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# Tracing the Evolution of Organic/Sustainable Agriculture

A Selected and Annotated  
Bibliography





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# Tracing the Evolution of Organic/Sustainable Agriculture

A Selected and Annotated Bibliography

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Information Center





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## Introduction

This bibliography cites writings through which may be traced the evolution of organic/sustainable agriculture and its pattern of philosophical and scientific aspects. It is not a comprehensive list, but the interested reader will find authors' references, individual bibliographies, and sources within the cited writings which will widen the traced path.

Three recent compilations have been of invaluable assistance in the preparation of this bibliography: R. R. Harwood\* and M. C. Merrill\*, writing in 1983, and A. M. Scofield\* (who wrote a brief article on the origin of the name "organic farming" in 1986) included in their writings citations to selected important works, many of which are cited here. In addition, acknowledgment is made of the work of the Canadian "Ecological Agriculture Project" (EAP) of the Macdonald College of McGill University, which has also compiled annotated lists of the literature of ecological agriculture and of selected background works of holistic approaches to agriculture.

All of the works cited here are in the collection of the National Agricultural Library, and NAL's call numbers are included in the citations. Directly below the call number is a "cited in" reference which refers to one or more of the following listed authors:

P = Pieters	1927	H = Harwood	1983
W = Waksman	1936	M = Merrill	1983
N = Northbourne	1940	S = Scofield	1986
B = Balfour	1943		

This bibliography was compiled under the direction of Jayne MacLean, Coordinator of the Alternative Farming Systems Information Center. Katy Bielenberg, clerk-typist, provided valuable assistance.

Persons wishing to suggest additions or changes to this list are invited to contact the Alternative Farming Systems Information Center, Rm 111, Beltsville, MD 20706.

\*see page 20



1580

Tusser, Thomas  
Five Hundred Points of Good Husbandry  
 n.p.  
 R30.8 T87  
 cited in: Bailey

This classic has been reprinted almost every century since its original publication. Tusser's maxims include observations of human behavior--"Still crop upon crop many farmers do take, and reap little profit, for greediness sake...", observations concerning the land--"and land (overburdened) is clean out of heart", or "if land be unlusty, the crop is not great." He also gives advice by the month, frequently in rhyme. "Octobers Abstract" is about the rotation of crops: "Where barlie did growe, laie wheat to sowe, yet better I thinke, sowe pease, after drinke. And then if ye please, sowe wheat after pease."

1788

Dickson, Adam  
The Husbandry of the Ancients  
 Edinburgh: Dickson & Creeca  
 V.1, 527 pp; V 2, 494 pp.  
 R30.9 D56  
 cited in: P

Dickson quotes Columella, Palladius, Cato, Virgil, Pliny, *et.al.*, regarding the knowledge and practice of husbandry, and confesses in the preface to be "agreeably surprised to find, that, notwithstanding the great differences in climate, the maxims of the ancient Roman farmers are the same with those of the best modern farmers in Britain..."

1846

Allen, Richard  
A Brief Compend of American Agriculture  
 New York: Saxon and Miles  
 437 pp. Index.  
 31.3 AL5 1846  
 cited in: P

The introduction contains a proposal for establishment of a "National Board of Agriculture," plus recommendations for States' actions, particularly re education.

1864

Wolfinger, John F.

"Green Manuring and Manures," Report of the U.S. Commissioner of Agriculture for the Year 1864.

Washington DC: Government Printing Office, 1865. pp 299-328

1 Ag84 1864

cited in: P

Lincoln was President when this report was published. Wolfinger defines his subject, tracing its history in Flanders (now Belgium), and listing the benefits of, and objections to, the practice of green manuring. He also quotes what "the best agricultural writers say of green manures."

1881

Darwin, Charles

The Formation of Vegetable Mould Through the Action of Worms with Observations on their Habits.

London: Murray. Reprint 1945.

153 pp. Index. Introduction by Sir Albert Howard.

