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UNIVERSITY OF WYOMING COOPERATIVE RESEARCH REPORT  
TO THE BUREAU OF LAND MANAGEMENT

ANNUAL PROGRESS REPORT  
1979 RESULTS

VOLUME I  
PHENOLOGY STUDY SECTION

PHENOLOGY AND PRODUCTION STUDIES ON  
SEMI-ARID SHRUB TYPES

SUBMITTED BY WYOMING AGRICULTURAL EXPERIMENT STATION

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PHENOLOGY AND PRODUCTION STUDIES ON  
SEMI-ARID SHRUB TYPES<sup>1</sup>

1979 ANNUAL PROGRESS REPORT

VOLUME I: PHENOLOGY STUDIES

BY

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## S E C T I O N I

### Phenology Study

1979

#### Introduction

Phenological study of important plant species in terms of production and microenvironmental variations will provide information that can be used to increase the efficiency of Bureau decision making with respect to management alternatives and disposition of natural resource areas.

Phenology studies of important shrub and grass species will provide detailed biological information related to specific changes in environmental characteristics such as time, duration, temperature, and movement. Very little detailed phenology and productivity information is available for arid land species of the western United States. Basic scientific knowledge and more precise information related to the Bureau's multiple resource management techniques will be enhanced by this phenology study.

Artemisia tridentata, Artemisia nova, Agropyron smithii, and Agropyron spicatum are the major shrub and grass species in the intermountain region on semi-arid, low elevation grazing ranges of public land. These species are especially important in the semi-arid regions of the western half of Wyoming from the Montana border on the north and the Utah and Colorado borders on the south. Their importance in adjacent states is equally significant. The ecological divergence of these four species is very great. They are found from high elevations to very low elevations and

from mesic to xeric situations. Therefore, these four species, in the development of the cooperative research program between the Bureau of Land Management and the University of Wyoming, were selected for intensive studies, to determine interrelationships of phenology, production, environment and utilization. These kinds of data are of major importance to the BLM for development of efficient and sound resource management decisions.

Intensive phenological studies were located on 12 selected exclosure areas. First level evaluation areas are: Demer exclosure, Farson exclosure, Horse Creek exclosure, Shoshoni Ant #7 exclosure, and Sweetwater exclosure. Second level evaluation areas are: Bud Kimball exclosure, Cedar Mountain exclosure, Cumberland #3 exclosure, Mesa Antelope exclosure Owl Draw exclosure, Red Wash #2 exclosure and Upper Government Draw exclosure.

Phenophase descriptions and stages with numerical scales were set up for four specific plant species: Agropyron smithii, A. spicatum, Artemisia nova, and A. tridentata, plus one phenological inventory for all plant species. Seasonal development (March-December) was recorded for 141 plant species in 12 exclosure areas. Individual plants of the four principal species in each of the 12 selected exclosure areas were permanently located for repeated observation.

Plans for 1980 will include continuation and intensification of production, phenology, and productivity data collection. The second level evaluation areas will be moved up to the first level evaluation process and the sampling frequency will also be increased. The independent variables of productivity, environmental and soil factors will be analyzed by statistical means. The productivity of the four major species will

be examined at various phenological development stages throughout the growing season.

#### Objectives

The objectives of the study are to determine:

- (1) the relationship of phenodynamics with vegetation production and environmental data;
- (2) relationships of phenodynamics and environmental characteristics to grazing and management procedures.

#### Methods and Procedures

The numerical description of the phenological stages was revised for the 1979 field season. The stages were separated to allow simultaneous scoring of vegetative and reproductive development. The old scoring system and the new system are listed below for comparison (page 6).

Twenty individual plants of each of the four principal species were permanently located along a 100 foot line in 12 exclosures. Every 5 ft. on the line, directions along and from the line for the closest plant were recorded.

Phenological measurements of Artemisia nova and A. tridentata included plant size, age, vegetative stages of growth with twig length, and reproductive stages of flowering and seed ripening with seed stalk length. Phenological measurements of Agropyron smithii and A. spicatum included plant size, age, vegetative stages of growth with leaf width and height; reproductive stages with spike height, number of spikelets per seed head and seed head development. The new scoring system uses the same measurements for the plant growth habit.

Phenological stages and numerical scores for shrubs and forbs are:

1. = initial start of growth of the plant;
2. = early vegetative growth -- the new leaves are developing and elongating;
3. = immature vegetative growth -- the new twigs are elongating;
4. = full vegetative growth -- the leaves and twigs are fully developed;
5. = floral bud stage -- the first buds begin development to the initiation of bloom;
6. = early bloom -- includes the initiation of bloom to 10% bloom;
7. = mid-bloom -- includes 10% to 75% of bloom;
8. = full-bloom -- includes 75% bloom to 100% bloom;
9. = late bloom -- the flowers are drying and seeds are beginning to form;
10. = milk stage -- the seeds are soft and immature (not well-formed);
11. = dough stage -- the seed is well-formed but still soft;
12. = ripe seed -- the seed is mature and hard;
13. = past ripe -- the seed is ripe but not shattered, and reproductive parts of the plant (seed, stalk, etc.) are mature, and are beginning to weather;
14. = mature vegetative -- the vegetative parts are beginning to brown to complete browning;



15. = mature reproductive -- the reproductive parts are curing (stem, leaf and seeds are shattering);
16. = fall regreening -- and/or leaf shed;
17. = winter dormancy.

The plant age classes of shrubs are classified as:

1. = seedling;
2. = young and small;
3. = intermediate age and size;
4. = mature age and size;
5. = old and decadent.

The phenological stages and numerical scores for grasses are:

1. = first leaf stage -- from the appearance of first leaf to appearance of second leaf;
2. = second leaf stage -- from the appearance of second leaf to appearance of third leaf;
3. = third leaf stage -- from the appearance of the third leaf to appearance of the fourth leaf;
4. = fourth leaf development -- from the appearance of the fourth leaf to full leaf development
5. = boot stage -- the seed stalk is elongating and the noticeable swelling of the seed head in boot;
6. = seed head emergence -- from the beginning of emergence of the seed head to the start of anthesis;
7. = early anthesis -- from initiation of anthesis to 10% of florets in bloom;
8. = mid-anthesis -- from 10% florets in bloom to 75% of florets in bloom;

9. = full anthesis -- 75% and more of the florets in bloom;
10. = milk stage --the seed is soft and immature (not well formed);
11. = dough stage -- the seed is well-formed but still soft;
12. = ripe seed -- the seed is well-formed and hard;
13. = past ripe -- the reproductive parts begin to weather;
14. = vegetative parts browning;
15. = reproductive parts curing -- stems, leaves and seeds cast;
16. = fall regreening -- with adequate fall moisture and temperature there is fall regrowth;
17. = winter dormancy.

The maturity of Agropyron spicatum clumps are classified as: (a) seedling, (b) young, (c) intermediate, (d) mature, and (e) old. Each maturity classification can then be designated as: (a) sparse, (b) intermediate, (c) dense and (d) decadent.

The revised vegetative phenological stages and numerical scores for the shrubs and forbs are listed below, followed by the old scores:

1. = winter dormancy, (0.);
2. = initial growth, (1.);
3. = early vegetative growth -- new leaves developing, (2.);
4. = immature vegetative growth -- twigs elongating, (3.);
5. = mature vegetative growth -- twigs elongated, (4.);
6. = vegetative parts browning, (14.);
7. = fall regreening and/or leaf shed, (16.);
8. = winter dormancy, (17.).

The revised reproductive phenological stages and numerical scores for the shrubs and forbs are:

- 9. = floral bud stage -- first bud developing to initiation of bloom, (5.);
- 10. = early bloom-- initiation of bloom to 10% bloom, (6.);
- 11. = mid-bloom -- 10% to 75% bloom, (7.)
- 12. = late bloom -- flowers drying and seeds beginning to form, (9.);
- 13. = milk stage -- seed soft and immature, (10.);
- 14. = dough stage -- seed well formed but soft, (11.);
- 15. = ripe seed -- seeds mature and hard, (12.);
- 16. = reproductive parts browning -- seeds cast, (15.).

The revised vegetative phenological stages and numerical scores for grasses are:

- 1. = winter dormancy, (0.);
- 2. = first leaf stage -- from the appearance of the first leaf to the appearance of the second leaf, (1.);
- 3. = second leaf stage -- from the appearance of the second leaf to the appearance of the third leaf, (2.);
- 4. = third leaf stage -- from the appearance of the third leaf to the appearance of the fourth leaf, (3.);
- 5. = fourth leaf stage -- from the appearance of the fourth leaf to full leaf development, (4.);
- 6. = vegetative parts browning, (14.);
- 7. = fall regreening, (16.);
- 8. = winter dormancy, (17.).

The revised reproductive phenological stages and numerical scores for grasses are:

9. = boot stage -- the seed stalk is elongating and there is noticeable swelling of the seed head in boot,(5.);
10. = seed head emergence -- from the beginning of emergence of the seed head to the start of anthesis,(6.);
11. = early anthesis -- from initiation of anthesis to 50% of florets in bloom,(7.);
12. = full anthesis -- from 50% to 100% of florets in bloom, (9.);
13. = milk stage -- seed soft and immature,(10.);
14. = dough stage -- seed well formed but soft,(11.);
15. = ripe seed -- seeds hard and mature,(12.);
16. = reproductive parts browning -- seeds cast,(15.).

#### 1979 Results

An alphabetical listing of the phenology study exclosures, exclosure location by county and the principal phenology species scored in each exclosure is given in Table I. Table II is an alphabetical listing of 141 species found in the twelve study exclosures. Table III is a phenological inventory presented by exclosure of the species listed in Table II. Table IV is an intensive phenological survey of the principal species for each exclosure including phenological stage, plant dimensions, plant age class and per cent dead material. 1973 through 1979 data on phenological development for three major growth stages are given in Table V for the species listed in Table II.

1979 phenology curves for the principal species in each enclosure were compared to curves developed from the earliest and latest dates observed from 1973 to 1978 (Figure I). The 1973 through 1978 phenology score averages were converted to the revised scoring system for the purpose of this comparison. In general, the 1979 observations indicated earlier vegetative and reproductive development than the average of previous years; except in the latter stages where regreening from late summer precipitation at certain enclosures tended to postpone dormancy in the grasses. Phenological development of grasses at study enclosures located in the Big Horn Basin progressed one to three weeks ahead of enclosures located in the Wind River and Green River Basins. This distinction was not as evident for regional comparisons of sagebrush phenology.

TABLE I. Alphabetical listing of study areas, the county where each occurs, and the prime species.

Exclosure Name	County	Prime Species
Bud Kimball	Washakie	Agropyron smithii Artemisia tridentata
Cedar Mountain	Sweetwater	Agropyron spicatum Artemisia tridentata
Cumberland #3	Lincoln	Agropyron smithii Agropyron spicatum Artemisia tridentata
Demer	Washakie	Agropyron smithii Agropyron spicatum Artemisia tridentata
Farson	Sweetwater	Agropyron smithii Artemisia tridentata
Horse Creek	Big Horn	Agropyron smithii Agropyron spicatum Artemisia nova Artemisia tridentata
Mesa Antelope	Sublette	Agropyron smithii Artemisia tridentata
Owl Draw	Natrona	Agropyron smithii Agropyron spicatum Artemisia nova Artemisia tridentata
Red Wash #2	Sweetwater	Agropyron smithii Agropyron spicatum Artemisia tridentata
Shoshone Ant #7	Fremont	Agropyron smithii Artemisia tridentata
Sweetwater	Fremont	Agropyron smithii Artemisia nova Artemisia tridentata
Upper Gov't. Draw	Fremont	Agropyron smithii Artemisia tridentata

TABLE II. LIST OF PLANT NAMES WHICH OCCURRED IN PHENOLOGY STUDY AREAS.

Code	Genus-Species	Common Name	Life Form	Longevity
AGLA	<i>Achillea lanulosa</i>	Western yarrow	Forb	Perennial
AGGL	<i>Agroseris glauca</i>	Pale agoseris	Forb	Perennial
AGCR	<i>Agropyron cristatum</i>	Crested wheatgrass	Grass	Perennial
AGSM	<i>Agropyron smithii</i>	Western wheatgrass	Grass	Perennial
AGSP	<i>Agropyron spicatum</i>	Bluebunch wheatgrass	Grass	Perennial
ALTE	<i>Allium textile</i>	Prairie onion	Forb	Perennial
ANAL	<i>Amelanchier alnifolia</i>	Saskatoon serviceberry	Shrub	Perennial
ANSE	<i>Androsace septentrionalis</i>	Rock jasmine	Forb	Perennial
ANDI	<i>Antennaria dimorpha</i>	Low pussytoe	Forb	Perennial
ANTO	<i>Antennaria rosea</i>	Rose pussytoes	Mat-form	Perennial
ANT	<i>Antennaria</i> spp.	Pussytoe	Mat-form	Perennial
ARHO <sup>2</sup>	<i>Arabis holboellii</i>	Holboell rockcress	Forb	Perennial
ARLI	<i>Arabis lignifera</i>	Woody rockcress	Forb	Annual
ARHO	<i>Arenaria hookeri</i>	Hooker sandwort	Mat-Form	Perennial
ARFE	<i>Aristida fendleriana</i>	Fendler three-awn	Grass	Perennial
ARFR	<i>Artemisia frigida</i>	Fringed sagewort	Half-shrub	Perennial
ARNO	<i>Artemisia nova</i>	Black sagebrush	Shrub	Perennial
ARSP	<i>Artemisia spinescens</i>	Bud sagewort	Half-shrub	Perennial
ARTR	<i>Artemisia tridentata</i>	Big sagebrush	Shrub	Perennial
ASCI	<i>Astragalus ciliaris</i>	Silky milkvetch	Forb	Perennial
ASDI	<i>Astragalus diversifolius</i>	Meadow milkvetch	Forb	Perennial
ASKE <sup>2</sup>	<i>Astragalus kentrophyta</i>	Nuttall kentrophyta milkvetch	Forb	Perennial
ASMI	<i>Astragalus miser</i>	Timber milkvetch	Forb	Perennial
ASMI	<i>Astragalus missouriensis</i>	Missouri milkvetch	Forb	Perennial
ASPU	<i>Astragalus purshii</i>	Pursh Milkvetch	Forb	Perennial
ASSP	<i>Astragalus spatulatus</i>	Tufted milkvetch	Forb	Perennial
AST	<i>Astragalus</i> spp.	Milkvetch	Forb	Perennial
ATCO	<i>Atriplex confertifolia</i>	Shadscale saltbush	Shrub	Perennial
ATGA	<i>Atriplex gardneri</i>	Gardner saltbush	Half-shrub	Perennial
BASA	<i>Balsamorhiza sagittata</i>	Arrowleaf balsamroot	Perennial	Perennial
BOCR	<i>Bouteloua gracilis</i>	Blue grama	Grass	Perennial
BRJA	<i>Bromus japonicus</i>	Japanese chess	Grass	Annual
BRTT	<i>Bromus tectorum</i>	Cheatgrass	Grass	Annual
CANU	<i>Calochortus nuttallii</i>	Sego mariposalily	Forb	Perennial
CAMI	<i>Camelina microcarpa</i>	Littlepod falseflax	Forb	Annual
CARL	<i>Carex eleocharis</i>	Needleleaf sedge	Sedge	Perennial
CAPT	<i>Carex filifolia</i>	Threadleaf sedge	Sedge	Perennial
CAAN	<i>Castilleja angustifolia</i>	Narrowleaf Indianpaintbrush	Forb	Perennial
CACH	<i>Castilleja chromosa</i>	Desert Indianpaintbrush	Forb	Perennial
CAS	<i>Castilleja</i> spp.	Indianpaintbrush	Forb	Perennial
CELA	<i>Ceratoides lanata</i>	Winterfat	Half-shrub	Perennial
CHDO	<i>Chaenactis douglasii</i>	Douglas dustymaiden	Forb	Perennial
CHE	<i>Chenopodium</i> spp.	Goosefoot	Forb	Annual
CHDE	<i>Chenopodium denticatum</i>	Desert goosefoot	Forb	Annual
CHLE	<i>Chenopodium leptophyllum</i>	Narrowleaf goosefoot	Forb	Annual
CHNA	<i>Chrysothamnus nauseosus</i>	Rubber rabbitbrush	Shrub	Perennial
CHVI	<i>Chrysothamnus viscidiflorus</i>	Douglas rabbitbrush	Shrub	Perennial
CIR	<i>Cirsium</i> spp.	Thistle	Forb	Perennial

TABLE II. (Continued)

Code	Genus-Species	Common Name	Life Form	Longevity
CLLU	<i>Cleome lutea</i>	Yellow beeplant	Forb	Annual
COPA	<i>Comandra pallida</i>	Pale bastardtoadflax	Forb	Perennial
CORA	<i>Cordylanthus ramosus</i>	Branched birdbeak	Forb	Annual
CRAC	<i>Crepis acuminata</i>	Tapertip hawkbeard	Forb	Perennial
CRMO	<i>Crepis modocensis</i>	Yellowstone hawkbeard	Forb	Perennial
CRBR	<i>Cryptantha bradburiana</i>	Miners candle	Forb	Perennial
CRFL	<i>Cryptantha flavoculata</i>	Roughseed cryptantha	Forb	Perennial
CYMO	<i>Cymopterus montanus</i>	Mountain springparsley	Forb	Perennial
DEGE	<i>Delphinium geveri</i>	Plains larkspur	Forb	Perennial
DEPI	<i>Descurainia pinnata</i>	Pinnate tansymustard	Forb	Annual
ERCA <sup>2</sup>	<i>Erigeron canadensis</i>	Horseweed fleabane	Forb	Annual
EROC	<i>Erigeron ochroleucus</i>	Creamy fleabane	Forb	Perennial
ERPU	<i>Erigeron pumilus</i>	Low fleabane	Forb	Perennial
ERCA	<i>Eriogonum caespitosum</i>	Mat wildbuckwheat	Mat-form	Perennial
ERCE	<i>Eriogonum cernuum</i>	Nodding wildbuckwheat	Forb	Annual
ERMI	<i>Eriogonum microthecum</i>	Slenderbrush wildbuckwheat	Forb	Perennial
EROV	<i>Eriogonum ovalifolium</i>	Cushion wildbuckwheat	Mat-form	Perennial
ERSU	<i>Eriogonum subalpinum</i>	Subalpine wildbuckwheat	Mat-form	Perennial
ERAS	<i>Erysimum asperum</i>	Plains wallflower	Forb	Perennial
ERAS	<i>Erysimum asperum</i>	Plains wallflower	Forb	Perennial
GIAG	<i>Gilia aggregata</i>	Skyrocket gilia	Forb	Perennial
GICO	<i>Gilia congesta</i>	Ballhead gilia	Forb	Perennial
GIPU	<i>Gilia pumila</i>	Dwarf gilia	Forb	Annual
GRSP	<i>Grayia spinosa</i>	Spiny hopsage	Shrub	Perennial
GRSQ	<i>Grindelia squarrosa</i>	Curlycup gumweed	Forb	Biennial
HAGL	<i>Halogeton glomeratus</i>	Halogeton	Forb	Annual
HAAC	<i>Haploppapus acaulis</i>	Stemless goldenweed	Forb	Perennial
JUOS	<i>Juniperus osteosperma</i>	Utah juniper	Tree	Perennial
JUSC	<i>Juniperus scopulorum</i>	Rockymountain juniper	Shrub	Perennial
KOAM	<i>Kochia americana</i>	Greenmolly summercypress	Shrub	Perennial
KOCR	<i>Koeleria cristata</i>	Prairie junegrass	Grass	Perennial
LAIN	<i>Lactuca integrata</i>	Lettuce	Forb	Perennial
LASE	<i>Lactuca serriola</i>	Prickly lettuce	Forb	Perennial
LARE	<i>Lappula redowskii</i>	Bluebur stickseed	Forb	Annual
LEDE	<i>Lepidium densiflorum</i>	Prairie pepperweed	Forb	Annual
LEPE	<i>Lepidium perfoliatum</i>	Clasping pepperweed	Forb	Annual
LEPU	<i>Leptodactylon pungens</i>	Granite gilia	Half-shrub	Perennial
LERE	<i>Lewisia rediviva</i>	Bitterroot	Forb	Perennial
LES	<i>Lesquerella spp.</i>	Bladderpod	Forb	Annual
LILE	<i>Linum lewisii</i>	Lewis flax	Forb	Perennial
LOFO	<i>Lomatium foeniculum</i>	Hairyseed Lomatium	Forb	Perennial
LOOR	<i>Lomatium orientale</i>	Eastern lomatium	Forb	Perennial
LOSI	<i>Lomatium simplex</i>	Narrowleaf lomatium	Forb	Perennial
LUPU	<i>Lupinus pusillus</i>	Rusty lupine	Forb	Annual
MACA	<i>Machaeranthera canescens</i>	Hoary aster	Forb	Perennial
MAGR	<i>Machaeranthera grindeloides</i>	Pinnate woody-aster	Half-shrub	Perennial
MATA	<i>Machaeranthera tanacetifolia</i>	Tanyleaf aster	Forb	Annual
MELO	<i>Mertensia longiflora</i>	Small bluebells	Forb	Perennial
OPPO	<i>Opuntia polyacantha</i>	Plains pricklypear	Forb	Perennial



TABLE II. (Continued)

Code	Genus-Species	Common Name	Life-form	Longevity
ORFA	<i>Orobanche fasciculata</i>	Tufted broomrape	Saprophyte	Perennial
ORHY	<i>Oryzopsis hymenoides</i>	Indian ricegrass	Grass	Perennial
PECL	<i>Penstemon cleburnei</i>	Cleyburn penstemon	Forb	Perennial
PEFR	<i>Penstemon fremonti</i>	Fremont penstemon	Forb	Perennial
PELA	<i>Penstemon laricifolius</i>	Larchleaf penstemon	Forb	Perennial
PEN	<i>Penstemon</i> spp.	Penstemon	Forb	Perennial
PHHO	<i>Phlox hoodii</i>	Hood's phlox	Mat-form	Perennial
PHLO	<i>Phlox longiflora</i>	Long-leaf phlox	Forb	Perennial
PLPA	<i>Plantago patagonica</i>	Wooly Indianwheat	Forb	Annual
PLSP	<i>Plantago spinescens</i>	Spiny Indianwheat	Forb	Annual
POFE	<i>Poa fendleriana</i>	Mutton bluegrass	Grass	Perennial
POSE	<i>Poa secunda</i>	Sandberg bluegrass	Grass	Perennial
PSTE	<i>Psoralea tenuiflora</i>	Slimflower scurfpea	Forb	Perennial
RHTR	<i>Rhus trilobata</i>	Skunkbush sumac	Shrub	Perennial
SALB	<i>Salsola iberica</i>	Russian thistle	Forb	Annual
SAVE	<i>Sarcobatus vermiculatus</i>	Greasewood	Shrub	Perennial
SELA	<i>Sedum lanceolatum</i>	Lanceleaf stonecrop	Forb	Perennial
SEDE	<i>Selaginella densa</i>	Spikemoss selaginella	Clubmoss	Perennial
SECA	<i>Senecio canus</i>	Woolly goundsel	Forb	Perennial
SEIN	<i>Senecia integerrimus</i>	Lambstongue groundsel	Forb	Perennial
SIAL	<i>Sisymbrium altissimum</i>	Tumbling hedgemustard	Forb	Annual
SILI	<i>Sisymbrium linifolium</i>	Narrowleaf hedgemustard	Forb	Annual
SIMY	<i>Sitanion hystrix</i>	Squirreltail bottlebrush	Grass	Perennial
SFCO	<i>Sphaeralcea coccinea</i>	Scarlet globemallow	Forb	Perennial
STCO	<i>Stipa cometa</i>	Needleandthread	Grass	Perennial
STVI	<i>Stipa viridula</i>	Green needlegrass	Grass	Perennial
SYOC	<i>Symphoricarpos occidentalis</i>	Western snowberry	Shrub	Perennial
TAOF	<i>Taraxacum officinale</i>	Common dandelion	Forb	Perennial
TECA	<i>Tetradymia canescens</i>	Gray horsebrush	Shrub	Perennial
TENU	<i>Tetradymia nuttallii</i>	Nuttall horsebrush	Shrub	Perennial
TOIN	<i>Townsendia incana</i>	Hoary townsendia	Forb	Perennial
TRDU	<i>Tragopogon dubius</i>	Yellow salsify	Forb	Biennial
TRGY	<i>Trifolium gymnocarpon</i>	Hollyleaf clover	Forb	Perennial
TRI	<i>Trifolium</i> spp.	Clover	Forb	
UMB	<i>Umbelliferae</i> fam.	Carrot		
VIAM	<i>Vicia americana</i>	American vetch	Forb	Perennial
VIVA	<i>Viola vallicola</i>	Nuttall violet	Forb	Perennial
VINU	<i>Viola nuttallii</i>	Nuttall violet	Forb	Perennial
VIO	<i>Viola</i> spp.	Violet	Forb	Perennial
WUOC	<i>Vulpia octoflora</i>	Common sixweeksgrass	Grass	Annual
WYAM	<i>Wyethia amplexicaulis</i>	Mulesear wyethia	Forb	Perennial
XASA	<i>Xanthocephalus sarothrae</i>	Broom snakeweed	Half-shrub	Perennial
YUGL	<i>Yucca glauca</i>	Small soapweed	Forb	Perennial
ZYPA	<i>Zygadenus paniculatus</i>	Foothill death camas	Forb	Perennial
ZYVE	<i>Zygadenus venenosus</i>	Death camas	Forb	Perennial

TABLE III. All species phenological survey by date for each enclosure.

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Bud Kimball Enclosure	15
Cedar Mountain Enclosure	16
Cumberland # 3 Enclosure	17
Demer Enclosure	18
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Mesa Antelope Enclosure	22
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Red Wash # 2 Enclosure	24
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Upper Government Enclosure	27

## PHENOLOGICAL INVENTORY

STUDY AREA 800 KIMBAL

1979

TYPE SITE

ARTR A65M

SPECIES	29 APRIL		24 MAY		11 JUNE		27 JUNE		17 JULY		9 AUG		1 SEPT		22 SEPT	
	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
1 AGCR	0.0	0.0	0.0	0.0	5.5	11.1	6.1	13.8	6.7	16.1	0.0	0.0	0.0	0.0	0.0	0.0
2 AGSM	4.2	0.0	4.6	0.0	5.1	0.0	5.3	10.0	6.2	12.5	6.6	15.2	6.8	15.9	6.9	16.0
3 AGSP	4.3	0.0	5.7	0.0	5.9	11.0	6.1	11.9	6.3	14.2	6.7	16.6	6.7	16.8	6.8	16.8
4 ALTE	3.3	9.1	4.8	10.2	6.0	14.5	6.0	14.9	6.8	16.5	6.9	16.7	6.9	16.9	6.9	16.9
5 ANT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	16.7	6.3	16.8	0.0	0.0	0.0	0.0
6 ANO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	16.7	6.8	16.8	6.9	16.9	6.9	16.9
7 ARH02	3.3	10.1	5.1	13.1	5.6	14.5	5.8	14.8	6.7	16.5	6.9	16.8	6.9	16.9	6.9	16.9
8 ARTR	2.3	0.0	3.2	0.0	3.3	0.0	4.1	9.0	4.5	9.4	5.3	9.5	5.5	10.4	5.6	10.7
9 ASPU	0.0	0.0	4.8	9.7	5.3	12.9	5.7	0.0	6.4	16.9	6.8	16.9	0.0	0.0	0.0	0.0
10 B0GR	4.3	0.0	5.6	0.0	5.8	0.0	5.9	0.0	6.2	0.0	6.3	0.0	6.7	0.0	6.9	0.0
11 BRJA	3.3	0.0	4.2	9.6	0.0	0.0	4.8	11.3	6.4	15.8	6.8	16.7	0.0	0.0	0.0	0.0
12 BRTE	4.3	0.0	4.7	10.8	5.8	12.4	6.4	16.3	6.6	16.5	6.8	16.7	6.9	16.8	6.9	16.8
13 CANU	0.0	0.0	4.3	0.0	4.6	10.0	5.1	12.1	6.8	14.5	6.9	16.8	6.9	16.8	6.9	16.9
14 CAS	3.4	9.3	4.7	11.2	5.6	14.2	5.9	14.8	6.8	16.3	6.9	16.5	6.9	16.8	6.9	16.9
15 CHE	2.4	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9	16.8	0.0	0.0
16 CRND	3.6	10.2	4.6	10.9	5.2	13.5	5.6	13.8	6.4	16.6	6.8	16.9	6.9	16.9	6.9	16.9
17 DEPI	3.3	9.3	4.2	11.8	4.6	13.9	6.8	16.5	6.9	16.7	0.0	0.0	0.0	0.0	0.0	0.0
18 ERPU	3.2	0.0	4.7	9.6	5.2	11.6	5.6	12.3	6.3	16.1	6.7	16.8	6.8	16.9	6.9	16.9
19 GIPU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8	16.6	6.9	16.9	6.9	16.9
20 HAGL	5.8	0.0	5.8	11.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21 KOCR	0.0	0.0	0.0	0.0	4.7	12.5	6.0	12.8	6.4	15.9	6.5	16.2	6.7	16.7	6.9	16.9
22 LARE	3.2	0.0	4.9	10.6	6.2	14.7	6.7	13.3	6.7	16.7	6.8	16.8	0.0	0.0	6.9	16.9
23 LEDE	0.0	0.0	0.0	0.0	4.9	13.8	5.8	13.8	6.8	16.2	6.9	16.3	6.9	16.5	6.9	16.9
24 LERE	3.3	0.0	6.1	9.2	6.5	11.4	6.9	12.2	6.9	16.9	6.9	16.9	0.0	0.0	0.0	0.0
25 LES	0.0	0.0	4.8	13.9	5.9	14.4	6.8	16.5	6.8	16.7	6.9	16.9	6.9	16.9	6.9	16.9
26 PPPD	2.1	0.0	2.6	0.0	4.3	9.4	4.8	12.1	5.2	14.8	5.7	15.8	6.1	16.3	6.3	16.6
27 DRHY	0.0	0.0	0.0	0.0	0.0	0.0	6.1	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28 PHHD	3.3	10.2	4.9	12.3	5.3	14.8	5.7	17.9	6.5	16.6	6.8	16.8	6.9	16.9	6.9	16.9
29 PLPA	0.0	0.0	4.8	10.3	5.0	10.6	5.8	14.8	6.6	15.8	6.8	16.7	6.9	16.8	6.9	16.8
30 POSE	6.2	0.0	5.1	10.8	5.6	11.8	5.8	16.3	6.7	16.5	6.8	16.6	6.9	16.8	6.9	16.9
31 SIHY	4.2	0.0	5.3	0.0	5.8	11.5	5.9	12.8	6.3	16.0	6.8	16.7	6.9	16.6	6.9	16.7
32 SIVI	3.3	0.0	4.8	0.0	0.0	0.0	5.3	16.3	6.3	16.5	6.4	16.7	6.6	16.8	6.7	16.8
33 SPCD	3.3	0.0	4.3	0.0	4.8	9.3	6.0	0.0	6.2	0.0	6.3	0.0	0.0	0.0	0.0	0.0
34 STCO	4.2	0.0	5.2	0.0	5.5	11.0	6.1	13.5	6.4	10.0	6.5	16.5	6.8	16.8	6.9	16.8
35 TADF	0.0	0.0	5.2	14.3	5.9	16.6	6.6	17.9	6.8	16.6	6.9	0.0	0.0	0.0	0.0	0.0
36 TRDU	3.2	0.0	4.6	0.0	4.5	10.0	5.2	13.3	6.7	16.5	6.8	16.8	6.9	16.9	6.9	16.9
37 VIAM	3.2	0.0	4.8	10.3	4.8	12.4	5.7	12.2	6.3	16.8	6.8	16.9	6.9	16.9	6.9	16.9
38 VID	3.3	9.5	0.0	0.0	5.8	14.6	5.9	0.0	0.0	0.0	6.9	0.0	0.0	0.0	0.0	0.0
39 VUDC	0.0	0.0	4.3	10.2	5.3	11.0	6.5	14.1	6.7	16.2	6.9	16.6	6.9	16.8	6.9	16.9

## PHENOLOGICAL INVENTORY

## STUDY AREA CEDAR MTN

1979

## TYPE SITE ARTR AGSP

SPECIES	6 MAY		25 MAY		4 JUNE		24 JUNE		15 JULY		6 AUG		31 AUG		21 SEPT	
	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
1 AGCR	3.9	0.0	5.6	0.0	5.8	10.6	5.9	11.0	6.2	13.5	6.7	16.5	7.4	16.9	7.5	16.9
2 AGSP	4.1	0.0	5.1	0.0	5.2	0.0	5.4	10.8	6.2	14.5	6.4	16.0	6.5	16.5	7.5	16.7
3 ARMO2	2.1	0.0	0.0	0.0	5.7	13.5	6.5	15.5	0.0	0.0	0.0	0.0	6.9	16.9	6.9	16.9
4 ARSP	2.5	0.0	4.4	12.2	4.6	12.7	5.7	14.7	6.8	13.5	6.9	16.6	6.9	16.9	7.0	16.9
5 ARTR	3.1	0.0	3.3	0.0	3.5	0.0	4.2	9.1	5.6	9.4	5.9	9.7	5.9	10.4	6.2	14.7
6 ASPU	2.1	0.0	3.2	0.0	4.2	12.4	5.5	16.0	6.8	15.8	6.9	16.9	0.0	0.0	0.0	0.0
7 ATCO	2.1	0.0	4.3	9.4	4.6	9.7	4.8	12.2	5.2	12.9	5.8	15.3	5.9	0.0	6.6	15.6
8 ATNU	2.2	0.0	4.4	10.5	4.9	11.6	5.1	12.0	5.7	15.7	5.9	16.2	6.1	16.9	7.3	16.9
9 CELA	0.0	0.0	4.5	0.0	4.7	0.0	5.2	0.0	6.3	12.1	6.4	15.3	6.2	0.0	7.1	16.9
10 CHVI	2.5	0.0	4.4	0.0	4.7	0.0	4.9	9.0	5.4	9.9	6.1	11.0	6.7	12.4	6.7	13.3
11 CORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	13.5	6.1	15.2	0.0	0.0	0.0	0.0
12 CYRD	0.0	0.0	5.0	12.4	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13 HAAC	0.0	0.0	5.0	10.8	5.3	11.5	6.0	15.8	6.3	16.6	6.5	16.9	0.0	0.0	7.2	16.9
14 KOAN	0.0	0.0	4.5	0.0	4.7	0.0	4.9	10.2	5.3	11.9	6.0	14.8	6.0	16.9	7.3	16.9
15 MAGR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	0.0	0.0	0.0	7.2	0.0
16 OPPD	2.0	0.0	2.4	9.2	4.1	9.4	4.3	9.5	5.0	12.2	5.3	14.8	5.5	14.4	6.4	15.3
17 ORHY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	16.8	0.0	0.0
18 PEFR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.3	0.0	6.3	0.0	7.5	16.9	7.5	16.9
19 PHMD	0.0	0.0	0.0	0.0	4.8	12.5	5.3	15.0	6.3	16.8	6.5	16.9	0.0	0.0	0.0	0.0
20 PHLO	0.0	0.0	4.7	11.6	5.2	13.2	5.6	16.0	6.4	16.8	6.9	16.9	7.4	16.9	7.5	16.9
21 POSE	3.0	0.0	5.0	10.3	5.3	11.4	6.4	12.7	6.8	16.6	6.9	16.8	7.3	16.9	7.4	16.9
22 SAVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	9.1	6.0	0.0	0.0	0.0	0.0	0.0
23 SIHY	5.1	0.0	5.6	9.5	5.8	10.5	5.9	11.7	6.1	15.6	6.8	16.6	7.4	16.2	7.6	16.8
24 SILL	0.0	0.0	5.0	11.4	5.4	11.9	5.8	13.8	6.7	16.8	6.9	16.8	6.9	16.9	6.9	16.9
25 SPCD	2.5	0.0	3.6	0.0	4.3	11.2	4.6	11.4	5.8	15.2	0.0	0.0	5.9	0.0	7.5	16.9
26 TAOF	0.0	0.0	0.0	0.0	0.0	0.0	6.2	16.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27 TENU	0.0	0.0	4.5	0.0	4.7	0.0	5.1	10.5	6.1	14.8	6.5	16.7	6.9	16.9	6.9	16.9
28 TOIN	0.0	0.0	0.0	0.0	4.8	11.4	5.1	11.9	6.4	15.8	6.7	16.8	0.0	0.0	6.7	15.4

## PHENOLOGICAL INVENTORY

STUDY AREA CUMBER. 3

1979

TYPE SITE

ARTR AGSN AGSP

SPECIES	22 MAY VEG REPR	5 JUNE VEG REPR	25 JUNE VEG REPR	15 JULY VEG REPR	8 AUG VEG REPR	1 SEPT VEG REPR	21 SEPT VEG REPR	VEG REPR
1 ASOI	7.1 16.9	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	5.8 12.5
2 AGGL	4.1 0.0	5.5 11.2	6.4 16.0	6.9 16.9	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0
3 AGSM	4.3 0.0	4.6 0.0	4.8 0.0	6.2 0.0	6.5 16.6	6.8 0.0	6.9 16.9	0.0 0.0
4 AGSP	4.5 0.0	4.8 0.0	5.3 0.0	6.2 14.9	6.5 16.5	6.8 16.4	6.9 16.9	0.0 0.0
5 ANAL	4.1 9.3	4.5 12.1	5.0 13.7	5.5 14.8	5.9 16.0	6.1 16.9	6.5 16.9	0.0 0.0
6 ANOI	5.3 10.4	5.8 12.1	6.3 16.2	6.9 16.3	6.9 16.9	6.9 16.9	6.9 16.9	0.0 0.0
7 ARH0Z	0.0 0.0	0.0 0.0	0.0 0.0	6.8 15.5	6.9 16.5	6.9 16.9	6.9 16.9	0.0 0.0
8 ARTR	3.3 0.0	3.5 0.0	4.2 9.1	4.4 9.2	5.4 9.6	5.8 10.5	6.3 14.5	0.0 0.0
9 ASCI	5.2 10.3	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	6.9 16.9	0.0 0.0	0.0 0.0
10 AST	0.0 0.0	0.0 0.0	0.0 0.0	6.0 16.4	0.0 0.0	0.0 0.0	6.9 16.9	0.0 0.0
11 CANU	4.4 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	6.9 16.9	0.0 0.0
12 CAS	4.4 0.0	4.8 9.4	5.0 11.5	5.8 14.0	6.9 16.9	6.9 16.9	6.9 16.9	0.0 0.0
13 CHVI	4.1 0.0	4.5 0.0	4.9 0.0	5.5 10.3	6.0 11.7	6.8 12.6	6.9 16.9	0.0 0.0
14 COPA	5.2 10.2	5.8 12.8	6.0 13.2	6.5 16.9	6.6 16.9	6.5 0.0	6.9 0.0	0.0 0.0
15 CORA	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	6.3 10.5	6.7 14.3	6.9 14.7	0.0 0.0
16 CRAC	4.8 0.0	5.0 9.3	5.5 9.9	6.9 16.9	6.9 16.9	6.9 16.9	6.9 16.9	0.0 0.0
17 CRFL	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	7.5 0.0	0.0 0.0	0.0 0.0
18 DEPI	0.0 0.0	5.4 10.4	6.2 13.8	6.9 16.3	6.9 16.9	6.9 16.9	6.9 16.9	0.0 0.0
19 ERRI	5.2 0.0	5.5 9.2	5.8 10.2	6.0 11.5	6.4 12.2	6.5 14.2	6.9 16.9	0.0 0.0
20 KOCC	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	6.5 16.1	7.1 16.7	0.0 0.0
21 OPPD	1.0 0.0	3.4 0.0	4.3 0.0	5.6 12.5	5.9 0.0	6.0 16.9	6.2 16.9	0.0 0.0
22 URHY	3.4 0.0	4.3 0.0	5.0 9.4	6.0 14.8	6.2 16.1	6.5 16.9	6.7 16.9	0.0 0.0
23 PHHD	5.7 11.1	5.9 14.1	6.4 15.4	6.9 15.9	6.9 16.5	6.9 16.9	6.9 16.9	0.0 0.0
24 PHLD	5.6 11.2	5.8 12.2	6.3 14.2	6.9 16.7	6.9 16.9	6.9 16.9	6.9 16.9	0.0 0.0
25 PQAM	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	6.7 16.5	7.1 16.8	0.0 0.0
26 P0FE	5.7 10.7	5.9 12.1	6.2 13.5	6.5 15.5	6.6 16.0	6.7 16.7	6.9 16.9	0.0 0.0
27 POSE	5.7 10.7	5.9 11.5	6.8 12.3	6.9 15.8	6.9 16.2	6.9 16.9	6.9 16.9	0.0 0.0
28 SIAL	4.5 9.5	5.5 14.2	6.9 14.5	6.9 16.9	6.9 16.9	6.9 16.9	6.9 16.9	0.0 0.0
29 SIHY	0.0 0.0	0.0 0.0	5.0 11.4	6.2 13.8	6.9 15.4	6.9 16.9	6.9 16.9	0.0 0.0
30 SILL	0.0 0.0	5.1 12.1	0.0 0.0	0.0 0.0	0.0 0.0	6.9 16.9	6.9 16.9	0.0 0.0
31 STCO	4.7 0.0	5.4 0.0	5.8 10.3	6.0 16.0	6.5 16.6	6.7 16.9	6.8 16.9	0.0 0.0
32 STC02	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	7.1 16.9	0.0 0.0
33 SYOC	4.4 0.0	4.8 0.0	5.2 11.0	5.8 16.0	6.0 16.9	6.3 16.9	6.8 16.9	0.0 0.0
34 TECA	3.5 0.0	4.1 0.0	4.8 9.5	5.5 11.0	6.1 12.5	6.5 16.4	6.9 16.9	0.0 0.0
35 TRDU	0.0 0.0	4.5 0.0	5.0 9.9	6.5 15.0	6.9 16.0	6.1 16.2	6.8 16.9	0.0 0.0
36 TRII	4.8 0.0	5.5 0.0	6.0 0.0	6.8 0.0	6.9 0.0	0.0 0.0	0.0 0.0	0.0 0.0
37 UMB	5.6 11.4	5.8 16.1	6.5 16.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0
38 ZYPA	5.3 0.0	5.8 13.1	6.0 16.0	6.9 16.9	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0

## PHENOLOGICAL INVENTORY

## STUDY AREA CEMER

1979

TYPE SITE

ARTR AGSM AGSP

SPECIES	28 APRIL		24 MAY		7 JUNE		27 JUNE		17 JULY		9 AUG		1 SEPT		23 SEPT	
	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
1 AGSM	4.3	0.0	4.8	0.0	5.2	0.0	5.5	14.7	6.2	0.0	6.6	16.5	6.8	16.7	6.9	16.7
2 AGSP	5.2	0.0	5.2	0.0	5.4	10.7	5.9	14.2	6.1	15.8	6.4	16.0	6.8	16.7	6.9	16.8
3 ALTE	3.2	9.1	4.5	11.2	5.8	14.2	6.4	15.1	6.7	16.5	6.9	16.3	6.9	16.8	6.9	16.9
4 ARTR	2.3	0.0	3.3	0.0	3.5	0.0	4.1	9.0	4.5	9.3	5.3	9.5	5.5	10.6	5.7	11.6
5 ASMI	0.0	0.0	4.4	0.0	5.5	14.3	5.7	0.0	5.8	14.9	6.2	16.2	6.3	16.7	6.9	16.9
6 ASPU	3.1	0.0	4.3	0.0	0.0	0.0	6.8	16.6	6.9	16.9	6.9	16.7	6.9	16.8	0.0	0.0
7 BDGR	4.3	0.0	5.4	0.0	5.9	0.0	5.9	11.9	6.0	12.5	6.6	15.9	6.7	16.0	6.8	16.1
8 BRTE	3.1	0.0	5.8	10.6	5.9	11.2	6.6	16.7	6.8	16.8	6.9	16.9	6.9	16.9	6.9	16.9
9 CANU	0.0	0.0	0.0	0.0	5.4	11.2	6.3	13.2	6.8	14.9	6.9	0.0	6.9	16.8	6.9	16.9
10 CHOE	0.0	0.0	0.0	0.0	4.3	10.2	5.9	14.9	6.8	16.0	6.8	15.8	0.0	0.0	0.0	0.0
11 CYMD	0.0	0.0	0.0	0.0	5.8	14.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12 OEGE	3.3	0.0	4.6	11.2	4.8	11.8	6.0	13.4	6.4	16.2	6.9	16.5	6.9	16.8	6.9	16.9
13 OEPI	0.0	0.0	4.5	10.9	4.9	14.2	6.8	13.3	6.9	16.9	6.9	16.9	6.9	16.9	6.9	16.9
14 ERPU	0.0	0.0	0.0	0.0	4.4	10.5	5.6	12.3	6.1	16.6	6.6	16.8	0.0	0.0	6.9	16.9
15 GIPU	0.0	0.0	6.9	16.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16 KOGR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	15.7	6.8	16.5	0.0	0.0	0.0	0.0
17 LAC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	13.5	6.8	12.8	6.8	16.2	6.9	16.6
18 LARE	2.3	0.0	5.3	11.2	5.5	14.3	5.8	16.3	6.7	16.5	6.9	16.8	6.9	16.8	0.0	0.0
19 LEQE	0.0	0.0	0.0	0.0	4.7	13.7	5.9	13.9	6.8	16.3	6.9	16.1	6.9	16.7	6.9	16.8
20 LUPU	0.0	0.0	4.4	10.3	4.7	11.3	5.8	14.7	6.4	14.9	6.9	16.7	6.9	16.8	6.9	16.9
21 MACA	0.0	0.0	0.0	0.0	4.5	11.0	0.0	0.0	6.0	16.2	6.1	16.4	6.6	16.6	6.7	16.6
22 NATA	0.0	0.0	4.5	10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23 DPPO	2.2	0.0	3.4	9.9	4.5	10.9	5.6	14.1	5.8	15.1	5.9	15.9	6.0	16.5	6.4	16.8
24 DRNY	3.4	0.0	4.3	0.0	4.8	9.8	5.8	15.1	6.2	16.7	6.4	16.7	6.6	16.8	6.8	16.8
25 PHHO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8	16.8	0.0	0.0	0.0	0.0
26 PLSP	0.0	0.0	4.4	10.9	4.6	11.3	5.8	14.5	6.3	15.3	6.9	15.9	6.9	16.6	6.9	16.6
27 POSE	0.0	0.0	5.7	11.4	5.8	12.2	6.8	16.4	6.9	16.7	6.9	16.7	6.9	16.8	6.9	16.9
28 SIAL	2.1	0.0	4.5	0.0	4.8	11.5	6.0	14.6	6.3	15.0	6.9	16.9	6.9	16.9	6.9	16.9
29 SIHY	4.2	0.0	5.5	9.4	5.9	10.4	6.0	14.2	6.4	15.8	6.9	16.7	6.9	16.8	6.9	16.8
30 SPCO	3.1	0.0	4.3	0.0	4.7	9.2	0.0	0.0	6.2	0.0	6.4	0.0	0.0	0.0	0.0	0.0
31 SICD	3.6	0.0	5.3	0.0	5.4	10.4	5.9	14.1	6.2	16.4	6.6	16.5	6.7	16.8	6.9	16.8
32 TROU	0.0	0.0	0.0	0.0	4.3	10.4	5.8	16.3	6.3	16.6	6.8	16.9	6.9	16.9	6.9	16.9
33 VUOC	0.0	0.0	5.5	10.7	5.9	10.9	6.8	16.7	6.9	16.8	6.9	16.9	6.9	16.8	6.9	16.9

## PHENOLOGICAL INVENTORY

## STUDY AREA FARSON

1979

TYPE SITE

ARTR AGSM

SPECIES	4 MAY		22 MAY		5 JUNE		25 JUNE		16 JULY		7 AUG		2 SEPT		22 SEPT	
	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
1 AGSM	3.3	0.0	4.3	0.0	4.5	0.0	5.0	0.0	6.1	0.0	6.4	16.8	6.6	16.9	6.8	16.9
2 ALTE	0.0	0.0	4.1	9.2	5.5	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3 ARHD	3.7	0.0	4.3	0.0	4.8	9.7	5.5	12.3	6.0	13.8	6.6	16.9	7.2	16.9	7.6	16.9
4 ARHDZ	0.0	0.0	5.1	11.1	0.0	0.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5 ARTR	2.3	0.0	3.0	0.0	3.5	0.0	4.0	0.0	4.5	0.0	5.5	9.6	5.8	10.9	6.1	15.1
6 ASPU	5.1	0.0	5.3	10.1	5.7	13.0	6.5	14.7	6.7	16.9	6.8	16.9	6.9	16.9	6.9	16.9
7 ATCO	1.5	0.0	4.1	0.0	4.6	10.0	4.9	12.5	5.5	0.0	5.8	0.0	5.9	0.0	6.1	0.0
8 CAEL	3.5	0.0	4.2	0.0	5.3	11.0	6.5	15.0	6.5	16.9	6.8	16.9	6.8	16.9	7.2	16.9
9 CAMD	0.0	0.0	4.6	0.0	4.8	0.0	5.5	0.0	6.0	0.0	6.6	16.9	6.9	16.9	6.9	16.9
10 CELA	6.0	16.7	6.3	16.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	4.2	0.0
11 CHVI	3.4	0.0	4.4	0.0	4.6	0.0	6.0	9.5	6.4	10.7	6.7	12.8	6.7	14.8	6.7	16.9
12 ERCE	1.0	0.0	3.5	0.0	4.5	0.0	4.9	9.3	5.5	10.9	6.6	11.8	7.1	12.7	7.9	16.9
13 ERDV	3.6	0.0	4.3	0.0	5.5	11.6	6.2	12.3	6.5	15.1	6.7	15.9	7.1	16.9	7.8	16.9
14 GRSP	2.2	0.0	4.3	0.0	4.9	0.0	4.9	0.0	6.3	0.0	6.6	0.0	6.9	16.9	6.9	16.9
15 HAAC	0.0	0.0	0.0	0.0	4.8	13.2	5.5	15.5	6.0	16.7	6.4	16.9	6.5	16.9	6.8	16.9
16 LARE	0.0	0.0	0.0	0.0	4.9	10.2	6.9	16.0	6.9	16.9	0.0	0.0	0.0	0.0	0.0	0.0
17 LEPU	3.6	0.0	0.0	0.0	0.0	0.0	6.0	12.5	6.5	16.5	6.8	16.9	6.9	16.9	6.9	16.9
18 DPPD	1.8	0.0	2.1	0.0	5.0	9.4	4.6	10.3	5.6	12.8	5.9	15.5	6.1	16.1	6.7	16.8
19 DRHY	2.4	0.0	4.3	0.0	4.8	9.1	5.6	11.2	6.0	13.5	6.4	16.6	6.6	16.9	6.7	16.9
20 PECL	5.3	0.0	5.5	10.7	5.7	12.5	6.0	13.5	5.8	16.7	6.2	16.9	6.3	16.8	0.0	0.0
21 PHHD	3.1	11.2	4.6	11.9	5.8	12.5	6.2	15.2	6.8	16.4	6.9	16.8	6.9	10.9	6.9	16.9
22 POSE	3.4	0.0	4.6	0.0	5.4	11.8	6.8	14.0	6.9	16.5	6.5	16.8	6.9	16.9	7.3	16.9
23 SIHY	5.2	0.0	4.7	0.0	5.3	9.0	5.8	12.2	6.1	14.5	6.5	16.1	7.2	16.9	7.9	16.9
24 SILI	0.0	0.0	0.0	0.0	4.8	11.8	6.1	0.0	6.5	14.8	0.0	0.0	6.9	16.9	6.9	16.9
25 SPCD	0.0	0.0	4.2	0.0	4.7	9.5	5.7	15.0	6.1	16.0	6.4	16.4	6.4	16.9	6.8	16.9
26 STCO	4.2	0.0	4.8	0.0	5.7	9.6	6.1	0.0	6.3	14.5	6.8	15.9	6.6	16.5	6.7	16.5
27 TESP	0.0	0.0	3.7	0.0	5.0	9.5	5.0	9.8	6.0	15.2	6.8	0.0	6.9	16.9	6.9	16.9
28 XASA	3.2	0.0	4.1	0.0	0.0	0.0	5.4	9.5	6.0	11.5	6.5	12.2	6.6	16.8	6.8	16.9

## PHENOLOGICAL INVENTORY

STUDY AREA HORSE CR.

1979

TYPE SITE

ARND AGSP

SPECIES	28 APRIL		24 MAY		7 JUNE		27 JUNE		18 JULY		9 AUG		2 SEPT		21 SEPT	
	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
1 AGSM	4.2	0.0	5.0	0.0	5.4	9.0	5.6	13.1	6.2	14.2	6.5	16.2	6.8	16.3	6.9	16.9
2 AGSP	4.3	0.0	5.1	11.1	5.5	10.3	5.8	14.3	6.5	16.8	6.8	16.8	6.8	16.8	6.9	16.9
3 ANDI	2.5	9.1	4.5	11.1	5.5	14.7	5.9	15.2	6.7	16.7	6.8	16.9	0.0	0.0	0.0	0.0
4 ARFE	6.7	16.3	6.7	16.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
5 ARMOZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9	16.9	0.0	0.0	0.0	0.0
6 ARTR	2.4	0.0	3.3	0.0	3.5	0.0	4.1	0.0	4.5	9.3	5.3	9.5	5.5	10.3	5.6	13.4
7 ARTR	2.4	0.0	3.3	0.0	3.5	0.0	4.2	9.3	4.5	9.3	5.3	9.5	5.5	10.3	5.6	13.4
8 ASPU	3.3	9.4	4.6	9.6	5.4	11.5	5.8	13.8	6.1	16.5	0.0	0.0	0.0	0.0	0.0	0.0
9 BAIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	0.0	6.2	0.0	0.0	0.0	0.0	0.0
10 BRTE	0.0	0.0	5.2	10.8	6.8	13.5	6.9	15.8	6.9	16.7	6.9	16.9	6.9	16.9	6.9	16.9
11 CAAN	3.2	9.2	4.4	11.4	5.3	10.5	6.0	13.3	6.9	15.7	6.9	16.5	6.9	16.7	6.9	16.9
12 CANU	0.0	0.0	0.0	0.0	0.0	0.0	6.8	14.4	6.9	16.8	6.9	16.8	6.9	16.8	6.9	16.9
13 CELA	6.0	13.3	6.1	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	4.2	0.0
14 CIR	2.2	0.0	4.9	9.8	5.4	10.1	6.1	11.6	6.4	14.6	6.6	16.0	6.6	16.1	6.6	16.1
15 COPA	0.0	0.0	4.4	0.0	4.9	0.0	5.0	0.0	5.7	15.1	6.3	0.0	6.4	0.0	6.4	0.0
16 CRBR	2.1	0.0	4.4	10.7	5.8	12.2	6.5	13.2	6.4	14.7	6.7	16.3	6.8	16.4	6.9	16.9
17 CYMD	2.6	9.1	4.7	12.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18 OEPI	0.0	0.0	4.9	12.5	5.4	13.2	6.9	14.5	6.9	16.8	6.9	16.9	6.9	16.9	6.9	16.9
19 ERCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	0.0	6.2	9.7	6.3	12.0	6.5	12.7
20 GACD	3.2	0.0	0.0	4.9	4.9	10.3	5.0	11.3	5.8	15.8	0.0	0.0	0.0	0.0	5.6	16.9
21 HAAC	2.7	0.0	5.2	12.4	5.3	13.2	6.0	16.8	6.5	16.9	6.7	16.9	6.7	16.9	6.7	16.9
22 LARE	0.0	0.0	0.0	0.0	6.5	11.8	6.9	16.0	6.9	16.8	6.9	16.9	6.9	16.9	0.0	0.0
23 LIRU	0.0	0.0	5.0	10.9	5.2	11.3	5.5	11.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24 LDDR	9.0	0.0	0.0	0.0	6.8	14.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25 MACA	0.0	0.0	0.0	0.0	4.9	11.2	5.3	13.1	5.8	15.8	0.0	0.0	0.0	0.0	16.9	0.0
26 OPPD	2.1	0.0	3.0	0.0	4.5	0.0	4.8	12.4	5.5	15.2	5.9	16.4	6.1	16.5	6.2	16.5
27 ORHY	0.0	0.0	4.9	0.0	5.9	11.2	6.0	15.2	6.4	16.7	6.5	16.9	6.6	16.8	6.0	16.9
28 PECL	3.2	0.0	4.6	0.0	4.5	0.0	5.4	13.8	5.9	16.8	6.4	16.9	6.4	16.8	6.9	16.9
29 PHHD	3.2	10.2	5.2	12.9	5.4	14.5	6.2	15.7	6.6	16.7	6.8	16.9	6.8	16.9	6.9	16.9
30 PDSF	4.3	0.0	4.9	10.8	6.3	0.0	6.7	15.4	6.8	16.9	6.9	16.9	6.9	16.9	6.9	16.9
31 RHTR	1.5	0.0	4.0	0.0	4.4	0.0	4.6	0.0	5.5	0.0	6.1	0.0	6.2	0.0	6.2	0.0
32 SAKA	0.0	0.0	4.0	0.0	4.7	0.0	4.8	0.0	5.6	10.2	6.1	12.7	5.7	11.3	5.9	11.8
33 SIHY	0.0	0.0	0.0	0.0	0.0	0.0	5.8	14.2	6.1	15.8	6.4	16.3	6.8	16.7	6.9	16.7
34 SPCD	3.1	0.0	4.8	9.0	4.9	10.5	6.2	0.0	6.4	0.0	6.6	0.0	6.6	0.0	6.6	0.0
35 STCD	2.5	0.0	0.0	0.0	5.3	14.1	5.8	14.7	6.3	15.9	6.5	16.5	6.7	16.7	6.7	16.7
36 TROU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	16.8	6.9	16.9	6.9	16.9	6.9	16.9
37 VIVA	3.2	10.1	0.0	0.0	0.0	0.0	6.4	0.0	6.8	0.0	6.9	16.7	0.0	0.0	0.0	0.0
38 XASA	5.8	11.3	6.2	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	4.0	0.0
39 YUGL	1.2	0.0	3.2	0.0	3.9	0.0	3.9	0.0	6.0	0.0	6.2	0.0	6.2	0.0	6.2	0.0
40 ZYVE	2.6	0.0	4.8	9.1	5.5	10.1	0.0	0.0	6.8	16.2	0.0	0.0	0.0	0.0	0.0	0.0



## PHENOLOGICAL INVENTORY

STUOY AREA HORSE CR.

1979

TYPE SITE

ARTR AGSM

SPECIES	28 APRL		24 MAY		7 JUNE		27 JUNE		18 JULY		9 AUG		2 SEPT		21 SEPT	
	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
1 AGSP	4.3	0.0	5.5	0.0	5.8	10.3	5.8	14.3	6.4	16.7	6.9	16.8	6.8	16.8	6.9	16.9
2 ALTE	0.0	0.0	4.3	10.8	5.8	13.8	6.3	14.5	6.9	16.9	6.9	16.9	0.0	0.0	0.0	0.0
3 ANOI	2.4	9.1	4.2	10.4	5.4	14.5	5.9	15.2	6.7	16.7	6.9	16.8	0.0	0.0	0.0	0.0
4 ARNO	2.2	0.0	3.1	0.0	3.3	0.0	4.2	9.1	4.5	9.5	5.2	9.6	5.5	10.4	5.7	11.5
5 BRJA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9	16.5	6.9	16.8	6.9	16.8	6.9	16.8
6 BRTE	3.2	0.0	4.7	10.8	6.9	13.3	6.9	15.3	6.9	16.4	6.9	16.9	6.9	16.9	6.9	16.9
7 CAAN	3.2	9.1	4.2	0.0	5.2	9.3	5.8	15.2	6.9	16.8	6.9	16.8	6.9	16.8	6.9	16.9
8 CANU	0.0	0.0	4.3	0.0	6.2	10.2	6.8	14.4	6.9	16.0	6.9	16.8	6.9	16.9	6.9	16.9
9 CELA	2.4	0.0	4.7	0.0	4.9	0.0	5.2	0.0	5.5	0.0	5.9	10.0	6.1	13.8	6.1	14.0
10 CHOE	0.0	0.0	3.2	0.0	0.0	0.0	6.1	14.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 COPA	0.0	0.0	4.2	0.0	4.9	0.0	5.2	15.2	5.7	15.1	6.3	0.0	0.0	0.0	0.0	0.0
12 CRAC	3.1	0.0	4.7	0.0	5.1	14.1	6.0	14.9	6.9	16.7	6.9	16.9	6.9	16.9	6.9	16.9
13 OEPI	2.3	0.0	4.5	12.3	5.4	13.2	6.7	14.5	6.9	16.8	6.9	16.8	6.9	16.9	6.9	16.9
14 ERPU	0.0	0.0	4.9	11.3	5.4	12.4	5.8	15.4	0.0	0.0	6.6	16.8	6.8	16.9	6.9	16.9
15 ERCE	0.0	0.0	0.0	0.0	0.0	0.0	4.7	12.3	5.8	15.8	6.2	16.7	0.0	0.0	0.0	0.0
16 KCCR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8	16.8	0.0	0.0
17 LAC	0.0	0.0	3.1	0.0	0.0	0.0	3.8	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18 LARE	0.0	0.0	5.1	10.8	6.5	11.8	6.8	15.7	6.9	16.3	6.9	16.8	6.9	16.9	6.9	16.9
19 LEOE	0.0	0.0	0.0	0.0	0.0	0.0	6.5	14.8	6.9	16.9	6.9	16.9	6.9	16.9	6.9	16.9
20 LDDR	0.0	0.0	0.0	0.0	0.0	0.0	6.8	14.7	6.9	16.3	0.0	0.0	0.0	0.0	0.0	0.0
21 HACA	0.0	0.0	0.0	0.0	0.0	0.0	5.8	12.3	5.8	16.8	0.0	0.0	0.0	0.0	0.0	0.0
22 OPPP	1.8	0.0	2.8	0.0	4.3	0.0	4.8	12.4	5.7	13.1	5.9	15.8	6.0	16.3	6.2	16.5
23 DRHY	0.0	0.0	4.7	0.0	0.0	0.0	5.9	13.5	6.4	16.7	6.5	16.9	6.6	16.8	0.0	0.0
24 PECL	3.2	0.0	0.0	0.0	4.3	0.0	5.7	14.6	5.0	16.8	6.2	16.9	6.3	16.9	6.9	16.9
25 PHHD	3.2	10.2	4.6	12.6	5.1	14.8	6.3	16.7	6.7	16.9	6.9	16.9	6.9	16.9	6.9	16.9
26 PDSE	4.2	0.0	4.9	11.8	6.2	12.7	6.5	16.6	6.9	16.8	6.9	16.9	6.9	16.9	6.9	16.9
27 SIHY	0.0	0.0	0.0	0.0	5.4	10.5	5.8	16.1	6.6	16.7	6.7	16.8	6.8	16.8	6.9	16.9
28 SPCD	2.2	0.0	4.1	0.0	4.6	0.0	6.1	0.0	6.5	0.0	6.6	0.0	0.0	0.0	0.0	0.0
29 STCD	3.2	0.0	0.0	0.0	4.9	11.2	5.8	14.7	6.5	16.3	6.5	16.5	6.8	16.7	0.0	0.0
30 TROU	2.4	0.0	6.7	11.3	6.7	14.7	6.2	15.5	6.9	16.9	6.9	16.9	6.9	16.9	6.9	16.9
31 VINU	3.2	10.1	0.0	0.0	0.0	0.0	6.3	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32 XASA	3.2	0.0	4.4	0.0	4.7	0.0	4.8	0.0	4.9	0.0	5.6	9.6	6.2	11.3	6.6	11.9
33 ZYVE	3.1	0.0	4.8	9.1	5.5	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



## PHENOLOGICAL INVENTORY

STUDY AREA DNL DRAW

1979

TYPE SITE ARTR ARNO AGSM AGSP

SPECIES	5 MAY		25 MAY		12 JUNE		28 JUNE		19 JULY		10 AUG		1 SEPT		23 SEPT	
	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
1 ACLA	0.0	0.0	0.0	0.0	4.3	0.0	5.9	11.7	6.8	15.8	6.9	16.5	7.4	16.8	7.7	16.9
2 AGSH	3.7	0.0	4.4	0.0	5.1	0.0	5.8	10.7	6.5	0.0	6.8	16.0	7.2	16.8	7.7	16.9
3 AGSP	4.1	0.0	5.1	0.0	5.5	0.0	6.1	0.0	6.4	0.0	6.8	0.0	7.4	16.9	7.8	16.9
4 ALL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5 ALTE	3.7	0.0	5.6	10.3	6.2	15.1	6.9	16.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 ANRO	0.0	0.0	0.0	0.0	0.0	0.0	5.7	15.8	6.1	16.4	6.7	16.9	6.7	16.9	6.9	16.9
7 ARHD	3.6	0.0	4.5	0.0	5.1	13.1	6.7	16.3	6.9	16.9	6.9	16.9	6.9	16.9	7.2	16.9
8 ARHOZ	0.0	0.0	0.0	0.0	0.0	0.0	6.8	16.9	6.9	16.9	6.9	16.9	6.9	16.9	6.9	16.9
9 ARHT	2.6	0.0	3.2	0.0	3.3	0.0	4.1	0.0	4.3	9.5	5.3	9.6	5.7	9.8	6.5	14.5
10 ARTR	2.8	0.0	3.4	0.0	3.5	0.0	4.3	0.0	4.4	9.4	5.3	9.5	4.6	9.7	6.2	16.9
11 ASRIZ	4.3	11.2	5.2	11.5	0.0	0.0	6.5	9.2	6.8	0.0	6.9	0.0	6.9	0.0	7.5	12.4
12 ASPU	3.6	0.0	5.3	12.6	5.5	14.5	6.3	16.5	6.7	16.9	6.9	16.9	6.9	16.9	7.3	16.9
13 AST	3.7	0.0	4.8	0.0	5.1	0.0	5.3	9.7	6.1	0.0	6.6	0.0	6.0	0.0	6.9	0.0
14 BASA	3.4	0.0	3.6	10.2	4.3	15.1	6.3	16.2	6.9	16.9	6.9	16.9	6.9	16.9	6.9	16.9
15 CACH	3.7	0.0	5.2	11.6	5.6	14.1	6.1	15.2	6.9	16.3	6.9	16.6	6.9	16.9	6.9	16.9
16 CANU	3.6	0.0	3.9	0.0	0.0	0.0	6.3	10.5	6.9	15.8	6.9	16.4	6.9	16.9	6.9	16.9
17 CELA	3.4	0.0	4.2	0.0	4.7	0.0	5.8	16.1	5.9	0.0	6.0	0.0	6.3	0.0	6.7	0.0
18 CHDO	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	5.5	0.0	6.2	0.0	6.7	0.0	0.0	0.0
19 CIR	0.0	0.0	3.3	0.0	4.6	0.0	4.7	10.0	6.7	0.0	6.9	16.2	6.9	16.9	7.3	16.9
20 CRAC	4.4	0.0	4.4	0.0	4.8	12.1	6.1	14.2	6.9	16.9	6.9	16.9	6.9	16.9	6.9	16.9
21 CRER	0.0	0.0	0.0	0.0	4.8	10.1	6.2	14.3	6.6	16.1	6.8	16.6	6.9	16.8	6.9	16.9
22 CYRO	4.0	0.0	4.7	0.0	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23 EROC	0.0	0.0	5.4	11.5	5.7	11.9	6.0	16.2	6.4	16.5	6.9	16.9	6.9	16.9	7.5	11.5
24 GICO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.3	16.1	6.9	16.9	6.9	0.0	6.9	0.0
25 GR5Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	9.7	6.4	11.5	6.5	11.8	6.8	12.2
26 MAAC	4.2	0.0	4.7	0.0	4.9	12.8	5.7	14.7	6.2	16.4	6.5	16.9	6.6	16.9	7.7	16.9
27 JUOS	3.2	0.0	3.4	0.0	4.1	13.1	5.7	15.7	6.0	15.9	6.0	15.9	6.0	15.9	6.0	0.0
28 KSCR	4.4	0.0	5.3	0.0	5.8	0.0	6.1	14.6	6.5	16.2	6.9	16.9	7.2	16.9	7.4	16.9
29 LAC	3.8	0.0	4.5	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 LERE	0.0	0.0	4.2	9.1	6.9	9.5	6.9	14.1	6.9	16.7	6.9	16.9	6.9	16.9	6.9	16.9
31 LILE	4.2	0.0	4.8	9.2	5.9	13.8	6.1	14.4	6.4	15.8	6.6	16.6	6.7	16.8	7.5	12.4
32 MAGR	0.0	0.0	0.0	0.0	0.0	0.0	4.5	10.2	6.1	15.9	6.3	16.5	6.4	16.6	6.6	16.9
33 MELD	4.5	11.3	5.7	12.6	5.8	13.8	0.0	0.0	0.0	0.0	6.9	16.9	6.9	16.9	6.9	16.9
34 OPPD	2.2	0.0	2.8	0.0	3.4	0.0	4.7	0.0	5.6	0.0	5.9	14.7	6.0	15.5	6.5	16.9
35 ORHY	3.8	0.0	5.1	0.0	5.7	0.0	6.0	0.0	6.0	0.0	6.0	16.3	6.8	16.9	6.8	16.9
36 OXY	0.0	0.0	0.0	0.0	4.7	12.1	5.6	14.8	6.4	15.9	6.9	0.0	6.9	0.0	7.5	11.5
37 PECL	4.5	10.6	5.4	0.0	5.8	14.8	6.7	16.3	6.9	16.9	6.9	16.9	6.9	16.9	7.4	16.9
38 PHHO	4.2	7.6	4.8	12.3	5.6	15.3	6.4	16.1	6.7	16.9	6.8	16.9	7.3	16.9	7.3	16.9
39 POFE	4.4	0.0	5.3	11.3	5.8	14.6	6.5	16.3	6.9	16.9	6.9	16.9	7.4	16.9	7.6	16.9
40 POSE	5.2	9.3	5.7	10.6	5.8	14.3	6.5	16.3	6.9	16.8	6.9	16.9	7.5	16.9	7.6	16.9
41 SECA	4.3	11.2	5.5	11.3	6.1	13.2	6.9	17.2	6.9	16.9	6.9	16.9	6.9	16.9	6.9	16.9
42 SELA	0.0	0.0	3.5	0.0	3.9	0.0	5.1	12.2	5.9	16.4	6.4	0.0	6.6	0.0	6.8	0.0
43 SPCD	0.0	0.0	0.0	0.0	0.0	0.0	5.9	9.5	6.4	0.0	6.6	0.0	6.7	0.0	6.8	0.0
44 STCU	3.3	0.0	4.4	0.0	4.9	0.0	6.1	10.8	6.4	15.9	6.7	16.8	7.2	16.9	7.4	16.9
45 TRBU	0.0	0.0	0.0	0.0	5.3	10.1	6.3	15.4	6.9	16.9	6.9	16.9	6.9	16.9	6.9	16.9
46 TRYQ	4.2	0.0	5.1	0.0	5.6	0.0	6.3	0.0	6.8	0.0	6.9	0.0	6.9	0.0	6.9	0.0
47 VIAN	0.0	0.0	4.4	0.0	4.8	10.3	6.1	17.1	6.8	16.7	6.9	16.9	6.9	16.9	6.9	16.9
48 VIO	4.1	0.0	4.4	0.0	4.9	0.0	6.5	16.1	6.9	0.0	6.9	0.0	6.9	0.0	6.9	0.0
49 XASA	3.2	0.0	4.3	0.0	4.9	0.0	5.1	0.0	6.1	9.1	6.3	10.7	6.4	11.5	6.1	12.7
50 ZYVE	3.3	0.0	4.5	0.0	5.4	0.0	0.0	0.0	6.9	16.2	6.9	16.8	6.9	16.9	6.9	16.9

## PHENOLOGICAL INVENTORY

STUDY AREA RED WASH 2

1979

TYPE SITE

ARTR AGSM AGSP

24

SPECIES	6 MAY		22 MAY		4 JUNE		24 JUNE		14 JULY		6 AUG		31 AUG		21 SEPT	
	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
1 AGSM	3.2	0.0	3.9	0.0	4.4	0.0	5.3	0.0	6.0	0.0	6.5	15.5	6.5	0.0	7.3	16.3
2 AGSP	4.0	0.0	4.5	0.0	4.8	0.0	5.5	10.5	6.2	14.1	6.4	15.8	6.5	16.5	7.4	16.7
3 ALTE	0.0	0.0	4.8	9.5	5.1	11.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 ARHD	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	12.8	6.1	15.8	7.1	0.0	0.0	0.0
5 ARHDZ	0.0	0.0	0.0	0.0	4.9	13.3	6.2	14.2	0.0	0.0	0.0	0.0	0.0	6.9	16.9	6.9
6 ARTR	3.1	0.0	3.2	0.0	3.5	0.0	4.1	0.0	4.3	0.0	5.1	9.6	5.7	11.1	6.4	14.8
7 ASOI	0.0	0.0	4.7	11.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	16.9	6.6
8 ASKE	0.0	0.0	2.9	0.0	0.0	0.0	4.3	0.0	4.5	0.0	5.3	12.0	6.0	14.9	7.2	16.9
9 ASPU	0.0	0.0	0.0	0.0	5.0	12.6	5.3	14.4	6.7	16.7	6.9	16.8	6.9	16.9	6.9	16.9
10 CELA	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0	5.2	11.6	5.4	12.4	6.0	14.4	6.2	15.8
11 CHOC	0.0	0.0	0.0	0.0	3.2	0.0	4.5	11.8	5.0	15.5	5.2	0.0	5.3	16.9	5.8	16.9
12 CHNA	2.2	0.0	3.2	0.0	4.3	0.0	4.6	0.0	4.9	9.1	5.3	9.8	5.8	10.7	6.0	13.2
13 CHV1	2.1	0.0	3.8	0.0	4.1	0.0	4.4	0.0	5.7	9.7	5.9	11.4	6.0	15.5	7.1	16.1
14 CORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	13.2	6.8	15.8
15 CRFL	0.0	0.0	0.0	0.0	4.5	11.2	4.9	12.3	5.9	15.0	6.1	16.0	7.0	16.8	7.2	16.9
16 CYMD	0.0	0.0	0.0	0.0	5.5	13.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17 ERAS	0.0	0.0	4.7	11.1	5.1	12.4	6.5	14.0	6.6	15.0	0.0	0.0	6.1	11.9	0.0	0.0
18 ERM1	0.0	0.0	0.0	0.0	3.7	0.0	4.4	10.2	4.9	11.0	5.4	11.4	6.9	15.9	7.2	16.1
19 ERDV	0.0	0.0	3.1	0.0	3.5	11.1	4.8	11.4	6.2	15.3	6.6	16.1	6.7	0.0	7.5	0.0
20 GICD	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	12.0	6.4	15.7	5.9	15.9	6.9	16.9
21 GRSP	2.1	0.0	3.1	0.0	4.1	0.0	4.5	12.6	5.0	16.0	6.4	16.2	6.9	16.9	6.9	16.9
22 HAAC	2.3	0.0	4.7	0.0	5.2	11.2	5.4	12.8	5.7	16.0	6.0	16.9	6.3	16.9	6.7	16.9
23 LEPD	0.0	0.0	0.0	0.0	4.1	0.0	4.6	10.4	5.4	14.9	5.9	16.8	5.9	0.0	7.1	0.0
24 NACA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	11.6	6.1	15.8
25 NAGR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	15.4	6.2	15.9	7.2	11.5
26 DPPO	0.0	0.0	1.5	0.0	2.2	0.0	4.3	9.8	4.8	10.9	5.3	14.7	5.9	15.5	6.4	16.4
27 DRHY	4.0	0.0	4.6	0.0	5.1	0.0	5.8	11.3	6.4	16.3	6.6	16.7	6.5	16.7	7.1	16.9
28 PEN	0.0	0.0	3.4	0.0	4.4	11.1	5.6	12.7	6.0	15.7	6.4	16.7	7.2	16.9	7.3	16.9
29 PHHD	0.0	10.2	4.8	11.4	5.1	12.8	5.5	15.4	6.1	16.8	6.8	16.9	6.8	16.9	6.9	16.9
30 POSE	3.0	0.0	4.2	0.0	4.9	0.0	5.8	12.6	6.8	15.4	6.9	16.8	6.9	16.9	7.2	16.9
31 SILI	0.0	0.0	5.3	9.2	4.7	11.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32 SIHY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	14.7	6.5	16.2	6.6	16.4	7.2	16.7
33 STCD	3.2	0.0	4.3	0.0	4.5	0.0	4.7	10.7	6.3	16.4	6.5	16.8	6.2	16.9	7.2	16.9
34 TECA	0.0	0.0	3.2	0.0	4.1	0.0	4.4	0.0	4.8	11.4	5.8	12.1	6.1	16.4	6.4	16.8

## PHENOLOGICAL INVENTORY

STUUY AREA SHOSHONI 7

1979

TYPE SITE ARTR AGSH

SPECIES	30 APRL		23 MAY		6 JUNE		26 JUNE		17 JULY		8 AUG		1 SEPT		29 SEPT	
	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
1 AGSH	4.2	0.0	4.7	0.0	4.8	0.0	5.1	0.0	6.2	0.0	6.8	15.8	6.9	15.9	7.8	16.3
2 ALTE	3.2	9.3	5.3	10.2	6.1	14.4	6.9	14.9	6.9	16.5	6.9	16.8	6.9	16.9	6.9	16.9
3 ARHOZ	4.4	10.4	0.0	0.0	6.4	13.8	6.2	16.1	6.7	16.8	6.9	16.9	6.9	16.9	6.9	16.9
4 ARTR	2.3	0.0	3.3	0.0	0.0	0.0	4.1	0.0	4.5	9.4	5.2	9.5	7.3	9.9	7.7	12.8
5 ASPI	0.0	0.0	4.6	11.3	4.8	12.2	5.0	14.1	5.7	16.0	6.0	16.2	6.6	16.9	6.9	16.9
6 ASPU	3.3	9.5	5.0	13.0	5.3	13.1	5.7	15.8	6.3	16.4	6.7	16.7	6.9	16.9	6.9	16.9
7 BOGR	4.2	0.0	4.0	0.0	5.6	0.0	5.9	10.9	6.1	12.0	6.5	15.0	7.2	15.8	7.9	0.0
8 BRTE	4.1	0.0	4.5	14.0	6.2	16.0	6.6	15.5	6.7	16.3	6.9	16.7	6.9	16.9	6.9	16.9
9 CAFI	0.0	0.0	4.5	10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 CHAL	0.0	0.0	3.0	9.1	4.5	10.0	4.9	11.2	5.8	13.7	6.2	14.6	6.0	0.0	0.0	0.0
11 CLLU	0.0	0.0	0.0	0.0	4.7	11.5	5.9	14.5	6.8	16.8	6.9	16.9	6.9	16.9	6.9	16.9
12 CYMD	3.2	10.1	5.2	13.8	6.0	15.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13 OEGR	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14 OEPI	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	6.8	16.7	6.9	16.9	6.9	16.9	6.9	16.9
15 ERPU	3.2	0.0	3.8	9.7	4.8	11.5	5.1	12.7	6.2	15.8	6.4	16.7	6.7	16.9	7.7	16.9
16 GIPU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	15.9	6.9	16.8	6.9	16.9	6.9	16.9
17 LARE	0.0	0.0	5.0	10.1	5.5	15.0	6.4	15.9	6.6	16.2	6.9	16.4	6.0	16.8	6.0	16.9
18 LEDE	0.0	0.0	5.6	14.9	6.8	14.1	6.4	15.4	6.8	16.2	6.9	16.5	6.9	16.9	6.9	16.9
19 LUPU	0.0	0.0	4.6	0.0	4.8	12.3	5.9	14.5	6.7	16.7	6.8	16.8	6.9	16.9	6.9	16.9
20 MACA	0.0	0.0	0.0	0.0	0.0	0.0	4.8	11.8	6.7	16.2	0.0	0.0	0.0	0.0	0.0	0.0
21 OPPD	2.2	0.0	3.0	9.2	4.3	9.5	4.8	10.4	5.1	13.9	5.4	15.8	5.7	16.9	6.9	16.9
22 ORHY	0.0	0.0	0.0	0.0	4.5	9.3	5.1	14.3	6.0	16.3	6.3	16.7	0.0	0.0	8.0	16.9
23 PHHO	3.3	10.1	5.2	13.4	5.7	15.0	6.2	16.1	6.3	16.7	6.7	16.8	7.3	16.9	7.9	16.9
24 PLPA	0.0	0.0	3.2	0.0	4.2	10.8	4.8	12.4	6.4	15.9	6.8	16.6	6.8	16.9	6.9	16.9
25 POSE	3.2	0.0	5.9	0.0	6.0	11.8	6.4	15.1	6.7	16.0	6.9	16.7	6.9	16.9	7.9	16.9
26 SAIB	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	4.3	9.1	5.8	11.3	5.9	12.6	6.7	14.2
27 SIHY	0.0	0.0	5.4	16.9	5.7	11.2	6.0	12.9	6.1	15.1	6.6	16.7	6.9	16.8	6.9	16.9
28 SPCD	2.4	0.0	3.0	0.0	4.9	10.5	5.8	12.1	6.0	16.1	6.3	16.9	6.3	16.9	6.8	16.9
29 STCO	3.4	0.0	5.0	9.1	4.9	10.2	5.0	12.7	6.2	16.5	6.5	16.7	7.6	16.9	7.7	16.9
30 VUOC	0.0	0.0	0.0	0.0	4.7	10.6	6.7	14.7	6.8	16.7	6.9	16.9	6.9	16.9	6.0	16.9

## PHENOLOGICAL INVENTORY

## STUOY AREA SWEETWATER

1979

## TYPE SITE

ARTR ARND AGSM

SPECIES	5 MAY		23 MAY		6 JUNE		26 JUNE		16 JULY		8 AUG		25 SEPT		29 SEPT	
	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
1 AGSM	4.3	0.0	4.5	0.0	4.7	0.0	4.9	0.0	6.3	0.0	6.6	15.4	7.2	16.2	7.7	16.7
2 ALTE	3.8	0.0	5.5	9.4	5.8	11.7	6.5	15.2	0.0	0.0	6.9	16.7	6.9	16.9	8.0	16.9
3 ARFR	4.0	0.0	4.2	0.0	4.6	0.0	4.7	0.0	5.2	0.0	6.0	9.6	7.2	10.6	7.6	12.8
4 ARHD	3.2	0.0	4.5	9.5	5.0	10.4	5.4	12.1	6.7	15.1	6.8	16.5	7.3	16.9	8.0	16.9
5 ARHD2	0.0	0.0	5.0	13.4	5.8	13.1	6.2	13.9	0.0	0.0	6.9	16.9	7.7	16.9	8.0	16.9
6 ARND	2.5	0.0	3.4	0.0	3.2	0.0	4.0	0.0	4.4	9.4	5.2	9.7	7.2	10.4	7.6	12.8
7 ARTR	2.5	0.0	3.3	0.0	3.4	0.0	4.2	0.0	4.4	9.3	5.2	9.5	7.3	9.8	7.7	12.6
8 ASMI	3.6	0.0	4.5	0.0	4.9	9.5	5.5	11.2	6.2	15.5	6.5	16.8	6.6	16.9	7.2	16.9
9 ASPU	3.2	0.0	4.6	0.0	5.5	14.2	5.7	15.6	6.3	16.6	6.7	16.9	7.5	16.9	7.7	16.9
10 ASSP	3.2	0.0	3.2	0.0	5.5	10.5	5.7	16.0	6.0	16.3	6.5	16.5	7.3	16.9	7.6	16.9
11 CAEL	5.2	8.3	5.5	9.8	5.9	0.0	6.3	15.3	6.4	16.8	6.7	16.9	7.2	16.9	7.7	16.9
12 CAFI	5.2	8.5	5.4	10.7	6.2	13.5	6.4	15.8	6.5	16.4	6.6	16.7	7.2	16.9	7.7	16.9
13 CHDD	0.0	0.0	2.5	0.0	4.6	9.6	4.8	10.5	0.0	0.0	5.7	16.9	6.2	16.9	0.0	0.0
14 CHNA	2.9	0.0	3.8	0.0	4.3	0.0	4.6	0.0	5.6	0.0	6.0	9.1	7.4	11.6	7.7	12.8
15 CHVI	3.3	0.0	3.8	0.0	4.5	0.0	4.8	0.0	5.6	9.5	6.1	10.2	6.2	11.8	6.5	16.4
16 COPA	4.2	0.0	4.6	9.9	5.3	12.7	5.5	16.4	5.8	16.8	6.1	16.9	6.3	16.9	6.7	16.9
17 CR8R	3.5	0.0	3.9	11.4	4.8	12.6	5.9	16.0	6.7	15.8	0.0	0.0	0.0	0.0	0.0	0.0
18 CRFL	3.6	0.0	4.2	10.3	4.9	12.8	5.6	14.0	6.0	16.3	6.5	16.5	7.4	16.8	7.8	16.9
19 CYMD	3.3	0.0	5.0	12.8	5.8	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20 DEGE	4.4	0.0	4.6	0.0	4.9	9.2	5.8	15.5	6.7	16.8	6.8	16.9	7.1	16.9	7.8	16.9
21 ERCE	0.0	0.0	0.0	0.0	5.3	0.0	4.6	9.1	5.2	10.6	6.3	11.7	7.2	13.8	0.0	0.0
22 ERDW	3.6	0.0	5.0	11.5	5.4	12.3	5.7	13.5	6.2	15.4	6.5	16.2	6.7	16.9	6.7	16.9
23 ERPU	0.0	0.0	0.0	0.0	5.4	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.9	16.9
24 HAAC	0.0	0.0	0.0	0.0	5.7	12.1	5.9	15.8	6.5	16.8	6.8	16.9	6.8	16.9	0.0	0.0
25 KOCR	4.2	0.0	5.5	9.5	5.7	10.9	5.9	12.1	6.7	15.4	6.8	16.1	7.2	16.9	7.8	16.9
26 LARE	0.0	0.0	5.0	11.2	4.2	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27 LEAL	0.0	0.0	0.0	0.0	4.6	10.8	5.5	13.7	6.3	14.4	6.5	16.5	6.9	16.9	6.9	16.9
28 LEPU	3.3	0.0	4.0	9.1	4.2	9.6	4.5	9.3	6.4	15.2	6.7	16.6	7.4	16.9	8.0	16.9
29 LIRU	0.0	0.0	0.0	0.0	4.8	11.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30 MACA	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0	5.0	10.4	5.3	11.0	7.3	11.8	0.0	0.0
31 MAGR	0.0	0.0	0.0	0.0	4.3	0.0	5.1	11.7	5.2	12.1	6.1	16.2	0.0	0.0	0.0	0.0
32 DEAL	0.0	0.0	0.0	0.0	4.8	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33 DPPD	3.1	0.0	3.4	9.2	4.3	9.5	4.5	10.0	5.2	14.0	5.3	15.4	5.7	16.9	5.9	16.9
34 DRFA	0.0	0.0	0.0	0.0	0.0	0.0	5.9	13.7	0.0	0.0	6.9	15.1	0.0	0.0	0.0	0.0
35 DRHY	3.2	0.0	4.8	0.0	5.8	9.0	5.9	11.7	6.1	16.4	6.4	16.6	7.2	16.9	8.0	16.9
36 PEFR	3.4	0.0	4.8	0.0	5.2	11.5	5.7	13.8	6.2	15.5	6.3	16.7	6.7	16.9	7.7	16.9
37 PHHD	3.8	7.5	5.0	13.2	5.8	15.8	6.0	16.6	6.4	16.8	6.7	16.8	7.2	16.9	8.0	16.9
38 PDSE	4.4	0.0	5.5	9.6	5.8	11.3	6.2	13.5	6.9	16.7	6.9	16.8	7.4	16.9	8.0	16.9
39 PSTE	0.0	0.0	3.5	0.0	4.9	0.0	5.1	10.6	6.1	15.9	6.5	16.8	6.7	16.9	0.0	0.0
40 SPCD	0.0	0.0	0.0	0.0	4.6	0.0	4.8	0.0	5.9	14.7	6.1	0.0	7.3	16.9	7.7	16.9
41 STCO	3.4	0.0	5.4	0.0	5.8	9.2	6.2	10.8	6.4	16.4	6.5	16.7	7.3	16.9	7.8	16.9
42 TECA	3.2	0.0	4.2	0.0	4.4	0.0	4.6	9.1	5.0	10.9	5.9	12.3	5.9	14.2	7.8	16.9
43 VID	4.0	7.4	5.2	12.9	5.8	13.8	6.1	14.8	6.8	16.8	6.9	16.9	6.9	16.9	8.0	16.9
44 ZYVE	3.4	0.0	4.8	10.2	6.1	15.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SPECIES	STUDY AREA UPPER GOVT 1979										TYPE SITE	ARTR AGSM				
	5 MAY	23 MAY	6 JUNE	26 JUNE	16 JULY	8 AUG	1 SEPT	29 SEPT	VEG REPR	VEG REPR		VEG REPR	VEG REPR			
1 AGSM	4.2	0.0	5.7	0.0	4.9	0.0	5.3	11.0	5.9	15.3	6.4	15.8	6.8	16.9	8.0	16.9
2 AND1	0.0	0.0	4.8	10.0	5.3	13.4	5.7	15.7	6.7	16.4	6.8	15.9	6.9	16.7	8.0	16.9
3 ARHO2	0.0	0.0	4.5	12.1	5.5	14.8	6.6	16.2	6.9	16.8	6.9	16.9	6.9	16.9	6.9	16.9
4 ARTR	2.4	0.0	3.4	0.0	3.5	0.0	4.1	0.0	4.5	9.2	5.1	9.5	7.2	9.7	7.7	12.6
5 ASOR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	16.5	0.0	0.0	0.0	0.0
6 ASPU	4.2	0.0	5.4	11.3	5.5	12.8	5.8	14.8	6.3	15.6	6.7	16.7	6.9	16.9	8.0	16.9
7 BGR	0.0	0.0	4.2	0.0	5.3	0.0	5.7	0.0	5.9	12.4	6.3	14.2	0.0	0.0	0.0	0.0
8 BRTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	15.0	6.9	16.1	6.9	16.6	6.9	16.9
9 CANU	0.0	0.0	0.0	0.0	0.0	0.0	5.8	11.5	6.6	14.0	6.8	16.8	6.9	16.9	8.0	16.9
10 CAS	3.4	0.0	4.5	9.3	5.0	9.7	6.2	14.6	6.4	15.9	6.8	16.3	6.9	16.9	7.9	16.9
11 CHV1	3.2	0.0	4.4	0.0	4.6	0.0	4.8	0.0	5.1	9.1	5.8	9.8	6.1	11.7	6.6	13.5
12 CRAC	3.4	0.0	4.6	9.7	5.2	11.9	6.2	13.7	6.5	15.7	6.7	16.8	6.9	16.9	8.0	16.9
13 DEP1	0.0	0.0	0.0	0.0	3.8	11.3	0.0	0.0	6.9	16.3	6.9	16.8	6.9	16.9	6.9	16.9
14 ERPU	0.0	0.0	0.0	0.0	4.6	11.4	6.0	12.0	6.2	16.1	6.7	16.7	7.2	16.9	7.7	16.9
15 HAAC	0.0	0.0	0.0	0.0	0.0	0.0	5.9	15.0	6.1	16.7	6.3	16.9	6.4	16.9	6.7	16.9
16 KOCR	4.6	0.0	5.1	10.5	5.4	11.0	5.7	12.5	6.4	15.4	6.6	16.2	7.3	16.7	8.0	16.9
17 LARE	0.0	0.0	4.0	9.2	4.4	10.5	6.3	15.3	6.9	16.7	6.9	16.8	6.9	16.9	6.9	16.9
18 LES	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	6.9	16.9	6.9	16.9	6.9	16.9	6.9	16.9
19 LERE	0.0	0.0	5.6	9.2	5.8	10.5	6.8	11.3	6.9	16.9	6.9	16.9	6.9	16.9	6.9	16.9
20 LOPD	0.0	0.0	4.8	11.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21 LDDR	4.4	11.4	5.5	12.4	5.7	13.0	6.8	16.1	6.9	16.9	6.9	16.9	6.9	16.9	7.9	16.9
22 NACA	0.0	0.0	0.0	0.0	0.0	0.0	4.4	11.1	6.2	15.5	6.3	16.0	6.7	16.9	8.0	16.9
23 OPOP	2.0	0.0	3.0	0.0	4.3	0.0	4.6	11.3	5.0	13.4	5.2	15.4	5.7	16.9	5.9	16.9
24 PECL	3.7	0.0	4.0	0.0	4.6	11.2	5.3	13.8	5.9	16.8	6.2	16.9	6.9	16.9	7.5	16.9
25 PHHD	4.2	7.3	5.4	11.9	5.6	12.9	6.0	15.0	6.4	16.7	6.6	16.8	6.7	16.9	8.0	16.9
26 PLPA	0.0	0.0	0.0	0.0	0.0	0.0	4.8	12.1	6.1	12.8	6.6	16.6	6.9	16.8	6.9	16.9
27 PDSF	4.3	0.0	4.4	10.6	4.9	11.2	6.4	14.0	6.7	15.6	6.8	16.7	7.4	16.9	8.0	16.9
28 SPCD	0.0	0.0	3.4	0.0	4.2	9.8	4.8	10.5	5.6	15.4	6.2	15.9	6.3	16.9	6.8	16.9
29 TRDU	0.0	0.0	0.0	0.0	0.0	0.0	4.4	10.5	6.2	16.9	6.9	16.9	6.9	16.9	8.0	16.9
30 VIAM	4.3	0.0	4.6	0.0	4.8	12.4	5.4	14.7	6.7	16.8	6.8	16.9	6.8	16.9	8.0	16.9
31 V1D	3.3	0.0	4.3	11.2	5.0	15.4	0.0	0.0	0.0	0.0	6.7	16.8	6.9	16.9	7.8	16.9
32 XASA	0.0	0.0	3.8	0.0	4.3	0.0	4.7	0.0	5.4	9.2	5.7	10.1	5.8	12.0	6.2	15.2

TABLE IV. Prime species intensive phenological inventory by enclosure, plant species, and date collection date for each permanently identified plant. Intra-tabular tables of contents and check list of sampling times.

	<u>Sampling Time</u>								<u>Page</u>
	1	2	3	4	5	6	7	8	
<u>Agropyron smithii</u>									
Bud Kimball Exc.	X	X	X	X	X	X	X	X	29
Cumberland #3 Exc.		X	X	X	X	X	X	X	37
Demer Exc.	X	X	X	X	X	X	X	X	44
Farson Exc.	X	X	X	X	X	X	X	X	52
Horse Creek Exc.	X	X	X	X	X	X	X	X	60
Mesa Antelope Exc.	X	X	X	X	X	X	X	X	68
Owl Draw Exc.	X	X	X	X	X	X	X	X	76
Red Wash #2 Exc.	X	X	X	X	X	X	X	X	84
Shoshoni #7 Exc.	X	X	X	X	X	X	X	X	92
Sweetwater Exc.	X	X	X	X	X	X	X	X	100
Upper Gov't Draw Exc.	X	X	X	X	X	X	X	X	108
<u>Agropyron spicatum</u>									
Cedar Mountain Exc.	X	X	X	X	X	X	X	X	116
Cumberland #3 Exc.		X	X	X	X	X	X	X	124
Demer Exc.	X	X	X	X	X	X	X	X	131
Horse Creek Exc.	X	X	X	X	X	X	X	X	139
Owl Draw Exc.	X	X	X	X	X	X	X	X	147
Red Wash #2 Exc.	X	X	X	X	X	X	X	X	155
<u>Artemisia nova</u>									
Horse Creek Exc.	X	X	X	X	X	X	X	X	163
Owl Draw Exc.	X	X	X	X	X	X	X	X	171
Sweetwater Exc.	X	X	X	X	X	X	X	X	179
<u>Artemisia tridentata</u>									
Bud Kimball Exc.	X	X	X	X	X	X	X	X	187
Cedar Mountain Exc.	X	X	X	X	X	X	X	X	195
Cumberland #3 Exc.		X	X	X	X	X	X	X	203
Demer Exc.	X	X	X	X	X	X	X	X	210
Farson Exc.	X	X	X	X	X	X	X	X	218
Horse Creek Exc.	X	X	X	X	X	X	X	X	226
Mesa Antelope Exc.	X	X	X	X	X	X	X	X	234
Owl Draw Exc.	X	X	X	X	X	X	X	X	242
Red Wash #2 Exc.	X	X	X		X	X	X	X	250



TABLE IV. (continued)

	<u>Sampling Time</u>								<u>Page</u>
	1	2	3	4	5	6	7	8	
<u>Artemisia tridentata</u> (con't)									
Shoshoni #7 Exc.	X	X	X	X	X		X	X	258
Sweetwater Exc.	X	X	X	X	X	X	X	X	266
Upper Gov't Draw Exc.	X	X	X	X	X	X	X	X	274

## Average Date for Sampling Times:

#1 - 30 April

#2 - 23 May

#3 - 6 June

#4 - 26 June

#5 - 17 July

#6 - 8 August

#7 - 1 Sept

#8 - 29 Sept



AGROPYRON SMITHII

STUDY AREA BUD KIMBAL

DATE 29

APRIL 1979

PLANT NO.	PHENOLOGICAL STAGE	SCOPE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	3.2	0.0	.2	8.2	0.0	0.0	0.0
2	4.1	0.0	.2	7.2	0.0	0.0	0.0
3	3.6	0.0	.2	14.4	0.0	0.0	0.0
4	3.2	0.0	.1	6.1	0.0	0.0	0.0
5	3.3	0.0	.2	8.4	0.0	0.0	0.0
6	4.1	0.0	.1	7.6	0.0	0.0	0.0
7	4.2	0.0	.2	12.5	0.0	0.0	0.0
8	3.2	0.0	.1	6.0	0.0	0.0	0.0
9	4.1	0.0	.2	11.0	0.0	0.0	0.0
10	4.2	0.0	.2	12.2	0.0	0.0	0.0
11	4.1	0.0	.2	12.2	0.0	0.0	0.0
12	4.2	0.0	.2	10.7	0.0	0.0	0.0
13	4.2	0.0	.2	13.2	0.0	0.0	0.0
14	4.3	0.0	.3	12.5	0.0	0.0	0.0
15	3.4	0.0	.1	9.5	0.0	0.0	0.0
16	4.2	0.0	.3	9.0	0.0	0.0	0.0
17	3.6	0.0	.1	12.0	0.0	0.0	0.0
18	4.2	0.0	.2	9.8	0.0	0.0	0.0
19	3.7	0.0	.2	11.1	0.0	0.0	0.0
20	3.4	0.0	.2	8.2	0.0	0.0	0.0

MEAN	3.8	0.0	.2	10.1	0.0	0.0	0.0
STD DEV	.4	0.0	.1	2.4	0.0	0.0	0.0

C.C = NOT RECORDED

ACROPYRON SMITHII

STUDY AREA BUD KIMBAL

DATE 24

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCDPE VEG.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	4.2	0.0	.2	12.6	0.0	0.0	0.0
2	4.3	0.0	.3	12.1	0.0	0.0	0.0
3	4.4	0.0	.3	23.0	0.0	0.0	0.0
4	4.4	0.0	.3	19.7	0.0	0.0	0.0
5	4.2	0.0	.2	11.9	0.0	0.0	0.0
6	4.3	0.0	.2	16.6	0.0	0.0	0.0
7	3.2	0.0	.2	10.1	0.0	0.0	0.0
8	4.3	0.0	.2	15.0	0.0	0.0	0.0
9	4.2	0.0	.2	11.6	0.0	0.0	0.0
10	5.2	0.0	.4	17.1	0.0	0.0	0.0
11	4.0	0.0	.3	14.1	0.0	0.0	0.0
12	3.4	0.0	.3	14.0	0.0	0.0	0.0
13	4.4	0.0	.3	17.8	0.0	0.0	0.0
14	4.4	0.0	.5	15.5	0.0	0.0	0.0
15	4.5	0.0	.3	18.3	0.0	0.0	0.0
16	4.4	0.0	.3	14.8	0.0	0.0	0.0
17	4.5	0.0	.4	15.4	0.0	0.0	0.0
18	4.3	0.0	.2	9.6	0.0	0.0	0.0
19	5.2	0.0	.4	18.1	0.0	0.0	0.0
20	4.4	0.0	.3	25.8	0.0	0.0	0.0

NEW PLANT REPLACES DEAD C  
NEW PLANT REPLACES DEAD C

MEAN 4.3 0.0 .3 15.7 0.0 0.0 0.0

STD DEV .5 0.0 .1 4.1 0.0 0.0 0.0

C.0 = NOT RECORDED

AGROPYRON SPITHII

STUDY AREA BUD KIMBAL

DATE 11

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCOPE REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	5.3	0.0	.2	14.0	0.0	0.0	0.0
2	5.4	0.0	.2	13.0	0.0	0.0	0.0
3	5.6	0.0	.2	18.0	0.0	0.0	0.0
4	4.9	0.0	.2	11.0	0.0	0.0	0.0
5	5.3	0.0	.2	15.0	0.0	0.0	0.0
6	5.1	0.0	.2	16.0	0.0	0.0	0.0
7	4.4	0.0	.2	15.0	0.0	0.0	0.0
8	4.4	0.0	.2	22.0	0.0	0.0	0.0
9	4.9	0.0	.2	20.0	0.0	0.0	0.0
10	5.8	0.0	.3	23.0	0.0	0.0	0.0
11	4.9	0.0	.3	16.0	0.0	0.0	0.0
12	4.7	0.0	.4	17.0	0.0	0.0	0.0
13	5.3	0.0	.4	20.0	0.0	0.0	0.0
14	5.9	0.0	.4	30.0	0.0	0.0	0.0
15	4.6	0.0	.3	19.0	0.0	0.0	0.0
16	4.1	0.0	.2	13.0	0.0	0.0	0.0
17	5.8	0.0	.4	20.0	0.0	0.0	0.0
18	4.9	0.0	.2	16.0	0.0	0.0	0.0
19	5.4	0.0	.4	17.0	0.0	0.0	0.0
20	5.3	0.0	.4	31.0	0.0	0.0	0.0

MEAN	5.1	0.0	.3	18.3	0.0	0.0	0.0
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STD DEV	.5	0.0	.1	5.2	0.0	0.0	0.0
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0.0 = NOT RECORDED

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORRE REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	5.1	0.0	.2	14.2	0.0	0.0	0.0
2	4.8	0.0	.2	13.1	0.0	0.0	0.0
3	4.8	0.0	.3	27.2	0.0	0.0	0.0
4	5.2	0.0	.3	24.9	0.0	0.0	0.0
5	4.8	0.0	.3	14.9	0.0	0.0	0.0
6	5.1	0.0	.3	16.1	0.0	0.0	0.0
7	4.6	0.0	.3	15.6	0.0	0.0	0.0
8	4.9	0.0	.3	22.7	0.0	0.0	0.0
9	5.2	0.0	.3	13.5	0.0	0.0	0.0
10	5.3	0.0	.3	22.7	0.0	0.0	0.0
11	4.9	0.0	.3	15.7	0.0	0.0	0.0
12	4.9	0.0	.4	15.8	0.0	0.0	0.0
13	4.9	0.0	.4	37.0	0.0	0.0	0.0
14	5.3	0.0	.4	29.7	0.0	0.0	0.0
15	4.9	0.0	.3	17.6	0.0	0.0	0.0
16	5.1	0.0	.3	13.4	0.0	0.0	0.0
17	5.4	0.0	.4	20.2	0.0	0.0	0.0
18	5.3	0.0	.3	16.3	0.0	0.0	0.0
19	5.4	0.0	.4	16.5	0.0	0.0	0.0
20	4.9	0.0	.3	27.6	0.0	0.0	0.0

MEAN 5.0 0.0 .3 19.7 0.0 0.0 0.0

STD DEV .2 0.0 .1 6.6 0.0 0.0 0.0

0.0 = NOT RECORDED

ACROBYRON SMITHII

STUDY AREA LUD KIMBAL

DATE 17

JULY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCOPE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.2	0.0	.2	14.1	0.0	0.0	0.0
2	6.3	0.0	.2	12.1	0.0	0.0	0.0
3	6.2	0.0	.2	17.2	0.0	0.0	0.0
4	6.2	0.0	.3	32.0	0.0	0.0	0.0
5	6.2	0.0	.2	15.0	0.0	0.0	0.0
6	6.2	0.0	.2	15.2	0.0	0.0	0.0
7	6.6	0.0	.1	10.9	0.0	0.0	0.0
8	6.2	0.0	.2	22.6	0.0	0.0	0.0
9	6.3	0.0	.2	23.5	0.0	0.0	0.0
10	6.3	0.0	.2	23.0	0.0	0.0	0.0
11	6.2	0.0	.3	15.6	0.0	0.0	0.0
12	6.3	0.0	.3	15.5	0.0	0.0	0.0
13	6.3	0.0	.3	36.7	0.0	0.0	0.0
14	6.3	0.0	.4	21.9	0.0	0.0	0.0
15	6.3	0.0	.3	18.1	0.0	0.0	0.0
16	6.2	0.0	.3	15.6	0.0	0.0	0.0
17	6.2	0.0	.4	20.3	0.0	0.0	0.0
18	6.3	0.0	.2	12.9	0.0	0.0	0.0
19	6.2	0.0	.4	19.9	0.0	0.0	0.0
20	6.3	0.0	.2	29.1	0.0	0.0	0.0

MEAN	6.3	0.0	.3	19.6	0.0	0.0	0.0
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STD DEV	.1	0.0	.1	6.8	0.0	0.0	0.0
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0.0 = NOT RECORDED

PLANT NO.	PHENOLOGICAL STAGE	SCORE	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.8	0.0	.1	14.1	0.0	0.0	1.0
2	6.7	0.0	.2	11.5	0.0	0.0	1.0
3	6.7	0.0	.2	27.4	0.0	0.0	1.0
4	6.8	0.0	.2	19.1	0.0	0.0	1.0
5	6.9	0.0	.2	20.4	0.0	0.0	1.0
6	6.4	0.0	.2	22.1	0.0	0.0	2.0
7	6.5	0.0	.2	15.6	0.0	0.0	1.0
8	6.5	0.0	.2	22.0	0.0	0.0	1.0
9	6.8	0.0	.3	24.6	0.0	0.0	2.0
10	6.7	0.0	.2	19.5	0.0	0.0	1.0
11	6.8	0.0	.2	16.1	0.0	0.0	2.0
12	6.5	0.0	.3	15.8	0.0	0.0	1.0
13	6.3	0.0	.3	20.1	0.0	0.0	1.0
14	6.5	0.0	.3	29.0	0.0	0.0	1.0
15	6.8	0.0	.2	17.2	0.0	0.0	2.0
16	6.9	0.0	.2	9.8	0.0	0.0	1.0
17	6.5	0.0	.3	20.5	0.0	0.0	1.0
18	6.6	0.0	.2	13.0	0.0	0.0	1.0
19	6.5	0.0	.2	19.4	0.0	0.0	1.0
20	6.5	0.0	.2	24.5	0.0	0.0	2.0

MEAN 6.6 0.0 .2 19.1 0.0 0.0 1.3

STD DEV .2 0.0 .1 5.1 0.0 0.0 .4

C.0 = NOT RECORDED



AGROPYRON SYTHII

STUDY AREA BUD KIMBAL

DATE 1 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCDPF REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.9	0.0	.2	11.5	0.0	0.0	0.0
2	6.9	0.0	.2	11.5	0.0	0.0	0.0
3	6.9	0.0	.2	27.3	0.0	0.0	0.0
4	6.8	0.0	.2	18.9	0.0	0.0	0.0
5	6.9	0.0	.2	12.2	0.0	0.0	0.0
6	6.8	0.0	.2	22.0	0.0	0.0	0.0
7	6.8	0.0	.2	15.2	0.0	0.0	0.0
8	6.8	0.0	.2	15.1	0.0	0.0	0.0
9	6.9	0.0	.2	24.0	0.0	0.0	0.0
10	6.9	0.0	.2	19.5	0.0	0.0	0.0
11	6.9	0.0	.2	14.8	0.0	0.0	0.0
12	6.8	0.0	.2	15.5	0.0	0.0	0.0
13	6.8	0.0	.2	19.8	0.0	0.0	0.0
14	6.8	0.0	.3	29.0	0.0	0.0	0.0
15	6.9	0.0	.2	17.2	0.0	0.0	0.0
16	6.8	0.0	.2	15.0	0.0	0.0	0.0
17	6.8	0.0	.2	19.5	0.0	0.0	0.0
18	6.9	0.0	.2	15.5	0.0	0.0	0.0
19	6.8	0.0	.2	15.0	0.0	0.0	0.0
20	6.8	0.0	.2	29.9	0.0	0.0	0.0

MEAN	6.8	0.0	.2	18.4	0.0	0.0	0.0
STD DEV	.1	0.0	.0	5.5	0.0	0.0	0.0

0.0 = NOT RECORDED

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REFP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	6.9	0.0	.2	14.2	0.0	0.0	0.0
2	6.9	0.0	.2	11.5	0.0	0.0	0.0
3	6.9	0.0	.2	18.0	0.0	0.0	0.0
4	6.9	0.0	.2	19.6	0.0	0.0	0.0
5	6.9	0.0	.2	12.2	0.0	0.0	0.0
6	6.9	0.0	.2	15.9	0.0	0.0	0.0
7	6.9	0.0	.2	15.2	0.0	0.0	0.0
8	6.9	0.0	.2	7.2	0.0	0.0	0.0
9	6.9	0.0	.2	22.2	0.0	0.0	0.0
10	6.9	0.0	.2	19.5	0.0	0.0	0.0
11	6.9	0.0	.2	15.5	0.0	0.0	0.0
12	6.9	0.0	.2	15.8	0.0	0.0	0.0
13	6.9	0.0	.2	20.0	0.0	0.0	0.0
14	6.9	0.0	.2	29.3	0.0	0.0	0.0
15	6.9	0.0	.2	17.6	0.0	0.0	0.0
16	6.9	0.0	.2	15.8	0.0	0.0	0.0
17	6.9	0.0	.2	20.0	0.0	0.0	0.0
18	6.9	0.0	.2	16.1	0.0	0.0	0.0
19	6.9	0.0	.2	18.0	0.0	0.0	0.0
20	6.9	0.0	.2	29.0	0.0	0.0	0.0

BC PERCENT UTILIZATION

MEAN	6.9	0.0	.2	17.6	0.0	0.0	0.0
STD DEV	.0	0.0	.0	5.2	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA CUMBER 3

DATE 22

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE SCORE	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	4.6	0.0	.3	23.9	0.0	0.0	0.0
2	4.2	0.0	.2	13.5	0.0	0.0	0.0
3	5.2	0.0	.2	14.2	0.0	0.0	0.0
4	4.6	0.0	.3	17.0	0.0	0.0	0.0
5	4.3	0.0	.2	16.3	0.0	0.0	0.0
6	3.7	0.0	.1	19.0	0.0	0.0	0.0
7	4.5	0.0	.2	14.6	0.0	0.0	0.0
8	4.7	0.0	.1	10.7	0.0	0.0	0.0
9	4.0	0.0	.2	14.9	0.0	0.0	0.0
10	4.2	0.0	.1	16.0	0.0	0.0	0.0
11	4.7	0.0	.2	20.2	0.0	0.0	0.0
12	4.4	0.0	.2	14.1	0.0	0.0	0.0
13	3.6	0.0	.1	9.9	0.0	0.0	0.0
14	4.7	0.0	.3	17.0	0.0	0.0	0.0
15	4.0	0.0	.2	16.5	0.0	0.0	0.0
16	5.6	0.0	.3	18.1	0.0	0.0	0.0
17	3.5	0.0	.1	18.1	0.0	0.0	0.0
18	4.3	0.0	.2	21.8	0.0	0.0	0.0
19	4.6	0.0	.3	13.1	0.0	0.0	0.0
20	5.4	0.0	.2	12.3	0.0	0.0	0.0

MEAN	4.4	0.0	.2	16.0	0.0	0.0	0.0
STD DEV	.6	0.0	.1	3.5	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA CUMBER 3

DATE 5

JUNE 1979

38

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	4.4	0.0	.2	29.6	0.0	0.0	0.0
2	4.5	0.0	.3	29.4	0.0	0.0	0.0
3	5.8	0.0	.2	16.7	0.0	0.0	0.0
4	5.9	0.0	.2	20.2	0.0	0.0	0.0
5	4.6	0.0	.2	14.0	0.0	0.0	0.0
6	4.6	0.0	.1	16.6	0.0	0.0	0.0
7	5.4	0.0	.2	19.3	0.0	0.0	0.0
8	4.7	0.0	.2	16.1	0.0	0.0	0.0
9	4.7	0.0	.2	14.4	0.0	0.0	0.0
10	4.2	0.0	.2	17.5	0.0	0.0	0.0
11	3.9	0.0	.2	19.9	0.0	0.0	0.0
12	4.8	0.0	.1	18.0	0.0	0.0	0.0
13	4.5	0.0	.1	10.1	0.0	0.0	0.0
14	4.4	0.0	.2	17.2	0.0	0.0	0.0
15	4.5	0.0	.2	16.1	0.0	0.0	0.0
16	4.9	0.0	.3	22.3	0.0	0.0	0.0
17	5.5	0.0	.2	18.2	0.0	0.0	0.0
18	4.7	0.0	.1	12.4	0.0	0.0	0.0
19	4.6	0.0	.1	12.0	0.0	0.0	0.0
20	4.8	0.0	.2	12.5	0.0	0.0	0.0
MEAN	4.8	0.0	.2	17.6	0.0	0.0	0.0
STD DEV	.5	0.0	.1	5.1	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA CUMBER 3

DATE 25

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	4.4	0.0	.2	26.8	0.0	0.0	0.0
2	4.7	0.0	.2	12.6	0.0	0.0	0.0
3	4.9	0.0	.2	11.0	0.0	0.0	0.0
4	4.6	0.0	.3	20.8	0.0	0.0	0.0
5	4.6	0.0	.2	15.2	0.0	0.0	0.0
6	3.9	0.0	.2	12.0	0.0	0.0	0.0
7	5.6	0.0	.3	18.2	0.0	0.0	0.0
8	5.2	0.0	.2	19.2	0.0	0.0	0.0
9	4.9	0.0	.3	15.9	0.0	0.0	0.0
10	5.9	0.0	.1	17.4	0.0	0.0	0.0
11	4.4	0.0	.3	19.8	0.0	0.0	0.0
12	4.9	0.0	.2	10.2	0.0	0.0	0.0
13	5.8	0.0	.1	10.8	0.0	0.0	0.0
14	4.7	0.0	.2	13.5	0.0	0.0	0.0
15	5.7	0.0	.3	32.1	0.0	0.0	0.0
16	5.3	0.0	.2	21.1	0.0	0.0	0.0
17	4.4	0.0	.2	28.8	0.0	0.0	0.0
18	4.9	0.0	.2	23.9	0.0	0.0	0.0
19	4.7	0.0	.3	17.8	0.0	0.0	0.0
20	4.9	0.0	.1	10.2	0.0	0.0	0.0

MEAN	4.9	0.0	.2	17.9	0.0	0.0	0.0
STD DEV	.5	0.0	.1	6.4	0.0	0.0	0.0

C.C. = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA CUMBER 3

DATE 15 JULY 1979

40

PLANT NO.	PHENOLOGICAL STAGE	SCURF REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	6.2	0.0	.2	28.0	0.0	0.0	0.0
2	6.2	0.0	.2	12.4	0.0	0.0	0.0
3	6.1	0.0	.2	11.3	0.0	C.C	0.0
4	6.1	0.0	.2	20.2	0.0	0.0	0.0
5	6.1	0.0	.1	14.2	0.0	0.0	0.0
6	6.0	0.0	.1	12.2	0.0	0.0	0.0
7	6.2	0.0	.2	15.5	0.0	0.0	0.0
8	6.2	0.0	.2	13.9	0.0	0.0	0.0
9	6.1	0.0	.2	17.2	0.0	0.0	0.0
10	6.2	0.0	.2	16.4	0.0	0.0	0.0
11	6.1	0.0	.2	17.5	0.0	0.0	0.0
12	6.2	0.0	.1	10.0	0.0	0.0	0.0
13	6.6	0.0	.2	18.4	0.0	C.C	0.0
14	6.1	0.0	.1	11.6	0.0	0.0	0.0
15	6.1	0.0	.2	32.0	0.0	0.0	0.0
16	6.2	0.0	.2	21.5	0.0	0.0	0.0
17	6.1	0.0	.2	19.3	0.0	0.0	0.0
18	6.3	0.0	.2	16.2	0.0	0.0	0.0
19	6.2	0.0	.2	16.5	0.0	0.0	0.0
20	6.1	0.0	.1	10.0	0.0	0.0	0.0

MEAN	6.2	0.0	.2	17.0	0.0	0.0	0.0
STD DEV	.1	0.0	.0	5.6	0.0	0.0	0.0

C.C = NOT RECORDED

ACROPYRON SMITHII

STUDY AREA CUMBER 3

DATE 7 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE	SCURF REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.5	0.0	.2	26.5	0.0	0.0	4.0
2	6.4	0.0	.2	13.1	0.0	0.0	3.0
3	6.8	0.0	.2	15.2	0.0	0.0	1.0
4	6.4	0.0	.2	20.0	0.0	0.0	1.0
5	6.8	0.0	.2	17.0	0.0	0.0	3.0
6	6.7	0.0	.2	7.0	0.0	0.0	1.0
7	6.4	0.0	.2	15.1	0.0	0.0	2.0
8	6.6	0.0	.2	18.5	0.0	0.0	1.0
9	6.4	0.0	.2	18.3	0.0	0.0	1.0
10	6.5	0.0	.2	15.5	0.0	0.0	2.0
11	6.5	0.0	.3	19.7	0.0	0.0	2.0
12	6.4	0.0	.2	10.0	0.0	0.0	1.0
13	6.9	0.0	.2	19.0	0.0	0.0	1.0
14	6.5	0.0	.2	12.2	0.0	0.0	2.0
15	5.3	0.0	.2	30.1	0.0	0.0	1.0
16	6.4	0.0	.2	21.2	0.0	0.0	1.0
17	6.4	0.0	.2	18.5	0.0	0.0	4.0
18	6.4	0.0	.2	30.1	0.0	0.0	1.0
19	6.4	0.0	.2	17.5	0.0	0.0	2.0
20	6.3	0.0	.2	12.5	0.0	0.0	1.0

40 PERCENT UTILIZATION

MEAN	6.5	0.0	.2	18.0	0.0	0.0	1.8
STD DEV	.2	0.0	.0	5.9	0.0	0.0	1.0

C.O = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA CUMBER 3

DATE 1 SEPTEMBER 1979

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PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	6.8	0.0	.2	26.5	0.0	0.0	0.0
2	6.7	0.0	.2	12.8	0.0	0.0	0.0
3	6.9	0.0	.2	18.0	0.0	0.0	0.0
4	6.9	0.0	.2	13.7	0.0	0.0	0.0
5	6.9	0.0	.2	13.5	0.0	0.0	0.0
6	6.9	0.0	.2	11.2	0.0	0.0	0.0
7	6.7	0.0	.2	14.3	0.0	0.0	0.0
8	6.9	0.0	.2	21.0	0.0	0.0	0.0
9	6.8	0.0	.2	11.2	0.0	0.0	0.0
10	6.8	0.0	.2	17.3	0.0	0.0	0.0
11	6.8	0.0	.2	20.1	0.0	0.0	0.0
12	6.7	0.0	.1	14.7	0.0	0.0	0.0
13	6.9	0.0	.2	20.1	0.0	0.0	0.0
14	6.8	0.0	.1	12.1	0.0	0.0	0.0
15	6.8	0.0	.2	13.4	0.0	0.0	0.0
16	6.9	0.0	.2	13.9	0.0	0.0	0.0
17	6.9	0.0	.2	19.8	0.0	0.0	0.0
18	6.8	0.0	.3	30.2	0.0	0.0	0.0
19	6.7	0.0	.2	17.6	0.0	0.0	0.0
20	6.8	0.0	.2	12.9	0.0	0.0	0.0

MEAN	6.8	0.0	.2	16.7	0.0	0.0	1.3
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STD DEV	.1	0.0	.0	5.1	0.0	0.0	0.0
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0.0 = NOT RECORDED



AGROPYRON SMITHII

STUDY AREA CUMBER 3

DATE 21 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORING SCORE PEPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.9	0.0	.2	27.5	0.0	0.0	0.0
2	6.9	0.0	.2	12.5	0.0	0.0	0.0
3	6.9	0.0	.2	6.7	0.0	0.0	0.0
4	7.2	0.0	.2	24.8	0.0	0.0	0.0
5	6.9	0.0	.2	13.8	0.0	0.0	0.0
6	6.9	0.0	.2	10.5	0.0	0.0	0.0
7	6.9	0.0	.2	16.0	0.0	0.0	0.0
8	6.9	0.0	.2	16.5	0.0	0.0	0.0
9	6.9	0.0	.2	11.0	0.0	0.0	0.0
10	6.9	0.0	.2	17.5	0.0	0.0	0.0
11	6.9	0.0	.2	17.9	0.0	0.0	0.0
12	7.1	0.0	.2	14.9	0.0	0.0	0.0
13	6.9	0.0	.2	18.6	0.0	0.0	0.0
14	6.9	0.0	.2	12.1	0.0	0.0	0.0
15	6.9	0.0	.2	20.1	0.0	0.0	0.0
16	6.9	0.0	.1	21.9	0.0	0.0	0.0
17	6.9	0.0	.2	18.9	0.0	0.0	0.0
18	6.9	0.0	.2	17.4	0.0	0.0	0.0
19	6.9	0.0	.2	16.6	0.0	0.0	0.0
20	6.9	0.0	.2	13.0	0.0	0.0	0.0

MEAN 6.9 0.0 .2 16.5 0.0 0.0 0.0

STD DEV .1 0.0 .0 4.8 0.0 0.0 0.0

0.0 = NOT RECORDED

AGROPHYRON SMITHII

STUDY AREA BEMER

DATE 28

APRIL 1979

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PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NUS. SPK/ CULM	NDS. VEG. PLANT
1	4.2	0.0	.2	10.1	0.0	0.0	0.0
2	4.3	0.0	.3	15.2	0.0	0.0	0.0
3	4.2	0.0	.4	11.0	0.0	0.0	0.0
4	4.2	0.0	.2	10.5	0.0	0.0	0.0
5	4.3	0.0	.4	14.2	0.0	0.0	0.0
6	4.3	0.0	.2	10.0	0.0	0.0	0.0
7	4.3	0.0	.4	30.0	0.0	0.0	0.0
8	4.2	0.0	.2	11.0	0.0	0.0	0.0
9	4.2	0.0	.2	19.5	0.0	0.0	0.0
10	4.3	0.0	.2	12.5	0.0	0.0	0.0
11	4.2	0.0	.2	16.5	0.0	0.0	0.0
12	4.1	0.0	.2	8.0	0.0	0.0	0.0
13	4.3	0.0	.3	10.5	0.0	0.0	0.0
14	4.2	0.0	.2	13.5	0.0	0.0	0.0
15	4.3	0.0	.2	10.5	0.0	0.0	0.0
16	4.2	0.0	.2	14.7	0.0	0.0	0.0
17	4.3	0.0	.2	21.7	0.0	0.0	0.0
18	5.2	0.0	.2	23.5	0.0	0.0	0.0
19	5.0	0.0	.2	10.4	0.0	0.0	0.0
20	4.2	0.0	.2	12.9	0.0	0.0	0.0
MEAN	4.3	0.0	.2	14.3	0.0	0.0	0.0
STD DEV	.3	0.0	.1	5.5	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA DEMER

DATE 24

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCOPE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	4.4	0.0	.3	13.6	0.0	0.0	0.0
2	5.3	0.0	.4	19.6	0.0	0.0	0.0
3	4.5	0.0	.3	14.5	0.0	0.0	0.0
4	4.5	0.0	.3	17.0	0.0	0.0	0.0
5	4.5	0.0	.3	20.2	0.0	0.0	0.0
6	4.4	0.0	.3	10.0	0.0	0.0	0.0
7	5.2	0.0	.3	28.4	0.0	0.0	0.0
8	5.1	0.0	.3	14.6	0.0	0.0	0.0
9	5.2	0.0	.3	13.9	0.0	0.0	0.0
10	5.3	0.0	.3	20.5	0.0	0.0	0.0
11	5.1	0.0	.3	15.2	0.0	0.0	0.0
12	4.2	0.0	.2	16.2	0.0	0.0	0.0
13	5.2	0.0	.3	22.0	0.0	0.0	0.0
14	5.4	0.0	.3	19.4	0.0	0.0	0.0
15	4.1	0.0	.2	10.9	0.0	0.0	0.0
16	5.4	0.0	.3	13.1	0.0	0.0	0.0
17	5.1	0.0	.2	14.0	0.0	0.0	0.0
18	5.2	0.0	.3	16.2	0.0	0.0	0.0
19	5.2	0.0	.2	14.3	0.0	0.0	0.0
20	4.4	0.0	.2	13.8	0.0	0.0	0.0

MEAN	4.9	0.0	.3	15.6	0.0	0.0	0.0
STD DEV	.4	0.0	.1	4.2	0.0	0.0	0.0

0.0 = NOT RECORDED

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	4.8	0.0	.3	20.4	0.0	0.0	0.0
2	5.5	0.0	.4	29.5	0.0	0.0	0.0
3	5.4	0.0	.3	19.5	0.0	0.0	0.0
4	5.3	0.0	.3	17.2	0.0	0.0	0.0
5	5.2	0.0	.3	18.6	0.0	0.0	0.0
6	5.3	0.0	.3	20.1	0.0	0.0	0.0
7	5.7	0.0	.3	14.2	0.0	0.0	0.0
8	5.4	0.0	.4	34.3	0.0	0.0	0.0
9	5.3	0.0	.3	25.6	0.0	0.0	0.0
10	5.5	0.0	.3	17.9	0.0	0.0	0.0
11	5.2	0.0	.3	17.6	0.0	0.0	0.0
12	5.5	0.0	.3	23.2	0.0	0.0	0.0
13	5.2	0.0	.2	8.4	0.0	0.0	0.0
14	4.9	0.0	.2	12.1	0.0	0.0	0.0
15	5.2	0.0	.2	14.2	0.0	0.0	0.0
16	5.3	0.0	.3	16.4	0.0	0.0	0.0
17	4.9	0.0	.3	24.5	0.0	0.0	0.0
18	5.2	0.0	.2	20.9	0.0	0.0	0.0
19	5.3	0.0	.2	19.6	0.0	0.0	0.0
20	5.2	0.0	.3	18.9	0.0	0.0	0.0
MEAN	5.3	0.0	.3	19.2	0.0	0.0	0.0
STD DEV	.2	0.0	.1	5.4	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA DEMER

DATE 27

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	5.1	0.0	.3	9.5	0.0	0.0	0.0
2	5.3	0.0	.3	21.9	0.0	0.0	0.0
3	5.1	0.0	.3	16.2	0.0	0.0	0.0
4	5.7	0.0	.3	19.1	0.0	0.0	0.0
5	5.6	0.0	.3	21.7	0.0	0.0	0.0
6	5.2	0.0	.3	12.3	0.0	0.0	0.0
7	5.8	0.0	.3	27.4	0.0	0.0	0.0
8	5.3	0.0	.3	14.3	0.0	0.0	0.0
9	5.7	0.0	.3	30.2	0.0	0.0	0.0
10	5.2	0.0	.3	22.6	0.0	0.0	0.0
11	5.4	0.0	.2	15.1	0.0	0.0	0.0
12	5.1	0.0	.3	20.7	0.0	0.0	0.0
13	5.2	0.0	.4	24.2	0.0	0.0	0.0
14	5.7	0.0	.3	23.3	0.0	0.0	0.0
15	4.9	0.0	.3	14.6	0.0	0.0	0.0
16	5.3	0.0	.3	16.2	0.0	0.0	0.0
17	5.8	0.0	.3	28.5	0.0	0.0	0.0
18	5.7	0.0	.3	19.6	0.0	0.0	0.0
19	5.6	0.0	.2	14.8	0.0	0.0	0.0
20	5.3	0.0	.3	19.4	0.0	0.0	0.0
MEAN	5.5	0.0	.3	19.6	0.0	0.0	0.0
STD DEV	.3	0.0	.0	5.5	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SPITHII

STUDY AREA DEMER

DATE 17

JULY 1979

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PLANT NO.	PHENOLOGICAL STAGE	SCORP VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.2	0.0	0.0	.2	12.8	0.0	0.0	0.0
2	6.4	0.0	0.0	.2	21.8	0.0	0.0	0.0
3	6.8	0.0	0.0	.1	14.5	0.0	0.0	0.0
4	6.2	0.0	0.0	.1	16.9	0.0	0.0	0.0
5	6.2	0.0	0.0	.2	20.5	0.0	0.0	0.0
6	6.0	0.0	0.0	.1	11.3	0.0	0.0	0.0
7	6.1	0.0	0.0	.2	30.1	0.0	0.0	0.0
8	6.1	0.0	0.0	.1	14.1	0.0	0.0	0.0
9	6.2	0.0	0.0	.2	30.3	0.0	0.0	0.0
10	6.2	0.0	0.0	.1	13.9	0.0	0.0	0.0
11	6.2	0.0	0.0	.1	15.3	0.0	0.0	0.0
12	6.1	0.0	0.0	.1	15.1	0.0	0.0	0.0
13	6.1	0.0	0.0	.1	14.5	0.0	0.0	0.0
14	6.1	0.0	0.0	.2	23.8	0.0	0.0	0.0
15	6.2	0.0	0.0	.1	14.6	0.0	0.0	0.0
16	6.1	0.0	0.0	.1	19.3	0.0	0.0	0.0
17	6.2	0.0	0.0	.2	27.2	0.0	0.0	0.0
18	6.2	0.0	0.0	.1	16.5	0.0	0.0	0.0
19	6.1	0.0	0.0	.1	15.9	0.0	0.0	0.0
20	6.2	0.0	0.0	.1	19.4	0.0	0.0	0.0
MEAN	6.2	0.0	0.0	.1	18.5	0.0	0.0	1.8
STD DEV	.2	0.0	0.0	.0	5.6	0.0	0.0	0.0

C.C = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA DEMER

DATE 9 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORP REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.5	0.0	.2	20.2	0.0	0.0	1.0
2	6.7	0.0	.2	20.3	0.0	0.0	2.0
3	6.9	0.0	.2	17.0	0.0	0.0	1.0
4	6.9	0.0	.2	14.0	0.0	0.0	1.0
5	6.6	0.0	.3	21.3	0.0	0.0	1.0
6	6.7	0.0	.1	12.5	0.0	0.0	2.0
7	6.5	0.0	.2	25.4	0.0	0.0	2.0
8	6.8	0.0	.2	14.4	0.0	0.0	1.0
9	6.5	0.0	.3	30.3	0.0	0.0	1.0
10	6.7	0.0	.2	20.7	0.0	0.0	1.0
11	6.6	0.0	.2	14.2	0.0	0.0	1.0
12	6.9	0.0	.2	13.5	0.0	0.0	2.0
13	6.7	0.0	.2	16.2	0.0	0.0	1.0
14	6.5	0.0	.2	23.9	0.0	0.0	1.0
15	6.6	0.0	.2	14.5	0.0	0.0	2.0
16	6.5	0.0	.3	19.8	0.0	0.0	2.0
17	6.5	0.0	.2	27.1	0.0	0.0	2.0
18	6.5	0.0	.2	19.1	0.0	0.0	1.0
19	6.4	0.0	.2	13.5	0.0	0.0	2.0
20	6.9	0.0	.2	18.9	0.0	0.0	1.0

MEAN	6.6	0.0	.2	16.8	0.0	0.0	1.4
STD DEV	.2	0.0	.0	5.0	0.0	0.0	.5

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA DEMER

DATE 1 SEPTEMBER 1979

50

PLANT NO.	PHENOLOGICAL STAGE	SCDDFF REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NUS. VEG. PLANT
1	6.6	0.0	.2	11.5	0.0	0.0	0.0
2	6.9	0.0	.2	11.3	0.0	0.0	0.0
3	6.9	0.0	.2	16.0	0.0	0.0	0.0
4	6.9	0.0	.2	14.0	0.0	0.0	0.0
5	6.8	0.0	.2	20.8	0.0	0.0	0.0
6	6.8	0.0	.2	8.6	0.0	0.0	0.0
7	6.8	0.0	.2	25.1	0.0	0.0	0.0
8	6.9	0.0	.2	12.8	0.0	0.0	0.0
9	6.8	0.0	.2	29.8	0.0	0.0	0.0
10	6.9	0.0	.2	13.0	0.0	0.0	0.0
11	6.9	0.0	.2	19.8	0.0	0.0	0.0
12	6.8	0.0	.2	19.2	0.0	0.0	0.0
13	6.8	0.0	.2	25.6	0.0	0.0	0.0
14	6.9	0.0	.2	20.5	0.0	0.0	0.0
15	6.9	0.0	.2	20.6	0.0	0.0	0.0
16	6.8	0.0	.2	19.0	0.0	0.0	0.0
17	6.7	0.0	.2	15.0	0.0	0.0	0.0
18	6.9	0.0	.2	9.3	0.0	0.0	0.0
19	6.7	0.0	.2	16.0	0.0	0.0	0.0
20	6.9	0.0	.2	18.2	0.0	0.0	0.0

MEAN 6.8 0.0 .2 17.3 0.0 0.0 0.0

SID DEV .1 0.0 .0 5.6 0.0 0.0 0.0

0.0 = NOT RECORDED



AGROPYRON SMITHII

STUDY AREA DENER

DATE 23 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF- WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	6.9	0.0	.2	12.6	0.0	0.0	0.0
2	6.9	0.0	.2	19.8	0.0	0.0	0.0
3	6.9	0.0	.2	16.2	0.0	0.0	0.0
4	6.9	0.0	.2	17.6	0.0	0.0	0.0
5	6.9	0.0	.2	20.6	0.0	0.0	0.0
6	6.9	0.0	.2	11.1	0.0	0.0	0.0
7	6.9	0.0	.2	29.5	0.0	0.0	0.0
8	6.9	0.0	.2	13.5	0.0	0.0	0.0
9	6.9	0.0	.2	30.0	0.0	0.0	0.0
10	6.9	0.0	.2	14.0	0.0	0.0	0.0
11	6.9	0.0	.2	19.2	0.0	0.0	0.0
12	6.9	0.0	.2	28.3	0.0	0.0	0.0
13	6.9	0.0	.2	35.1	0.0	0.0	0.0
14	6.9	0.0	.2	20.6	0.0	0.0	0.0
15	6.9	0.0	.2	14.2	0.0	0.0	0.0
16	6.9	0.0	.2	10.8	0.0	0.0	0.0
17	6.9	0.0	.2	19.1	0.0	0.0	0.0
18	5.9	0.0	.2	28.8	0.0	0.0	0.0
19	6.9	0.0	.2	15.1	0.0	0.0	0.0
20	6.9	0.0	.2	11.1	0.0	0.0	0.0

80 PERCENT UTILIZATION

MEAN	6.9	0.0	.2	19.4	0.0	0.0	0.0
STD DEV	.0	0.0	.0	7.3	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA FARSON

DATE 4

MAY 1979

52

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCURF REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	3.3	0.0	.2	10.1	0.0	0.0	0.0
2	3.2	0.0	.2	8.5	0.0	0.0	0.0
3	3.3	0.0	.2	9.6	0.0	0.0	0.0
4	3.6	0.0	.1	4.0	0.0	0.0	0.0
5	4.3	0.0	.2	8.5	0.0	0.0	0.0
6	3.3	0.0	.2	9.2	0.0	0.0	0.0
7	3.3	0.0	.2	9.1	0.0	0.0	0.0
8	3.5	0.0	.1	8.4	0.0	0.0	0.0
9	3.3	0.0	.2	0.0	0.0	0.0	0.0
10	3.4	0.0	.3	12.4	0.0	0.0	0.0
11	3.3	0.0	.3	11.5	0.0	0.0	0.0
12	3.2	0.0	.2	12.7	0.0	0.0	0.0
13	3.6	0.0	.3	11.1	0.0	0.0	0.0
14	3.2	0.0	.2	10.0	0.0	0.0	0.0
15	3.3	0.0	.2	9.6	0.0	0.0	0.0
16	3.2	0.0	.2	8.0	0.0	0.0	0.0
17	2.6	0.0	.1	4.6	0.0	0.0	0.0
18	2.3	0.0	.3	11.2	0.0	0.0	0.0
19	2.3	0.0	.2	9.0	0.0	0.0	0.0
20	2.4	0.0	.3	10.0	0.0	0.0	0.0

UTILIZATION

MEAN	3.2	0.0	.2	9.3	0.0	0.0	0.0
STD DEV	.5	0.0	.1	2.2	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPHYTON SMITHII

STUDY AREA FARSON

DATE 22

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCDPE REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	3.7	0.0	.1	12.2	0.0	0.0	0.0
2	3.4	0.0	.1	10.6	0.0	0.0	0.0
3	4.6	0.0	.1	13.2	0.0	0.0	0.0
4	4.8	0.0	.1	8.5	0.0	0.0	0.0
5	4.8	0.0	.1	11.3	0.0	0.0	0.0
6	4.6	0.0	.2	16.2	0.0	0.0	0.0
7	3.7	0.0	.1	10.2	0.0	0.0	0.0
8	3.7	0.0	.1	9.0	0.0	0.0	0.0
9	3.5	0.0	.1	10.4	0.0	0.0	0.0
10	5.2	0.0	.2	12.0	0.0	0.0	0.0
11	4.6	0.0	.2	18.7	0.0	0.0	0.0
12	4.4	0.0	.2	15.4	0.0	0.0	0.0
13	5.3	0.0	.3	19.0	0.0	0.0	0.0
14	4.3	0.0	.2	16.1	0.0	0.0	0.0
15	4.5	0.0	.2	19.8	0.0	0.0	0.0
16	3.6	0.0	.1	14.0	0.0	0.0	0.0
17	4.0	0.0	.1	9.4	0.0	0.0	0.0
18	4.6	0.0	.1	12.4	0.0	0.0	0.0
19	4.6	0.0	.2	14.5	0.0	0.0	0.0
20	4.2	0.0	.2	21.2	0.0	0.0	0.0

MEAN 4.3 0.0 .2 13.7 0.0 0.0 0.0

STD DEV .6 0.0 .1 3.8 0.0 0.0 0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA FAPSON

DATE 5 JUNE 1979

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PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HCHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	4.6	0.0	.1	12.6	0.0	0.0	0.0
2	2.9	0.0	.1	10.6	0.0	0.0	0.0
3	3.9	0.0	.1	12.5	0.0	0.0	0.0
4	4.4	0.0	.1	10.8	0.0	0.0	0.0
5	5.4	0.0	.2	14.5	0.0	0.0	0.0
6	5.5	0.0	.2	16.8	0.0	0.0	0.0
7	3.9	0.0	.1	15.5	0.0	0.0	0.0
8	4.3	0.0	.1	10.7	0.0	0.0	0.0
9	4.2	0.0	.1	10.7	0.0	0.0	0.0
10	4.7	0.0	.2	14.2	0.0	0.0	0.0
11	4.9	0.0	.2	21.3	0.0	0.0	0.0
12	3.9	0.0	.2	15.0	0.0	0.0	0.0
13	4.9	0.0	.2	18.4	0.0	0.0	0.0
14	3.9	0.0	.1	10.1	0.0	0.0	0.0
15	4.7	0.0	.3	20.2	0.0	0.0	0.0
16	4.3	0.0	.1	15.6	0.0	0.0	0.0
17	4.5	0.0	.2	9.6	0.0	0.0	0.0
18	4.7	0.0	.1	14.5	0.0	0.0	0.0
19	4.2	0.0	.2	17.8	0.0	0.0	0.0
20	4.7	0.0	.2	21.4	0.0	0.0	0.0

MEAN 4.4 0.0 .2 14.7 0.0 0.0 0.0

STD DEV .6 0.0 .1 3.8 0.0 0.0 0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA FARSON

DATE 25

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	4.2	0.0	.2	14.1	0.0	0.0	0.0
2	6.6	0.0	.1	9.9	0.0	0.0	0.0
3	4.5	0.0	.2	13.7	0.0	0.0	0.0
4	4.6	0.0	.2	10.7	0.0	0.0	0.0
5	4.6	0.0	.2	14.6	0.0	0.0	0.0
6	4.7	0.0	.3	16.6	0.0	0.0	0.0
7	4.2	0.0	.2	15.1	0.0	0.0	0.0
8	4.4	0.0	.1	9.9	0.0	0.0	0.0
9	4.2	0.0	.1	10.7	0.0	0.0	0.0
10	3.9	0.0	.2	12.8	0.0	0.0	0.0
11	3.9	0.0	.2	21.4	0.0	0.0	0.0
12	4.0	0.0	.2	16.5	0.0	0.0	0.0
13	4.2	0.0	.2	18.8	0.0	0.0	0.0
14	4.5	0.0	.2	19.3	0.0	0.0	0.0
15	4.9	0.0	.2	18.7	0.0	0.0	0.0
16	4.4	0.0	.2	15.4	0.0	0.0	0.0
17	6.8	0.0	.1	9.8	0.0	0.0	0.0
18	3.8	0.0	.2	16.2	0.0	0.0	0.0
19	4.5	0.0	.2	17.7	0.0	0.0	0.0
20	4.4	0.0	.2	24.0	0.0	0.0	0.0

MEAN	4.6	0.0	.2	15.3	0.0	0.0	0.0
STD DEV	.8	0.0	.0	4.0	0.0	0.0	0.0

0.0 = NOT RECORDED

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HCHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.3	0.0	.1	12.6	0.0	0.0	0.0
2	6.9	0.0	.2	22.5	0.0	0.0	0.0
3	6.1	0.0	.2	13.7	0.0	0.0	0.0
4	6.0	0.0	.2	10.5	0.0	0.0	0.0
5	6.2	0.0	.1	16.1	0.0	0.0	0.0
6	6.2	0.0	.2	17.1	0.0	0.0	0.0
7	6.0	0.0	.2	15.4	0.0	0.0	0.0
8	6.8	0.0	.1	9.8	0.0	0.0	0.0
9	6.2	0.0	.1	12.3	0.0	0.0	0.0
10	6.2	0.0	.1	14.5	0.0	0.0	0.0
11	6.1	0.0	.2	21.8	0.0	0.0	0.0
12	6.1	0.0	.2	12.2	0.0	0.0	0.0
13	6.1	0.0	.1	19.8	0.0	0.0	0.0
14	6.0	0.0	.2	19.8	0.0	0.0	0.0
15	6.1	0.0	.2	19.3	0.0	0.0	0.0
16	6.1	0.0	.1	17.5	0.0	0.0	0.0
17	6.9	0.0	.1	15.2	0.0	0.0	0.0
18	6.2	0.0	.1	15.9	0.0	0.0	0.0
19	6.1	0.0	.1	16.4	0.0	0.0	0.0
20	6.0	0.0	.1	24.1	0.0	0.0	0.0

MEAN        6.2    0.0    .1    16.3    0.0    0.0    1.8

STD DEV     .3    0.0    .1    4.0    0.0    0.0    0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA FARSON

DATE 7 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE SCORE	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	6.4	0.0	.2	12.5	0.0	0.0	4.0
2	6.8	0.0	.1	9.5	0.0	0.0	3.0
3	6.3	0.0	.2	13.6	0.0	0.0	3.0
4	6.4	15.8	.2	8.7	39.2	1.0	4.0
5	6.3	0.0	.3	17.6	0.0	0.0	4.0
6	6.4	0.0	.2	16.3	0.0	0.0	2.0
7	6.6	0.0	.1	15.1	0.0	0.0	1.0
8	6.7	0.0	.1	13.8	0.0	0.0	1.0
9	6.6	0.0	.2	11.8	0.0	0.0	2.0
10	6.4	15.8	.2	11.9	26.0	1.0	6.0
11	6.5	0.0	.2	21.3	0.0	0.0	2.0
12	6.6	0.0	.2	11.2	0.0	0.0	1.0
13	6.4	0.0	.2	19.0	0.0	0.0	2.0
14	6.4	0.0	.2	19.7	0.0	0.0	1.0
15	6.4	0.0	.2	22.1	0.0	0.0	1.0
16	6.4	0.0	.2	15.6	0.0	0.0	3.0
17	6.8	0.0	.2	14.2	0.0	0.0	2.0
18	6.5	0.0	.2	21.0	0.0	0.0	3.0
19	6.5	0.0	.2	18.2	0.0	0.0	2.0
20	6.4	0.0	.2	22.0	0.0	0.0	4.0

MEAN 6.5 15.8 .2 15.8 29.6 1.0 2.6

STD DEV .1 0.0 .0 4.2 13.6 0.0 1.4

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA FARSON

DATE 2 SEPTEMBER 1979

58

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.6	0.0	.2	14.3	0.0	0.0	0.0
2	6.9	0.0	.2	10.1	0.0	0.0	0.0
3	6.6	0.0	.2	14.0	0.0	0.0	0.0
4	6.5	0.0	.2	16.5	0.0	0.0	0.0
5	6.8	0.0	.1	14.1	0.0	0.0	0.0
6	6.6	0.0	.2	17.5	0.0	0.0	0.0
7	6.4	0.0	.2	14.5	0.0	0.0	0.0
8	6.9	0.0	.1	9.8	0.0	0.0	0.0
9	6.9	0.0	.2	11.9	0.0	0.0	0.0
10	6.6	0.0	.2	15.4	0.0	0.0	0.0
11	6.5	0.0	.3	22.0	0.0	0.0	0.0
12	6.7	0.0	.2	17.4	0.0	0.0	0.0
13	5.5	0.0	.2	18.6	0.0	0.0	0.0
14	6.5	0.0	.2	19.1	0.0	0.0	0.0
15	6.6	0.0	.2	20.2	0.0	0.0	0.0
16	6.4	0.0	.2	15.2	0.0	0.0	0.0
17	6.5	0.0	.2	18.7	0.0	0.0	0.0
18	6.8	0.0	.1	12.6	0.0	0.0	0.0
19	6.8	0.0	.2	16.2	0.0	0.0	0.0
20	6.4	0.0	.2	23.6	0.0	0.0	0.0

MEAN 6.6 0.0 .2 16.1 0.0 0.0 0.0

STD DEV .2 0.0 .0 3.7 0.0 0.0 0.0

C.0 = NOT RECORDED



ACROPYRON SMITHII

STUDY AREA FARSON

DATE 22 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE	MAX. LEAF WIDTH	MAX. LEAF HCHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.8	0.0	.2	13.5	0.0	0.0	0.0
2	6.9	0.0	.2	9.5	0.0	0.0	0.0
3	6.9	0.0	.3	14.3	0.0	0.0	0.0
4	6.7	0.0	.3	11.0	0.0	0.0	0.0
5	6.9	0.0	.2	11.9	0.0	0.0	0.0
6	6.7	0.0	.3	16.2	0.0	0.0	0.0
7	6.8	0.0	.2	12.8	0.0	0.0	0.0
8	6.7	0.0	.2	11.0	0.0	0.0	0.0
9	6.9	0.0	.2	11.7	0.0	0.0	0.0
10	6.8	0.0	.3	16.4	0.0	0.0	0.0
11	7.1	0.0	.3	22.4	0.0	0.0	0.0
12	6.9	0.0	.2	16.7	0.0	0.0	0.0
13	6.8	0.0	.3	18.2	0.0	0.0	0.0
14	6.7	0.0	.2	20.0	0.0	0.0	0.0
15	6.7	0.0	.2	19.8	0.0	0.0	0.0
16	6.7	0.0	.3	15.7	0.0	0.0	0.0
17	6.9	0.0	.2	9.4	0.0	0.0	0.0
18	6.8	0.0	.3	13.8	0.0	0.0	0.0
19	6.7	0.0	.2	18.2	0.0	0.0	0.0
20	6.6	0.0	.3	23.5	0.0	0.0	0.0
MEAN	6.8	0.0	.2	15.3	0.0	0.0	0.0
STD DEV	.1	0.0	.1	4.1	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA HORSE CR.

DATE 28

APRIL 1979

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PLANT NO.	PHENOLOGICAL STAGE	SCORE	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	3.2	0.0	.2	11.0	0.0	0.0	0.0
2	5.1	0.0	.3	12.0	0.0	0.0	0.0
3	4.1	0.0	.1	7.5	0.0	0.0	0.0
4	4.1	0.0	.2	10.0	0.0	0.0	0.0
5	4.2	0.0	.2	14.8	0.0	0.0	0.0
6	3.4	0.0	.3	12.8	0.0	0.0	0.0
7	3.2	0.0	.2	8.5	0.0	0.0	0.0
8	4.2	0.0	.3	12.4	0.0	0.0	0.0
9	4.3	0.0	.3	15.5	0.0	0.0	0.0
10	4.2	0.0	.3	17.0	0.0	0.0	0.0
11	3.3	0.0	.2	11.2	0.0	0.0	0.0
12	4.4	0.0	.2	11.8	0.0	0.0	0.0
13	4.5	0.0	.3	16.4	0.0	0.0	0.0
14	4.2	0.0	.2	12.2	0.0	0.0	0.0
15	4.1	0.0	.1	11.0	0.0	0.0	0.0
16	4.1	0.0	.2	9.0	0.0	0.0	0.0
17	4.2	0.0	.2	17.4	0.0	0.0	0.0
18	3.5	0.0	.2	9.5	0.0	0.0	0.0
19	3.6	0.0	.3	12.0	0.0	0.0	0.0
20	4.2	0.0	.2	10.5	0.0	0.0	0.0

MEAN	4.0	0.0	.2	12.1	0.0	0.0	0.0
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STD DEV	.5	0.0	.1	2.8	0.0	0.0	0.0
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0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA HORSE CR.

DATE 24

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCOPE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. CULM	NOS. SPK/ VEG. PLANT
1	5.2	0.0	.3	22.6	0.0	0.0	0.0
2	5.6	0.0	.4	19.0	0.0	0.0	0.0
3	5.2	0.0	.3	11.7	0.0	0.0	0.0
4	5.3	0.0	.4	18.4	0.0	0.0	0.0
5	5.2	0.0	.3	19.4	0.0	0.0	0.0
6	4.9	0.0	.3	18.4	0.0	0.0	0.0
7	4.6	0.0	.3	13.3	0.0	0.0	0.0
8	5.2	0.0	.3	17.3	0.0	0.0	0.0
9	5.4	0.0	.3	19.5	0.0	0.0	0.0
10	4.4	0.0	.3	12.4	0.0	0.0	0.0
11	4.7	0.0	.4	13.8	0.0	0.0	0.0
12	4.4	0.0	.3	16.1	0.0	0.0	0.0
13	5.4	0.0	.4	30.2	0.0	0.0	0.0
14	4.3	0.0	.3	9.5	0.0	0.0	0.0
15	4.3	0.0	.3	13.1	0.0	0.0	0.0
16	5.3	0.0	.4	13.0	0.0	0.0	0.0
17	5.4	0.0	.4	21.0	0.0	0.0	0.0
18	3.9	0.0	.3	17.6	0.0	0.0	0.0
19	4.2	0.0	.3	16.8	0.0	0.0	0.0
20	4.3	0.0	.3	12.6	0.0	0.0	0.0

MEAN	4.9	0.0	.3	16.8	0.0	0.0	0.0
STD DEV	.5	0.0	.0	4.7	0.0	0.0	0.0

C.C = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA HORSE CR.

DATE 7

JUNE 1979

62

PLANT NO.	PHENOLOGICAL STAGE	GROWTH SCOPE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	5.1	0.0	.3	13.5	0.0	0.0	0.0
2	4.8	0.0	.3	14.1	0.0	0.0	0.0
3	5.9	0.0	.2	9.5	0.0	0.0	0.0
4	5.5	0.0	.3	22.6	0.0	0.0	0.0
5	5.6	0.0	.3	19.8	0.0	0.0	0.0
6	5.7	0.0	.3	18.9	0.0	0.0	0.0
7	5.5	0.0	.3	17.8	0.0	0.0	0.0
8	5.3	0.0	.3	19.7	0.0	0.0	0.0
9	5.3	0.0	.3	23.6	0.0	0.0	0.0
10	5.4	0.0	.2	20.2	0.0	0.0	0.0
11	5.5	0.0	.3	22.5	0.0	0.0	0.0
12	5.4	0.0	.3	18.0	0.0	0.0	0.0
13	5.9	0.0	.3	31.0	0.0	0.0	0.0
14	3.9	0.0	.2	13.2	0.0	0.0	0.0
15	4.7	0.0	.2	12.5	0.0	0.0	0.0
16	4.9	0.0	.2	7.8	0.0	0.0	0.0
17	5.6	0.0	.3	21.2	0.0	0.0	0.0
18	4.9	0.0	.3	18.4	0.0	0.0	0.0
19	4.9	0.0	.3	16.1	0.0	0.0	0.0
20	5.4	0.0	.3	17.0	0.0	0.0	0.0

MEAN	5.3	0.0	.3	17.9	0.0	0.0	0.0
STD DEV	.5	0.0	.0	5.3	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA HORSE CR.

DATE 27

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	5.5	0.0	.2	15.2	0.0	0.0	0.0
2	5.7	0.0	.4	23.0	0.0	0.0	0.0
3	5.5	0.0	.2	10.5	0.0	0.0	0.0
4	5.7	0.0	.3	23.2	0.0	0.0	0.0
5	5.3	0.0	.3	22.5	0.0	0.0	0.0
6	5.6	0.0	.3	20.0	0.0	0.0	0.0
7	5.4	0.0	.2	14.3	0.0	0.0	0.0
8	5.5	0.0	.4	20.3	0.0	0.0	0.0
9	5.7	13.1	.4	15.3	48.5	7.0	1.0
10	5.3	0.0	.3	11.4	0.0	0.0	0.0
11	5.2	0.0	.4	23.2	0.0	0.0	0.0
12	5.1	0.0	.3	17.0	0.0	0.0	0.0
13	5.8	0.0	.4	35.6	0.0	0.0	0.0
14	5.3	0.0	.3	13.5	0.0	0.0	0.0
15	4.9	0.0	.2	12.6	0.0	0.0	0.0
16	4.9	0.0	.2	15.0	0.0	0.0	0.0
17	5.7	0.0	.4	22.0	0.0	0.0	0.0
18	5.6	0.0	.3	24.5	0.0	0.0	0.0
19	5.3	0.0	.4	17.5	0.0	0.0	0.0
20	4.9	0.0	.3	20.2	0.0	0.0	0.0
MEAN	5.4	13.1	.3	18.8	48.5	7.0	1.0
STD DEV	.3	0.0	.1	5.9	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA HORSE CR.

DATE 18

JULY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	PHENOLOGICAL SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT	
1	6.1	0.0	.2	10.3	0.0	0.0	0.0	20 PERCENT UTILIZATION
2	6.2	0.0	.2	18.7	0.0	0.0	0.0	
3	6.2	0.0	.1	7.9	0.0	0.0	0.0	
4	6.0	0.0	.2	12.2	0.0	0.0	0.0	
5	6.1	0.0	.2	16.5	0.0	0.0	0.0	25 PERCENT UTILIZATION PLANT DEAD
6	6.8	0.0	.3	19.5	0.0	0.0	0.0	
7	6.1	0.0	.1	15.6	0.0	0.0	0.0	
8	6.2	0.0	.2	14.7	0.0	0.0	0.0	
9	6.2	14.6	.2	24.1	49.0	8.0	1.0	
10	6.8	0.0	.1	12.9	0.0	0.0	0.0	
11	6.2	0.0	.2	22.5	0.0	0.0	0.0	
12	6.1	0.0	.2	17.6	0.0	0.0	0.0	
13	6.2	0.0	.3	34.7	0.0	0.0	0.0	
14	6.1	0.0	.2	10.2	0.0	0.0	0.0	
15	6.9	0.0	.2	11.3	0.0	0.0	0.0	
16	6.4	0.0	.2	16.9	0.0	0.0	0.0	
17	6.3	0.0	.3	21.2	0.0	0.0	0.0	
18	6.2	0.0	.2	25.1	0.0	0.0	0.0	
19	6.2	0.0	.2	16.5	0.0	0.0	0.0	
20	6.2	0.0	.2	16.1	0.0	0.0	0.0	
MEAN	6.3	14.6	.2	17.2	49.0	8.0	1.0	
STD DEV	.3	0.0	.1	6.2	0.0	0.0	0.0	

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA HORSE CR.

DATE 9 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCOPE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT	
1	6.8	0.0	.3	21.0	0.0	0.0	1.0	
2	6.8	0.0	.2	21.5	0.0	0.0	1.0	
3	6.8	0.0	.2	3.0	0.0	0.0	1.0	90 PERCENT UTILIZATION
4	6.9	0.0	.2	12.0	0.0	0.0	1.0	50 PERCENT UTILIZATION
5	6.9	0.0	.2	3.0	17.0	0.0	1.0	70 PERCENT UTILIZATION
6	6.8	0.0	.3	16.1	0.0	0.0	3.0	15 PERCENT UTILIZATION
7	6.7	0.0	.2	17.3	0.0	0.0	5.0	50 PERCENT UTILIZATION
8	6.9	0.0	.3	20.5	0.0	0.0	1.0	40 PERCENT UTILIZATION
9	6.9	16.2	.3	13.0	48.5	14.0	3.0	30 PERCENT UTILIZATION
10	6.9	0.0	.2	24.2	0.0	0.0	3.0	
11	6.9	0.0	.2	13.8	0.0	0.0	2.0	40 PERCENT UTILIZATION
12	6.8	0.0	.2	17.5	0.0	0.0	2.0	40 PERCENT UTILIZATION
13	6.9	0.0	.2	14.6	0.0	0.0	1.0	60 PERCENT UTILIZATION
14	6.9	0.0	.2	10.0	0.0	0.0	2.0	70 PERCENT UTILIZATION
15	6.9	0.0	.2	11.2	0.0	0.0	3.0	70 PERCENT UTILIZATION
16	6.8	0.0	.3	21.5	0.0	0.0	3.0	5 PERCENT UTILIZATION
17	6.7	0.0	.2	20.6	0.0	0.0	1.0	15 PERCENT UTILIZATION
18	6.9	0.0	.2	15.5	0.0	0.0	4.0	
19	6.8	0.0	.2	14.0	0.0	0.0	5.0	30 PERCENT UTILIZATION
20	6.8	0.0	.3	16.7	0.0	0.0	2.0	15 PERCENT UTILIZATION

MEAN	6.8	15.2	.2	15.5	32.8	14.0	2.3
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STD DEV	.1	0.0	.0	5.8	22.3	0.0	1.3
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0.0 = NOT RECORDED

AGROPPYRON SMITHII

STUDY AREA HORSE CR.

DATE 2 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NUS. SPK/ CULM	NOS. VEG. PLANT	
1	6.8	0.0	.2	6.1	0.0	0.0	0.0	80 PERCENT UTILIZATION
2	6.8	0.0	.2	20.1	0.0	0.0	0.0	20 PERCENT UTILIZATION
3	6.9	0.0	.2	8.6	0.0	0.0	0.0	70 PERCENT UTILIZATION
4	6.9	0.0	.2	12.2	0.0	0.0	0.0	75 PERCENT UTILIZATION
5	6.9	0.0	.2	21.2	0.0	0.0	0.0	15 PERCENT UTILIZATION
6	6.9	0.0	.2	19.0	0.0	0.0	0.0	
7	6.9	0.0	.2	9.1	0.0	0.0	0.0	80 PERCENT UTILIZATION
8	6.9	0.0	.2	10.5	0.0	0.0	0.0	75 PERCENT UTILIZATION
9	6.8	16.3	.2	14.0	47.0	0.0	0.0	10 PERCENT UTILIZATION
10	6.8	0.0	.2	22.0	0.0	0.0	0.0	15 PERCENT UTILIZATION
11	6.9	0.0	.2	25.0	0.0	0.0	0.0	
12	6.8	0.0	.2	15.0	0.0	0.0	0.0	55 PERCENT UTILIZATION
13	5.8	0.0	.2	17.9	0.0	0.0	0.0	30 PERCENT UTILIZATION
14	6.8	0.0	.2	25.0	0.0	0.0	0.0	15 PERCENT UTILIZATION
15	6.9	0.0	.2	11.0	0.0	0.0	0.0	75 PERCENT UTILIZATION
16	6.9	0.0	.2	5.0	0.0	0.0	0.0	90 PERCENT UTILIZATION
17	6.8	0.0	.2	19.7	0.0	0.0	0.0	20 PERCENT UTILIZATION
18	6.8	0.0	.2	20.3	0.0	0.0	0.0	45 PERCENT UTILIZATION
19	6.9	0.0	.2	14.8	0.0	0.0	0.0	70 PERCENT UTILIZATION
20	6.9	0.0	.2	6.2	0.0	0.0	0.0	80 PERCENT UTILIZATION
MEAN	6.9	16.3	.2	15.1	47.0	0.0	0.0	
STD DEV	.1	0.0	.0	6.3	0.0	0.0	0.0	

C.C. = NOT RECORDED



ACROPYRON SMITHII

STUDY AREA HORSE CR.