56.12 D45

cited in: H, M

The real foundation for "the study of the principles underlying farming and gardening..."

1906

Hilgard, Eugene Woldemar

Soils, Their Formation, Properties, and Relations to Climate and Plant Growth in the Humid and Arid Regions

New York: Macmillian

593 pp. Index. List of authors referred to in text.

56 H54S

cited in: M, P

Professor of Agriculture at the University of California and Director of the California Experiment Station, Hilgard originally planned this to be a text and reference book, but enlarged its scope to include his soil studies "in the humid and arid regions."

1907

Elliot, Robert Henry

The Clifton Park System of Farming and Laying Down Land to Grass.London: Simpkin, et.al. 5th ed.260 pp. Index. First published in 1898 as Agricultural Changes.

32 E152

cited in: H

The author writes of his more than 30 years' experience in India and in England as a planter and a farmer. He quotes Cato, devotes considerable space to Arthur Young, and remarks that proposals to agricultural changes are often met with a response characterized as "What we know we know, and what we don't know we don't want to know."

1907

Fletcher, Stevenson Whitcomb

Soils: How to Handle and Improve Them

New York: Doubleday, Page

438 pp. Index. Appendix (includes crop rotations by states).

56.7 F632

cited in: H

Fletcher, then at the Agricultural College of Michigan, attempts here to "set forth the important facts about the soil in a plain and nontechnical manner."

1910

Hopkins, Cyril George

Soil Fertility and Permanent Agriculture

Boston, Massachusetts: Ginn

653 pp. Index. Appendix.

56.6 H77

cited in: M; quoted in King

This book contains chapters on "Theories concerning Soil Fertility" and on the Rothamsted Experiments. The final chapter is titled "Two Periods in Agricultural History" and contains quotations from Varro (B.C.226 to 28) to Liebig and Lincoln (1859) to King (1910).

1911

King, Franklin Hiram  
Farmers of Forty Centuries (or) Permanent Agriculture in  
 China, Korea, and Japan  
 New York: Harcourt, Brace  
 379 pp. Index. 209 illustrations. Preface by L.H. Bailey.  
 34.5 K58  
 cited in: H, M, P

King, a chief of the USDA Division of Soil Management, wrote this book after his retirement but did not live to write a final chapter. Bailey calls it the "writing of a well-trained observer who went...to study the actual conditions of life of agricultural peoples." It is one of the most influential of all the works cited, with far-reaching consequences for agricultural practices worldwide.

1915

Bailey, Liberty Hyde  
The Holy Earth  
 New York: Scribner's  
 117 pp.  
 30.4 B15  
 cited in: M; quoted in Bromfield

"Dean" Bailey, who wrote many textbooks in fields relating to agriculture and who published one volume of verse, writes here on a simple "philosophy of rural life."

1923

Gray, L. C., et al.  
 "The Utilization of Our Lands for Crops, Pasture and  
 Forests," U.S.D.A. Yearbook, 1923. pp. 415-506.  
 Washington, D.C. Government Printing Office.  
 1 Ag844 1923  
 cited in: P

This article reflects the government's views as to the "present situation and future outlook" regarding available resources for the growing of food and raw materials which must be supplied by crop lands, pastures and forests. As such, it is both a summary and an estimate.

1924

Steiner, Rudolf  
Agriculture. A Course of Eight Lectures.  
 n.p.  
 175 pp.  
 on order 8/88  
 cited in: H, S

This is the text which is based on the series of lectures Steiner gave in Silesia (E. Germany) in 1924. The lecture series marked the beginning of the bio-dynamic agriculture movement.

1927

Pieters, Adrian John  
Green Manuring  
 Wiley  
 356 pp. Index. Bibliography.  
 57.5 P61  
 cited in: W

Pieters was an agronomist working for the USDA at the time he wrote this book, defining "green manuring," and cover, catch and shade crops. The second chapter, a history of the subject, covers China and Japan, Greece and Rome, through the Middle Ages to England and America in the 19th Century.