DATE 21 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT	
1	6.9	0.0	.2	21.2	0.0	0.0	0.0	80 PERCENT UTILIZATION
2	6.9	0.0	.2	21.0	0.0	0.0	0.0	20 PERCENT UTILIZATION
3	6.9	0.0	.2	1.5	0.0	0.0	0.0	99 PERCENT UTILIZATION
4	6.9	0.0	.2	5.0	0.0	0.0	0.0	99 PERCENT UTILIZATION
5	6.9	0.0	.2	22.5	0.0	0.0	0.0	15 PERCENT UTILIZATION
6	6.9	0.0	.2	15.0	0.0	0.0	0.0	
7	6.9	0.0	.2	4.0	0.0	0.0	0.0	97 PERCENT UTILIZATION
8	6.9	0.0	.2	9.5	0.0	0.0	0.0	95 PERCENT UTILIZATION
9	6.9	16.9	.2	14.0	26.0	0.0	0.0	10 PERCENT UTILIZATION
10	6.9	0.0	.2	21.5	0.0	0.0	0.0	15 PERCENT UTILIZATION
11	6.9	0.0	.2	24.5	0.0	0.0	0.0	
12	6.9	0.0	.2	15.5	0.0	0.0	0.0	55 PERCENT UTILIZATION
13	6.9	0.0	.2	10.7	0.0	0.0	0.0	30 PERCENT UTILIZATION
14	6.9	0.0	.2	10.2	0.0	0.0	0.0	15 PERCENT UTILIZATION
15	6.9	0.0	.2	11.0	0.0	0.0	0.0	75 PERCENT UTILIZATION
16	6.9	0.0	.2	19.7	0.0	0.0	0.0	90 PERCENT UTILIZATION
17	6.9	0.0	.2	20.0	0.0	0.0	0.0	20 PERCENT UTILIZATION
18	6.9	0.0	.2	19.0	0.0	0.0	0.0	45 PERCENT UTILIZATION
19	6.9	0.0	.2	16.7	0.0	0.0	0.0	70 PERCENT UTILIZATION
20	6.9	0.0	.2	7.6	0.0	0.0	0.0	95 PERCENT UTILIZATION

MEAN	6.9	16.9	.2	14.5	26.0	0.0	0.0	
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STD DEV	.0	0.0	.0	6.8	0.0	0.0	0.0	
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0.0 = NOT RECORDED

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCDRE REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	4.3	0.0	.2	10.5	0.0	0.0	0.0
2	3.3	0.0	.2	7.5	0.0	0.0	0.0
3	3.4	0.0	.2	12.5	0.0	0.0	0.0
4	3.3	0.0	.2	7.0	0.0	0.0	0.0
5	1.0	0.0	0.0	0.0	0.0	0.0	0.0
6	3.1	0.0	.1	4.0	0.0	0.0	0.0
7	3.2	0.0	.2	6.0	0.0	0.0	0.0
8	3.3	0.0	.2	7.0	0.0	0.0	0.0
9	3.3	0.0	.3	9.0	0.0	0.0	0.0
10	3.2	0.0	.2	4.6	0.0	0.0	0.0
11	3.3	0.0	.2	8.0	0.0	0.0	0.0
12	3.5	0.0	.2	11.1	0.0	0.0	0.0
13	3.4	0.0	.2	10.6	0.0	0.0	0.0
14	3.2	0.0	.1	6.2	0.0	0.0	0.0
15	4.2	0.0	.2	12.2	0.0	0.0	0.0
16	3.3	0.0	.2	11.3	0.0	0.0	0.0
17	3.3	0.0	.2	8.4	0.0	0.0	0.0
18	2.5	0.0	.2	7.4	0.0	0.0	0.0
19	4.2	0.0	.3	13.9	0.0	0.0	0.0
20	4.3	0.0	.2	8.4	0.0	0.0	0.0

MEAN 3.3 0.0 .2 8.7 0.0 0.0 0.0

STD DEV .7 0.0 .0 2.7 0.0 0.0 0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA MESA ANTEL

DATE 22

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORF REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIRE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	2.9	0.0	.1	10.1	0.0	0.0	0.0
2	3.2	0.0	.1	13.6	0.0	0.0	0.0
3	4.7	0.0	.1	9.6	0.0	0.0	0.0
4	4.6	0.0	.1	12.0	0.0	0.0	0.0
5	4.4	0.0	.1	14.1	0.0	0.0	0.0
6	3.9	0.0	.1	8.3	0.0	0.0	0.0
7	5.3	0.0	.1	11.1	0.0	0.0	0.0
8	4.2	0.0	.1	11.7	0.0	0.0	0.0
9	4.6	0.0	.1	9.4	0.0	0.0	0.0
10	4.1	0.0	.1	7.3	0.0	0.0	0.0
11	4.5	0.0	.1	12.9	0.0	0.0	0.0
12	3.7	0.0	.1	11.1	0.0	0.0	0.0
13	3.7	0.0	.1	12.3	0.0	0.0	0.0
14	3.6	0.0	.1	16.5	0.0	0.0	0.0
15	3.2	0.0	.1	10.4	0.0	0.0	0.0
16	3.5	0.0	.1	8.0	0.0	0.0	0.0
17	3.0	0.0	.1	5.1	0.0	0.0	0.0
18	3.7	0.0	.1	10.0	0.0	0.0	0.0
19	4.8	0.0	.1	8.0	0.0	0.0	0.0
20	4.6	0.0	.1	4.4	0.0	0.0	0.0

MEAN 4.0 0.0 .1 10.3 0.0 0.0 0.0

STD DEV .7 0.0 .0 3.0 0.0 0.0 0.0

0.0 = NOT RECORDED

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	3.8	0.0	.1	11.5	0.0	0.0	0.0
2	4.9	0.0	.1	14.1	0.0	0.0	0.0
3	4.9	0.0	.1	11.1	0.0	0.0	0.0
4	3.7	0.0	.1	12.0	0.0	0.0	0.0
5	4.9	0.0	.1	14.4	0.0	0.0	0.0
6	4.4	0.0	.1	19.2	0.0	0.0	0.0
7	4.9	0.0	.2	16.5	0.0	0.0	0.0
8	4.7	0.0	.1	8.1	0.0	0.0	0.0
9	4.6	0.0	.1	9.7	0.0	0.0	0.0
10	4.8	0.0	.1	12.3	0.0	0.0	0.0
11	4.7	0.0	.1	13.6	0.0	0.0	0.0
12	4.2	0.0	.1	10.7	0.0	0.0	0.0
13	3.5	0.0	.1	9.5	0.0	0.0	0.0
14	3.2	0.0	.1	16.0	0.0	0.0	0.0
15	4.4	0.0	.1	12.5	0.0	0.0	0.0
16	4.2	0.0	.1	15.3	0.0	0.0	0.0
17	4.7	0.0	.1	13.3	0.0	0.0	0.0
18	4.4	0.0	.1	12.6	0.0	0.0	0.0
19	4.9	0.0	.2	17.8	0.0	0.0	0.0
20	3.8	0.0	.1	3.0	0.0	0.0	0.0

MEAN	4.4	0.0	.1	12.7	0.0	0.0	0.0
STD DEV	.5	0.0	.0	3.6	0.0	0.0	0.0

C.C = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA MESA ANTEL

DATE 25

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE	SCOPE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHI.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	4.2	0.0	.2	15.7	0.0	0.0	0.0
2	4.1	0.0	.1	13.3	0.0	0.0	0.0
3	4.3	0.0	.1	11.7	0.0	0.0	0.0
4	4.0	0.0	.1	11.8	0.0	0.0	0.0
5	5.2	0.0	.2	14.5	0.0	0.0	0.0
6	4.0	0.0	.1	12.4	0.0	0.0	0.0
7	4.1	0.0	.1	7.0	0.0	0.0	0.0
8	4.1	0.0	.1	14.5	0.0	0.0	0.0
9	4.7	0.0	.2	15.9	0.0	0.0	0.0
10	4.6	0.0	.1	8.5	0.0	0.0	0.0
11	4.8	0.0	.1	13.1	0.0	0.0	0.0
12	4.7	0.0	.1	11.3	0.0	0.0	0.0
13	4.7	0.0	.1	6.8	0.0	0.0	0.0
14	5.8	0.0	.2	16.4	0.0	0.0	0.0
15	4.5	0.0	.1	12.5	0.0	0.0	0.0
16	6.9	0.0	.1	10.0	0.0	0.0	0.0
17	4.8	0.0	.1	13.0	0.0	0.0	0.0
18	4.8	0.0	.1	10.3	0.0	0.0	0.0
19	4.9	0.0	.1	12.5	0.0	0.0	0.0
20	5.1	0.0	.1	3.5	0.0	0.0	0.0

MEAN      4.7    13.1    .1    11.7    46.5    7.0    1.0

STD DEV    .7    0.0    .0    3.3    0.0    0.0    0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA MESA ANTEL

DATE 15

JULY 1979

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PLANT NO.	PHENOLOGICAL STAGE	SCORE REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.1	0.0	.2	15.5	0.0	0.0	0.0
2	6.1	0.0	.2	13.1	0.0	0.0	0.0
3	6.8	0.0	0.0	2.1	0.0	0.0	0.0
4	6.5	0.0	.1	12.1	0.0	0.0	0.0
5	5.7	0.0	.1	15.1	0.0	0.0	0.0
6	6.7	0.0	.1	8.1	0.0	0.0	0.0
7	6.1	0.0	.1	7.2	0.0	0.0	0.0
8	6.4	0.0	.1	9.1	0.0	0.0	0.0
9	6.1	0.0	.1	19.3	0.0	0.0	0.0
10	6.7	0.0	.1	8.1	0.0	0.0	0.0
11	6.5	0.0	.1	12.6	0.0	0.0	0.0
12	6.2	0.0	.1	10.4	0.0	0.0	0.0
13	6.4	0.0	.1	15.1	0.0	0.0	0.0
14	6.9	0.0	.1	16.5	0.0	0.0	0.0
15	6.1	0.0	.1	15.5	0.0	0.0	0.0
16	6.8	0.0	.1	9.8	0.0	0.0	0.0
17	6.5	0.0	.2	11.5	0.0	0.0	0.0
18	6.2	0.0	.1	12.8	0.0	0.0	0.0
19	6.1	0.0	.2	15.9	0.0	0.0	0.0
20	6.8	0.0	.1	3.2	0.0	0.0	0.0

UTILIZATION

MEAN 6.4 14.6 .1 11.7 49.0 8.0 1.0

STD DEV .2 0.0 .0 4.5 0.0 0.0 0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA MESA ANTEL

DATE 7 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT	
1	6.4	0.0	.2	12.0	0.0	0.0	1.0	
2	6.8	0.0	.2	13.1	0.0	0.0	1.0	35 PERCENT UTILIZATION
3	6.9	0.0	.1	1.8	0.0	0.0	1.0	95 PERCENT UTILIZATION
4	6.5	0.0	.2	11.6	0.0	0.0	5.0	
5	6.8	0.0	.2	14.8	0.0	0.0	1.0	
6	6.7	0.0	.2	19.5	0.0	0.0	1.0	
7	6.8	0.0	.2	7.2	0.0	0.0	1.0	
8	6.8	0.0	.2	8.0	0.0	0.0	1.0	
9	6.4	0.0	.2	19.7	0.0	0.0	1.0	
10	6.7	0.0	.1	8.4	0.0	0.0	1.0	30 PERCENT UTILIZATION
11	6.7	0.0	.1	12.5	0.0	0.0	1.0	
12	6.9	0.0	.1	2.4	0.0	0.0	0.0	90 PERCENT UTILIZATION
13	6.9	0.0	.2	4.7	0.0	0.0	0.0	65 PERCENT UTILIZATION
14	6.9	0.0	.2	5.1	0.0	0.0	1.0	60 PERCENT UTILIZATION
15	6.7	0.0	.2	7.8	0.0	0.0	2.0	
16	6.9	0.0	.2	10.1	0.0	0.0	1.0	
17	6.7	0.0	.2	12.8	0.0	0.0	1.0	
18	6.6	0.0	.2	12.5	0.0	0.0	2.0	
19	6.4	0.0	.2	15.7	0.0	0.0	2.0	
20	6.9	0.0	.2	2.0	0.0	0.0	1.0	90 PERCENT UTILIZATION

MEAN	6.7	16.2	.2	10.1	32.8	14.0	1.4	
STD DEV	.2	0.0	.0	5.3	0.0	0.0	1.0	

C.C. = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA MEGA ANTEL

DATE 1 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	7.1	0.0	.2	15.7	0.0	0.0	0.0
2	7.1	0.0	.2	14.1	0.0	0.0	0.0
3	7.1	0.0	.1	7.2	0.0	0.0	0.0
4	6.9	0.0	.2	11.5	0.0	0.0	0.0
5	7.1	0.0	.2	13.5	0.0	0.0	0.0
6	6.9	0.0	.1	7.5	0.0	0.0	0.0
7	6.9	0.0	.1	6.4	0.0	0.0	0.0
8	6.9	0.0	.1	8.1	0.0	0.0	0.0
9	6.9	0.0	.2	21.0	0.0	0.0	0.0
10	6.9	0.0	.1	3.6	0.0	0.0	0.0
11	7.1	0.0	.2	12.9	0.0	0.0	0.0
12	7.1	0.0	.2	10.9	0.0	0.0	0.0
13	7.2	0.0	.1	5.8	0.0	0.0	0.0
14	7.1	0.0	.1	7.0	0.0	0.0	0.0
15	7.2	0.0	.2	10.9	0.0	0.0	0.0
16	6.9	0.0	.2	9.5	0.0	0.0	0.0
17	6.9	0.0	.2	9.6	0.0	0.0	0.0
18	7.2	0.0	.2	4.9	0.0	0.0	0.0
19	7.3	0.0	.3	18.5	0.0	0.0	0.0
20	6.9	0.0	.1	2.0	0.0	0.0	0.0

99 PERCENT UTILIZATION

MEAN	7.0	16.3	.2	10.0	47.0	0.0	0.0
STD DEV	.1	0.0	.1	4.9	0.0	0.0	0.0

0.0 = NOT RECORDED



AGROPYRON SMITHII

STUDY AREA MESA ANTEL

DATE 22 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
*****							
1	6.9	0.0	.1	16.1	0.0	0.0	0.0
2	6.9	0.0	.1	14.1	0.0	0.0	0.0
3	7.2	0.0	.1	7.1	0.0	0.0	0.0
4	7.2	0.0	.1	3.2	0.0	0.0	0.0
5	6.9	0.0	.1	13.5	0.0	0.0	0.0
6	6.9	0.0	.1	7.2	0.0	0.0	0.0
7	6.9	0.0	.1	6.3	0.0	0.0	0.0
8	6.9	0.0	.1	7.9	0.0	0.0	0.0
9	6.9	0.0	.2	21.3	0.0	0.0	0.0
10	7.1	0.0	.1	6.6	0.0	0.0	0.0
11	7.0	0.0	.1	13.2	0.0	0.0	0.0
12	7.0	0.0	.1	5.8	0.0	0.0	0.0
13	6.9	0.0	.1	5.5	0.0	0.0	0.0
14	6.9	0.0	.1	7.5	0.0	0.0	0.0
15	6.9	0.0	.2	14.5	0.0	0.0	0.0
16	6.9	0.0	.1	10.2	0.0	0.0	0.0
17	6.9	0.0	.1	9.7	0.0	0.0	0.0
18	6.9	0.0	.1	13.1	0.0	0.0	0.0
19	7.4	0.0	.2	19.0	0.0	0.0	0.0
20	6.9	0.0	.1	2.0	0.0	0.0	0.0

60 PERCENT UTILIZATION

MEAN	7.0	16.9	.1	10.2	26.0	0.0	0.0
STD DEV	.1	0.0	.0	5.2	0.0	0.0	0.0

0.0 = NOT RECORDED

AGOPYRON SPITHIT

STUDY AREA Owl DRAW

DATE 5

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCDPP REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	4.1	0.0	.3	12.6	0.0	0.0	0.0
2	3.1	0.0	.2	4.4	0.0	0.0	0.0
3	3.2	0.0	.2	3.0	0.0	0.0	0.0
4	4.8	0.0	.3	9.0	0.0	0.0	0.0
5	4.1	0.0	.2	5.5	0.0	0.0	0.0
6	3.3	0.0	.2	3.5	0.0	0.0	0.0
7	2.2	0.0	.2	7.0	0.0	0.0	0.0
8	4.1	0.0	.2	9.3	0.0	0.0	0.0
9	3.3	0.0	.2	8.0	0.0	0.0	0.0
10	4.5	0.0	.3	18.9	0.0	0.0	0.0
11	4.4	0.0	.3	12.5	0.0	0.0	0.0
12	3.3	0.0	.3	8.2	0.0	0.0	0.0
13	3.2	0.0	.2	5.6	0.0	0.0	0.0
14	3.3	0.0	.2	14.9	0.0	0.0	0.0
15	3.8	0.0	.2	10.9	0.0	0.0	0.0
16	4.1	0.0	.3	6.7	0.0	0.0	0.0
17	4.3	0.0	.2	7.2	0.0	0.0	0.0
18	3.2	0.0	.2	5.3	0.0	0.0	0.0
19	3.3	0.0	.2	9.5	0.0	0.0	0.0
20	4.1	0.0	.3	10.9	0.0	0.0	0.0

60 PERCENT UTILIZATION

MEAN	3.7	0.0	.2	8.6	0.0	0.0	0.0
STD DEV	.6	0.0	.0	4.0	0.0	0.0	0.0

0.0 = NOT RECORDED

ACRUPYRGE SMITHII

STUDY AREA Owl DRAW

DATE 25

MAY 197

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE PEPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	5.3	0.0	.4	14.2	0.0	0.0	0.0
2	4.8	0.0	.4	14.1	0.0	0.0	0.0
3	4.8	0.0	.3	11.9	0.0	0.0	0.0
4	5.2	0.0	.3	16.3	0.0	0.0	0.0
5	4.1	0.0	.3	11.2	0.0	0.0	0.0
6	4.4	0.0	.4	12.9	0.0	0.0	0.0
7	4.6	0.0	.3	15.8	0.0	0.0	0.0
8	4.8	0.0	.3	16.1	0.0	0.0	0.0
9	4.8	0.0	.3	17.4	0.0	0.0	0.0
10	4.7	0.0	.3	21.5	0.0	0.0	0.0
11	4.8	0.0	.3	14.5	0.0	0.0	0.0
12	2.9	0.0	.2	13.3	0.0	0.0	0.0
13	4.6	0.0	.2	11.4	0.0	0.0	0.0
14	4.8	0.0	.2	10.8	0.0	0.0	0.0
15	4.1	0.0	.3	14.6	0.0	0.0	0.0
16	4.1	0.0	.2	7.8	0.0	0.0	0.0
17	4.6	0.0	.2	15.8	0.0	0.0	0.0
18	4.6	0.0	.4	11.0	0.0	0.0	0.0
19	4.8	0.0	.3	12.2	0.0	0.0	0.0
20	5.4	0.0	.4	18.7	0.0	0.0	0.0

MEAN 4.6 0.0 .3 14.1 0.0 0.0 0.0

STD DEV .5 0.0 .1 3.1 0.0 0.0 0.0

0.0 = NOT RECORDED

AGROPYRON SPITHII

STUDY AREA UWL DRAW

DATE 12

JUNE 1979

78

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	4.2	0.0	.3	14.7	0.0	0.0	0.0
2	4.7	0.0	.4	16.7	0.0	0.0	0.0
3	6.1	0.0	.4	18.0	0.0	0.0	0.0
4	5.3	0.0	.4	23.7	0.0	0.0	0.0
5	4.8	0.0	.3	13.0	0.0	0.0	0.0
6	5.4	0.0	.4	17.7	0.0	0.0	0.0
7	5.3	0.0	.3	15.8	0.0	0.0	0.0
8	5.5	0.0	.3	19.7	0.0	0.0	0.0
9	5.3	0.0	.3	10.5	0.0	0.0	0.0
10	5.2	0.0	.3	22.4	0.0	0.0	0.0
11	4.8	0.0	.3	14.2	0.0	0.0	0.0
12	4.3	0.0	.3	12.9	0.0	0.0	0.0
13	5.2	0.0	.3	14.4	0.0	0.0	0.0
14	4.9	0.0	.3	13.2	0.0	0.0	0.0
15	4.3	0.0	.3	13.9	0.0	0.0	0.0
16	5.3	0.0	.3	9.2	0.0	0.0	0.0
17	4.8	0.0	.3	12.2	0.0	0.0	0.0
18	4.7	0.0	.4	14.4	0.0	0.0	0.0
19	4.6	0.0	.3	16.2	0.0	0.0	0.0
20	4.8	0.0	.3	19.2	0.0	0.0	0.0
MEAN	5.0	0.0	.3	16.0	0.0	0.0	0.0
STD DEV	.5	0.0	.0	3.7	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPHYTON SMITHII

STUDY AREA O&L DRAW

DATE 28

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE	SCOPE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VFG. PLANT
1	5.7	0.0	.3	14.9	0.0	0.0	0.0
2	5.8	0.0	.3	15.9	0.0	0.0	0.0
3	6.1	0.0	.4	17.8	0.0	0.0	0.0
4	5.3	0.0	.4	24.1	0.0	0.0	0.0
5	4.9	0.0	.2	17.4	0.0	0.0	0.0
6	5.6	0.0	.3	17.5	0.0	0.0	0.0
7	5.4	0.0	.3	15.5	0.0	0.0	0.0
8	5.0	0.0	.3	15.0	0.0	0.0	0.0
9	6.1	0.0	.3	17.5	0.0	0.0	0.0
10	6.2	0.0	.2	25.8	0.0	0.0	0.0
11	5.3	0.0	.3	18.2	0.0	0.0	0.0
12	6.0	0.0	.2	13.0	0.0	0.0	0.0
13	5.2	0.0	.3	14.0	0.0	0.0	0.0
14	6.0	0.0	.2	11.3	0.0	0.0	0.0
15	5.2	0.0	.2	13.4	0.0	0.0	0.0
16	5.3	0.0	.2	9.1	0.0	0.0	0.0
17	5.8	0.0	.2	18.2	0.0	0.0	0.0
18	5.4	0.0	.3	16.4	0.0	0.0	0.0
19	5.7	0.0	.3	17.5	0.0	0.0	0.0
20	5.8	0.0	.3	18.5	0.0	0.0	0.0

MEAN 5.6 13.1 .3 16.6 48.5 7.0 1.0  
 STD DEV .4 0.0 .1 3.8 0.0 0.0 0.0

0.0 = NOT RECORDED

AGPCPY2BK SMITHJ

STUDY AREA OWL DRAW

DATE 19

JULY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCOPE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT	
1	6.8	0.0	.2	6.5	0.0	0.0	0.0	UTILIZATION BY CATTLE HEA ALONG THE LENGTH OF THIS TRANSECT FOR THIS SAMPLIN PERIOD
2	6.3	0.0	.3	16.0	0.0	0.0	0.0	
3	6.4	0.0	.2	14.8	0.0	0.0	0.0	
4	6.3	0.0	.3	25.7	0.0	0.0	0.0	
5	6.4	0.0	.2	5.5	0.0	0.0	0.0	
6	6.9	0.0	.2	19.1	0.0	0.0	0.0	
7	6.3	0.0	.2	15.2	0.0	0.0	0.0	
8	6.2	0.0	.1	10.4	0.0	0.0	0.0	
9	6.5	0.0	.2	12.3	0.0	0.0	0.0	
10	6.4	0.0	.2	24.5	0.0	0.0	0.0	
11	6.4	0.0	.2	5.0	0.0	0.0	0.0	
12	6.9	0.0	.2	17.3	0.0	0.0	0.0	
13	6.9	0.0	.2	17.9	0.0	0.0	0.0	
14	6.3	0.0	.2	11.5	0.0	0.0	0.0	
15	6.4	0.0	.2	13.9	0.0	0.0	0.0	
16	6.4	0.0	.2	5.8	0.0	0.0	0.0	
17	6.6	0.0	.2	15.4	0.0	0.0	0.0	
18	6.2	0.0	.3	16.3	0.0	0.0	0.0	
19	6.3	0.0	.2	15.9	0.0	0.0	0.0	
20	6.4	0.0	.2	19.0	0.0	0.0	0.0	

MEAN	6.5	14.6	.2	14.4	49.0	6.0	1.0
STD DEV	.2	0.0	.0	5.8	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SPITHII

STUDY AREA OWL DRAW

DATE 10

AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT	
1	6.9	0.0	.2	2.5	0.0	0.0	2.0	95 PERCENT UTILIZATION
2	6.5	0.0	.2	13.5	0.0	0.0	4.0	
3	6.6	0.0	.1	15.0	0.0	0.0	1.0	5 PERCENT UTILIZATION
4	6.7	16.0	.2	33.8	33.0	7.0	2.0	
5	6.7	0.0	.2	5.6	0.0	0.0	2.0	85 PERCENT UTILIZATION
6	6.9	0.0	.2	19.5	0.0	0.0	2.0	10 PERCENT UTILIZATION
7	6.9	0.0	.2	15.6	0.0	0.0	2.0	
8	6.3	0.0	.3	19.6	0.0	0.0	3.0	
9	6.9	0.0	.2	17.3	0.0	0.0	1.0	
10	6.5	0.0	.2	25.0	0.0	0.0	2.0	
11	6.9	0.0	.2	11.0	0.0	0.0	1.0	75 PERCENT UTILIZATION
12	6.9	0.0	.2	16.2	0.0	0.0	1.0	
13	6.9	0.0	.2	17.1	0.0	0.0	2.0	
14	6.9	0.0	.2	2.1	0.0	0.0	1.0	90 PERCENT UTILIZATION
15	6.7	0.0	.2	15.6	0.0	0.0	2.0	
16	6.4	0.0	.2	9.3	0.0	0.0	2.0	
17	6.7	0.0	.2	15.6	0.0	0.0	2.0	
18	6.3	0.0	.2	16.0	0.0	0.0	1.0	5 PERCENT UTILIZATION
19	6.8	0.0	.2	15.5	0.0	0.0	2.0	
20	6.5	0.0	.2	17.8	0.0	0.0	4.0	
MEAN	6.7	16.0	.2	15.2	33.0	7.0	2.0	
STD DEV	.2	0.0	.0	7.2	0.0	0.0	.9	

0.0 = NOT RECORDED

AGOPYMON SMITHII

STUDY AREA DWL DRAW

DATE 1 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NOS. VEG. PLANT	
1	7.2	0.0	.2	5.3	0.0	0.0	1.0	80 PERCENT UTILIZATION
2	6.8	0.0	.1	10.4	0.0	0.0	2.0	10 PERCENT UTILIZATION
3	7.3	0.0	.2	19.2	0.0	0.0	1.0	
4	7.2	0.0	.3	24.1	0.0	0.0	0.0	20 PERCENT UTILIZATION
5	6.9	0.0	.2	6.4	0.0	0.0	2.0	60 PERCENT UTILIZATION
6	6.9	0.0	.2	19.8	0.0	0.0	1.0	
7	7.1	0.0	.2	15.0	0.0	0.0	1.0	
8	6.8	0.0	.3	18.8	0.0	0.0	1.0	5 PERCENT UTILIZATION
9	7.5	0.0	.2	16.3	0.0	0.0	1.0	10 PERCENT UTILIZATION
10	6.8	0.0	.2	24.6	0.0	0.0	3.0	
11	7.3	0.0	.2	9.7	0.0	0.0	5.0	50 PERCENT UTILIZATION
12	7.2	0.0	.3	14.2	0.0	0.0	3.0	30 PERCENT UTILIZATION
13	7.2	0.0	.2	14.0	0.0	0.0	2.0	
14	6.6	0.0	.2	11.4	0.0	0.0	2.0	
15	6.5	0.0	.2	12.7	0.0	0.0	2.0	15 PERCENT UTILIZATION
16	7.3	0.0	.2	10.2	0.0	0.0	2.0	10 PERCENT UTILIZATION
17	6.4	0.0	.2	15.2	0.0	0.0	2.0	
18	6.6	0.0	.2	15.5	0.0	0.0	2.0	
19	6.4	0.0	.2	16.5	0.0	0.0	4.0	20 PERCENT UTILIZATION
20	6.4	0.0	.3	21.6	0.0	0.0	4.0	
MEAN	6.9	16.3	.2	14.8	47.0	0.0	2.2	
STD DEV	.4	0.0	.0	5.2	0.0	0.0	1.2	

0.0 = NOT RECORDED



AGROPYRON SMITHII

STUDY AREA BwL DRAW

DATE 23 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	7.8	0.0	.2	8.2	0.0	0.0	0.0
2	7.9	0.0	.1	3.2	0.0	0.0	0.0
3	7.8	0.0	.2	14.8	0.0	0.0	0.0
4	7.8	0.0	.2	10.2	0.0	0.0	0.0
5	7.0	0.0	.2	5.6	0.0	0.0	0.0
6	7.7	0.0	.2	10.9	0.0	0.0	0.0
7	7.9	0.0	.2	15.1	0.0	0.0	0.0
8	7.7	0.0	.1	7.5	0.0	0.0	0.0
9	7.8	0.0	.1	7.5	0.0	0.0	0.0
10	7.8	0.0	.3	24.0	0.0	0.0	0.0
11	7.9	0.0	.1	1.1	0.0	0.0	0.0
12	7.5	0.0	.2	9.3	0.0	0.0	0.0
13	7.9	0.0	.2	17.8	0.0	0.0	0.0
14	7.7	0.0	.2	10.2	0.0	0.0	0.0
15	7.7	0.0	.2	12.1	0.0	0.0	0.0
16	7.6	0.0	.2	10.0	0.0	0.0	0.0
17	7.6	0.0	.1	12.4	0.0	0.0	0.0
18	7.7	0.0	.1	15.3	0.0	0.0	0.0
19	7.6	0.0	.2	19.0	0.0	0.0	0.0
20	7.6	0.0	.2	19.8	0.0	0.0	0.0
MEAN	7.7	16.9	.2	11.7	26.0	0.0	0.0
STD DEV	.1	0.0	.1	5.7	0.0	0.0	0.0

G.C = NOT RECORDED

AGROPHYRON SMITHII

STUDY AREA RED WASH 2

DATE 6

MAY 1979

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PLANT NO.	PHENOLOGICAL STAGE VEG.	MAX. SCORE REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	3.5	0.0	.1	12.1	0.0	0.0	0.0
2	3.5	0.0	.1	14.8	0.0	0.0	0.0
3	4.0	0.0	.1	14.0	0.0	0.0	0.0
4	3.3	0.0	.1	8.5	0.0	0.0	0.0
5	3.2	0.0	.1	6.8	0.0	0.0	0.0
6	3.4	0.0	.1	9.9	0.0	0.0	0.0
7	3.0	0.0	.1	10.5	0.0	0.0	0.0
8	3.3	0.0	.1	7.0	0.0	0.0	0.0
9	2.5	0.0	.1	7.1	0.0	0.0	0.0
10	4.3	0.0	.1	11.5	0.0	0.0	0.0
11	3.0	0.0	.1	5.5	0.0	0.0	0.0
12	2.1	0.0	.1	8.0	0.0	0.0	0.0
13	3.5	0.0	.1	7.2	0.0	0.0	0.0
14	4.1	0.0	.1	8.9	0.0	0.0	0.0
15	3.3	0.0	.1	6.8	0.0	0.0	0.0
16	3.2	0.0	.1	7.3	0.0	0.0	0.0
17	4.1	0.0	.1	16.0	0.0	0.0	0.0
18	3.2	0.0	.1	5.5	0.0	0.0	0.0
19	3.5	0.0	.1	10.0	0.0	0.0	0.0
20	3.5	0.0	.1	8.0	0.0	0.0	0.0

MEAN	3.4	0.0	.1	9.3	0.0	0.0	0.0
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STD DEV	.5	0.0	.0	3.0	0.0	0.0	0.0
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0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA RED WASH 2

DATE 22

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCOPE REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	3.5	0.0	.2	15.5	0.0	0.0	0.0
2	4.5	0.0	.2	17.5	0.0	0.0	0.0
3	4.5	0.0	.2	21.5	0.0	0.0	0.0
4	4.3	0.0	.1	8.5	0.0	0.0	0.0
5	4.6	0.0	.2	12.8	0.0	0.0	0.0
5	4.4	0.0	.2	14.5	0.0	0.0	0.0
7	3.7	0.0	.2	15.6	0.0	0.0	0.0
8	3.6	0.0	.2	13.9	0.0	0.0	0.0
9	4.4	0.0	.2	11.4	0.0	0.0	0.0
10	4.1	0.0	.2	14.5	0.0	0.0	0.0
11	3.6	0.0	.2	12.0	0.0	0.0	0.0
12	3.5	0.0	.2	10.5	0.0	0.0	0.0
13	4.4	0.0	.2	8.2	0.0	0.0	0.0
14	4.3	0.0	.2	8.7	0.0	0.0	0.0
15	3.9	0.0	.2	5.7	0.0	0.0	0.0
16	4.2	0.0	.2	11.6	0.0	0.0	0.0
17	2.6	0.0	.1	10.2	0.0	0.0	0.0
18	3.9	0.0	.1	6.5	0.0	0.0	0.0
19	3.7	0.0	.2	11.8	0.0	0.0	0.0
20	3.4	0.0	.1	4.1	0.0	0.0	0.0

MEAN            4.0    0.0    .2    11.9    0.0    0.0    0.0

STD DEV        .5    0.0    .0    4.0    0.0    0.0    0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA RED WASH 2

DATE 4

JUNE 1979

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PLANT NO.	PHENOLOGICAL STAGE VEG.	SCOPE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	4.9	0.0	.2	18.5	0.0	0.0	0.0
2	4.6	0.0	.2	19.4	0.0	0.0	0.0
3	4.6	0.0	.2	22.9	0.0	0.0	0.0
4	4.3	0.0	.2	12.5	0.0	0.0	0.0
5	4.5	0.0	.2	12.6	0.0	0.0	0.0
6	4.7	0.0	.2	19.1	0.0	0.0	0.0
7	4.6	0.0	.2	18.2	0.0	0.0	0.0
8	4.4	0.0	.2	16.8	0.0	0.0	0.0
9	4.5	0.0	.2	14.3	0.0	0.0	0.0
10	4.4	0.0	.2	15.7	0.0	0.0	0.0
11	3.6	0.0	.2	14.0	0.0	0.0	0.0
12	4.6	0.0	.1	11.4	0.0	0.0	0.0
13	4.3	0.0	.2	15.1	0.0	0.0	0.0
14	4.5	0.0	.2	14.1	0.0	0.0	0.0
15	4.8	0.0	.1	8.2	0.0	0.0	0.0
16	4.7	0.0	.2	11.3	0.0	0.0	0.0
17	5.2	0.0	.2	18.8	0.0	0.0	0.0
18	4.4	0.0	.2	11.8	0.0	0.0	0.0
19	4.5	0.0	.2	16.6	0.0	0.0	0.0
20	4.4	0.0	.1	5.5	0.0	0.0	0.0

MEAN	4.6	0.0	.2	14.9	0.0	0.0	0.0
STD DEV	.3	0.0	.0	4.2	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA RED WASH 2

DATE 24

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	5.6	0.0	.2	23.5	0.0	0.0	0.0
2	5.7	0.0	.2	19.7	0.0	0.0	0.0
3	5.2	0.0	.2	30.9	0.0	0.0	0.0
4	5.6	0.0	.2	15.4	0.0	0.0	0.0
5	5.5	0.0	.2	12.1	0.0	0.0	0.0
6	5.4	0.0	.2	17.4	0.0	0.0	0.0
7	4.9	0.0	.2	20.5	0.0	0.0	0.0
8	5.4	0.0	.2	15.9	0.0	0.0	0.0
9	5.4	0.0	.2	17.1	0.0	0.0	0.0
10	5.3	0.0	.3	20.6	0.0	0.0	0.0
11	4.3	0.0	.2	15.1	0.0	0.0	0.0
12	4.6	0.0	.1	11.5	0.0	0.0	0.0
13	5.3	0.0	.2	10.3	0.0	0.0	0.0
14	5.3	0.0	.2	11.9	0.0	0.0	0.0
15	4.8	0.0	.1	8.3	0.0	0.0	0.0
16	4.9	0.0	.2	13.4	0.0	0.0	0.0
17	4.9	0.0	.1	18.2	0.0	0.0	0.0
18	4.9	0.0	.1	11.8	0.0	0.0	0.0
19	4.8	0.0	.1	15.7	0.0	0.0	0.0
20	4.4	0.0	.1	6.2	0.0	0.0	0.0

MEAN	5.1	13.1	.2	15.8	48.5	7.0	1.0
STD DEV	.4	0.0	.1	5.7	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA RED WASH 2

DATE 14

JULY 1979

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PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NOS. VEG. PLANT
1	5.4	0.0	.1	19.6	0.0	0.0	0.0
2	5.8	0.0	.1	18.5	0.0	0.0	0.0
3	6.1	0.0	.1	7.8	0.0	0.0	0.0
4	6.1	0.0	.1	15.1	0.0	0.0	0.0
5	6.1	0.0	.1	12.2	0.0	0.0	0.0
6	5.9	0.0	.1	19.0	0.0	0.0	0.0
7	6.0	0.0	.1	20.6	0.0	0.0	0.0
8	5.9	0.0	.1	16.0	0.0	0.0	0.0
9	5.9	0.0	.1	16.5	0.0	0.0	0.0
10	6.0	0.0	.2	20.6	0.0	0.0	0.0
11	6.1	0.0	.2	15.0	0.0	0.0	0.0
12	6.1	0.0	.1	11.0	0.0	0.0	0.0
13	5.8	0.0	.1	6.2	0.0	0.0	0.0
14	5.9	0.0	.1	11.2	0.0	0.0	0.0
15	5.9	0.0	.1	7.8	0.0	0.0	0.0
16	6.0	0.0	.1	13.1	0.0	0.0	0.0
17	6.1	0.0	.1	18.0	0.0	0.0	0.0
18	6.0	0.0	.1	11.6	0.0	0.0	0.0
19	5.9	0.0	.1	17.0	0.0	0.0	0.0
20	6.0	0.0	.1	8.7	0.0	0.0	0.0

MEAN      6.0    14.6    .1    14.3    49.0    8.0    1.0

STD DEV      .1    0.0    .0    4.5    0.0    0.0    0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA RED WASH 2

DATE 6 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	6.3	0.0	.2	24.1	0.0	0.0	4.0
2	6.2	0.0	.2	18.8	0.0	0.0	1.0
3	6.4	0.0	.3	31.1	0.0	0.0	4.0
4	6.8	0.0	.2	15.5	0.0	0.0	1.0
5	6.4	0.0	.2	11.6	0.0	0.0	2.0
6	6.5	0.0	.2	22.0	0.0	0.0	6.0
7	6.5	0.0	.1	20.8	0.0	0.0	2.0
8	6.4	0.0	.2	15.7	0.0	0.0	6.0
9	6.5	0.0	.1	15.5	0.0	0.0	1.0
10	6.3	0.0	.2	20.5	0.0	0.0	5.0
11	6.4	0.0	.2	15.5	0.0	0.0	1.0
12	6.4	0.0	.1	11.6	0.0	0.0	1.0
13	6.3	0.0	.2	25.0	0.0	0.0	1.0
14	6.4	0.0	.2	11.4	0.0	0.0	2.0
15	6.5	0.0	.1	7.6	0.0	0.0	1.0
16	6.6	0.0	.1	11.3	0.0	0.0	1.0
17	6.5	0.0	.2	18.0	0.0	0.0	1.0
18	6.9	0.0	.1	13.0	0.0	0.0	1.0
19	6.6	0.0	.2	17.1	0.0	0.0	3.0
20	6.3	0.0	.1	6.0	0.0	0.0	1.0
MEAN	6.5	16.0	.2	16.7	33.0	7.0	2.3
STD DEV	.2	0.0	.1	6.1	0.0	0.0	1.8

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA RED WASH 2

DATE 31 AUGUST 1979

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PLANT NO.	PHENOLOGICAL STAGE VEG.	SCOPE REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	6.7	0.0	.2	19.0	0.0	0.0	0.0
2	6.6	0.0	.2	18.3	0.0	0.0	0.0
3	6.6	0.0	.3	30.9	0.0	0.0	0.0
4	6.7	0.0	.2	14.5	0.0	0.0	0.0
5	6.6	0.0	.2	12.0	0.0	0.0	0.0
6	6.6	0.0	.3	22.0	0.0	0.0	0.0
7	6.8	0.0	.2	20.1	0.0	0.0	0.0
8	6.7	0.0	.1	10.9	0.0	0.0	0.0
9	6.5	0.0	.2	16.5	0.0	0.0	0.0
10	6.5	0.0	.3	20.2	0.0	0.0	0.0
11	6.8	0.0	.2	15.0	0.0	0.0	0.0
12	6.6	0.0	.2	10.9	0.0	0.0	0.0
13	6.6	0.0	.2	9.2	0.0	0.0	0.0
14	6.5	0.0	.3	11.3	0.0	0.0	0.0
15	6.5	0.0	.2	6.9	0.0	0.0	0.0
16	6.6	0.0	.2	11.5	0.0	0.0	0.0
17	6.7	0.0	.2	17.8	0.0	0.0	0.0
18	6.8	0.0	.1	8.0	0.0	0.0	0.0
19	6.7	0.0	.3	17.5	0.0	0.0	0.0
20	6.5	0.0	.1	5.9	0.0	0.0	0.0
MEAN	6.6	16.3	.2	14.9	47.0	0.0	2.2
STD DEV	.1	0.0	.1	6.1	0.0	0.0	0.0

0.0 = NOT RECORDED



ACROPHYTON SMITHII

STUDY AREA RED WASH 2

DATE 21 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE SCOPE VEG.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	7.3	0.0	.2	18.9	0.0	0.0	0.0
2	7.2	0.0	.2	18.7	0.0	0.0	0.0
3	7.4	0.0	.3	30.9	0.0	0.0	0.0
4	6.9	0.0	.2	16.1	0.0	0.0	0.0
5	7.3	0.0	.2	12.1	0.0	0.0	0.0
6	7.5	0.0	.3	22.7	0.0	0.0	0.0
7	6.9	0.0	.3	20.9	0.0	0.0	0.0
8	7.2	0.0	.2	13.8	0.0	0.0	0.0
9	7.1	0.0	.1	16.7	0.0	0.0	0.0
10	7.6	0.0	.3	18.8	0.0	0.0	0.0
11	7.2	0.0	.1	14.2	0.0	0.0	0.0
12	6.9	0.0	.1	10.6	0.0	0.0	0.0
13	7.0	0.0	.1	15.6	0.0	0.0	0.0
14	7.5	0.0	.1	11.8	0.0	0.0	0.0
15	6.9	0.0	.1	7.0	0.0	0.0	0.0
16	6.9	0.0	.1	11.5	0.0	0.0	0.0
17	7.3	0.0	.2	17.8	0.0	0.0	0.0
18	7.1	0.0	.2	10.7	0.0	0.0	0.0
19	7.6	0.0	.3	18.7	0.0	0.0	0.0
20	7.4	0.0	.2	9.0	0.0	0.0	0.0

MEAN	7.2	16.9	.2	15.8	26.0	0.0	0.0
STD DEV	.2	0.0	.1	5.5	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SHOSHONI 7

DATE 30

APRIL 1979

92

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORPE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	4.2	0.0	.1	8.0	0.0	0.0	0.0
2	3.1	0.0	.1	2.2	0.0	0.0	0.0
3	4.2	0.0	.2	10.2	0.0	0.0	0.0
4	3.4	0.0	.1	7.1	0.0	0.0	0.0
5	4.3	0.0	.3	12.4	0.0	0.0	0.0
6	4.2	0.0	.2	14.0	0.0	0.0	0.0
7	4.1	0.0	.2	5.0	0.0	0.0	0.0
8	4.2	0.0	.2	8.5	0.0	0.0	0.0
9	3.2	0.0	.1	6.5	0.0	0.0	0.0
10	4.2	0.0	.2	9.0	0.0	0.0	0.0
11	4.2	0.0	.2	13.8	0.0	0.0	0.0
12	4.2	0.0	.2	10.0	0.0	0.0	0.0
13	3.3	0.0	.2	15.5	0.0	0.0	0.0
14	4.1	0.0	.1	9.5	0.0	0.0	0.0
15	3.2	0.0	.1	8.5	0.0	0.0	0.0
16	4.1	0.0	.2	4.2	0.0	0.0	0.0
17	3.3	0.0	.1	6.0	0.0	0.0	0.0
18	4.2	0.0	.2	11.2	0.0	0.0	0.0
19	4.2	0.0	.2	13.5	0.0	0.0	0.0
20	3.3	0.0	.1	9.7	0.0	0.0	0.0
MEAN	3.9	0.0	.2	9.4	0.0	0.0	0.0
STD DEV	.5	0.0	.1	3.4	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPHYRON SMITHII

STUDY AREA SHOSHONI 7

DATE 23

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	MAX. LEAF WIDTH	MAX. LEAF HGT.	MAX SPIKE HGT.	NUS. SPK/ CULM	NDS. VEG. PLANT
1	4.9	0.0	.2	15.6	0.0	0.0	0.0
2	4.7	0.0	.1	8.1	0.0	0.0	0.0
3	5.2	0.0	.3	16.7	0.0	0.0	0.0
4	4.7	0.0	.2	10.8	0.0	0.0	0.0
5	4.3	0.0	.3	20.8	0.0	0.0	0.0
6	4.4	0.0	.3	16.8	0.0	0.0	0.0
7	5.6	0.0	.3	12.8	0.0	0.0	0.0
8	4.4	0.0	.3	15.8	0.0	0.0	0.0
9	4.3	0.0	.2	11.8	0.0	0.0	0.0
10	4.9	0.0	.3	15.6	0.0	0.0	0.0
11	4.6	0.0	.2	13.7	0.0	0.0	0.0
12	4.7	0.0	.3	18.2	0.0	0.0	0.0
13	5.3	0.0	.3	22.8	0.0	0.0	0.0
14	4.3	0.0	.3	16.6	0.0	0.0	0.0
15	3.7	0.0	.1	4.9	0.0	0.0	0.0
16	4.4	0.0	.2	17.1	0.0	0.0	0.0
17	4.8	0.0	.3	11.4	0.0	0.0	0.0
18	4.3	0.0	.2	17.1	0.0	0.0	0.0
19	4.8	0.0	.3	12.8	0.0	0.0	0.0
20	3.3	0.0	.1	11.0	0.0	0.0	0.0

MEAN	4.6	0.0	.2	14.3	0.0	0.0	0.0
STD DEV	.5	0.0	.1	4.2	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SHOSHONI 7

DATE 6 JUNE 1979

94

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NUS. SPK/ CULM	NDS. VEG. PLANT
1	4.4	0.0	.2	15.6	0.0	0.0	0.0
2	3.9	0.0	.1	8.5	0.0	0.0	0.0
3	4.5	0.0	.2	17.0	0.0	0.0	0.0
4	4.4	0.0	.2	10.0	0.0	0.0	0.0
5	5.3	0.0	.3	24.0	0.0	0.0	0.0
6	5.0	0.0	.3	18.9	0.0	0.0	0.0
7	5.4	0.0	.3	13.6	0.0	0.0	0.0
8	4.5	0.0	.2	9.4	0.0	0.0	0.0
9	4.3	0.0	.2	12.8	0.0	0.0	0.0
10	5.5	0.0	.3	16.1	0.0	0.0	0.0
11	4.6	0.0	.2	8.3	0.0	0.0	0.0
12	5.3	0.0	.3	17.8	0.0	0.0	0.0
13	4.9	0.0	.3	22.8	0.0	0.0	0.0
14	4.5	0.0	.3	17.0	0.0	0.0	0.0
15	4.7	0.0	.1	6.6	0.0	0.0	0.0
16	3.7	0.0	.2	16.9	0.0	0.0	0.0
17	5.6	0.0	.2	12.1	0.0	0.0	0.0
18	4.8	0.0	.2	14.1	0.0	0.0	0.0
19	5.4	0.0	.3	17.3	0.0	0.0	0.0
20	4.2	0.0	.2	16.8	0.0	0.0	0.0
MEAN	4.7	0.0	.2	14.8	0.0	0.0	0.0
STD DEV	.5	0.0	.1	4.7	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SHOSHONI 7

DATE 26

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CUEM	NDS. VEG. PLANT
1	4.6	0.0	.2	15.5	0.0	0.0	0.0
2	3.9	0.0	.1	8.0	0.0	0.0	0.0
3	4.5	0.0	.2	15.2	0.0	0.0	0.0
4	3.9	0.0	.1	10.2	0.0	0.0	0.0
5	5.1	0.0	.2	24.2	0.0	0.0	0.0
6	5.2	0.0	.2	17.0	0.0	0.0	0.0
7	4.6	0.0	.2	13.3	0.0	0.0	0.0
8	3.4	0.0	.2	7.8	0.0	0.0	0.0
9	3.7	0.0	.2	12.5	0.0	0.0	0.0
10	5.0	0.0	.2	15.5	0.0	0.0	0.0
11	4.9	0.0	.2	8.2	0.0	0.0	0.0
12	5.9	0.0	.2	17.4	0.0	0.0	0.0
13	5.6	0.0	.2	22.0	0.0	0.0	0.0
14	6.4	0.0	.1	2.5	0.0	0.0	0.0
15	3.9	0.0	.1	5.0	0.0	0.0	0.0
16	4.3	0.0	.2	14.0	0.0	0.0	0.0
17	5.9	0.0	.2	15.2	0.0	0.0	0.0
18	6.2	0.0	.1	13.6	0.0	0.0	0.0
19	5.8	0.0	.2	17.4	0.0	0.0	0.0
20	4.9	0.0	.2	16.8	0.0	0.0	0.0

MEAN	4.9	13.1	.2	13.8	48.5	7.0	1.0
STD DEV	.8	0.0	.0	5.2	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SHOSHONI 7

DATE 17

JULY 1979

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PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORF REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	5.0	0.0	.1	15.6	0.0	0.0	0.0
2	6.2	0.0	.1	8.7	0.0	0.0	0.0
3	6.4	0.0	.2	16.9	0.0	0.0	0.0
4	6.8	0.0	.1	10.4	0.0	0.0	0.0
5	6.1	0.0	.2	24.4	0.0	0.0	0.0
6	6.0	0.0	.2	17.5	0.0	0.0	0.0
7	5.9	0.0	.1	10.3	0.0	0.0	0.0
8	6.1	0.0	.1	9.6	0.0	0.0	0.0
9	6.2	0.0	.1	12.6	0.0	0.0	0.0
10	6.2	0.0	.2	15.6	0.0	0.0	0.0
11	6.7	0.0	.2	8.3	0.0	0.0	0.0
12	6.1	0.0	.3	17.6	0.0	0.0	0.0
13	6.1	0.0	.3	21.5	0.0	0.0	0.0
14	6.2	0.0	.2	16.5	0.0	0.0	0.0
15	6.5	0.0	.1	8.1	0.0	0.0	0.0
16	5.0	0.0	.1	14.2	0.0	0.0	0.0
17	6.1	0.0	.2	11.5	0.0	0.0	0.0
18	6.1	0.0	.1	12.6	0.0	0.0	0.0
19	6.2	0.0	.2	17.0	0.0	0.0	0.0
20	6.1	0.0	.2	16.6	0.0	0.0	0.0

MEAN	6.3	14.6	.2	14.3	49.0	8.0	1.0
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STD DEV	.3	0.0	.1	4.4	0.0	0.0	0.0
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0.0 = NOT RECORDED

AGROPYRON SMITH11

STUDY AREA SHOSHONI 7

DATE 8 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE	SCOPE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	6.5	0.0	.2	16.1	0.0	0.0	2.0
2	6.8	0.0	.1	2.5	0.0	0.0	1.0
3	6.8	0.0	.2	17.0	0.0	0.0	2.0
4	6.8	0.0	.1	8.5	0.0	0.0	1.0
5	6.5	0.0	.3	24.2	0.0	0.0	2.0
6	6.2	0.0	.3	17.0	0.0	0.0	2.0
7	6.9	0.0	.2	10.5	0.0	0.0	1.0
8	6.7	0.0	.3	16.8	0.0	0.0	1.0
9	6.8	0.0	.2	11.0	0.0	0.0	2.0
10	6.5	0.0	.3	16.0	0.0	0.0	1.0
11	6.9	0.0	.1	8.9	0.0	0.0	1.0
12	6.4	0.0	.3	17.2	0.0	0.0	1.0
13	6.4	0.0	.2	12.9	0.0	0.0	1.0
14	6.9	0.0	.1	5.4	0.0	0.0	1.0
15	6.7	0.0	.1	14.0	0.0	0.0	1.0
16	6.4	0.0	.2	14.5	0.0	0.0	1.0
17	6.4	0.0	.2	11.9	0.0	0.0	1.0
18	6.9	0.0	.2	11.7	0.0	0.0	1.0
19	6.5	0.0	.2	17.4	0.0	0.0	2.0
20	6.4	0.0	.2	17.0	0.0	0.0	1.0

MEAN	6.6	16.0	.2	13.8	33.0	7.0	1.3
STD DEV	.2	0.0	.1	4.4	0.0	0.0	.5

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SHOSHCNI 7

DATE 1 SEPTEMBER 1979

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PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT	
1	6.9	0.0	.2	15.3	0.0	0.0	0.0	
2	6.9	0.0	.2	0.0	0.0	0.0	0.0	
3	6.7	0.0	.3	16.3	0.0	0.0	0.0	INSECT DAMAGE
4	6.9	0.0	.2	9.4	0.0	0.0	0.0	INSECT DAMAGE
5	6.6	0.0	.3	26.6	0.0	0.0	0.0	
6	6.7	0.0	.3	15.8	0.0	0.0	0.0	
7	6.7	0.0	.3	12.1	0.0	0.0	0.0	
8	6.5	0.0	.3	16.5	0.0	0.0	0.0	
9	6.8	0.0	.2	11.4	0.0	0.0	0.0	
10	6.6	0.0	.3	14.4	0.0	0.0	0.0	
11	6.8	0.0	.2	11.6	0.0	0.0	0.0	
12	6.9	0.0	.3	16.4	0.0	0.0	0.0	
13	6.5	0.0	.3	21.5	0.0	0.0	0.0	
14	6.7	0.0	.3	16.3	0.0	0.0	0.0	
15	6.7	0.0	.2	0.0	0.0	0.0	0.0	GRAZED
16	6.7	0.0	.2	13.5	0.0	0.0	0.0	
17	6.7	0.0	.3	11.0	0.0	0.0	0.0	
18	6.6	0.0	.2	11.4	0.0	0.0	0.0	
19	7.3	0.0	.3	17.4	0.0	0.0	0.0	
20	7.2	0.0	.2	15.0	0.0	0.0	0.0	

MEAN 6.8 16.3 .3 15.2 47.0 0.0 2.2  
 STD DEV .2 0.0 .1 4.1 0.0 0.0 0.0

0.0 = NOT RECORDED



AGMGPYRUM SMITHII

STUDY AREA SHOSHONI 7

DATE 29 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE RFPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	P.0	0.0	.2	17.0	0.0	0.0	0.0
2	7.7	0.0	.3	18.4	0.0	0.0	0.0
3	7.8	0.0	.2	11.5	0.0	0.0	0.0
4	8.0	0.0	.2	11.6	0.0	0.0	0.0
5	8.0	0.0	.2	13.3	0.0	0.0	0.0
6	8.0	0.0	.2	0.0	0.0	0.0	0.0
7	7.9	0.0	.3	16.2	0.0	0.0	0.0
8	7.6	0.0	.3	23.2	0.0	0.0	0.0
9	8.0	0.0	.3	17.1	0.0	0.0	0.0
10	7.8	0.0	.3	18.8	0.0	0.0	0.0
11	7.9	0.0	.3	15.8	0.0	0.0	0.0
12	8.0	0.0	.2	11.8	0.0	0.0	0.0
13	8.0	0.0	.2	9.4	0.0	0.0	0.0
14	8.0	0.0	.3	14.6	0.0	0.0	0.0
15	7.7	0.0	.3	17.5	0.0	0.0	0.0
16	8.0	0.0	.3	24.1	0.0	0.0	0.0
17	8.0	0.0	.2	9.5	0.0	0.0	0.0
18	7.9	0.0	.3	16.9	0.0	0.0	0.0
19	8.0	0.0	.2	0.0	0.0	0.0	0.0
20	8.0	0.0	.2	14.7	0.0	0.0	0.0
MEAN	7.9	16.9	.3	15.6	26.0	0.0	0.0
STD DEV	.1	0.0	.1	4.1	0.0	0.0	0.0

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GRAZED

GRAZED

0.0 = NOT RECORDED

AGROPHYRON SMITHII

STUDY AREA SWEETWATER

DATE 5

MAY 1974

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PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NUS. SPK/ CULM	NDS. VEG. PLANT
1	4.2	0.0	.2	10.1	0.0	0.0	0.0
2	3.4	0.0	.2	8.9	0.0	0.0	0.0
3	5.1	0.0	.3	11.4	0.0	0.0	0.0
4	4.2	0.0	.2	13.6	0.0	0.0	0.0
5	3.0	0.0	.1	9.7	0.0	0.0	0.0
6	4.1	0.0	.3	14.5	0.0	0.0	0.0
7	4.0	0.0	.2	9.8	0.0	0.0	0.0
8	4.3	0.0	.2	9.8	0.0	0.0	0.0
9	4.2	0.0	.2	10.2	0.0	0.0	0.0
10	4.3	0.0	.1	10.3	0.0	0.0	0.0
11	3.8	0.0	.2	9.9	0.0	0.0	0.0
12	4.4	0.0	.2	11.0	0.0	0.0	0.0
13	4.4	0.0	.2	9.9	0.0	0.0	0.0
14	3.3	0.0	.2	7.1	0.0	0.0	0.0
15	3.3	0.0	.2	13.8	0.0	0.0	0.0
16	4.2	0.0	.2	6.1	0.0	0.0	0.0
17	4.2	0.0	.3	13.4	0.0	0.0	0.0
18	4.3	0.0	.2	8.0	0.0	0.0	0.0
19	4.4	0.0	.2	9.6	0.0	0.0	0.0
20	4.3	0.0	.2	7.9	0.0	0.0	0.0

MEAN	4.1	0.0	.2	10.3	0.0	0.0	0.0
STD DEV	.5	0.0	.1	2.2	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SWEETWATER

DATE 25

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	MAX. LEAF WIDTH	MAX. LEAF HGT.	MAX SPIKE HGT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	4.8	0.0	.2	16.1	0.0	0.0	0.0
2	3.8	0.0	.2	15.5	0.0	0.0	0.0
3	4.1	0.0	.2	16.5	0.0	0.0	0.0
4	5.3	0.0	.3	22.2	0.0	0.0	0.0
5	4.4	0.0	.1	16.1	0.0	0.0	0.0
6	4.8	0.0	.2	16.3	0.0	0.0	0.0
7	4.6	0.0	.2	11.2	0.0	0.0	0.0
8	4.7	0.0	.2	12.7	0.0	0.0	0.0
9	4.6	0.0	.2	13.1	0.0	0.0	0.0
10	4.7	0.0	.2	11.1	0.0	0.0	0.0
11	3.8	0.0	.1	10.1	0.0	0.0	0.0
12	4.3	0.0	.2	13.8	0.0	0.0	0.0
13	5.2	0.0	.2	12.5	0.0	0.0	0.0
14	4.0	0.0	.1	9.8	0.0	0.0	0.0
15	3.8	0.0	.2	16.5	0.0	0.0	0.0
16	3.8	0.0	.1	8.2	0.0	0.0	0.0
17	4.8	0.0	.3	18.2	0.0	0.0	0.0
18	4.3	0.0	.2	16.0	0.0	0.0	0.0
19	4.7	0.0	.2	18.4	0.0	0.0	0.0
20	4.7	0.0	.2	11.2	0.0	0.0	0.0
MEAN	4.5	0.0	.2	14.3	0.0	0.0	0.0
STD DEV	.4	0.0	.1	3.5	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SWEETWATER

DATE 6

JUNE 1979

102

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCDPF REPP.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	4.4	0.0	.2	16.0	0.0	0.0	0.0
2	5.0	0.0	.1	11.0	0.0	0.0	0.0
3	4.7	0.0	.2	17.0	0.0	0.0	0.0
4	4.7	0.0	.1	17.0	0.0	0.0	0.0
5	4.7	0.0	.2	19.0	0.0	0.0	0.0
6	5.4	0.0	.2	13.0	0.0	0.0	0.0
7	4.6	0.0	.2	13.0	0.0	0.0	0.0
8	4.5	0.0	.2	15.0	0.0	0.0	0.0
9	4.6	0.0	.2	14.0	0.0	0.0	0.0
10	3.4	0.0	.1	10.0	0.0	0.0	0.0
11	4.4	0.0	.2	12.0	0.0	0.0	0.0
12	4.7	0.0	.2	12.0	0.0	0.0	0.0
13	4.4	0.0	.1	11.0	0.0	0.0	0.0
14	4.2	0.0	.1	15.0	0.0	0.0	0.0
15	4.1	0.0	.1	8.0	0.0	0.0	0.0
16	4.5	0.0	.2	20.0	0.0	0.0	0.0
17	4.2	0.0	.2	15.0	0.0	0.0	0.0
18	4.3	0.0	.1	11.0	0.0	0.0	0.0
19	4.4	0.0	.1	15.0	0.0	0.0	0.0
20	4.4	0.0	.1	13.0	0.0	0.0	0.0
MEAN	4.5	0.0	.2	13.9	0.0	0.0	0.0
STD DEV	.4	0.0	.1	3.0	0.0	0.0	0.0

0.0 = NOT RECORDED

ACROPYRON SMITHII

STUDY AREA SWEETWATER

DATE 26

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	5.3	0.0	.1	5.8	0.0	0.0	0.0
2	4.8	0.0	.2	11.3	0.0	0.0	0.0
3	4.8	0.0	.3	18.5	0.0	0.0	0.0
4	5.5	0.0	.3	21.2	0.0	0.0	0.0
5	5.3	0.0	.1	16.1	0.0	0.0	0.0
6	5.4	0.0	.2	19.6	0.0	0.0	0.0
7	4.4	0.0	.2	14.9	0.0	0.0	0.0
8	5.3	0.0	.2	13.9	0.0	0.0	0.0
9	5.3	0.0	.2	17.2	0.0	0.0	0.0
10	4.8	0.0	.2	13.8	0.0	0.0	0.0
11	4.8	0.0	.2	15.2	0.0	0.0	0.0
12	4.7	0.0	.2	19.9	0.0	0.0	0.0
13	4.8	0.0	.2	12.9	0.0	0.0	0.0
14	4.9	0.0	.2	14.1	0.0	0.0	0.0
15	6.8	0.0	0.0	0.0	0.0	0.0	0.0
16	4.9	0.0	.3	23.6	0.0	0.0	0.0
17	4.6	0.0	.2	18.1	0.0	0.0	0.0
18	4.6	0.0	.2	14.0	0.0	0.0	0.0
19	4.5	0.0	.2	17.4	0.0	0.0	0.0
20	4.8	0.0	.1	10.3	0.0	0.0	0.0

MEAN	5.0	13.1	.2	15.5	48.5	7.0	1.0
STD DEV	.5	0.0	.1	3.9	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SWEETWATER

DATE 16

JULY 1977

104

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK / CULM	NOS. VEG. PLANT
1	5.8	0.0	.2	17.2	0.0	0.0	0.0
2	6.6	0.0	.1	12.0	0.0	0.0	0.0
3	5.9	0.0	.3	18.1	0.0	0.0	0.0
4	6.2	0.0	.2	20.6	0.0	0.0	0.0
5	6.3	0.0	.1	16.3	0.0	0.0	0.0
6	6.1	0.0	.2	25.0	0.0	0.0	0.0
7	6.3	0.0	.2	15.5	0.0	0.0	0.0
8	6.2	0.0	.2	19.8	0.0	0.0	0.0
9	6.3	0.0	.2	17.2	0.0	0.0	0.0
10	6.0	0.0	.2	13.5	0.0	0.0	0.0
11	6.5	0.0	.2	15.8	0.0	0.0	0.0
12	6.5	0.0	.2	12.3	0.0	0.0	0.0
13	6.0	0.0	.1	11.0	0.0	0.0	0.0
14	6.5	0.0	.1	10.0	0.0	0.0	0.0
15	6.1	0.0	.1	13.5	0.0	0.0	0.0
16	6.1	0.0	.2	21.2	0.0	0.0	0.0
17	6.2	0.0	.2	20.4	0.0	0.0	0.0
18	5.9	0.0	.2	15.3	0.0	0.0	0.0
19	6.1	0.0	.2	18.5	0.0	0.0	0.0
20	6.2	0.0	.2	12.7	0.0	0.0	0.0

MEAN	6.2	14.6	.2	16.3	49.0	8.0	1.0
STD DEV	.2	0.0	.1	3.9	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SWEETWATER

DATE 8 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	6.9	0.0	.1	9.2	0.0	0.0	1.0
2	6.9	0.0	.2	11.9	0.0	0.0	2.0
3	6.6	0.0	.3	18.7	0.0	0.0	1.0
4	6.8	0.0	.1	11.5	0.0	0.0	1.0
5	6.5	0.0	.1	16.8	0.0	0.0	1.0
6	6.9	0.0	.1	7.8	0.0	0.0	1.0
7	6.3	0.0	.2	15.1	0.0	0.0	2.0
8	6.5	0.0	.2	19.8	0.0	0.0	2.0
9	6.8	0.0	.1	11.0	0.0	0.0	1.0
10	6.6	0.0	.2	13.0	0.0	0.0	2.0
11	6.7	0.0	.2	15.2	0.0	0.0	1.0
12	6.9	0.0	.2	17.6	0.0	0.0	1.0
13	6.5	0.0	.2	11.5	0.0	0.0	1.0
14	6.4	0.0	.2	13.2	0.0	0.0	1.0
15	6.5	0.0	.2	14.0	0.0	0.0	1.0
16	6.4	0.0	.2	21.0	0.0	0.0	3.0
17	6.5	0.0	.3	20.2	0.0	0.0	4.0
18	6.5	0.0	.2	16.0	0.0	0.0	3.0
19	6.4	0.0	.2	19.6	0.0	0.0	3.0
20	6.6	0.0	.2	13.0	0.0	0.0	4.0

MEAN	6.6	16.0	.2	14.8	33.0	7.0	1.6
STD DEV	.2	0.0	.1	3.8	0.0	0.0	1.1

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SWEETWATER

DATE 2 SEPTEMBER 1974

106

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	7.2	0.0	.2	16.5	0.0	0.0	0.0
2	6.4	0.0	.3	23.9	0.0	0.0	0.0
3	6.4	0.0	.3	18.2	0.0	0.0	0.0
4	6.5	0.0	.2	18.5	0.0	0.0	0.0
5	6.6	0.0	.2	14.3	0.0	0.0	0.0
6	6.6	0.0	.2	18.2	0.0	0.0	0.0
7	6.3	0.0	.2	14.3	0.0	0.0	0.0
8	7.2	0.0	.2	13.0	0.0	0.0	0.0
9	7.2	0.0	.2	16.0	0.0	0.0	0.0
10	7.2	0.0	.2	10.9	0.0	0.0	0.0
11	7.3	0.0	.2	17.0	0.0	0.0	0.0
12	6.7	0.0	.2	20.6	0.0	0.0	0.0
13	7.1	0.0	.2	21.1	0.0	0.0	0.0
14	7.3	0.0	.3	12.9	0.0	0.0	0.0
15	7.2	0.0	.2	27.5	0.0	0.0	0.0
16	6.7	0.0	.2	20.1	0.0	0.0	0.0
17	7.3	0.0	.2	17.1	0.0	0.0	0.0
18	7.2	0.0	.3	14.2	0.0	0.0	0.0
19	7.3	0.0	.2	15.6	0.0	0.0	0.0
20	7.2	0.0	.2	13.5	0.0	0.0	0.0

MEAN            6.9    16.3    .2    17.2    47.0    0.0    2.2

STD DEV        .4    0.0    .0    4.0    0.0    0.0    0.0

0.0 = NOT RECORDED



AGROPYRON SMITHII

STUDY AREA SWEETWATER

DATE 29 SEPTEMBER 1977

PLANT NO.	PHENOLOGICAL STAGE	SCDPF REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	7.P	0.0	.2	16.2	0.0	0.0	0.0
2	7.7	0.0	.2	22.3	0.0	0.0	0.0
3	7.e	0.0	.2	18.7	0.0	0.0	0.0
4	6.e	0.0	.2	16.2	0.0	0.0	0.0
5	7.7	0.0	.2	14.5	0.0	0.0	0.0
6	8.0	0.0	.2	18.4	0.0	0.0	0.0
7	7.8	0.0	.2	16.2	0.0	0.0	0.0
8	7.7	0.0	.3	19.9	0.0	0.0	0.0
9	7.8	0.0	.2	16.3	0.0	0.0	0.0
10	7.6	0.0	.2	13.0	0.0	0.0	0.0
11	7.7	0.0	.2	17.8	0.0	0.0	0.0
12	7.6	0.0	.2	14.6	0.0	0.0	0.0
13	8.0	0.0	.2	19.6	0.0	0.0	0.0
14	7.7	0.0	.2	17.1	0.0	0.0	0.0
15	7.6	0.0	.2	0.0	0.0	0.0	0.0
16	7.8	0.0	.2	20.5	0.0	0.0	0.0
17	7.7	0.0	.2	20.1	0.0	0.0	0.0
18	7.7	0.0	.2	12.7	0.0	0.0	0.0
19	7.8	0.0	.2	14.5	0.0	0.0	0.0
20	7.9	0.0	.2	16.1	0.0	0.0	0.0

EATEN

MEAN	7.7	16.9	.2	16.6	26.0	0.0	0.0
STD DEV	.2	0.0	.0	3.0	0.0	0.0	0.0

0.0 = NOT RECORDED

ACRODYPYRON SMITHII

STUDY AREA UPPER GOVI

DATE 5

MAY 1977

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCOPE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	4.2	0.0	.2	9.2	0.0	0.0	0.0
2	3.4	0.0	.2	10.4	0.0	0.0	0.0
3	4.3	0.0	.3	18.2	0.0	0.0	0.0
4	3.4	0.0	.2	8.6	0.0	0.0	0.0
5	4.3	0.0	.2	7.4	0.0	0.0	0.0
6	3.3	0.0	.2	11.6	0.0	0.0	0.0
7	4.3	0.0	.3	14.4	0.0	0.0	0.0
8	4.3	0.0	.2	8.8	0.0	0.0	0.0
9	4.0	0.0	.2	10.6	0.0	0.0	0.0
10	4.2	0.0	.2	12.9	0.0	0.0	0.0
11	4.4	0.0	.2	10.5	0.0	0.0	0.0
12	4.3	0.0	.2	10.6	0.0	0.0	0.0
13	4.3	0.0	.3	7.1	0.0	0.0	0.0
14	3.4	0.0	.2	14.0	0.0	0.0	0.0
15	4.2	0.0	.3	11.0	0.0	0.0	0.0
16	3.3	0.0	.2	8.2	0.0	0.0	0.0
17	4.3	0.0	.3	15.8	0.0	0.0	0.0
18	3.2	0.0	.2	12.9	0.0	0.0	0.0
19	4.1	0.0	.3	11.3	0.0	0.0	0.0
20	4.3	0.0	.3	14.9	0.0	0.0	0.0
MEAN	4.0	0.0	.2	11.4	0.0	0.0	0.0
STD DEV	.4	0.0	.0	3.0	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA UPPER GOVT

DATE 23

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	MAX. SCORE	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	4.3	0.0	.3	12.1	0.0	0.0	0.0
2	4.6	0.0	.2	14.7	0.0	0.0	0.0
3	4.6	0.0	.2	12.3	0.0	0.0	0.0
4	3.8	0.0	.2	13.8	0.0	0.0	0.0
5	5.5	0.0	.3	15.6	0.0	0.0	0.0
6	3.9	0.0	.2	12.2	0.0	0.0	0.0
7	4.2	0.0	.2	16.0	0.0	0.0	0.0
8	4.8	0.0	.2	12.2	0.0	0.0	0.0
9	4.3	0.0	.3	17.4	0.0	0.0	0.0
10	4.5	0.0	.3	23.7	0.0	0.0	0.0
11	4.6	0.0	.3	22.3	0.0	0.0	0.0
12	4.1	0.0	.2	13.4	0.0	0.0	0.0
13	4.4	0.0	.3	16.0	0.0	0.0	0.0
14	4.1	0.0	.2	13.7	0.0	0.0	0.0
15	4.4	0.0	.1	16.1	0.0	0.0	0.0
16	4.8	0.0	.2	12.3	0.0	0.0	0.0
17	4.9	0.0	.3	25.4	0.0	0.0	0.0
18	4.2	0.0	.3	17.8	0.0	0.0	0.0
19	4.1	0.0	.2	16.3	0.0	0.0	0.0
20	4.9	0.0	.3	18.4	0.0	0.0	0.0

MEAN	4.5	0.0	.2	16.1	0.0	0.0	0.0
STD DEV	.4	0.0	.1	3.9	0.0	0.0	0.0

C.C = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA UPPER GOVT

DATE 6

JUNE 1977

111

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORF REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NUS. SPK/ CULM	NOS. VEG. PLANT
1	4.9	0.0	.2	14.0	0.0	0.0	0.0
2	4.8	0.0	.2	15.4	0.0	0.0	0.0
3	5.6	0.0	.3	26.5	0.0	0.0	0.0
4	4.3	0.0	.2	14.2	0.0	0.0	0.0
5	4.9	0.0	.2	17.9	0.0	0.0	0.0
6	4.4	0.0	.2	15.7	0.0	0.0	0.0
7	4.6	0.0	.2	16.6	0.0	0.0	0.0
8	5.2	0.0	.2	14.6	0.0	0.0	0.0
9	5.2	0.0	.3	23.0	0.0	0.0	0.0
10	5.3	0.0	.2	26.7	0.0	0.0	0.0
11	5.3	0.0	.2	11.3	0.0	0.0	0.0
12	4.8	0.0	.2	14.5	0.0	0.0	0.0
13	4.9	0.0	.3	19.6	0.0	0.0	0.0
14	5.3	0.0	.3	16.8	0.0	0.0	0.0
15	5.9	9.6	.3	25.2	0.0	0.0	0.0
16	4.8	0.0	.2	13.9	0.0	0.0	0.0
17	3.9	0.0	.1	19.2	0.0	0.0	0.0
18	4.9	0.0	.3	26.4	0.0	0.0	0.0
19	4.6	0.0	.2	17.9	0.0	0.0	0.0
20	4.8	0.0	.2	20.6	0.0	0.0	0.0

MEAN	4.9	9.6	.2	18.5	0.0	0.0	0.0
STD DEV	.5	0.0	.1	4.8	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA UPPER GOVT

DATE 26

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE SCORF	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	5.1	0.0	.3	18.5	0.0	0.0	0.0
2	5.2	0.0	.3	18.4	0.0	0.0	0.0
3	5.5	0.0	.3	28.7	0.0	0.0	0.0
4	4.8	0.0	.3	23.7	0.0	0.0	0.0
5	5.5	0.0	.3	10.3	0.0	0.0	0.0
6	4.9	0.0	.2	15.0	0.0	0.0	0.0
7	4.8	0.0	.2	16.6	0.0	0.0	0.0
8	5.2	0.0	.2	13.2	0.0	0.0	0.0
9	4.9	0.0	.4	22.5	0.0	0.0	0.0
10	4.8	0.0	.3	26.6	0.0	0.0	0.0
11	5.1	0.0	.3	11.1	0.0	0.0	0.0
12	5.6	0.0	.2	16.1	0.0	0.0	0.0
13	5.7	0.0	.3	19.4	0.0	0.0	0.0
14	5.2	0.0	.4	35.7	0.0	0.0	0.0
15	4.9	0.0	.4	20.6	0.0	0.0	0.0
16	5.7	0.0	.3	27.1	0.0	0.0	0.0
17	4.9	0.0	.2	22.2	0.0	0.0	0.0
18	4.8	0.0	.2	20.3	0.0	0.0	0.0
19	4.8	0.0	.2	17.8	0.0	0.0	0.0
20	5.8	0.0	.3	23.8	0.0	0.0	0.0

MEAN	5.2	13.1	.3	20.4	48.5	7.0	1.0
STD DEV	.4	0.0	.1	6.2	0.0	0.0	0.0

G.C = NOT RECORDED

AGULFYRON SMITHII

STUDY AREA UPPER GOVI

DATE 16 JULY 1977

112

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	5.9	0.0	.2	18.6	0.0	0.0	0.0
2	5.3	0.0	.2	17.4	0.0	0.0	0.0
3	5.6	0.0	.3	28.5	0.0	0.0	0.0
4	6.0	0.0	.2	19.5	0.0	0.0	0.0
5	5.1	0.0	.2	25.0	0.0	0.0	0.0
6	6.0	0.0	.2	16.8	0.0	0.0	0.0
7	6.2	0.0	.1	16.1	0.0	0.0	0.0
8	5.3	0.0	.2	13.7	0.0	0.0	0.0
9	5.2	0.0	.3	22.5	0.0	0.0	0.0
10	6.0	0.0	.2	18.7	0.0	0.0	0.0
11	5.2	0.0	.2	24.2	0.0	0.0	0.0
12	5.9	0.0	.3	18.6	0.0	0.0	0.0
13	5.8	0.0	.3	20.2	0.0	0.0	0.0
14	5.2	0.0	.2	15.5	0.0	0.0	0.0
15	6.3	15.5	.2	11.2	34.5	5.0	1.0
16	5.8	0.0	.2	15.5	0.0	0.0	0.0
17	5.5	0.0	.3	26.4	0.0	0.0	0.0
18	6.1	0.0	.2	21.0	0.0	0.0	0.0
19	6.6	0.0	.2	18.0	0.0	0.0	0.0
20	6.0	0.0	.3	24.1	0.0	0.0	0.0
MEAN	5.8	15.5	.2	19.6	34.5	5.0	1.0
STD DEV	.4	0.0	.1	4.4	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA UPPER GOVT

DATE 8 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.3	0.0	.2	22.9	0.0	0.0	1.0
2	6.3	0.0	.3	32.5	0.0	0.0	1.0
3	6.4	0.0	.2	22.7	0.0	0.0	1.0
4	6.5	0.0	.2	24.0	0.0	0.0	2.0
5	6.2	0.0	.2	18.5	0.0	0.0	1.0
6	6.4	0.0	.2	16.3	0.0	0.0	1.0
7	6.5	0.0	.2	16.4	0.0	0.0	1.0
8	6.4	0.0	.2	13.5	0.0	0.0	1.0
9	6.5	0.0	.2	22.5	0.0	0.0	1.0
10	6.4	0.0	.2	18.5	0.0	0.0	1.0
11	6.6	0.0	.2	21.5	0.0	0.0	1.0
12	6.4	0.0	.2	16.0	0.0	0.0	1.0
13	6.5	0.0	.3	19.6	0.0	0.0	1.0
14	6.4	0.0	.2	25.4	0.0	0.0	4.0
15	6.8	0.0	.2	10.8	0.0	0.0	1.0
16	6.4	0.0	.2	21.5	0.0	0.0	1.0
17	6.5	0.0	.3	26.7	0.0	0.0	1.0
18	6.6	0.0	.3	27.6	0.0	0.0	1.0
19	6.5	0.0	.3	25.4	0.0	0.0	2.0
20	6.6	0.0	.3	23.6	0.0	0.0	1.0

MEAN	6.5	16.0	.2	21.3	33.0	7.0	1.3
STD DEV	.1	0.0	.0	5.2	0.0	0.0	.7

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA UPPER GOVT

DATE 1 SEPTEMBER 1979

114

PLANT NO.	PHENOLOGICAL STAGE	SCORE	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	7.3	0.0	.3	17.6	0.0	0.0	0.0
2	6.7	0.0	.2	15.8	0.0	0.0	0.0
3	6.6	0.0	.3	27.5	0.0	0.0	0.0
4	7.2	0.0	.2	17.8	0.0	0.0	0.0
5	6.7	0.0	.2	20.2	0.0	0.0	0.0
6	6.8	0.0	.1	15.5	0.0	0.0	0.0
7	6.8	0.0	.2	16.6	0.0	0.0	0.0
8	7.3	0.0	.2	13.7	0.0	0.0	0.0
9	7.2	0.0	.3	22.3	0.0	0.0	0.0
10	6.5	0.0	.3	25.2	0.0	0.0	0.0
11	6.7	0.0	.2	18.5	0.0	0.0	0.0
12	7.0	0.0	.2	16.0	0.0	0.0	0.0
13	6.8	0.0	.2	19.4	0.0	0.0	0.0
14	5.4	0.0	.2	31.5	0.0	0.0	0.0
15	6.9	16.9	.2	15.3	31.5	7.0	0.0
16	6.7	0.0	.2	21.7	0.0	0.0	0.0
17	6.6	0.0	.2	25.4	0.0	0.0	0.0
18	6.8	0.0	.2	20.6	0.0	0.0	0.0
19	6.8	0.0	.2	9.5	0.0	0.0	0.0
20	6.7	0.0	.2	14.4	0.0	0.0	0.0

MEAN 6.8 16.9 .2 19.2 31.5 7.0 2.2

STD DEV .3 0.0 .0 5.2 0.0 0.0 0.0

0.0 = NOT RECORDED



AGROPYRON SMITHII

STUDY AREA UPPER GOVT

DATE 29 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE	MAX. SCOPE	MAX. LEAF WIDTH	MAX. LLAF HGHT.	MAX SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	7.7	0.0	.2	22.9	0.0	0.0	0.0
2	8.0	0.0	.2	32.1	0.0	0.0	0.0
3	7.9	0.0	.3	23.5	0.0	0.0	0.0
4	7.7	0.0	.2	13.8	0.0	0.0	0.0
5	7.8	0.0	.2	17.5	0.0	0.0	0.0
6	8.0	0.0	.2	11.8	0.0	0.0	0.0
7	8.0	0.0	.2	18.0	0.0	0.0	0.0
8	8.0	0.0	.3	13.4	0.0	0.0	0.0
9	7.9	0.0	.3	19.0	0.0	0.0	0.0
10	7.7	0.0	.2	21.2	0.0	0.0	0.0
11	8.0	0.0	.2	17.0	0.0	0.0	0.0
12	8.0	0.0	.2	13.7	0.0	0.0	0.0
13	8.0	0.0	.3	6.7	0.0	0.0	0.0
14	7.7	0.0	.2	27.2	0.0	0.0	0.0
15	8.0	0.0	.2	11.1	0.0	0.0	0.0
16	8.0	0.0	.3	15.2	0.0	0.0	0.0
17	8.0	0.0	.3	25.2	0.0	0.0	0.0
18	8.0	0.0	.2	20.4	0.0	0.0	0.0
19	7.9	0.0	.2	21.1	0.0	0.0	0.0
20	8.0	0.0	.2	11.5	0.0	0.0	0.0

MEAN	7.9	16.9	.2	18.1	26.0	0.0	0.0
STD DEV	.1	0.0	.0	6.2	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CEDAR MTN.

DATE 6 MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	4.2	0.0	0.0	0.0	33.0	.1	17.8	0.0	0.	0.	0.
2	4.1	0.0	0.0	0.0	7.6	.2	14.0	0.0	0.	0.	0.
3	3.1	0.0	0.0	0.0	7.6	.2	22.9	0.0	0.	0.	0.
4	4.0	0.0	0.0	0.0	70.0	.2	30.5	0.0	0.	0.	0.
5	4.1	0.0	0.0	0.0	38.1	.2	43.2	0.0	0.	0.	0.
6	4.1	0.0	116.8	83.8	0.0	.2	16.5	0.0	0.	0.	0.
7	4.1	0.0	0.0	0.0	35.6	.2	20.3	0.0	0.	0.	0.
8	4.0	0.0	0.0	0.0	22.9	.1	14.0	0.0	0.	0.	0.
9	4.1	0.0	0.0	0.0	10.2	.1	19.1	0.0	0.	0.	0.
10	3.1	0.0	83.8	42.3	0.0	.1	19.1	0.0	0.	0.	0.
11	4.1	0.0	0.0	0.0	38.1	.2	27.9	0.0	0.	0.	0.
12	4.0	0.0	0.0	0.0	7.6	.1	8.4	0.0	0.	0.	0.
13	4.1	0.0	0.0	0.0	15.2	.2	19.1	0.0	0.	0.	0.
14	4.1	0.0	0.0	0.0	15.2	.2	25.4	0.0	0.	0.	0.
15	4.3	0.0	86.4	50.6	0.0	.2	38.1	0.0	0.	0.	0.
16	4.2	0.0	0.0	0.0	63.5	.2	40.6	0.0	0.	0.	0.
17	4.1	0.0	86.4	25.4	0.0	.2	30.5	0.0	0.	0.	0.
18	4.1	0.0	91.4	68.6	0.0	.2	25.4	0.0	0.	0.	0.
19	4.5	0.0	0.0	0.0	48.3	.2	30.5	0.0	0.	0.	0.
20	4.1	0.0	0.0	0.0	48.3	.2	35.6	0.0	0.	0.	0.
MEAN	4.0	0.0	93.0	55.4	30.7	.2	24.9	0.0	0.	0.	0.
STD DEV	.3	0.0	13.6	22.1	20.6	.0	9.5	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CEDAR MTN.

DATE 25

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGT	MAX. SPK HGT	NO. SPL/ CULM	NO. REPP CULM	NO. VEG CULM
1	5.3	0.0	0.0	0.0	0.0	.3	24.3	0.0	0.	0.	0.
2	5.4	0.0	0.0	0.0	0.0	.2	10.2	0.0	0.	0.	0.
3	5.3	0.0	0.0	0.0	0.0	.3	15.4	0.0	0.	0.	0.
4	4.4	0.0	0.0	0.0	0.0	.3	21.2	0.0	0.	0.	0.
5	4.9	0.0	0.0	0.0	0.0	.2	21.6	0.0	0.	0.	0.
6	4.1	0.0	0.0	0.0	0.0	.3	11.4	0.0	0.	0.	0.
7	5.1	0.0	0.0	0.0	0.0	.2	14.7	0.0	0.	0.	0.
8	4.3	0.0	0.0	0.0	0.0	.2	12.2	0.0	0.	0.	0.
9	4.2	0.0	0.0	0.0	0.0	.2	11.8	0.0	0.	0.	0.
10	4.3	0.0	0.0	0.0	0.0	.2	17.2	0.0	0.	0.	0.
11	5.2	0.0	0.0	0.0	0.0	.3	21.5	0.0	0.	0.	0.
12	5.1	0.0	0.0	0.0	0.0	.2	8.6	0.0	0.	0.	0.
13	5.2	0.0	0.0	0.0	0.0	.2	10.5	0.0	0.	0.	0.
14	5.1	0.0	0.0	0.0	0.0	.3	15.6	0.0	0.	0.	0.
15	5.3	0.0	0.0	0.0	0.0	.3	11.2	0.0	0.	0.	0.
16	5.2	0.0	0.0	0.0	0.0	.3	17.2	0.0	0.	0.	0.
17	5.1	0.0	0.0	0.0	0.0	.2	11.9	0.0	0.	0.	0.
18	5.1	0.0	0.0	0.0	0.0	.2	15.9	0.0	0.	0.	0.
19	5.3	0.0	0.0	0.0	0.0	.3	25.3	0.0	0.	0.	0.
20	5.3	0.0	0.0	0.0	0.0	.3	18.0	0.0	0.	0.	0.
MFAN	5.0	0.0	0.0	0.0	0.0	.3	15.8	0.0	0.	0.	0.
STD DEV	.4	0.0	0.0	0.0	0.0	.1	4.9	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CEDAR MIN.

DATE 4 JUNE 1979

118

PLANT NO.	PHENOLOGICAL STAGE	SCORE	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.3	0.0	29.0	11.0	0.0	.2	14.2	0.0	0.	0.	0.
2	5.2	0.0	0.0	0.0	3.0	.2	11.0	0.0	0.	0.	0.
3	5.5	9.2	16.0	9.0	0.0	.3	17.5	0.0	0.	0.	0.
4	5.5	0.0	0.0	0.0	29.0	.3	21.8	0.0	0.	0.	0.
5	4.6	0.0	0.0	0.0	29.0	.2	17.9	0.0	0.	0.	0.
6	4.5	0.0	46.0	31.0	0.0	.2	16.2	0.0	0.	0.	0.
7	5.2	0.0	0.0	0.0	24.0	.2	9.8	0.0	0.	0.	0.
8	5.2	0.0	36.0	23.0	0.0	.2	16.5	0.0	0.	0.	0.
9	4.9	0.0	0.0	0.0	21.0	.3	11.2	0.0	0.	0.	0.
10	4.8	0.0	0.0	0.0	29.0	.2	16.5	0.0	0.	0.	0.
11	5.4	0.0	0.0	0.0	9.0	.2	19.8	0.0	0.	0.	0.
12	4.5	0.0	0.0	0.0	14.0	.3	11.0	0.0	0.	0.	0.
13	5.4	0.0	45.0	28.0	0.0	.3	11.2	0.0	0.	0.	0.
14	5.4	0.0	0.0	0.0	14.0	.3	19.2	0.0	0.	0.	0.
15	4.9	0.0	0.0	0.0	8.0	.3	16.4	0.0	0.	0.	0.
16	5.7	0.0	0.0	0.0	19.0	.2	21.2	0.0	0.	0.	0.
17	5.5	0.0	36.0	12.0	0.0	.2	18.4	0.0	0.	0.	0.
18	5.3	0.0	32.0	15.0	0.0	.2	16.1	0.0	0.	0.	0.
19	4.7	0.0	0.0	0.0	18.0	.3	17.1	0.0	0.	0.	0.
20	5.2	0.0	0.0	0.0	23.0	.3	22.0	0.0	0.	0.	0.
MEAN	5.1	9.2	33.7	18.4	17.8	.2	16.1	0.0	0.	0.	0.
STD DEV	.4	0.0	10.7	8.8	7.8	.1	3.7	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CEDAR MTN.

DATE 24

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCOPE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.5	11.3	0.0	0.0	0.0	.3	31.2	38.5	7.	9.	15.
2	5.6	10.4	0.0	0.0	0.0	.3	13.5	15.7	3.	3.	60.
3	5.4	11.3	0.0	0.0	0.0	.3	13.2	31.7	4.	4.	25.
4	5.5	0.0	0.0	0.0	0.0	.3	23.2	0.0	0.	0.	0.
5	5.3	0.0	0.0	0.0	0.0	.2	22.2	0.0	0.	0.	0.
6	5.6	10.8	0.0	0.0	0.0	.3	15.7	32.5	5.	1.	65.
7	5.2	10.8	0.0	0.0	0.0	.3	15.8	18.2	4.	2.	50.
8	5.3	11.0	0.0	0.0	0.0	.3	23.5	39.5	7.	10.	90.
9	5.5	0.0	0.0	0.0	0.0	.3	15.9	0.0	0.	0.	0.
10	5.3	10.4	0.0	0.0	0.0	.3	19.8	10.2	5.	9.	35.
11	5.6	0.0	0.0	0.0	0.0	.3	23.3	0.0	0.	0.	0.
12	5.5	10.3	0.0	0.0	0.0	.2	8.8	9.2	2.	1.	15.
13	5.4	10.7	0.0	0.0	0.0	.3	17.6	23.7	4.	1.	85.
14	5.4	0.0	0.0	0.0	0.0	.3	22.4	0.0	0.	0.	0.
15	5.4	10.3	0.0	0.0	0.0	.2	16.8	12.2	3.	4.	9.
16	5.2	10.8	0.0	0.0	0.0	.3	26.1	39.5	7.	9.	65.
17	5.4	10.3	0.0	0.0	0.0	.2	17.1	13.2	4.	4.	80.
18	5.3	10.8	0.0	0.0	0.0	.2	16.7	27.8	5.	14.	50.
19	5.4	10.9	0.0	0.0	0.0	.2	25.7	41.0	6.	9.	45.
20	5.2	10.2	0.0	0.0	0.0	.3	22.4	27.7	3.	12.	55.
MEAN	5.4	10.0	0.0	0.0	0.0	.3	19.5	25.8	5.	6.	50.
STD DEV	.1	2.7	0.0	0.0	0.0	.0	5.3	11.1	2.	4.	26.

C.C = NOT RECORDED

AGROPHYRON SPICATUM

STUDY AREA CEDAR MTN.

DATE 15

JULY 1979

120

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGT	MAX. SPK HGT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
*****											
1	6.1	0.0	0.0	0.0	0.0	.2	16.1	0.0	0.	0.	0.
2	6.3	14.2	0.0	0.0	0.0	.2	15.5	13.0	3.	2.	60.
3	6.2	14.8	0.0	0.0	0.0	.2	14.7	34.0	4.	2.	40.
4	6.0	0.0	0.0	0.0	0.0	.2	29.0	0.0	0.	0.	0.
5	6.0	0.0	0.0	0.0	0.0	.2	21.5	0.0	0.	0.	0.
6	5.8	14.0	0.0	0.0	0.0	.2	16.2	8.8	0.	1.	90.
7	6.0	14.9	0.0	0.0	0.0	.2	16.8	23.2	0.	3.	100.
8	6.4	15.5	0.0	0.0	0.0	.2	31.0	42.0	0.	6.	110.
9	6.2	0.0	0.0	0.0	0.0	.2	23.2	0.0	0.	0.	0.
10	6.1	13.8	0.0	0.0	0.0	.2	21.2	12.0	0.	5.	25.
11	6.1	0.0	0.0	0.0	0.0	.2	26.0	0.0	0.	0.	0.
12	6.8	0.0	0.0	0.0	0.0	.1	6.0	0.0	0.	0.	0.
13	6.0	14.8	0.0	0.0	0.0	.2	16.2	24.0	0.	4.	95.
14	6.2	0.0	0.0	0.0	0.0	.2	21.5	0.0	0.	0.	0.
15	6.4	14.2	0.0	0.0	0.0	.2	16.5	14.0	0.	3.	15.
16	5.6	14.0	0.0	0.0	0.0	.2	29.5	41.0	0.	7.	60.
17	6.1	14.2	0.0	0.0	0.0	.2	17.5	10.5	0.	4.	65.
18	5.8	13.9	0.0	0.0	0.0	.2	16.2	31.0	0.	5.	40.
19	6.0	14.5	0.0	0.0	0.0	.2	20.5	43.5	0.	6.	25.
20	6.2	14.6	0.0	0.0	0.0	.2	22.0	28.5	0.	3.	55.
MEAN	6.1	14.4	0.0	0.0	0.0	.2	19.9	25.0	4.	4.	60.
STD DEV	.3	.5	0.0	0.0	0.0	.0	6.0	12.7	1.	2.	31.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CEDAR MIN.

DATE 6 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE VFG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.4	0.0	23.0	9.0	0.0	.2	14.8	0.0	0.	0.	20.
2	6.5	0.0	27.0	17.0	0.0	.2	15.4	0.0	0.	0.	60.
3	6.4	0.0	9.0	4.0	0.0	.2	15.0	0.0	0.	0.	10.
4	6.4	0.0	32.0	22.0	0.0	.2	25.0	0.0	0.	0.	30.
5	6.3	0.0	27.0	10.0	0.0	.2	22.0	0.0	0.	0.	15.
6	6.3	16.3	52.0	26.0	0.0	.2	18.5	32.0	6.	1.	65.
7	6.4	15.8	21.0	19.0	0.0	.2	21.2	22.5	5.	2.	80.
8	6.5	16.1	34.0	20.0	0.0	.2	23.0	44.0	6.	20.	80.
9	6.3	0.0	4.0	2.0	0.0	.1	13.5	0.0	0.	0.	10.
10	6.3	15.8	13.0	10.0	0.0	.1	13.6	13.5	4.	7.	25.
11	6.4	0.0	14.0	10.0	0.0	.2	17.5	0.0	0.	0.	20.
12	6.3	0.0	2.0	4.0	0.0	.1	5.9	0.0	0.	0.	7.
13	6.3	0.0	0.0	0.0	26.0	.2	9.7	0.0	0.	0.	35.
14	6.4	0.0	16.0	13.0	0.0	.2	22.0	0.0	0.	0.	30.
15	6.4	15.8	7.0	5.0	0.0	.2	13.6	12.5	3.	2.	10.
16	6.3	15.8	22.0	14.0	0.0	.3	26.4	36.7	7.	10.	50.
17	6.3	17.7	35.0	10.0	0.0	.2	17.5	12.0	3.	1.	60.
18	6.3	16.1	30.0	15.0	0.0	.2	16.5	28.5	5.	8.	45.
19	6.3	16.5	24.0	12.0	0.0	.2	17.5	39.0	6.	2.	40.
20	6.3	15.9	0.0	0.0	25.0	.3	23.7	27.0	6.	12.	60.
MEAN	6.4	16.2	21.8	12.3	25.5	.2	17.6	26.8	5.	7.	38.
STD DEV	.1	.6	12.7	6.6	.7	.1	5.2	11.5	1.	6.	24.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CEDAR MTN.

DATE 31 AUGUST 1979

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PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
*****											
1	6.4	0.0	0.0	0.0	0.0	.2	9.4	0.0	0.	0.	20.
2	6.5	0.0	0.0	0.0	0.0	.2	10.2	0.0	0.	0.	45.
3	6.5	0.0	0.0	0.0	0.0	.2	14.6	0.0	0.	0.	10.
4	6.4	0.0	0.0	0.0	0.0	.2	20.2	0.0	0.	0.	30.
5	6.5	0.0	0.0	0.0	0.0	.2	21.1	0.0	0.	0.	10.
6	6.6	0.0	0.0	0.0	0.0	.2	11.7	0.0	0.	0.	50.
7	6.6	15.6	0.0	0.0	0.0	.2	10.2	9.5	5.	2.	45.
8	6.7	0.0	0.0	0.0	0.0	.2	9.0	0.0	0.	0.	18.
9	6.4	0.0	0.0	0.0	0.0	.2	11.7	0.0	0.	0.	10.
10	6.5	16.4	0.0	0.0	0.0	.2	16.1	10.2	5.	10.	25.
11	6.5	0.0	0.0	0.0	0.0	.2	13.1	0.0	0.	0.	27.
12	6.4	0.0	0.0	0.0	0.0	.1	4.9	0.0	0.	0.	6.
13	6.4	16.1	0.0	0.0	0.0	.2	17.2	23.6	4.	1.	55.
14	6.5	0.0	0.0	0.0	0.0	.3	19.0	0.0	0.	0.	35.
15	6.5	16.5	0.0	0.0	0.0	.2	16.5	12.4	4.	2.	25.
16	6.5	16.5	0.0	0.0	0.0	.2	25.3	37.0	6.	10.	65.
17	6.6	15.9	0.0	0.0	0.0	.3	16.0	10.2	3.	1.	70.
18	6.5	16.9	0.0	0.0	0.0	.3	17.0	30.5	6.	10.	60.
19	6.5	16.9	0.0	0.0	0.0	.3	14.5	38.5	8.	5.	30.
20	6.5	16.9	0.0	0.0	0.0	.3	23.0	38.0	7.	15.	50.
MEAN	6.5	16.4	0.0	0.0	0.0	.2	15.0	23.3	5.	6.	34.
STD DEV	.1	.5	0.0	0.0	0.0	.1	5.2	12.9	2.	5.	20.

0.0 = NOT RECORDED



AGROPYRON SPICATUM

STUDY AREA CEDAR MTN.

DATE 21 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL / CULM	NO. REPR CULM	NO. VEG CULM
1	7.2	0.0	0.0	0.0	0.0	.2	12.5	0.0	0.	0.	25.
2	7.3	0.0	0.0	0.0	0.0	.2	11.2	0.0	0.	0.	10.
3	7.3	0.0	0.0	0.0	0.0	.2	15.2	0.0	0.	0.	10.
4	7.5	0.0	0.0	0.0	0.0	.3	25.8	0.0	0.	0.	30.
5	7.5	0.0	0.0	0.0	0.0	.2	20.2	0.0	0.	0.	15.
6	7.6	0.0	0.0	0.0	0.0	.2	13.6	0.0	0.	0.	45.
7	7.3	0.0	0.0	0.0	0.0	.2	14.5	0.0	0.	0.	50.
8	7.5	0.0	0.0	0.0	0.0	.2	9.8	0.0	0.	0.	15.
9	7.5	0.0	0.0	0.0	0.0	.2	10.9	0.0	0.	0.	19.
10	7.4	0.0	0.0	0.0	0.0	.2	15.4	0.0	0.	0.	25.
11	7.5	0.0	0.0	0.0	0.0	.2	18.9	0.0	0.	0.	30.
12	6.9	0.0	0.0	0.0	0.0	.1	8.1	0.0	0.	0.	5.
13	7.4	16.7	0.0	0.0	0.0	.2	14.3	23.4	5.	1.	55.
14	7.7	0.0	0.0	0.0	0.0	.2	17.5	0.0	0.	0.	19.
15	7.8	0.0	0.0	0.0	0.0	.1	19.7	0.0	0.	0.	5.
16	7.6	16.9	0.0	0.0	0.0	.2	18.3	34.5	8.	5.	65.
17	7.6	0.0	0.0	0.0	0.0	.2	12.2	0.0	0.	0.	60.
18	7.5	16.9	0.0	0.0	0.0	.2	13.2	28.9	6.	3.	75.
19	7.5	16.9	0.0	0.0	0.0	.2	15.1	41.0	6.	5.	40.
20	7.5	16.9	0.0	0.0	0.0	.2	21.6	19.6	2.	9.	45.
MEAN	7.5	16.9	0.0	0.0	0.0	.2	15.4	29.5	5.	5.	32.
STD DEV	.2	.1	0.0	0.0	0.0	.0	4.4	8.6	2.	3.	21.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CUMBER. 3

DATE 22

MAY 1979

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PLANT NO.	PHENOLOGICAL STAGE SCORE VEG. REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
*****										
1	4.1	0.0	0.0	0.0	0.0	.2	16.9	0.0	0.	0.
2	4.0	0.0	0.0	0.0	0.0	.2	18.0	0.0	0.	0.
3	5.5	0.0	0.0	0.0	0.0	.2	17.5	0.0	0.	0.
4	4.5	0.0	0.0	0.0	0.0	.3	26.0	0.0	0.	0.
5	3.6	0.0	0.0	0.0	0.0	.1	16.5	0.0	0.	0.
6	4.7	0.0	0.0	0.0	0.0	.1	20.0	0.0	0.	0.
7	4.6	0.0	0.0	0.0	0.0	.2	13.6	0.0	0.	0.
8	5.4	0.0	0.0	0.0	0.0	.2	25.2	0.0	0.	0.
9	4.4	0.0	0.0	0.0	0.0	.3	20.2	0.0	0.	0.
10	5.6	0.0	0.0	0.0	0.0	.2	22.0	0.0	0.	0.
11	4.2	0.0	0.0	0.0	0.0	.1	20.2	0.0	0.	0.
12	4.2	0.0	0.0	0.0	0.0	.1	12.2	0.0	0.	0.
13	4.4	0.0	0.0	0.0	0.0	.2	15.3	0.0	0.	0.
14	5.3	0.0	0.0	0.0	0.0	.2	24.7	0.0	0.	0.
15	4.6	0.0	0.0	0.0	0.0	.1	8.4	0.0	0.	0.
16	4.6	0.0	0.0	0.0	0.0	.1	12.9	0.0	0.	0.
17	5.9	0.0	0.0	0.0	0.0	.3	25.2	0.0	0.	0.
18	5.4	0.0	0.0	0.0	0.0	.3	24.5	0.0	0.	0.
19	4.4	0.0	0.0	0.0	0.0	.2	25.7	0.0	0.	0.
20	4.0	0.0	0.0	0.0	0.0	.3	30.7	0.0	0.	0.
MEAN	4.7	0.0	93.0	55.4	30.7	.2	19.8	0.0	0.	0.
STD DEV	.6	0.0	0.0	0.0	0.0	.1	5.7	0.0	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CUMBER. 3

DATE 5 JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	3.8	0.0	0.0	0.0	13.0	.1	12.3	0.0	0.	0.	0.
2	4.7	0.0	22.0	11.0	0.0	.2	23.0	0.0	0.	0.	0.
3	5.3	0.0	10.0	8.0	0.0	.3	26.1	0.0	0.	0.	0.
4	5.3	0.0	16.0	13.0	0.0	.2	29.1	0.0	0.	0.	0.
5	4.0	0.0	0.0	0.0	4.0	.2	28.0	0.0	0.	0.	0.
6	4.4	0.0	4.0	.5	0.0	.1	17.2	0.0	0.	0.	0.
7	3.5	0.0	15.0	12.0	0.0	.2	14.5	0.0	0.	0.	0.
8	4.7	0.0	0.0	0.0	7.0	.2	27.2	0.0	0.	0.	0.
9	3.7	0.0	14.0	8.0	0.0	.1	14.4	0.0	0.	0.	0.
10	4.5	0.0	7.0	4.0	0.0	.2	19.8	0.0	0.	0.	0.
11	5.4	0.0	0.0	0.0	16.0	.2	24.7	0.0	0.	0.	0.
12	4.5	0.0	15.0	13.0	0.0	.2	20.0	0.0	0.	0.	0.
13	2.9	0.0	14.0	10.0	0.0	.3	23.3	0.0	0.	0.	0.
14	5.4	0.0	18.0	12.0	0.0	.2	24.0	0.0	0.	0.	0.
15	4.9	0.0	0.0	0.0	3.0	.2	22.4	0.0	0.	0.	0.
16	4.7	0.0	0.0	0.0	8.0	.2	13.0	0.0	0.	0.	0.
17	4.2	0.0	28.0	19.0	0.0	.2	29.3	0.0	0.	0.	0.
18	4.6	0.0	0.0	0.0	0.0	.2	28.0	0.0	0.	0.	0.
19	5.4	0.0	0.0	0.0	17.0	.2	22.6	0.0	0.	0.	0.
20	5.1	0.0	0.0	0.0	5.5	.2	24.5	0.0	0.	0.	0.
MEAN	4.6	0.0	14.8	10.0	9.4	.2	22.2	0.0	0.	0.	0.
STD DEV	.7	0.0	6.6	4.9	5.8	.1	5.4	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CUMBER. 3

DATE 25

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
*****											
1	5.6	0.0	0.0	0.0	0.0	0.0	.3	31.0	0.0	0.	0.
2	5.8	9.3	0.0	0.0	0.0	.3	24.0	22.0	0.	3.	45.
3	5.2	0.0	0.0	0.0	0.0	.3	33.0	0.0	0.	0.	0.
4	5.4	0.0	0.0	0.0	0.0	.3	33.0	0.0	0.	0.	0.
5	5.2	0.0	0.0	0.0	0.0	.2	31.0	0.0	0.	0.	0.
6	5.3	0.0	0.0	0.0	0.0	.2	24.0	0.0	0.	0.	0.
7	5.4	12.3	0.0	0.0	0.0	.3	35.0	39.0	6.	1.	45.
8	5.2	0.0	0.0	0.0	0.0	.3	29.0	0.0	0.	0.	0.
9	5.1	0.0	0.0	0.0	0.0	.3	29.0	0.0	0.	0.	0.
10	5.2	0.0	0.0	0.0	0.0	.3	24.0	0.0	0.	0.	0.
11	5.5	0.0	0.0	0.0	0.0	.3	33.0	0.0	0.	0.	0.
12	5.7	0.0	0.0	0.0	0.0	.3	26.0	0.0	0.	0.	0.
13	5.4	0.0	0.0	0.0	0.0	.2	19.0	0.0	0.	0.	0.
14	5.3	0.0	0.0	0.0	0.0	.3	30.0	0.0	0.	0.	0.
15	5.5	9.7	0.0	0.0	0.0	.3	36.0	26.0	0.	2.	12.
16	5.2	0.0	0.0	0.0	0.0	.2	20.0	0.0	0.	0.	0.
17	5.6	0.0	0.0	0.0	0.0	.3	43.0	0.0	0.	0.	0.
18	5.6	0.0	0.0	0.0	0.0	.3	29.0	0.0	0.	0.	0.
19	5.4	0.0	0.0	0.0	0.0	.2	28.0	0.0	0.	0.	0.
20	5.6	9.2	0.0	0.0	0.0	.3	42.0	31.0	0.	7.	6.
MEAN	5.4	10.1	33.7	18.4	17.8	.3	30.0	29.5	6.	3.	27.
STD DEV	.2	1.5	0.0	0.0	0.0	.0	6.3	7.3	0.	3.	21.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CUMBER. 3

DATE 15

JULY 1979

PLANT NO.	PHENOLOGICAL STAGE SCORE VEG. REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM	
1	6.1 0.0	0.0	0.0	0.0	0.0	.1	28.1	0.0	0.	0.	
2	6.2 15.1	0.0	0.0	0.0	0.0	.2	27.4	19.5	3.	35.	
3	6.2 0.0	0.0	0.0	0.0	0.0	.2	30.3	0.0	0.	0.	
4	6.3 0.0	0.0	0.0	0.0	0.0	.2	33.2	0.0	0.	0.	
5	6.2 14.7	0.0	0.0	0.0	0.0	.2	35.9	0.0	0.	0.	
6	6.2 0.0	0.0	0.0	0.0	0.0	.1	26.1	0.0	0.	0.	
7	6.3 0.0	0.0	0.0	0.0	0.0	.2	32.9	36.5	4.	20.	
8	6.3 0.0	0.0	0.0	0.0	0.0	.2	32.6	0.0	0.	0.	
9	6.3 0.0	0.0	0.0	0.0	0.0	.2	25.4	0.0	0.	0.	
10	6.1 0.0	0.0	0.0	0.0	0.0	.2	17.1	0.0	0.	0.	
11	6.1 0.0	0.0	0.0	0.0	0.0	.2	31.2	0.0	0.	0.	
12	6.7 0.0	0.0	0.0	0.0	0.0	.2	27.2	0.0	0.	0.	
13	6.3 0.0	0.0	0.0	0.0	0.0	.2	23.5	0.0	0.	0.	
14	6.2 0.0	0.0	0.0	0.0	0.0	.3	25.8	0.0	0.	0.	
15	6.1 0.0	0.0	0.0	0.0	0.0	.2	33.6	0.0	0.	0.	
16	6.1 0.0	0.0	0.0	0.0	0.0	.2	19.0	0.0	0.	0.	
17	6.3 0.0	0.0	0.0	0.0	0.0	.2	40.1	0.0	0.	0.	
18	6.0 0.0	0.0	0.0	0.0	0.0	.1	26.3	0.0	0.	0.	
19	6.1 0.0	0.0	0.0	0.0	0.0	.1	19.1	0.0	0.	0.	
20	6.1 15.2	0.0	0.0	0.0	0.0	.3	34.1	31.6	5.	10.	
MEAN	6.2 15.0	0.0	0.0	0.0	0.0	.2	28.4	29.2	3.	5.	22.
STD DEV	.1 .3	0.0	0.0	0.0	0.0	.1	6.0	8.8	2.	4.	13.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CUMBER. 3

DATE 7 AUGUST 1979

128

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPP.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.3	0.0	0.0	0.0	8.0	.2	28.1	0.0	0.	0.	40.
2	6.4	15.8	26.0	7.0	0.0	.3	32.3	23.0	4.	5.	60.
3	6.7	0.0	0.0	0.0	6.0	.3	17.4	0.0	0.	0.	30.
4	6.5	0.0	19.0	14.0	0.0	.2	33.4	0.0	0.	0.	70.
5	6.3	0.0	0.0	0.0	6.0	.2	28.0	0.0	0.	0.	10.
6	6.4	0.0	6.0	3.0	0.0	.2	17.0	0.0	0.	0.	14.
7	6.6	16.6	21.0	10.0	0.0	.2	31.5	36.0	5.	3.	40.
8	6.4	16.5	0.0	0.0	5.0	.2	27.5	43.6	5.	2.	10.
9	6.5	0.0	12.0	8.0	0.0	.3	31.0	0.0	0.	0.	45.
10	6.4	0.0	7.0	4.0	0.0	.2	21.0	0.0	0.	0.	15.
11	6.8	16.6	0.0	0.0	17.0	.2	24.5	38.5	5.	12.	80.
12	6.8	0.0	21.0	14.0	0.0	.2	23.3	0.0	0.	0.	80.
13	6.4	0.0	11.0	7.0	0.0	.2	21.5	0.0	0.	0.	35.
14	6.5	0.0	11.0	8.0	0.0	.3	21.0	53.0	7.	1.	25.
15	6.4	16.7	0.0	0.0	3.0	.3	33.0	0.0	0.	0.	8.
16	6.4	0.0	8.0	5.0	0.0	.2	13.5	0.0	0.	0.	25.
17	6.5	0.0	18.0	9.0	0.0	.3	35.0	0.0	0.	0.	45.
18	6.4	0.0	0.0	0.0	.3	.2	16.5	0.0	0.	0.	4.
19	6.5	0.0	16.0	13.0	0.0	.2	26.0	0.0	0.	0.	40.
20	6.5	15.9	7.0	6.0	0.0	.3	30.5	31.0	5.	12.	5.
MEAN	6.5	16.4	14.1	8.3	6.5	.2	25.6	37.5	5.	6.	34.
STD DEV	.1	.4	6.5	3.6	5.3	.0	6.4	10.3	1.	5.	24.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CUMBER. 3

DATE 1 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VFG.	LOGICAL SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.7	0.0	0.0	0.0	0.0	.2	28.7	0.0	0.	0.	25.
2	6.7	16.4	0.0	0.0	0.0	.3	29.3	23.4	5.	10.	64.
3	6.9	0.0	0.0	0.0	0.0	.3	32.3	0.0	0.	0.	35.
4	6.8	0.0	0.0	0.0	0.0	.3	24.7	0.0	0.	0.	65.
5	6.8	0.0	0.0	0.0	0.0	.2	26.1	0.0	0.	0.	30.
6	6.8	0.0	0.0	0.0	0.0	.3	22.8	0.0	0.	0.	18.
7	6.8	16.9	0.0	0.0	0.0	.3	25.1	36.7	4.	6.	23.
8	6.9	0.0	0.0	0.0	0.0	.3	30.3	0.0	0.	0.	14.
9	6.8	0.0	0.0	0.0	0.0	.2	28.1	0.0	0.	0.	34.
10	6.7	0.0	0.0	0.0	0.0	.3	26.5	0.0	0.	0.	15.
11	6.8	0.0	0.0	0.0	0.0	.2	28.2	0.0	0.	0.	110.
12	6.9	0.0	0.0	0.0	0.0	.2	24.5	0.0	0.	0.	75.
13	6.8	0.0	0.0	0.0	0.0	.2	15.6	0.0	0.	0.	11.
14	6.8	0.0	0.0	0.0	0.0	.3	23.9	0.0	0.	0.	25.
15	6.7	0.0	0.0	0.0	0.0	.3	39.7	0.0	0.	0.	45.
16	6.9	0.0	0.0	0.0	0.0	.2	15.2	0.0	0.	0.	23.
17	6.8	0.0	0.0	0.0	0.0	.2	27.5	0.0	0.	0.	65.
18	6.6	0.0	0.0	0.0	0.0	.3	23.9	0.0	0.	0.	5.
19	6.8	16.2	0.0	0.0	0.0	.3	27.1	19.3	5.	3.	35.
20	6.9	16.7	0.0	0.0	0.0	.3	28.1	30.3	5.	8.	19.
MEAN	6.8	16.6	21.8	12.3	25.5	.3	26.4	27.4	5.	7.	37.
STD DEV	.1	.3	0.0	0.0	0.0	.1	5.3	7.7	1.	3.	27.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CUMBER. 3

DATE 21 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGT	MAX. SPK HGT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.9	0.0	0.0	0.0	0.0	.2	24.1	0.0	0.	0.	30.
2	6.9	16.9	0.0	0.0	0.0	.2	32.0	25.1	5.	5.	50.
3	6.9	0.0	0.0	0.0	0.0	.2	32.1	0.0	0.	0.	45.
4	6.9	0.0	0.0	0.0	0.0	.2	35.1	0.0	0.	0.	65.
5	6.9	0.0	0.0	0.0	0.0	.2	28.9	0.0	0.	0.	15.
6	6.9	0.0	0.0	0.0	0.0	.2	19.1	0.0	0.	0.	25.
7	6.9	16.9	0.0	0.0	0.0	.2	26.4	36.1	5.	5.	35.
8	6.9	0.0	0.0	0.0	0.0	.2	33.0	0.0	0.	0.	17.
9	6.9	0.0	0.0	0.0	0.0	.2	25.3	0.0	0.	0.	45.
10	6.9	0.0	0.0	0.0	0.0	.2	13.5	0.0	0.	0.	10.
11	6.9	16.9	0.0	0.0	0.0	.2	16.2	55.5	5.	15.	110.
12	6.9	0.0	0.0	0.0	0.0	.2	25.8	0.0	0.	0.	100.
13	6.9	0.0	0.0	0.0	0.0	.2	21.9	0.0	0.	0.	30.
14	6.9	0.0	0.0	0.0	0.0	.2	14.9	0.0	0.	0.	20.
15	6.9	0.0	0.0	0.0	0.0	.2	27.5	0.0	0.	0.	10.
16	6.9	0.0	0.0	0.0	0.0	.2	17.9	0.0	0.	0.	25.
17	6.9	0.0	0.0	0.0	0.0	.2	36.1	0.0	0.	0.	55.
18	7.0	0.0	0.0	0.0	0.0	.2	16.9	0.0	0.	0.	10.
19	6.9	0.0	0.0	0.0	0.0	.2	24.0	0.0	0.	0.	45.
20	6.9	16.9	0.0	0.0	0.0	.2	21.2	31.5	5.	8.	15.
MEAN	6.9	16.9	0.0	0.0	0.0	.2	24.7	37.1	5.	8.	38.
STD DEV	.0	.0	0.0	0.0	0.0	.0	7.1	13.1	0.	5.	28.

0.0 = NOT RECORDED



AGROPYRON SPICATUM

STUDY AREA DEMER

DATE 28

APRIL 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	4.3	0.0	0.0	0.0	0.0	.3	24.0	0.0	0.	0.	0.
2	5.2	0.0	0.0	0.0	0.0	.3	19.2	0.0	0.	0.	0.
3	5.2	0.0	0.0	0.0	0.0	.3	19.6	0.0	0.	0.	0.
4	5.1	0.0	0.0	0.0	0.0	.3	24.2	0.0	0.	0.	0.
5	5.1	0.0	0.0	0.0	0.0	.3	17.5	0.0	0.	0.	0.
6	5.1	0.0	0.0	0.0	0.0	.3	20.2	0.0	0.	0.	0.
MEAN	5.0	0.0	93.0	55.4	30.7	.3	20.8	0.0	0.	0.	0.
STD DEV	.3	0.0	0.0	0.0	0.0	.0	2.7	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DEMER

DATE 24

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.3	9.2	0.0	0.0	0.0	.3	19.9	0.0	0.	0.	0.
2	5.4	9.2	0.0	0.0	0.0	.4	31.8	0.0	0.	0.	0.
3	5.1	9.1	0.0	0.0	0.0	.3	38.3	0.0	0.	0.	0.
4	5.2	9.0	0.0	0.0	0.0	.3	32.6	0.0	0.	0.	0.
5	5.1	9.1	0.0	0.0	0.0	.3	33.9	0.0	0.	0.	0.
6	5.5	9.6	0.0	0.0	0.0	.3	33.7	0.0	0.	0.	0.
MEAN	5.3	9.2	14.8	10.0	9.4	.3	31.7	0.0	0.	0.	0.
STD DEV	.2	.2	0.0	0.0	0.0	.0	6.2	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DEMER

DATE 7 JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
*****											
1	5.4	10.8	27.0	19.0	0.0	.4	35.2	46.2	12.	10.	53.
2	5.8	10.7	58.0	41.0	0.0	.4	39.0	57.0	14.	60.	70.
3	5.4	10.8	41.0	41.0	0.0	.3	46.0	55.0	8.	27.	65.
4	5.4	10.8	63.0	48.0	0.0	.3	35.0	71.0	10.	120.	50.
5	5.1	10.7	49.0	29.0	0.0	.3	34.0	67.0	8.	55.	80.
6	5.2	10.8	0.0	0.0	22.0	.3	25.0	61.0	10.	25.	30.
MEAN	5.4	10.8	47.6	35.6	22.0	.3	35.7	59.5	10.	50.	58.
STD DEV	.2	.1	14.3	11.5	0.0	.1	6.9	8.9	2.	39.	18.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DEMER

DATE 27

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.9	13.8	0.0	0.0	0.0	.3	36.5	49.1	8.	8.	27.
2	5.8	14.1	0.0	0.0	0.0	.3	42.6	59.5	11.	49.	31.
3	5.8	14.3	0.0	0.0	0.0	.3	41.2	69.1	7.	10.	35.
4	5.7	13.9	0.0	0.0	0.0	.3	49.2	73.3	9.	60.	30.
5	5.8	14.5	0.0	0.0	0.0	.3	52.3	73.5	10.	64.	32.
6	5.9	14.2	0.0	0.0	0.0	.3	38.1	70.2	9.	20.	16.
MEAN	5.8	14.1	0.0	0.0	0.0	.3	43.3	65.8	9.	35.	29.
STD DEV	.1	.3	0.0	0.0	0.0	.0	6.2	9.6	1.	25.	7.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DEMER

DATE 17

JULY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	CLUMP LGTH WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM	
1	6.2	15.7	0.0	0.0	0.0	.2	19.8	54.2	8.	15.	20.
2	6.1	15.9	0.0	0.0	0.0	.3	40.2	56.5	11.	30.	40.
3	6.0	15.9	0.0	0.0	0.0	.2	39.6	68.1	7.	15.	60.
4	6.0	15.8	0.0	0.0	0.0	.2	36.9	63.5	9.	60.	100.
5	6.1	15.7	0.0	0.0	0.0	.2	38.7	54.5	8.	45.	80.
6	6.1	15.8	0.0	0.0	0.0	.2	31.9	56.2	8.	20.	25.
MEAN	6.1	15.8	14.1	8.3	0.0	.2	34.5	58.8	9.	31.	54.
STD DEV	.1	.1	0.0	0.0	0.0	.0	7.8	5.7	1.	18.	32.

0.0 = NOT RECORDED

AGRCOPYRON SPICATUM

STUDY AREA DEMER

DATE 9 AUGUST 1979

136

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.5	15.8	23.0	9.0	0.0	.3	25.4	52.5	7.	6.	45.
2	6.3	15.9	61.0	39.0	0.0	.2	28.0	48.0	7.	60.	110.
3	6.3	15.9	37.0	21.0	0.0	.2	30.1	47.0	8.	25.	90.
4	6.4	16.1	57.0	34.0	0.0	.3	31.5	72.0	10.	90.	210.
5	6.4	16.1	34.0	23.0	0.0	.2	21.0	64.0	8.	60.	180.
6	6.4	16.2	17.0	14.0	0.0	.2	28.0	69.0	9.	50.	50.
MEAN	6.4	16.0	38.2	23.3	0.0	.2	27.3	58.8	8.	49.	114.
STD DEV	.1	.2	17.7	11.5	0.0	.1	3.7	11.0	1.	29.	68.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DEMER

DATE 1 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.7	16.8	0.0	0.0	0.0	.2	28.6	49.1	0.	0.	0.
2	6.6	16.7	0.0	0.0	0.0	.3	34.0	41.5	0.	0.	0.
3	6.8	16.5	0.0	0.0	0.0	.2	43.1	57.3	0.	0.	0.
4	6.8	16.6	0.0	0.0	0.0	.2	54.5	81.3	0.	0.	0.
5	6.8	16.8	0.0	0.0	0.0	.2	31.2	51.6	0.	0.	0.
6	6.8	16.8	0.0	0.0	0.0	.2	40.6	60.2	0.	0.	0.
MEAN	6.8	16.7	0.0	0.0	0.0	.2	38.7	56.8	5.	8.	38.
STD DEV	.1	.1	0.0	0.0	0.0	.0	9.5	13.7	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DEMER

DATE 23 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL / CULM	NO. REPR CULM	NO. VEG CULM
1	6.9	16.8	0.0	0.0	0.0	.2	33.0	43.6	0.	0.	0.
2	6.9	16.8	0.0	0.0	0.0	.2	35.1	42.0	0.	0.	0.
3	6.9	16.8	0.0	0.0	0.0	.2	44.0	59.5	0.	0.	0.
4	6.9	16.7	0.0	0.0	0.0	.2	48.6	70.2	0.	0.	0.
5	6.9	16.9	0.0	0.0	0.0	.2	33.1	49.8	0.	0.	0.
6	6.9	16.8	0.0	0.0	0.0	.2	49.8	66.2	0.	0.	0.
MEAN	6.9	16.8	0.0	0.0	0.0	.2	40.6	55.2	5.	5.	32.
STD DEV	.0	.1	0.0	0.0	0.0	.0	7.8	11.9	0.	0.	0.

0.0 = NOT RECORDED



AGROPYRON SPICATUM

STUDY AREA HORSE CR.

DATE 29

APRIL 1979

PLANT NO.	PHENOLOGICAL STAGE SCORE VEG. REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
*****										
1	4.2	0.0	0.0	0.0	0.0	.2	12.0	0.0	0.	0.
2	3.3	0.0	0.0	0.0	0.0	.2	13.0	0.0	0.	0.
3	5.2	0.0	0.0	0.0	0.0	.2	18.0	0.0	0.	0.
4	4.3	0.0	0.0	0.0	0.0	.1	7.5	0.0	0.	0.
5	4.2	0.0	0.0	0.0	0.0	.2	13.4	0.0	0.	0.
6	4.2	0.0	0.0	0.0	0.0	.2	12.3	0.0	0.	0.
7	4.3	0.0	0.0	0.0	0.0	.3	19.8	0.0	0.	0.
8	4.2	0.0	0.0	0.0	0.0	.1	11.2	0.0	0.	0.
9	4.3	0.0	0.0	0.0	0.0	.1	17.4	0.0	0.	0.
10	4.3	0.0	0.0	0.0	0.0	.2	15.8	0.0	0.	0.
11	3.4	0.0	0.0	0.0	0.0	.1	7.5	0.0	0.	0.
12	4.1	0.0	0.0	0.0	0.0	.1	9.5	0.0	0.	0.
13	4.2	0.0	0.0	0.0	0.0	.2	18.0	0.0	0.	0.
14	4.3	0.0	0.0	0.0	0.0	.2	15.5	0.0	0.	0.
15	4.2	0.0	0.0	0.0	0.0	.1	11.3	0.0	0.	0.
16	5.0	0.0	0.0	0.0	0.0	.1	15.2	0.0	0.	0.
17	4.1	0.0	0.0	0.0	0.0	.1	5.0	0.0	0.	0.
18	4.2	0.0	0.0	0.0	0.0	.1	12.5	0.0	0.	0.
19	4.3	0.0	0.0	0.0	0.0	.2	11.5	0.0	0.	0.
20	4.3	0.0	0.0	0.0	0.0	.2	13.1	0.0	0.	0.
MEAN	4.2	0.0	93.0	55.4	0.0	.2	13.0	0.0	0.	0.
STD DEV	.4	0.0	0.0	0.0	0.0	.1	3.8	0.0	0.	0.

C.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA HORSE CR.

DATE 24

MAY 1979

140

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
*****											
1	5.7	9.8	0.0	0.0	0.0	.3	33.2	0.0	0.	0.	0.
2	5.6	9.6	0.0	0.0	0.0	.3	30.1	0.0	0.	0.	0.
3	5.7	9.5	0.0	0.0	0.0	.3	23.2	0.0	0.	0.	0.
4	5.5	9.4	0.0	0.0	0.0	.3	35.6	0.0	0.	0.	0.
5	5.5	9.4	0.0	0.0	0.0	.3	18.9	0.0	0.	0.	0.
6	5.8	9.6	0.0	0.0	0.0	.3	38.6	0.0	0.	0.	0.
7	5.3	9.0	0.0	0.0	0.0	.3	26.5	0.0	0.	0.	0.
8	5.7	9.6	0.0	0.0	0.0	.3	31.1	0.0	0.	0.	0.
9	5.3	9.0	0.0	0.0	0.0	.3	29.2	0.0	0.	0.	0.
10	5.2	9.0	0.0	0.0	0.0	.3	29.7	0.0	0.	0.	0.
11	5.3	9.0	0.0	0.0	0.0	.3	23.8	0.0	0.	0.	0.
12	4.3	9.0	0.0	0.0	0.0	.3	22.6	0.0	0.	0.	0.
13	5.6	9.7	0.0	0.0	0.0	.3	31.4	0.0	0.	0.	0.
14	5.6	9.5	0.0	0.0	0.0	.3	31.0	0.0	0.	0.	0.
15	5.5	9.3	0.0	0.0	0.0	.3	22.9	0.0	0.	0.	0.
16	5.2	9.0	0.0	0.0	0.0	.3	14.1	0.0	0.	0.	0.
17	4.9	9.0	0.0	0.0	0.0	.2	8.7	0.0	0.	0.	0.
18	5.2	9.0	0.0	0.0	0.0	.2	23.6	0.0	0.	0.	0.
19	5.2	9.0	0.0	0.0	0.0	.2	17.5	0.0	0.	0.	0.
20	5.4	9.0	0.0	0.0	0.0	.3	18.5	0.0	0.	0.	0.
MEAN	5.4	9.5	14.8	10.0	0.0	.3	25.5	0.0	0.	0.	0.
STD DEV	.3	.2	0.0	0.0	0.0	.0	7.5	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA HORSE CR.

DATE 7 JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VFG.	LOGICAL SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.9	10.4	0.0	0.0	20.0	.3	36.0	62.2	11.	80.	49.
2	5.9	10.4	0.0	0.0	14.0	.3	39.0	58.6	9.	40.	50.
3	5.6	10.5	0.0	0.0	14.0	.3	42.0	55.5	7.	50.	45.
4	5.9	0.0	0.0	0.0	3.0	.3	12.1	0.0	0.	0.	0.
5	5.4	10.2	0.0	0.0	2.0	.3	24.5	35.2	4.	1.	3.
6	5.9	10.6	0.0	0.0	24.0	.3	45.3	60.3	8.	40.	55.
7	5.9	10.4	0.0	0.0	9.0	.3	51.2	66.8	10.	25.	25.
8	5.6	10.3	20.0	14.0	0.0	.3	40.0	58.5	5.	25.	55.
9	5.8	10.5	0.0	0.0	6.0	.3	35.8	45.2	6.	8.	12.
10	5.9	10.5	0.0	0.0	20.0	.3	54.2	61.0	7.	22.	60.
11	5.7	0.0	0.0	0.0	1.0	.3	11.1	0.0	0.	0.	0.
12	5.8	9.2	33.0	28.0	0.0	.3	18.2	0.0	0.	0.	0.
13	5.5	10.6	0.0	0.0	10.0	.3	40.2	53.6	7.	7.	20.
14	5.9	10.3	0.0	0.0	9.0	.3	44.6	59.4	8.	8.	28.
15	5.9	10.3	19.0	10.0	0.0	.3	35.5	44.9	7.	18.	33.
16	5.9	10.4	8.0	4.0	0.0	.3	29.0	33.7	6.	1.	18.
17	4.7	0.0	0.0	0.0	3.0	.2	9.2	0.0	0.	0.	0.
18	5.9	9.0	6.0	4.0	0.0	.3	28.2	0.0	0.	0.	0.
19	5.6	0.0	0.0	0.0	2.0	.2	17.0	0.0	0.	0.	0.
20	5.9	0.0	5.0	3.0	0.0	.3	20.5	0.0	0.	0.	0.
MEAN	5.7	10.2	15.2	10.5	9.1	.3	31.7	53.5	7.	25.	35.
STD DEV	.3	.5	10.9	9.6	7.8	.0	13.6	10.5	2.	23.	18.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA HORSE CR.

DATE 6 JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VFG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGT	MAX. SPK HGT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.8	14.3	0.0	0.0	0.0	.3	44.5	71.3	9.	35.	30.
2	5.7	14.3	0.0	0.0	0.0	.3	43.2	65.5	7.	35.	40.
3	5.6	12.7	0.0	0.0	0.0	.3	32.9	60.0	7.	44.	35.
4	5.9	0.0	0.0	0.0	0.0	.2	11.4	0.0	0.	0.	0.
5	5.8	13.4	0.0	0.0	0.0	.3	14.1	37.9	3.	1.	3.
6	5.9	14.1	0.0	0.0	0.0	.3	13.0	67.0	6.	40.	30.
7	4.8	13.8	0.0	0.0	0.0	.3	25.3	66.8	10.	30.	32.
8	5.5	14.5	0.0	0.0	0.0	.3	21.0	53.6	5.	25.	36.
9	5.6	14.4	0.0	0.0	0.0	.2	28.0	52.5	5.	4.	10.
10	5.9	14.6	0.0	0.0	0.0	.3	35.8	54.8	7.	55.	32.
11	5.9	0.0	0.0	0.0	0.0	.2	9.8	0.0	0.	0.	0.
12	5.9	10.1	0.0	0.0	0.0	.3	20.7	0.0	0.	1.	35.
13	5.6	14.5	0.0	0.0	0.0	.3	26.0	54.5	7.	5.	30.
14	5.8	12.8	0.0	0.0	0.0	.3	33.0	53.2	7.	10.	23.
15	5.5	13.4	0.0	0.0	0.0	.3	32.2	50.0	6.	36.	41.
16	5.8	14.1	0.0	0.0	0.0	.3	26.6	36.0	8.	1.	25.
17	5.5	0.0	0.0	0.0	0.0	.2	19.8	0.0	0.	0.	0.
18	5.3	0.0	0.0	0.0	0.0	.3	25.8	0.0	0.	0.	0.
19	5.2	0.0	0.0	0.0	0.0	.3	17.4	0.0	0.	0.	0.
20	5.9	0.0	0.0	0.0	0.0	.3	21.4	0.0	0.	0.	0.
MEAN	5.6	13.6	0.0	0.0	0.0	.3	25.1	55.7	7.	23.	29.
STD DEV	.3	1.2	0.0	0.0	0.0	.0	9.8	10.8	2.	19.	11.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA HORSE CR.

DATE 18

JULY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.5	16.7	0.0	0.0	0.0	.2	39.4	68.4	8.	50.	40.
2	6.6	16.5	0.0	0.0	0.0	.2	34.5	61.3	6.	53.	45.
3	6.3	16.5	0.0	0.0	0.0	.2	24.0	59.5	6.	39.	45.
4	6.3	0.0	0.0	0.0	0.0	.2	13.5	0.0	0.	0.	15.
5	6.6	16.7	0.0	0.0	0.0	.2	22.5	55.6	8.	6.	3.
6	6.4	16.8	0.0	0.0	0.0	.2	24.2	62.6	8.	24.	38.
7	6.5	16.7	0.0	0.0	0.0	.2	29.2	73.4	8.	18.	40.
8	6.6	16.7	0.0	0.0	0.0	.2	25.1	54.3	5.	21.	56.
9	6.4	0.0	0.0	0.0	0.0	.1	27.1	0.0	0.	0.	0.
10	6.3	16.7	0.0	0.0	0.0	.2	33.8	58.2	5.	36.	75.
11	6.4	0.0	0.0	0.0	0.0	.1	9.5	0.0	0.	0.	1.
12	6.4	0.0	0.0	0.0	0.0	.2	20.1	0.0	0.	0.	25.
13	6.4	16.8	0.0	0.0	0.0	.2	28.5	56.7	7.	5.	25.
14	6.4	16.8	0.0	0.0	0.0	.2	21.5	56.8	7.	11.	30.
15	6.3	16.7	0.0	0.0	0.0	.2	17.1	48.9	5.	6.	30.
16	6.6	16.7	0.0	0.0	0.0	.2	14.3	42.5	7.	1.	20.
17	6.4	0.0	0.0	0.0	0.0	.1	8.8	0.0	0.	0.	11.
18	6.2	0.0	0.0	0.0	0.0	.2	28.3	0.0	0.	0.	20.
19	6.3	0.0	0.0	0.0	0.0	.2	18.2	0.0	0.	0.	7.
20	6.5	0.0	0.0	0.0	0.0	.2	19.7	0.0	0.	0.	22.
MFAN	6.4	16.7	14.1	8.3	0.0	.2	23.0	58.2	7.	22.	29.
STD DEV	.1	.1	0.0	0.0	0.0	.0	8.2	8.1	1.	18.	19.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA HORSE CR.

DATE 9 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE VFG. SCOPE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.7 16.8	0.0	0.0	16.0	.2	42.2	66.3	8.	70.	105.
2	6.8 16.8	15.0	12.0	0.0	.2	35.5	52.6	6.	40.	65.
3	6.7 16.8	14.0	9.0	0.0	.3	34.0	47.8	0.	42.	75.
4	6.7 0.0	3.0	2.0	0.0	.2	11.0	0.0	0.	0.	15.
5	6.7 16.8	0.0	0.0	2.0	.2	36.5	51.1	6.	6.	2.
6	6.7 16.8	20.0	14.0	0.0	.2	32.8	45.2	8.	13.	35.
7	6.8 16.8	13.0	10.0	0.0	.2	50.2	67.1	7.	21.	37.
8	6.7 16.8	18.0	12.0	0.0	.2	37.9	47.8	9.	29.	42.
9	6.7 16.8	3.0	2.0	0.0	.2	28.2	39.0	4.	1.	4.
10	6.8 16.8	30.0	18.0	0.0	.2	40.9	49.5	6.	15.	108.
11	6.7 0.0	0.0	0.0	.5	.2	9.0	0.0	0.	0.	1.
12	6.8 0.0	12.0	5.0	0.0	.2	20.0	0.0	0.	0.	47.
13	6.8 16.8	0.0	0.0	5.0	.3	40.8	55.0	7.	5.	43.
14	6.7 16.8	15.0	9.0	0.0	.2	37.2	52.6	6.	9.	30.
15	6.8 16.7	17.0	10.0	0.0	.2	27.5	38.8	6.	23.	51.
16	6.7 16.8	9.0	5.0	0.0	.2	26.5	43.0	8.	1.	35.
17	6.8 0.0	3.0	2.0	0.0	.2	7.2	0.0	0.	0.	10.
18	6.7 0.0	17.0	0.0	0.0	.2	19.8	0.0	0.	0.	42.
19	6.8 0.0	0.0	0.0	2.0	.2	17.0	0.0	0.	0.	5.
20	6.8 16.8	4.0	3.0	0.0	.2	13.0	28.0	5.	1.	14.
MEAN	6.7 16.8	12.9	7.9	5.1	.2	28.4	48.9	7.	20.	38.
STD DEV	.1 .0	7.6	4.9	6.3	.0	12.5	10.3	1.	20.	31.

0.0 = NOT RECORDED

AGROCYRON SPICATUM

STUDY AREA HORSE CR.

DATE 2 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM	
1	6.7	16.8	0.0	0.0	0.0	.2	41.6	59.3	0.	0.	0.	
2	6.8	16.9	0.0	0.0	0.0	.2	32.0	51.6	0.	0.	0.	
3	6.8	16.8	0.0	0.0	0.0	.2	36.1	51.2	0.	0.	0.	
4	6.9	0.0	0.0	0.0	0.0	.2	10.6	0.0	0.	0.	0.	
5	6.8	0.0	0.0	0.0	0.0	.2	10.1	0.0	0.	0.	0.	60 % UTILI
6	6.8	16.7	0.0	0.0	0.0	.2	36.5	48.3	0.	0.	0.	
7	6.8	16.9	0.0	0.0	0.0	.2	48.6	69.0	0.	0.	0.	
8	6.8	16.9	0.0	0.0	0.0	.2	32.9	48.7	0.	0.	0.	
9	6.9	16.9	0.0	0.0	0.0	.2	34.5	46.0	0.	0.	0.	
10	6.8	16.8	0.0	0.0	0.0	.2	43.2	56.0	0.	0.	0.	
11	6.9	0.0	0.0	0.0	0.0	.2	4.2	0.0	0.	0.	0.	90 % UTILI
12	6.8	0.0	0.0	0.0	0.0	.2	20.3	0.0	0.	0.	0.	5 % UTILI
13	6.7	16.9	0.0	0.0	0.0	.2	41.0	52.5	0.	0.	0.	
14	6.8	16.9	0.0	0.0	0.0	.2	34.9	53.0	0.	0.	0.	
15	6.8	16.8	0.0	0.0	0.0	.2	36.0	50.0	0.	0.	0.	
16	6.7	16.9	0.0	0.0	0.0	.2	25.5	42.0	0.	0.	0.	
17	6.9	0.0	0.0	0.0	0.0	.2	8.1	0.0	0.	0.	0.	15 % UTILI
18	6.9	0.0	0.0	0.0	0.0	.2	21.1	0.0	0.	0.	0.	
19	6.9	0.0	0.0	0.0	0.0	.2	18.0	0.0	0.	0.	0.	
20	6.9	0.0	0.0	0.0	0.0	.2	13.1	0.0	0.	0.	0.	60 % UTILI
MEAN	6.8	16.9	0.0	0.0	0.0	.2	27.4	52.3	5.	8.	38.	
STD DEV	.1	.1	0.0	0.0	0.0	.0	13.3	6.9	0.	0.	0.	

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA HORSE CR.

DATE 21 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM	
1	6.9	16.9	0.0	0.0	0.0	.2	41.2	59.6	0.	0.	0.	
2	6.9	16.9	0.0	0.0	0.0	.2	31.1	51.1	0.	0.	0.	
3	6.9	16.9	0.0	0.0	0.0	.2	40.1	60.4	0.	0.	0.	
4	6.9	0.0	0.0	0.0	0.0	.2	13.0	0.0	0.	0.	0.	
5	6.9	0.0	0.0	0.0	0.0	.2	15.8	0.0	0.	0.	0.	60 % UTILI.
6	6.9	16.9	0.0	0.0	0.0	.2	34.2	63.0	0.	0.	0.	
7	6.9	16.9	0.0	0.0	0.0	.2	41.0	59.8	0.	0.	0.	
8	6.9	16.9	0.0	0.0	0.0	.2	39.0	49.3	0.	0.	0.	
9	6.9	16.9	0.0	0.0	0.0	.2	28.5	39.0	0.	0.	0.	
10	6.9	16.9	0.0	0.0	0.0	.2	42.2	57.0	0.	0.	0.	
11	6.9	0.0	0.0	0.0	0.0	.2	6.2	0.0	0.	0.	0.	75 % UTILI.
12	6.9	0.0	0.0	0.0	0.0	.2	20.8	0.0	0.	0.	0.	20 % UTILI.
13	6.9	16.9	0.0	0.0	0.0	.2	28.7	48.7	0.	0.	0.	
14	6.9	16.9	0.0	0.0	0.0	.2	35.5	51.1	0.	0.	0.	
15	6.9	16.9	0.0	0.0	0.0	.2	30.2	41.5	0.	0.	0.	
16	6.9	16.9	0.0	0.0	0.0	.2	25.5	42.0	0.	0.	0.	
17	6.9	0.0	0.0	0.0	0.0	.2	8.0	0.0	0.	0.	0.	
18	6.9	16.9	0.0	0.0	0.0	.2	27.5	41.0	0.	0.	0.	
19	6.9	0.0	0.0	0.0	0.0	.2	23.4	0.0	0.	0.	0.	
20	6.9	0.0	0.0	0.0	0.0	.2	17.2	0.0	0.	0.	0.	
MEAN	6.9	16.9	0.0	0.0	0.0	.2	27.5	51.1	5.	5.	32.	
STD DEV	.0	.0	0.0	0.0	0.0	.0	11.1	8.4	0.	0.	0.	

0.0 = NOT RECORDED



AGROPHYRON SPICATUM

STUDY AREA OWL DRAW

DATE 5 MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCDR VLG.	SCDR REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.0	0.0	0.0	0.0	0.0	0.0	.3	8.8	0.0	0.	0.	0.
2	4.0	0.0	0.0	0.0	0.0	0.0	.2	5.5	0.0	0.	0.	0.
3	3.3	0.0	0.0	0.0	0.0	0.0	.1	7.3	0.0	0.	0.	0.
4	3.2	0.0	0.0	0.0	0.0	0.0	.2	6.9	0.0	0.	0.	0.
5	4.3	0.0	0.0	0.0	0.0	0.0	.2	7.0	0.0	0.	0.	0.
6	3.3	0.0	0.0	0.0	0.0	0.0	.2	7.7	0.0	0.	0.	0.
7	3.8	0.0	0.0	0.0	0.0	0.0	.3	13.3	0.0	0.	0.	0.
8	4.4	0.0	0.0	0.0	0.0	0.0	.3	10.7	0.0	0.	0.	0.
9	3.3	0.0	0.0	0.0	0.0	0.0	.3	10.4	0.0	0.	0.	0.
10	3.3	0.0	0.0	0.0	0.0	0.0	.2	11.4	0.0	0.	0.	0.
11	3.2	0.0	0.0	0.0	0.0	0.0	.2	14.2	0.0	0.	0.	0.
12	4.1	0.0	0.0	0.0	0.0	0.0	.2	6.3	0.0	0.	0.	0.
13	4.1	0.0	0.0	0.0	0.0	0.0	.3	7.5	0.0	0.	0.	0.
14	4.2	0.0	0.0	0.0	0.0	0.0	.2	7.8	0.0	0.	0.	0.
15	4.1	0.0	0.0	0.0	0.0	0.0	.2	5.2	0.0	0.	0.	0.
16	3.9	0.0	0.0	0.0	0.0	0.0	.2	6.1	0.0	0.	0.	0.
17	3.2	0.0	0.0	0.0	0.0	0.0	.2	6.9	0.0	0.	0.	0.
18	4.1	0.0	0.0	0.0	0.0	0.0	.2	6.8	0.0	0.	0.	0.
19	4.2	0.0	0.0	0.0	0.0	0.0	.2	9.3	0.0	0.	0.	0.
20	4.1	0.0	0.0	0.0	0.0	0.0	.2	5.6	0.0	0.	0.	0.
MEAN	3.9	0.0	93.0	55.4	0.0	.2	8.2	0.0	0.	0.	0.	0.
STD DEV	.5	0.0	0.0	0.0	0.0	.1	2.6	0.0	0.	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA D<sub>W</sub>L DRAW

DATE 25

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE PEPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.6	0.0	0.0	0.0	0.0	.2	9.0	0.0	0.	0.	0.
2	4.8	0.0	0.0	0.0	0.0	.2	10.5	0.0	0.	0.	0.
3	4.5	0.0	0.0	0.0	0.0	.2	15.5	0.0	0.	0.	0.
4	4.2	0.0	0.0	0.0	0.0	.1	4.2	0.0	0.	0.	0.
5	5.3	0.0	0.0	0.0	0.0	.3	11.0	0.0	0.	0.	0.
6	5.1	0.0	0.0	0.0	0.0	.2	14.0	0.0	0.	0.	0.
7	4.6	0.0	0.0	0.0	0.0	.2	14.7	0.0	0.	0.	0.
8	4.8	0.0	0.0	0.0	0.0	.2	13.2	0.0	0.	0.	0.
9	4.8	0.0	0.0	0.0	0.0	.2	5.7	0.0	0.	0.	0.
10	4.6	0.0	0.0	0.0	0.0	.2	12.0	0.0	0.	0.	0.
11	5.3	0.0	0.0	0.0	0.0	.3	14.1	0.0	0.	0.	0.
12	4.8	0.0	0.0	0.0	0.0	.2	7.3	0.0	0.	0.	0.
13	5.2	0.0	0.0	0.0	0.0	.2	9.6	0.0	0.	0.	0.
14	5.5	0.0	0.0	0.0	0.0	.3	10.3	0.0	0.	0.	0.
15	4.6	0.0	0.0	0.0	0.0	.2	8.2	0.0	0.	0.	0.
16	5.2	0.0	0.0	0.0	0.0	.2	7.2	0.0	0.	0.	0.
17	5.7	0.0	0.0	0.0	0.0	.3	7.5	0.0	0.	0.	0.
18	4.7	0.0	0.0	0.0	0.0	.2	9.5	0.0	0.	0.	0.
19	4.7	0.0	0.0	0.0	0.0	.2	14.6	0.0	0.	0.	0.
20	4.8	0.0	0.0	0.0	0.0	.3	10.1	0.0	0.	0.	0.
MEAN	4.9	9.5	14.8	10.0	0.0	.2	10.4	0.0	0.	0.	0.
STD DEV	.4	0.0	0.0	0.0	0.0	.1	3.2	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPHYMON SPICATUM

STUDY AREA Dwl DRAW

DATE 12

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE VFG. REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGT	MAX. SPK HGT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.7	0.0	0.0	0.0	4.0	.3	11.4	0.0	0.	0.	0.
2	5.5	0.0	0.0	0.0	3.0	.2	11.1	0.0	0.	0.	0.
3	4.8	0.0	0.0	0.0	3.0	.3	14.4	0.0	0.	0.	0.
4	6.5	0.0	0.0	0.0	1.0	.2	9.8	0.0	0.	0.	0.
5	5.2	0.0	0.0	0.0	6.0	.3	12.6	0.0	0.	0.	0.
6	6.1	0.0	0.0	0.0	1.0	.2	13.2	0.0	0.	0.	0.
7	6.1	0.0	0.0	0.0	1.0	.2	19.0	0.0	0.	0.	0.
8	6.1	0.0	0.0	0.0	3.0	.1	10.8	0.0	0.	0.	0.
9	5.2	0.0	0.0	0.0	2.0	.2	18.8	0.0	0.	0.	0.
10	5.4	0.0	0.0	0.0	2.0	.2	15.5	0.0	0.	0.	0.
11	6.1	0.0	0.0	0.0	1.0	.2	20.2	0.0	0.	0.	0.
12	5.2	0.0	18.0	11.0	0.0	.2	10.6	0.0	0.	0.	0.
13	5.6	0.0	0.0	0.0	2.0	.2	10.8	0.0	0.	0.	0.
14	5.6	0.0	0.0	0.0	8.0	.2	10.3	0.0	0.	0.	0.
15	5.7	0.0	0.0	0.0	2.0	.2	8.7	0.0	0.	0.	0.
16	5.3	0.0	0.0	0.0	2.0	.2	9.7	0.0	0.	0.	0.
17	5.4	0.0	17.0	10.0	0.0	.2	12.2	0.0	0.	0.	0.
18	5.2	0.0	0.0	0.0	3.0	.2	9.8	0.0	0.	0.	0.
19	5.5	0.0	0.0	0.0	3.0	.2	14.9	0.0	0.	0.	0.
20	5.4	0.0	16.0	9.0	0.0	.2	9.8	0.0	0.	0.	0.
MEAN	5.6	10.2	17.0	10.0	2.8	.2	12.7	53.5	7.	25.	35.
STD DEV	.4	0.0	1.0	1.0	1.9	.0	3.4	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGREPYRON SPICATUM

STUDY AREA OWL DRAW

DATE 28

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VIG.	SCORE REPP.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
*****											
1	5.7	0.0	0.0	0.0	0.0	.3	9.1	0.0	0.	0.	0.
2	5.8	0.0	0.0	0.0	0.0	.1	10.4	0.0	0.	0.	0.
3	6.2	0.0	0.0	0.0	0.0	.2	15.3	0.0	0.	0.	0.
4	6.3	0.0	0.0	0.0	0.0	.2	9.8	0.0	0.	0.	0.
5	5.3	0.0	0.0	0.0	0.0	.2	16.6	0.0	0.	0.	0.
6	6.0	0.0	0.0	0.0	0.0	.1	13.1	0.0	0.	0.	0.
7	6.4	0.0	0.0	0.0	0.0	.2	19.0	0.0	0.	0.	0.
8	6.1	0.0	0.0	0.0	0.0	.2	10.0	0.0	0.	0.	0.
9	6.3	0.0	0.0	0.0	0.0	.2	13.1	0.0	0.	0.	0.
10	6.3	0.0	0.0	0.0	0.0	.2	15.9	0.0	0.	0.	0.
11	6.1	0.0	0.0	0.0	0.0	.2	20.4	0.0	0.	0.	0.
12	5.4	0.0	0.0	0.0	0.0	.2	9.4	0.0	0.	0.	0.
13	5.4	0.0	0.0	0.0	0.0	.2	10.1	0.0	0.	0.	0.
14	6.1	0.0	0.0	0.0	0.0	.2	15.2	0.0	0.	0.	0.
15	6.2	0.0	0.0	0.0	0.0	.2	8.0	0.0	0.	0.	0.
16	6.3	0.0	0.0	0.0	0.0	.2	10.4	0.0	0.	0.	0.
17	6.0	0.0	0.0	0.0	0.0	.2	10.3	0.0	0.	0.	0.
18	6.0	0.0	0.0	0.0	0.0	.2	8.5	0.0	0.	0.	0.
19	6.4	0.0	0.0	0.0	0.0	.1	13.2	0.0	0.	0.	0.
20	5.8	0.0	0.0	0.0	0.0	.2	17.0	0.0	0.	0.	0.
MEAN	6.0	13.6	0.0	0.0	0.0	.2	12.7	55.7	7.	23.	29.
STD DEV	.3	0.0	0.0	0.0	0.0	.0	3.7	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGREPYRON SPICATUM

STUDY AREA OWL DRAW

DATE 19

JULY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.3	0.0	0.0	0.0	0.0	.1	10.8	0.0	0.	0.	0.
2	6.5	0.0	0.0	0.0	0.0	.1	10.8	0.0	0.	0.	0.
2	6.5	0.0	0.0	0.0	0.0	.1	10.4	0.0	0.	0.	0.
4	6.6	0.0	0.0	0.0	0.0	.2	14.2	0.0	0.	0.	0.
5	6.3	0.0	0.0	0.0	0.0	.2	10.0	0.0	0.	0.	0.
6	6.6	0.0	0.0	0.0	0.0	.2	16.8	0.0	0.	0.	0.
7	6.4	0.0	0.0	0.0	0.0	.2	14.0	0.0	0.	0.	0.
8	6.5	0.0	0.0	0.0	0.0	.2	16.8	0.0	0.	0.	0.
9	6.7	0.0	0.0	0.0	0.0	.2	15.6	0.0	0.	0.	0.
10	6.6	0.0	0.0	0.0	0.0	.1	11.5	0.0	0.	0.	0.
11	6.3	0.0	0.0	0.0	0.0	.2	15.7	0.0	0.	0.	0.
12	6.6	0.0	0.0	0.0	0.0	.2	18.0	0.0	0.	0.	0.
13	6.9	0.0	0.0	0.0	0.0	.1	14.8	0.0	0.	0.	0.
14	6.3	0.0	0.0	0.0	0.0	.2	20.0	0.0	0.	0.	0.
15	6.4	0.0	0.0	0.0	0.0	.2	15.0	0.0	0.	0.	0.
16	6.5	0.0	0.0	0.0	0.0	.2	13.5	0.0	0.	0.	0.
17	6.4	0.0	0.0	0.0	0.0	.2	9.8	0.0	0.	0.	0.
18	6.3	0.0	0.0	0.0	0.0	.2	16.6	0.0	0.	0.	0.
19	6.5	0.0	0.0	0.0	0.0	.2	9.9	0.0	0.	0.	0.
20	6.4	0.0	0.0	0.0	0.0	.2	11.3	0.0	0.	0.	0.
MFAN	6.5	16.7	14.1	8.3	0.0	.2	13.8	58.2	7.	22.	29.
STD DEV	.2	0.0	0.0	0.0	0.0	.0	3.1	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA OWL DRAW

DATE 10

AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGT WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM	
1	6.8	0.0	8.0	2.0	0.0	.2	10.2	0.0	0.	8.	
2	6.8	0.0	7.0	1.0	0.0	.2	8.8	0.0	0.	8.	5% UTILIZ
3	6.7	0.0	0.0	0.0	2.0	.2	12.6	0.0	0.	2.	20% UTILIZ
4	6.9	0.0	0.0	0.0	1.0	.1	5.3	0.0	0.	2.	90% UTILIZ
5	6.7	0.0	5.0	3.0	0.0	.2	14.1	0.0	0.	14.	
6	6.9	0.0	0.0	0.0	1.0	.2	12.5	0.0	0.	1.	
7	6.8	0.0	0.0	0.0	1.0	.2	18.2	0.0	0.	1.	
8	6.8	0.0	8.0	3.0	0.0	.2	10.0	0.0	0.	4.	10% UTILIZ
9	6.9	0.0	0.0	0.0	1.0	.2	15.6	0.0	0.	1.	
10	6.8	0.0	4.0	1.0	0.0	.2	16.0	0.0	0.	5.	
11	6.8	0.0	0.0	0.0	1.0	.2	11.0	0.0	0.	1.	40% UTILIZ
12	6.8	0.0	15.0	12.0	0.0	.2	11.0	0.0	0.	30.	50% UTILIZ
13	6.7	0.0	0.0	0.0	2.0	.2	9.6	0.0	0.	5.	30% UTILIZ
14	6.8	0.0	12.0	10.0	0.0	.2	13.7	0.0	0.	22.	
15	6.8	0.0	0.0	0.0	2.0	.1	7.0	0.0	0.	4.	
16	6.7	0.0	15.0	12.0	0.0	.2	9.3	0.0	0.	19.	
17	6.8	0.0	0.0	0.0	12.0	.2	11.0	0.0	0.	30.	10% UTILIZ
18	6.8	0.0	0.0	0.0	2.0	.2	9.0	0.0	0.	3.	
19	6.8	0.0	0.0	0.0	3.0	.2	10.3	0.0	0.	6.	30% UTILIZ
20	6.7	0.0	12.0	9.0	0.0	.2	8.2	0.0	0.	46.	
MEAN	6.8	16.8	9.0	5.9	2.5	.2	11.2	48.9	7.	20.	11.
STD DEV	.1	0.0	4.8	4.8	3.2	.0	3.2	0.0	0.	0.	13.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DWL DRAW

DATE 1 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	7.4	0.0	0.0	0.0	0.0	0.0	.2	7.1	0.0	0.	15.
2	7.5	0.0	0.0	0.0	0.0	0.0	.2	9.7	0.0	0.	8.
3	7.6	0.0	0.0	0.0	0.0	0.0	.2	10.4	0.0	0.	2.
4	7.4	0.0	0.0	0.0	0.0	0.0	.1	5.1	0.0	0.	1.
5	7.3	0.0	0.0	0.0	0.0	0.0	.3	13.0	0.0	0.	20.
6	7.6	0.0	0.0	0.0	0.0	0.0	.2	7.6	0.0	0.	3.
7	7.5	0.0	0.0	0.0	0.0	0.0	.2	10.7	0.0	0.	4.
8	7.5	0.0	0.0	0.0	0.0	0.0	.2	10.4	0.0	0.	2.
9	7.6	0.0	0.0	0.0	0.0	0.0	.3	16.3	0.0	0.	1.
10	7.5	0.0	0.0	0.0	0.0	0.0	.2	16.5	0.0	0.	5.
11	7.6	0.0	0.0	0.0	0.0	0.0	.2	15.2	0.0	0.	2.
12	7.4	0.0	0.0	0.0	0.0	0.0	.2	8.9	0.0	0.	18.
13	7.5	0.0	0.0	0.0	0.0	0.0	.2	13.5	0.0	0.	6.
14	7.5	0.0	0.0	0.0	0.0	0.0	.2	14.7	0.0	0.	10.
15	7.3	0.0	0.0	0.0	0.0	0.0	.2	14.6	0.0	0.	4.
16	7.2	0.0	0.0	0.0	0.0	0.0	.1	11.4	0.0	0.	4.
17	7.4	0.0	0.0	0.0	0.0	0.0	.3	16.3	0.0	0.	20.
18	6.9	0.0	0.0	0.0	0.0	0.0	.1	4.6	0.0	0.	1.
19	7.2	0.0	0.0	0.0	0.0	0.0	.2	3.8	0.0	0.	2.
20	7.4	0.0	0.0	0.0	0.0	0.0	.2	17.3	0.0	0.	29.
MEAN	7.4	16.9	0.0	0.0	0.0	.2	11.4	52.3	5.	8.	8.
STD DEV	.2	0.0	0.0	0.0	0.0	.1	4.2	0.0	0.	0.	8.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA OWL DRAW

DATE 23 SEPTEMBER 1979

154

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG.	REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	7.7	0.0	0.0	0.0	0.0	0.0	.2	10.5	0.0	0.	0.	10.
2	7.8	0.0	0.0	0.0	0.0	0.0	.2	8.2	0.0	0.	0.	13.
3	7.7	0.0	0.0	0.0	0.0	0.0	.3	16.2	0.0	0.	0.	2.
4	7.8	0.0	0.0	0.0	0.0	0.0	.2	9.8	0.0	0.	0.	1.
5	7.7	0.0	0.0	0.0	0.0	0.0	.3	11.3	0.0	0.	0.	35.
6	7.7	0.0	0.0	0.0	0.0	0.0	.2	14.6	0.0	0.	0.	1.
7	7.7	0.0	0.0	0.0	0.0	0.0	.2	17.1	0.0	0.	0.	1.
8	7.7	0.0	0.0	0.0	0.0	0.0	.2	10.2	0.0	0.	0.	4.
9	7.8	0.0	0.0	0.0	0.0	0.0	.2	16.4	0.0	0.	0.	1.
10	7.9	0.0	0.0	0.0	0.0	0.0	.2	15.6	0.0	0.	0.	10.
11	7.6	0.0	0.0	0.0	0.0	0.0	.2	18.8	0.0	0.	0.	50.
12	7.8	0.0	0.0	0.0	0.0	0.0	.2	12.1	0.0	0.	0.	30.
13	7.7	0.0	0.0	0.0	0.0	0.0	.2	9.9	0.0	0.	0.	9.
14	7.7	0.0	0.0	0.0	0.0	0.0	.2	15.2	0.0	0.	0.	25.
15	7.7	0.0	0.0	0.0	0.0	0.0	.2	7.3	0.0	0.	0.	12.
16	7.8	0.0	0.0	0.0	0.0	0.0	.2	9.7	0.0	0.	0.	27.
17	7.8	0.0	0.0	0.0	0.0	0.0	.2	11.4	0.0	0.	0.	31.
18	7.8	0.0	0.0	0.0	0.0	0.0	.2	7.9	0.0	0.	0.	2.
19	7.8	0.0	0.0	0.0	0.0	0.0	.2	15.1	0.0	0.	0.	10.
20	7.9	0.0	0.0	0.0	0.0	0.0	.2	11.9	0.0	0.	0.	35.
MEAN	7.8	16.9	0.0	0.0	0.0	0.0	.2	12.5	51.1	5.	5.	15.
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	.0	3.4	0.0	0.	0.	15.

0.0 = NOT RECORDED



AGROPYRON SPICATUM

STUDY AREA RED WASH 2

DATE 6

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE VFG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGT	MAX. SPK HGT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	4.0	0.0	0.0	0.0	35.0	.1	10.1	0.0	0.	0.	0.
2	4.0	0.0	74.0	30.0	0.0	.1	9.5	0.0	0.	0.	0.
3	4.2	0.0	0.0	0.0	81.0	.1	10.5	0.0	0.	0.	0.
4	3.2	0.0	0.0	0.0	4.0	.1	10.0	0.0	0.	0.	0.
5	3.0	0.0	0.0	0.0	57.0	.1	9.5	0.0	0.	0.	0.
6	3.1	0.0	0.0	0.0	8.0	.1	10.5	0.0	0.	0.	0.
7	3.0	0.0	0.0	0.0	3.0	.1	6.0	0.0	0.	0.	0.
8	3.3	0.0	46.0	25.0	0.0	.1	7.5	0.0	0.	0.	0.
9	3.1	0.0	24.0	10.0	0.0	.1	6.8	0.0	0.	0.	0.
10	4.1	0.0	0.0	0.0	4.0	.1	10.8	0.0	0.	0.	0.
11	4.1	0.0	20.0	6.0	0.0	.1	15.1	0.0	0.	0.	0.
12	4.0	0.0	33.0	17.0	0.0	.1	9.3	0.0	0.	0.	0.
13	4.0	0.0	68.0	54.0	0.0	.1	8.0	0.0	0.	0.	0.
14	3.0	0.0	0.0	0.0	3.0	.1	4.5	0.0	0.	0.	0.
15	5.0	0.0	0.0	0.0	20.0	.1	9.0	0.0	0.	0.	0.
16	4.1	0.0	46.0	27.0	0.0	.1	8.9	0.0	0.	0.	0.
17	4.1	0.0	0.0	0.0	40.0	.1	10.0	0.0	0.	0.	0.
18	3.5	0.0	0.0	0.0	2.0	.1	14.0	0.0	0.	0.	0.
19	4.0	0.0	28.0	8.0	0.0	.1	9.5	0.0	0.	0.	0.
20	3.9	0.0	0.0	0.0	18.0	.1	7.0	0.0	0.	0.	0.
MEAN	3.7	0.0	42.4	22.1	22.9	.1	9.3	0.0	0.	0.	0.
STD DEV	.5	0.0	20.1	15.8	25.5	.0	2.4	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGREPYRON SPICATUM

STUDY AREA RED WASH 2

DATE 21

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	4.2	0.0	0.0	0.0	0.0	0.0	.2	11.3	0.0	0.	0.
2	4.5	0.0	0.0	0.0	0.0	0.0	.2	12.8	0.0	0.	0.
3	4.2	0.0	0.0	0.0	0.0	0.0	.2	12.3	0.0	0.	0.
4	4.7	0.0	0.0	0.0	0.0	0.0	.2	13.7	0.0	0.	0.
5	4.4	0.0	0.0	0.0	0.0	0.0	.2	8.7	0.0	0.	0.
6	4.5	0.0	0.0	0.0	0.0	0.0	.2	10.5	0.0	0.	0.
7	5.3	0.0	0.0	0.0	0.0	0.0	.3	8.2	0.0	0.	0.
8	3.8	0.0	0.0	0.0	0.0	0.0	.2	17.6	0.0	0.	0.
9	2.5	0.0	0.0	0.0	0.0	0.0	.2	6.6	0.0	0.	0.
10	3.5	0.0	0.0	0.0	0.0	0.0	.3	16.1	0.0	0.	0.
11	4.7	0.0	0.0	0.0	0.0	0.0	.2	12.9	0.0	0.	0.
12	5.3	0.0	0.0	0.0	0.0	0.0	.3	17.5	0.0	0.	0.
13	5.7	0.0	0.0	0.0	0.0	0.0	.3	13.6	0.0	0.	0.
14	5.8	0.0	0.0	0.0	0.0	0.0	.3	14.0	0.0	0.	0.
15	4.4	0.0	0.0	0.0	0.0	0.0	.2	14.6	0.0	0.	0.
16	5.3	0.0	0.0	0.0	0.0	0.0	.3	16.8	0.0	0.	0.
17	5.4	0.0	0.0	0.0	0.0	0.0	.3	15.2	0.0	0.	0.
18	4.2	0.0	0.0	0.0	0.0	0.0	.3	10.6	0.0	0.	0.
19	4.3	0.0	0.0	0.0	0.0	0.0	.2	17.1	0.0	0.	0.
20	4.2	0.0	0.0	0.0	0.0	0.0	.2	6.8	0.0	0.	0.
MEAN	4.5	9.5	14.8	10.0	0.0	.2	12.8	0.0	0.	0.	0.
STD DEV	.8	0.0	0.0	0.0	0.0	.1	3.5	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA RED WASH 2

DATE 4 JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VFG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	4.5	0.0	0.0	0.0	39.0	.2	13.6	0.0	0.	0.	0.
2	5.4	0.0	74.0	38.0	0.0	.3	17.5	0.0	0.	0.	0.
3	5.3	0.0	83.0	63.0	0.0	.3	16.1	0.0	0.	0.	0.
4	4.8	0.0	0.0	0.0	2.5	.2	13.2	0.0	0.	0.	0.
5	4.3	0.0	0.0	0.0	53.0	.2	25.0	0.0	0.	0.	0.
6	4.4	0.0	9.0	7.0	0.0	.3	15.0	0.0	0.	0.	0.
7	4.3	0.0	0.0	0.0	2.0	.2	9.0	0.0	0.	0.	0.
8	4.5	0.0	0.0	0.0	3.0	.2	21.2	0.0	0.	0.	0.
9	5.6	0.0	94.0	54.0	0.0	.3	16.0	0.0	0.	0.	0.
10	5.4	0.0	0.0	0.0	3.0	.3	17.6	0.0	0.	0.	0.
11	5.2	0.0	7.0	4.0	0.0	.2	14.7	0.0	0.	0.	0.
12	5.2	0.0	33.0	18.0	0.0	.2	13.8	0.0	0.	0.	0.
13	5.1	0.0	65.0	41.0	0.0	.3	28.1	0.0	0.	0.	0.
14	5.3	0.0	82.0	68.0	0.0	.3	24.5	0.0	0.	0.	0.
15	5.2	0.0	26.0	14.0	0.0	.3	18.5	0.0	0.	0.	0.
16	4.9	0.0	0.0	0.0	3.0	.3	17.5	0.0	0.	0.	0.
17	4.7	0.0	33.0	25.0	0.0	.3	22.7	0.0	0.	0.	0.
18	4.7	0.0	0.0	0.0	3.0	.2	17.1	0.0	0.	0.	0.
19	5.4	0.0	26.0	12.0	0.0	.2	23.5	0.0	0.	0.	0.
20	5.4	0.0	0.0	0.0	16.0	.3	26.3	0.0	0.	0.	0.
MEAN	5.0	10.2	48.4	31.3	13.8	.3	18.7	53.5	7.	25.	35.
STD DEV	.4	0.0	31.7	22.9	19.1	.1	5.0	0.0	0.	0.	0.

0.0 = NOT RECORDED

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.4	10.8	0.0	0.0	0.0	.2	20.2	28.2	4.	35.	75.
2	5.5	10.7	0.0	0.0	0.0	.3	24.6	40.2	8.	15.	145.
3	5.7	0.0	0.0	0.0	0.0	.3	19.2	0.0	0.	0.	0.
4	5.3	10.4	0.0	0.0	0.0	.3	21.8	36.0	5.	7.	110.
5	5.3	10.6	0.0	0.0	0.0	.3	29.4	31.5	7.	15.	175.
6	5.5	0.0	0.0	0.0	0.0	.4	21.2	0.0	0.	0.	0.
7	5.3	0.0	0.0	0.0	0.0	.3	18.5	0.0	0.	0.	0.
8	5.3	0.0	0.0	0.0	0.0	.4	18.6	0.0	0.	0.	0.
9	5.4	10.5	0.0	0.0	0.0	.3	25.1	19.5	5.	18.	95.
10	5.1	0.0	0.0	0.0	0.0	.3	18.3	0.0	0.	0.	0.
11	5.5	9.2	0.0	0.0	0.0	.3	15.6	0.0	0.	0.	0.
12	5.4	10.6	0.0	0.0	0.0	.3	15.5	36.6	6.	6.	45.
13	5.6	10.5	0.0	0.0	0.0	.3	18.4	36.5	10.	35.	70.
14	5.1	10.7	0.0	0.0	0.0	.3	27.5	50.2	9.	20.	195.
15	5.5	10.7	0.0	0.0	0.0	.4	14.7	29.5	6.	5.	40.
16	5.5	10.4	0.0	0.0	0.0	.3	15.2	19.8	5.	1.	25.
17	5.3	10.7	0.0	0.0	0.0	.3	25.5	39.5	7.	55.	45.
18	5.6	0.0	0.0	0.0	0.0	.3	20.2	0.0	0.	0.	0.
19	5.5	10.6	0.0	0.0	0.0	.3	25.6	43.2	7.	7.	40.
20	5.3	10.8	0.0	0.0	0.0	.4	27.2	53.5	10.	15.	70.
MEAN	5.4	10.5	0.0	0.0	0.0	.3	21.1	35.7	7.	16.	87.
STD DEV	.2	.4	0.0	0.0	0.0	.0	4.5	10.2	2.	15.	55.

0.0 = NOT RECORDED

AGROPHYRON SPICATUM

STUDY AREA RED WASH 2

DATE 14 JULY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGT	MAX. SPK HGT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.0	14.1	0.0	0.0	0.0	.2	39.0	32.5	7.	25.	80.
2	5.9	14.2	0.0	0.0	0.0	.2	43.1	53.5	7.	10.	100.
3	6.2	12.9	0.0	0.0	0.0	.3	24.5	32.6	5.	1.	90.
4	6.0	14.3	0.0	0.0	0.0	.3	42.9	55.6	6.	15.	80.
5	6.1	14.1	0.0	0.0	0.0	.2	37.0	56.5	7.	10.	75.
6	6.1	0.0	0.0	0.0	0.0	.3	23.5	0.0	0.	0.	0.
7	6.0	0.0	0.0	0.0	0.0	.2	7.9	0.0	0.	0.	0.
8	6.1	12.3	0.0	0.0	0.0	.3	33.5	26.0	3.	2.	30.
9	6.1	14.0	0.0	0.0	0.0	.3	27.0	40.0	6.	12.	70.
10	6.1	0.0	0.0	0.0	0.0	.2	19.6	0.0	0.	0.	0.
11	6.1	0.0	0.0	0.0	0.0	.2	16.5	0.0	0.	0.	0.
12	6.2	14.2	0.0	0.0	0.0	.3	26.5	46.7	5.	8.	35.
13	6.0	14.1	0.0	0.0	0.0	.3	32.0	46.0	7.	25.	65.
14	6.2	14.1	0.0	0.0	0.0	.3	34.5	56.8	7.	20.	85.
15	6.1	14.4	0.0	0.0	0.0	.3	23.1	21.1	5.	1.	25.
16	6.2	14.4	0.0	0.0	0.0	.3	14.5	25.0	5.	1.	15.
17	6.1	14.1	0.0	0.0	0.0	.3	33.5	45.3	8.	25.	40.
18	6.0	12.8	0.0	0.0	0.0	.3	20.5	23.0	5.	7.	40.
19	6.0	14.3	0.0	0.0	0.0	.2	24.0	48.5	7.	6.	20.
20	6.2	14.3	0.0	0.0	0.0	.3	36.5	60.5	9.	12.	35.
MEAN	6.1	13.9	14.1	8.3	0.0	.3	28.0	42.0	6.	11.	55.
STD DEV	.1	.6	0.0	0.0	0.0	.0	9.6	13.3	1.	9.	28.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA RED WASH 2

DATE 6 AUGUST 1974

160

PLANT NO.	PHENOLOGICAL STAGE VIG.	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.4	15.6	23.0	16.0	0.0	.2	30.5	58.5	5.	20.	35.
2	6.4	15.8	29.0	5.0	0.0	.2	33.5	51.5	5.	5.	25.
3	6.4	15.8	141.0	27.0	0.0	.2	18.0	39.0	5.	20.	260.
4	6.4	15.6	37.0	24.0	0.0	.3	31.0	53.0	7.	34.	60.
5	6.4	15.9	41.0	15.0	0.0	.3	23.0	29.0	3.	3.	35.
6	6.4	15.8	51.0	23.0	0.0	.3	22.0	33.0	5.	4.	40.
7	6.3	15.9	83.0	57.0	0.0	.2	31.5	55.5	9.	30.	160.
8	6.4	15.8	88.0	39.0	0.0	.3	34.0	46.0	9.	40.	115.
9	6.3	15.5	31.0	17.0	0.0	.2	29.0	45.5	5.	5.	60.
10	6.4	0.0	9.0	4.0	0.0	.2	18.0	0.0	0.	0.	14.
11	6.4	0.0	11.0	6.0	0.0	.2	19.5	0.0	0.	0.	15.
12	6.4	15.8	95.0	80.0	0.0	.3	23.0	48.0	5.	65.	290.
13	6.4	15.8	14.0	7.0	0.0	.2	31.0	28.0	3.	2.	20.
14	6.4	16.1	52.0	46.0	0.0	.2	21.0	31.5	4.	3.	60.
15	6.3	15.2	48.0	23.0	0.0	.2	26.5	26.0	3.	2.	45.
16	6.3	15.9	0.0	0.0	51.0	.3	31.0	53.0	6.	20.	120.
17	6.4	16.2	71.0	22.0	0.0	.3	32.5	58.5	8.	55.	150.
18	6.3	15.9	85.0	63.0	0.0	.3	34.0	32.0	5.	10.	270.
19	6.2	15.4	83.0	29.0	0.0	.3	35.0	53.5	8.	45.	300.
20	6.3	15.8	49.0	37.0	0.0	.2	28.0	48.5	6.	65.	110.
MEAN	6.4	15.8	53.7	28.9	51.0	.2	27.6	43.9	6.	24.	111.
STD DEV	.1	.2	33.7	21.8	0.0	.1	5.7	11.3	2.	22.	98.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA RED WASH 2

DATE 31 AUGUST 1977

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.5	15.9	0.0	0.0	0.0	.3	13.9	49.3	6.	4.	20.
2	6.5	15.9	0.0	0.0	0.0	.3	19.0	53.5	6.	15.	120.
3	6.5	16.3	0.0	0.0	0.0	.3	22.5	32.4	5.	5.	180.
4	6.2	15.9	0.0	0.0	0.0	.3	23.1	45.5	7.	15.	150.
5	6.5	16.9	0.0	0.0	0.0	.3	26.0	53.0	8.	30.	180.
6	6.4	0.0	0.0	0.0	0.0	.3	23.1	0.0	0.	0.	35.
7	6.0	16.9	0.0	0.0	0.0	.3	18.0	29.2	5.	2.	8.
8	6.4	16.1	0.0	0.0	0.0	.3	17.2	27.1	3.	2.	30.
9	6.5	16.3	0.0	0.0	0.0	.3	28.4	42.5	5.	20.	100.
10	6.4	0.0	0.0	0.0	0.0	.3	20.1	0.0	0.	0.	20.
11	6.5	0.0	0.0	0.0	0.0	.3	16.2	0.0	0.	0.	25.
12	6.5	15.9	0.0	0.0	0.0	.3	17.5	47.0	6.	10.	55.
13	6.5	15.9	0.0	0.0	0.0	.3	33.5	48.2	7.	40.	210.
14	6.5	16.4	0.0	0.0	0.0	.3	24.2	43.2	6.	12.	190.
15	6.4	15.9	0.0	0.0	0.0	.3	20.3	30.0	5.	10.	50.
16	6.4	0.0	0.0	0.0	0.0	.3	21.2	0.0	0.	0.	40.
17	6.4	15.9	0.0	0.0	0.0	.3	25.2	44.5	7.	65.	50.
18	6.4	0.0	0.0	0.0	0.0	.3	21.4	0.0	0.	0.	55.
19	6.3	16.9	0.0	0.0	0.0	.3	21.8	44.1	6.	7.	60.
20	6.3	15.9	0.0	0.0	0.0	.3	31.0	53.5	8.	20.	52.
MEAN	6.5	16.2	0.0	0.0	0.0	.3	22.2	42.9	6.	17.	82.
STD DEV	.1	.4	0.0	0.0	0.0	.0	4.9	9.0	1.	17.	65.

0.0 = NOT RECORDED

TOT

PLANT NO.	PHENOLOGICAL VFC. STAGE SCORE	REFR. SCORE	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	ND. SPL/ CULM	ND. REFR CULM	ND. VFC CULM
1	7.5	16.7	0.0	0.0	0.0	.2	18.9	49.3	8.	30.	90.
2	7.3	16.8	0.0	0.0	0.0	.2	24.0	53.0	7.	10.	150.
3	7.7	16.9	0.0	0.0	0.0	.2	16.1	32.0	6.	1.	230.
4	7.5	16.5	0.0	0.0	0.0	.3	27.5	46.2	7.	20.	180.
5	7.5	16.9	0.0	0.0	0.0	.3	27.5	53.2	8.	20.	160.
6	7.5	0.0	0.0	0.0	0.0	.2	19.3	0.0	0.	0.	15.
7	7.4	16.9	0.0	0.0	0.0	.2	19.9	31.3	4.	2.	10.
8	7.5	16.7	0.0	0.0	0.0	.2	29.7	29.5	3.	2.	30.
9	7.7	16.7	0.0	0.0	0.0	.2	18.5	47.7	5.	20.	100.
10	7.5	0.0	0.0	0.0	0.0	.3	19.8	0.0	0.	0.	30.
11	7.2	0.0	0.0	0.0	0.0	.2	17.9	0.0	0.	0.	25.
12	7.2	16.8	0.0	0.0	0.0	.2	22.9	47.4	6.	10.	50.
13	7.7	16.5	0.0	0.0	0.0	.3	13.9	49.9	9.	35.	170.
14	7.2	17.0	0.0	0.0	0.0	.3	22.1	55.5	7.	20.	210.
15	7.4	0.0	0.0	0.0	0.0	.2	24.0	0.0	0.	0.	15.
16	7.5	0.0	0.0	0.0	0.0	.2	16.1	0.0	0.	0.	10.
17	7.5	16.7	0.0	0.0	0.0	.2	22.5	45.0	8.	40.	80.
18	7.7	16.9	0.0	0.0	0.0	.2	23.2	35.5	5.	3.	30.
19	7.7	16.9	0.0	0.0	0.0	.2	23.2	47.2	6.	7.	40.
20	7.7	16.8	0.0	0.0	0.0	.2	25.0	57.2	8.	15.	75.
MEAN	7.5	16.3	0.0	0.0	0.0	.2	21.4	45.3	6.	16.	83.
STD DEV	.2	.1	0.0	0.0	0.0	.0	4.3	9.0	2.	12.	70.

0.0 = NOT RECORDED



ARTEMISIA NOVA

STUDY AREA HORSE CR.

DATE 28

APRIL 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
*****										
1	2.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	2.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	2.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	2.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA HORSE CR.

DATE 24

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLH	NEW SEED STALK LNGLH
*****										
1	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA HORSE CR.

DATE 7

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
*****										
1	3.4	0.0	19.0	45.0	30.0	0.0	4.	60.	0.0	0.0
2	3.4	0.0	13.0	21.0	14.0	0.0	3.	5.	0.0	0.0
3	3.2	0.0	10.0	33.0	22.0	0.0	4.	10.	0.0	0.0
4	3.3	0.0	30.0	53.0	45.0	0.0	4.	10.	0.0	0.0
5	3.3	0.0	18.0	48.0	24.0	0.0	4.	10.	0.0	0.0
6	3.2	0.0	23.0	43.0	24.0	0.0	4.	15.	0.0	0.0
7	3.2	0.0	34.0	118.0	66.0	0.0	4.	65.	0.0	0.0
8	3.2	0.0	14.0	41.0	26.0	0.0	4.	20.	0.0	0.0
9	3.2	0.0	16.0	48.0	42.0	0.0	4.	50.	0.0	0.0
10	3.1	0.0	20.0	28.0	27.0	0.0	5.	30.	0.0	0.0
11	3.2	0.0	55.0	100.0	66.0	0.0	4.	15.	0.0	0.0
12	3.3	0.0	29.0	59.0	45.0	0.0	4.	25.	0.0	0.0
13	3.4	0.0	46.0	86.0	46.0	0.0	4.	25.	0.0	0.0
14	3.2	0.0	24.0	60.0	47.0	0.0	4.	5.	0.0	0.0
15	3.4	0.0	19.0	26.0	18.0	0.0	4.	30.	0.0	0.0
16	3.4	0.0	26.0	44.0	33.0	0.0	4.	10.	0.0	0.0
17	3.3	0.0	10.0	31.0	11.0	0.0	5.	60.	0.0	0.0
18	3.3	0.0	22.0	33.0	19.0	0.0	5.	60.	0.0	0.0
19	3.4	0.0	12.0	24.0	13.0	0.0	3.	0.	0.0	0.0
20	3.3	0.0	12.0	22.0	12.0	0.0	2.	5.	0.0	0.0

MEAN	3.3	0.0	22.6	48.2	31.5	0.0	4.	27.	0.0	0.0
STD DEV	.1	0.0	11.8	26.2	16.8	0.0	1.	21.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA HORSE CR.

DATE 27

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
*****										
1	4.3	9.2	0.0	0.0	0.0	0.0	0.	0.	.3	10.5
2	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
3	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	.6	11.1
4	4.3	9.2	0.0	0.0	0.0	0.0	0.	0.	1.5	14.5
5	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	.2	17.9
6	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	.5	12.5
7	4.2	9.0	0.0	0.0	0.0	0.0	0.	0.	.8	12.9
8	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	7.0
9	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	8.3
10	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
11	4.3	9.1	0.0	0.0	0.0	0.0	0.	0.	.4	11.2
12	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
13	4.2	9.0	0.0	0.0	0.0	0.0	0.	0.	.4	9.2
14	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	1.8	14.5
15	4.3	9.0	0.0	0.0	0.0	0.0	0.	0.	1.5	12.6
16	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	.4	9.5
17	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	0.0
18	4.3	9.1	0.0	0.0	0.0	0.0	0.	0.	1.2	12.5
19	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	.3	7.8
20	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
MEAN	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	.7	11.5
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.5	2.9

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA HORSE CR.

DATE 18

JULY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLH	NEW SEED STALK LNGLH
*****										
1	4.3	9.3	0.0	0.0	0.0	0.0	0.	0.	2.1	13.8
2	4.4	9.5	0.0	0.0	0.0	0.0	0.	0.	1.6	12.5
3	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	2.2	11.9
4	4.4	9.5	0.0	0.0	0.0	0.0	0.	0.	2.0	16.3
5	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	1.8	8.7
6	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	1.1	13.1
7	4.4	9.4	0.0	0.0	0.0	0.0	0.	0.	1.2	9.7
8	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	2.9	6.9
9	4.4	9.5	0.0	0.0	0.0	0.0	0.	0.	1.5	7.0
10	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.8	0.0
11	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	2.6	12.9
12	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
13	4.4	9.5	0.0	0.0	0.0	0.0	0.	0.	1.4	6.9
14	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	5.1	13.2
15	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	3.1	9.1
16	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	1.0	7.8
17	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.6	0.0
18	4.4	9.5	0.0	0.0	0.0	0.0	0.	0.	3.3	12.4
19	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	1.1	8.1
20	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	4.5	0.0

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MEAN	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	2.1	10.6
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	1.1	3.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA HORSE CR.