1936

Waksman, Selman Abraham  
Humus: Origin, Chemical Composition, and Importance in Nature  
 Baltimore: Williams and Wilkins  
 526 pp. Index. Index of Authors. Extensive Bibliography.  
 56 W13H  
 cited in: B, H, M; author cited extensively by Pfeiffer

An "attempt to tell the story of humus, its origin from plant and animal residues, its chemical composition, its physical properties, its importance in nature, especially in soil processes and in plant growth, and finally its decomposition."

1938

U.S.D.A.

Soils and Men: The Yearbook of Agriculture, 1938

Washington, D.C.: U.S. Government Printing Office

1232 pp. Index. Glossary. Literature cited.

1 AG844 1938

cited in: M

More than 100 authors contributed to this yearbook, including William A. Albrecht, then Professor of Soils at the University of Missouri and one of the fathers of the ecological agricultural movement. It represents an effort to see "the subject as a whole--scientific aspects, practical aspects, social and economic aspects; the needs of individuals, groups, and the Nation."

1939

Jacks, G. V. and R. O. White

The Rape of the Earth: a World Survey of Soil Erosion.

London: Faber and Faber

313 pp. Index. 47 illustrations. Published in America under the title Vanishing Lands.

56.7 J13

cited in: B, M, N, and Howard

Frequently cited, this book is a pioneering classic on the subject.

1940

Howard, Albert, Sir

An Agricultural Testament

Oxford: Oxford University Press

253 pp. Index. Literature. Bibliographies at ends of chapters.

56.6 H83A

cited in: B, S, N, M, H

This is the classic study on soil fertility by the "father of the movement." It includes the "Agriculture of the Nations Which Have Passed Away" and observations of agricultural practices of both the Orient and the Occident.

1940

Northbourne, Walter Ernest Christopher James, Lord (Baron)

Look to the Land

London: Dent

206 pp. Index. Bibliography.

30 N81

cited in: H, S

This frequently overlooked early inspirational work includes the first known use of the term "organic farming" in a chapter heading on page 148, "diversified organic farming a practical proposition."

According to his son, the present Baron, Northbourne felt obliged, when World War II came in 1939, "to recommend to other farms the chemical methods of stimulating production" in order to "help feed" the country. "Being an honourable person, he therefore felt that he, too, must abandon his organic production and adopt the more conventional methods of fertilising and weed control which were beginning to emerge at that time." (Personal correspondence 9/88)

1943

Balfour, Evelyn Barbara, Lady

The Living Soil

London: Faber and Faber

248 pp. Index. Glossary. Bibliography.

56.5 B19

cited in: H, M, S

Based on 32 years' comparison of organic, mixed and chemical sections of a farm at Haughley, England, this is an extremely readable exposition of the evidence in favor of biological agriculture by one of the founders of that country's "Soil Association."

1943

Faulkner, Edward Hubert  
Plowman's Folly  
 New York: Grossett and Dunlap  
 155 pp.  
 56.7 F27  
 cited in: H

As the title implies, this famous work states that plowing is wrong, and that the moldboard plow is not a satisfactory implement for the preparation of land for the production of crops.

1945

Rodale, Jerome Irving  
Pay Dirt: Farming and Gardening with Composts  
 New York: Devin-Adair Company  
 242 pp. Bibliography. Introduction by Albert Howard.  
 57.4 R61  
 cited in: H, S

The classic statement on the value of soil, this and Rodale's later works sparked and fueled the organic movement in North America.

1946

Kolisko, Eugen and L. Kolisko  
Agriculture of Tomorrow  
 Gloucester: Kolisko Archive  
 426 pp. Index. Bibliography.  
 30 K833  
 cited in: H

This account of scientific work based on the principles of Rudolf Steiner details the Koliskos controlled experiments on the effects of cosmic forces on crop production.