DATE 9 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LENGH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG	NEW SEED STALK LENGH
*****										
1	5.2	9.5	19.0	45.0	30.0	0.0	4.	65.	2.6	14.2
2	5.3	9.6	15.0	21.0	15.0	0.0	3.	5.	2.8	13.3
3	5.3	9.6	11.0	33.0	22.0	0.0	4.	10.	2.4	12.0
4	5.3	9.6	31.0	53.0	45.0	0.0	4.	10.	2.0	11.8
5	5.4	9.6	18.0	48.0	24.0	0.0	4.	10.	2.2	10.1
6	5.3	9.6	25.0	45.0	24.0	0.0	4.	15.	2.0	13.4
7	5.3	9.5	36.0	118.0	66.0	0.0	4.	65.	1.6	13.8
8	5.3	9.5	14.0	42.0	29.0	0.0	4.	20.	4.1	7.4
9	5.3	9.6	17.0	48.0	42.0	0.0	4.	53.	1.9	7.2
10	5.2	0.0	22.0	28.0	27.0	0.0	5.	30.	1.8	0.0
11	5.3	9.5	56.0	100.0	66.0	0.0	5.	30.	3.0	10.9
12	5.2	9.5	30.0	60.0	46.0	0.0	4.	25.	3.0	10.6
13	5.2	9.5	46.0	87.0	47.0	0.0	4.	25.	1.9	14.5
14	5.2	9.5	24.0	61.0	47.0	0.0	4.	5.	6.1	16.5
15	5.2	9.5	15.0	27.0	17.0	0.0	4.	25.	3.6	11.3
16	5.2	9.6	30.0	0.0	0.0	33.0	4.	10.	1.9	10.6
17	5.2	0.0	10.0	30.0	20.0	0.0	5.	40.	1.6	0.0
18	5.2	9.6	23.0	33.0	26.0	0.0	4.	20.	1.3	3.4
19	5.3	9.6	26.0	49.0	30.0	0.0	4.	10.	1.5	12.2
20	5.2	0.0	12.0	19.0	9.0	0.0	3.	5.	3.9	0.0
MEAN	5.3	9.6	24.0	49.8	33.3	33.0	4.	24.	2.6	11.4
STD DEV	.1	.1	11.8	26.5	16.1	0.0	1.	19.	1.2	3.2

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA HORSE CR.

DATE 2 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
*****										
1	5.4	10.3	0.0	0.0	0.0	0.0	0.	0.	4.6	9.6
2	5.4	10.5	0.0	0.0	0.0	0.0	0.	0.	3.6	8.0
3	5.6	10.4	0.0	0.0	0.0	0.0	0.	0.	2.8	10.5
4	5.5	10.4	0.0	0.0	0.0	0.0	0.	0.	2.6	17.1
5	5.6	10.3	0.0	0.0	0.0	0.0	0.	0.	2.2	6.9
6	5.5	10.5	0.0	0.0	0.0	0.0	0.	0.	3.3	9.7
7	5.5	10.3	0.0	0.0	0.0	0.0	0.	0.	4.0	18.2
8	5.4	0.0	0.0	0.0	0.0	0.0	0.	0.	2.7	0.0
9	5.4	10.3	0.0	0.0	0.0	0.0	0.	0.	4.0	7.2
10	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	2.8	0.0
11	5.6	10.4	0.0	0.0	0.0	0.0	0.	0.	3.1	18.4
12	5.5	10.4	0.0	0.0	0.0	0.0	0.	0.	1.9	7.7
13	5.5	10.3	0.0	0.0	0.0	0.0	0.	0.	1.7	5.2
14	5.6	10.4	0.0	0.0	0.0	0.0	0.	0.	4.8	14.2
15	5.4	10.3	0.0	0.0	0.0	0.0	0.	0.	4.7	12.0
16	5.6	10.3	0.0	0.0	0.0	0.0	0.	0.	2.3	13.0
17	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	2.2	0.0
18	5.5	10.5	0.0	0.0	0.0	0.0	0.	0.	3.3	14.0
19	5.6	10.4	0.0	0.0	0.0	0.0	0.	0.	3.2	11.0
20	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	4.2	0.0
MEAN	5.5	10.4	0.0	0.0	0.0	0.0	0.	0.	3.2	11.4
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.9	4.1

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA HORSE CR.

DATE 21 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH	
*****											
1	5.7	11.0	0.0	0.0	0.0	0.0	0.	0.	2.6	11.9	
2	5.6	11.4	0.0	0.0	0.0	0.0	0.	0.	3.4	13.1	APHID PREDATION
3	5.7	10.9	0.0	0.0	0.0	0.0	0.	0.	2.1	11.3	
4	5.7	11.6	0.0	0.0	0.0	0.0	0.	0.	1.9	14.4	
5	5.7	11.4	0.0	0.0	0.0	0.0	0.	0.	2.2	9.1	
6	5.6	11.7	0.0	0.0	0.0	0.0	0.	0.	2.0	12.6	
7	5.6	11.8	0.0	0.0	0.0	0.0	0.	0.	2.3	7.2	
8	5.7	11.5	0.0	0.0	0.0	0.0	0.	0.	2.2	7.0	
9	5.7	11.3	0.0	0.0	0.0	0.0	0.	0.	3.0	9.0	
10	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	1.5	0.0	
11	5.8	11.6	0.0	0.0	0.0	0.0	0.	0.	1.8	19.4	
12	5.6	11.3	0.0	0.0	0.0	0.0	0.	0.	2.7	8.0	
13	5.7	11.7	0.0	0.0	0.0	0.0	0.	0.	2.6	7.1	
14	5.6	11.8	0.0	0.0	0.0	0.0	0.	0.	5.7	13.9	
15	5.7	11.7	0.0	0.0	0.0	0.0	0.	0.	4.0	11.1	
16	5.6	11.4	0.0	0.0	0.0	0.0	0.	0.	2.1	10.8	
17	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	2.4	0.0	
18	5.7	11.8	0.0	0.0	0.0	0.0	0.	0.	2.6	13.0	
19	5.8	11.7	0.0	0.0	0.0	0.0	0.	0.	1.7	11.8	
20	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	4.1	0.0	
MEAN	5.7	11.5	0.0	0.0	0.0	0.0	0.	0.	2.6	11.2	
STD DEV	.1	.3	0.0	0.0	0.0	0.0	0.	0.	1.0	3.2	

0.0 = NOT RECORDED



ARTEMISIA NOVA

STUDY AREA OWL DRAW

DATE 5

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLH	NEW SEED STALK LNGLH
*****										
1	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA OWL DRAW

DATE 25

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
*****										
1	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA OWL DRAW

DATE 12

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGTH	NEW SEED STALK LNGTH
1	3.3	0.0	9.0	14.0	12.0	0.0	3.	5.	0.0	0.0
2	3.3	0.0	11.0	16.0	14.0	0.0	4.	30.	0.0	0.0
3	3.4	0.0	12.0	16.0	9.0	0.0	4.	10.	0.0	0.0
4	3.3	0.0	13.0	32.0	24.0	0.0	4.	10.	0.0	0.0
5	3.4	0.0	8.0	17.0	11.0	0.0	4.	5.	0.0	0.0
6	3.4	0.0	9.0	29.0	15.0	0.0	5.	25.	0.0	0.0
7	3.5	0.0	16.0	26.0	15.0	0.0	4.	5.	0.0	0.0
8	3.4	0.0	10.0	21.0	22.0	0.0	4.	5.	0.0	0.0
9	3.3	0.0	17.0	34.0	19.0	0.0	4.	10.	0.0	0.0
10	3.4	0.0	8.0	17.0	14.0	0.0	5.	50.	0.0	0.0
11	3.3	0.0	8.0	41.0	13.0	0.0	5.	35.	0.0	0.0
12	3.3	0.0	10.0	26.0	21.0	0.0	5.	30.	0.0	0.0
13	3.3	0.0	12.0	26.0	17.0	0.0	4.	25.	0.0	0.0
14	3.2	0.0	8.0	28.0	20.0	0.0	5.	20.	0.0	0.0
15	3.3	0.0	17.0	56.0	34.0	0.0	4.	10.	0.0	0.0
16	3.2	0.0	5.0	25.0	15.0	0.0	5.	50.	0.0	0.0
17	3.2	0.0	11.0	34.0	21.0	0.0	4.	5.	0.0	0.0
18	3.3	0.0	17.0	45.0	28.0	0.0	4.	20.	0.0	0.0
19	3.2	0.0	12.0	17.0	18.0	0.0	4.	15.	0.0	0.0
20	3.4	0.0	5.0	10.0	7.0	0.0	2.	5.	0.0	0.0
MEAN	3.3	0.0	10.9	26.5	17.5	0.0	4.	19.	0.0	0.0
STD DEV	.1	0.0	3.7	11.5	6.5	0.0	1.	15.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA OWL DRAW

DATE 28

JUNE 1979

PLANT ND.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG.	NEW SEED STALK LNTH	NEW SEED LNTH
1	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0	
2	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0	
3	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0	
4	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0	
5	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0	
6	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0	
7	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	3.5	
8	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	3.0	
9	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	4.8	
10	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0	
11	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0	
12	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0	
13	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0	
14	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0	
15	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	4.2	
16	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0	
17	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0	
18	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0	
19	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0	
20	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0	
									.1	0.0	
MEAN	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.9	
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	.8	

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA OWL DRAW

DATE 19

JULY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LGNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LGNTH	NEW SEED STALK LGNTH
1	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	1.3	0.0
2	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
3	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
4	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	0.0
5	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
6	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
7	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	0.0
8	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
9	4.3	9.5	0.0	0.0	0.0	0.0	0.	0.	.2	4.2
10	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
11	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.7	0.0
12	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
13	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
14	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
15	4.3	9.4	0.0	0.0	0.0	0.0	0.	0.	.2	3.3
16	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
17	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.7	0.0
18	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
19	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
20	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
MEAN	4.3	9.5	0.0	0.0	0.0	0.0	0.	0.	.4	3.8
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.3	.6

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA OWL DRAW

DATE 10

AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
1	5.3	0.0	9.0	14.0	12.0	0.0	4.	5.	1.2	0.0
2	5.3	0.0	13.0	18.0	12.0	0.0	4.	40.	.4	0.0
3	5.3	0.0	12.0	17.0	19.0	0.0	4.	10.	.4	0.0
4	5.3	9.6	14.0	38.0	16.0	0.0	4.	10.	.8	4.1
5	5.3	0.0	7.0	16.0	9.0	0.0	4.	5.	.5	0.0
6	5.3	0.0	7.0	28.0	13.0	0.0	5.	40.	.6	0.0
7	5.3	0.0	16.0	28.0	19.0	0.0	4.	10.	.7	0.0
8	5.2	0.0	11.0	21.0	20.0	0.0	4.	5.	.2	0.0
9	5.3	9.6	12.0	33.0	15.0	0.0	4.	15.	.6	5.5
10	5.4	0.0	9.0	17.0	12.0	0.0	4.	20.	.2	0.0
11	5.3	0.0	8.0	27.0	13.0	0.0	5.	5.	1.1	0.0
12	5.3	0.0	8.0	24.0	13.0	0.0	5.	15.	.1	0.0
13	5.3	0.0	8.0	33.0	30.0	0.0	5.	25.	.3	0.0
14	5.3	0.0	9.0	28.0	20.0	0.0	5.	10.	.1	0.0
15	5.3	9.5	10.0	57.0	29.0	0.0	4.	10.	.5	0.0
16	5.4	0.0	6.0	21.0	12.0	0.0	5.	30.	.2	0.0
17	5.3	0.0	10.0	30.0	20.0	0.0	4.	5.	.1	0.0
18	5.3	0.0	16.0	39.0	33.0	0.0	4.	20.	.5	0.0
19	5.3	0.0	11.0	25.0	19.0	0.0	4.	15.	.9	0.0
20	5.3	0.0	5.0	9.0	6.0	0.0	3.	5.	.2	0.0
MEAN	5.3	9.6	10.1	26.2	17.1	0.0	4.	15.	.5	4.8
STD DEV	.0	.1	3.1	10.8	7.1	0.0	1.	11.	.3	1.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA OWL DRAW

DATE 1 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
1	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	2.0	0.0
2	6.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.5	0.0
3	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
4	6.1	9.8	0.0	0.0	0.0	0.0	0.	0.	.8	3.4
5	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
6	6.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
7	6.1	9.8	0.0	0.0	0.0	0.0	0.	0.	.8	3.5
8	6.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
9	6.0	9.7	0.0	0.0	0.0	0.0	0.	0.	.3	4.1
10	6.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
11	6.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
12	6.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
13	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
14	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
15	6.1	9.8	0.0	0.0	0.0	0.0	0.	0.	.5	6.9
16	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
17	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
18	6.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.0	0.0
19	6.1	9.7	0.0	0.0	0.0	0.0	0.	0.	.5	2.8
20	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
MEAN	6.1	9.8	0.0	0.0	0.0	0.0	0.	0.	.7	4.1
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.4	1.6

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA OWL DRAW

DATE 23 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
*****										
1	6.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
2	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.7	0.0
3	6.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	0.0
4	6.3	14.4	0.0	0.0	0.0	0.0	0.	0.	.6	4.1
5	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
6	6.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
7	6.2	9.4	0.0	0.0	0.0	0.0	0.	0.	.7	3.6
8	6.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.7	0.0
9	6.2	14.3	0.0	0.0	0.0	0.0	0.	0.	.8	5.2
10	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
11	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
12	6.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	0.0
13	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
14	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.7	0.0
15	6.2	14.8	0.0	0.0	0.0	0.0	0.	0.	.5	7.1
16	6.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
17	6.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	0.0
18	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
19	6.3	14.3	0.0	0.0	0.0	0.0	0.	0.	.5	2.5
20	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
MEAN	6.2	13.4	0.0	0.0	0.0	0.0	0.	0.	.7	4.5
STD DEV	.1	2.3	0.0	0.0	0.0	0.0	0.	0.	.2	1.7

0.0 = NOT RECORDED



ARTEMISIA NOVA

STUDY AREA SWEETWATER

DATE 5 MAY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
*****										
1	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA SWEETWATER

DATE 23

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGLTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLTH	NEW SEED STALK LNGLTH
1	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA SWEETWATER

DATE 6

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
*****										
1	3.1	0.0	20.0	87.0	37.0	0.0	4.	15.	0.0	0.0
2	3.2	0.0	15.0	69.0	37.0	0.0	4.	35.	0.0	0.0
3	3.2	0.0	14.0	39.0	29.0	0.0	4.	20.	0.0	0.0
4	3.1	0.0	12.0	39.0	28.0	0.0	4.	5.	0.0	0.0
5	3.3	0.0	7.0	9.0	5.0	0.0	4.	5.	0.0	0.0
6	3.3	0.0	11.0	32.0	15.0	0.0	4.	5.	0.0	0.0
7	3.2	0.0	13.0	19.0	11.0	0.0	5.	85.	0.0	0.0
8	3.1	0.0	7.0	11.0	7.0	0.0	5.	95.	0.0	0.0
9	3.2	0.0	16.0	58.0	35.0	0.0	4.	20.	0.0	0.0
10	3.2	0.0	11.0	21.0	11.0	0.0	4.	45.	0.0	0.0
11	3.1	0.0	13.0	39.0	25.0	0.0	4.	5.	0.0	0.0
12	3.2	0.0	12.0	29.0	15.0	0.0	4.	15.	0.0	0.0
13	3.2	0.0	16.0	69.0	49.0	0.0	4.	5.	0.0	0.0
14	3.3	0.0	6.0	15.0	10.0	0.0	3.	5.	0.0	0.0
15	3.2	0.0	7.0	17.0	6.0	0.0	5.	85.	0.0	0.0
16	3.1	0.0	5.0	13.0	7.0	0.0	5.	85.	0.0	0.0
17	3.1	0.0	12.0	31.0	11.0	0.0	4.	75.	0.0	0.0
18	3.2	0.0	9.0	45.0	18.0	0.0	4.	60.	0.0	0.0
19	3.2	0.0	18.0	54.0	24.0	0.0	4.	5.	0.0	0.0
20	3.3	0.0	11.0	39.0	22.0	0.0	4.	10.	0.0	0.0
MEAN	3.2	0.0	11.8	36.8	20.1	0.0	4.	34.	0.0	0.0
STD DEV	.1	0.0	4.1	21.7	12.5	0.0	0.	34.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA SWEETWATER

DATE 26

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
1	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	9.4
2	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	11.2
3	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	8.5
4	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	7.5
5	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	4.7
6	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	7.4
7	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	3.9
8	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	3.5
9	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	8.9
10	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	4.7
11	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	7.5
12	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	7.0
13	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	11.6
14	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	4.7
15	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	2.1
16	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	4.2
18	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	5.7
19	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	7.9
20	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	5.9
MEAN	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	6.6
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	2.6

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA SWEETWATER

DATE 16

JULY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
*****										
1	4.2	9.5	0.0	0.0	0.0	0.0	0.	0.	.2	5.9
2	4.4	9.4	0.0	0.0	0.0	0.0	0.	0.	.3	10.8
3	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	.3	6.4
4	4.3	9.4	0.0	0.0	0.0	0.0	0.	0.	.9	6.9
5	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
6	4.4	9.5	0.0	0.0	0.0	0.0	0.	0.	1.4	4.4
7	4.3	9.3	0.0	0.0	0.0	0.0	0.	0.	.2	6.1
8	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	.2	3.6
9	4.4	9.5	0.0	0.0	0.0	0.0	0.	0.	1.1	9.3
10	4.4	9.4	0.0	0.0	0.0	0.0	0.	0.	.2	6.4
11	4.3	9.4	0.0	0.0	0.0	0.0	0.	0.	.4	5.2
12	4.3	9.5	0.0	0.0	0.0	0.0	0.	0.	.5	10.1
13	4.4	9.4	0.0	0.0	0.0	0.0	0.	0.	.3	5.2
14	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.2	0.0
15	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
16	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
17	4.4	9.4	0.0	0.0	0.0	0.0	0.	0.	1.7	7.1
18	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	.6	7.1
19	4.4	9.4	0.0	0.0	0.0	0.0	0.	0.	.5	8.2
20	4.3	9.4	0.0	0.0	0.0	0.0	0.	0.	.5	9.4
MEAN	4.4	9.4	0.0	0.0	0.0	0.0	0.	0.	.6	7.0
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.5	2.1

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA SWEETWATER

DATE 8 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG	NEW SEED STALK LENGTH
*****										
1	5.2	9.7	11.0	50.0	28.0	0.0	4.	15.	1.6	7.1
2	5.1	9.7	14.0	23.0	12.0	0.0	4.	30.	1.2	9.1
3	5.2	9.7	12.0	36.0	32.0	0.0	4.	20.	1.1	6.2
4	5.3	9.7	12.0	37.0	34.0	0.0	4.	10.	1.5	7.8
5	5.3	0.0	6.0	9.0	5.0	0.0	3.	5.	.2	0.0
6	5.2	9.2	12.0	27.0	19.0	0.0	4.	5.	1.5	9.4
7	5.3	9.7	12.0	32.0	16.0	0.0	4.	75.	.3	6.4
8	5.2	9.7	3.8	17.0	8.0	0.0	5.	60.	1.1	5.5
9	5.3	9.7	17.0	56.0	38.0	0.0	4.	25.	1.1	10.4
10	5.3	9.7	10.0	18.0	13.0	0.0	5.	20.	.9	7.0
11	5.3	9.7	12.0	33.0	28.0	0.0	4.	5.	.9	8.4
12	5.2	9.8	10.0	32.0	18.0	0.0	4.	15.	.6	3.8
13	5.2	0.0	12.0	65.0	49.0	0.0	4.	10.	.5	0.0
14	5.3	9.5	6.0	14.0	13.0	0.0	3.	5.	1.7	3.0
15	5.3	0.0	6.0	30.0	16.0	0.0	5.	60.	1.1	0.0
16	5.1	9.6	4.0	13.0	11.0	0.0	5.	75.	1.1	10.7
17	5.3	9.7	10.0	42.0	17.0	0.0	4.	10.	.6	7.8
18	5.3	9.7	10.0	0.0	0.0	15.0	4.	20.	.6	4.6
19	5.1	9.7	16.0	49.0	28.0	0.0	4.	5.	1.0	9.6
20	5.1	9.7	10.0	36.0	26.0	0.0	4.	10.	.7	7.6
MEAN	5.2	9.7	10.3	32.6	21.6	7.5	4.	24.	1.0	7.3
STD DEV	.1	.1	3.6	15.2	11.4	10.6	1.	24.	.4	2.2

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA SWEETWATER

DATE 2 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
1	7.2	9.8	0.0	0.0	0.0	0.0	0.	0.	1.2	6.0
2	7.2	9.8	0.0	0.0	0.0	0.0	0.	0.	.5	10.8
3	7.1	10.4	0.0	0.0	0.0	0.0	0.	0.	1.3	8.0
4	7.0	10.2	0.0	0.0	0.0	0.0	0.	0.	.8	8.9
5	7.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
6	7.3	10.1	0.0	0.0	0.0	0.0	0.	0.	.5	9.0
7	7.1	10.1	0.0	0.0	0.0	0.0	0.	0.	.3	6.1
8	7.2	9.8	0.0	0.0	0.0	0.0	0.	0.	.8	5.1
9	7.2	10.0	0.0	0.0	0.0	0.0	0.	0.	1.1	10.0
10	7.2	9.9	0.0	0.0	0.0	0.0	0.	0.	.5	5.9
11	7.3	10.8	0.0	0.0	0.0	0.0	0.	0.	.7	8.1
12	7.0	11.2	0.0	0.0	0.0	0.0	0.	0.	.5	11.1
13	7.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.7	0.0
14	7.2	9.8	0.0	0.0	0.0	0.0	0.	0.	1.5	2.8
15	7.2	9.8	0.0	0.0	0.0	0.0	0.	0.	.7	7.8
16	7.2	9.8	0.0	0.0	0.0	0.0	0.	0.	.8	10.8
17	7.2	9.8	0.0	0.0	0.0	0.0	0.	0.	1.1	7.5
18	7.2	10.0	0.0	0.0	0.0	0.0	0.	0.	.4	7.4
19	7.2	10.1	0.0	0.0	0.0	0.0	0.	0.	1.0	8.0
20	7.2	9.8	0.0	0.0	0.0	0.0	0.	0.	1.1	6.2

MEAN	7.2	10.1	0.0	0.0	0.0	0.0	0.	0.	.8	7.7
STD DEV	.1	.4	0.0	0.0	0.0	0.0	0.	0.	.3	2.2

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA SWEETWATER

DATE 29 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
*****										
1	7.7	12.8	0.0	0.0	0.0	0.0	0.	0.	1.2	5.9
2	7.7	12.6	0.0	0.0	0.0	0.0	0.	0.	1.9	7.3
3	7.6	12.7	0.0	0.0	0.0	0.0	0.	0.	1.5	8.2
4	7.5	12.6	0.0	0.0	0.0	0.0	0.	0.	1.9	8.8
5	7.7	0.0	0.0	0.0	0.0	0.0	0.	0.	.7	0.0
6	7.7	12.6	0.0	0.0	0.0	0.0	0.	0.	1.5	8.3
7	7.6	12.5	0.0	0.0	0.0	0.0	0.	0.	.6	6.7
8	7.6	12.6	0.0	0.0	0.0	0.0	0.	0.	1.0	3.6
9	7.7	12.5	0.0	0.0	0.0	0.0	0.	0.	1.5	5.6
10	7.6	12.5	0.0	0.0	0.0	0.0	0.	0.	.4	6.9
11	7.7	12.6	0.0	0.0	0.0	0.0	0.	0.	1.1	6.3
12	7.7	14.2	0.0	0.0	0.0	0.0	0.	0.	.9	8.4
13	7.6	12.6	0.0	0.0	0.0	0.0	0.	0.	.6	4.5
14	7.7	12.6	0.0	0.0	0.0	0.0	0.	0.	1.6	3.1
15	7.6	0.0	0.0	0.0	0.0	0.0	0.	0.	1.0	0.0
16	7.6	12.5	0.0	0.0	0.0	0.0	0.	0.	1.1	11.0
17	7.7	12.7	0.0	0.0	0.0	0.0	0.	0.	1.2	9.4
18	7.7	13.1	0.0	0.0	0.0	0.0	0.	0.	1.5	7.6
19	7.7	12.5	0.0	0.0	0.0	0.0	0.	0.	1.9	10.4
20	7.6	12.6	0.0	0.0	0.0	0.0	0.	0.	1.2	6.9
MEAN	7.6	12.7	0.0	0.0	0.0	0.0	0.	0.	1.2	7.2
STD DEV	.1	.4	0.0	0.0	0.0	0.0	0.	0.	.4	2.1

0.0 = NOT RECORDED



ARTEMISIA TRIDENTATA

STUDY AREA BUD KIMBAL

DATE 29

APRIL 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
*****										
1	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA BUD KIMBAL

DATE 24

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
1	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA BUD KIMBAL

DATE 11

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
1	3.2	0.0	17.0	22.0	16.0	0.0	4.	15.	0.0	0.0
2	3.4	0.0	11.0	18.0	12.0	0.0	3.	5.	0.0	0.0
3	3.3	0.0	12.0	22.0	8.0	0.0	5.	85.	0.0	0.0
4	3.3	0.0	18.0	34.0	19.0	0.0	4.	5.	0.0	0.0
5	3.3	0.0	42.0	69.0	26.0	0.0	4.	10.	0.0	0.0
6	3.2	0.0	22.0	41.0	19.0	0.0	4.	15.	0.0	0.0
7	3.2	0.0	16.0	0.0	0.0	11.0	3.	5.	0.0	0.0
8	3.3	0.0	34.0	69.0	35.0	0.0	4.	20.	0.0	0.0
9	3.3	0.0	12.0	34.0	13.0	0.0	4.	15.	0.0	0.0
10	3.3	0.0	17.0	26.0	9.0	0.0	4.	65.	0.0	0.0
11	3.2	0.0	29.0	0.0	0.0	37.0	4.	5.	0.0	0.0
12	3.3	0.0	11.0	0.0	0.0	11.0	3.	5.	0.0	0.0
13	3.3	0.0	13.0	0.0	0.0	16.0	3.	5.	0.0	0.0
14	3.4	0.0	28.0	34.0	19.0	0.0	3.	5.	0.0	0.0
15	3.3	0.0	27.0	0.0	0.0	28.0	4.	5.	0.0	0.0
16	3.3	0.0	24.0	0.0	0.0	16.0	3.	5.	0.0	0.0
17	3.4	0.0	53.0	59.0	33.0	0.0	4.	15.	0.0	0.0
18	3.3	0.0	65.0	109.0	43.0	0.0	4.	60.	0.0	0.0
19	3.3	0.0	42.0	84.0	22.0	0.0	5.	80.	0.0	0.0
20	3.2	0.0	16.0	25.0	10.0	0.0	3.	5.	0.0	0.0
MEAN	3.3	0.0	25.5	46.1	20.3	19.8	4.	22.	0.0	0.0
STD DEV	.1	0.0	15.0	27.6	10.6	10.5	1.	27.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA BUD KIMBAL

DATE 27

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
1	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	8.2
2	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
3	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	0.0
4	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
5	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.4	0.0
6	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	.2	7.9
7	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
8	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	.3	11.1
9	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
10	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
11	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
12	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
13	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
14	4.4	9.0	0.0	0.0	0.0	0.0	0.	0.	8.9	15.5
15	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	.3	9.7
16	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	10.9
17	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	.2	5.5
18	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	7.1
19	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.2	0.0
20	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	3.2	0.0
MEAN	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	.9	9.5
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	2.0	3.1

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA BUD KIMBAL

DATE 17

JULY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
1	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	1.2	8.2
2	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.8	0.0
3	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.6	0.0
4	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	1.0	4.5
5	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	.6	3.4
6	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	2.2	7.2
7	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
8	4.6	9.4	0.0	0.0	0.0	0.0	0.	0.	1.5	9.0
9	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.2	0.0
10	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.5	0.0
11	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.4	0.0
12	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	0.0
13	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
14	4.4	9.4	0.0	0.0	0.0	0.0	0.	0.	4.8	14.7
15	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	2.6	6.4
16	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	1.5	10.8
17	4.4	9.4	0.0	0.0	0.0	0.0	0.	0.	2.1	6.5
18	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	1.1	10.7
19	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.8	0.0
20	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	2.2	5.6
MEAN	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	1.6	7.9
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.9	3.2

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA BUD KIMBAL

DATE 9 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG.	REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
*****											
1	5.4	9.6		23.0	33.0	22.0	0.0	4.	30.	1.6	6.2
2	5.3	0.0		9.0	18.0	17.0	0.0	3.	10.	1.6	0.0
3	5.3	0.0		9.0	30.0	18.0	0.0	5.	75.	1.7	0.0
4	5.3	9.5		20.0	31.0	20.0	0.0	4.	5.	4.0	4.0
5	5.3	0.0		33.0	68.0	38.0	0.0	4.	15.	3.0	0.0
6	5.3	9.4		22.0	39.0	22.0	0.0	4.	10.	1.2	8.5
7	5.4	0.0		15.0	15.0	11.0	0.0	4.	5.	.9	0.0
8	5.3	9.5		29.0	68.0	60.0	0.0	4.	10.	1.8	9.5
9	5.3	0.0		11.0	32.0	18.0	0.0	4.	15.	2.0	0.0
10	5.3	0.0		17.0	24.0	13.0	0.0	4.	55.	3.5	0.0
11	5.3	0.0		26.0	50.0	40.0	0.0	4.	5.	2.1	0.0
12	5.3	0.0		11.0	11.0	9.0	0.0	4.	5.	.4	0.0
13	5.3	0.0		12.0	24.0	19.0	0.0	4.	5.	1.5	0.0
14	5.3	9.5		24.0	28.0	23.0	0.0	3.	5.	5.6	14.7
15	5.3	9.4		23.0	32.0	21.0	0.0	4.	10.	3.6	7.7
16	5.3	0.0		17.0	17.0	11.0	0.0	4.	10.	2.8	0.0
17	5.3	9.5		45.0	55.0	42.0	0.0	4.	10.	1.5	4.7
18	5.3	9.5		59.0	102.0	86.0	0.0	4.	30.	2.8	6.3
19	5.3	0.0		22.0	29.0	14.0	0.0	4.	5.	3.1	0.0
20	5.3	9.5		16.0	30.0	9.0	0.0	4.	15.	1.6	5.1
MEAN	5.3	9.5		22.2	36.8	25.7	0.0	4.	17.	2.3	7.6
STD DEV	.0	.1		12.4	22.1	19.3	0.0	0.	18.	1.2	3.3

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA BUD KIMBAL

DATE 1 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
*****										
1	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	2.2	0.0
2	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.4	0.0
3	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.9	0.0
4	5.5	10.2	0.0	0.0	0.0	0.0	0.	0.	2.1	4.2
5	5.4	10.4	0.0	0.0	0.0	0.0	0.	0.	2.1	3.8
6	5.5	10.3	0.0	0.0	0.0	0.0	0.	0.	1.8	8.8
7	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	2.8	0.0
8	5.5	10.5	0.0	0.0	0.0	0.0	0.	0.	2.9	9.0
9	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	2.2	0.0
10	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	3.1	0.0
11	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	3.2	0.0
12	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	1.4	0.0
13	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	3.6	0.0
14	5.5	10.5	0.0	0.0	0.0	0.0	0.	0.	5.2	16.2
15	5.5	10.7	0.0	0.0	0.0	0.0	0.	0.	3.0	8.0
16	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	3.2	0.0
17	5.5	10.4	0.0	0.0	0.0	0.0	0.	0.	3.0	5.0
18	5.5	10.4	0.0	0.0	0.0	0.0	0.	0.	2.9	12.0
19	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.7	0.0
20	5.4	0.0	0.0	0.0	0.0	0.0	0.	0.	4.0	0.0
MEAN	5.5	10.4	0.0	0.0	0.0	0.0	0.	0.	2.7	8.4
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.9	4.2

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA BUD KIMBAL

DATE 22 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LGNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGNTH	NEW SEED STALK LGNTH	
*****											
1	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	3.2	0.0	
2	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	1.4	0.0	
3	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	2.1	0.0	
4	5.5	11.7	0.0	0.0	0.0	0.0	0.	0.	2.2	3.6	INSECT DAMAGED
5	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	1.8	0.0	
6	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	2.2	0.0	
7	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	1.7	0.0	
8	5.6	11.9	0.0	0.0	0.0	0.0	0.	0.	3.1	10.3	INSECT DAMAGED
9	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	2.2	0.0	
10	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	3.0	0.0	
11	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	3.3	0.0	
12	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	1.4	0.0	
13	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	2.2	0.0	
14	5.6	9.6	0.0	0.0	0.0	0.0	0.	0.	2.3	3.6	INSECT DAMAGED
15	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	2.6	6.6	INSECT DAMAGED
16	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	2.8	0.0	
17	5.6	11.2	0.0	0.0	0.0	0.0	0.	0.	3.1	5.2	
18	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	2.3	0.0	
19	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	2.8	0.0	
20	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	3.6	0.0	
MEAN	5.6	11.1	0.0	0.0	0.0	0.0	0.	0.	2.5	5.9	
STD DEV	.1	1.0	0.0	0.0	0.0	0.0	0.	0.	.6	2.8	

0.0 = NOT RECORDED



ARTEMISIA TRIDENTATA

STUDY AREA CEDAR MTN

DATE 6

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LENGH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW TWIG VEG.	NEW SEED STALK LENGH	
*****											
1	3.0	0.0	12.0	0.0	0.0	13.0	3.	0.	0.0	0.0	
2	3.1	0.0	15.0	42.0	10.0	0.0	5.	50.	0.0	0.0	
3	3.1	0.0	18.0	26.0	13.0	0.0	4.	20.	0.0	0.0	
4	3.1	0.0	39.0	0.0	0.0	45.0	4.	10.	0.0	0.0	
5	3.1	0.0	7.0	0.0	0.0	10.0	2.	0.	0.0	0.0	
6	3.1	0.0	23.0	0.0	0.0	29.0	4.	0.	0.0	0.0	
7	3.2	0.0	40.0	0.0	0.0	55.0	4.	7.	0.0	0.0	
8	3.2	0.0	23.0	0.0	0.0	30.0	4.	3.	0.0	0.0	
9	3.2	0.0	41.0	85.0	38.0	0.0	4.	45.	0.0	0.0	
10	3.1	0.0	48.0	0.0	0.0	92.0	4.	15.	0.0	0.0	
11	3.1	0.0	49.0	0.0	0.0	71.0	4.	10.	0.0	0.0	
12	3.2	0.0	30.0	0.0	0.0	40.0	4.	2.	0.0	0.0	
13	3.1	0.0	41.0	0.0	0.0	91.0	4.	5.	0.0	0.0	
14	3.1	0.0	22.0	70.0	33.0	0.0	4.	20.	0.0	0.0	
15	3.1	0.0	29.0	0.0	0.0	40.0	3.	20.	0.0	0.0	
16	3.2	0.0	19.0	0.0	0.0	28.0	3.	5.	0.0	0.0	
17	3.1	0.0	38.0	0.0	0.0	73.0	4.	15.	0.0	0.0	
18	3.2	0.0	20.0	0.0	0.0	16.0	2.	0.	0.0	0.0	
19	3.1	0.0	40.0	46.0	25.0	0.0	4.	25.	0.0	0.0	
20	3.1	0.0	39.0	0.0	0.0	73.0	4.	5.	0.0	0.0	
MEAN	3.1	0.0	29.7	53.8	23.8	47.1	4.	16.	0.0	0.0	
STD DEV	.1	0.0	12.5	23.5	12.2	27.4	1.	14.	0.0	0.0	

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CEDAR MTN

DATE 25

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LGNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGNTH	NEW SEED STALK LGNTH
*****										
1	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CEDAR MTN

DATE 4

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LGNTH	NEW SEED STALK LGNTH
1	3.3	0.0	12.0	15.0	14.0	0.0	3.	10.	0.0	0.0
2	3.1	0.0	20.0	42.0	18.0	0.0	5.	60.	0.0	0.0
3	3.6	0.0	32.0	42.0	21.0	0.0	3.	5.	0.0	0.0
4	3.2	0.0	10.0	10.0	9.0	0.0	2.	5.	0.0	0.0
5	3.5	0.0	19.0	28.0	15.0	0.0	4.	15.	0.0	0.0
6	3.4	0.0	24.0	27.0	18.0	0.0	3.	10.	0.0	0.0
7	3.5	0.0	32.0	48.0	22.0	0.0	4.	10.	0.0	0.0
8	3.5	0.0	25.0	37.0	33.0	0.0	4.	5.	0.0	0.0
9	3.6	0.0	33.0	86.0	55.0	0.0	4.	30.	0.0	0.0
10	3.4	0.0	50.0	83.0	74.0	0.0	4.	10.	0.0	0.0
11	3.3	0.0	46.0	88.0	56.0	0.0	4.	10.	0.0	0.0
12	3.3	0.0	11.0	13.0	7.0	0.0	3.	5.	0.0	0.0
13	3.5	0.0	41.0	89.0	60.0	0.0	4.	10.	0.0	0.0
14	3.3	0.0	22.0	42.0	25.0	0.0	3.	5.	0.0	0.0
15	3.5	0.0	19.0	30.0	21.0	0.0	4.	15.	0.0	0.0
16	3.4	0.0	27.0	39.0	16.0	0.0	4.	10.	0.0	0.0
17	3.3	0.0	42.0	87.0	83.0	0.0	4.	15.	0.0	0.0
18	3.5	0.0	24.0	0.0	0.0	17.0	2.	5.	0.0	0.0
19	3.6	0.0	41.0	46.0	32.0	0.0	4.	30.	0.0	0.0
20	3.5	0.0	37.0	77.0	58.0	0.0	4.	10.	0.0	0.0
MEAN	3.4	0.0	28.4	48.9	33.5	17.0	4.	14.	0.0	0.0
STD DEV	.1	0.0	11.8	27.4	23.2	0.0	1.	13.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CEDAR MTN

DATE 24

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW TWIG VEG.	NEW SEED STALK LGTH
*****										
1	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
2	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.7	3.1
3	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.7
4	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	2.5
5	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	2.5	9.5
6	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	.3	9.3
7	4.0	9.2	0.0	0.0	0.0	0.0	0.	0.	1.0	5.4
8	4.2	9.0	0.0	0.0	0.0	0.0	0.	0.	.2	7.3
9	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	.3	13.6
10	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	.5	9.0
11	4.3	9.0	0.0	0.0	0.0	0.0	0.	0.	3.0	9.5
12	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.6	0.0
13	4.2	9.0	0.0	0.0	0.0	0.0	0.	0.	2.7	11.9
14	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	2.4	8.1
15	4.3	9.0	0.0	0.0	C.C	0.0	0.	0.	2.5	10.2
16	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	.9	11.8
17	4.3	9.1	0.0	0.0	0.0	0.0	0.	0.	3.9	12.5
18	4.3	9.0	0.0	0.0	0.0	0.0	0.	0.	1.8	8.3
19	4.3	9.1	0.0	0.0	0.0	0.0	0.	0.	3.5	7.9
20	4.3	9.1	0.0	0.0	0.0	0.0	0.	0.	3.0	10.1
MEAN	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	1.6	8.3
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	1.3	3.3

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CEDAR MTN

DATE 15

JULY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
1	5.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	0.0
2	5.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	3.6
3	5.2	9.5	0.0	0.0	0.0	0.0	0.	0.	.7	3.1
4	6.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
5	6.1	9.1	0.0	0.0	0.0	0.0	0.	0.	.8	7.0
6	5.7	9.4	0.0	0.0	0.0	0.0	0.	0.	1.1	4.4
7	5.8	9.7	0.0	0.0	0.0	0.0	0.	0.	1.1	7.4
8	5.6	9.3	0.0	0.0	0.0	0.0	0.	0.	.7	8.7
9	5.6	9.4	0.0	0.0	0.0	0.0	0.	0.	1.5	15.1
10	5.7	9.7	0.0	0.0	0.0	0.0	0.	0.	2.5	15.3
11	5.7	9.4	0.0	0.0	0.0	0.0	0.	0.	2.1	11.8
12	5.9	0.0	0.0	0.0	0.0	0.0	0.	0.	2.5	0.0
13	5.8	9.6	0.0	0.0	0.0	0.0	0.	0.	2.6	11.2
14	5.7	9.2	0.0	0.0	0.0	0.0	0.	0.	2.6	9.3
15	5.7	9.3	0.0	0.0	0.0	0.0	0.	0.	2.1	9.5
16	5.6	9.4	0.0	0.0	0.0	0.0	0.	0.	1.5	10.0
17	5.3	9.3	0.0	0.0	0.0	0.0	0.	0.	1.8	12.5
18	6.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
19	6.1	9.4	0.0	0.0	0.0	0.0	0.	0.	1.3	8.1
20	5.6	9.4	0.0	0.0	0.0	0.0	0.	0.	1.2	10.1

MEAN	5.7	9.4	0.0	0.0	0.0	0.0	0.	0.	1.4	9.2
STD DEV	.3	.2	0.0	0.0	0.0	0.0	0.	0.	.8	3.6

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CEDAR MTN

DATE 6 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGLTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLTH	NEW SEED STALK LNGLTH
*****										
1	5.9	0.0	10.0	0.0	0.0	13.0	3.	20.	2.0	0.0
2	5.9	9.8	20.0	23.0	20.0	0.0	5.	70.	.7	2.9
3	5.5	9.5	33.0	41.0	24.0	0.0	4.	10.	.9	5.1
4	6.1	0.0	8.0	9.0	7.0	0.0	3.	5.	1.9	0.0
5	5.8	9.4	18.0	26.0	16.0	0.0	4.	10.	4.1	7.1
6	6.1	9.8	26.0	30.0	26.0	0.0	3.	5.	2.0	5.8
7	5.4	9.8	35.0	50.0	26.0	0.0	4.	10.	2.7	10.6
8	5.8	9.6	26.0	34.0	29.0	0.0	4.	10.	2.9	5.9
9	6.0	9.5	41.0	87.0	39.0	0.0	4.	35.	4.2	7.2
10	5.9	9.7	42.0	92.0	74.0	0.0	4.	10.	3.0	14.5
11	5.8	9.4	41.0	85.0	61.0	0.0	4.	10.	2.4	10.6
12	6.1	0.0	8.0	11.0	6.0	0.0	3.	5.	3.6	0.0
13	5.8	9.8	42.0	92.0	74.0	0.0	4.	5.	2.4	11.2
14	5.9	9.7	27.0	40.0	30.0	0.0	4.	5.	3.1	9.4
15	5.8	9.7	21.0	41.0	30.0	0.0	4.	15.	3.4	9.7
16	5.9	9.7	24.0	33.0	21.0	0.0	4.	10.	4.8	3.9
17	5.9	9.6	39.0	83.0	70.0	0.0	4.	15.	3.4	10.1
18	5.8	9.7	22.0	19.0	14.0	0.0	3.	5.	4.0	9.5
19	5.8	9.7	37.0	38.0	22.0	0.0	4.	20.	3.5	10.1
20	5.8	9.7	35.0	71.0	65.0	0.0	4.	5.	3.1	7.1
MEAN	5.8	9.7	27.8	47.6	34.4	6.5	4.	14.	2.9	8.3
STD DEV	.2	.1	11.4	28.2	22.7	9.2	1.	15.	1.1	3.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CEDAR MTN

DATE 28

AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
*****										
1	6.0	0.0	0.0	0.0	0.0	0.0	0.	0.	2.0	0.0
2	5.9	10.1	0.0	0.0	0.0	0.0	0.	0.	.6	3.2
3	6.0	10.2	0.0	0.0	0.0	0.0	0.	0.	1.8	2.7
4	5.9	0.0	0.0	0.0	0.0	0.0	0.	0.	2.1	0.0
5	5.9	10.3	0.0	0.0	0.0	0.0	0.	0.	2.1	7.8
6	5.9	10.5	0.0	0.0	0.0	0.0	0.	0.	2.3	8.0
7	5.9	10.7	0.0	0.0	0.0	0.0	0.	0.	1.1	9.5
8	5.9	10.1	0.0	0.0	0.0	0.0	0.	0.	2.7	10.2
9	5.9	10.4	0.0	0.0	0.0	0.0	0.	0.	2.5	13.2
10	5.9	10.7	0.0	0.0	0.0	0.0	0.	0.	2.1	14.6
11	5.9	10.8	0.0	0.0	0.0	0.0	0.	0.	2.5	16.5
12	5.9	0.0	0.0	0.0	0.0	0.0	0.	0.	2.1	0.0
13	5.9	11.6	0.0	0.0	0.0	0.0	0.	0.	2.5	8.7
14	5.9	10.9	0.0	0.0	0.0	0.0	0.	0.	2.4	15.1
15	5.9	11.6	0.0	0.0	0.0	0.0	0.	0.	2.1	10.9
16	5.9	10.2	0.0	0.0	0.0	0.0	0.	0.	1.8	8.7
17	5.9	10.1	0.0	0.0	0.0	0.0	0.	0.	2.1	14.4
18	5.9	11.3	0.0	0.0	0.0	0.0	0.	0.	3.1	9.7
19	5.9	11.4	0.0	0.0	0.0	0.0	0.	0.	1.7	9.2
20	5.9	10.3	0.0	0.0	0.0	0.0	0.	0.	1.8	12.9
MEAN	5.9	10.7	0.0	0.0	0.0	0.0	0.	0.	2.1	10.3
STD DEV	.0	.5	0.0	0.0	0.0	0.0	0.	0.	.5	3.9

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CEDAR MTN

DATE 21 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
1	6.4	14.7	0.0	0.0	0.0	0.0	0.	0.	1.1	10.4
2	6.0	14.9	0.0	0.0	0.0	0.0	0.	0.	1.0	3.5
3	6.3	14.5	0.0	0.0	0.0	0.0	0.	0.	.8	3.6
4	6.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.8	0.0
5	6.1	14.6	0.0	0.0	0.0	0.0	0.	0.	2.9	9.2
6	6.1	14.6	0.0	0.0	0.0	0.0	0.	0.	2.1	6.3
7	6.1	14.5	0.0	0.0	0.0	0.0	0.	0.	2.7	7.4
8	6.2	14.8	0.0	0.0	0.0	0.0	0.	0.	1.5	7.9
9	6.2	14.7	0.0	0.0	0.0	0.0	0.	0.	2.7	12.1
10	6.2	14.9	0.0	0.0	0.0	0.0	0.	0.	1.6	15.7
11	6.3	14.5	0.0	0.0	0.0	0.0	0.	0.	2.6	12.0
12	6.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.8	0.0
13	6.1	15.1	0.0	0.0	0.0	0.0	0.	0.	3.2	15.3
14	6.3	14.7	0.0	0.0	0.0	0.0	0.	0.	2.9	7.6
15	6.2	14.8	0.0	0.0	0.0	0.0	0.	0.	2.5	10.9
16	6.1	14.6	0.0	0.0	0.0	0.0	0.	0.	2.8	12.6
17	6.2	14.7	0.0	0.0	0.0	0.0	0.	0.	2.1	12.0
18	6.2	14.8	0.0	0.0	0.0	0.0	0.	0.	2.7	9.8
19	6.3	0.0	0.0	0.0	0.0	0.0	0.	0.	2.1	0.0
20	6.2	14.7	0.0	0.0	0.0	0.0	0.	0.	2.9	13.5
MEAN	6.2	14.7	0.0	0.0	0.0	0.0	0.	0.	2.2	10.0
STD. DEV	.1	.2	0.0	0.0	0.0	0.0	0.	0.	.7	3.6

0.0 = NOT RECORDED



ARTEMISIA TRIDENTATA

STUDY AREA CUMBER 3

DATE 22

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LGHTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LGHTH	NEW SEED STALK LGHTH
*****										
1	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
REPLACED DEAD PLANT										
MEAN	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CUMBER 3

DATE 5 JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LGNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGNTH	NEW SEED STALK LGNTH
1	3.6	0.0	56.0	70.0	61.0	0.0	4.	10.	0.0	0.0
2	3.7	0.0	30.0	25.0	21.0	0.0	4.	15.	0.0	0.0
3	3.4	0.0	34.0	33.0	30.0	0.0	4.	20.	0.0	0.0
4	3.6	0.0	47.0	53.0	35.0	0.0	4.	5.	0.0	0.0
5	3.5	0.0	49.0	52.0	36.0	0.0	4.	40.	0.0	0.0
6	3.5	0.0	55.0	28.0	17.0	0.0	5.	50.	0.0	0.0
7	3.6	0.0	44.0	43.0	31.0	0.0	3.	5.	0.0	0.0
8	3.5	0.0	60.0	63.0	43.0	0.0	4.	15.	0.0	0.0
9	3.6	0.0	16.0	38.0	11.0	0.0	5.	50.	0.0	0.0
10	3.4	0.0	68.0	67.0	38.0	0.0	5.	50.	0.0	0.0
11	3.5	0.0	34.0	36.0	34.0	0.0	5.	30.	0.0	0.0
12	3.4	0.0	56.0	54.0	45.0	0.0	4.	40.	0.0	0.0
13	3.5	0.0	64.0	95.0	67.0	0.0	4.	25.	0.0	0.0
14	3.6	0.0	65.0	0.0	0.0	57.0	4.	5.	0.0	0.0
15	3.3	0.0	57.0	0.0	0.0	43.0	4.	35.	0.0	0.0
16	3.5	0.0	60.0	72.0	26.0	0.0	4.	45.	0.0	0.0
17	3.5	0.0	93.0	109.0	83.0	0.0	4.	10.	0.0	0.0
18	3.5	0.0	43.0	58.0	27.0	0.0	4.	20.	0.0	0.0
19	3.4	0.0	57.0	48.0	33.0	0.0	4.	30.	0.0	0.0
20	3.6	0.0	38.0	59.0	29.0	0.0	4.	35.	0.0	0.0
MEAN	3.5	0.0	51.3	55.7	37.1	50.0	4.	27.	0.0	0.0
STD DEV	.1	0.0	16.6	22.0	17.9	9.9	0.	16.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CUMBER 3

DATE 25

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLTH	NEW SEED STALK LNGLTH
1	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.2	4.2
2	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	2.1	0.0
3	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
4	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	.6	5.8
5	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	6.5
6	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	1.9
7	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	9.0
8	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	5.5
9	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	5.0
10	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
11	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
12	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	4.0
13	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	4.8
14	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.8	5.0
15	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	5.5
16	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.0	6.0
17	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.8	8.1
18	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	6.4
19	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	3.3
20	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	3.8	4.9
MEAN	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	.9	5.4
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	1.7

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CUMBER 3

DATE 15

JULY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LENGH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGH	NEW SEED STALK LENGH
1	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	3.0	11.1
2	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	3.0	0.0
3	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	1.2	0.0
4	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	4.2	8.5
5	4.4	9.1	0.0	0.0	0.0	0.0	0.	0.	5.2	6.1
6	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	2.0	4.6
7	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	2.0	13.0
8	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	3.1	8.1
9	4.3	9.2	0.0	0.0	0.0	0.0	0.	0.	.3	9.2
10	4.3	9.2	0.0	0.0	0.0	0.0	0.	0.	.8	8.3
11	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.7	0.0
12	4.4	9.2	0.0	0.0	0.0	0.0	0.	0.	.6	4.0
13	4.4	9.2	0.0	0.0	0.0	0.0	0.	0.	2.6	8.1
14	4.4	9.2	0.0	0.0	0.0	0.0	0.	0.	2.9	6.3
15	4.6	9.4	0.0	0.0	0.0	0.0	0.	0.	.4	4.5
16	4.4	9.2	0.0	0.0	0.0	0.0	0.	0.	2.1	12.2
17	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	5.0	7.5
18	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	4.8	6.9
19	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	2.0	8.2
20	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	3.1	7.2
MEAN	4.4	8.7	0.0	0.0	0.0	0.0	0.	0.	2.5	7.9
STD DEV	.1	2.2	0.0	0.0	0.0	0.0	0.	0.	1.5	2.5

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CUMBER 3

DATE 7 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LENGH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGH	NEW SEED STALK LENGH
1	5.3	9.5	57.0	69.0	61.0	0.0	4.	10.	4.3	8.2
2	5.4	0.0	32.0	22.0	19.0	0.0	4.	30.	3.3	0.0
3	5.5	0.0	35.0	32.0	29.0	0.0	4.	15.	2.3	0.0
4	5.4	9.6	49.0	51.0	32.0	0.0	4.	10.	4.5	9.2
5	5.5	9.6	76.0	66.0	43.0	0.0	4.	35.	2.4	9.2
6	5.4	9.6	60.0	29.0	17.0	0.0	4.	40.	2.6	4.7
7	5.3	9.5	42.0	46.0	29.0	0.0	4.	15.	3.1	11.8
8	5.3	9.6	58.0	54.0	46.0	0.0	4.	20.	2.5	5.9
9	5.3	9.5	32.0	24.0	10.0	0.0	5.	65.	1.5	9.4
10	5.3	0.0	63.0	65.0	47.0	0.0	4.	50.	2.4	0.0
11	5.3	0.0	34.0	35.0	32.0	0.0	5.	60.	2.2	0.0
12	5.3	9.4	49.0	56.0	45.0	0.0	4.	50.	2.5	7.4
13	5.5	9.5	70.0	136.0	72.0	0.0	4.	35.	2.7	13.4
14	5.3	9.6	66.0	62.0	59.0	0.0	4.	5.	2.5	8.8
15	5.7	9.7	57.0	46.0	46.0	0.0	4.	55.	1.8	3.6
16	5.4	9.5	63.0	79.0	26.0	0.0	4.	45.	3.5	9.2
17	5.5	9.6	97.0	125.0	102.0	0.0	4.	15.	3.1	12.6
18	5.5	9.7	49.0	52.0	33.0	0.0	4.	25.	3.5	7.1
19	5.5	9.5	60.0	49.0	39.0	0.0	4.	30.	4.1	8.7
20	5.3	9.6	32.0	50.0	33.0	0.0	4.	35.	5.5	7.9
MEAN	5.4	9.6	54.1	57.4	41.0	0.0	4.	32.	3.0	8.6
STD DEV	.1	.1	16.9	29.3	21.0	0.0	0.	18.	1.0	2.6

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CUMBER 3

DATE 1 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LENGH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG	NEW SEED STALK LNTH
*****										
1	5.8	10.4	0.0	0.0	0.0	0.0	0.	0.	1.8	8.9
2	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	2.7	0.0
3	5.8	0.0	0.0	0.0	0.0	0.0	0.	0.	2.1	0.0
4	5.8	10.3	0.0	0.0	0.0	0.0	0.	0.	2.6	11.4
5	5.9	10.5	0.0	0.0	0.0	0.0	0.	0.	2.3	6.2
6	5.7	10.6	0.0	0.0	0.0	0.0	0.	0.	1.8	6.1
7	5.8	10.7	0.0	0.0	0.0	0.0	0.	0.	2.6	8.9
8	5.7	10.6	0.0	0.0	0.0	0.0	0.	0.	1.8	8.7
9	5.8	10.4	0.0	0.0	0.0	0.0	0.	0.	2.1	10.3
10	5.9	10.2	0.0	0.0	0.0	0.0	0.	0.	2.4	2.8
11	5.8	0.0	0.0	0.0	0.0	0.0	0.	0.	2.3	0.0
12	5.8	10.2	0.0	0.0	0.0	0.0	0.	0.	2.7	8.1
13	5.8	10.5	0.0	0.0	0.0	0.0	0.	0.	2.5	15.6
14	5.8	10.5	0.0	0.0	0.0	0.0	0.	0.	2.8	10.1
15	5.8	10.4	0.0	0.0	0.0	0.0	0.	0.	.7	4.9
16	5.9	10.6	0.0	0.0	0.0	0.0	0.	0.	2.1	11.2
17	5.7	10.6	0.0	0.0	0.0	0.0	0.	0.	2.1	13.4
18	5.8	10.5	0.0	0.0	0.0	0.0	0.	0.	2.6	7.9
19	5.7	10.3	0.0	0.0	0.0	0.0	0.	0.	2.7	7.6
20	5.9	10.3	0.0	0.0	0.0	0.0	0.	0.	2.4	7.3
MEAN	5.8	10.4	0.0	0.0	0.0	0.0	0.	0.	2.3	8.8
STD DEV	.1	.2	0.0	0.0	0.0	0.0	0.	0.	.5	3.1

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CUMBER 3

DATE 21 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
*****										
1	6.3	14.5	0.0	0.0	0.0	0.0	0.	0.	1.5	7.6
2	6.5	0.0	0.0	0.0	0.0	0.0	0.	0.	2.2	0.0
3	6.6	0.0	0.0	0.0	0.0	0.0	0.	0.	2.4	0.0
4	6.5	14.6	0.0	0.0	0.0	0.0	0.	0.	1.8	8.6
5	6.4	14.7	0.0	0.0	0.0	0.0	0.	0.	6.8	8.7
6	6.2	14.9	0.0	0.0	0.0	0.0	0.	0.	1.5	5.1
7	6.5	14.2	0.0	0.0	0.0	0.0	0.	0.	2.7	10.1
8	6.2	14.8	0.0	0.0	0.0	0.0	0.	0.	2.5	8.9
9	6.3	14.6	0.0	0.0	0.0	0.0	0.	0.	2.5	7.8
10	6.3	14.5	0.0	0.0	0.0	0.0	0.	0.	2.3	2.8
11	6.4	0.0	0.0	0.0	0.0	0.0	0.	0.	2.1	0.0
12	6.1	13.8	0.0	0.0	0.0	0.0	0.	0.	2.0	8.3
13	6.5	14.2	0.0	0.0	0.0	0.0	0.	0.	2.9	14.3
14	6.6	14.3	0.0	0.0	0.0	0.0	0.	0.	2.5	8.1
15	6.4	14.9	0.0	0.0	0.0	0.0	0.	0.	1.5	2.8
16	6.3	14.5	0.0	0.0	0.0	0.0	0.	0.	2.5	12.1
17	6.3	14.8	0.0	0.0	0.0	0.0	0.	0.	2.8	10.0
18	6.2	14.2	0.0	0.0	0.0	0.0	0.	0.	2.0	8.1
19	6.2	14.1	0.0	0.0	0.0	0.0	0.	0.	2.1	9.2
20	6.3	14.3	0.0	0.0	0.0	0.0	0.	0.	2.8	7.2
MEAN	6.4	14.5	0.0	0.0	0.0	0.0	0.	0.	2.5	8.2
STD DEV	.1	.3	0.0	0.0	0.0	0.0	0.	0.	1.1	2.9

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA DEMER

DATE 28

APRIL 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
*****										
1	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED



ARTEMISIA TRIDENTATA

STUDY AREA DEMER

DATE 24

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. LNGLH	NEW SEED STALK LNGLH
*****										
1	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA DEMER

DATE 7

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
*****										
1	3.5	0.0	24.0	43.0	19.0	0.0	4.	10.	0.0	0.0
2	3.4	0.0	32.0	58.0	51.0	0.0	4.	5.	0.0	0.0
3	3.4	0.0	17.0	22.0	34.0	0.0	5.	45.	0.0	0.0
4	3.5	0.0	17.0	43.0	34.0	0.0	4.	15.	0.0	0.0
5	3.5	0.0	20.0	58.0	32.0	0.0	4.	30.	0.0	0.0
6	3.5	0.0	24.0	51.0	28.0	0.0	4.	25.	0.0	0.0
7	3.4	0.0	11.0	17.0	14.0	0.0	5.	55.	0.0	0.0
8	3.5	0.0	23.0	54.0	48.0	0.0	4.	10.	0.0	0.0
9	3.5	0.0	35.0	52.0	29.0	0.0	4.	5.	0.0	0.0
10	3.5	0.0	42.0	77.0	54.0	0.0	4.	5.	0.0	0.0
11	3.5	0.0	48.0	69.0	46.0	0.0	4.	5.	0.0	0.0
12	3.4	0.0	29.0	62.0	51.0	0.0	3.	5.	0.0	0.0
13	3.5	0.0	28.0	62.0	32.0	0.0	5.	70.	0.0	0.0
14	3.4	0.0	43.0	106.0	51.0	0.0	4.	60.	0.0	0.0
15	3.4	0.0	53.0	43.0	39.0	0.0	4.	40.	0.0	0.0
16	3.5	0.0	54.0	0.0	0.0	66.0	4.	15.	0.0	0.0
17	3.5	0.0	17.0	46.0	31.0	0.0	4.	5.	0.0	0.0
18	3.4	0.0	27.0	63.0	45.0	0.0	4.	5.	0.0	0.0
19	3.4	0.0	22.0	43.0	9.0	0.0	5.	70.	0.0	0.0
20	3.4	0.0	24.0	47.0	32.0	0.0	4.	15.	0.0	0.0
MEAN	3.5	0.0	29.5	53.5	35.7	66.0	4.	25.	0.0	0.0
STD DEV	.1	0.0	12.5	19.3	13.0	0.0	0.	23.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA DEMER

DATE 27

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
*****										
1	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	.3	10.1
2	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	12.9
3	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
4	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	5.0
5	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	5.2
6	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	6.1
7	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.5	0.0
8	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	8.5
9	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	1.3	0.0
10	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	13.0
11	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	1.9	15.2
12	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	8.4
13	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
14	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	11.1
15	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	8.2
16	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	.4	12.6
17	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
18	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	6.9
19	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.3	7.5
20	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	8.2
MEAN	4.2	9.0	0.0	0.0	0.0	0.0	0.	0.	.6	9.3
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	3.1

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA DEMER

DATE 17

JULY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLH	NEW SEED STALK LNGLH
1	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	2.4	7.9
2	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	3.5	11.5
3	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	3.0	0.0
4	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	1.6	5.9
5	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	1.6	8.5
6	4.4	9.2	0.0	0.0	0.0	0.0	0.	0.	.5	7.1
7	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.2	0.0
8	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	3.4	8.4
9	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	3.2	13.1
10	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	3.1	8.4
11	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	4.5	12.6
12	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	2.5	4.8
13	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	3.6	0.0
14	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	3.5	9.0
15	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	3.1	12.4
16	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	3.6	0.0
17	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	4.0	0.0
18	4.6	9.3	0.0	0.0	0.0	0.0	0.	0.	4.4	14.3
19	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	3.1	8.9
20	4.7	9.3	0.0	0.0	0.0	0.0	0.	0.	.7	6.6
MEAN	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	2.8	9.3
STD. DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	1.2	2.8

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA DEMER

DATE 9 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGHT	PLANT LENGH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLTH	NEW SEED STALK LNGLTH
1	5.2	9.5	21.0	40.0	21.0	0.0	4.	20.	2.1	8.3
2	5.3	9.5	33.0	59.0	52.0	0.0	4.	5.	2.3	11.1
3	5.2	0.0	27.0	26.0	21.0	0.0	5.	55.	4.1	0.0
4	5.3	9.5	17.0	39.0	32.0	0.0	4.	20.	1.9	4.5
5	5.3	9.5	16.0	45.0	30.0	0.0	4.	15.	1.7	7.3
6	5.2	9.4	22.0	47.0	36.0	0.0	4.	20.	3.0	7.6
7	5.2	9.6	53.0	48.0	39.0	0.0	4.	25.	4.2	11.3
8	5.3	9.4	23.0	52.0	33.0	0.0	4.	15.	3.2	9.5
9	5.3	9.6	32.0	51.0	35.0	0.0	4.	10.	3.5	4.3
10	5.3	9.5	37.0	90.0	46.0	0.0	4.	5.	2.6	12.5
11	5.3	9.5	43.0	65.0	46.0	0.0	4.	5.	6.6	7.0
12	5.3	9.5	27.0	65.0	46.0	0.0	4.	5.	3.6	7.8
13	5.4	0.0	24.0	75.0	28.0	0.0	5.	40.	5.1	0.0
14	5.3	9.3	38.0	39.0	45.0	0.0	4.	5.	2.3	10.5
15	5.4	9.6	56.0	42.0	34.0	0.0	4.	20.	4.7	10.4
16	5.3	9.5	48.0	78.0	60.0	0.0	4.	15.	5.4	11.7
17	5.3	0.0	17.0	43.0	25.0	0.0	4.	5.	3.8	0.0
18	5.3	9.4	26.0	58.0	42.0	0.0	4.	5.	5.8	4.1
19	5.2	9.4	19.0	39.0	13.0	0.0	5.	60.	3.2	9.1
20	5.4	9.6	27.0	39.0	30.0	0.0	4.	10.	2.0	8.0
MEAN	5.3	9.5	30.3	52.0	35.7	0.0	4.	18.	3.6	8.5
STD DEV	.1	.1	12.0	16.0	11.5	0.0	0.	16.	1.4	2.6

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA DEMER

DATE 1 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGLTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLTH	NEW SEED STALK LNGLTH
1	5.5	10.7	0.0	0.0	0.0	0.0	0.	0.	2.6	8.4
2	5.4	10.4	0.0	0.0	0.0	0.0	0.	0.	3.4	14.2
3	5.4	0.0	0.0	0.0	0.0	0.0	0.	0.	4.1	0.0
4	5.4	10.1	0.0	0.0	0.0	0.0	0.	0.	4.3	10.5
5	5.5	10.5	0.0	0.0	0.0	0.0	0.	0.	1.4	8.8
6	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	3.6	0.0
7	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	2.0	0.0
8	5.5	10.5	0.0	0.0	0.0	0.0	0.	0.	2.8	8.2
9	5.4	10.8	0.0	0.0	0.0	0.0	0.	0.	4.2	13.2
10	5.5	10.6	0.0	0.0	0.0	0.0	0.	0.	5.6	12.0
11	5.5	10.7	0.0	0.0	0.0	0.0	0.	0.	2.1	13.3
12	5.5	10.4	0.0	0.0	0.0	0.0	0.	0.	3.4	5.4
13	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	3.2	0.0
14	5.6	10.2	0.0	0.0	0.0	0.0	0.	0.	3.8	10.7
15	5.5	10.4	0.0	0.0	0.0	0.0	0.	0.	3.6	10.2
16	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	5.5	0.0
17	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	3.5	0.0
18	5.5	10.6	0.0	0.0	0.0	0.0	0.	0.	5.3	13.1
19	5.6	10.5	0.0	0.0	0.0	0.0	0.	0.	2.8	9.4
20	5.5	10.5	0.0	0.0	0.0	0.0	0.	0.	2.2	5.7
MEAN	5.5	10.5	0.0	0.0	0.0	0.0	0.	0.	3.5	10.2
STD DEV	.1	.2	0.0	0.0	0.0	0.0	0.	0.	1.2	2.8

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA DEMER

DATE 23 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
1	5.7	12.8	0.0	0.0	0.0	0.0	0.	0.	1.7	19.2
2	5.6	13.3	0.0	0.0	0.0	0.0	0.	0.	2.4	12.2
3	5.8	0.0	0.0	0.0	0.0	0.0	0.	0.	2.2	0.0
4	5.7	11.2	0.0	0.0	0.0	0.0	0.	0.	2.1	5.8
5	5.7	11.5	0.0	0.0	0.0	0.0	0.	0.	2.0	3.4
6	5.6	11.6	0.0	0.0	0.0	0.0	0.	0.	1.9	7.8
7	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	2.7	0.0
8	5.6	11.7	0.0	0.0	0.0	0.0	0.	0.	3.6	10.2
9	5.7	13.2	0.0	0.0	0.0	0.0	0.	0.	4.3	17.0
10	5.7	11.8	0.0	0.0	0.0	0.0	0.	0.	3.8	8.7
11	5.8	12.7	0.0	0.0	0.0	0.0	0.	0.	2.7	17.7
12	5.7	11.8	0.0	0.0	0.0	0.0	0.	0.	3.6	5.4
13	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	2.8	0.0
14	5.7	11.3	0.0	0.0	0.0	0.0	0.	0.	3.2	11.0
15	5.6	12.4	0.0	0.0	0.0	0.0	0.	0.	2.6	10.2
16	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	2.1	0.0
17	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	3.2	0.0
18	5.7	12.2	0.0	0.0	0.0	0.0	0.	0.	3.1	15.1
19	5.6	11.9	0.0	0.0	0.0	0.0	0.	0.	3.1	9.0
20	5.7	12.3	0.0	0.0	0.0	0.0	0.	0.	2.0	8.2
MEAN	5.7	12.1	0.0	0.0	0.0	0.0	0.	0.	2.8	10.7
STD DEV	.1	.7	0.0	0.0	0.0	0.0	0.	0.	.7	4.7

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA FARSON

DATE 4

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLH	NEW SEED STALK LNGLH
*****										
1	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	2.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED



ARTEMISIA TRIDENTATA

STUDY AREA FARSON

DATE 22

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLH	NEW SEED STALK LNGLH
1	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA FARSON

DATE 5

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
*****										
1	3.4	0.0	19.0	34.0	24.0	0.0	4.	15.	0.0	0.0
2	3.5	0.0	9.0	35.0	26.0	0.0	4.	20.	0.0	0.0
3	3.5	0.0	26.0	33.0	30.0	0.0	3.	10.	0.0	0.0
4	3.5	0.0	18.0	28.0	25.0	0.0	4.	25.	0.0	0.0
5	3.4	0.0	33.0	56.0	52.0	0.0	4.	60.	0.0	0.0
6	3.4	0.0	26.0	0.0	0.0	35.0	4.	35.	0.0	0.0
7	3.5	0.0	12.0	26.0	22.0	0.0	4.	10.	0.0	0.0
8	3.5	0.0	27.0	65.0	37.0	0.0	4.	15.	0.0	0.0
9	3.4	0.0	16.0	43.0	19.0	0.0	4.	10.	0.0	0.0
10	3.5	0.0	17.0	29.0	22.0	0.0	5.	50.	0.0	0.0
11	3.5	0.0	30.0	64.0	27.0	0.0	4.	10.	0.0	0.0
12	3.5	0.0	24.0	71.0	49.0	0.0	4.	5.	0.0	0.0
13	3.4	0.0	20.0	51.0	24.0	0.0	4.	10.	0.0	0.0
14	3.4	0.0	31.0	25.0	18.0	0.0	5.	35.	0.0	0.0
15	3.4	0.0	19.0	29.0	23.0	0.0	4.	15.	0.0	0.0
16	3.5	0.0	14.0	25.0	19.0	0.0	4.	10.	0.0	0.0
17	3.4	0.0	22.0	53.0	29.0	0.0	4.	10.	0.0	0.0
18	3.4	0.0	16.0	22.0	13.0	0.0	5.	50.	0.0	0.0
19	3.5	0.0	28.0	42.0	23.0	0.0	4.	40.	0.0	0.0
20	3.5	0.0	19.0	47.0	20.0	0.0	4.	30.	0.0	0.0
MEAN	3.5	0.0	21.3	40.9	26.4	17.5	4.	23.	0.0	0.0
STD DEV	.1	0.0	6.6	15.3	9.9	24.7	0.	16.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA FARSON

DATE 25

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLH	NEW SEED STALK LNGLH
1	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	.2	5.0
2	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	1.6
4	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
5	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	4.2
6	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
8	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
9	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	2.1
11	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	6.1
12	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	2.9
14	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	2.1
15	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
16	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
17	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
18	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	2.1
19	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
20	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	3.6
MEAN	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	3.3
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	1.5

0.0 = NOT RECORDED

PLANT NO.	PHENOLOGICAL STAGE	VEG. SCORE	REPR.	PLANT HGHT	PLANT LENGH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGH	NEW SEED STALK LENGH
1	4.5	0.0		0.0	0.0	0.0	0.0	0.	0.	.1	0.0
2	4.5	0.0		0.0	0.0	0.0	0.0	0.	0.	.2	0.0
3	4.5	0.0		0.0	0.0	0.0	0.0	0.	0.	.2	0.0
4	4.5	0.0		0.0	0.0	0.0	0.0	0.	0.	.2	0.0
5	4.5	9.3		0.0	0.0	0.0	0.0	0.	0.	.2	2.5
6	4.5	9.3		0.0	0.0	0.0	0.0	0.	0.	.2	2.1
7	4.5	0.0		0.0	0.0	0.0	0.0	0.	0.	.2	0.0
8	4.5	0.0		0.0	0.0	0.0	0.0	0.	0.	.2	0.0
9	4.4	0.0		0.0	0.0	0.0	0.0	0.	0.	.2	0.0
10	4.6	0.0		0.0	0.0	0.0	0.0	0.	0.	.3	0.0
11	4.5	9.4		0.0	0.0	0.0	0.0	0.	0.	.3	10.4
12	4.5	9.5		0.0	0.0	0.0	0.0	0.	0.	1.6	7.5
13	4.5	9.3		0.0	0.0	0.0	0.0	0.	0.	.3	3.1
14	4.5	9.4		0.0	0.0	0.0	0.0	0.	0.	.2	2.7
15	4.5	0.0		0.0	0.0	0.0	0.0	0.	0.	1.2	0.0
16	4.5	0.0		0.0	0.0	0.0	0.0	0.	0.	.3	0.0
17	4.6	9.4		0.0	0.0	0.0	0.0	0.	0.	.2	2.2
18	4.6	0.0		0.0	0.0	0.0	0.0	0.	0.	.2	0.0
19	4.4	0.0		0.0	0.0	0.0	0.0	0.	0.	.5	0.0
20	4.5	0.0		0.0	0.0	0.0	0.0	0.	0.	.5	0.0
MEAN	4.5	9.4		0.0	0.0	0.0	0.0	0.	0.	.4	4.4
STD DEV	.1	.1		0.0	0.0	0.0	0.0	0.	0.	.4	3.3

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA FARSON

DATE 7

AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
*****										
1	5.6	0.0	19.0	36.0	19.0	0.0	4.	10.	.2	0.0
2	5.6	0.0	10.0	34.0	27.0	0.0	4.	15.	.3	0.0
3	5.5	9.7	30.0	61.0	38.0	0.0	4.	20.	.3	3.4
4	5.6	0.0	16.0	28.0	24.0	0.0	4.	25.	.3	0.0
5	5.7	9.6	33.0	61.0	41.0	0.0	4.	35.	.2	4.7
6	5.5	9.5	28.0	37.0	26.0	0.0	4.	40.	.2	3.4
7	5.5	0.0	12.0	32.0	16.0	0.0	4.	15.	1.1	0.0
8	5.5	0.0	31.0	64.0	33.0	0.0	4.	15.	.7	0.0
9	5.6	0.0	15.0	43.0	19.0	0.0	4.	5.	.2	0.0
10	5.5	0.0	18.0	27.0	20.0	0.0	4.	30.	.1	0.0
11	5.5	9.7	28.0	0.0	0.0	45.0	4.	10.	1.0	4.9
12	5.6	9.6	27.0	59.0	45.0	0.0	4.	5.	1.0	7.4
13	5.6	9.6	25.0	46.0	22.0	0.0	4.	10.	.3	3.5
14	5.5	0.0	29.0	29.0	21.0	0.0	4.	45.	.6	0.0
15	5.5	0.0	20.0	30.0	19.0	0.0	4.	40.	.2	0.0
16	5.6	0.0	14.0	21.0	19.0	0.0	4.	5.	2.0	0.0
17	5.6	9.6	26.0	52.0	28.0	0.0	4.	10.	.9	2.1
18	5.6	0.0	15.0	21.0	11.0	0.0	4.	35.	.2	0.0
19	5.5	0.0	27.0	41.0	22.0	0.0	4.	45.	.7	0.0
20	5.6	9.7	15.0	41.0	20.0	0.0	4.	15.	1.7	3.8
MEAN	5.6	9.6	21.9	40.2	24.7	45.0	4.	22.	.6	4.2
STD DEV	.1	.1	7.2	13.7	8.8	0.0	0.	14.	.5	1.6

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA FARSON

DATE 2 SEPTEMBER 1979

224

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
1	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
2	5.8	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
3	5.7	10.3	0.0	0.0	0.0	0.0	0.	0.	.7	4.1
4	5.9	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
5	5.9	10.5	0.0	0.0	0.0	0.0	0.	0.	1.1	3.7
6	5.8	11.0	0.0	0.0	0.0	0.0	0.	0.	.9	2.6
7	5.8	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
8	5.9	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
9	5.8	0.0	0.0	0.0	0.0	0.0	0.	0.	.7	0.0
10	5.9	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	0.0
11	5.8	11.5	0.0	0.0	0.0	0.0	0.	0.	.9	4.4
12	5.9	11.8	0.0	0.0	0.0	0.0	0.	0.	1.2	8.5
13	5.9	10.6	0.0	0.0	0.0	0.0	0.	0.	.7	3.9
14	5.8	10.4	0.0	0.0	0.0	0.0	0.	0.	.8	2.3
15	5.8	11.4	0.0	0.0	0.0	0.0	0.	0.	.7	1.5
16	5.9	0.0	0.0	0.0	0.0	0.0	0.	0.	1.5	0.0
17	5.9	11.1	0.0	0.0	0.0	0.0	0.	0.	1.1	2.3
18	5.9	10.4	0.0	0.0	0.0	0.0	0.	0.	.7	2.0
19	5.8	0.0	0.0	0.0	0.0	0.0	0.	0.	1.2	0.0
20	5.8	11.7	0.0	0.0	0.0	0.0	0.	0.	1.3	4.6
MEAN	5.8	11.0	0.0	0.0	0.0	0.0	0.	0.	.9	3.6
STD DEV	.1	.6	0.0	0.0	0.0	0.0	0.	0.	.3	1.9

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA FARSON

DATE 22 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. LNTH	NEW SEED STALK LNTH
*****										
1	6.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	0.0
2	5.9	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
3	6.1	15.1	0.0	0.0	0.0	0.0	0.	0.	.7	3.2
4	6.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
5	6.1	14.8	0.0	0.0	0.0	0.0	0.	0.	.7	6.5
6	6.2	15.1	0.0	0.0	0.0	0.0	0.	0.	.6	3.2
7	6.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	0.0
8	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
9	6.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.7	0.0
10	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	0.0
11	6.1	15.5	0.0	0.0	0.0	0.0	0.	0.	2.5	4.6
12	6.1	15.2	0.0	0.0	0.0	0.0	0.	0.	1.6	7.3
13	6.4	14.9	0.0	0.0	0.0	0.0	0.	0.	.9	5.4
14	6.3	14.9	0.0	0.0	0.0	0.0	0.	0.	.9	5.3
15	6.2	15.2	0.0	0.0	0.0	0.0	0.	0.	.8	1.5
16	6.3	0.0	0.0	0.0	0.0	0.0	0.	0.	1.4	0.0
17	6.2	14.9	0.0	0.0	0.0	0.0	0.	0.	1.1	2.1
18	6.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
19	6.3	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
20	6.2	15.8	0.0	0.0	0.0	0.0	0.	0.	.9	4.4
MEAN	6.2	15.1	0.0	0.0	0.0	0.0	0.	0.	.9	4.4
STD DEV	.1	.3	0.0	0.0	0.0	0.0	0.	0.	.5	1.9

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA HORSE CR.

DATE 28

APRIL 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
*****										
1	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED



ARTEMISIA TRIDENTATA

STUDY AREA HORSE CR.

DATE 24

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
*****										
1	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA HORSE CR.

DATE 7

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LENGH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGH	NEW SEED STALK LENGH
1	3.5	0.0	38.0	84.0	52.0	0.0	4.	35.	0.0	0.0
2	3.5	0.0	33.0	76.0	54.0	0.0	4.	30.	0.0	0.0
3	3.4	0.0	47.0	73.0	57.0	0.0	4.	15.	0.0	0.0
4	3.4	0.0	62.0	93.0	66.0	0.0	4.	10.	0.0	0.0
5	3.5	0.0	22.0	33.0	14.0	0.0	2.	0.	0.0	0.0
6	3.4	0.0	17.0	24.0	16.0	0.0	4.	20.	0.0	0.0
7	3.5	0.0	54.0	80.0	32.0	0.0	4.	10.	0.0	0.0
8	3.5	0.0	48.0	91.0	50.0	0.0	4.	30.	0.0	0.0
9	3.4	0.0	28.0	57.0	14.0	0.0	5.	55.	0.0	0.0
10	3.4	0.0	21.0	52.0	28.0	0.0	5.	35.	0.0	0.0
11	3.5	0.0	29.0	49.0	28.0	0.0	4.	5.	0.0	0.0
12	3.4	0.0	28.0	54.0	35.0	0.0	4.	10.	0.0	0.0
13	3.6	0.0	28.0	27.0	17.0	0.0	3.	10.	0.0	0.0
14	3.4	0.0	38.0	53.0	32.0	0.0	4.	25.	0.0	0.0
15	3.7	0.0	36.0	49.0	40.0	0.0	3.	5.	0.0	0.0
16	3.5	0.0	42.0	57.0	26.0	0.0	4.	10.	0.0	0.0
17	3.5	0.0	48.0	43.0	35.0	0.0	4.	50.	0.0	0.0
18	3.6	0.0	29.0	20.0	19.0	0.0	5.	75.	0.0	0.0
19	3.4	0.0	28.0	91.0	40.0	0.0	5.	50.	0.0	0.0
20	3.6	0.0	41.0	100.0	62.0	0.0	4.	10.	0.0	0.0
MEAN	3.5	0.0	35.9	60.3	35.9	0.0	4.	26.	0.0	0.0
STD DEV	.1	0.0	11.7	24.5	16.4	0.0	1.	20.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA HORSE CR.

DATE 27

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
1	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	7.0
2	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.5	4.0
3	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	10.4
4	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	1.5	12.0
5	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
6	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
7	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	6.2
8	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
9	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
10	4.2	9.0	0.0	0.0	0.0	0.0	0.	0.	1.1	8.6
11	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	.6	6.0
12	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
13	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	3.1	8.6
14	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.6	8.2
15	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	2.9	0.0
16	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	10.1
17	4.3	9.0	0.0	0.0	0.0	0.0	0.	0.	3.2	14.0
18	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.3	3.5
19	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.6	7.1
20	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	6.5	14.0
MEAN	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	1.4	8.6
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.5	3.3

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA HORSE CR.

DATE 18 JULY 1979

230

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
1	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	1.1	6.5
2	4.6	9.3	0.0	0.0	0.0	0.0	0.	0.	1.5	4.0
3	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	1.9	8.1
4	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	5.6	16.7
5	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	4.9	3.7
6	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.4	0.0
7	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	2.7	6.1
8	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.6	0.0
9	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	1.5	0.0
10	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	2.5	9.2
11	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	3.1	6.3
12	4.6	9.3	0.0	0.0	0.0	0.0	0.	0.	2.4	9.1
13	4.6	9.4	0.0	0.0	0.0	0.0	0.	0.	3.6	7.4
14	4.6	9.4	0.0	0.0	0.0	0.0	0.	0.	3.6	9.1
15	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	3.2	12.6
16	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	4.1	8.7
17	4.6	9.3	0.0	0.0	0.0	0.0	0.	0.	3.5	14.7
18	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	.5	7.5
19	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	2.3	6.6
20	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	5.2	13.4
MEAN	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	2.8	8.8
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	1.4	3.6

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA HORSE CR.

DATE 9 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE	PHENOLOGICAL SCORE	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
*****										
1	5.3	9.2	39.0	61.0	35.0	0.0	4.	20.	1.9	5.8
2	5.4	9.7	35.0	68.0	34.0	0.0	5.	50.	2.2	5.9
3	5.4	9.4	47.0	97.0	60.0	0.0	4.	20.	3.1	8.9
4	5.2	9.3	61.0	81.0	60.0	0.0	4.	5.	1.5	6.7
5	5.3	9.5	23.0	30.0	16.0	0.0	5.	10.	2.1	5.2
6	5.2	0.0	13.0	24.0	11.0	0.0	5.	30.	1.2	0.0
7	5.3	9.2	57.0	82.0	34.0	0.0	4.	10.	1.0	6.1
8	5.3	0.0	17.0	45.0	22.0	0.0	5.	40.	2.3	0.0
9	5.3	0.0	26.0	51.0	20.0	0.0	5.	55.	1.7	0.0
10	5.3	9.2	17.0	18.0	17.0	0.0	4.	10.	2.8	9.5
11	5.2	9.2	27.0	48.0	26.0	0.0	4.	10.	2.5	3.7
12	5.3	9.2	19.0	31.0	16.0	0.0	5.	10.	2.5	9.0
13	5.4	9.6	30.0	22.0	14.0	0.0	4.	15.	2.9	7.6
14	5.3	9.3	34.0	53.0	29.0	0.0	4.	60.	2.8	7.9
15	5.4	9.3	38.0	44.0	30.0	0.0	3.	5.	2.3	13.0
16	5.3	9.5	34.0	42.0	26.0	0.0	4.	5.	2.5	10.4
17	5.4	9.3	50.0	43.0	35.0	0.0	4.	25.	4.0	14.4
18	5.3	9.4	26.0	25.0	19.0	0.0	5.	70.	.6	3.5
19	5.3	9.5	18.0	69.0	63.0	0.0	5.	50.	1.7	6.5
20	5.3	9.5	43.0	105.0	66.0	0.0	4.	5.	2.8	9.7
MEAN	5.3	9.4	32.7	52.0	31.7	0.0	4.	25.	2.2	7.9
STD DEV	.1	.2	13.7	25.1	17.3	0.0	1.	21.	.8	3.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA HORSE CR.

DATE 9 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH	
*****											
1	5.4	9.4	0.0	0.0	0.0	0.0	0.	0.	3.2	5.6	
2	5.4	9.4	0.0	0.0	0.0	0.0	0.	0.	3.2	4.5	
3	5.5	9.5	0.0	0.0	0.0	0.0	0.	0.	2.2	9.5	
4	5.5	10.4	0.0	0.0	0.0	0.0	0.	0.	4.0	12.3	
5	5.5	9.4	0.0	0.0	0.0	0.0	0.	0.	1.6	15.3	APHID PREDATIOI
6	5.4	0.0	0.0	0.0	0.0	0.0	0.	0.	2.0	0.0	
7	5.5	9.4	0.0	0.0	0.0	0.0	0.	0.	2.2	6.5	
8	5.4	10.2	0.0	0.0	0.0	0.0	0.	0.	2.6	6.2	
9	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	2.1	0.0	
10	5.4	10.3	0.0	0.0	0.0	0.0	0.	0.	4.0	11.0	
11	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	2.3	0.0	
12	5.5	10.0	0.0	0.0	0.0	0.0	0.	0.	2.4	9.2	
13	5.5	10.3	0.0	0.0	0.0	0.0	0.	0.	4.5	8.1	
14	5.5	10.2	0.0	0.0	0.0	0.0	0.	0.	4.7	8.4	
15	5.5	10.4	0.0	0.0	0.0	0.0	0.	0.	3.2	13.3	
16	5.6	10.5	0.0	0.0	0.0	0.0	0.	0.	4.5	11.0	
17	5.4	10.3	0.0	0.0	0.0	0.0	0.	0.	3.2	14.7	
18	5.6	10.2	0.0	0.0	0.0	0.0	0.	0.	1.8	8.2	
19	5.5	10.5	0.0	0.0	0.0	0.0	0.	0.	2.3	5.6	
20	5.4	0.0	0.0	0.0	0.0	0.0	0.	0.	3.5	0.0	
MEAN	5.5	10.0	0.0	0.0	0.0	0.0	0.	0.	3.0	9.3	
STD DEV	.1	.4	0.0	0.0	0.0	0.0	0.	0.	1.0	3.3	

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA HORSE CR.

DATE 21 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW TWIG VEG.	NEW SEED STALK LNPTH	
*****											
1	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	2.9	6.2	THE FLOWER BUD
2	5.6	10.5	0.0	0.0	0.0	0.0	0.	0.	3.6	9.2	ALL THE SAGEBR
3	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	3.2	8.3	PLANTS IN THIS
4	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	5.5	17.1	SAMPLE WERE DE
5	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	3.2	5.0	ED BY APHID PR
6	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	1.8	0.0	TION.
7	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	2.8	6.2	
8	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	4.8	10.2	
9	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	1.6	0.0	
10	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	2.2	9.5	
11	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	3.2	6.8	
12	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	2.3	9.2	
13	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	2.3	8.0	
14	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	2.2	4.7	
15	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	5.2	12.8	
16	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	3.5	10.3	
17	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	3.1	15.5	
18	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	1.7	7.7	
19	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	2.3	4.8	
20	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	3.1	0.0	
MEAN	5.6	10.5	0.0	0.0	0.0	0.0	0.	0.	3.0	8.9	
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	3.5	

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA MESA ANTEL

DATE 4

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGHT	PLANT LENGH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGH	NEW SEED STALK LENGH
*****										
1	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED



ARTEMISIA TRIDENTATA

STUDY AREA MESA ANTEL

DATE 22

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLH	NEW SEED STALK LNGLH
*****										
1	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA MESA ANTEL

DATE 5 JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE SCORE VEG. REPR.	PLANT HGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGTH	NEW SEED STALK LNGTH
1	3.5 0.0	22.0	52.0	35.0	0.0	4.	5.	0.0	0.0
2	3.4 0.0	21.0	45.0	38.0	0.0	4.	10.	0.0	0.0
3	3.4 0.0	32.0	65.0	54.0	0.0	4.	10.	0.0	0.0
4	3.4 0.0	13.0	23.0	15.0	0.0	5.	20.	0.0	0.0
5	3.4 0.0	27.0	48.0	35.0	0.0	4.	5.	0.0	0.0
6	3.5 0.0	21.0	40.0	38.0	0.0	4.	5.	0.0	0.0
7	3.5 0.0	22.0	0.0	0.0	39.0	4.	10.	0.0	0.0
8	3.5 0.0	25.0	16.0	8.0	0.0	4.	25.	0.0	0.0
9	3.5 0.0	22.0	51.0	24.0	0.0	4.	10.	0.0	0.0
10	3.6 0.0	16.0	27.0	20.0	0.0	4.	10.	0.0	0.0
11	3.4 0.0	15.0	19.0	11.0	0.0	4.	15.	0.0	0.0
12	3.6 0.0	25.0	65.0	23.0	0.0	4.	20.	0.0	0.0
13	3.6 0.0	27.0	40.0	28.0	0.0	4.	10.	0.0	0.0
14	3.5 0.0	29.0	78.0	40.0	0.0	4.	20.	0.0	0.0
15	3.6 0.0	13.0	46.0	22.0	0.0	4.	5.	0.0	0.0
16	3.5 0.0	18.0	47.0	21.0	0.0	4.	5.	0.0	0.0
17	3.5 0.0	23.0	71.0	37.0	0.0	4.	20.	0.0	0.0
18	3.6 0.0	19.0	39.0	22.0	0.0	4.	5.	0.0	0.0
19	3.6 0.0	24.0	66.0	33.0	0.0	4.	10.	0.0	0.0
20	3.4 0.0	18.0	33.0	11.0	0.0	4.	10.	0.0	0.0
MEAN	3.5 0.0	21.6	45.8	27.1	19.5	4.	12.	0.0	0.0
STD DEV	.1 0.0	5.2	17.7	12.0	27.6	0.	6.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA MESA ANTEL

DATE 25

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG.	REPR.	PLANT HIGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH	NEW VEG.	NEW SEED STALK
								CLASS	PERCENT	TWIG LNPTH	LNPTH
*****											
1	4.0	0.0		0.0	0.0	0.0	0.0	0.	0.	.1	3.0
2	4.0	0.0		0.0	0.0	0.0	0.0	0.	0.	.2	0.0
3	3.9	0.0		0.0	0.0	0.0	0.0	0.	0.	0.0	1.7
4	4.0	0.0		0.0	0.0	0.0	0.0	0.	0.	.2	0.0
5	3.8	0.0		0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	4.0	0.0		0.0	0.0	0.0	0.0	0.	0.	.1	2.0
7	4.0	0.0		0.0	0.0	0.0	0.0	0.	0.	.2	0.0
8	3.9	0.0		0.0	0.0	0.0	0.0	0.	0.	0.0	1.5
9	4.0	0.0		0.0	0.0	0.0	0.0	0.	0.	.2	2.5
10	4.1	0.0		0.0	0.0	0.0	0.0	0.	0.	.4	3.1
11	4.0	0.0		0.0	0.0	0.0	0.0	0.	0.	.2	0.0
12	4.0	0.0		0.0	0.0	0.0	0.0	0.	0.	.2	2.9
13	4.0	0.0		0.0	0.0	0.0	0.0	0.	0.	.2	0.0
14	4.0	0.0		0.0	0.0	0.0	0.0	0.	0.	.2	0.0
15	4.0	0.0		0.0	0.0	0.0	0.0	0.	0.	.2	2.1
16	4.0	0.0		0.0	0.0	0.0	0.0	0.	0.	.1	0.0
17	3.9	0.0		0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	4.0	0.0		0.0	0.0	0.0	0.0	0.	0.	.1	0.0
19	3.9	0.0		0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	4.1	0.0		0.0	0.0	0.0	0.0	0.	0.	.1	.3
MEAN	4.0	0.0		0.0	0.0	0.0	0.0	0.	0.	.2	2.1
STD DEV	.1	0.0		0.0	0.0	0.0	0.0	0.	0.	.1	.9

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA MESA ANTEL

DATE 15

JULY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	OEAD BRANCH PERCENT	NEW VEG. TWIG LNGLH	NEW SEEO STALK LNGLH
*****										
1	4.3	9.4	0.0	0.0	0.0	0.0	0.	0.	.5	3.1
2	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	.4	1.9
3	4.4	9.4	0.0	0.0	0.0	0.0	0.	0.	.2	2.6
4	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
5	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
6	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	0.0
7	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
8	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
9	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
10	4.6	9.4	0.0	0.0	0.0	0.0	0.	0.	.4	2.2
11	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
12	4.4	9.5	0.0	0.0	0.0	0.0	0.	0.	1.6	2.3
13	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.6	0.0
14	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
15	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
16	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
17	4.4	9.4	0.0	0.0	0.0	0.0	0.	0.	1.5	1.9
18	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.2	0.0
19	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
20	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	.6	7.4
MEAN	4.4	8.2	0.0	0.0	0.0	0.0	0.	0.	.6	3.1
STD DEV	.1	3.3	0.0	0.0	0.0	0.0	0.	0.	.5	2.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA MESA ANTEL

DATE 7 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LENGH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGH	NEW SEED STALK LENGH
*****										
1	5.7	9.4	22.0	55.0	40.0	0.0	5.	10.	1.0	1.9
2	5.6	0.0	24.0	0.0	0.0	41.0	4.	15.	.5	0.0
3	5.5	9.8	29.0	76.0	48.0	0.0	4.	20.	1.0	2.4
4	5.8	0.0	11.0	28.0	14.0	0.0	5.	40.	.6	0.0
5	5.7	0.0	13.0	29.0	21.0	0.0	4.	10.	.2	0.0
6	5.6	9.5	24.0	43.0	40.0	0.0	4.	5.	.3	1.5
7	5.7	9.7	17.0	0.0	0.0	36.0	4.	10.	.9	1.2
8	5.7	0.0	26.0	16.0	10.0	0.0	5.	35.	.2	0.0
9	5.5	9.4	20.0	54.0	31.0	0.0	4.	20.	.5	1.9
10	5.6	9.7	17.0	26.0	20.0	0.0	4.	10.	1.0	1.8
11	5.5	0.0	16.0	17.0	11.0	0.0	4.	25.	.7	0.0
12	5.6	9.6	25.0	69.0	31.0	0.0	4.	25.	.3	4.2
13	5.5	0.0	22.0	28.0	17.0	0.0	4.	30.	1.1	0.0
14	5.4	9.6	23.0	40.0	35.0	0.0	4.	15.	.9	1.0
15	5.7	0.0	13.0	20.0	19.0	0.0	4.	20.	.6	0.0
16	5.6	0.0	17.0	28.0	26.0	0.0	4.	5.	.2	0.0
17	5.5	0.0	16.0	46.0	22.0	0.0	4.	55.	.3	0.0
18	5.5	0.0	14.0	32.0	25.0	0.0	4.	5.	.6	0.0
19	5.6	0.0	22.0	56.0	53.0	0.0	4.	15.	.6	0.0
20	5.4	9.4	18.0	31.0	26.0	0.0	4.	30.	.6	7.3
MEAN	5.6	9.6	19.5	38.6	27.2	38.5	4.	20.	.6	2.6
STD DEV	.1	.2	5.0	17.5	12.2	3.5	0.	13.	.3	2.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA MESA ANTEL

DATE 1 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. THWG LNPTH	NEW SEED STALK LNPTH
*****										
1	5.8	10.3	0.0	0.0	0.0	0.0	0.	0.	1.1	3.2
2	5.8	10.1	0.0	0.0	0.0	0.0	0.	0.	1.2	2.5
3	5.7	10.8	0.0	0.0	0.0	0.0	0.	0.	1.3	2.6
4	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
5	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
6	5.7	11.2	0.0	0.0	0.0	0.0	0.	0.	1.4	1.1
7	5.8	11.2	0.0	0.0	0.0	0.0	0.	0.	1.1	2.1
8	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
9	5.9	11.6	0.0	0.0	0.0	0.0	0.	0.	1.1	1.4
10	5.7	11.3	0.0	0.0	0.0	0.0	0.	0.	1.2	2.2
11	5.8	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
12	5.9	11.7	0.0	0.0	0.0	0.0	0.	0.	1.3	1.8
13	5.8	0.0	0.0	0.0	0.0	0.0	0.	0.	1.4	0.0
14	5.8	11.2	0.0	0.0	0.0	0.0	0.	0.	.9	1.6
15	5.9	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
16	5.9	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
17	5.8	0.0	0.0	0.0	0.0	0.0	0.	0.	1.3	0.0
18	5.8	0.0	0.0	0.0	0.0	0.0	0.	0.	1.2	0.0
19	5.9	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
20	5.9	11.5	0.0	0.0	0.0	0.0	0.	0.	.9	8.9
MEAN	5.8	11.1	0.0	0.0	0.0	0.0	0.	0.	1.1	2.7
STD DEV	.1	.5	0.0	0.0	0.0	0.0	0.	0.	.3	2.3

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA MESA ANTEL

DATE 22 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LENGH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGH	NEW SEED STALK LENGH
*****										
1	6.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
2	6.4	15.4	0.0	0.0	0.0	0.0	0.	0.	1.0	2.1
3	6.7	15.9	0.0	0.0	0.0	0.0	0.	0.	.7	2.8
4	6.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
5	6.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
6	6.5	15.2	0.0	0.0	0.0	0.0	0.	0.	1.0	2.5
7	6.2	14.7	0.0	0.0	0.0	0.0	0.	0.	.5	2.1
8	6.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	0.0
9	6.3	15.2	0.0	0.0	0.0	0.0	0.	0.	.6	1.5
10	6.3	15.8	0.0	0.0	0.0	0.0	0.	0.	1.2	2.7
11	6.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.2	0.0
12	6.2	15.2	0.0	0.0	0.0	0.0	0.	0.	.9	1.2
13	6.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.5	0.0
14	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
15	6.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
16	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	0.0
17	6.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
18	6.3	0.0	0.0	0.0	0.0	0.0	0.	0.	1.8	0.0
19	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
20	6.4	15.3	0.0	0.0	0.0	0.0	0.	0.	1.5	4.9
MEAN	6.4	15.3	0.0	0.0	0.0	0.0	0.	0.	.9	2.5
STD DEV	.2	.4	0.0	0.0	0.0	0.0	0.	0.	.4	1.1

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA OWL DRAW

DATE 5

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LENGH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGH	NEW SEED STALK LENGH
*****										
1	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED



ARTEMISIA TRIDENTATA

STUDY AREA OWL DRAW

DATE 25

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
*****										
1	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

## ARTEMISIA TRIDENTATA

## STUDY AREA OWL DRAW

DATE 12

JUNE 1979

244

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LENGH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGH	NEW SEED STALK LENGH
*****										
1	3.6	0.0	52.0	85.0	56.0	0.0	4.	5.	0.0	0.0
2	3.5	0.0	53.0	56.0	47.0	0.0	4.	10.	0.0	0.0
3	3.5	0.0	26.0	67.0	46.0	0.0	5.	50.	0.0	0.0
4	3.5	0.0	13.0	22.0	13.0	0.0	5.	40.	0.0	0.0
5	3.5	0.0	22.0	45.0	35.0	0.0	4.	15.	0.0	0.0
6	3.4	0.0	29.0	35.0	24.0	0.0	4.	20.	0.0	0.0
7	3.5	0.0	11.0	7.0	5.0	0.0	2.	25.	0.0	0.0
8	3.5	0.0	22.0	31.0	21.0	0.0	3.	5.	0.0	0.0
9	3.5	0.0	50.0	76.0	52.0	0.0	4.	5.	0.0	0.0
10	3.5	0.0	10.0	7.0	6.0	0.0	2.	40.	0.0	0.0
11	3.4	0.0	66.0	122.0	93.0	0.0	4.	35.	0.0	0.0
12	3.5	0.0	64.0	99.0	49.0	0.0	4.	5.	0.0	0.0
13	3.6	0.0	15.0	13.0	12.0	0.0	2.	0.	0.0	0.0
14	3.4	0.0	52.0	96.0	51.0	0.0	4.	5.	0.0	0.0
15	3.6	0.0	41.0	98.0	70.0	0.0	4.	35.	0.0	0.0
16	3.6	0.0	13.0	0.0	0.0	13.0	2.	5.	0.0	0.0
17	3.5	0.0	12.0	7.0	5.0	0.0	2.	5.	0.0	0.0
18	3.5	0.0	17.0	18.0	7.0	0.0	5.	65.	0.0	0.0
19	3.4	0.0	6.0	11.0	6.0	0.0	2.	10.	0.0	0.0
20	3.5	0.0	21.0	54.0	38.0	0.0	4.	35.	0.0	0.0
MEAN	3.5	0.0	29.8	49.9	33.5	13.0	4.	22.	0.0	0.0
STD DEV	.1	0.0	19.6	37.3	25.4	0.0	1.	19.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA OWL DRAW

DATE 28

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
1	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	7.0
2	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	5.9
3	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	4.0
4	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
5	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	1.9
6	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	1.9
7	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
8	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	1.5
9	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	4.1
10	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
11	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
12	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	3.0
13	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	2.4
14	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	4.9
15	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	6.5
16	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	4.0
17	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
18	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	4.1
19	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
20	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	3.7
MEAN	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	3.9
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	1.7

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA OWL DRAW

DATE 18

JULY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LGNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGNTH	NEW SEED STALK LGNTH
1	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	1.9	7.8
2	4.4	9.4	0.0	0.0	0.0	0.0	0.	0.	.9	6.5
3	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	2.6	5.4
4	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	3.4	0.0
5	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	2.1	0.0
6	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	1.4	4.1
7	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.4	0.0
8	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
9	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.2	0.0
10	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	3.2	0.0
11	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	4.9	13.5
12	4.4	9.4	0.0	0.0	0.0	0.0	0.	0.	2.1	12.4
13	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	5.1	0.0
14	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	1.6	7.8
15	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	4.9	0.0
16	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	3.8	0.0
17	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
18	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	3.1	0.0
19	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.3	0.0
20	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	2.5	0.0
MEAN	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	2.5	8.2
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	1.4	3.5

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA OWL DRAW

DATE 10

AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
*****										
1	5.3	9.5	53.0	77.0	52.0	0.0	4.	10.	1.8	8.1
2	5.3	9.5	50.0	55.0	45.0	0.0	4.	10.	1.1	4.2
3	5.3	0.0	24.0	64.0	32.0	0.0	5.	40.	2.0	0.0
4	5.2	0.0	12.0	21.0	11.0	0.0	5.	50.	2.3	0.0
5	5.3	0.0	19.0	42.0	38.0	0.0	4.	20.	1.4	0.0
6	5.3	0.0	33.0	34.0	17.0	0.0	4.	25.	.5	0.0
7	5.3	0.0	9.0	8.0	3.0	0.0	3.	45.	1.4	0.0
8	5.3	0.0	20.0	33.0	26.0	0.0	4.	5.	1.2	0.0
9	5.3	0.0	51.0	72.0	45.0	0.0	4.	5.	1.1	0.0
10	5.3	0.0	8.0	11.0	7.0	0.0	3.	25.	2.0	0.0
11	5.3	9.4	45.0	121.0	117.0	0.0	4.	25.	2.5	12.6
12	5.3	9.4	59.0	96.0	39.0	0.0	4.	10.	2.4	7.6
13	5.2	9.4	43.0	66.0	37.0	0.0	4.	15.	3.4	8.0
14	5.3	9.5	50.0	93.0	58.0	0.0	4.	5.	1.2	7.2
15	5.3	0.0	48.0	91.0	70.0	0.0	4.	30.	2.9	0.0
16	5.4	9.4	10.0	10.0	8.0	0.0	3.	10.	1.9	4.5
17	5.3	0.0	11.0	7.0	5.0	0.0	3.	10.	.7	0.0
18	5.3	0.0	15.0	20.0	6.0	0.0	5.	70.	1.0	0.0
19	5.3	0.0	7.0	10.0	6.0	0.0	3.	10.	1.8	0.0
20	5.3	9.5	32.0	77.0	33.0	0.0	4.	60.	1.0	4.1
MEAN	5.3	9.5	30.0	50.4	32.8	0.0	4.	24.	1.7	7.0
STD DEV	.0	.1	18.3	35.4	28.1	0.0	1.	19.	.8	2.8

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA OWL DRAW

DATE 1 SEPTEMBER 1979

248

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
*****										
1	7.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.5	0.0
2	7.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.0	0.0
3	7.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.5	0.0
4	7.0	9.8	0.0	0.0	0.0	0.0	0.	0.	3.5	3.0
5	7.2	0.0	0.0	0.0	0.0	0.0	0.	0.	2.0	0.0
6	7.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.8	0.0
7	7.1	9.5	0.0	0.0	0.0	0.0	0.	0.	2.0	3.0
8	7.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
9	7.1	9.7	0.0	0.0	0.0	0.0	0.	0.	.7	4.1
10	7.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.0	0.0
11	7.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
12	7.2	0.0	0.0	0.0	0.0	0.0	0.	0.	3.0	0.0
13	7.2	0.0	0.0	0.0	0.0	0.0	0.	0.	2.5	0.0
14	7.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.0	0.0
15	7.1	9.8	0.0	0.0	0.0	0.0	0.	0.	.8	6.9
16	7.2	0.0	0.0	0.0	0.0	0.0	0.	0.	2.5	0.0
17	7.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
18	7.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.0	0.0
19	7.1	9.7	0.0	0.0	0.0	0.0	0.	0.	.5	2.8
20	7.2	0.0	0.0	0.0	0.0	0.0	0.	0.	3.0	0.0
MEAN	7.1	9.7	0.0	0.0	0.0	0.0	0.	0.	1.5	4.0
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	1.0	1.7

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA OWL DRAW

DATE 23 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
1	6.2	14.6	0.0	0.0	0.0	0.0	0.	0.	2.3	9.2
2	6.2	14.7	0.0	0.0	0.0	0.0	0.	0.	2.5	6.2
3	6.2	14.7	0.0	0.0	0.0	0.0	0.	0.	1.9	5.5
4	6.1	0.0	0.0	0.0	0.0	0.0	0.	0.	2.5	0.0
5	6.3	0.0	0.0	0.0	0.0	0.0	0.	0.	2.1	0.0
6	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.6	0.0
7	6.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
8	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.4	0.0
9	6.3	0.0	0.0	0.0	0.0	0.0	0.	0.	2.4	0.0
10	6.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
11	6.2	14.8	0.0	0.0	0.0	0.0	0.	0.	3.2	6.2
12	6.3	14.6	0.0	0.0	0.0	0.0	0.	0.	1.9	7.8
13	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	2.6	0.0
14	6.3	14.6	0.0	0.0	0.0	0.0	0.	0.	1.8	6.5
15	6.3	14.7	0.0	0.0	0.0	0.0	0.	0.	2.1	7.1
16	6.2	14.6	0.0	0.0	0.0	0.0	0.	0.	3.2	5.7
17	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
18	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	4.3	0.0
19	6.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
20	6.3	0.0	0.0	0.0	0.0	0.0	0.	0.	3.1	0.0
MEAN	6.2	14.7	0.0	0.0	0.0	0.0	0.	0.	2.1	6.8
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.9	1.2

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA RED WASH 2

DATE 6

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LENGH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG	NEW SEED STALK LENGH	NEW SEED STALK LENGH
1	3.1	0.0	33.0	84.0	57.0	0.0	5.	7.	0.0	0.0	
2	3.1	0.0	37.0	0.0	0.0	75.0	4.	85.	0.0	0.0	
3	3.2	0.0	51.0	0.0	0.0	120.0	5.	3.	0.0	0.0	
4	3.2	0.0	17.0	0.0	0.0	25.0	3.	3.	0.0	0.0	
5	3.2	0.0	33.0	0.0	0.0	35.0	5.	3.	0.0	0.0	
6	3.2	0.0	19.0	0.0	0.0	47.0	3.	0.	0.0	0.0	
7	3.1	0.0	30.0	96.0	75.0	0.0	3.	5.	0.0	0.0	
8	3.1	0.0	28.0	29.0	36.0	0.0	3.	25.	0.0	0.0	
9	3.1	0.0	34.0	0.0	0.0	33.0	5.	20.	0.0	0.0	
10	3.2	0.0	20.0	25.0	14.0	0.0	3.	20.	0.0	0.0	
11	3.1	0.0	16.0	23.0	14.0	0.0	3.	12.	0.0	0.0	
12	3.1	0.0	45.0	0.0	0.0	104.0	5.	5.	0.0	0.0	
13	3.1	0.0	8.0	15.0	10.0	0.0	2.	3.	0.0	0.0	
14	3.1	0.0	33.0	0.0	0.0	85.0	5.	5.	0.0	0.0	
15	3.1	0.0	11.0	19.0	14.0	0.0	3.	10.	0.0	0.0	
16	3.1	0.0	12.0	0.0	0.0	10.0	2.	3.	0.0	0.0	
17	3.1	0.0	19.0	0.0	0.0	14.0	3.	10.	0.0	0.0	
18	3.1	0.0	49.0	0.0	0.0	140.0	5.	8.	0.0	0.0	
19	3.2	0.0	22.0	53.0	22.0	0.0	4.	45.	0.0	0.0	
20	3.1	0.0	43.0	0.0	0.0	68.0	5.	5.	0.0	0.0	
MEAN	3.1	0.0	28.0	43.0	30.3	58.2	4.	15.	0.0	0.0	
STD DEV	.0	0.0	12.9	31.3	24.0	44.5	1.	20.	0.0	0.0	

0.0 = NOT RECORDED



ARTEMISIA TRIDENTATA

STUDY AREA RED WASH 2

DATE 21

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LENGH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGH	NEW SEED STALK LENGH
1	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA RED WASH 2

DATE 4

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
1	3.6	0.0	36.0	74.0	51.0	0.0	3.	10.	0.0	0.0
2	3.5	0.0	66.0	107.0	61.0	0.0	5.	50.	0.0	0.0
3	3.5	0.0	42.0	131.0	84.0	0.0	4.	5.	0.0	0.0
4	3.4	0.0	41.0	59.0	40.0	0.0	4.	5.	0.0	0.0
5	3.5	0.0	31.0	33.0	28.0	0.0	4.	5.	0.0	0.0
6	3.5	0.0	20.0	41.0	30.0	0.0	3.	5.	0.0	0.0
7	3.4	0.0	32.0	84.0	63.0	0.0	3.	5.	0.0	0.0
8	3.3	0.0	26.0	30.0	28.0	0.0	4.	20.	0.0	0.0
9	3.5	0.0	29.0	149.0	94.0	0.0	4.	10.	0.0	0.0
10	3.4	0.0	29.0	71.0	55.0	0.0	4.	10.	0.0	0.0
11	3.3	0.0	23.0	36.0	22.0	0.0	5.	50.	0.0	0.0
12	3.5	0.0	37.0	91.0	85.0	0.0	4.	5.	0.0	0.0
13	3.4	0.0	9.0	17.0	14.0	0.0	3.	5.	0.0	0.0
14	3.3	0.0	34.0	81.0	64.0	0.0	3.	5.	0.0	0.0
15	3.3	0.0	11.0	0.0	0.0	35.0	5.	30.	0.0	0.0
16	3.4	0.0	12.0	11.0	8.0	0.0	2.	5.	0.0	0.0
17	3.5	0.0	12.0	52.0	28.0	0.0	4.	15.	0.0	0.0
18	3.6	0.0	46.0	167.0	103.0	0.0	4.	10.	0.0	0.0
19	3.5	0.0	19.0	45.0	26.0	0.0	4.	30.	0.0	0.0
20	3.5	0.0	42.0	64.0	48.0	0.0	4.	10.	0.0	0.0
MEAN	3.4	0.0	29.9	70.7	49.1	35.0	4.	15.	0.0	0.0
STD DEV	.1	0.0	14.2	43.4	27.9	0.0	1.	14.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA RED WASH 2

DATE 24

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGHT	PLANT LGNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGNTH	NEW SEED STALK LGNTH
1	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	7.2
2	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	2.1
3	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	6.5
4	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	2.5
5	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	4.5
6	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	3.5
7	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	2.5
8	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	3.7
9	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	6.2
10	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	3.5
11	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
12	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	7.5
13	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
14	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	3.0
15	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
16	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
17	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	2.8
18	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	7.0
19	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	5.3
20	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	7.8
MEAN	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	4.7
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	2.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA RED WASH 2

DATE 14

JULY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
1	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	3.5	13.2
2	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	.1	3.3
3	4.3	9.2	0.0	0.0	0.0	0.0	0.	0.	2.3	9.7
4	4.3	9.2	0.0	0.0	0.0	0.0	0.	0.	1.9	9.3
5	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	2.1	7.6
6	4.4	9.2	0.0	0.0	0.0	0.0	0.	0.	2.3	6.9
7	4.4	9.1	0.0	0.0	0.0	0.0	0.	0.	2.7	9.0
8	4.3	9.2	0.0	0.0	0.0	0.0	0.	0.	1.1	5.0
9	4.2	9.3	0.0	0.0	0.0	0.0	0.	0.	.9	10.5
10	4.3	9.1	0.0	0.0	0.0	0.0	0.	0.	2.2	4.3
11	4.2	9.0	0.0	0.0	0.0	0.0	0.	0.	.3	4.3
12	4.3	9.2	0.0	0.0	0.0	0.0	0.	0.	1.6	13.3
13	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
14	4.3	9.1	0.0	0.0	0.0	0.0	0.	0.	2.9	12.5
15	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
16	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.9	0.0
17	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	2.4	0.0
18	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	0.0
19	4.2	9.3	0.0	0.0	0.0	0.0	0.	0.	.8	10.6
20	4.4	9.2	0.0	0.0	0.0	0.0	0.	0.	1.6	11.5
MEAN	4.3	9.2	0.0	0.0	0.0	0.0	0.	0.	1.6	8.7
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	1.0	3.4

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA RED WASH 2

DATE 6 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGLTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLTH	NEW SEED STALK LNGLTH
*****										
1	4.8	9.5	41.0	73.0	59.0	0.0	4.	15.	3.5	12.8
2	5.1	9.6	65.0	109.0	71.0	0.0	4.	65.	1.9	3.5
3	4.8	9.6	40.0	115.0	109.0	0.0	4.	10.	1.1	8.4
4	4.9	9.5	20.0	22.0	20.0	0.0	4.	5.	2.0	3.0
5	4.9	9.7	29.0	39.0	31.0	0.0	4.	15.	1.7	10.9
6	5.1	9.4	26.0	43.0	25.0	0.0	4.	5.	2.1	12.6
7	5.1	9.7	38.0	88.0	56.0	0.0	4.	5.	1.8	7.3
8	5.2	9.7	29.0	33.0	29.0	0.0	4.	30.	4.8	14.8
9	5.1	9.6	30.0	148.0	98.0	0.0	4.	10.	2.4	10.1
10	5.1	9.7	29.0	76.0	61.0	0.0	4.	16.	1.9	12.4
11	5.2	9.5	18.0	26.0	19.0	0.0	5.	40.	.6	4.5
12	5.2	9.5	39.0	103.0	88.0	0.0	4.	10.	1.8	2.5
13	5.5	0.0	10.4	16.0	11.0	0.0	3.	5.	1.7	0.0
14	5.1	9.5	33.0	77.0	56.0	0.0	4.	5.	1.9	6.5
15	5.2	0.0	11.0	34.0	19.0	0.0	5.	60.	.6	0.0
16	5.2	0.0	11.0	12.0	10.0	0.0	3.	0.	1.8	0.0
17	5.2	0.0	23.0	51.0	41.0	0.0	4.	15.	2.4	0.0
18	5.3	9.4	42.0	171.0	119.0	0.0	4.	10.	1.9	8.1
19	5.1	9.7	18.0	44.0	39.0	0.0	4.	20.	.7	5.7
20	5.1	9.5	45.0	61.0	44.0	0.0	5.	15.	3.2	11.1
MEAN	5.1	9.6	29.9	67.1	50.3	0.0	4.	19.	2.0	8.4
STD DEV	.2	.1	13.6	44.2	32.7	0.0	1.	18.	1.0	3.9

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA RED WASH 2

DATE 31

AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGLTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLTH	NEW SEED STALK LNGLTH
*****										
1	5.7	10.9	0.0	0.0	0.0	0.0	0.	0.	2.5	10.0
2	5.6	10.4	0.0	0.0	0.0	0.0	0.	0.	1.1	4.5
3	5.7	10.4	0.0	0.0	0.0	0.0	0.	0.	4.5	12.0
4	5.6	10.9	0.0	0.0	0.0	0.0	0.	0.	4.1	16.9
5	5.8	10.4	0.0	0.0	0.0	0.0	0.	0.	3.0	8.7
6	5.7	10.4	0.0	0.0	0.0	0.0	0.	0.	2.3	12.8
7	5.7	10.2	0.0	0.0	0.0	0.0	0.	0.	3.7	4.5
8	5.8	10.9	0.0	0.0	0.0	0.0	0.	0.	5.9	15.6
9	5.7	10.8	0.0	0.0	0.0	0.0	0.	0.	2.8	11.0
10	5.6	11.2	0.0	0.0	0.0	0.0	0.	0.	3.7	12.2
11	5.7	10.3	0.0	0.0	0.0	0.0	0.	0.	2.5	5.1
12	5.7	11.3	0.0	0.0	0.0	0.0	0.	0.	3.1	12.5
13	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	2.5	0.0
14	5.6	10.2	0.0	0.0	0.0	0.0	0.	0.	3.1	8.5
15	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	1.2	0.0
16	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	1.8	0.0
17	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	1.9	0.0
18	5.7	10.3	0.0	0.0	0.0	0.0	0.	0.	2.5	8.5
19	5.8	11.4	0.0	0.0	0.0	0.0	0.	0.	2.5	11.1
20	5.7	10.1	0.0	0.0	0.0	0.0	0.	0.	3.1	8.6
MEAN	5.7	10.6	0.0	0.0	0.0	0.0	0.	0.	2.9	10.2
STD DEV	.1	.4	0.0	0.0	0.0	0.0	0.	0.	1.1	3.6

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA RED WASH 2

DATE 21 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LGNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGNTH	NEW SEED STALK LGNTH
1	6.5	14.8	0.0	0.0	0.0	0.0	0.	0.	1.3	12.5
2	6.4	14.7	0.0	0.0	0.0	0.0	0.	0.	1.9	5.6
3	6.3	14.9	0.0	0.0	0.0	0.0	0.	0.	5.1	17.1
4	6.5	14.8	0.0	0.0	0.0	0.0	0.	0.	1.5	5.7
5	6.4	14.7	0.0	0.0	0.0	0.0	0.	0.	1.8	8.8
6	6.5	14.8	0.0	0.0	0.0	0.0	0.	0.	1.5	11.9
7	6.4	15.1	0.0	0.0	0.0	0.0	0.	0.	3.5	8.9
8	6.5	14.9	0.0	0.0	0.0	0.0	0.	0.	2.5	15.1
9	6.5	14.8	0.0	0.0	0.0	0.0	0.	0.	3.1	14.1
10	6.4	14.8	0.0	0.0	0.0	0.0	0.	0.	3.1	7.1
11	6.4	14.7	0.0	0.0	0.0	0.0	0.	0.	2.7	4.1
12	6.5	14.8	0.0	0.0	0.0	0.0	0.	0.	2.8	14.2
13	6.3	0.0	0.0	0.0	0.0	0.0	0.	0.	2.1	0.0
14	6.4	15.1	0.0	0.0	0.0	0.0	0.	0.	3.2	13.6
15	6.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.3	0.0
16	6.7	0.0	0.0	0.0	0.0	0.0	0.	0.	1.5	0.0
17	6.5	0.0	0.0	0.0	0.0	0.0	0.	0.	2.5	0.0
18	6.5	14.5	0.0	0.0	0.0	0.0	0.	0.	2.3	11.9
19	6.3	14.6	0.0	0.0	0.0	0.0	0.	0.	1.7	12.1
20	6.5	14.6	0.0	0.0	0.0	0.0	0.	0.	3.1	18.9
MEAN	6.4	14.8	0.0	0.0	0.0	0.0	0.	0.	2.4	11.4
STD DEV	.1	.2	0.0	0.0	0.0	0.0	0.	0.	.9	4.3

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SHOSHONI 7

DATE 30

APRIL 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLH	NEW SEED STALK LNGLH
*****										
1	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	2.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	2.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
*****										
MEAN	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED



ARTEMISIA TRIDENTATA

STUDY AREA SHOSHONI 7

DATE 23

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH CLASS	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
1	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SHOSHONI 7

DATE 6 JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
*****										
1	3.4	0.0	19.0	35.0	19.0	0.0	4.	10.	0.0	0.0
2	3.5	0.0	11.0	46.0	17.0	0.0	5.	60.	0.0	0.0
3	3.4	0.0	10.0	43.0	22.0	0.0	5.	30.	0.0	0.0
4	3.6	0.0	22.0	38.0	25.0	0.0	4.	5.	0.0	0.0
5	3.5	0.0	9.0	35.0	20.0	0.0	4.	10.	0.0	0.0
6	3.5	0.0	34.0	58.0	30.0	0.0	4.	15.	0.0	0.0
7	3.4	0.0	42.0	45.0	22.0	0.0	5.	50.	0.0	0.0
8	3.4	0.0	25.0	51.0	34.0	0.0	4.	10.	0.0	0.0
9	3.5	0.0	15.0	39.0	28.0	0.0	4.	25.	0.0	0.0
10	3.4	0.0	13.0	23.0	11.0	0.0	5.	50.	0.0	0.0
11	3.5	0.0	20.0	74.0	50.0	0.0	4.	20.	0.0	0.0
12	3.5	0.0	8.0	16.0	10.0	0.0	5.	50.	0.0	0.0
13	3.5	0.0	19.0	56.0	41.0	0.0	4.	15.	0.0	0.0
14	3.5	0.0	22.0	30.0	22.0	0.0	3.	5.	0.0	0.0
15	3.5	0.0	22.0	43.0	9.0	0.0	5.	70.	0.0	0.0
16	3.5	0.0	11.0	27.0	11.0	0.0	4.	30.	0.0	0.0
17	3.6	0.0	21.0	38.0	20.0	0.0	4.	15.	0.0	0.0
18	3.5	0.0	29.0	37.0	25.0	0.0	4.	15.	0.0	0.0
19	3.6	0.0	17.0	45.0	17.0	0.0	4.	20.	0.0	0.0
20	3.4	0.0	17.0	44.0	24.0	0.0	4.	20.	0.0	0.0
MEAN	3.5	0.0	19.3	41.2	22.9	0.0	4.	26.	0.0	0.0
STD DEV	.1	0.0	8.6	12.9	10.3	0.0	1.	19.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SHOSHONI 7

DATE 26

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLH	NEW SEED STALK LNGLH
1	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	7.0
2	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.9
3	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	5.7
4	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	8.3
5	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
6	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	7.6
7	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	6.3
8	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	6.0
9	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	4.3
10	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	13.0
11	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	8.9
12	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	9.5
13	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	4.5
14	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	5.4
15	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	9.8
16	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
17	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	7.6
18	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	13.0
19	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	9.7
20	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	7.5
MEAN	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	7.7
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	2.7

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SHOSHONI 7

DATE 17

JULY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG	SEED STALK LENGTH	NEW SEED STALK LENGTH
1	4.6	9.2	0.0	0.0	0.0	0.0	0.	0.	1.7	7.9	
2	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	1.4	4.2	
3	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.5	0.0	
4	4.6	9.5	0.0	0.0	0.0	0.0	0.	0.	1.5	6.7	
5	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0	
6	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	.9	6.4	
7	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	1.1	5.4	
8	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	.7	6.0	
9	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	.5	4.9	
10	4.6	9.5	0.0	0.0	0.0	0.0	0.	0.	4.4	9.5	
11	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	1.1	8.9	
12	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.7	0.0	
13	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	1.6	4.6	
14	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	3.1	6.2	
15	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	1.9	10.1	
16	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.7	0.0	
17	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	2.4	7.9	
18	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	2.6	10.1	
19	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	2.2	6.9	
20	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	1.2	5.5	
MEAN	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	1.7	7.0	
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.9	1.9	

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SHOSHONI 7

DATE 8 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
*****										
1	5.3	9.4	14.0	37.0	32.0	0.0	4.	5.	1.6	9.1
2	5.2	0.0	10.0	44.0	14.0	0.0	5.	65.	1.5	0.0
3	5.3	0.0	9.0	39.0	18.0	0.0	4.	10.	2.0	0.0
4	5.2	9.6	2.0	37.0	22.0	0.0	4.	10.	.5	8.2
5	5.4	0.0	9.0	33.0	24.0	0.0	4.	10.	1.5	0.0
6	5.3	9.3	29.0	51.0	35.0	0.0	4.	10.	1.8	3.2
7	5.3	9.6	10.0	49.0	28.0	0.0	5.	50.	1.5	5.6
8	5.4	9.5	21.0	49.0	39.0	0.0	4.	10.	2.2	8.1
9	5.2	0.0	16.0	37.0	27.0	0.0	4.	20.	1.5	5.5
10	5.4	9.6	11.0	22.0	11.0	0.0	4.	15.	2.3	9.8
11	5.3	9.5	15.0	36.0	19.0	0.0	4.	5.	2.3	11.0
12	5.4	0.0	10.0	14.0	18.0	0.0	5.	50.	1.8	0.0
13	5.4	9.6	18.0	46.0	39.0	0.0	4.	20.	1.9	6.5
14	5.3	9.5	21.0	49.0	28.0	0.0	4.	10.	1.4	9.2
15	5.3	9.5	19.0	41.0	8.0	0.0	5.	35.	1.6	9.7
16	5.3	9.5	10.0	27.0	12.0	0.0	4.	30.	1.5	3.2
17	5.3	9.6	16.0	43.0	28.0	0.0	4.	10.	1.6	5.4
18	5.2	9.5	23.0	42.0	29.0	0.0	4.	15.	1.6	10.1
19	5.3	9.4	21.0	44.0	26.0	0.0	4.	10.	1.3	8.5
20	5.4	9.5	11.0	42.0	26.0	0.0	4.	20.	1.5	7.9
MEAN	5.3	9.5	14.8	39.1	24.2	0.0	4.	21.	1.6	7.6
STD DEV	.1	.1	6.4	9.4	8.9	0.0	0.	17.	.4	2.4

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SHOSHONI 7

DATE 1 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLH	NEW SEED STALK LNGLH
*****										
1	7.2	9.8	0.0	0.0	0.0	0.0	0.	0.	2.1	6.8
2	7.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
3	7.2	9.8	0.0	0.0	0.0	0.0	0.	0.	.3	6.2
4	7.1	9.9	0.0	0.0	0.0	0.0	0.	0.	2.0	9.5
5	7.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
6	7.2	9.0	0.0	0.0	0.0	0.0	0.	0.	1.2	5.3
7	7.3	9.7	0.0	0.0	0.0	0.0	0.	0.	.8	5.0
8	7.2	10.1	0.0	0.0	0.0	0.0	0.	0.	1.8	6.0
9	6.9	10.0	0.0	0.0	0.0	0.0	0.	0.	1.2	4.7
10	6.8	9.9	0.0	0.0	0.0	0.0	0.	0.	4.5	6.5
11	7.3	10.6	0.0	0.0	0.0	0.0	0.	0.	2.8	8.0
12	7.2	9.8	0.0	0.0	0.0	0.0	0.	0.	1.5	2.0
13	7.3	9.8	0.0	0.0	0.0	0.0	0.	0.	1.2	5.0
14	7.3	9.8	0.0	0.0	0.0	0.0	0.	0.	2.3	6.5
15	7.3	9.8	0.0	0.0	0.0	0.0	0.	0.	2.0	9.5
16	7.2	9.7	0.0	0.0	0.0	0.0	0.	0.	2.9	2.6
17	7.3	9.8	0.0	0.0	0.0	0.0	0.	0.	1.4	5.1
18	7.3	9.8	0.0	0.0	0.0	0.0	0.	0.	1.9	6.4
19	7.2	9.8	0.0	0.0	0.0	0.0	0.	0.	2.1	16.3
20	7.3	9.8	0.0	0.0	0.0	0.0	0.	0.	.9	7.0
MEAN	7.2	9.8	0.0	0.0	0.0	0.0	0.	0.	1.7	6.6
STD DEV	.1	.3	0.0	0.0	0.0	0.0	0.	0.	.9	3.1

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SHOSHONI 7

DATE 29 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
*****										
1	7.7	12.5	0.0	0.0	0.0	0.0	0.	0.	1.9	6.6
2	7.7	0.0	0.0	0.0	0.0	0.0	0.	0.	1.6	0.0
3	7.7	12.5	0.0	0.0	0.0	0.0	0.	0.	1.7	6.7
4	7.8	12.5	0.0	0.0	0.0	0.0	0.	0.	4.5	10.1
5	7.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.5	0.0
6	7.6	0.0	0.0	0.0	0.0	0.0	0.	0.	2.2	6.4
7	7.6	12.5	0.0	0.0	0.0	0.0	0.	0.	1.1	5.0
8	7.7	12.8	0.0	0.0	0.0	0.0	0.	0.	.9	8.3
9	7.7	12.7	0.0	0.0	0.0	0.0	0.	0.	.8	5.4
10	7.6	12.5	0.0	0.0	0.0	0.0	0.	0.	2.0	9.1
11	7.6	12.6	0.0	0.0	0.0	0.0	0.	0.	3.2	9.0
12	7.6	0.0	0.0	0.0	0.0	0.0	0.	0.	3.2	0.0
13	7.8	12.5	0.0	0.0	0.0	0.0	0.	0.	1.2	5.3
14	7.6	12.4	0.0	0.0	0.0	0.0	0.	0.	2.5	4.1
15	7.7	12.5	0.0	0.0	0.0	0.0	0.	0.	2.3	6.5
16	7.6	12.5	0.0	0.0	0.0	0.0	0.	0.	1.6	2.8
17	7.6	12.4	0.0	0.0	0.0	0.0	0.	0.	1.4	4.1
18	7.6	12.7	0.0	0.0	0.0	0.0	0.	0.	.4	8.0
19	7.6	12.5	0.0	0.0	0.0	0.0	0.	0.	2.1	8.0
20	7.6	12.5	0.0	0.0	0.0	0.0	0.	0.	1.2	7.6
MEAN	7.6	12.5	0.0	0.0	0.0	0.0	0.	0.	1.9	6.6
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	1.0	2.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SWEETWATER

DATE 5

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	VEG. SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
*****										
1	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED



ARTEMISIA TRIDENTATA

STUDY AREA SWEETWATER

DATE 23

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
*****										
1	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SWEETWATER

DATE 6

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
1	3.3	0.0	19.0	54.0	21.0	0.0	4.	5.	0.0	0.0
2	3.4	0.0	9.0	11.0	5.0	0.0	5.	90.	0.0	0.0
3	3.3	0.0	25.0	53.0	32.0	0.0	4.	10.	0.0	0.0
4	3.3	0.0	44.0	63.0	28.0	0.0	4.	5.	0.0	0.0
5	3.3	0.0	16.0	13.0	7.0	0.0	4.	5.	0.0	0.0
6	3.4	0.0	19.0	39.0	15.0	0.0	4.	10.	0.0	0.0
7	3.5	0.0	17.0	33.0	17.0	0.0	5.	70.	0.0	0.0
8	3.4	0.0	8.0	27.0	13.0	0.0	4.	5.	0.0	0.0
9	3.3	0.0	15.0	82.0	47.0	0.0	4.	10.	0.0	0.0
10	3.3	0.0	28.0	83.0	35.0	0.0	5.	55.	0.0	0.0
11	3.2	0.0	39.0	109.0	74.0	0.0	4.	15.	0.0	0.0
12	3.3	0.0	15.0	19.0	19.0	0.0	5.	85.	0.0	0.0
13	3.3	0.0	21.0	75.0	27.0	0.0	4.	35.	0.0	0.0
14	3.4	0.0	11.0	26.0	9.0	0.0	4.	75.	0.0	0.0
15	3.3	0.0	34.0	109.0	79.0	0.0	4.	10.	0.0	0.0
16	3.3	0.0	33.0	117.0	53.0	0.0	4.	25.	0.0	0.0
17	3.4	0.0	11.0	41.0	26.0	0.0	4.	5.	0.0	0.0
18	3.3	0.0	35.0	69.0	44.0	0.0	4.	20.	0.0	0.0
19	3.4	0.0	24.0	63.0	46.0	0.0	4.	10.	0.0	0.0
20	3.4	0.0	13.0	14.0	6.0	0.0	5.	75.	0.0	0.0
MEAN	3.3	0.0	21.8	55.0	30.2	0.0	4.	31.	0.0	0.0
STD DEV	.1	0.0	10.6	33.4	21.4	0.0	0.	31.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SWEETWATER

DATE 26

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
*****										
1	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.4	6.4
2	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.4	0.0
3	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.5	6.0
4	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.6	9.2
5	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.7	8.3
6	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.5	4.3
7	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.6	4.2
8	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.1	0.0
9	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.3	5.9
10	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.6	4.8
11	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.8	3.9
12	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.6	3.5
13	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.1	3.0
14	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.1	3.5
15	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.3	4.1
16	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.3	5.1
17	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.3	2.7
18	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.7	9.5
19	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.2	9.1
20	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.1	0.0
MEAN	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.4	5.5
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.2	2.3

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SWEETWATER

DATE 16

JULY 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
*****										
1	4.4	9.5	0.0	0.0	0.0	0.0	0.	0.	1.6	8.5
2	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.7	0.0
3	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	1.8	6.6
4	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	1.3	10.6
5	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	.3	3.1
6	4.4	9.1	0.0	0.0	0.0	0.0	0.	0.	.4	4.5
7	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	1.0	4.7
8	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
9	4.6	9.3	0.0	0.0	0.0	0.0	0.	0.	2.5	8.4
10	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	1.9	6.2
11	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	1.4	7.6
12	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	.3	6.5
13	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	1.7	5.1
14	4.4	9.2	0.0	0.0	0.0	0.0	0.	0.	1.3	3.8
15	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	.8	3.1
16	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	1.2	6.3
17	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	0.0
18	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	.5	9.4
19	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	.6	11.6
20	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
MEAN	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	1.1	6.6
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.7	2.6

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SWEETWATER

DATE 8 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LGNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGNTH	NEW SEED STALK LGNTH
*****										
1	5.3	9.7	18.0	48.0	28.0	0.0	4.	5.	1.5	6.2
2	5.3	0.0	7.0	15.0	8.0	0.0	5.	30.	1.5	0.0
3	5.3	9.5	22.0	51.0	32.0	0.0	4.	10.	2.1	6.4
4	5.2	9.4	38.0	59.0	45.0	0.0	4.	5.	2.1	10.6
5	5.2	9.6	19.0	23.0	10.0	0.0	4.	15.	.6	9.1
6	5.2	9.5	14.0	38.0	29.0	0.0	4.	10.	1.0	4.6
7	5.2	9.5	18.0	50.0	24.0	0.0	4.	45.	1.5	7.9
8	5.2	0.0	6.0	26.0	12.0	0.0	4.	10.	1.9	0.0
9	5.2	9.5	16.0	88.0	54.0	0.0	4.	10.	1.4	12.1
10	5.2	9.4	23.0	115.0	94.0	0.0	4.	15.	1.7	4.5
11	5.2	9.5	36.0	117.0	109.0	0.0	4.	10.	1.9	5.5
12	5.3	9.6	10.0	24.0	19.0	0.0	5.	25.	.3	6.6
13	5.2	9.4	14.0	31.0	21.0	0.0	4.	15.	.6	4.4
14	5.3	9.3	9.0	19.0	16.0	0.0	5.	40.	1.4	4.2
15	5.2	9.5	36.0	96.0	78.0	0.0	4.	10.	1.6	7.7
16	5.1	9.4	28.0	107.0	70.0	0.0	4.	15.	1.5	6.3
17	5.2	0.0	9.0	53.0	29.0	0.0	4.	10.	.3	0.0
18	5.2	9.5	23.0	59.0	44.0	0.0	4.	5.	1.6	5.2
19	5.2	9.5	16.0	111.0	53.0	0.0	4.	15.	.9	7.1
20	5.3	0.0	13.0	19.0	14.0	0.0	5.	40.	.3	0.0
MEAN	5.2	9.5	18.8	57.5	39.5	0.0	4.	17.	1.3	6.8
STD DEV	.1	.1	9.6	35.5	28.9	0.0	0.	12.	.6	2.3

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SWEETWATER

DATE 2 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG	NEW SEED STALK LENGTH
*****										
1	7.3	11.2	0.0	0.0	0.0	0.0	0.	0.	1.1	9.1
2	7.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.5	0.0
3	7.2	10.0	0.0	0.0	0.0	0.0	0.	0.	1.9	6.2
4	7.3	9.9	0.0	0.0	0.0	0.0	0.	0.	1.1	10.2
5	7.2	9.9	0.0	0.0	0.0	0.0	0.	0.	.6	4.1
6	7.2	9.8	0.0	0.0	0.0	0.0	0.	0.	.6	4.0
7	7.2	9.8	0.0	0.0	0.0	0.0	0.	0.	1.9	7.5
8	7.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
9	7.3	9.9	0.0	0.0	0.0	0.0	0.	0.	1.8	8.0
10	7.2	9.7	0.0	0.0	0.0	0.0	0.	0.	1.0	7.4
11	7.2	10.0	0.0	0.0	0.0	0.0	0.	0.	1.5	7.3
12	7.2	9.9	0.0	0.0	0.0	0.0	0.	0.	.4	6.6
13	7.2	11.2	0.0	0.0	0.0	0.0	0.	0.	.4	3.9
14	7.4	9.7	0.0	0.0	0.0	0.0	0.	0.	1.0	3.6
15	7.3	9.8	0.0	0.0	0.0	0.0	0.	0.	2.8	7.5
16	7.2	9.8	0.0	0.0	0.0	0.0	0.	0.	1.5	5.7
17	7.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.0	0.0
18	7.1	9.8	0.0	0.0	0.0	0.0	0.	0.	1.4	6.5
19	7.3	9.9	0.0	0.0	0.0	0.0	0.	0.	.5	6.6
20	7.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	6.6
MEAN	7.2	10.0	0.0	0.0	0.0	0.0	0.	0.	1.2	6.5
STD DEV	.1	.5	0.0	0.0	0.0	0.0	0.	0.	.6	1.8

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SWEETWATER

DATE 29 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW TWIG VEG.	NEW SEED STALK LENGTH
1	7.7	12.8	0.0	0.0	0.0	0.0	0.	0.	2.2	9.6
2	7.7	0.0	0.0	0.0	0.0	0.0	0.	0.	1.6	0.0
3	7.8	12.9	0.0	0.0	0.0	0.0	0.	0.	1.4	6.8
4	7.8	12.7	0.0	0.0	0.0	0.0	0.	0.	1.3	8.8
5	7.6	12.9	0.0	0.0	0.0	0.0	0.	0.	.6	4.1
6	7.8	12.3	0.0	0.0	0.0	0.0	0.	0.	.5	3.5
7	7.8	12.7	0.0	0.0	0.0	0.0	0.	0.	1.0	5.2
8	7.6	0.0	0.0	0.0	0.0	0.0	0.	0.	1.9	0.0
9	7.7	12.5	0.0	0.0	0.0	0.0	0.	0.	2.5	11.6
10	7.7	12.5	0.0	0.0	0.0	0.0	0.	0.	.4	4.2
11	7.7	12.5	0.0	0.0	0.0	0.0	0.	0.	1.5	6.3
12	7.6	12.4	0.0	0.0	0.0	0.0	0.	0.	.4	7.1
13	7.6	12.7	0.0	0.0	0.0	0.0	0.	0.	1.1	4.0
14	7.7	12.3	0.0	0.0	0.0	0.0	0.	0.	1.7	3.5
15	7.8	12.5	0.0	0.0	0.0	0.0	0.	0.	1.5	8.0
16	7.7	12.7	0.0	0.0	0.0	0.0	0.	0.	1.2	6.1
17	7.6	0.0	0.0	0.0	0.0	0.0	0.	0.	1.2	0.0
18	7.7	12.6	0.0	0.0	0.0	0.0	0.	0.	1.0	6.5
19	7.7	12.6	0.0	0.0	0.0	0.0	0.	0.	1.1	4.2
20	7.6	12.7	0.0	0.0	0.0	0.0	0.	0.	4.1	6.4
MEAN	7.7	12.6	0.0	0.0	0.0	0.0	0.	0.	1.4	6.2
STD DEV	.1	.2	0.0	0.0	0.0	0.0	0.	0.	.8	2.3

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA UPPER GOVT

DATE 5

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
*****										
1	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED



ARTEMISIA TRIDENTATA

STUDY AREA UPPER GOVT

DATE 23

MAY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LGNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGNTH	NEW SEED STALK LGNTH
*****										
1	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA UPPER GOVT

DATE 6

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
*****										
1	2.4	0.0	28.0	0.0	0.0	22.0	4.	15.	0.0	0.0
2	3.4	0.0	19.0	61.0	25.0	0.0	4.	30.	0.0	0.0
3	3.5	0.0	32.0	47.0	41.0	0.0	4.	10.	0.0	0.0
4	3.4	0.0	28.0	40.0	19.0	0.0	5.	40.	0.0	0.0
5	3.4	0.0	33.0	65.0	40.0	0.0	4.	15.	0.0	0.0
6	3.5	0.0	33.0	52.0	43.0	0.0	4.	10.	0.0	0.0
7	3.4	0.0	22.0	30.0	27.0	0.0	4.	5.	0.0	0.0
8	3.5	0.0	18.0	22.0	15.0	0.0	4.	50.	0.0	0.0
9	3.5	0.0	33.0	61.0	41.0	0.0	4.	20.	0.0	0.0
10	3.5	0.0	25.0	49.0	36.0	0.0	4.	10.	0.0	0.0
11	3.5	0.0	36.0	47.0	33.0	0.0	4.	15.	0.0	0.0
12	3.5	0.0	13.0	19.0	14.0	0.0	5.	30.	0.0	0.0
13	3.6	0.0	31.0	66.0	49.0	0.0	4.	10.	0.0	0.0
14	3.5	0.0	36.0	43.0	33.0	0.0	4.	15.	0.0	0.0
15	3.5	0.0	23.0	35.0	25.0	0.0	4.	10.	0.0	0.0
16	3.5	0.0	40.0	0.0	0.0	64.0	4.	5.	0.0	0.0
17	3.5	0.0	29.0	51.0	48.0	0.0	4.	10.	0.0	0.0
18	3.5	0.0	39.0	63.0	42.0	0.0	4.	10.	0.0	0.0
19	3.5	0.0	22.0	25.0	17.0	0.0	4.	10.	0.0	0.0
20	3.4	0.0	35.0	48.0	31.0	0.0	4.	5.	0.0	0.0
MEAN	3.4	0.0	28.8	45.8	32.2	28.7	4.	16.	0.0	0.0
STD DEV	.2	0.0	7.4	14.8	11.2	32.5	0.	12.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA UPPER GOVT

DATE 26

JUNE 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGTH	NEW SEED STALK LNGTH
*****										
1	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	11.9
2	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	11.0
3	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	11.2
4	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	15.5
5	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	8.5
6	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	8.8
7	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	8.5
8	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	9.2
9	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	11.9
10	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	8.7
11	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	9.8
12	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	12.5
13	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	6.2
14	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	11.9
15	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	8.6
16	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	5.9
17	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	1.6	11.0
18	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	9.7
19	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	13.5
20	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	15.0
MEAN	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	10.5
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	2.6

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA UPPER GOVT

DATE 16

JULY 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
1	4.4	9.2	0.0	0.0	0.0	0.0	0.	0.	4.0	14.4
2	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	2.4	10.7
3	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	2.5	13.6
4	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	1.9	16.2
5	4.3	9.2	0.0	0.0	0.0	0.0	0.	0.	1.9	9.3
6	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	2.1	7.3
7	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	2.4	8.3
8	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	2.0	8.3
9	4.4	9.2	0.0	0.0	0.0	0.0	0.	0.	2.4	14.4
10	4.4	9.2	0.0	0.0	0.0	0.0	0.	0.	2.2	15.1
11	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	2.4	11.5
12	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	4.1	14.6
13	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	2.5	7.5
14	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	4.2	14.8
15	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	4.1	11.8
16	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	2.4	13.6
17	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	5.5	8.6
18	4.4	9.1	0.0	0.0	0.0	0.0	0.	0.	1.9	12.4
19	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	2.7	17.4
20	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	3.4	13.5
MEAN	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	2.9	12.2
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	1.0	3.1

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA UPPER GOVT

DATE 8 AUGUST 1979

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	PLANT HGHT	PLANT LNGLTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLTH	NEW SEED STALK LNGLTH
*****										
1	5.1	9.4	28.0	0.0	0.0	24.0	4.	15.	3.1	7.0
2	5.2	9.4	17.0	36.0	16.0	0.0	4.	25.	2.1	8.6
3	5.1	9.5	22.0	47.0	38.0	0.0	4.	10.	2.6	12.7
4	5.1	9.5	25.0	33.0	23.0	0.0	4.	30.	3.4	13.9
5	5.1	9.5	27.0	70.0	43.0	0.0	4.	10.	1.5	19.2
6	5.1	9.5	30.0	0.0	0.0	43.0	4.	5.	2.3	12.8
7	5.1	9.5	19.0	35.0	24.0	0.0	4.	5.	2.5	8.2
8	5.1	9.5	19.0	20.0	13.0	0.0	4.	50.	2.4	8.6
9	5.1	9.4	32.0	59.0	46.0	0.0	4.	10.	3.0	14.1
10	5.2	9.4	32.0	45.0	32.0	0.0	4.	5.	3.6	11.6
11	5.1	9.5	37.0	45.0	40.0	0.0	4.	10.	2.1	11.9
12	5.1	9.4	17.0	20.0	13.0	0.0	4.	5.	2.0	7.9
13	5.2	9.5	36.0	78.0	53.0	0.0	4.	5.	3.3	7.0
14	5.2	9.5	30.0	41.0	32.0	0.0	4.	10.	2.8	8.5
15	5.3	9.5	41.0	36.0	26.0	0.0	4.	5.	5.7	12.8
16	5.2	9.5	29.0	42.0	34.0	0.0	4.	10.	4.0	8.1
17	5.2	9.5	30.0	47.0	38.0	0.0	4.	5.	3.5	14.1
18	5.2	9.5	34.0	42.0	35.0	0.0	4.	5.	1.4	13.2
19	5.2	9.4	18.0	20.0	14.0	0.0	4.	15.	5.4	17.4
20	5.1	9.4	38.0	46.0	31.0	0.0	4.	5.	3.2	10.9

MEAN	5.1	9.5	28.1	42.3	30.6	33.5	4.	12.	3.0	11.4
STD DEV	.1	.0	7.4	15.5	11.8	13.4	0.	11.	1.1	3.4

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA UPPER GOVT

DATE 1 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLH	NEW SEED STALK LNGLH
*****										
1	7.2	9.7	0.0	0.0	0.0	0.0	0.	0.	2.2	7.2
2	7.2	9.7	0.0	0.0	0.0	0.0	0.	0.	2.0	12.1
3	7.2	9.7	0.0	0.0	0.0	0.0	0.	0.	1.6	11.2
4	7.2	9.7	0.0	0.0	0.0	0.0	0.	0.	4.9	15.8
5	7.3	9.7	0.0	0.0	0.0	0.0	0.	0.	2.1	9.1
6	7.3	9.7	0.0	0.0	0.0	0.0	0.	0.	2.8	8.7
7	7.2	9.7	0.0	0.0	0.0	0.0	0.	0.	3.3	8.9
8	7.2	9.7	0.0	0.0	0.0	0.0	0.	0.	2.2	10.9
9	7.2	9.6	0.0	0.0	0.0	0.0	0.	0.	3.0	16.9
10	7.2	9.6	0.0	0.0	0.0	0.0	0.	0.	3.1	15.0
11	7.2	9.7	0.0	0.0	0.0	0.0	0.	0.	2.0	11.2
12	6.8	9.7	0.0	0.0	0.0	0.0	0.	0.	1.7	14.1
13	7.2	9.7	0.0	0.0	0.0	0.0	0.	0.	3.3	5.8
14	7.2	9.8	0.0	0.0	0.0	0.0	0.	0.	3.8	13.4
15	7.3	9.7	0.0	0.0	0.0	0.0	0.	0.	2.1	10.3
16	7.3	9.7	0.0	0.0	0.0	0.0	0.	0.	1.8	7.5
17	7.3	9.6	0.0	0.0	0.0	0.0	0.	0.	3.3	12.4
18	7.1	9.7	0.0	0.0	0.0	0.0	0.	0.	2.1	12.5
19	7.2	9.7	0.0	0.0	0.0	0.0	0.	0.	2.5	19.3
20	7.4	9.7	0.0	0.0	0.0	0.0	0.	0.	4.5	12.4
MEAN	7.2	9.7	0.0	0.0	0.0	0.0	0.	0.	2.7	11.7
STD DEV	.1	.0	0.0	0.0	0.0	0.0	0.	0.	.9	3.4

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA UPPER GOVT

DATE 29 SEPTEMBER 1979

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGLTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLTH	NEW SEED STALK LNGLTH
*****										
1	7.5	12.8	0.0	0.0	0.0	0.0	0.	0.	4.5	13.7
2	7.6	12.5	0.0	0.0	0.0	0.0	0.	0.	1.9	7.5
3	7.7	12.6	0.0	0.0	0.0	0.0	0.	0.	4.4	8.6
4	7.6	12.6	0.0	0.0	0.0	0.0	0.	0.	2.9	15.7
5	7.7	12.6	0.0	0.0	0.0	0.0	0.	0.	2.8	9.4
6	7.6	12.5	0.0	0.0	0.0	0.0	0.	0.	2.3	9.1
7	7.7	12.7	0.0	0.0	0.0	0.0	0.	0.	2.3	8.4
8	7.6	12.5	0.0	0.0	0.0	0.0	0.	0.	4.0	19.3
9	7.7	12.7	0.0	0.0	0.0	0.0	0.	0.	3.3	15.1
10	7.7	12.6	0.0	0.0	0.0	0.0	0.	0.	4.3	13.5
11	7.7	12.6	0.0	0.0	0.0	0.0	0.	0.	2.9	12.0
12	7.6	12.5	0.0	0.0	0.0	0.0	0.	0.	6.1	14.3
13	7.6	12.6	0.0	0.0	0.0	0.0	0.	0.	4.5	8.0
14	7.7	12.5	0.0	0.0	0.0	0.0	0.	0.	4.1	13.7
15	7.6	12.5	0.0	0.0	0.0	0.0	0.	0.	4.8	10.3
16	7.7	12.6	0.0	0.0	0.0	0.0	0.	0.	2.1	13.1
17	7.6	12.7	0.0	0.0	0.0	0.0	0.	0.	2.5	12.0
18	7.7	12.8	0.0	0.0	0.0	0.0	0.	0.	1.6	12.5
19	7.7	12.8	0.0	0.0	0.0	0.0	0.	0.	3.1	18.0
20	7.7	12.8	0.0	0.0	0.0	0.0	0.	0.	4.3	12.8
MEAN	7.6	12.6	0.0	0.0	0.0	0.0	0.	0.	3.4	12.4
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	1.2	3.3

0.0 = NOT RECORDED

TABLE V. Average phenological development for the prime species for the sampling dates.

	<u>Page</u>
<u>Agropyron smithii</u>	
Bud Kimball Exclosure	283
Cumberland # 3 Exclosure	284
Demer Exclosure	285
Farson Exclosure	286
Horse Creek Exclosure	287
Mesa Antelope Exclosure	288
Owl Draw Exclosure	289
Red Wash # 2 Exclosure	290
Shoshoni # 7 Exclosure	291
Sweetwater Exclosure	292
Upper Government Draw Exclosure	293
<u>Agropyron spicatum</u>	
Cedar Mountain Exclosure	294
Cumberland # 3 Exclosure	295
Demer Exclosure	296
Horse Creek Exclosure	297
Owl Draw Exclosure	298
Red Wash # 2 Exclosure	299
<u>Artemisia nova</u>	
Horse Creek Exclosure	300
Owl Draw Exclosure	301
Sweetwater Exclosure	307
<u>Artemisia tridentata</u>	
Bud Kimball Exclosure	303
Cedar Mountain Exclosure	304
Cumberland # 3 Exclosure	305
Demer Exclosure	306
Farson Exclosure	307
Horse Creek Exclosure	308
Mesa Antelope Exclosure	309
Owl Draw Exclosure	310
Red Wash # 2 Exclosure	311
Shoshoni # 7 Exclosure	312
Sweetwater Exclosure	313
Upper Government Draw Exclosure	314



AGROPYRON SMITHII

STUDY AREA BUD KIMBAL

DATE	PHENOLOGICAL STAGE	SCORE	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
29	APRIL 1979	3.8	0.0	.2	10.1	0.0	0.0
24	MAY 1979	4.3	0.0	.3	15.7	0.0	0.0
11	JUNE 1979	5.1	0.0	.3	18.3	0.0	0.0
27	JUNE 1979	5.0	0.0	.3	19.7	0.0	0.0
17	JULY 1979	6.3	0.0	.3	19.6	0.0	0.0
9	AUGUST 1979	6.6	0.0	.2	19.1	0.0	1.3
1	SEPTEMBER 1979	6.8	0.0	.2	18.4	0.0	0.0
22	SEPTEMBER 1979	6.9	0.0	.2	17.6	0.0	0.0

AGROPHYTON SMITHII

STUDY AREA CUMBER 3

DATE	PHENOLOGICAL STAGE	SCORE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
22	MAY 1979	4.4	0.0	.2	16.0	0.0	0.0	0.0
5	JUNE 1979	4.8	0.0	.2	17.6	0.0	0.0	0.0
25	JUNE 1979	4.9	0.0	.2	17.9	0.0	0.0	0.0
15	JULY 1979	6.2	0.0	.2	17.0	0.0	0.0	0.0
7	AUGUST 1979	6.5	0.0	.2	18.0	0.0	0.0	1.8
1	SEPTEMBER 1979	6.8	0.0	.2	16.7	0.0	0.0	1.3
21	SEPTEMBER 1979	6.9	0.0	.2	16.5	0.0	0.0	0.0

ACRGPYRON SMITHII

STUDY AREA DEMER

DATE	PHENOLOGICAL STAGE	SCORE VEG.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
28	APRIL 1979	4.3	0.0	.2	14.3	0.0	0.0
24	MAY 1979	4.9	0.0	.3	16.6	0.0	0.0
7	JUNE 1979	5.3	0.0	.3	19.2	0.0	0.0
27	JUNE 1979	5.5	0.0	.3	19.6	0.0	0.0
17	JULY 1979	6.2	0.0	.1	18.5	0.0	1.8
9	AUGUST 1979	6.6	0.0	.2	18.8	0.0	1.4
1	SEPTEMBER 1979	6.8	0.0	.2	17.3	0.0	0.0
23	SEPTEMBER 1979	6.9	0.0	.2	19.4	0.0	0.0

AGROPYRON SMITHII

STUDY AREA FARSON

DATE	PHENOLOGICAL STAGE	SCORE	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK / CULM	NOS. VEG. PLANT
4 MAY 1979	3.2	0.0	.2	9.3	0.0	0.0	0.0
22 MAY 1979	4.3	0.0	.2	13.7	0.0	0.0	0.0
5 JUNE 1979	4.4	0.0	.2	14.7	0.0	0.0	0.0
25 JUNE 1979	4.6	0.0	.2	15.3	0.0	0.0	0.0
16 JULY 1979	5.2	0.0	.1	16.3	0.0	0.0	1.8
7 AUGUST 1979	5.5	16.8	.2	15.8	29.6	1.0	2.6
2 SEPTEMBER 1979	6.6	0.0	.2	16.1	0.0	0.0	0.0
22 SEPTEMBER 1979	6.8	0.0	.2	15.3	0.0	0.0	0.0

AGROPYRON SMITHII

STUDY AREA HORSE CR.

DATE	PHENOLOGICAL STAGE	SCORE	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
*****	*****	*****	*****	*****	*****	*****	*****
28 APRIL 1979	4.0	0.0	.2	12.1	0.0	0.0	0.0
24 MAY 1979	4.9	0.0	.3	16.8	0.0	0.0	0.0
7 JUNE 1979	5.3	0.0	.3	17.9	0.0	0.0	0.0
27 JUNE 1979	5.4	13.1	.3	18.8	48.5	7.0	1.0
18 JULY 1979	6.3	14.6	.2	17.2	49.0	8.0	1.0
9 AUGUST 1979	6.8	16.2	.2	15.5	32.8	14.0	2.3
2 SEPTEMBER 1979	6.9	16.3	.2	15.1	47.0	0.0	0.0
21 SEPTEMBER 1979	6.9	16.9	.2	14.5	26.0	0.0	0.0

AGROPYRON SMITHII

STUDY AREA MESA ANTEL

DATE	PHENOLOGICAL STAGE	SCORE	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NUS. SPK/ CULM	NOS. VEG. PLANT
4	MAY 1979	3.3	0.0	.2	8.7	0.0	0.0
22	MAY 1979	4.0	0.0	.1	10.3	0.0	0.0
5	JUNE 1979	4.4	0.0	.1	12.7	0.0	0.0
25	JUNE 1979	4.7	13.1	.1	11.7	48.5	7.0
15	JULY 1979	6.4	14.6	.1	11.7	49.0	8.0
7	AUGUST 1979	6.7	16.2	.2	10.1	32.8	14.0
1	SEPTEMBER 1979	7.0	16.3	.2	10.0	47.0	0.0
22	SEPTEMBER 1979	7.0	16.9	.1	10.2	26.0	0.0

AGROPYRON SMITHII

STUDY AREA OWL DRAW

DATE	PHENOLOGICAL STAGE	SCORE	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
5	MAY 1979	3.7	0.0	.2	8.6	0.0	0.0
25	MAY 197	4.6	0.0	.3	14.1	0.0	0.0
12	JUNE 1979	5.0	0.0	.3	16.0	0.0	0.0
28	JUNE 1979	5.6	13.1	.3	16.6	48.5	7.0
19	JULY 1979	6.5	14.6	.2	14.4	49.0	8.0
10	AUGUST 1979	6.7	16.0	.2	15.2	33.0	7.0
1	SEPTEMBER 1979	6.9	16.3	.2	14.8	47.0	0.0
23	SEPTEMBER 1979	7.7	16.7	.2	11.7	26.0	0.0

AGROPYRON SMITHII

STUDY AREA RED WASH 2

DATE	PHENOLOGICAL STAGE	SCORE VEG.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
6	MAY 1979	3.4	0.0	.1	9.3	0.0	0.0
22	MAY 1979	4.0	0.0	.2	11.9	0.0	0.0
4	JUNE 1979	4.5	0.0	.2	14.9	0.0	0.0
24	JUNE 1979	5.1	13.1	.2	15.8	48.5	7.0
14	JULY 1979	6.0	14.6	.1	14.3	49.0	8.0
6	AUGUST 1979	6.5	16.0	.2	16.7	33.0	7.0
31	AUGUST 1979	6.6	16.3	.2	14.9	47.0	0.0
21	SEPTEMBER 1979	7.2	16.9	.2	15.8	26.0	0.0



AGROPYRON SMITHII

STUDY AREA SHOSHONI 7

DATE	PHENOLOGICAL STAGE	SCORE	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT	
30	APRIL 1979	3.9	0.0	.2	9.4	0.0	0.0	
23	MAY 1979	4.6	0.0	.2	14.3	0.0	0.0	
6	JUNE 1979	4.7	0.0	.2	14.8	0.0	0.0	
26	JUNE 1979	4.9	13.1	.2	13.8	48.5	7.0	1.0
17	JULY 1979	6.3	14.6	.2	14.3	49.0	8.0	1.0
8	AUGUST 1979	6.6	16.0	.2	13.8	33.0	7.0	1.3
1	SEPTEMBER 1979	6.8	16.3	.3	15.2	47.0	0.0	2.2
29	SEPTEMBER 1979	7.9	16.9	.3	15.6	26.0	0.0	0.0

AGROPYRON SMITHII

STUDY AREA SWEETWATER

DATE	PHENOLOGICAL STAGE	SCORE	MAX. LEAF REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
5	MAY 1979	4.1	0.0	.2	10.3	0.0	0.0	0.0
23	MAY 1979	4.5	0.0	.2	14.3	0.0	0.0	0.0
6	JUNE 1979	4.5	0.0	.2	13.9	0.0	0.0	0.0
26	JUNE 1979	5.0	13.1	.2	15.5	48.5	7.0	1.0
16	JULY 1979	5.2	14.6	.2	16.3	49.0	8.0	1.0
8	AUGUST 1979	6.6	16.0	.2	14.8	33.0	7.0	1.8
2	SEPTEMBER 1979	6.9	16.3	.2	17.2	47.0	0.0	2.2
29	SEPTEMBER 1979	7.7	16.9	.2	16.6	26.0	0.0	0.0

AGROPYRON SMITHII

STUDY AREA UPPER GOVT

DATE	PHENOLOGICAL STAGE	SCORE	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
5	MAY 1979	4.0	0.0	.2	11.4	0.0	0.0
23	MAY 1979	4.5	0.0	.2	16.1	0.0	0.0
6	JUNE 1979	4.9	9.6	.2	18.5	0.0	0.0
26	JUNE 1979	5.2	13.1	.3	20.4	48.5	7.0
16	JULY 1979	5.8	15.5	.2	19.6	34.5	5.0
8	AUGUST 1979	6.5	16.0	.2	21.3	33.0	7.0
1	SEPTEMBER 1979	6.8	16.9	.2	19.2	31.5	7.0
29	SEPTEMBER 1979	7.9	16.9	.2	18.1	26.0	0.0

AGROPYRON SPICATUM

STUDY AREA CEDAR MTN.

DATE	PHENOLOGICAL STAGE SCORE VEG. REPR.	CLUMP LGTH WIDTH	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
6	MAY 1979	4.0 0.0	93.0 55.4	30.7 .2	24.9 0.0	0. 0.	0. 0.	
25	MAY 1979	5.0 0.0	0.0 0.0	0.0 .3	15.9 0.0	0. 0.	0. 0.	
4	JUNE 1979	5.1 9.2	33.7 18.4	17.8 .2	16.1 0.0	0. 0.	0. 0.	
24	JUNE 1979	5.4 10.0	0.0 0.0	0.0 .3	19.5 25.8	5. 6.	50. 50.	
15	JULY 1979	6.1 14.4	0.0 0.0	0.0 .2	19.9 25.0	4. 4.	60. 60.	
6	AUGUST 1979	6.4 16.2	21.8 12.3	25.5 .2	17.6 26.8	5. 7.	38. 38.	
31	AUGUST 1979	6.5 16.4	0.0 0.0	0.0 .2	15.0 23.3	5. 6.	34. 34.	
21	SEPTEMBER 1979	7.5 16.9	0.0 0.0	0.0 .2	15.4 29.5	5. 5.	32. 32.	

AGROPYRON SPICATUM

STUDY AREA CUMBER. 3

DATE	PHENOLOGICAL STAGE	SCORE REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM		
22	MAY	1979	4.7	0.0	93.0	55.4	30.7	.2	19.8	0.0	0.	0.	
5	JUNE	1979	4.6	0.0	14.8	10.0	9.4	.2	22.2	0.0	0.	0.	
25	JUNE	1979	5.4	10.1	33.7	18.4	17.8	.3	30.0	29.5	6.	3.	27.
15	JULY	1979	6.2	15.0	0.0	0.0	0.0	.2	28.4	29.2	3.	5.	22.
7	AUGUST	1979	6.5	16.4	14.1	6.3	6.5	.2	25.6	37.5	5.	6.	34.
1	SEPTEMBER	1979	6.8	16.6	21.8	12.3	25.5	.3	26.4	27.4	5.	7.	37.
21	SEPTEMBER	1979	6.9	16.9	0.0	0.0	0.0	.2	24.7	37.1	5.	8.	38.

AGROPYRON SPICATUM

STUDY AREA DEMER

DATE	PHENOLOGICAL STAGE	SCORE	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM		
*****													
28	APRIL	1979	5.0	0.0	93.0	55.4	30.7	.3	20.8	0.0	0.	0.	
24	MAY	1979	5.3	9.2	14.8	10.0	9.4	.3	31.7	0.0	0.	0.	
7	JUNE	1979	5.4	10.8	47.6	35.6	22.0	.3	35.7	59.5	10.	50.	58.
27	JUNE	1979	5.8	14.1	0.0	0.0	0.0	.3	43.3	65.8	9.	35.	29.
17	JULY	1979	6.1	15.8	14.1	8.3	0.0	.2	34.5	58.8	9.	31.	54.
9	AUGUST	1979	6.4	16.0	38.2	23.3	0.0	.2	27.3	58.8	8.	49.	114.
1	SEPTEMBER	1979	6.8	16.7	0.0	0.0	0.0	.2	38.7	56.8	5.	8.	30.
23	SEPTEMBER	1979	6.9	16.8	0.0	0.0	0.0	.2	40.6	55.2	5.	5.	32.

AGROPYRON SPICATUM

STUDY AREA HORSE CR.

DATE	PHENOLOGICAL		LGTH	CLUMP		DIAM	MAX.	MAX.	MAX.	NO.	NO.	NO.
	STAGE	SCORE		LEAF	LEAF		SPK	SPL/	REPR	VEG		
	VEG.	REPR.		WIDTH		WIDTH	HGHT	HGHT	CULM	CULM	CULM	CULM
*****												
29	APRIL 1979	4.2	0.0	93.0	55.4	0.0	.2	13.0	0.0	0.	0.	0.
24	MAY 1979	5.4	9.5	14.8	10.0	0.0	.3	25.5	0.0	0.	0.	0.
7	JUNE 1979	5.7	10.2	15.2	10.5	9.1	.3	31.7	53.5	7.	25.	35.
6	JUNE 1979	5.6	13.6	0.0	0.0	0.0	.3	25.1	55.7	7.	23.	29.
18	JULY 1979	6.4	16.7	14.1	8.3	0.0	.2	23.0	58.2	7.	22.	29.
9	AUGUST 1979	6.7	16.8	12.9	7.9	5.1	.2	28.4	48.9	7.	20.	38.
2	SEPTEMBER 1979	6.8	16.9	0.0	0.0	0.0	.2	27.4	52.3	5.	8.	38.
21	SEPTEMBER 1979	6.9	16.9	0.0	0.0	0.0	.2	27.5	51.1	5.	5.	32.

## AGROPYRON SPICATUM

## STUDY AREA DWL DRAW

DATE	PHENOLOGICAL STAGE SCORE VEG. REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
*****										
5	MAY 1979	3.9	0.0	93.0	55.4	0.0	.2	8.2	0.0	0.
25	MAY 1979	4.9	9.5	14.8	10.0	0.0	.2	10.4	0.0	0.
12	JUNE 1979	5.6	10.2	17.0	10.0	2.6	.2	12.7	53.5	7.
28	JUNE 1979	6.0	13.6	0.0	0.0	0.0	.2	12.7	55.7	7.
19	JULY 1979	6.5	16.7	14.1	8.3	0.0	.2	13.8	58.2	7.
10	AUGUST 1979	6.8	16.8	9.0	5.9	2.5	.2	11.2	48.9	7.
1	SEPTEMBER 1979	7.4	16.9	0.0	0.0	0.0	.2	11.4	52.3	5.
23	SEPTEMBER 1979	7.8	16.9	0.0	0.0	0.0	.2	12.5	51.1	5.



AGROPYRON SPICATUM

STUDY AREA RED WASH 2

DATE	PHENOLOGICAL STAGE SCORE VEG. REPR.	LGTH	CLUMP WIDTH	DIAM	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM		
6	MAY 1979	3.7	3.0	42.4	22.1	22.9	.1	9.3	0.0	0.	0.	
21	MAY 1979	4.5	9.5	14.8	10.0	0.0	.2	12.8	0.0	0.	0.	
4	JUNE 1979	5.0	10.2	48.4	31.3	13.5	.3	18.7	53.5	7.	25.	39.
24	JUNE 1979	5.4	10.5	0.0	0.0	0.0	.3	21.1	35.7	7.	15.	87.
14	JULY 1979	6.1	13.9	14.1	8.3	0.0	.3	23.0	42.0	6.	11.	59.
6	AUGUST 1979	6.4	15.6	53.7	28.9	51.0	.2	27.6	43.9	6.	24.	111.
31	AUGUST 1979	6.5	16.2	0.0	0.0	0.0	.3	22.2	42.9	6.	17.	82.
21	SEPTEMBER 1979	7.5	16.8	0.0	0.0	0.0	.2	21.4	45.3	0.	10.	83.

ARTEMISIA NOVA

STUDY AREA HORSE CR.

DATE	PHENOLOGICAL STAGE	SCORE	VEG. REPR.	PLANT HGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLH	NEW SEED STALK LNGLH
*****											
28	APRIL 1979	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
24	MAY 1979	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	JUNE 1979	3.3	0.0	22.6	48.2	31.5	0.0	4.	27.	0.0	0.0
27	JUNE 1979	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	.7	11.5
18	JULY 1979	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	2.1	10.6
9	AUGUST 1979	5.3	9.6	24.0	49.8	33.3	33.0	4.	24.	2.6	11.4
2	SEPTEMBER 1979	5.5	10.4	0.0	0.0	0.0	0.0	0.	0.	3.2	11.4
21	SEPTEMBER 1979	5.7	11.5	0.0	0.0	0.0	0.0	0.	0.	2.6	11.2

## ARTEMISIA NOVA

## STUDY AREA OWL DRAW

	DATE	PHENOLOGICAL STAGE SCORE VEG. REPR.	PLANT HGHT	PLANT LNGLTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLTH	NEW SEED STALK LNGLTH	
	*****										
5	MAY 1979	2.6 0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0	
25	MAY 1979	3.2 0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0	
12	JUNE 1979	3.3 0.0	10.9	26.5	17.5	0.0	4.	19.	0.0	0.0	
28	JUNE 1979	4.1 0.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.9	
19	JULY 1979	4.3 9.5	0.0	0.0	0.0	0.0	0.	0.	.4	3.8	
10	AUGUST 1979	5.3 9.6	10.1	26.2	17.1	0.0	4.	15.	.5	4.8	
1	SEPTEMBER 1979	6.1 9.8	0.0	0.0	0.0	0.0	0.	0.	.7	4.1	
23	SEPTEMBER 1979	6.2 13.4	0.0	0.0	0.0	0.0	0.	0.	.7	4.5	

## ARTEMISIA NOVA

## STUDY AREA SWEETWATER

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DATE	PHENOLOGICAL STAGE	SCORE	PLANT VEG. REPR.	PLANT HIGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLH	NEW SEED STALK LNGLH
*****											
5	MAY 1979	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
23	MAY 1979	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	JUNE 1979	3.2	0.0	11.8	36.8	20.1	0.0	4.	34.	0.0	0.0
26	JUNE 1979	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	6.6
16	JULY 1979	4.4	9.4	0.0	0.0	0.0	0.0	0.	0.	.6	7.0
8	AUGUST 1979	5.2	9.7	10.3	32.6	21.6	7.5	4.	24.	1.0	7.3
2	SEPTEMBER 1979	7.2	10.1	0.0	0.0	0.0	0.0	0.	0.	.8	7.7
29	SEPTEMBER 1979	7.6	12.7	0.0	0.0	0.0	0.0	0.	0.	1.2	7.2

ARTEMISIA TRIDENTATA      STUDY AREA      BUD KIMBAL

DATE	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH	
*****											
29	APRIL 1979	2.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0	
24	MAY 1979	3.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0	
11	JUNE 1979	3.3	0.0	25.5	46.1	20.3	19.8	4.	22.	0.0	0.0
27	JUNE 1979	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	.9	9.5
17	JULY 1979	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	1.6	7.9
9	AUGUST 1979	5.3	9.5	22.2	36.8	25.7	0.0	4.	17.	2.3	7.6
1	SEPTEMBER 1979	5.5	10.4	0.0	0.0	0.0	0.0	0.	0.	2.7	8.4
22	SEPTEMBER 1979	5.6	11.1	0.0	0.0	0.0	0.0	0.	0.	2.5	5.9

ARTEMISIA TRIDENTATA

STUDY AREA

CEDAR MTN

304

	DATE	PHENOLOGICAL STAGE SCORE VEG. REPR.	PLANT HGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLH	NEW SEED STALK LNGLH	
	*****										
6	MAY 1979	3.1 0.0	29.7	53.8	23.8	47.1	4.	16.	0.0	0.0	
25	MAY 1979	3.3 0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0	
4	JUNE 1979	3.4 0.0	28.4	48.9	33.5	17.0	4.	14.	0.0	0.0	
24	JUNE 1979	4.2 9.1	0.0	0.0	0.0	0.0	0.	0.	1.6	8.3	
15	JULY 1979	5.7 9.4	0.0	0.0	0.0	0.0	0.	0.	1.4	9.2	
6	AUGUST 1979	5.8 9.7	27.8	47.6	34.4	6.5	4.	14.	2.9	8.3	
28	AUGUST 1979	5.9 10.7	0.0	0.0	0.0	0.0	0.	0.	2.1	10.3	
21	SEPTEMBER 1979	6.2 14.7	0.0	0.0	0.0	0.0	0.	0.	2.2	10.0	

ARTEMISIA TRIDENTATA      STUDY AREA      CUMBER 3

	DATE	PHENOLOGICAL STAGE	SCORE	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
	*****										
22	MAY 1979	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	JUNE 1979	3.5	0.0	51.3	55.7	37.1	50.0	4.	27.	0.0	0.0
25	JUNE 1979	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	.9	5.4
15	JULY 1979	4.4	8.7	0.0	0.0	0.0	0.0	0.	0.	2.5	7.9
7	AUGUST 1979	5.4	9.6	54.1	57.4	41.0	0.0	4.	32.	3.0	8.6
1	SEPTEMBER 1979	5.8	10.4	0.0	0.0	0.0	0.0	0.	0.	2.3	8.8
21	SEPTEMBER 1979	6.4	14.5	0.0	0.0	0.0	0.0	0.	0.	2.5	8.2

ARTEMISIA TRIDENTATA

STUDY AREA

DEMER

306

DATE	PHENOLOGICAL STAGE	SCORE	PLANT HIGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLH	NEW SEED STALK LNGLH
*****										
28	APRIL 1979	2.4	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
24	MAY 1979	3.3	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	JUNE 1979	3.5	0.0	29.5	53.5	35.7	66.0	4.	25.	0.0
27	JUNE 1979	4.2	9.0	0.0	0.0	0.0	0.0	0.	0.	0.6
17	JULY 1979	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	2.8
9	AUGUST 1979	5.3	9.5	30.3	52.0	35.7	0.0	4.	18.	3.6
1	SEPTEMBER 1979	5.5	10.5	0.0	0.0	0.0	0.0	0.	0.	3.5
23	SEPTEMBER 1979	5.7	12.1	0.0	0.0	0.0	0.0	0.	0.	2.8



ARTEMISIA TRIDENTATA      STUDY AREA      FARSON

	DATE	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH	
	*****											
4	MAY 1979	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0	
22	MAY 1979	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0	
5	JUNE 1979	3.5	0.0	21.3	40.9	26.4	17.5	4.	23.	0.0	0.0	
25	JUNE 1979	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	3.3	
16	JULY 1979	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	.4	4.4	
7	AUGUST 1979	5.6	9.6	21.9	40.2	24.7	45.0	4.	22.	.6	4.2	
2	SEPTEMBER 1979	5.8	11.0	0.0	0.0	0.0	0.0	0.	0.	.9	3.6	
22	SEPTEMBER 1979	6.2	15.1	0.0	0.0	0.0	0.0	0.	0.	.9	4.4	

ARTEMISIA TRIDENTATA

STUDY AREA

HORSE CR.

308

DATE	PHENOLOGICAL STAGE	SCORE VEG.	REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH
*****											
28	APRIL 1979	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
24	MAY 1979	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	JUNE 1979	3.5	0.0	35.9	60.3	35.9	0.0	4.	26.	0.0	0.0
27	JUNE 1979	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	1.4	8.6
18	JULY 1979	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	2.8	8.8
9	AUGUST 1979	5.3	9.4	32.7	52.0	31.7	0.0	4.	25.	2.2	7.9
9	SEPTEMBER 1979	5.5	10.0	0.0	0.0	0.0	0.0	0.	0.	3.0	9.3
21	SEPTEMBER 1979	5.6	10.5	0.0	0.0	0.0	0.0	0.	0.	3.0	8.9

ARTEMISIA TRIDENTATA      STUDY AREA      MESA ANTEL

	DATE	PHENOLOGICAL STAGE	SCORE	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
	*****										
4	MAY 1979	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
22	MAY 1979	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	JUNE 1979	3.5	0.0	21.6	45.8	27.1	19.5	4.	12.	0.0	0.0
25	JUNE 1979	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	2.1
15	JULY 1979	4.4	8.2	0.0	0.0	0.0	0.0	0.	0.	.6	3.1
7	AUGUST 1979	5.6	9.6	19.5	38.6	27.2	38.5	4.	20.	.6	2.6
1	SEPTEMBER 1979	5.8	11.1	0.0	0.0	0.0	0.0	0.	0.	1.1	2.7
22	SEPTEMBER 1979	6.4	15.3	0.0	0.0	0.0	0.0	0.	0.	.9	2.5

ARTEMISIA TRIDENTATA      STUDY AREA      OWL DRAW

310

DATE	PHENOLOGICAL STAGE	SCORE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLH	NEW SEED STALK LNGLH
*****											
5	MAY 1979	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
25	MAY 1979	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	JUNE 1979	3.5	0.0	29.8	49.9	33.5	13.0	4.	22.	0.0	0.0
28	JUNE 1979	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	3.9
18	JULY 1979	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	2.5	8.2
10	AUGUST 1979	5.3	9.5	30.0	50.4	32.8	0.0	4.	24.	1.7	7.0
1	SEPTEMBER 1979	7.1	9.7	0.0	0.0	0.0	0.0	0.	0.	1.5	4.0
23	SEPTEMBER 1979	6.2	14.7	0.0	0.0	0.0	0.0	0.	0.	2.1	6.8

ARTEMISIA TRIDENTATA      STUDY AREA      RED WASH 2

	DATE	PHENOLOGICAL STAGE SCORE VEG. REPR.	PLANT HGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLH	NEW SEED STALK LNGLH
*****										
6	MAY 1979	3.1 0.0	28.0	43.0	30.3	63.0	4.	15.	0.0	0.0
21	MAY 1979	3.2 0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	JUNE 1979	3.4 0.0	29.9	70.7	49.1	35.0	4.	15.	0.0	0.0
24	JUNE 1979	4.1 0.0	0.0	0.0	0.0	0.0	0.	0.	.3	4.7
14	JULY 1979	4.3 9.2	0.0	0.0	0.0	0.0	0.	0.	1.6	8.7
6	AUGUST 1979	5.1 9.6	29.9	67.1	50.3	0.0	4.	19.	2.0	8.4
31	AUGUST 1979	5.7 10.6	0.0	0.0	0.0	0.0	0.	0.	2.9	10.2
21	SEPTEMBER 1979	6.4 14.8	0.0	0.0	0.0	0.0	0.	0.	2.4	11.4

ARTEMISIA TRIDENTATA      STUDY AREA      SHOSHONI 7  
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DATE	PHENOLOGICAL STAGE	SCORE	PLANT VEG.	PLANT REPR.	PLANT HGHT	PLANT LNGLH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGLH	NEW SEED STALK LNGLH
*****												
30	APRIL	1979	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
23	MAY	1979	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	JUNE	1979	3.5	0.0	19.3	41.2	22.9	0.0	4.	26.	0.0	0.0
26	JUNE	1979	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	7.7
17	JULY	1979	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	1.7	7.0
8	AUGUST	1979	5.3	9.5	14.8	39.1	24.2	0.0	4.	21.	1.6	7.6
1	SEPTEMBER	1979	7.2	9.8	0.0	0.0	0.0	0.0	0.	0.	1.7	6.6
29	SEPTEMBER	1979	7.6	12.5	0.0	0.0	0.0	0.0	0.	0.	1.9	6.6

ARTEMISIA TRIDENTATA      STUDY AREA      SWEETWATER

DATE	PHENOLOGICAL STAGE	SCORE VEG.	PLANT HGT REPR.	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH	
*****											
5	MAY 1979	2.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0	
23	MAY 1979	3.3	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0	
6	JUNE 1979	3.3	0.0	21.8	55.0	30.2	0.0	4.	31.	0.0	0.0
26	JUNE 1979	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	5.5
16	JULY 1979	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	1.1	6.6
8	AUGUST 1979	5.2	9.5	18.8	57.5	39.5	0.0	4.	17.	1.3	6.8
2	SEPTEMBER 1979	7.2	10.0	0.0	0.0	0.0	0.0	0.	0.	1.2	6.5
29	SEPTEMBER 1979	7.7	12.6	0.0	0.0	0.0	0.0	0.	0.	1.4	6.2

ARTEMISIA TRIDENTATA      STUDY AREA      UPPER GOVT

	DATE	PHENOLOGICAL STAGE SCORE VEG. REPR.	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH	
	*****										
5	MAY 1979	2.4 0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0	
23	MAY 1979	3.4 0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0	
6	JUNE 1979	3.4 0.0	28.8	45.8	32.2	28.7	4.	16.	0.0	0.0	
26	JUNE 1979	4.1 0.0	0.0	0.0	0.0	0.0	0.	0.	.6	10.5	
16	JULY 1979	4.5 9.2	0.0	0.0	0.0	0.0	0.	0.	2.9	12.2	
8	AUGUST 1979	5.1 9.5	28.1	42.3	30.6	33.5	4.	12.	3.0	11.4	
1	SEPTEMBER 1979	7.2 9.7	0.0	0.0	0.0	0.0	0.	0.	2.7	11.7	
29	SEPTEMBER 1979	7.6 12.6	0.0	0.0	0.0	0.0	0.	0.	3.4	12.4	



TABLE VI. Phenological development dates for all species for three major growth stages - growth initiation, full bloom, seed dissemination - by exclosure for the years 1973 through 1979.

	<u>Page</u>
Bud Kimball Exclosure	316
Cedar Mountain Exclosure	318
Cumberland # 3 Exclosure	319
Demer Exclosure	321
Farson Exclosure	322
Horse Creek Exclosure	323
Mesa Antelope Exclosure	325
Owl Draw Exclosure	326
Red Wash # 2 Exclosure	328
Shoshoni # 7 Exclosure	329
Sweetwater Exclosure	330
Upper Government Draw Exclosure	332

TABLE VI. (Continued)

STUDY AREA BUD KIMBALL

SPECIES	GROWTH INITIATION							FULL BLOOM							SEED DISSEMINATION							SITE
	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	
AGCR	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7 Aug
AGSM	---	Mar	Mar	Mar	23 Apr	Apr	Apr	---	25 Jun	30 Jun	20 Jul	1 Jul	19 Jul	17 Jul	10 Aug	10 Aug	15 Aug	19 Aug	11 Aug	2 Sep	1 Sep	
AGSP	---	---	---	---	---	Apr	Apr	---	---	---	---	---	Jun	---	---	---	---	---	20 Jul	10 Aug	9 Aug	
ALTE	---	---	---	---	---	May	Apr	---	---	20 Jun	---	---	---	24 May	12 Jul	17 Jul	20 Jul	---	---	19 Jul	17 Jul	
ANT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	17 Jul	
AND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	17 Jul	
ARHO <sub>2</sub>	---	---	---	---	---	Apr	Apr	---	---	---	---	---	---	24 May	---	---	---	---	---	19 Jul	17 Jul	
ARTR	---	20 May	May	May	23 Apr	Apr	Apr	25 Sep	20 Sep	Sep	25 Sep	17 Sep	---	22 Sep	---	Nov	Nov	Nov	---	1 Nov	---	
ASPU	---	---	---	---	---	---	Apr	---	---	---	---	---	---	11 Jun	---	---	---	---	---	---	27 Jun	
BOGR	---	---	---	---	---	Jun	Apr	---	---	---	---	---	19 Jul	---	---	---	---	---	---	2 Sep	---	
BRJA	---	---	---	---	---	---	Apr	---	---	---	---	---	Jun	27 Jun	---	---	---	---	---	19 Jul	17 Jul	
BRTE	---	---	---	Mar	23 Apr	Apr	Apr	---	15 Jun	25 Jun	23 Jun	8 Jun	---	11 Jun	---	---	20 Jul	30 Jul	1 Jul	19 Jul	27 Jun	
CACH	---	---	---	23 Apr	---	---	---	---	---	---	---	8 Jun	---	---	---	---	---	---	1 Jul	---	---	
CANU	---	---	---	---	---	---	Apr	---	---	---	---	---	---	11 Jun	---	---	---	---	---	10 Aug	1 Aug	
CAAN	---	25 Apr	---	Apr	---	---	Apr	---	5 Jul	20 Jun	15 Jun	---	Jun	24 May	20 Jul	25 Jul	25 Jul	15 Jul	---	19 Jul	17 Jul	
CHDE	---	---	---	---	---	---	Apr	---	---	---	---	---	---	---	---	---	---	---	2 Sep	Aug	---	
CRE	---	---	---	23 Apr	---	---	---	---	20 Jun	15 Jun	5 Jul	May	---	---	---	---	15 Jul	1 Jul	---	---	---	
CRMO	---	---	---	---	---	Apr	Apr	---	---	---	---	---	Jun	24 May	---	---	---	---	19 Jul	1 Jul	---	
CYMO	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	15 Jul	---	---	---	---	
DEPI	---	---	---	---	May	Apr	---	---	20 Jun	15 Jun	---	---	---	24 May	---	25 Jul	25 Jun	---	19 Jul	27 Jun	---	
ERPU	---	---	Apr	Apr	25 May	Apr	---	---	25 Jun	15 Jun	---	Jun	26 Jun	11 Jun	---	25 Jul	30 Jun	1 Jul	19 Jul	17 Jul	9 Aug	
GTPU	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
HAGL	---	---	---	---	---	---	---	---	---	---	---	---	---	22 Sep	---	---	---	---	---	---	---	
KOCR	---	Mar	Mar	Mar	Apr	---	Apr	---	20 Jun	---	20 Jun	8 Jun	---	11 Jun	20 Jul	10 Jul	---	25 Jul	20 Jun	---	17 Jul	
LARE	---	---	---	Mar	Apr	25 May	Apr	---	10 Jun	17 Jun	15 Jun	8 Jun	---	24 May	20 Jul	25 Jul	25 Jul	25 Jul	20 Jul	19 Jul	27 Jun	
LEDE	---	---	---	---	25 May	May	---	---	---	---	---	---	---	---	---	---	---	1 Jul	19 Jul	17 Jul	---	
LERE	25 Apr	---	---	Apr	17 May	25 May	Apr	---	25 Jun	25 Jun	27 Jun	---	---	11 Jun	10 Jul	15 Jul	15 Jul	10 Jul	1 Jul	19 Jul	---	
LES	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	17 Jul	
LOOR	---	---	---	23 Apr	Apr	---	---	---	---	---	---	17 May	---	---	---	---	---	1 Jul	26 Jun	27 Jun	---	
MAGR	5 May	---	---	May	---	---	---	---	15 Jun	---	15 Jun	---	---	---	15 Jul	---	20 Jul	---	---	---	---	
MATA	---	---	---	May	23 Apr	---	---	---	23 Jun	20 Jul	1 Jul	---	---	---	---	---	20 Jul	---	---	---	---	
OPPO	---	---	---	Apr	23 Apr	25 May	Apr	---	15 Jun	---	20 Jun	---	19 Jul	27 Jun	Sep	30 Aug	15 Aug	5 Aug	11 Aug	---	9 Aug	
ORHY	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	27 Jun	---	
PHHO	---	---	---	Mar	23 Apr	25 May	Apr	---	10 Jun	15 Jun	---	---	---	24 May	---	---	17 Aug	1 Jul	---	17 Jul	---	
PLPA	---	---	---	---	Jun	---	---	---	---	---	---	---	Jun	11 Jun	---	---	---	---	19 Jul	17 Jul	---	
PLSA	---	---	---	---	---	---	---	---	---	---	---	---	---	---	25 Jul	20 Jul	25 Jul	---	---	---	---	
PLSP	---	---	---	May	---	---	---	---	---	---	---	---	---	---	---	---	1 Jul	---	---	---	---	
POSE	---	Mar	Mar	Mar	Mar	Apr	Apr	---	5 Jun	25 Jun	1 Jul	8 Jun	26 Jun	11 Jun	15 Jul	1 Jul	5 Jul	20 Jul	1 Jul	19 Jul	27 Jun	
SIHY	---	Mar	Mar	Apr	---	---	Apr	---	15 Jul	10 Jul	15 Jul	Jun	---	11 Jun	20 Jul	30 Jul	30 Jul	30 Jul	1 Jul	10 Aug	17 Jul	
SIVI	---	---	---	---	---	Apr	Apr	---	---	---	---	---	---	---	---	---	---	---	10 Aug	27 Jun	---	

TABLE VI. (Continued)

STUDY AREA BUD KIMBALL

SPECIES	GROWTH INITIATION								FULL BLOOM					SEED DISSEMINATION							
	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979
SPCO	----	Mar	----	Apr	23 Apr	25 May	Apr	----	25 Jun	30 Jun	10 Jul	----	----	----	----	20 Jul	25 Jul	10 Aug	----	----	----
SPCR	----									30 Jun							27 Jul				
STCO	----	Mar	Mar	Mar	Mar		Apr	----	25 Jun	5 Jul	10 Jul	Jun		11 Jun	25 Jul	30 Jul	30 Jul	5 Aug	1 Jun	19 Jul	17 Jul
STVI	----			Mar				----			3 Jul							20 Jul	20 Jul		
TAOF	----							----													1 Jun
TRDU	----					Apr	Apr	----						11 Jun							10 Aug
VIAM	----					Apr	Apr	----					Jun	11 Jun							19 Jul
VINU	----				23 Apr	Apr	Apr	----	15 Jun			17 May									1 Jul
VUOC	----				May			----				Jun		11 Jun						1 Jul	19 Jul

TABLE VI. (Continued)

STUDY AREA CEDAR MOUNTAIN

SPECIES	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	
AGCR	----	5 Mar	Apr	Apr	20 Apr	Apr	Apr	Jun	17 Jun	Jun	20 Jun	Jun	----	----	24 Jun	----	----	Aug	10 Aug	19 Jul	30 Aug	6 Aug
ACSP	----	----	Apr	Apr	20 Apr	29 Apr	Apr	5 Jul	30 Jun	20 Jun	1 Jul	----	----	----	24 Jun	----	5 Aug	20 Aug	----	30 Aug	6 Aug	----
ARHO	----	----	----	----	20 Apr	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ARHO <sub>2</sub>	----	Apr	----	Apr	----	----	Apr	Jun	5 Jun	----	3 Jun	----	----	----	----	----	----	5 Aug	----	8 Aug	24 Jun	----
ARSP	----	Apr	----	Apr	20 Apr	29 Apr	Apr	Apr	Jul	Jul	25 Jun	5 Jul	Jun	----	25 May	----	----	Jul	1 Aug	27 Jun	8 Aug	15 Jul
ARTR	24 May	15 May	May	May	19 May	29 Apr	Apr	Sep	Sep	Sep	Sep	Sep	----	----	31 Aug	----	----	----	Nov	5 Nov	----	----
ASPU	----	Apr	Apr	Mar	----	May	Apr	----	30 May	25 May	May	May	----	----	4 Jun	30 Jun	17 Jun	25 Jun	1 Jul	27 Jun	----	24 Jun
ATCO	----	May	May	May	19 May	Apr	Apr	Jul	25 Jun	Jun	Jul	----	----	----	24 Jun	----	----	----	1 Jul	----	----	6 Aug
ATGA	----	Apr	Apr	Apr	19 May	----	----	Jun	5 Jun	5 Jun	1 Jun	----	----	----	----	----	----	----	1 Aug	----	----	15 Jul
ATNU	----	----	----	----	22 May	Apr	Apr	----	Aug	Aug	18 Aug	18 Aug	Jun	Jun	4 Jun	----	----	----	----	5 Nov	----	----
CHVI	May	May	10 May	May	19 May	22 May	Apr	Apr	----	Aug	Aug	18 Aug	18 Aug	30 Aug	6 Aug	6 Aug	6 Aug	6 Aug	6 Aug	6 Aug	6 Aug	6 Aug
GORA	----	----	----	----	20 Apr	22 May	----	----	----	----	----	May	May	May	26 Jun	26 Jun	26 Jun	26 Jun	26 Jun	26 Jun	26 Jun	26 Jun
CYMO	----	----	----	----	20 Apr	22 May	----	----	----	----	Jun	Jun	May	May	Jun	Jun	Jun	Jun	Jun	19 Jul	19 Jul	19 Jul
EROV	----	May	May	May	20 Apr	May	----	Jun	Jun	10 Jun	Jun	Jun	Jun	Jun	Jun	Jun	Jun	Jun	Jun	19 Jul	19 Jul	19 Jul
ERPU	----	10 May	Apr	Apr	20 Apr	----	----	Jun	15 Jun	Jun	20 Jun	20 Jun	20 Jun	20 Jun	15 Jul	15 Jul	15 Jul	15 Jul	15 Jul	15 Jul	15 Jul	15 Jul
CELA	24 May	15 May	May	May	19 May	May	----	Jul	15 Jul	Jul	15 Jul	15 Jul	15 Jul	15 Jul	4 Jun	4 Jun	4 Jun	21 Jun	20 Jul	1 Jul	1 Jul	24 Jun
HAAC	----	Apr	Apr	Apr	20 Apr	Jun	----	10 Jun	1 Jun	5 Jun	7 Jun	7 Jun	7 Jun	7 Jun	24 Jun	24 Jun	24 Jun	24 Jun	24 Jun	24 Jun	24 Jun	24 Jun
KOAM	11 Mar	Mar	Mar	Mar	Apr	Apr	----	Jul	10 Jul	Jul	10 Jul	10 Jul	10 Jul	10 Jul	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun
LA	----	----	----	----	----	----	----	----	----	----	----	----	----	----	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun
OPPO	----	Apr	5 May	May	19 May	22 May	25 May	10 Jul	Jul	10 Jul	15 Jun	15 Jun	15 Jun	15 Jun	15 Jul	15 Jul	15 Jul	15 Jul	15 Jul	15 Jul	15 Jul	15 Jul
ORHY	5 Mar	Apr	Apr	Apr	20 Apr	Apr	Apr	20 Jun	20 Jun	20 Jun	20 Jun	20 Jun	20 Jun	20 Jun	20 Jun	20 Jun	20 Jun	20 Jun	20 Jun	20 Jun	20 Jun	20 Jun
PEFR	----	----	----	----	20 Apr	Apr	Apr	----	----	----	----	----	----	----	4 Jun	28 Jun	20 Jun	20 Jun	1 Jul	30 Jun	30 Jun	24 Jun
PHFD	----	Apr	Apr	Apr	20 Apr	Apr	Apr	----	30 May	30 May	5 Jun	5 Jun	5 Jun	5 Jun	4 Jun	28 Jun	20 Jun	20 Jun	1 Jul	30 Jun	30 Jun	24 Jun
PHLO	----	----	----	Apr	7 Jun	Apr	Apr	----	30 May	15 Jun	10 Jun	10 Jun	10 Jun	10 Jun	25 May	25 May	15 Jun	15 Jun	20 Jul	20 Jul	20 Jul	24 Jun
POSE	15 Mar	Mar	Mar	20 Apr	29 Apr	Apr	Apr	Jun	15 Jun	15 Jun	15 Jun	15 Jun	15 Jun	15 Jun	Jun	4 Jun	Jul	5 Jul	Jul	10 Jul	10 Jul	17 Jul
SAVE	----	----	----	----	Apr	Apr	Apr	----	----	----	----	----	----	----	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun
SIAL	----	----	----	----	Apr	Apr	Apr	----	----	----	----	----	----	----	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun	17 Jul
SIHY	10 Mar	----	----	20 Apr	Apr	Apr	Apr	28 Jun	15 Jun	20 Jun	15 Jun	15 Jun	15 Jun	15 Jun	24 Jun	1 Aug	Jul	Aug	10 Aug	10 Aug	17 Jul	15 Jul
SILL	----	----	----	May	Apr	Apr	Apr	25 May	1 Jun	1 Jun	1 Jun	1 Jun	1 Jun	1 Jun	Jun	25 Jun	28 Jun	28 Jun	28 Jun	28 Jun	28 Jun	8 Aug
SPCO	----	----	----	May	22 May	Apr	Apr	15 Jun	Jul	12 Jun	12 Jun	12 Jun	12 Jun	12 Jun	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun	15 Jul
TAOF	----	Apr	10 May	Apr	19 May	22 May	22 May	Jul	Jul	Jul	Jul	Jul	Jul	Jul	24 Jun	24 Jun	24 Jun	24 Jun	24 Jun	24 Jun	24 Jun	15 Jul
TENU	----	----	----	Apr	19 May	22 May	22 May	Jul	Jul	Jul	Jul	Jul	Jul	Jul	24 Jun	24 Jun	24 Jun	24 Jun	24 Jun	24 Jun	24 Jun	15 Jul
TOIN	----	----	----	Apr	20 Apr	Apr	Apr	Jul	Jul	Jul	Jul	Jul	Jul	Jul	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun	4 Jun	15 Jul

TABLE VI. (Continued)

STUDY AREA CUMBERLAND 3

SPECIES	GROWTH INITIATION								FULL BLOOM					SEED DISSEMINATION							
	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979
AGCL	---	10 Mar	---	May	19 May	May	May	15 Jun	10 Jun	---	10 Jun	---	Jun	5 Jun	Aug	Jun	---	10 Jul	7 Jun	---	25 Jun
AGSM	---	Apr	Mar	Apr	Apr	Apr	Apr	25 Jul	30 Jun	Jul	---	Apr	---	20 Aug	5 Aug	Aug	---	---	---	8 Aug	7 Aug
AGSP	---	Apr	Mar	Apr	Apr	Apr	Apr	28 Jun	25 Jun	Jul	20 Jul	---	26 Jun	25 Jun	5 Aug	30 Jul	25 Jul	20 Aug	---	8 Aug	7 Aug
AMAL	---	20 May	---	May	19 May	May	May	---	---	30 Jun	10 Jun	---	26 Jun	5 Jun	---	---	---	10 Sep	9 Aug	---	15 Jul
ANDI	---	May	---	Apr	19 May	May	Apr	---	Jun	---	1 Jun	7 Jun	---	5 Jun	Jun	20 Jun	---	15 Jul	19 Jul	---	25 Jun
ARHO	---	---	---	---	19 May	---	---	---	---	---	---	---	---	---	---	---	---	---	9 Aug	---	---
ARHO <sup>2</sup>	---	May	---	May	---	Apr	---	Jun	24 May	Jun	1 Jun	---	6 Jun	---	5 Jul	10 Jul	Jul	1 Aug	---	17 Jul	15 Jul
ARTR	Jun	20 May	May	May	Sep	May	May	Sep	10 Jul	5 Aug	15 Sep	---	---	1 Sep	---	---	Nov	5 Nov	4 Nov	---	---
ASCA	---	---	---	---	---	---	---	---	10 Jul	---	---	---	---	---	---	---	---	---	---	---	---
ASGI	---	May	---	---	19 May	Jun	---	---	6 Jun	10 Jun	1 Jun	---	---	5 Jun	28 Jun	25 Jun	Jul	15 Jul	---	---	---
ASDI	---	Apr	---	May	---	---	---	5 Jul	6 Jun	Jun	3 Jul	---	---	5 Jun	30 Jul	15 Jul	Jul	20 Aug	---	---	25 Jun
ASPU	---	---	---	---	19 May	May	---	---	---	---	---	---	6 Jun	---	---	---	---	---	28 Jun	17 Jul	---
AST	---	---	---	---	---	---	---	---	10 Jun	12 Jun	---	---	---	Jul	---	20 Jul	---	---	---	---	15 Jul
BRE	---	---	---	---	---	---	---	---	---	---	---	---	---	Jul	---	---	---	---	---	---	---
BRE	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
CANU	---	---	---	---	---	---	---	---	---	---	---	---	---	Jul	---	---	---	---	---	---	---
CAS	---	12 Mar	---	May	May	Apr	---	5 Jul	30 Jun	Jun	15 Jun	28 Jun	26 Jun	25 Jun	25 Jul	---	Aug	20 Aug	9 Aug	8 Aug	7 Aug
CHNA	---	---	---	---	Jun	---	---	---	---	---	---	9 Aug	---	---	---	---	---	7 Sep	---	---	---
CHVI	---	20 May	---	May	19 May	Apr	---	5 Aug	15 Jul	Jul	5 Aug	9 Aug	8 Aug	15 Jul	---	---	1 Oct	5 Nov	4 Nov	1 Sep	---
COPA	---	1 Jun	May	---	Apr	May	---	---	14 Jun	Jun	1 Jul	28 Jun	---	22 May	---	20 Jul	Jul	25 Aug	9 Aug	---	1 Jul
CORA	---	6 Jun	---	May	---	6 Jun	---	---	---	---	10 Aug	---	8 Aug	7 Aug	---	---	---	30 Aug	---	30 Aug	22 Sep
CRAC	---	30 May	---	May	---	---	---	5 Jul	15 Jul	20 Jun	30 Jun	---	---	25 Jun	14 Aug	---	Jul	14 Jul	---	---	15 Jul
DEPI	---	---	---	---	---	---	---	---	---	---	---	---	---	5 Jun	---	20 Jun	---	---	---	---	25 Jun
ERMI	---	14 May	May	May	19 May	Apr	---	10 Aug	15 Jul	5 Aug	20 Aug	9 Aug	Aug	15 Jul	---	---	30 Oct	5 Nov	4 Nov	1 Sep	---
EROV	---	12 Mar	---	---	---	---	---	25 Jun	6 Jun	---	---	---	---	---	14 Aug	10 Jul	---	---	---	---	---
ERSU	---	---	---	---	---	---	---	25 Jun	---	---	---	---	---	---	25 Jul	---	---	---	---	---	---
KOCR	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1 Sep
LARE	---	---	---	---	---	Apr	---	---	---	---	---	---	---	---	---	---	---	---	---	---	26 Jun
LEPE	---	---	---	---	---	May	---	---	---	---	---	---	---	---	---	---	---	---	---	---	8 Aug
LOSI	---	---	---	---	Apr	May	---	---	---	---	---	---	---	---	---	---	---	---	28 Jun	---	---
MACA	---	---	---	---	Jul	---	---	---	---	---	---	---	8 Aug	---	---	---	---	---	---	---	---
MELO	---	Apr	---	Apr	Apr	---	---	5 Jul	30 May	15 Jun	15 Jun	May	---	---	Jul	---	10 Aug	7 Jun	---	---	---
OPPO	---	May	May	May	19 May	May	22 May	---	15 Jul	5 Jul	10 Aug	19 Jul	---	15 Jul	---	---	Aug	20 Sep	9 Aug	---	7 Aug
ORHY	---	12 Mar	---	Mar	Apr	Apr	May	5 Jul	30 Jun	---	10 Jun	---	---	1 Jul	---	---	20 Aug	9 Aug	8 Aug	7 Aug	---
PELA	---	---	---	---	---	---	---	20 Jun	15 Jun	25 Jun	---	---	---	---	10 Aug	15 Jul	Jul	20 Aug	---	---	25 Jun
PHHO	---	Mar	---	---	---	May	---	Jun	24 May	5 Jun	5 Jun	---	---	22 May	10 Jul	20 Jul	Jul	10 Jul	---	26 Jun	25 Jun
PHLO	---	Mar	---	May	19 May	May	---	Jun	6 Jun	15 Jun	15 Jun	---	Jun	22 May	10 Jul	20 Jul	Jul	10 Jul	28 Jun	26 Jun	25 Jun
PIMU	---	---	---	---	19 May	---	---	---	---	---	---	---	---	---	---	---	---	---	28 Jun	---	---

TABLE VI. (Continued)

STUDY AREA CUMBERLAND 3

SPECIES	GROWTH INITIATION								FULL BLOOM					SEED DISSEMINATION									
	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979		
POFE	----	Mar	----	Apr	19 May	Apr	----	Jun	15 Jun	Jun	15 Jun	Jun	----	22 May	25 Jul	10 Jul	25 Jul	1 Aug	28 Jun	8 Aug	15 Jul		
POSE	----	Mar	----	Apr	Apr	Apr	----	2 Jul	30 Jun	30 Jun	10 Jun	Jun	----	5 Jun	15 Jul	5 Jul	Jul	15 Jul	28 Jul	17 Jul	15 Jul		
SEN	----	----	----	----	----	May	----	----	----	----	----	----	----	Jun	5 Jun	----	----	----	----	----	8 Aug	----	
SIAL	----	----	----	----	----	May	May	----	----	----	----	----	----	Jun	5 Jun	----	----	----	----	----	17 Jul	15 Jul	
SIHY	----	----	----	----	19 May	Apr	----	5 Jul	1 Jul	----	----	----	----	25 Jun	30 Jul	30 Jul	25 Jul	10 Aug	----	8 Aug	7 Aug	----	
SILI	----	----	----	----	May	Apr	----	----	----	----	----	----	----	Jun	5 Jun	----	----	----	----	----	17 Jul	----	
STCO	----	----	----	Apr	Apr	May	May	----	Jun	Jun	Jun	----	----	25 Jun	----	Jul	Jul	15 Jul	----	----	17 Jul	15 Jul	
SYOC	----	----	----	----	19 May	May	May	----	----	----	----	----	----	25 Jun	----	----	----	----	7 Sep	8 Aug	15 Jul	----	
TECA	----	24 May	----	May	19 May	May	May	10 Aug	10 Jul	5 Aug	1 Aug	Jul	8 Aug	15 Jul	----	----	----	30 Sep	7 Sep	30 Aug	1 Sep	----	
TRDU	----	----	----	----	----	Apr	----	----	----	----	----	----	----	Jul	25 Jun	----	----	----	----	----	----	15 Jul	----
TRI	----	----	----	May	19 May	May	May	May	30 May	----	----	----	----	----	28 Jun	20 Jun	Jun	Jun	----	----	----	----	----
UMB	----	----	----	Apr	----	May	----	----	----	----	1 Jun	----	Jun	22 May	Jul	6 Jun	----	1 Jul	----	8 Aug	25 Jun	----	
VIO	----	----	----	May	19 May	May	----	----	----	----	----	----	----	----	----	Jun	Jul	----	----	----	----	----	----
VINU	----	May	----	----	----	----	----	----	Jun	----	----	----	----	----	Jun	Jul	----	----	----	----	----	----	----
WYAM	----	----	----	May	----	May	----	----	8 Jun	12 Jun	10 Jun	7 Jun	----	5 Jun	Jun	15 Jun	Jun	20 Jul	28 Jun	8 Aug	25 Jun	----	
ZYPA	----	12 Mar	----	Mar	Apr	Apr	----	----	----	----	----	----	----	5 Jun	Jun	15 Jun	Jun	20 Jul	28 Jun	8 Aug	25 Jun	----	

TABLE VI. (Continued)

STUDY AREA DEMER

SPECIES	GROWTH INITIATION							FULL BLOOM					SEED DISSEMINATION								
	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979
AGSM	---	5 Mar	5 Mar	Mar	Mar	Apr	Apr	20 Jun	25 Jun	5 Jul	---	---	---	---	1 Nov	15 Aug	20 Aug	20 Aug	---	---	9 Aug
AGSP	---	5 Mar	1 Mar	Mar	Mar	Apr	Apr	10 Jun	25 Jun	1 Jul	15 Jun	---	---	7 Jun	1 Aug	30 Jul	5 Aug	30 Jul	11 Aug	20 Jul	17 Jul
ALTE	---	---	Apr	---	Apr	Apr	Apr	---	10 Jun	---	---	May	May	24 May	---	10 Jul	---	30 Jun	20 Jul	17 Jul	
ARTR	---	20 May	22 Apr	Apr	23 Apr	25 May	28 Apr	10 Sep	20 Sep	10 Sep	5 Sep	---	---	1 Sep	15 Nov	15 Nov	10 Nov	Nov	---	1 Nov	---
ASMI	---	---	---	---	---	Jun	---	---	---	---	---	---	---	7 Jun	---	---	---	---	---	9 Aug	9 Aug
ASPU	---	---	---	---	---	28 Apr	---	---	---	---	---	---	---	---	---	---	---	---	---	27 Jun	---
BOGR	---	30 Mar	25 Apr	Apr	Mar	Apr	Apr	5 Aug	5 Jul	15 Jul	12 Jul	---	Jun	27 Jun	10 Aug	30 Jul	5 Aug	20 Aug	---	20 Jul	9 Aug
BRTE	---	---	Mar	Mar	Mar	---	Apr	---	10 Jun	12 Jun	15 Jun	9 Jun	---	7 Jun	24 Jun	5 Jul	10 Jul	30 Jul	30 Jun	20 Jul	27 Jun
CANU	---	---	---	---	---	May	---	---	---	---	---	---	Jun	7 Jun	---	---	---	---	---	20 Jul	9 Aug
CHB	---	---	---	---	---	---	---	---	---	---	---	---	---	7 Jun	---	---	---	---	---	---	17 Jul
CHAL	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2 Sep	---
CHEN	---	---	Apr	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1 Oct	---	---
CHFR	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9 Sep	---
CTR	---	---	Apr	May	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
CRY	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9 Aug	---
CYMO	---	---	Mar	---	---	---	---	---	1 Jun	1 Jun	---	---	---	Jun	---	---	20 Jun	---	---	---	---
DEGE	---	25 Mar	5 May	Apr	23 Apr	Apr	Apr	30 Jul	10 Jun	20 Jun	15 Jun	9 Jun	---	24 May	1 Aug	10 Jul	20 Jul	15 Jun	30 Jun	20 Jul	17 Jul
DEPI	---	---	---	---	Apr	---	---	---	---	---	---	9 Jun	---	24 May	---	---	---	---	---	20 Jul	17 Jul
ERFU	---	Mar	---	---	---	---	---	---	---	---	---	---	---	7 Jun	---	---	---	---	---	---	17 Jul
GTPU	---	---	---	---	---	Jun	---	---	---	---	---	---	Jul	---	---	---	---	---	---	2 Sep	Jul
HOJU	---	---	---	---	---	---	---	---	---	---	---	---	---	Jun	---	---	---	---	---	---	---
KOCR	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	17 Jul
LAC	---	---	---	---	---	---	---	---	---	---	---	---	---	17 Jul	---	---	---	---	---	---	1 Sep
LARE	---	---	May	May	---	Apr	28 Apr	---	5 Jun	15 Jun	28 May	---	---	24 May	Jul	15 Jul	20 Jul	20 Jul	20 Jul	9 Aug	27 Jun
LEDE	---	---	May	May	May	25 May	---	---	---	---	Jun	---	Jun	Jun	---	---	20 Jul	25 Jul	30 Jun	20 Jul	17 Jul
LUPU	---	20 May	---	---	---	---	---	---	25 Jun	---	---	---	---	7 Jun	---	---	20 Jul	---	---	---	9 Aug
MACA	---	---	---	---	---	---	---	---	---	---	---	---	---	7 Jun	---	---	---	---	---	---	17 Jul
MATA	---	---	---	---	---	---	---	---	---	---	---	---	---	24 May	---	---	---	---	---	---	---
OPPO	---	28 Mar	---	Apr	23 Apr	25 May	28 Apr	---	25 Jun	---	Jun	---	20 Jul	7 Jun	Jun	10 Aug	---	30 Jul	11 Aug	---	17 Jul
ORHY	---	---	5 Mar	Mar	---	May	Apr	5 Jun	---	10 Jun	Jul	---	---	Jun	20 Jul	---	20 Jul	Aug	20 Jul	9 Aug	17 Jul
PLSP	---	---	Mar	May	Apr	25 May	---	---	5 Jun	15 Jun	25 Jun	9 Jun	Jun	7 Jun	10 Jul	15 Jul	29 Jul	10 Aug	30 Jun	20 Jul	9 Aug
POSE	---	1 Mar	1 Mar	Mar	Mar	Apr	---	1 Jun	10 Jun	15 Jun	25 Jun	---	Jun	24 May	1 Jul	1 Jul	1 Jul	10 Aug	30 Jun	20 Jul	27 Jun
SAIB	Jun	---	---	Jun	---	---	---	---	---	---	---	---	---	---	Jul	---	---	---	---	---	---
STAL	---	---	---	---	Apr	28 Apr	---	---	---	---	---	---	28 Jun	7 Jun	---	---	---	---	---	---	17 Jul
SIHY	---	5 Mar	1 Mar	Mar	Mar	---	---	---	25 Jun	15 Jun	15 Jun	---	---	7 Jun	2 Aug	25 Jul	30 Jul	30 Jul	20 Jul	9 Aug	17 Jul
SILI	---	---	Apr	May	17 May	---	---	---	---	May	10 Jul	9 Jun	---	---	---	---	20 Jul	10 Aug	11 Aug	---	---
SPCO	---	25 Apr	30 Apr	May	23 Apr	Apr	Apr	5 Jul	20 Jun	1 Jul	---	---	---	---	30 Jul	15 Jul	25 Jul	---	---	---	---
STCO	---	5 Mar	5 Mar	Mar	Mar	---	Apr	5 Jun	25 Jun	25 Jun	15 Jun	Jun	---	7 Jun	25 Jul	20 Jul	20 Jul	30 Jul	20 Jul	20 Jul	17 Jul
TRUD	---	---	---	---	---	---	---	---	---	---	---	---	---	7 Jun	---	---	---	---	---	9 Aug	27 Jun
VUOC	---	---	Mar	May	---	Apr	---	---	10 Jun	12 Jun	25 Jun	---	---	24 May	---	20 Jun	Jul	30 Jul	30 Jun	20 Jul	27 Jun

TABLE VI. (Continued)

STUDY AREA FARSON

SPECIES	GROWTH INITIATION							FULL BLOOM					SEED DISSEMINATION									
	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	
AGSM	----	30 Mar	26 Apr	----	Apr 21	Apr	Apr	20 Jul	15 Jul	----	15 Jul	----	17 Jul	----	15 Oct	21 Sep	15 Oct	10 Sep	----	1 Sep	Aug	
ALTE	----	----	----	----	Apr 21	Apr	Apr	----	25 Jun	25 May	----	----	7 Jun	Jun	----	----	Jul 10	Aug	----	17 Jul	----	
ARHO	----	----	----	----	21 Apr	22 May	Apr	----	----	----	----	----	27 Jun	25 Jun	----	----	----	----	----	16 Aug	7 Aug	
ARHO <sup>2</sup>	----	May	May	May	18 May	Apr	Apr	----	10 Jul	----	10 Jul	----	7 Jun	22 May	----	----	10 Aug	----	17 Jul	----		
ARTR	----	20 May	10 May	15 May	21 Apr	22 May	Apr	4 May	10 Sep	21 Sep	10 Sep	10 Sep	----	2 Sep	15 Nov	15 Nov	15 Nov	Nov	----	3 Nov	----	
ASPU	----	15 Mar	30 Apr	Apr	Jul	Apr	Apr	----	Jun 23	May 10	Jun 20	Jun 20	Jun 20	Jun 5	Jun 5	Jun 30	Jun 20	Jun 5	Aug	17 Jul	25 Jun	
ASSP	----	15 Mar	30 Apr	----	----	----	----	27 Apr	----	----	----	----	----	----	15 Jun	----	----	----	----	----	----	
ATCO	----	27 Apr	26 Apr	Apr	7 Jun	Apr	Apr	4 May	20 Jul	10 Aug	20 Jun	Jul	----	5 Jun	15 Oct	Oct	Oct	Aug	----	3 Nov	----	
CAEL	----	15 Apr	20 May	Apr	21 Apr	Apr	May	----	25 May	----	20 May	May	7 Jun	5 Jun	----	10 Jul	5 Aug	----	----	25 Jun	Jul	
CAMO	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	Jul	
CHLA	----	27 Apr	30 Apr	15 May	18 May	Apr	May	10 Aug	10 Sep	30 Jul	----	Sep	----	5 Jun	20 Oct	26 Oct	Oct	----	6 Nov	3 Nov	7 Aug	
CHLE	----	----	----	----	----	Jun	----	----	----	----	----	----	----	----	----	----	----	----	3 Nov	----	----	
CHER	----	Apr	----	----	----	15 Aug	----	15 Aug	----	----	----	----	----	----	15 Jul	----	----	----	----	----	----	
CHVI	May	Apr	15 May	25 Apr	18 May	Apr	May	15 Aug	24 Aug	10 Aug	5 Aug	----	----	16 Jul	15 Oct	25 Sep	Sep	20 Sep	6 Nov	3 Nov	2 Sep	
CRFL	----	----	----	----	22 May	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
CYMO	----	May	Apr	21 Apr	22 May	Apr	Apr	----	Jun	----	----	----	----	27 Jun	----	22 May	Jul	----	----	----	----	
DEPI	----	----	----	----	----	----	----	----	----	----	----	----	27 Jun	----	----	----	----	----	17 Jul	----	----	
ERCE	----	----	----	10 Aug	22 May	Apr	5 May	----	----	----	----	----	17 Jul	16 Jul	----	----	----	----	3 Nov	7 Aug	Sep	
EROV	----	Apr 10	May 5	May 18	May 18	Apr	Apr	5 Jul	10 Jul	15 Jun	10 Jul	----	27 Jun	5 Jun	25 Jul	10 Jul	Jul 20	Aug	1 Sep	7 Aug	Aug	
GACO	----	Apr	----	----	----	----	----	----	5 Jun	25 Jul	Jul	----	----	----	----	10 Nov	1 Aug	20 Sep	1 Sep	----	----	
GRSP	----	Apr 15	May 25	Apr 18	May 18	Apr	Apr	----	20 Jun	Jul	----	----	Jun	----	20 Jun	Jul	20 Aug	----	17 Jul	25 Jun	Jun	
HAAC	----	Apr 10	May 15	Apr 21	Apr 22	May	----	----	20 Jun	----	----	----	Jun	5 Jun	----	20 Aug	20 Aug	----	17 Jul	25 Jun	Jun	
KOCR	----	15 May	Apr 21	Apr 22	May	Apr	----	----	Jun	----	----	----	Jun	----	----	----	----	17 Jul	----	----	----	
LARE	----	May	----	----	Jun	May	----	----	Jun	25 Jun	----	----	Jun	25 Jun	----	Aug	----	3 Nov	16 Jul	----	----	
LEPU	May	27 Apr	10 May	Apr 18	May 22	May 4	May 25	Jul 10	Jul 5	Jul 5	Jul 5	----	25 Jun	Sep 24	Aug 15	Aug 15	Aug 6	Nov	7 Aug	7 Aug	Aug	
OPPO	----	15 Apr	5 May	Apr 21	Apr 22	May 4	May 25	Jun 5	Jul 10	Jul 5	Jul 5	----	25 Jun	14 Oct	15 Jul	30 Jul	10 Aug	16 Aug	7 Aug	7 Aug	Aug	
ORHY	----	30 Apr	May 18	May 18	Apr	----	6 Jun	15 Jun	5 Jun	----	Apr	Jun 22	22 May	Jul 1	Jul 1	Aug	17 Jul	Jul	17 Jul	Jul	Jul	
PREL	May	30 May	5 May	Apr 18	May 22	May 4	May 5	Jun 10	Jun 1	Jun 1	Jun 1	7 Jun	4 May	27 Jun	5 Jul	Jul 10	Aug	16 Aug	25 Jun	25 Jun	Jun	
PHHO	----	15 Apr	5 May	Mar 21	Apr	Apr	May	Jun 6	Jun 20	Jun 25	Jun	----	Jun 5	Jun 20	Jul 20	Jul 20	Jul 5	Aug	17 Jul	16 Jul	Jul	
POSE	----	30 Mar	30 Apr	Apr 21	Apr	Apr	----	27 Jun	25 Jun	5 Jul	10 Jul	----	Jun 25	Jun 10	Aug 15	Jul 5	Aug 20	Aug	17 Jul	7 Aug	Jul	
SIHY	May	Apr	May	Apr	----	----	5 Jun	5 Jun	May	27 Jun	Jun	27 Jun	Apr 5	Jun 10	Jul 5	Jul	Jul	17 Jul	16 Jul	16 Jul	Jul	
SILI	May	10 May	5 May	May	Jul	Apr	----	10 Jun	5 Jul	Jun	Jun	27 Jun	Apr 5	Jun 10	Jul 5	Jul	Jul	17 Jul	16 Jul	16 Jul	Jul	
SPCO	----	15 Apr	5 May	Apr 21	Apr 22	May	Apr	10 Jul	30 Jun	10 Jul	Jul	----	----	10 Aug	15 Jul	30 Jul	15 Aug	----	17 Jul	7 Aug	Jul	
STCO	----	----	----	----	----	----	----	----	----	----	----	----	25 Jun	----	----	----	----	16 Aug	16 Aug	16 Aug	16 Aug	Jul
TCCA	----	----	----	----	----	----	----	----	----	----	----	----	25 Jun	----	----	----	----	16 Aug	16 Aug	16 Aug	16 Aug	Jul
TESP	----	----	----	----	18 May	Apr	Apr	----	----	----	----	----	Jul 16	Jul	----	----	----	----	16 Jul	16 Jul	Aug	
XASA	----	----	----	18 May	Apr	Apr	----	----	----	----	----	----	Jul 16	Jul	----	----	----	----	16 Jul	16 Jul	Aug	



TABLE VI. (Continued)

## STUDY AREA HORSE CREEK

SPECIES	GROWTH INITIATION									FULL BLOOM					SEED DISSEMINATION						
	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979
AGSM	----	5 Mar	Apr	Apr	----	Apr	----	25 Jun	5 Jul	10 Jul	----	----	Jul	Jun	10 Nov	20 Aug	15 Aug	----	3 Sep	Jul	
AGSP	----	5 Mar	Apr	Mar	Mar	Mar	----	20 Jun	30 Jun	5 Jul	10 Jun	Jun	Jun	24 May	30 Jul	10 Jul	15 Jul	30 Jul	20 Jul	10 Aug	27 Jun
ALTE	----	----	----	Apr	----	Apr	----	----	----	9 Jun	May	----	Jun	24 May	----	10 Jul	20 Jul	----	20 Jul	27 Jun	
ANDI	----	----	----	----	----	Apr	Apr	----	----	----	----	----	----	24 May	----	----	----	----	----	27 Jun	
ARFE	----	15 Apr	Apr	Apr	Mar	----	----	20 Jun	10 Jul	15 Jul	Jul	----	----	Jun	1 Aug	15 Jul	20 Jul	10 Aug	30 Jun	18 Jul	
ARHO <sup>2</sup>	----	----	----	----	Mar	----	----	----	----	----	----	----	----	----	----	----	10 Aug	8 Jun	----	----	
ARNO	----	14 May	15 May	May	23 Apr	----	Apr	20 Sep	20 Sep	15 Sep	10 Oct	----	----	2 Sep	5 Nov	5 Nov	Nov	----	----	----	
ARTR	----	20 May	20 May	May	23 Apr	Apr	Apr	10 Sep	20 Sep	20 Sep	10 Oct	----	24 Sep	2 Sep	20 Nov	10 Nov	5 Nov	Nov	----	----	
ASPU	----	Apr	Apr	----	23 Apr	----	Apr	----	20 May	25 May	----	----	----	7 Jun	25 Jun	15 Jun	20 Jun	8 Jun	----	Jul	
BRCO	----	----	Apr	----	----	----	----	----	25 Jun	Jun	----	----	----	----	2 Aug	25 Jul	20 Jul	----	----	----	
BRJA	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	10 Aug	----	----	
BRTE	----	----	Apr	May	Mar	Mar	Apr	----	15 Jun	30 Jun	May	----	----	24 May	25 Jul	5 Jul	10 Jul	5 Jul	30 Jun	20 Jul	27 Jun
CAAN	----	----	----	Mar	Mar	Apr	----	----	----	----	8 Jun	Jun	Jun	7 Jun	----	----	30 Jun	30 Jun	20 Jul	27 Jun	
CANU	----	30 May	Apr	May	----	----	----	20 Jun	15 Jun	5 Jul	Jun	----	30 Jun	7 Jun	15 Jul	15 Jul	20 Jul	5 Aug	20 Jul	27 Jun	
CAS	----	20 Mar	Apr	Apr	----	----	----	5 Jun	10 Jun	10 Jun	----	----	----	20 Jul	25 Jul	15 Jul	2 Jul	----	----	----	
CELA	----	25 Apr	10 May	May	Apr	Apr	Apr	25 Jul	20 Jul	20 Jul	25 Sep	----	20 Jul	9 Aug	20 Sep	20 Sep	Nov	----	----	----	
CHDE	----	----	May	May	Apr	Apr	----	5 Jul	Jun	8 Jun	----	----	----	25 Jul	Aug	----	----	3 Sep	27 Jun	18 Jul	
CIR	----	----	----	23 Apr	Apr	Apr	----	----	30 Jun	----	17 May	----	30 Jun	24 May	----	Jul	20 Sep	----	20 Jul	27 Jun	
COPA	----	May	May	23 Apr	Mar	Apr	Apr	----	30 Jun	----	17 May	8 Jun	24 May	----	----	Jul	20 Sep	30 Jun	18 Jul		
CRAC	----	----	23 Apr	----	Apr	Apr	----	----	----	----	----	8 Jun	24 May	----	----	30 Jun	30 Jun	20 Jul	27 Jun	18 Jul	
CRBR	----	May	Apr	23 Apr	----	Apr	----	25 May	25 Jun	10 Jun	----	----	24 May	Jun	Jul	10 Jul	30 Jun	18 Jul	----	----	
CRF	----	May	Apr	23 Apr	----	----	----	30 Jun	10 Jun	10 Jun	----	----	2 Aug	5 Jul	10 Jul	30 Jun	----	----	----	----	
CRFL	----	Apr	----	----	----	----	----	30 Jun	10 Jun	10 Jun	----	----	2 Aug	5 Jul	10 Jul	30 Jun	----	----	----	----	
CRY	----	Apr	----	----	----	Apr	Apr	5 Jun	5 Jun	10 Jun	May	Jun	24 May	Jul	20 Jun	10 Jul	10 Jul	30 Jun	20 Jul	27 Jun	
CRKE	----	Apr	May	Apr	Apr	28 Apr	30 Jun	5 Jun	10 Jun	May	Jun	24 May	Jul	20 Jun	10 Jul	10 Jul	30 Jun	20 Jul	27 Jun	----	
CYMO	----	Apr	May	Apr	Apr	28 Apr	30 Jun	5 Jun	10 Jun	May	Jun	24 May	Jul	20 Jun	10 Jul	10 Jul	30 Jun	20 Jul	27 Jun	----	
DEPI	----	Apr	May	Apr	Apr	28 Apr	30 Jun	5 Jun	10 Jun	May	Jun	24 May	Jul	20 Jun	10 Jul	10 Jul	30 Jun	20 Jul	27 Jun	----	
ERCE	----	Apr	May	Apr	Apr	28 Apr	30 Jun	5 Jun	10 Jun	May	Jun	24 May	Jul	20 Jun	10 Jul	10 Jul	30 Jun	20 Jul	27 Jun	----	
ERPU	----	Apr	May	Apr	Apr	28 Apr	30 Jun	5 Jun	10 Jun	May	Jun	24 May	Jul	20 Jun	10 Jul	10 Jul	30 Jun	20 Jul	27 Jun	----	
GACO	----	May	Apr	23 Apr	Apr	Apr	Apr	5 Jun	30 Jun	Jun	8 Jun	24 May	Jul	20 Jun	10 Jul	10 Jul	30 Jun	20 Jul	27 Jun	18 Jul	
HAAC	----	May	Apr	23 Apr	Apr	Apr	Apr	5 Jun	30 Jun	Jun	8 Jun	24 May	Jul	20 Jun	10 Jul	10 Jul	30 Jun	20 Jul	27 Jun	18 Jul	
LARE	----	May	17 May	Apr	Apr	28 Apr	30 Jun	5 Jun	10 Jun	May	Jun	24 May	Jul	20 Jun	10 Jul	10 Jul	30 Jun	20 Jul	27 Jun	18 Jul	
LASE	----	May	17 May	Apr	Apr	28 Apr	30 Jun	5 Jun	10 Jun	May	Jun	24 May	Jul	20 Jun	10 Jul	10 Jul	30 Jun	20 Jul	27 Jun	18 Jul	
LEDE	----	May	17 May	Apr	Apr	28 Apr	30 Jun	5 Jun	10 Jun	May	Jun	24 May	Jul	20 Jun	10 Jul	10 Jul	30 Jun	20 Jul	27 Jun	18 Jul	
LERE	----	May	17 May	Apr	Apr	28 Apr	30 Jun	5 Jun	10 Jun	May	Jun	24 May	Jul	20 Jun	10 Jul	10 Jul	30 Jun	20 Jul	27 Jun	18 Jul	
LETR	----	May	17 May	Apr	Apr	28 Apr	30 Jun	5 Jun	10 Jun	May	Jun	24 May	Jul	20 Jun	10 Jul	10 Jul	30 Jun	20 Jul	27 Jun	18 Jul	
LOOR	----	May	17 May	Apr	Apr	28 Apr	30 Jun	5 Jun	10 Jun	May	Jun	24 May	Jul	20 Jun	10 Jul	10 Jul	30 Jun	20 Jul	27 Jun	18 Jul	
MACA	----	30 Mar	May	May	May	May	May	25 Jun	20 Jun	10 Jul	20 Jul	7 Jun	25 Jul	25 Jul	20 Aug	----	----	20 Jul	7 Jun	18 Jul	

TABLE VI. (Continued)

STUDY AREA HORSE CREEK

SPECIES	GROWTH INITIATION								FULL BLOOM						SEED DISSEMINATION						
	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979
MAGR	----	----	Jun	May	----	May	----	20 Jun	Jul	----	----	----	----	----	Jul	----	25 Aug	----	----	----	----
OPPO	----	----	May	Apr	23 Apr	Apr	28 Apr	5 Jun	20 Jun	9 Jun	1 Jul	----	30 Jun	27 Jun	----	20 Aug	10 Sep	18 Aug	20 Jul	24 Sep	18 Jul
ORHY	----	5 Mar	Apr	May	----	----	----	5 Jun	1 Jul	Jun	8 Jun	----	7 Jun	5 Aug	15 Jul	25 Jul	15 Aug	20 Jul	24 Sep	27 Jun	Jun
PECL	----	----	----	Apr	Apr	----	Apr	----	----	8 Jun	Jun	----	----	----	----	----	30 Jun	----	27 Jun	----	----
PEN	----	----	Apr	Apr	----	----	----	15 Jul	12 Jun	----	----	----	----	----	30 Jul	10 Jul	----	----	----	----	----
PRHO	----	----	Apr	Apr	23 Apr	Apr	28 Apr	30 May	5 Jun	10 Jun	----	25 May	24 May	26 Jun	15 Jun	5 Jul	25 Jun	30 Jun	30 Jun	27 Jun	Jun
POSE	----	20 Feb	10 Mar	Apr	Mar	Apr	----	20 Jun	25 Jun	15 Jun	8 Jun	----	24 May	15 Jul	5 Jul	5 Aug	30 Jun	10 Aug	27 Jun	----	----
SAIB	26 Jun	20 Jun	15 Jun	Jun	23 Apr	----	----	25 Aug	5 Aug	25 Aug	17 Sep	----	18 Jul	----	Sep	----	Sep	----	----	----	----
SIHY	----	5 Mar	Apr	May	Mar	Mar	----	20 Jun	1 Jul	5 Jul	10 Jun	8 Jun	7 Jun	5 Aug	10 Jul	15 Jul	30 Jul	10 Aug	18 Jul	----	18 Jul
SPCO	----	----	----	May	23 Apr	Apr	Apr	5 Jul	5 Jul	10 Jun	8 Jun	----	7 Jun	1 Aug	25 Jul	25 Jul	25 Jul	10 Aug	20 Jul	----	----
STCO	----	10 Mar	Apr	May	Mar	Apr	Apr	20 Jun	1 Jul	1 Jul	15 Jun	Jun	7 Jun	5 Aug	15 Jul	15 Jul	15 Aug	20 Jun	----	27 Jun	----
TRDU	----	20 May	15 May	Apr	----	Apr	Apr	15 Jun	30 Jun	Jun	----	Jun	24 May	----	15 Jul	15 Jul	15 Jul	----	20 Jul	27 Jun	----
VIO	----	5 Mar	----	Apr	----	----	----	20 Jun	25 Jun	Jun	----	----	----	25 Jun	10 Jul	10 Jul	15 Jul	----	----	----	----
VINU	----	----	----	----	Apr	Apr	Apr	----	----	----	----	----	----	----	----	----	----	----	----	----	----
VIVA	----	----	----	----	Apr	Apr	Apr	----	----	17 May	----	----	17 May	24 Sep	2 Sep	----	----	8 Jun	----	----	----
XASA	----	----	----	23 Apr	Mar	Apr	Apr	----	----	17 Sep	24 Sep	2 Sep	----	----	----	----	----	30 Jun	----	----	----
YUGL	----	----	----	17 May	----	28 Apr	Apr	----	8 Jun	----	----	----	27 Jun	10 Jul	10 Jul	10 Jul	20 Jun	8 Jun	20 Jul	----	----
ZYVE	----	20 Apr	Apr	Apr	Mar	Apr	Apr	30 May	30 May	23 May	----	----	----	27 Jun	10 Jul	10 Jul	10 Jul	20 Jun	8 Jun	20 Jul	----

TABLE VI. (Continued)

STUDY AREA MESA ANTELOPE

SPECIES	GROWTH INITIATION							FULL BLOOM							SEED DISSEMINATION							
	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	
AGSM	----	30 Mar	Mar	Apr	21 Apr	Apr	Apr	Jul	Jul	Jul	----	----	----	----	----	Sep	Aug	10 Aug	----	----	----	----
ALTE	----	----	----	----	21 Apr	----	----	----	----	----	----	----	----	----	----	----	----	----	28 Jun	----	----	----
ARNO	----	----	Jun	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ARHO	----	----	----	----	Aug	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ARHO <sup>2</sup>	----	----	----	May	----	Apr	----	Jun	----	15 Jun	Jun	----	6 Jun	5 Jun	Jul	----	Jul	5 Aug	----	17 Jul	Jul	----
ARTR	May	23 May	May	May	21 Apr	22 May	Apr	10 Sep	20 Sep	10 Sep	10 Sep	7 Sep	6 Jun	Aug	1 Sep	14 Oct	5 Nov	5 Nov	10 Nov	5 Nov	4 Nov	----
ASCI	----	----	----	May	----	May	----	----	----	----	----	----	6 Jun	----	----	----	----	Jul	----	----	----	----
ASPU	----	----	----	May	21 Apr	22 May	----	----	----	15 Jun	----	----	6 Jun	Jun	----	----	Jul	Oct	----	----	15 Jul	----
ASSP	----	----	----	May	----	----	----	1 Aug	----	----	25 Jul	----	6 Jun	----	----	----	30 Sep	----	----	----	----	----
ATGA	----	----	----	May	----	Jun	----	----	----	----	----	----	26 Jun	----	----	----	----	----	8 Aug	----	----	----
ATRU	----	May	May	Apr	21 Apr	22 May	May	Jun	Jun	Jun	20 Jun	----	6 Jun	5 Jun	Jul	Jul	Jul	Aug	19 Jul	8 Aug	25 Jun	----
CABL	May	23 May	May	May	May	22 May	----	10 Sep	Sep	1 Sep	30 Aug	9 Aug	8 Aug	15 Jul	14 Oct	Oct	Oct	Oct	5 Nov	30 Aug	7 Aug	----
CORA	----	----	----	----	Jun	----	----	----	----	----	----	----	----	----	----	----	----	----	28 Jun	----	----	----
CYMO	----	----	----	Mar	----	Apr	----	Apr	----	----	----	May	22 May	----	----	----	----	----	28 Jun	----	----	----
ERCA <sup>2</sup>	----	Mar	----	Apr	May	22 May	----	25 May	15 Jun	20 Jul	Jun	26 Jun	22 May	10 Aug	20 Jun	Jul	Oct	19 Jul	8 Aug	25 Jun	----	
EROV	----	Mar	----	May	21 Apr	22 May	Apr	Jun	30 May	20 Jun	13 Jul	26 Jun	5 Jun	25 Jul	Jul	Jul	Oct	8 Aug	25 Jun	----	----	
CELA	May	20 May	May	May	May	Apr	May	1 Aug	Aug	Jul	25 Aug	----	5 Jun	Oct	Oct	25 Oct	Oct	5 Nov	4 Nov	15 Jul	----	
HAAC	----	----	----	Apr	21 Apr	May	Apr	----	15 Jun	12 Jun	----	26 Jun	5 Jun	Jul	----	Jul	13 Jul	----	17 Jul	25 Jun	----	
LEAL	----	----	----	----	Jun	----	----	----	----	----	----	----	Jun	----	----	----	----	----	8 Aug	15 Jul	----	----
LEPU	----	May	May	----	May	May	Apr	Jun	15 Jun	30 Jun	----	26 Jun	5 Jun	Jul	Jul	10 Aug	----	----	8 Aug	15 Jul	----	
LOOM	----	----	----	----	May	May	Apr	Jun	15 Jun	30 Jun	----	26 Jun	5 Jun	Jul	Jul	10 Aug	----	----	8 Aug	15 Jul	----	
MACA	May	----	----	Jun	May	May	May	15 Aug	1 Jun	20 Jun	20 Aug	9 Aug	8 Aug	7 Aug	----	Oct	1 Oct	5 Sep	5 Nov	4 Nov	1 Sep	
MATA	----	----	----	May	May	May	May	15 Aug	1 Jun	20 Jun	20 Aug	9 Aug	8 Aug	7 Aug	----	Oct	1 Oct	5 Sep	5 Nov	4 Nov	1 Sep	
OPPO	----	May	----	May	May	22 May	4 May	1 Aug	Jul	Jul	20 Jul	19 Jul	Jul	15 Jul	Sep	Sep	Aug	30 Sep	7 Sep	----	7 Aug	
ORHY	30 Mar	----	----	Apr	21 Apr	22 May	May	10 Jul	30 Jun	5 Jul	1 Jul	Jun	----	25 Jun	10 Aug	----	1 Aug	20 Aug	5 Nov	8 Aug	15 Jul	
PELA	----	----	----	May	21 Apr	----	----	17 Jul	Jul	22 Jul	Jul	Sep	7 Aug	----	----	20 Aug	5 Nov	----	1 Sep	----	----	
PHHO	30 Mar	----	----	Apr	21 Apr	22 May	----	23 May	15 Jun	10 Jun	7 Jun	6 Jun	22 May	20 Jul	20 Jun	30 Jul	30 Jul	28 Jun	17 Jul	25 Jun	----	
POFE	----	----	----	May	22 May	----	----	----	Jun	5 Jun	----	Jun	5 Jun	----	----	----	----	8 Aug	15 Jul	----	----	
POSE	----	Mar	----	Apr	21 Apr	Apr	Apr	20 Jun	10 Jun	30 Jun	20 Jun	----	26 Jun	25 Jun	1 Aug	----	Jul	20 Aug	28 Jun	17 Jul	15 Jul	
SIHY	----	Mar	----	Apr	21 Apr	Apr	Apr	Jul	Jul	Jul	1 Jul	28 Jun	25 Jun	5 Aug	----	4 Aug	15 Aug	19 Jul	17 Jul	15 Jul	----	
SILL	----	----	----	Apr	----	Apr	Apr	30 Jun	Jun	20 Jun	----	26 Jun	4 Jun	10 Jul	----	10 Aug	----	17 Jul	----	----	----	
SPOC	----	----	----	Jun	----	----	----	----	Jun	20 Jun	----	Jun	----	----	----	----	----	----	17 Jul	----	----	
STCO	30 Mar	----	----	Apr	21 Apr	Apr	----	10 Jul	Jul	Jul	1 Jul	19 Jul	25 Jun	15 Aug	----	Jul	1 Aug	7 Sep	17 Jul	15 Jul	----	
TRGY	----	----	----	Apr	May	22 May	----	5 Jun	----	----	----	----	15 Jul	----	----	20 Jun	----	----	----	----	----	

TABLE VI. (Continued)

STUDY AREA OWL DRAW

SPECIES	GROWTH INITIATION							FULL BLOOM							SEED DISSEMINATION						
	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979
ACLA	----	----	----	----	----	----	----	----	----	----	----	----	----	----	28 Jun	----	----	----	----	4 Sep	19 Jul
AGSM	----	----	Apr	Apr	17 Apr	Apr	Apr	16 Jul	5 Jul	17 Jul	17 Jul	----	----	----	28 Jun	5 Aug	25 Jul	Oct	12 Aug	4 Sep	10 Aug
AGSP	----	----	Apr	Mar	17 Apr	Apr	Apr	5 Jul	5 Jul	14 Jul	Jul	----	Jul	----	3 Aug	25 Jul	28 Jul	25 Aug	18 Jul	4 Sep	----
ALL	----	----	----	----	----	----	----	----	----	----	----	----	----	10 Aug	----	----	----	----	----	----	----
ALTE	----	----	----	----	Mar	Apr	Apr	----	----	----	----	----	----	25 May	----	----	----	12 Aug	29 Sep	12 Jun	----
ANRO	----	----	----	----	Apr	26 May	----	----	----	----	----	----	----	----	----	----	----	18 Jul	----	28 Jun	28 Jun
ARHO	----	----	----	----	Apr	May	Apr	----	1 Jun	15 Jul	14 Jul	----	1 Jul	----	----	20 Jun	30 Jul	2 Aug	18 Jul	24 Jul	Jun
ARHO <sup>2</sup>	----	----	----	May	Mar	May	----	----	Jun	Jun	----	----	----	----	----	Jul	25 Jul	30 Jul	2 Jul	----	----
ARNO	30 May	May	May	18 May	26 May	26 May	Apr	20 Sep	20 Sep	5 Sep	----	----	29 Sep	Sep	----	----	Nov	17 Nov	Nov	22 Sep	22 Sep
ARTR	30 May	May	May	16 May	26 May	26 May	Apr	20 Sep	20 Sep	5 Sep	18 Sep	29 Sep	Sep	----	----	----	Nov	17 Nov	Nov	22 Sep	22 Sep
ASPU	----	Apr	Apr	Apr	Apr	Apr	Apr	May	25 May	10 Jun	----	9 Jun	26 May	----	Jul	20 Jul	25 Jul	2 Jul	11 Aug	12 Jun	----
AST	----	Apr	Apr	Apr	Apr	Apr	----	Jun	10 Jun	10 Jun	----	----	----	----	Jul	30 Jul	10 Aug	18 Jul	11 Aug	----	----
ASDR	----	Apr	Apr	Apr	Apr	Apr	Apr	Jun	10 Jun	15 Jul	Jul	----	----	----	Jul	10 Jul	25 Aug	2 Jul	4 Sep	----	----
ASMI <sup>2</sup>	----	Apr	Apr	Apr	Apr	Apr	Apr	Jun	10 Jun	Jun	Jul	1 Jul	25 May	----	Jul	10 Jul	15 Aug	2 Jul	4 Sep	----	----
BASA	5 Jun	1 Jun	May	Apr	Apr	Apr	Apr	Jun	Jun	Jun	16 May	1 Jul	Jun	25 May	----	Jul	Jul	12 Jul	2 Jul	24 Jul	12 Jun
CACH	----	----	----	17 Apr	Apr	Apr	Apr	----	----	----	----	----	1 Jul	25 May	----	----	----	2 Jul	24 Jul	28 Jun	----
CAMI	----	----	----	----	----	----	----	----	----	----	----	----	----	----	Jul	14 Jul	----	----	1 Jul	----	----
CANU	May	May	May	17 Apr	Apr	----	Apr	16 Jul	4 Jul	14 Jul	1 Jul	2 Jul	28 Jun	10 Aug	Aug	10 Aug	18 Jul	11 Aug	19 Jul	----	----
CAS	----	----	Apr	----	----	----	----	6 Jun	25 Jun	----	----	----	----	Jul	28 Jul	25 Jul	----	----	----	----	----
CELA	----	May	May	15 May	----	----	Apr	Jun	5 Jul	30 Jul	Jul	11 Aug	----	Sep	20 Sep	Sep	----	----	----	----	----
CHDO	----	----	May	----	May	----	----	Aug	Aug	25 Aug	12 Aug	1 Jul	----	----	----	----	24 Jul	----	----	----	----
CHVI	May	May	May	17 Apr	Apr	----	Aug	Aug	25 Aug	12 Aug	Aug	28 Jun	----	Sep	25 Sep	10 Oct	----	----	----	----	----
CTR	----	----	Apr	May	May	----	----	Jun	Jun	----	----	11 Aug	12 Jun	Jul	Jul	17 Jul	2 Jul	24 Jul	28 Jun	Aug	----
CORA	----	----	----	----	----	----	----	Jun	Jun	Jun	May	Jun	----	Jul	1 Jul	20 Jul	2 Jul	24 Jul	28 Jun	19 Jul	----
CRBR	May	May	May	Apr	Apr	Apr	Apr	Jun	Jun	5 Jun	10 Jun	16 May	1 Jul	25 May	20 Jul	21 Jul	2 Jul	24 Jul	28 Jun	19 Jul	----
CRAC	May	May	May	Apr	Apr	Apr	Apr	Jun	Jun	5 Jun	10 Jun	16 May	1 Jul	25 May	20 Jul	21 Jul	2 Jul	24 Jul	28 Jun	19 Jul	----
CYMO	May	May	May	Apr	Apr	Apr	Apr	Jun	Jun	5 Jun	10 Jun	16 May	1 Jul	25 May	20 Jul	21 Jul	2 Jul	24 Jul	28 Jun	19 Jul	----
DEPI	Jun	----	Apr	Apr	Apr	Apr	Apr	Jul	Jun	10 Jun	16 May	1 Jul	25 May	20 Jul	21 Jul	2 Jul	24 Jul	28 Jun	19 Jul	----	----
DORA	Jun	----	Apr	Apr	Apr	Apr	Apr	Jul	Jun	10 Jun	5 Jun	May	1 Jul	25 May	20 Jul	21 Jul	2 Jul	24 Jul	28 Jun	19 Jul	----
EROC	----	May	17 Apr	Apr	Apr	Apr	Apr	10 Jun	5 Jun	May	1 Jul	25 May	20 Jul	21 Jul	2 Jul	24 Jul	28 Jun	19 Jul	----	----	----
GICO	----	----	----	----	----	----	----	11 Aug	10 Aug	1 Jul	12 Jun	Jul	10 Jul	5 Jul	20 Jul	2 Jul	24 Jul	28 Jun	19 Jul	----	----
GRSQ	May	May	May	17 Apr	Apr	Apr	Apr	10 Jun	15 Jun	Jun	Jul	5 Jul	15 Jul	Aug	Aug	Oct	2 Jul	28 Jun	19 Jul	----	----
HAAC	May	May	May	16 May	26 May	26 May	Apr	Jul	5 Jun	Jun	Jun	1 Jul	25 May	20 Jul	21 Jul	2 Jul	24 Jul	28 Jun	19 Jul	----	----
JUOS	May	May	May	16 May	26 May	26 May	Apr	Jul	5 Jun	Jun	Jun	1 Jul	25 May	20 Jul	21 Jul	2 Jul	24 Jul	28 Jun	19 Jul	----	----
JUSC	May	May	May	16 May	26 May	26 May	Apr	Jul	5 Jun	Jun	Jun	1 Jul	25 May	20 Jul	21 Jul	2 Jul	24 Jul	28 Jun	19 Jul	----	----
KOCR	Apr	Apr	Apr	17 Apr	26 May	26 May	Apr	Jul	5 Jun	Jun	Jun	1 Jul	25 May	20 Jul	21 Jul	2 Jul	24 Jul	28 Jun	19 Jul	4 Sep	----
LASC	----	----	----	----	----	----	Apr	----	----	----	----	----	----	----	----	----	----	4 Sep	----	----	----

TABLE VI. (Continued)

STUDY AREA OWL DRAW

SPECIES	GROWTH INITIATION							FULL BLOOM							SEED DISSEMINATION							
	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	
LERE	----	----	----	May 17	Apr 26	May	----	20 Jul	20 Jun	5 Jul	Jun 17	Apr	----	Jun	Aug	10 Jul	20 Jul	15 Jul	2 Jul	24 Jul	Jul	
LILE	----	May	May	Jun 17	Apr	Apr	Apr	----	Jun 25	Jun 1	Jul	----	1 Jul	Jun	----	Jul 25	Jul 10	Aug 2	Jul 24	Jul 19	Jul	
MAVI	----	----	----	----	----	----	----	----	Jul 1	Jul	----	----	----	----	Jul	Jul	----	----	----	----	----	
MAGR	----	May	May	Jun 17	Apr	----	----	----	15 Jun	10 Jun	Jun	----	----	28 Jun	20 Jul	Jul	Jul 10	Aug 12	Aug 11	Aug 19	Jul	
MELO	----	----	----	----	26 May	Apr	----	----	Jun	Jun 10	Jul	----	Jun 25	May	----	Aug	Aug 10	Jul	----	10 Aug	10 Aug	
OPPO	----	----	May	May 16	May 26	May 5	May	----	Jun	Jun 10	Jul	----	----	----	Aug	Aug 10	Jul	----	10 Aug	10 Aug	10 Aug	
ORHY	----	----	Apr	Apr 17	Apr 26	May	Apr	----	25 Jun	Jun 10	Jul	----	----	----	10 Jul 25	Jul 5	Aug 18	Jul 24	Jul 19	Jul 28	Jun 28	
OKY	----	----	----	17 Apr	Apr	Apr	----	25 Jun	Jun 10	Jul	----	Jun	12 Jun	----	10 Jul 25	Jul 5	Aug 18	Jul 24	Jul 12	Jun 28	Jun 28	
PECL	----	----	May	May	17 Apr	Apr	Apr	----	Jun 30	Jun 1	Jul	----	Jun	----	10 Jul 25	Jul 5	Aug 18	Jul 24	Jul 12	Jun 28	Jun 28	
PEN	----	May	May	May 17	Apr 26	May	Apr	----	1 Jun	1 Jun 5	Jun	9 Jun	May	25 Jun	10 Jul 15	Jul 2	Jul 1	Jul 12	Jun 2	Jul 1	Jul 12	Jun 12
PHHO	----	Apr	Apr 17	Apr	Apr	Apr	Apr	----	15 Jun	10 Jun 8	Jun	May	25 May	20 Jul 10	Jul 10	Jul 30	Jul 2	Jul 24	Jul 12	Jun 2	Jul 12	Jun 12
POFE	----	Apr	Apr 17	Apr	Apr	Apr	Apr	----	17 Jun	10 Jun 8	Jun	----	25 May	20 Jul 10	Jul 10	Jul 26	Jul 2	Jul 11	Aug 12	Jun 2	Jul 12	Jun 12
POSE	----	May	Apr	Apr	Apr	Apr	Apr	10 Jul	10 Jun 15	Jun 3	Jun	----	25 May	----	12 Jul	2 Jul 11	Aug	Jun	Jun	Jun	Jun	Jun
SECA	----	----	Apr	Apr 17	Apr	Apr	May	----	30 Jun	1 Jul	----	Jul	Jun	----	Jul 25	Jul 25	Aug 2	Jul 11	Aug	----	----	----
SELA	----	Apr	Apr 16	May	Apr	Apr	----	25 Jun 25	Jun 25	Jun	1 Jul	1 Jul	----	10 Jul 15	Jul 30	Jul 2	Jul 24	Jul 19	Jul 2	Jul 24	Jul 19	Jul 19
SPOC	----	Apr	Apr 17	Apr	Apr	Apr	Apr	25 Jun 25	Jun 25	Jun	1 Jul	1 Jul	28 Jun	10 Jul 15	Jul 30	Jul 2	Jul 24	Jul 19	Jul 2	Jul 24	Jul 19	Jul 19
STCO	----	Apr	Apr 17	Apr	Apr	Apr	Apr	25 Jun 25	Jun 25	Jun	1 Jul	1 Jul	28 Jun	10 Jul 15	Jul 30	Jul 2	Jul 24	Jul 19	Jul 2	Jul 24	Jul 19	Jul 19
TRBU	----	----	Jun	----	----	----	----	----	Jun 20	Jul	----	----	12 Jun	----	5 Jul 2	Jul 2	Jul 24	Jul 28	Jun 2	Jul 1	Jul 28	Jun 28
TRCY	----	----	Apr	Apr	Apr	Apr	Apr	----	Jun 5	Jun	----	----	12 Jun	10 Jul 15	Jun 5	Jul 1	Jul	----	----	----	----	----
TRJ	----	May	May	Apr	Apr	Apr	Apr	10 Jun 15	Jun	Jun	16 May	1 Jul	12 Jun 10	Jul 15	Jun 5	Jul 1	Jul	2 Jul	----	----	----	----
VIAM	----	----	Mar	Apr	Apr	Apr	Apr	----	----	----	16 May	1 Jul	12 Jun 10	Jul 15	Jun 5	Jul 1	Jul	2 Jul	----	----	----	----
VIO	----	----	----	Apr	Apr	Apr	Apr	----	----	----	16 May	1 Jul	12 Jun 10	Jul 15	Jun 5	Jul 1	Jul	2 Jul	----	----	----	----
XASA	----	----	----	Apr	Apr	Apr	Apr	----	----	----	16 May	1 Jul	12 Jun 10	Jul 15	Jun 5	Jul 1	Jul	2 Jul	----	----	----	----
ZYVE	----	----	----	Apr	Apr	Apr	Apr	----	----	----	16 May	1 Jul	12 Jun 10	Jul 15	Jun 5	Jul 1	Jul	2 Jul	----	----	----	----

TABLE VI. (Continued)

STUDY AREA RED WASH

SPECIES	GROWTH INITIATION								FULL BLOOM					SEED DISSEMINATION							
	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979
AGSM	----	30 Mar	Mar	Apr	20 Apr	29 Apr	Apr	Jul	Jul	Jul	Jul	-----	-----	-----	Aug	5 Aug	Aug	10 Aug	-----	-----	-----
AGSP	----	28 Mar	Mar	Mar	Apr	29 Apr	Apr	Jul	Jul	Jul	15 Jun	-----	-----	24 Jun	Aug	30 Jul	Aug	10 Sep	-----	-----	6 Aug
ALTE	----	May	-----	May	Apr	22 May	-----	-----	5 Jun	15 Jun	10 Jun	-----	-----	4 Jun	Jul	Jul	25 Jul	10 Jul	15 Aug	4 Aug	-----
ARCO	----	-----	-----	-----	-----	-----	-----	-----	25 Jun	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ARHO	----	30 Mar	-----	Jun	20 May	22 May	6 May	30 Jun	6 Jun	6 Jul	15 Jul	27 Jun	-----	-----	May	Jul	20 Jun	Aug	10 Aug	15 Aug	28 Aug
ARHO <sup>2</sup>	----	-----	-----	-----	-----	-----	-----	-----	6 Jun	6 Jul	15 Jul	27 Jun	-----	-----	-----	-----	-----	-----	-----	-----	24 Jun
ARNO	----	May	-----	-----	-----	-----	-----	-----	Aug	-----	-----	-----	-----	-----	-----	-----	Oct	-----	-----	-----	-----
ARTR	----	May	May	May	20 May	29 Apr	Apr	-----	5 Aug	Aug	10 Sep	9 Sep	-----	31 Aug	-----	-----	Oct	Oct	Nov	4 Nov	6 Nov
ASDI	----	-----	May	Apr	Apr	22 May	-----	-----	1 Jun	Jul	15 Jun	-----	Jun	21 May	-----	Aug	Jul	18 Aug	-----	-----	-----
ASKE	Jun	May	-----	May	Jun	22 May	May	-----	1 Jun	-----	18 Aug	-----	-----	-----	Jul	-----	Aug	-----	Oct	-----	31 Aug
ASPU	-----	May	May	Apr	Apr	22 May	-----	20 Jun	7 Jun	1 Jun	30 May	5 Jun	-----	-----	Jun	Jul	20 Jun	Jul	20 Jul	27 Jun	17 Jul
CELA	-----	May	May	May	20 May	29 Apr	-----	-----	5 Aug	Aug	25 Aug	-----	-----	Jun	14 Jul	-----	-----	-----	Oct	4 Nov	6 Nov
CHDO	-----	30 Mar	May	Apr	20 May	22 May	May	30 Jul	7 Jun	Jul	30 Jun	-----	-----	24 Jun	-----	1 Aug	-----	15 Aug	-----	17 Jul	14 Jul
CHNA	-----	1 Jun	Jun	May	20 May	29 Apr	Apr	Aug	Aug	-----	30 Aug	15 Aug	28 Aug	31 Aug	-----	-----	-----	-----	Oct	4 Nov	6 Nov
CHVI	-----	May	Jun	May	20 May	29 Apr	Apr	Aug	Aug	Aug	10 Aug	15 Aug	Aug	6 Aug	-----	-----	-----	-----	Oct	4 Nov	6 Nov
CHVA	-----	-----	-----	-----	-----	-----	-----	-----	6 Aug	-----	-----	-----	-----	4 Jun	-----	-----	-----	-----	-----	-----	31 Aug
CPRL	-----	May	May	May	Apr	22 May	-----	30 Jun	20 Jun	26 Jun	12 Jul	15 Jul	Jun	4 Jun	-----	5 Aug	Jul	18 Aug	15 Aug	4 Aug	14 Jul
CYNO	-----	-----	-----	-----	Apr	22 May	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	27 Jun	-----
DEPI	-----	May	-----	-----	-----	-----	-----	Jun	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ERAS	-----	May	May	Apr	Apr	-----	-----	20 Jun	5 Jun	13 Jun	15 Jun	-----	-----	21 May	-----	30 Jul	Jul	20 Jul	27 Jun	-----	14 Jul
ERMI	-----	May	-----	May	Apr	22 May	-----	-----	20 Jun	30 Jun	20 Jun	15 Aug	28 Aug	14 Jul	-----	Aug	-----	25 Sep	4 Nov	6 Nov	31 Aug
EROV	-----	May	May	May	20 May	29 Apr	-----	25 Jun	30 Jun	30 Jun	20 Jun	10 Jun	-----	Jun	17 Jul	4 Jun	5 Aug	-----	Jul	25 Aug	27 Jun
GLAG	-----	-----	-----	Apr	-----	-----	-----	25 Jun	15 Jun	-----	10 Jun	-----	-----	-----	-----	15 Aug	-----	-----	-----	-----	4 Aug
GICO	-----	-----	-----	-----	May	Jun	Apr	-----	-----	-----	-----	-----	6 Jun	Jun	15 Jul	-----	-----	-----	-----	27 Jun	-----
GRSP	-----	May	May	May	Apr	22 May	Apr	Jun	5 Aug	10 Jul	-----	-----	-----	5 Jun	Jun	Jun	Jul	-----	30 Jul	-----	4 Aug
HAAC	-----	Mar	-----	Apr	20 May	-----	Apr	25 Jun	5 Jun	20 Jun	10 Jun	-----	-----	4 Jun	-----	-----	-----	Jul	1 Jul	1 Aug	27 Jun
LEPU	-----	-----	-----	May	20 May	22 May	-----	28 Jun	15 Jun	30 Jun	15 Jun	27 Jun	-----	24 Jun	Jun	Jul	5 Aug	25 Jul	18 Aug	15 Aug	4 Aug
MACA	-----	-----	-----	May	Aug	-----	-----	-----	10 Aug	-----	18 Aug	-----	-----	-----	-----	-----	-----	-----	-----	-----	6 Nov
MAGR	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	6 Aug
OPPO	-----	-----	-----	May	20 May	22 May	21 May	-----	Jul	Jul	Jul	15 Jul	28 Aug	14 Jul	-----	25 Jul	Aug	1 Sep	15 Aug	4 Aug	6 Aug
ORFA	-----	May	-----	May	15 Aug	-----	-----	-----	10 Jun	-----	-----	Jun	Sep	-----	-----	30 Jun	-----	5 Jul	4 Nov	-----	-----
ORHY	11 Mar	Mar	Mar	Apr	Apr	May	Apr	10 Jul	5 Jul	5 Jul	Jun	Jun	-----	24 Jun	5 Aug	30 Jul	25 Jul	6 Aug	15 Jul	4 Aug	Jul
PEN	-----	Mar	-----	Apr	Apr	29 Apr	-----	30 Jun	15 Jun	30 Jun	20 Jun	27 Jun	-----	Jun	4 Jun	Aug	Aug	6 Aug	14 Aug	4 Aug	14 Jul
PHHO	-----	Mar	-----	Apr	Apr	29 Apr	-----	-----	1 Jun	5 Jun	10 Jun	-----	-----	Jun	21 May	Jun	20 Jun	25 Jun	20 Jul	27 Jun	17 Jul
POSE	11 Mar	Mar	Mar	Apr	20 Apr	Apr	-----	Jun	25 Jun	Jun	Jun	-----	-----	Jun	-----	Jul	Aug	Jul	18 Aug	9 Sep	17 Jul
SIRY	30 Mar	Mar	-----	Apr	-----	-----	-----	-----	Jul	Jul	30 Jun	-----	-----	-----	-----	30 Jul	30 Jul	18 Aug	-----	-----	29 Aug
SILI	-----	-----	-----	May	Apr	22 May	-----	20 Jun	1 Jun	20 Jun	10 Jun	6 Jun	-----	4 Jun	-----	Jul	15 Jun	Jun	18 Aug	27 Jun	-----
STCO	-----	Mar	20 Mar	Apr	20 Mar	22 Mar	Apr	Jul	Jul	Jul	30 Jun	-----	-----	24 Jun	-----	Aug	Jul	Jul	20 Aug	-----	4 Aug
TECA	-----	May	May	May	20 May	29 Apr	-----	Aug	Jul	5 Aug	23 Jul	15 Aug	4 Aug	14 Jul	-----	Aug	Aug	Aug	20 Sep	4 Nov	6 Nov
VINU	-----	-----	-----	-----	Apr	22 May	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	15 Aug

TABLE VI. (Continued)

STUDY AREA SHOSHONI 7

SPECIES	GROWTH INITIATION					FULL BLOOM					SEED DISSEMINATION											
	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	
AGSM	----	28 Mar	5 Apr	Apr	23 Apr	Apr	Apr	5 Jul	15 Jul	18 Jul	15 Jul	----	----	----	Oct	30 Oct	30 Oct	1 Oct	----	19 Jul	8 Aug	
ALTE	----	----	May	Apr	Apr	Apr	Apr	Jun	Jun	15 Jun	May	----	----	23 May	30 Jun	15 Jun	30 Jun	15 Jun	Jul	19 Jul	26 Jun	
ARHO <sup>2</sup>	----	----	----	----	----	----	Apr	----	----	----	----	----	----	May	----	----	----	----	----	----	26 Jun	
ARTR	----	22 May	May	May	23 Apr	24 May	Apr	15 Sep	10 Oct	10 Oct	Sep	----	----	Sep	9 Nov	9 Nov	1 Nov	Nov	19 Nov	23 Sep	----	
ASMI	----	----	----	----	----	----	----	----	----	----	----	----	----	23 May	----	----	----	----	----	----	17 Jul	
ASPU	----	5 Mar	Mar	----	----	May	Apr	Jun	5 Jun	20 May	----	----	9 Jun	May	15 Jul	15 Jun	10 Jul	----	----	----	26 Jun	
BOGR	----	15 Apr	15 Apr	Apr	Mar	----	Apr	7 Aug	20 Jul	20 Jul	6 Jul	----	----	26 Jun	9 Nov	10 Nov	Nov	Sep	----	9 Aug	8 Aug	
BRETE	----	5 Mar	Apr	May	----	----	Apr	----	10 Jun	30 Jun	10 Jun	8 Jun	----	----	5 Jul	10 Jul	10 Jul	6 Jul	Jun	19 Jul	Jun	
CARI	----	----	----	----	----	----	----	----	----	----	----	----	----	23 May	----	----	----	----	----	----	----	
CELA	----	----	----	----	----	----	----	30 Jul	----	----	----	----	----	----	Sep	----	----	----	----	----	----	
CHAL	----	----	----	----	----	May	----	----	----	----	----	----	----	26 Jun	----	----	----	----	----	----	8 Aug	
CLIJ	----	----	----	----	----	----	----	----	----	----	----	----	----	6 Jun	----	----	----	----	----	----	26 Jun	
CYMO	----	----	----	Apr	----	Apr	----	----	30 May	----	17 May	----	----	May	----	----	20 Jun	----	8 Jun	----	6 Jun	
DEGR	----	----	----	----	----	Apr	Apr	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
DEPI	----	----	May	Apr	----	May	May	----	----	May	May	----	----	----	----	10 Jul	1 Jul	Jun	----	Jul	Jul	
ERPU	----	21 Feb	Mar	Apr	----	Apr	Apr	27 Jun	30 May	30 Jun	17 Jun	8 Jun	28 Jun	6 Jun	15 Jul	15 Jun	20 Jul	25 Jul	Jun	19 Jul	17 Jul	
GIPU	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	17 Jul	
LARE	----	----	----	----	----	----	----	----	----	----	----	----	----	23 May	Jul	----	----	----	----	----	6 Jun	
LEDE	----	----	----	----	----	----	----	----	----	----	----	----	----	----	5 Jul	----	20 Jul	----	----	----	23 May	
LUPU	----	----	May	----	May	----	----	25 Jun	15 Jun	----	----	----	----	6 Jun	----	25 Jul	1 Jul	----	9 Aug	26 Jun	Jun	
MACA	----	----	----	May	----	----	----	25 Jun	----	----	8 Jun	----	----	26 Jun	Jun	Jul	----	----	----	Jul	Jul	
OPPO	----	20 Apr	Apr	Apr	23 Apr	24 May	Apr	5 Jul	20 Jun	5 Jul	Jun	Jun	19 Jul	26 Jun	15 Aug	----	Aug	Aug	Jun	----	8 Aug	
ORHY	----	5 Mar	5 Apr	Apr	Apr	Jun	----	Jun	10 Jun	30 Jun	Jun	Jun	Jun	----	5 Aug	15 Jul	15 Jul	30 Jul	Jul	19 Jul	26 Jun	
PHHO	----	5 Mar	10 Apr	Apr	23 Apr	24 May	Apr	----	10 May	30 May	May	8 Jun	Jun	23 May	25 Jun	5 Jul	5 Jul	10 Jul	Jul	----	6 Jun	
PLPA	----	5 Mar	Apr	----	17 May	24 May	May	1 Jul	5 Jun	25 Jun	----	Jun	Jun	6 Jun	1 Aug	15 Jul	25 Jul	----	Jun	19 Jul	17 Jul	
POSE	----	21 Feb	30 May	Apr	Apr	----	Apr	Jun	10 Jun	10 Jun	15 Jun	----	----	Jun	6 Jun	30 Jun	5 Jul	30 Jun	10 Aug	Jun	19 Jul	26 Jun
SABE	----	----	----	----	----	----	----	----	----	----	----	----	----	8 Aug	----	----	----	----	----	----	29 Sep	
STAL	----	----	----	----	24 May	----	----	----	----	----	----	28 Jun	----	----	----	----	----	----	----	19 Jul	----	
SIHY	----	25 Mar	25 Mar	Apr	----	----	----	Jun	25 Jun	30 Jun	Jun	8 Jun	----	6 Jun	5 Aug	15 Jul	5 Aug	10 Aug	Jun	9 Aug	17 Jul	
SILI	----	----	----	----	----	----	----	Jun	25 Jun	30 Jun	30 May	----	----	----	5 Jul	----	----	----	----	----	----	
SPCO	----	25 Apr	Apr	Apr	17 May	Apr	Apr	5 Jul	20 Jun	30 Jun	----	----	----	26 Jun	1 Aug	15 Jul	25 Jul	----	Jun	----	17 Jul	
STCO	----	5 Mar	Mar	Mar	23 Apr	24 May	Apr	Jun	5 Jul	5 Jul	Jul	----	----	26 Jun	5 Aug	14 Jul	20 Jul	5 Aug	Jun	23 Sep	17 Jul	
VOUC	----	----	----	----	----	----	----	----	----	----	----	----	----	6 Jun	----	----	----	----	----	----	26 Jun	



TABLE VI. (Continued)

STUDY AREA SWEETWATER

SPECIES	GROWTH INITIATION								FULL BLOOM					SEED DISSEMINATION							
	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979
AGSM	----	28 Mar	Apr	Apr	15 Apr	Apr	May	12 Jul	10 Jul	5 Jul	----	----	----	----	15 Sep	15 Sep	30 Jul	----	----	----	8 Aug
ALTE	----	----	----	----	24 May	24 May	May	----	----	15 Jun	----	----	----	6 Jun	25 Jul	----	----	----	----	19 Jul	26 Jun
ARTR	----	28 Mar	5 Apr	Apr	15 Apr	24 May	May	5 Sep	Aug	Aug	25 Aug	----	22 Sep	2 Sep	Nov	Oct	Oct	Oct	Oct	----	----
ARHO	----	----	----	Apr	15 Apr	24 May	May	----	20 Jun	20 Jun	5 Jul	Jun	Jun	6 Jun	25 Jul	----	1 Aug	19 Jul	19 Jul	16 Jul	Jul
ARHO <sup>2</sup>	----	20 Apr	----	Apr	15 Apr	Apr	----	----	25 May	30 May	25 May	----	----	23 May	30 Jun	----	25 Jun	8 Jun	19 Jul	16 Jul	Jul
ARNO	----	22 May	20 May	May	15 Apr	24 May	5 May	15 Sep	20 Sep	20 Sep	15 Sep	----	22 Sep	2 Sep	5 Nov	25 Oct	25 Oct	Nov	Nov	----	----
ARTR	----	22 May	20 May	May	15 Apr	24 May	5 May	15 Sep	15 Sep	20 Sep	19 Sep	----	22 Sep	2 Sep	10 Nov	30 Oct	25 Oct	Nov	Nov	----	----
ASDI	----	1 Jun	----	----	----	----	----	20 Jul	Jul	Jul	----	----	----	----	Aug	Aug	----	----	----	----	----
ASMI	----	----	----	15 Apr	Apr	Apr	Apr	----	----	----	----	----	26 Jun	Jun	Jun	Jun	Jun	Jun	Jun	19 Jul	16 Jul
ASPU	----	20 Mar	5 Apr	Apr	15 Apr	24 May	May	1 Jul	5 Jun	15 Jun	2 Jun	----	----	12 Jul	10 Jun	Jun	15 Jul	29 Jun	----	26 Jun	Jun
ASSP	----	25 Mar	5 Apr	Apr	15 Apr	24 May	May	1 Jul	19 Jun	30 Jun	15 Jun	Jun	Jun	6 Jun	Aug	25 Jul	25 Jul	25 Aug	19 Jul	1 Sep	26 Jun
CAEL	----	----	----	15 Apr	Apr	Apr	Apr	----	----	----	----	----	----	Jun	Jun	Jun	Jun	Jun	8 Jun	7 Aug	26 Jun
CAFI	----	28 Mar	Apr	Apr	15 Apr	Apr	----	30 May	15 Jun	12 Jun	12 Jun	----	23 May	20 Aug	5 Aug	5 Jul	19 Sep	8 Jun	----	26 Jun	Jun
CANU	----	15 May	10 May	----	----	----	----	20 Jun	19 Jun	Jun	Jun	----	----	5 Jul	5 Jul	----	----	----	----	19 Jul	----
CAS	----	----	----	----	Apr	Apr	----	----	----	----	----	1 Sep	----	----	----	----	----	----	----	19 Jul	----
CELA	----	1 Jun	----	----	Apr	Apr	May	20 Jun	20 Jun	Jun	Jun	----	26 Jun	Jun	Jun	10 Jul	25 Jul	----	----	7 Aug	----
CHDO	----	25 Apr	30 Apr	May	15 Apr	24 May	May	Sep	Sep	Sep	19 Sep	Aug	19 Jul	2 Sep	Oct	Oct	Oct	Nov	Nov	----	----
CHNA	----	May	20 Apr	May	May	18 May	24 May	Apr	10 Sep	10 Aug	Aug	15 Sep	Aug	22 Sep	2 Sep	30 Oct	Oct	Nov	Nov	----	27 Sep
CHVI	May	----	----	Apr	Apr	Apr	Apr	29 Jun	5 Jun	20 Jun	10 Jun	8 Jun	7 Jun	6 Jun	Jul	20 Jul	20 Jul	10 Aug	19 Jul	19 Jul	----
COPA	----	----	----	15 Apr	Apr	Apr	May	----	----	----	----	8 Jun	7 Jun	23 May	----	----	----	----	29 Jun	19 Jul	26 Jun
CRBR	----	----	----	15 Apr	Apr	Apr	May	----	----	----	----	Jun	30 Jun	6 Jun	Jun	Jun	Jun	Jun	19 Jul	7 Aug	Jul
CRFL	----	25 Mar	1 Mar	Apr	Apr	Apr	May	29 Jun	22 May	30 Jun	1 Jul	----	----	10 Aug	Aug	25 Jul	20 Aug	----	----	----	----
CRP	----	----	----	----	----	----	----	----	----	----	----	----	----	16 Jul	Jul	Jul	Jul	Jul	2 Sep	2 Sep	2 Sep
CRY	----	25 Mar	5 Apr	Apr	18 May	May	May	20 Jun	25 Jun	15 Jun	May	8 Jun	----	23 May	----	20 Jun	15 Jun	8 Jun	19 Jul	16 Jul	6 Jun
CYMO	----	May	May	Apr	Mar	Apr	May	May	5 Jun	17 May	May	----	23 May	----	20 Jun	15 Jun	8 Jun	19 Jul	16 Jul	26 Jun	6 Jun
DEGE	----	25 Mar	5 Apr	Apr	18 May	May	May	20 Jun	25 Jun	15 Jun	May	8 Jun	----	16 Jul	Jul	Jul	Jul	Jul	2 Sep	2 Sep	2 Sep
ERCE	----	----	May	May	Apr	24 May	May	20 Jun	25 May	15 Jun	15 Jun	Jun	7 Jun	23 May	5 Jul	10 Jul	10 Jul	Aug	29 Jun	19 Jul	16 Jul
ERLA	----	20 Apr	May	May	Apr	24 May	May	29 Jun	15 Jun	Jun	Jun	Jun	7 Jun	23 May	6 Jun	5 Jul	10 Jul	10 Jul	29 Jun	19 Jul	16 Jul
ERPV	----	25 Mar	5 Apr	Apr	Apr	Apr	Apr	29 Jun	15 Jun	Jun	Jun	Jun	7 Jun	23 May	6 Jun	5 Jul	10 Jul	10 Jul	29 Jun	19 Jul	16 Jul
HAAC	----	----	----	15 Apr	Apr	Apr	May	----	----	----	----	----	----	26 Jun	Jul	1 Aug	20 Jul	10 Aug	19 Jul	7 Aug	16 Jul
KOCR	----	28 Mar	Apr	Apr	15 Apr	Apr	Apr	25 Jun	20 Jun	20 Jun	20 Jun	----	30 Jun	6 Jun	24 Aug	15 Jul	15 Jul	10 Aug	29 Jun	19 Jul	16 Jul
LARE	----	----	----	----	----	----	----	----	----	----	----	----	23 Jun	Jun	Jun	Jun	Jun	Jun	Jun	Jun	Jun
LEAL	----	----	----	----	1 Jun	24 Jun	Jun	30 Jun	6 Jun	Jun	Jun	30 Jun	6 Jun	Jun	Jun	Jun	Jun	Jun	Jun	Jun	Jun
LEPU	----	20 May	May	Apr	15 Apr	Apr	Apr	30 Jun	19 Jun	30 Jun	5 Jul	29 Jun	26 Jun	Jul	1 Aug	20 Jul	10 Aug	19 Jul	7 Aug	16 Jul	16 Jul
MACA	----	----	May	May	May	May	May	Jul	20 Aug	Aug	Aug	Aug	26 Jun	Jun	Jun	Jun	Jun	Jun	Jun	Jun	Jun
MAGR	----	----	----	----	----	----	----	20 Jun	Jun	Jun	Jun	Jun	26 Jun	Jun	Jun	Jun	Jun	Jun	Jun	Jun	Jun
OECA	----	----	----	----	----	----	----	----	----	----	----	----	----	----	Aug	Jul	Sep	19 Jul	7 Aug	8 Aug	8 Aug



TABLE VI. (Continued)

STUDY AREA SWEETWATER

SPECIES	GROWTH INITIATION								FULL BLOOM					SEED DISSEMINATION								
	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	
OEAL	----	----	----	----	----	----	----	----	----	----	----	----	----	6 Jun	----	----	----	----	----	----	----	----
OPPO	----	25 Apr	May	Apr	15 Apr	24 May	May	15 Jul	5 Jul	10 Jul	30 Jul	29 Jun	----	26 Jun	Sep	Aug	----	Sep	18 Sep	1 Sep	8 Aug	
ORPA	----	----	----	----	----	----	----	----	20 Jun	Jul	----	----	----	----	15 Jul	----	----	----	----	8 Aug	8 Aug	
ORHY	----	28 Mar	Apr	Mar	15 Apr	24 May	May	20 Jun	20 Jun	30 Jun	Jun	----	Jun	26 Jun	5 Sep	10 Jul	10 Jul	15 Jul	19 Jul	19 Jul	Jul	
OXIA	----	20 Mar	30 Mar	----	----	----	----	----	10 Jun	25 Jun	----	----	----	----	Aug	Aug	25 Jul	----	----	----	----	
PECL	----	May	----	Apr	----	----	----	30 Jun	20 Jun	25 Jun	Jun	----	----	----	20 Jul	10 Jul	5 Aug	30 Jul	----	----	----	
PEFR	----	----	----	15 Apr	Apr	May	May	----	----	----	----	Jun	Jun	6 Jun	----	----	----	29 Jun	7 Aug	16 Jul	16 Jul	
PHHO	----	----	----	Apr	15 Apr	24 May	May	30 Jun	22 May	30 May	May	Jun	----	23 May	12 Jul	5 Jul	Jul	2 Jun	29 Jun	1 Sep	6 Jun	
POSE	----	25 Mar	Apr	----	----	----	Apr	15 Jun	20 Jun	----	----	----	----	6 Jun	5 Jul	5 Jul	----	----	1 Sep	Jul	Jul	
FSTE	----	20 May	----	May	18 May	Jun	May	----	----	----	Jul	----	----	26 Jun	----	Aug	Aug	----	1 Sep	16 Jul	16 Jul	
SADE	----	----	----	----	7 Jun	----	----	----	----	----	----	----	----	----	----	Aug	5 Jul	Aug	----	16 Jul	16 Jul	
SFCO	----	28 Mar	5 Apr	Apr	18 May	Apr	May	25 Jun	30 Jun	Jul	----	----	----	Aug	5 Jul	Aug	Aug	Aug	Aug	16 Jul	16 Jul	
STCO	----	28 Mar	Apr	Mar	15 Apr	Apr	Apr	25 Jun	25 Jun	30 Jun	25 Jun	----	7 Aug	26 Jun	5 Sep	10 Jul	10 Jul	1 Aug	19 Jul	19 Jul	16 Jul	
TBCA	----	28 Mar	5 Apr	Apr	18 May	24 May	Apr	1 Aug	1 Aug	1 Aug	5 Aug	19 Jul	7 Aug	16 Jul	Oct	15 Oct	15 Oct	19 Sep	----	2 Sep	2 Sep	
TOIN	----	----	May	Apr	Mar	----	----	10 Jun	15 Jun	10 Sep	----	----	----	----	10 Jul	Aug	Oct	Oct	Oct	----	----	
VIO	----	----	----	Apr	24 May	Apr	Apr	----	----	----	8 Jun	----	----	----	10 Jul	Aug	Oct	29 Jun	----	26 Jun	26 Jun	
VIVA	----	5 May	----	----	----	----	----	25 May	1 Jun	----	----	----	----	----	15 Jun	----	----	----	----	----	----	
ZVVE	----	28 Mar	5 Apr	Apr	15 Apr	Apr	Apr	30 May	5 Jun	May	----	----	----	23 May	----	5 Jul	30 Jun	25 Jun	29 Jun	----	6 Jun	

TABLE VI. (Continued)

## STUDY AREA UPPER GOVERNMENT

SPECIES	GROWTH INITIATION							FULL BLOOM							SEED DISSEMINATION						
	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979
AGSM	----	Mar	Mar	Apr	Mar	Apr	Apr	10 Jul	Jul	10 Jul	Jul	----	----	26 Jun	Aug	25 Aug	Aug	Aug	10 Aug	9 Aug	8 Aug
ALTE	----	----	----	Apr	Mar	24 May	Apr	Jun	Jun	20 Jun	10 Jun	----	----	6 Jun	Jun	1 Jun	Jul	24 Jul	28 Jun	9 Aug	16 Jul
ANDI	----	----	----	Apr	24 May	May	May	----	----	----	----	----	----	6 Jun	Jun	----	----	----	8 Jun	----	26 Jun
ARIO <sup>2</sup>	----	----	----	----	----	May	May	----	----	----	----	----	----	23 May	----	----	----	----	----	----	26 Jun
ARLI	----	May	May	May	Apr	24 May	May	Aug	22 Aug	30 May	5 Jun	----	----	----	----	----	Jun	10 Jul	8 Jun	19 Jul	----
ARTR	----	May	May	May	23 Apr	24 May	May	Aug	22 Aug	Aug	18 Sep	Sep	----	Sep	Nov	Nov	Nov	Nov	Nov	23 Sep	----
ASDR	----	----	----	----	----	----	----	----	----	30 May	5 Jun	----	----	----	----	----	Jun	10 Jul	8 Jun	19 Jul	8 Aug
ASPU	----	----	May	Apr	23 Apr	May	May	----	----	May	1 Jun	17 May	----	23 May	----	----	Jun	5 Jul	28 Jun	9 Aug	16 Jul
BOGR	----	----	----	Apr	24 May	Apr	May	----	----	----	----	----	----	16 Jul	----	----	----	----	----	----	----
BRTE	----	----	Jun	Apr	----	----	----	----	----	30 Jun	Jun	----	----	----	----	----	25 Jul	25 Jul	19 Jul	19 Jul	16 Jul
CANU	----	----	----	----	----	----	----	----	----	----	----	----	----	26 Jun	Jun	----	----	----	----	----	16 Jul
CAS	----	----	----	May	23 Apr	Apr	May	5 Jul	10 Jun	5 Jun	20 Jun	8 Jun	Jun	Jun	Jun	25 Jul	Jul	25 Jul	25 Jul	18 Jun	19 Jul
GELA	----	May	May	May	23 Apr	Apr	May	10 Jul	22 Aug	Aug	20 Sep	10 Aug	Jun	1 Sep	Jun	Aug	Sep	Sep	Oct	----	19 Jul
CHVI	----	May	May	May	23 Apr	Apr	May	15 Aug	22 Aug	Aug	20 Sep	10 Aug	Jun	1 Sep	Jun	Jun	Sep	Sep	Oct	----	19 Jul
CRAC	----	----	----	Apr	23 Apr	Apr	May	----	----	10 Jun	10 Jun	10 Jun	8 Jun	Jun	Jun	----	20 Jul	15 Jun	20 Jul	5 Jul	28 Jun
CRMO	----	----	May	Apr	23 Apr	----	----	----	----	10 Jun	10 Jun	10 Jun	8 Jun	Jun	Jun	----	20 Jul	15 Jun	20 Jul	5 Jul	28 Jun
DEPI	----	May	May	May	24 May	May	May	----	----	15 Jun	Jun	May	18 May	----	----	24 Jun	5 Jun	8 Jun	----	----	----
ERPU	----	Jun	Jun	May	23 Apr	24 May	----	----	----	25 Jun	15 Jul	Jun	19 Jul	6 Jun	Jun	Jul	19 Jul	25 Jul	5 Aug	19 Jul	9 Aug
HAAC	----	----	----	----	----	----	----	----	----	25 Jun	15 Jul	Jun	19 Jul	6 Jun	Jun	Jul	19 Jul	25 Jul	5 Aug	19 Jul	9 Aug
KOCR	Mar	Mar	Apr	----	Apr	May	Jul	20 Jun	30 Jun	30 Jun	30 Jun	8 Jun	26 Jun	6 Jun	25 Jul	Jul	30 Jul	10 Aug	19 Jul	19 Jul	16 Jul
LARE	----	Jun	Apr	----	24 May	----	----	----	----	24 Jun	15 Jun	Jun	----	6 Jun	Jun	----	----	Jul	10 Aug	----	26 Jun
LEDE	----	Jun	----	----	----	----	----	----	Jun	----	----	----	----	----	----	1 Aug	----	----	----	----	----
LES	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	1 Aug	----	----	----	Jul
LERE	----	Jun	----	23 Apr	24 May	----	----	25 Jun	----	----	----	Jun	----	26 Jun	----	Jul	----	----	19 Jul	----	16 Jul
LOFO	----	----	----	23 Apr	----	----	----	----	----	----	----	19 May	----	23 May	----	----	Jul	----	----	----	----
LOOR	----	----	23 Apr	----	----	----	----	----	----	----	----	19 May	5 May	----	----	----	----	28 Jun	----	26 Jun	----
MACA	----	May	----	Apr	----	----	----	30 Jun	----	----	----	28 Jun	26 Jun	26 Jun	----	----	25 Jul	----	10 Aug	9 Aug	16 Jul
MAGL	----	May	May	May	23 Apr	24 May	5 May	5 Jul	Jul	Jul	25 Jun	28 Jun	19 Jul	26 Jun	30 Aug	Aug	Aug	Aug	10 Aug	23 Sep	8 Aug
OPPO	----	May	May	May	23 Apr	24 May	5 May	5 Jul	Jul	Jul	25 Jun	28 Jun	19 Jul	26 Jun	30 Aug	Aug	Aug	Aug	10 Aug	23 Sep	8 Aug
PECL	----	Jun	May	May	24 May	May	May	20 Jun	24 Jun	Jun	Jun	Jun	Jun	6 Jun	Jun	Jul	Aug	1 Jul	10 Aug	----	Jul
PHHO	----	Apr	Apr	23 Apr	24 May	----	Jun	5 Jun	1 Jun	May	19 May	Jun	23 May	Jun	Jul	Jul	Jul	1 Jul	8 Jun	19 Jul	26 Jun
PLPA	----	----	----	----	----	----	Jun	5 Jun	1 Jun	May	19 May	Jun	23 May	Jun	Jul	Jul	Jul	1 Jul	8 Jun	19 Jul	26 Jun
PLSP	----	Jun	----	----	----	----	----	30 Jun	----	----	----	----	----	Jun	Jun	----	30 Jul	----	----	19 Jul	Aug
POSE	Mar	Mar	Apr	Mar	Apr	May	----	10 Jun	30 Jun	20 Jun	8 Jun	----	6 Jun	Jun	Jul	Jul	Jul	10 Aug	28 Jun	19 Jul	16 Jul
SIHY	Mar	Mar	Apr	Mar	Apr	May	----	10 Jun	30 Jun	20 Jun	8 Jun	----	6 Jun	Jun	Jul	25 Jul	20 Aug	----	----	----	----
SPCO	May	May	Apr	23 Apr	24 May	May	30 Jun	15 Jun	Jun	Jun	----	----	26 Jun	Jun	Aug	20 Aug	5 Aug	15 Aug	10 Aug	1 Sep	16 Jul

TABLE VI. (Continued)

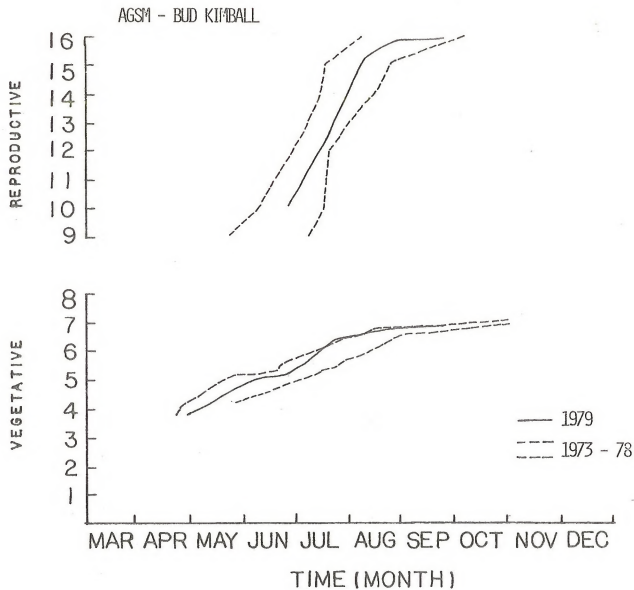
STUDY AREA UPPER GOVERNMENT

SPECIES	GROWTH INITIATION						FULL BLOOM						SEED DISSEMINATION								
	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979
STCO	----	----	----	----	23 Apr	Apr	May	----	----	----	----	----	----	Jun	----	----	----	----	19 Jul	19 Jul	Jul
TRDU	----	----	----	----	Apr	----	----	----	----	----	----	----	----	26 Jun	----	----	----	----	28 Jun	19 Jul	Jul
UMB	----	----	----	----	----	----	----	----	May	----	----	----	----	17 Jul	----	Jun	----	----	----	----	----
VIAM	----	----	Jun	May	Apr	Apr	May	----	25 Jun	----	----	Jun	Jun	Jul	Jul	Jul	----	28 Jun	9 Aug	26 Jun	
VINU	----	----	May	May	23 Apr	24 May	May	----	Jun	May	May	----	23 May	----	----	Jul	Jun	28 Jun	----	Jun	
XASA	----	----	----	----	----	----	May	----	----	----	----	----	1 Sep	----	----	----	----	----	----	29 Sep	

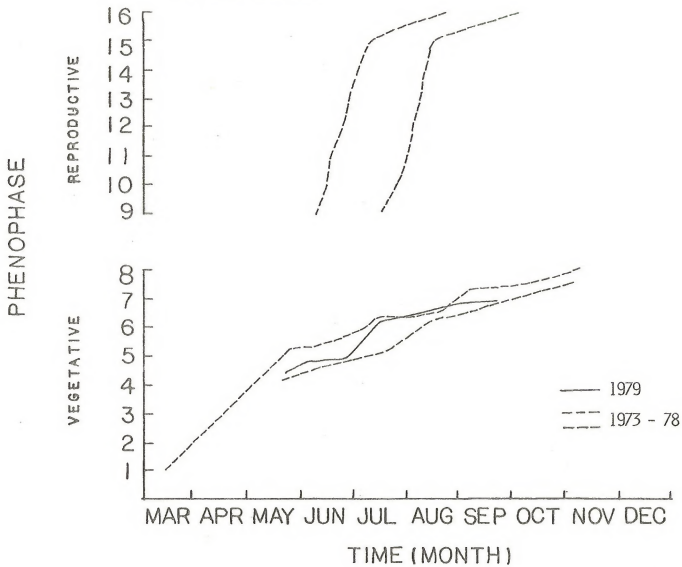
Figure 1. Phenological progression curve for each of the prime species at each exclosure. Current year compared to earliest and latest phenological development from 1973 through 1978.

	<u>Page</u>
AGSM - <i>Agropyron smithii</i>	335
AGSP - <i>Agropyron spicatum</i>	346
ARNO - <i>Artemisia nova</i>	352
ARTR - <i>Artemisia tridentata</i>	355

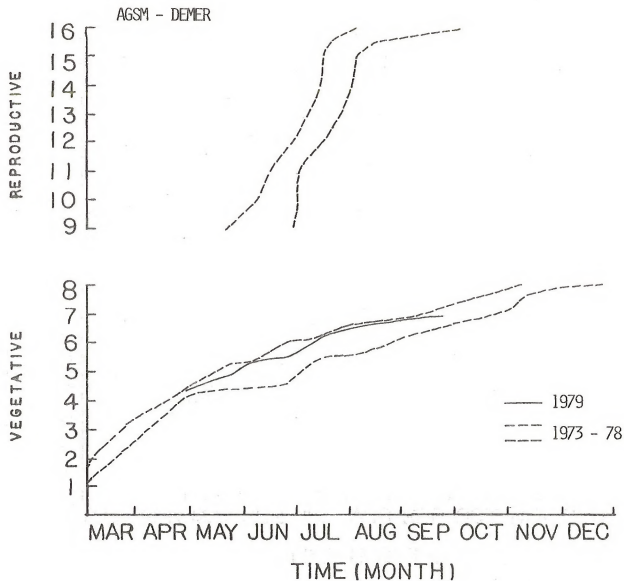
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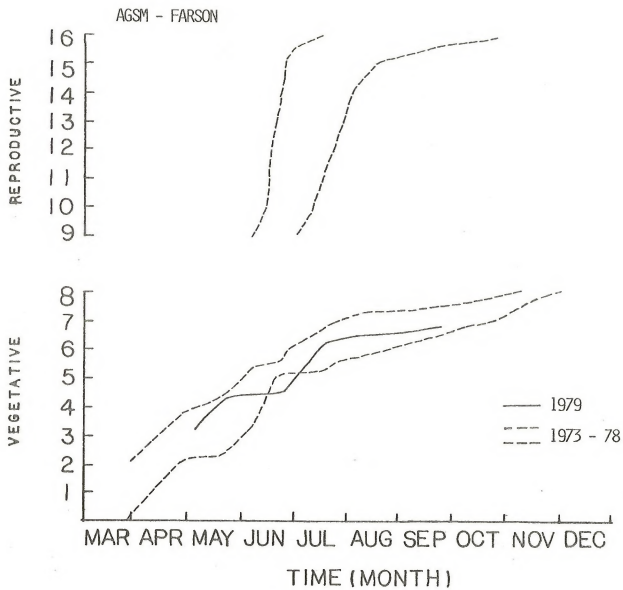
AGSM - CUMBERLAND 3



PHENOPHASE

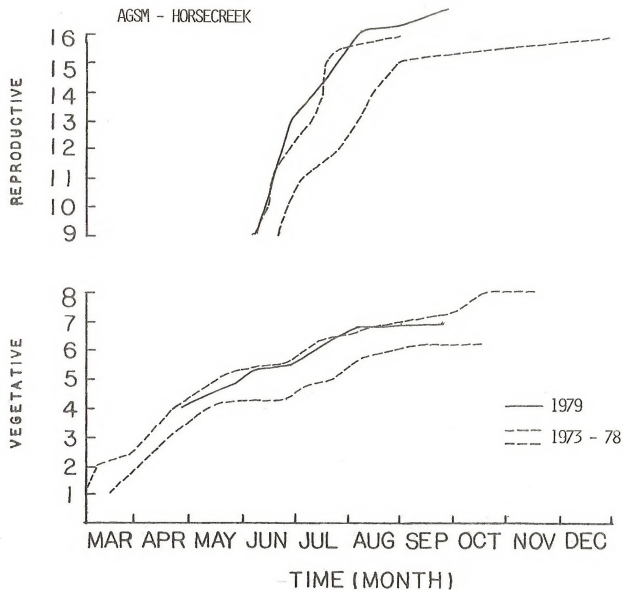


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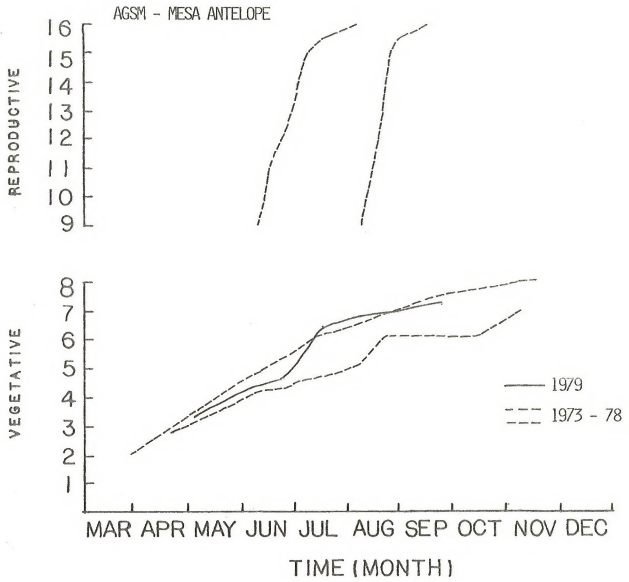




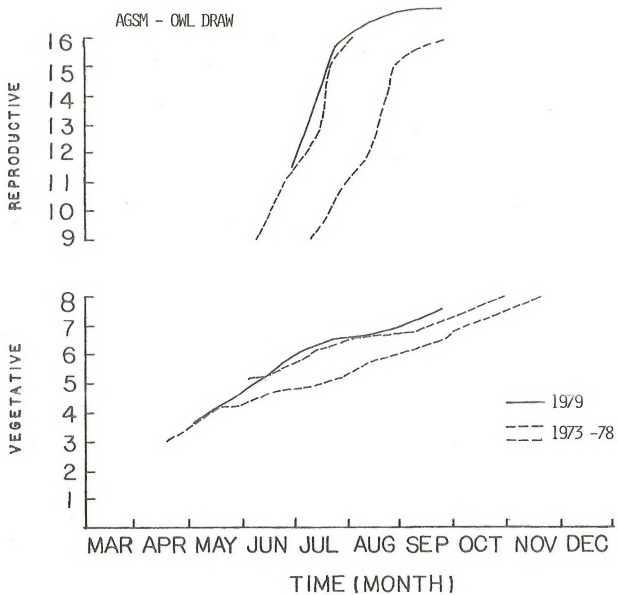
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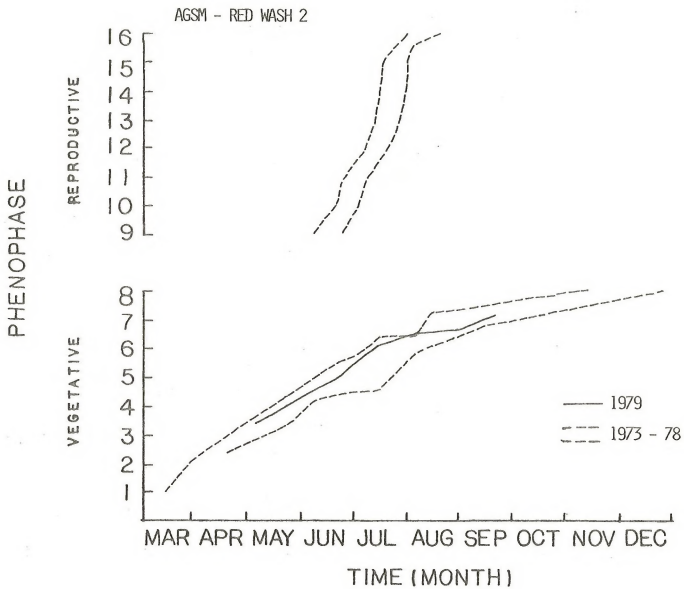


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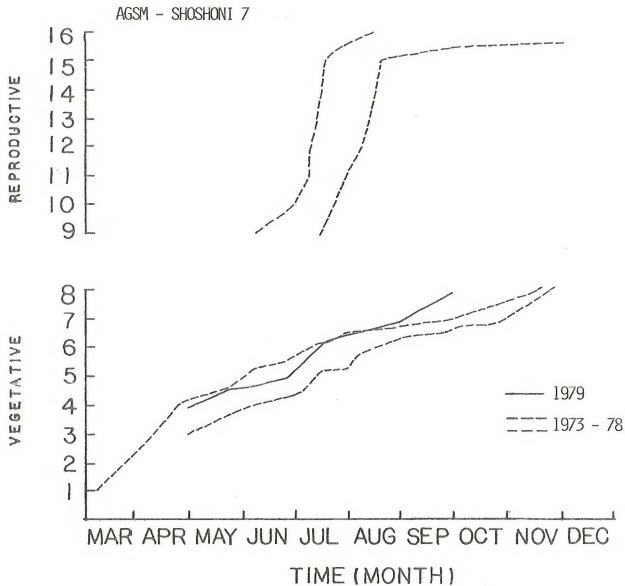


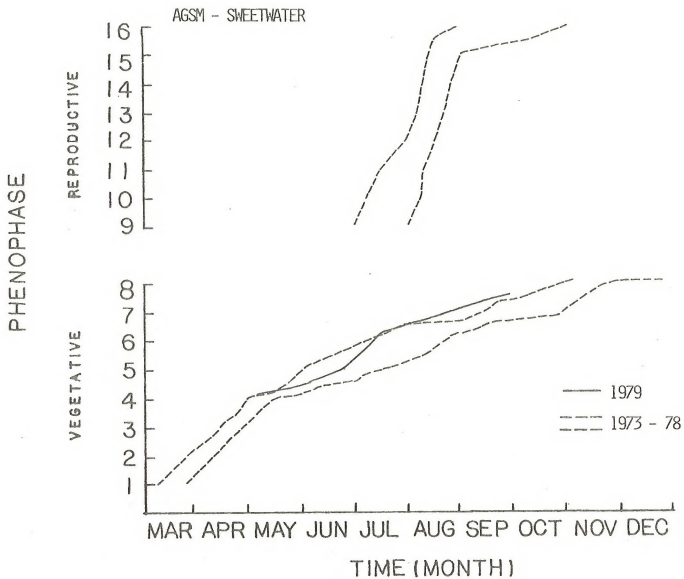
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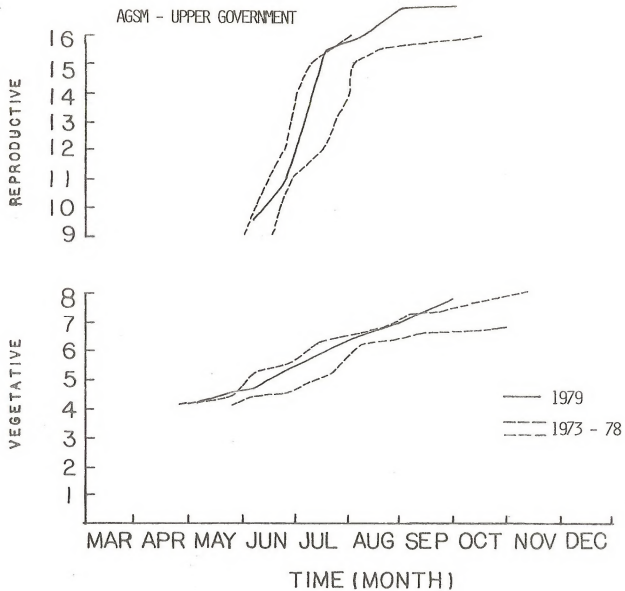


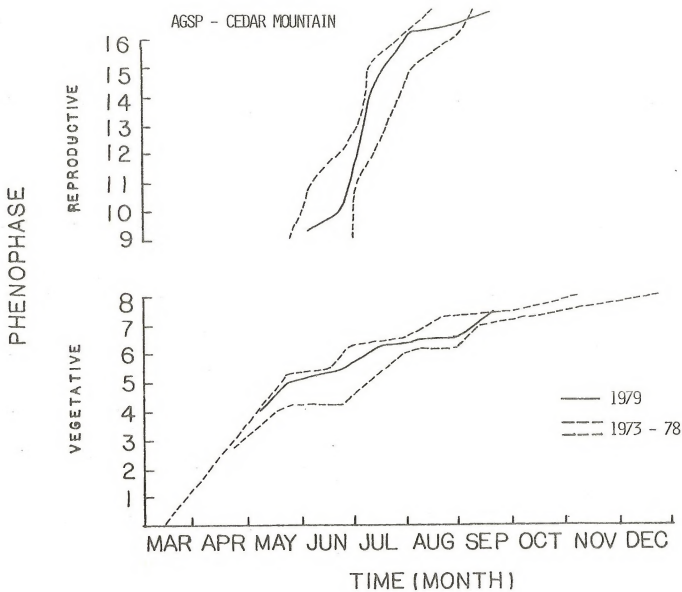
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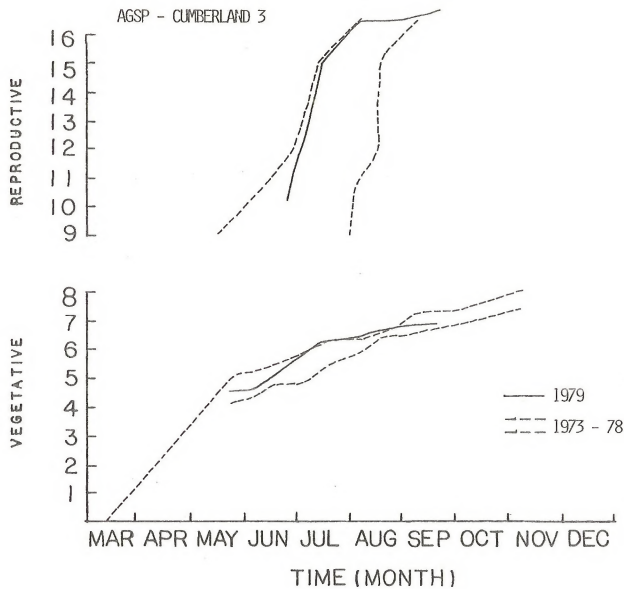
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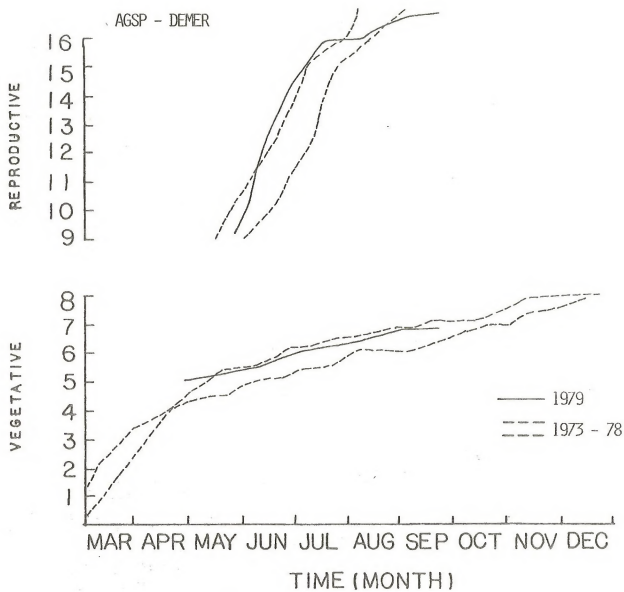




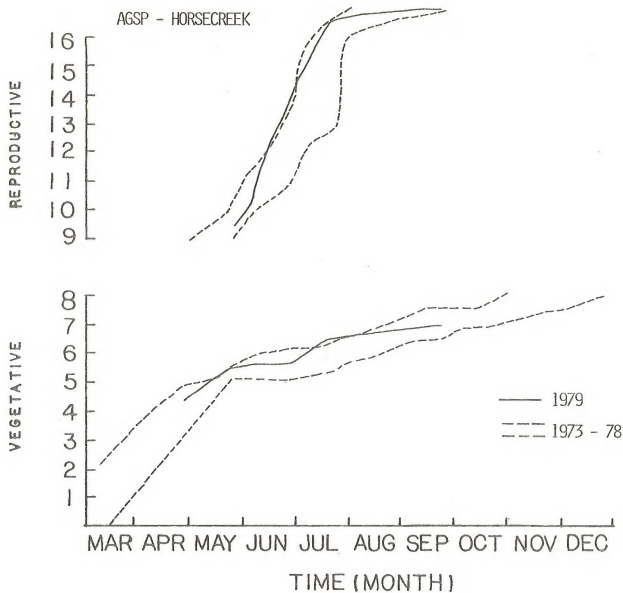
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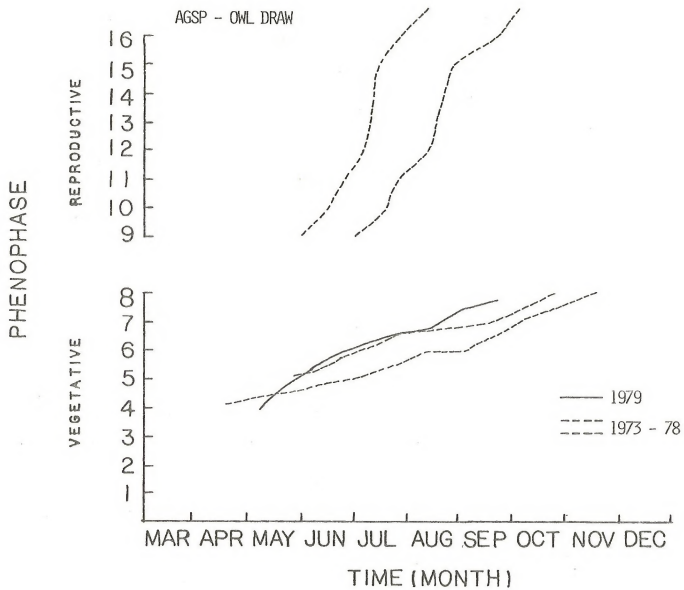


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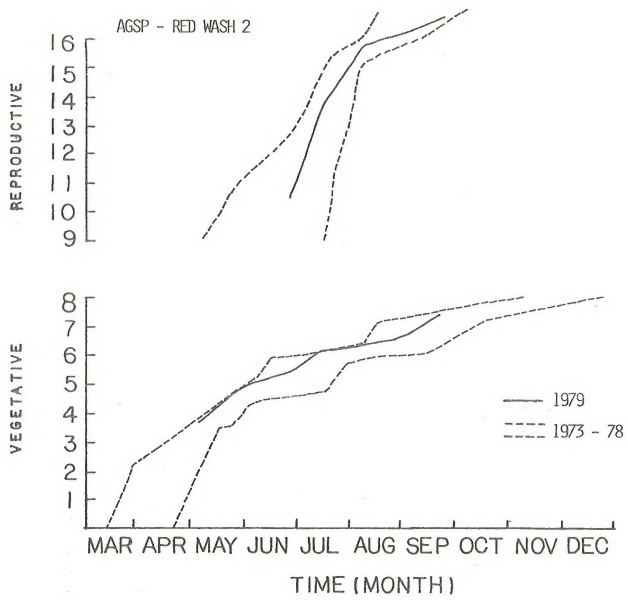


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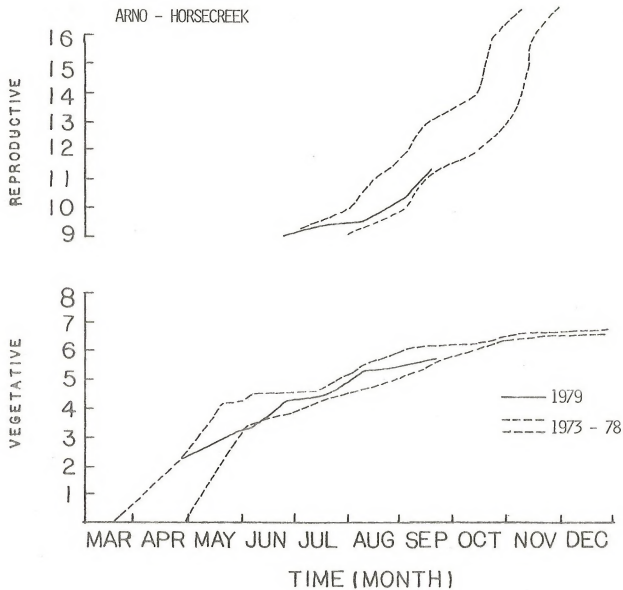




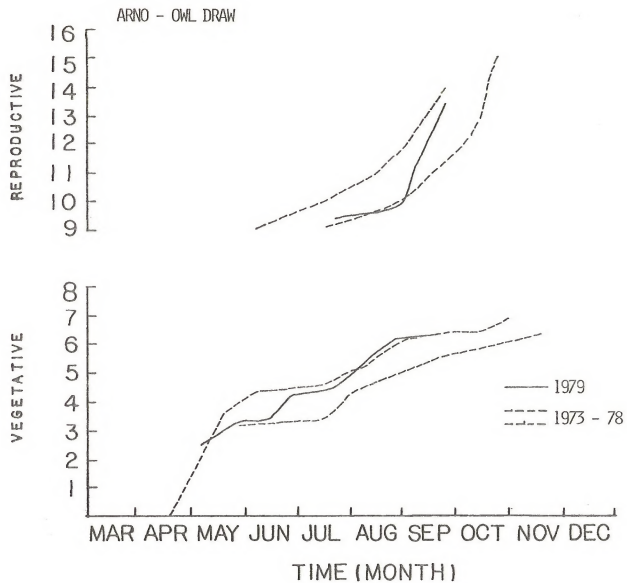
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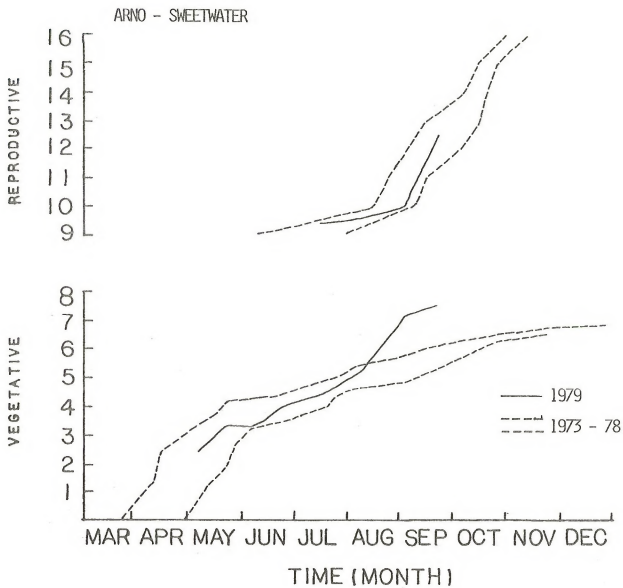
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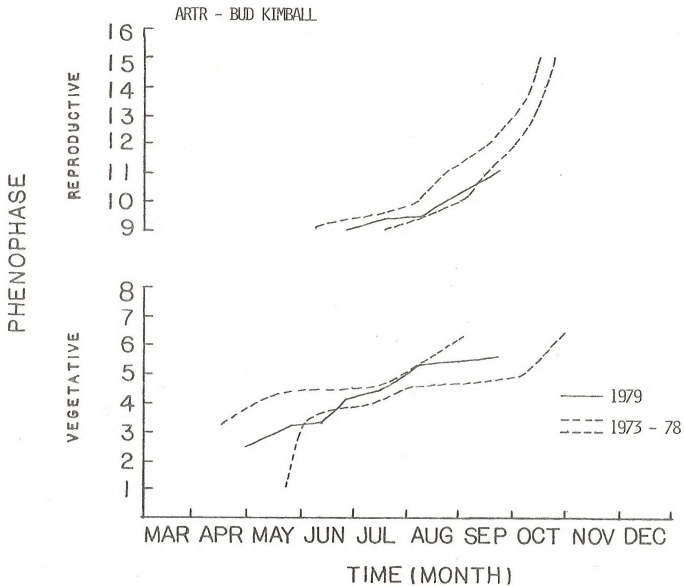
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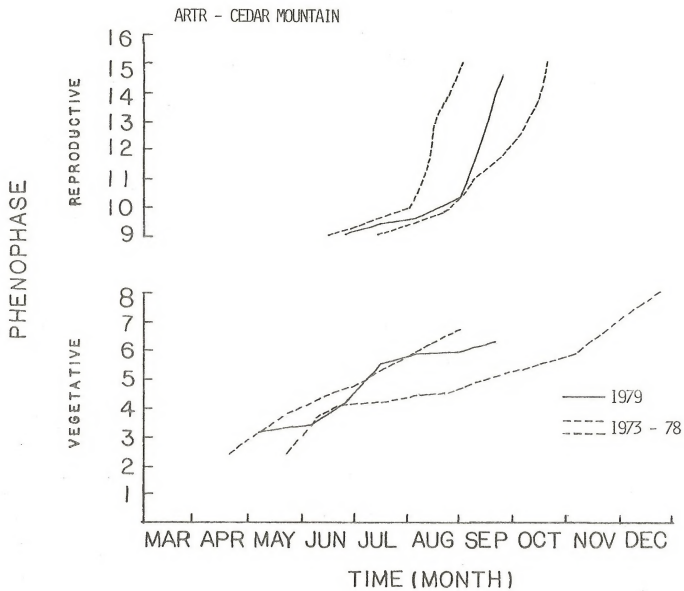


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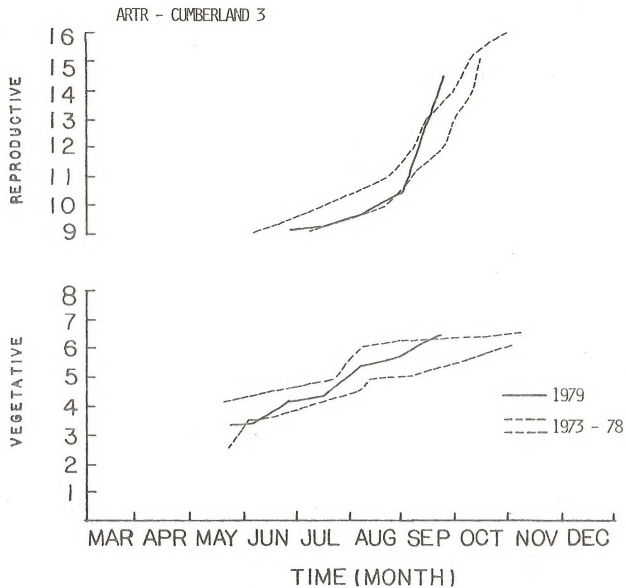




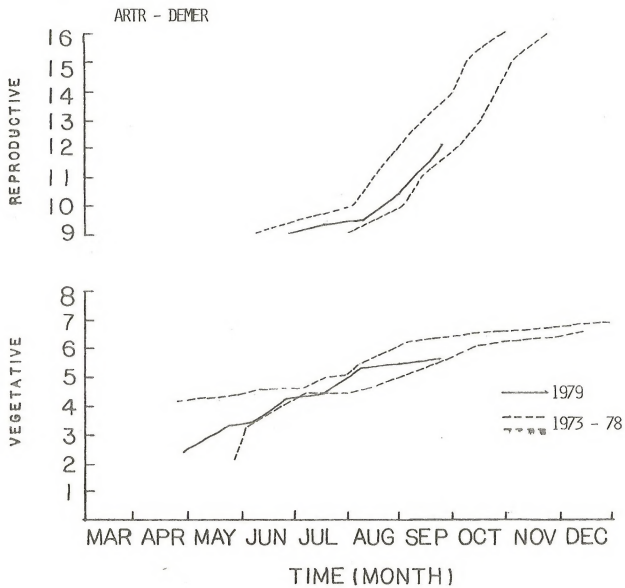




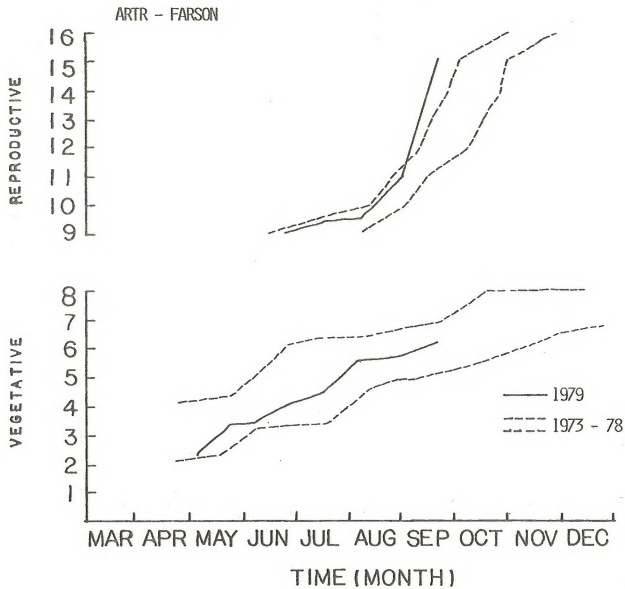
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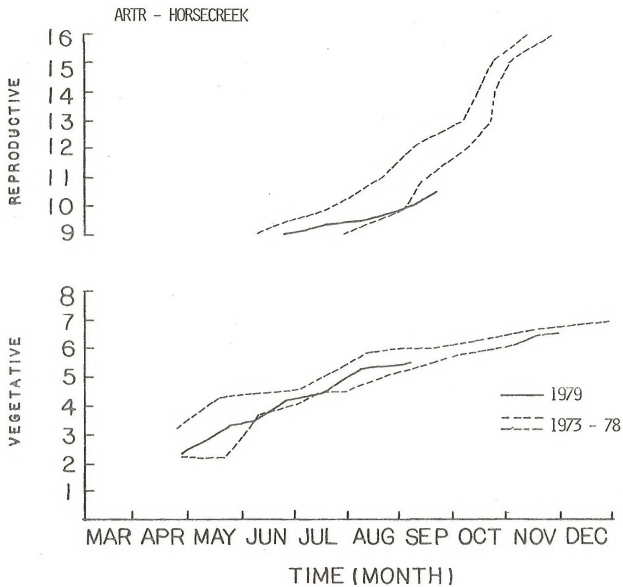
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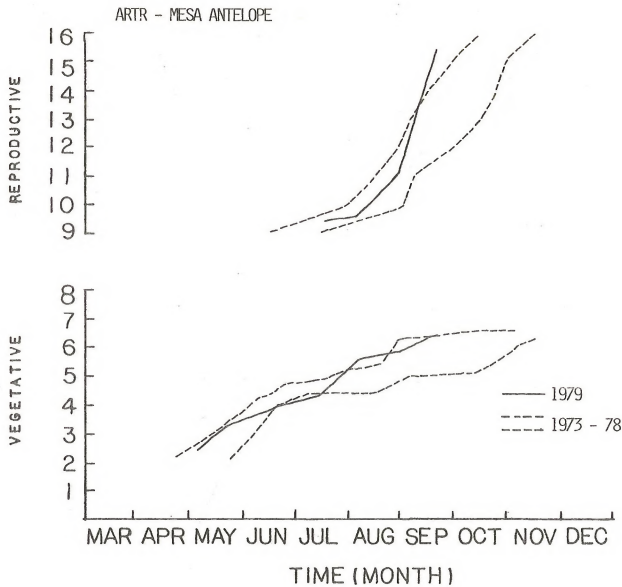
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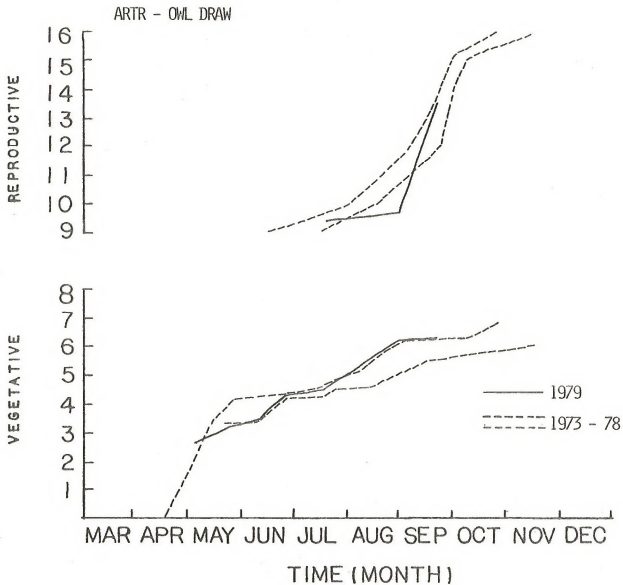
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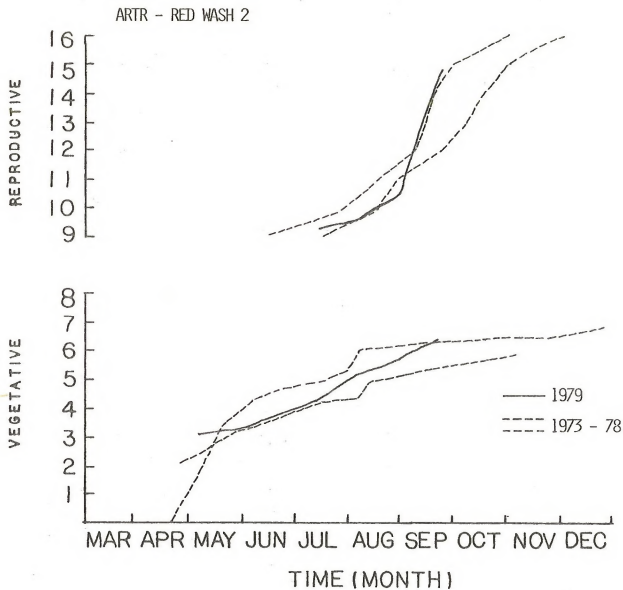


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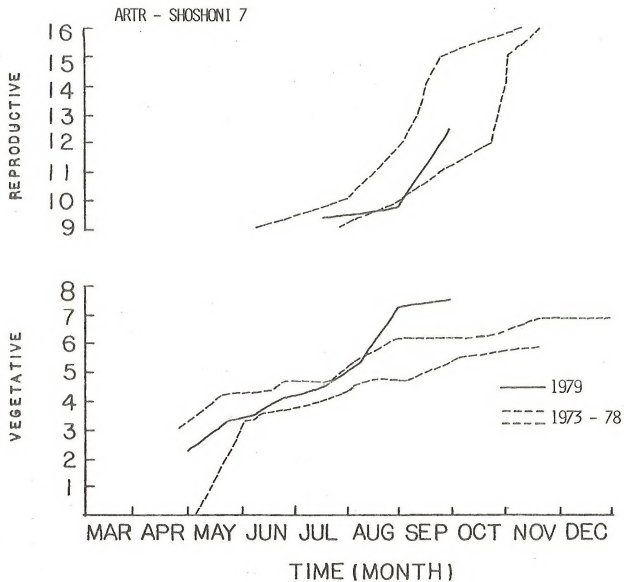




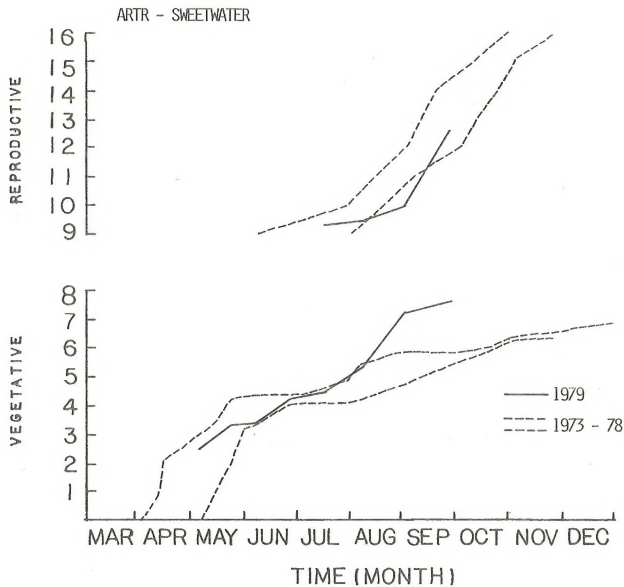
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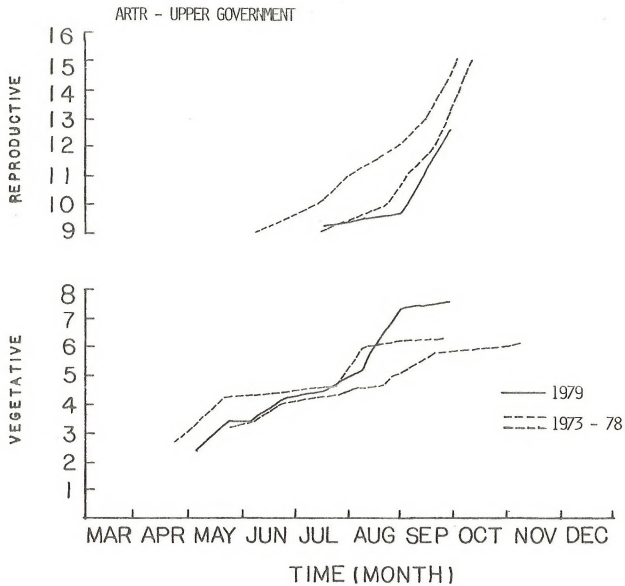
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## SECTION II

### Multiple Linear Regression for Predictive Modeling

#### Introduction

A multiple linear regression model was used to analyze the vegetative and reproductive phenological data. The purpose of the analysis was to establish causal relationships between environmental factors and phenodynamics. Two grass species, Agropyron smithii and A. spicatum, and two shrub species, Artemisia nova and A. tridentata, were analyzed.

The Hocking-LaMotte-Leslie method of multiple regression analysis was implemented for the current report. This method is a backward selection process as opposed to the previously used forward selection process. A backward selection process was deemed superior to the forward selection process for this data set. In the forward selection models the most significant variable is entered into the model first. Partial correlation coefficients are then calculated and the next most significant variable, given that the first variable is already in the model, is entered. Partial correlations are then recalculated and the process continues. This procedure poses the possibility of entering one significant variable while two other variables when combined may be more significant. The model then deviates from the optimum model. The backward selection process eliminates this problem by starting with the full model of independent variables and deleting the non-significant variables. The alternate pathways are then not possible. The backward selection process begins by entering all of the independent variables into a selection pool. Any size subset of

variables from the selection pool can then be specified and the optimum regressions for those subsets calculated. The calculation is then used to determine the optimum regression, based on the minimum mean square error. Partial correlation coefficients for the full model and the specified subset are calculated for tests of significance.

A simple t-test is calculated to determine significant variables. The least significant variables are eliminated from the regression to establish the desired subset size. An analysis of variance is then determined and the model is tested for significance. Variables with the partial correlation coefficients are included in the model until the optimum mean square error is determined. A multiple correlation coefficient is then computed and compared to the coefficient for other regressions. An evaluation of the t-value for regression coefficients, the F-value for the regression, and the multiple regression coefficient will yield the optimum predictive model.

The regression model is expressed in terms of independent variables and their effect on a dependent or response variable. The model takes the form:

$$Y = \beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} + \beta_3 X_{i3} + \dots + \beta_n X_{in} + e_i$$

The Y is the response variable that is defined by the right side of the equation. In this report the response variables are the vegetative and reproductive phenological stages. The  $\beta_0$  is the y-axis intercept of the optimum regression and is of little interpretive value in an ecological sense. The coefficients  $\beta_i$  demonstrate the positive or negative dependence and the magnitude of that relationship to Y according to the influence of the other independent variables. A negative coefficient denotes an accelerated plant development. The  $X_i$  variables are the environmental

and biotic factors listed in Table 1. When the  $\beta_i$  coefficients are combined with the  $X_i$  values an estimate of Y can be obtained. The multiple correlation coefficient and the standard error of the regression will determine the accuracy of that estimate.

The analyses for vegetative and reproductive phenodynamics for each of the four species are listed in following sections.

TABLE 1. Independent and dependent variables used in multiple regression analysis.

Variable No.	
1	Soil temperature at 38 cm depth on the sampling date (°C)
2	Soil moisture % at 0-15 cm depth on the sampling date
3	Soil moisture % at 15-30 cm depth on the sampling date
4	Soil moisture % at 46-61 cm depth on the sampling date
5	Soil moisture % at 0-15 cm depth on the previous sampling date
6	Soil moisture % at 15-30 cm depth on the previous sampling date
7	Soil moisture % at 46-61 cm depth on the previous sampling date
8	Annual precipitation total accumulation (mm)
9	Oct. 15-April 15 precipitation accumulation (mm)
10	April 15-July 1 precipitation accumulation (mm)
11	July 1-Sept. 1 precipitation accumulation (mm)
12	Sept. 1-Oct. 15 precipitation accumulation (mm)
13	Total forage production (kg/ha/yr)
14	Species forage production (kg/ha/yr)
15	Ambient air temperature on sampling date (°C)
16	Maximum air temperature since the previous sampling date (°C)
17	Minimum air temperature since the previous sampling date (°C)
18	Reproductive phenophase value
19	Vegetative phenophase value



ANALYSES FOR AGROPYRON SMITHII

Several modifications to the data structure were necessary to enable proper use of statistical analyses procedures. In order for a multiple regression to provide valid results the independent variables must not be highly correlated, or a sum of other variables in the model. Therefore the variables of total precipitation, total production, and species production were eliminated from the selection pool. The total precipitation variable is an accumulation of the seasonal values so the correlation between the variables is high. The total production and species production values are also related to one another. The sample size for these values are also too small for adequate analysis. Only five exclosures were available for analysis and the use of five values through the phenology and environmental observations caused a high correlation between observations.

Reproductive Phenology. Seven independent environmental variables were chosen from the selection pool of fourteen variables. The variables chosen and their significance levels are listed in Table II. The regression model calculated for this subset of variables is:

$$Y_{18} = -3.421 - .054X_2 - .088X_5 + .009X_9 + .005X_{10} + .064X_{11} - .053X_{12} \\ + .051X_{16}$$

where  $Y_{18}$  = reproductive phenology.

This regression model was highly significant when tested by analysis of variance procedures. The F- statistic was calculated to be 3.48 (P <.0022). The seven independent variables accounted for only 13.42 percent of the variability of the reproductive phenology. This value is an adjusted multiple correlation coefficient for the number of variables present in the model.

The low coefficient is due to the general lack of reproduction of western wheatgrass during 1979.

The variables that promoted phenologic development were October 15 - April 15 precipitation accumulation ( $X_9$ ), April 15 - July 1 precipitation accumulation ( $X_{10}$ ), July 1 - September 1 precipitation accumulation ( $X_{11}$ ), and maximum air temperature since the previous sampling date ( $X_{16}$ ). The variables that prolonged phenologic development were soil moisture percent at 0-15 cm on the sampling date ( $X_2$ ), soil moisture percent at 0-15 cm on the previous sampling date ( $X_{12}$ ).

Vegetative Phenology. Nine independent environmental variables were selected from a possible fourteen variables to supply the best regression model. The variables chosen and their significance levels are listed in Table III. The regression model calculated is listed below:

$$Y_{19} = 4.674 + .094X_1 - .027X_3 - .019X_4 - .036X_7 - .004X_9 - .019X_{12} \\ - .073X_{13} + .122X_{16} + .009X_{17}$$

where  $Y_{19}$  = vegetative phenology.

The regression model was highly significant when tested by analysis of variance procedures. The F- statistic was calculated as 37.51 ( $P < .0001$ ). The independent variables present in the model accounted for 74.58 percent of the vegetative phenology variability.

Three variables promoted the vegetative phenologic development. They were soil temperature at 38 cm depth on the sampling date ( $X_1$ ), maximum air temperature since the previous sampling date ( $X_{16}$ ), and minimum air temperature since the previous sampling date ( $X_{17}$ ). Six factors prolonged the vegetative development. They were soil moisture percent at 15-30 cm depth on the sampling date ( $X_3$ ), soil moisture percent at 46-61 cm depth on the

Table II. Descriptions and significances of independent variables used in the analysis of reproductive phenology of Agropyron smithii.

Variable	Description	T-value	Signifi- cance
2	Soil moisture % at 0-15 cm depth on the sampling date ( $\alpha$ )	-1.06	.292
5	Soil moisture % at 0-15 cm depth on the previous sampling date ( $^{\circ}\text{C}$ )	-1.75	.083
9	October 15 - April 15 precipitation accumulation (mm)	1.31	.194
10	April 15 - July 1 precipitation accumulation (mm)	1.47	.145
11	July 1 - September 1 precipitation accumulation (mm)	4.16	.001
12	September 1 - October 15 precipitation accumulation (mm)	-1.24	.216
16	Maximum air temperature since the previous sampling date ( $^{\circ}\text{C}$ )	1.54	.126

sampling date ( $X_4$ ), soil moisture percent at 46-61 cm depth on the previous sampling date ( $X_7$ ), October 15 - April 15 precipitation accumulation ( $X_9$ ), September 1 - October 15 precipitation accumulation ( $X_{12}$ ), and ambient air temperature on the sampling date ( $X_{15}$ ).

Table III. Description and significances of independent variables used in the analysis of vegetative phenology of Agropyron smithii.

Variable	Description	T-value	Signifi- cance
1	Soil temperature at 38 cm depth on the sampling date ( $^{\circ}\text{C}$ )	5.32	.001
3	Soil moisture % at 15-30 cm depth on the sampling date	-1.50	.137
4	Soil moisture % at 46-61 cm depth on the sampling date	-1.30	.198
7	Soil moisture % at 46-61 cm depth on the previous sampling date	-2.91	.004
9	October 15 - April 15 precipitation Accumulation (mm)	-2.36	.020
12	September 1 - October 15 precipitation accumulation (mm)	-1.29	.199
15	Ambient air temperature on the sampling date ( $^{\circ}\text{C}$ )	-6.42	.001
16	Maximum air temperature since the previous sampling date ( $^{\circ}\text{C}$ )	7.62	.001
17	Minimum air temperature since the previous sampling date ( $^{\circ}\text{C}$ )	1.11	.270

ANALYSES FOR AGROPYRON SPICATUM

Eleven of the seventeen independent variables were entered into the selection pool. The remaining six variables were eliminated due to the close correlation between the variables. The variables eliminated from the regression were total and species production values and the precipitation values for the winter, spring, summer, and the fall. The high correlation between these values was due to the rarity of exclosures containing this species.

Reproductive Phenology. Six independent environmental variables were chosen from the selection pool of eleven variables. The variables chosen and their significance levels are listed in Table IV. The regression model calculated for this subset of variables is:

$$Y_{18} = 2.176 + .325X_1 - .142X_2 + .069X_3 + .115X_6 - .116X_7 + .239X_{16}$$

where  $Y_{18}$  = reproductive phenology.

This regression model was highly significant when tested by analysis of variance procedures. The F- statistic was 59.31 and the probability associated with the F- statistic was less than .0001. The five independent variables accounted for 92.35 percent of the variability of the reproductive phenology. This value represents an adjusted multiple correlation coefficient that has accounted for the number of variables present in the model.

The variables that promoted phenologic development were soil temperature ( $X_1$ ), soil moisture percent at 15-30 cm depth ( $X_3$ ), soil moisture percent at 15-30 cm depth on the previous sampling date ( $X_5$ ) and the maximum air temperature since the previous sampling date ( $X_{16}$ ). The other variables prolonged or slowed the plant phenologic development. They were the soil moisture percent at 0-15 cm depth on the sampling date ( $X_2$ ) and the soil moisture percent at 46-61 cm depth on the previous sampling date ( $X_7$ ).

Table IV. Descriptions and significances of independent variables used in the analysis of reproductive phenology of Agropyron spicatum.

Variable	Description	T-value	Significance
1	Soil temperature at 38 cm depth on the sampling date ( $^{\circ}\text{C}$ )	4.89	.000
2	Soil moisture % at 0-15 cm depth on the sampling date	-2.10	.047
3.	Soil moisture % at 15-30 cm depth on the sampling date	1.23	.231
6	Soil moisture % at 15-30 cm depth on the previous sampling date	1.96	.063
7	Soil moisture % at 46-61 cm depth on the previous sampling date	-2.09	.047
16	Maximum air temperature since the previous sampling date ( $^{\circ}\text{C}$ )	5.00	.000

Vegetative Phenology. Five independent environmental variables were selected from the possible variables to form the best regression model. The variables chosen and their significance levels are listed in Table V. The regression model calculated is listed below:

$$Y_{19} = 10.473 + .078X_1 + .015X_2 - .030X_5 - .009X_8 + .056X_{16}$$

where  $Y_{19}$  = vegetative phenology.

The regression model was highly significant when tested by analysis of variance. The F- statistic was calculated as 165.91 ( $P < .0001$ ). The independent variables present in the regression model accounted for 96.60 percent of the variability of the vegetative phenology. The adjusted multiple correlation coefficient was used to determine the best regression model.

Three factors promoted plant vegetative phenologic development: soil temperature at 38 cm depth ( $X_1$ ), soil moisture percent at 0-15 cm depth on the sampling date ( $X_2$ ), and the maximum air temperature since the previous sampling date ( $X_{16}$ ). Two factors prolonged phenologic development: soil moisture percent at 0-15 cm on the previous sampling date ( $X_5$ ) and the annual precipitation ( $X_8$ ).



Table V. Descriptions and significances of independent variables used in the analysis of vegetative phenology of Agropyron spicatum.

Variable	Description	T-value	Significance
1	Soil temperature at 38 cm depth on the sampling date (°C)	10.55	.000
2	Soil moisture % at 0-15 cm depth on the sampling date	1.60	.124
5	Soil moisture % at 0-15 cm depth on the previous sampling date	-3.76	.001
8	Annual precipitation total accumulation (mm)	-1.04	.307
16	Maximum air temperature since the previous sampling date (°C)	8.40	.000

ANALYSES FOR ARTEMISIA NOVA

Eleven of the seventeen independent variables were entered into the selection pool. The remaining variables were eliminated due to high multicollinearity. The variables eliminated were the same variables eliminated in the analysis of Agropyron spicatum.

Reproductive Phenology. Seven environmental variables were chosen from the selection pool of eleven variables. The variables chosen and their significance levels are listed in Table VI. The regression model calculated from this subset of variables is:

$$Y_{18} = 15.553 + .171X_1 - .059X_2 - .049X_3 - .069X_4 - .047X_7 - .005X_8 \\ - .134X_{15}$$

where  $Y_{18}$  = reproductive phenology.

The model was highly significant when tested by analysis of variance. The F- statistic was calculated to be 20.66 ( $P < .0001$ ). The independent variables present accounted for 74.54 percent of the variability of the reproductive phenology.

One factor promoted phenological development, soil temperature at 38 cm depth on the sampling date ( $X_1$ ). Six factors prolonged the phenological development: soil moisture percent at 0-15 cm depth on the sampling date ( $X_2$ ), soil moisture percent at 15-30 cm depth on the sampling date ( $X_3$ ), soil moisture percent at 46-61 cm depth on the sampling date ( $X_4$ ), soil moisture percent at 46-61 cm depth on the previous sampling date ( $X_7$ ), annual precipitation total accumulation ( $X_8$ ), and ambient air temperature on the sampling date ( $X_{15}$ ).

Vegetative Phenology. Six environmental variables were chosen from the selection pool of eleven independent variables. The variables chosen and

Table VI. Descriptions and significances of independent variables used in the analysis of reproductive phenology of Artemisia nova.

Variable	Description	T-value	Significance
1	Soil temperature at 38 cm depth on the sampling date ( $^{\circ}\text{C}$ )	4.86	.000
2	Soil moisture % at 0-15 cm depth on the sampling date	-1.76	.086
3	Soil moisture % at 15-30 cm depth on the sampling date	-1.05	.301
4	Soil moisture % at 46-61 cm depth on the sampling date	-2.61	.013
7	Soil moisture % at 46-61 cm depth on the previous sampling date	-1.72	.093
8	Annual precipitation total accumulation (mm)	-3.14	.003
15	Ambient air temperature on sampling date ( $^{\circ}\text{C}$ )	-6.32	.000

their significance levels are listed in Table VII. The regression model calculated from this subset is:

$$Y_{19} = 16.05 + .257X_1 - .041X_4 - .043X_7 - .015X_8 - .163X_{15} + .055X_{17}$$

where  $Y_{19}$  = vegetative phenology.

The model was highly significant when tested by analysis of variance. The F- statistic was calculated to be 41.02 ( $P < .0001$ ). The independent variables present in the model account for 83.63 percent of the variability of the vegetative phenology.

Two variables promoted phenological development: soil temperature at 38 cm depth on the sampling date ( $X_1$ ) and the minimum air temperature since the previous sampling date ( $X_{17}$ ). Four factors prolonged phenological development: soil moisture percent at 46-61 cm depth on the sampling date ( $X_4$ ), soil moisture percent at 46-61 cm depth on the previous sampling date ( $X_7$ ), annual precipitation accumulation ( $X_8$ ), and the ambient air temperature on the sampling date ( $X_{15}$ ).

Table VII. Descriptions and significances of independent variables used in analysis of vegetative phenology of Artemisia nova.

Variable	Description	T-value	Significance ( $P < X$ )
1	Soil temperature at 38 cm depth on the sampling date ( $^{\circ}\text{C}$ )	8.95	.000
4	Soil moisture % at 46-61 cm depth on the sampling date	-1.71	.094
7	Soil moisture % at 46-61 cm depth on the previous sampling date	-1.69	.098
8	Annual precipitation total accumulation (mm)	-7.44	.000
15	Ambient air temperature on the sampling date ( $^{\circ}\text{C}$ )	-7.42	.000
17	Minimum air temperature since the previous sampling date ( $^{\circ}\text{C}$ )	2.58	.014

ANALYSIS FOR ARTEMISIA TRIDENTATA

Fourteen of the seventeen independent variables were entered into the selection pool. The variables of total precipitation, species production, and total production were eliminated due to high multicollinearity.

Reproductive Phenology. Six independent environmental variables were chosen from the selection pool. The variables chosen and their significance levels are listed in Table VIII. The regression model calculated from the chosen variables is:

$$Y_{18} = 9.242 - .064X_2 - .085X_3 - .043X_7 - .004X_{10} - .109X_{15} + .137X_{16}$$

where  $Y_{18}$  = reproductive phenology.

The model was highly significant when tested by analysis of variance procedures. The F- statistic was calculated as 8.13 ( $P < .0001$ ). The independent variables accounted for 27.45 percent of the big sagebrush reproductive phenology.

One factor promoted phenologic development, the maximum air temperature since the previous sampling date ( $X_{16}$ ). Five factors prolonged the phenologic development. They were soil moisture percent at 0-15 cm on the sampling date ( $X_2$ ), soil moisture percent at 15-30 cm on the sampling date ( $X_3$ ), soil moisture percent at 46-61 cm on the previous sampling date ( $X_7$ ), April 15 - July 1 precipitation accumulation ( $X_{10}$ ), and ambient air temperature on the sampling date ( $X_{15}$ ).

Vegetative Phenology. Nine independent environmental variables were chosen from the selection pool. The variables chosen and their significance levels are listed in Table IX. The regression model calculated from the chosen variables is:

Table VIII. Descriptions and significiances of independent variables used in the analysis of Artemisia tridentata reproductive phenology.

Variable	Description	T-statistic	Significance
2	Soil moisture % at 0-15 cm depth on the sampling date	-1.28	.202
3	Soil moisture % at 15-30 cm depth on the sampling date	-1.89	.061
7	Soil moisture % at 46-61 cm depth on the previous sampling date	-1.43	.157
10	April 15 - July 1 precipitation accumulation (mm)	-2.04	.044
15	Ambient air temperature on the sampling date (°C)	-4.13	.001
16	Maximum air temperature since the previous sampling date	4.30	.001

$$Y_{19} = 3.193 + .139X_1 - .054X_2 - .025X_4 - .021X_7 - .004X_9 - .002X_{10} \\ - .091X_{15} + .141X_{16} - .015X_{17}$$

where  $Y_{19}$  = vegetative phenology.

The model was highly significant when tested by analysis of variance procedures. The F- statistic was calculated as 32.20 ( $P < .0001$ ). The independent variables accounted for 71.30 percent of the big sagebrush vegetative phenology.

Two variables promoted vegetative phenologic development. They were the soil temperature at 38 cm depth on the sampling date ( $X_1$ ) and the maximum air temperature since the previous sampling date ( $X_{16}$ ). Seven factors prolonged the phenologic development. They were soil moisture percent at 0-15 cm depth on the sampling date ( $X_2$ ), soil moisture percent at 46-61 cm depth on the sampling date ( $X_4$ ), soil moisture percent at 46-61 cm depth on the previous sampling date ( $X_7$ ), October 15 - April 15 precipitation accumulation ( $X_9$ ), April 15 - July 1 precipitation accumulation ( $X_{10}$ ), ambient air temperature on the sampling date ( $X_{15}$ ), and the minimum air temperature since the previous sampling date.



Table IX. Descriptions and significances of independent variables used in the analysis of *Artemisia tridentata* vegetative phenology.

Variable	Description	T-statistic	Significance
1	Soil temperature at 38 cm depth on the sampling date (°C)	5.81	.001
2	Soil moisture % at 0-15 cm depth on the sampling date	-1.97	.052
4	Soil moisture % at 46-61 cm depth on the sampling date	-1.14	.256
7	Soil moisture % at 46-61 cm depth on the previous sampling date	-1.19	.238
9	October 15 - April 15 precipitation accumulation (mm)	-1.78	.077
10	April 15 - July 1 precipitation accumulation (mm)	-1.15	.253
15	Ambient air temperature on the sampling date (°C)	-6.02	.001
16	Maximum air temperature since the previous sampling date (°C)	6.78	.001
17	Minimum air temperature since the previous sampling date (°C)	-1.13	.259

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