1947

Bromfield, Louis  
Malabar Farm  
 New York: Harper  
 405 pp.  
 31.3 B78M  
 cited in: H, M

The journal of the famous Ohio farmer/author, this work intersperses anecdotes and history with practical advice and a recounting of his experiences. It is a sequel to his earlier book, Pleasant Valley, published in 1945.

1947

Howard, Louise Ernestine Matthaei  
The Earth's Green Carpet  
 London: Faber and Faber  
 219 pp. Index. Appendices, including "The Indore Process and its Evolution" and a "List of Books" (including periodicals).  
 30 H83  
 cited in: H, M

This is an account of the ideas and principles of Sir Albert Howard written by his second wife, also a proponent of organic agriculture.

1947

Pfieffer, Ehrenfried  
Soil Fertility, Renewal and Preservation: Bio-Dynamic Farming and Gardening  
 London: Faber and Faber. Rev.ed.  
 196 pp. Index. Bibliography. Introduction by E. B. Balfour.  
 Published in America as Bio-Dynamic Farming and Gardening, 1940.  
 30 P47  
 cited in: H, M, N, B

Based on Steiner's approach, this book stresses the importance of the "life process (biological process)", with the farm or garden a biological organic unit, not a series of unconnected processes.

1948

Rodale, Jerome Irving  
The Organic Front  
 Emmaus, Pennsylvania: Rodale Press  
 198 pp.  
 56.6 R610  
 cited in: H, M

Rodale calls the movement "organiculture", the "new, yet age-old method."

1949

Leopold, Aldo  
A Sand County Almanac and Sketches Here and There  
 New York: Oxford University Press  
 226 pp.  
 409 L552

In this well-known collection of essays, Leopold presents the case for a land ethic as a product of social evolution.

1950

Cocannouer, Joseph A  
Weeds: Guardians of the Soil  
 New York: Devin-Adair  
 179 pp. Brief list of "other books on organiculture" opposite title page.  
 79 C04  
 cited in: H, M

Called a "pioneering work" in the advocacy of the controlled use of weeds, this book's author wrote on other subjects having to do with modern farming practices.

1951

Sykes, Friend  
Food, Farming and the Future  
 London: Faber and Faber  
 294 pp. Introduction by Louise E. Howard.  
 32 Sy4F  
 cited in: H, M

An experienced British farmer, the author of this book also wrote Humus and the Farmer and Modern Humus Farming.

1954

Hainsworth, P. H.  
Agriculture, A New Approach  
 London: Faber and Faber  
 248 pp. Index. Bibliography. Glossary.  
 30 H12  
 cited in: H, M

One of the best early sources of technical information regarding natural fertilizing, this represents an "attempt to gather together relevant material that may have some bearing on the results achieved by...organic methods."

1954

Wickenden, Leonard  
Gardening with Nature: How to Grow Your Own Vegetables, Fruits and Flowers by Natural Methods  
 New York: Devin-Adair  
 392 pp. Index. Suggested readings.  
 90 W632

Depicted by the author, who has a chemistry background, as "largely a 'how-to' book," this work integrates Wickenden's advice with the scientific basis on which the organic concept of plant growth was built. Readers can thus learn both organic gardening practices and how to defend them. In 1949 Wickenden had written the popular Make Friends with your Land.

1955

Easey, Ben  
Practical Organic Gardening  
 London: Faber and Faber  
 151 pp. Index. Bibliography. Appendices. Lists of gardens, suppliers, and organizations.  
 57.4 Ea7

This is a substantive work on the subject, with a thorough and well-documented framework.

1955

Turner, Newman  
Fertility Pastures: Herbal Leys as the Basis of Soil  
 Fertility and Animal Husbandry  
 London: Faber and Faber  
 204 pp. Index.  
 60.1 T85  
 cited in: H, M

Also spelled "lea"; the dictionary defines ley as "arable land sown to grasses or clover for hay or grazing and usually plowed and planted with other crops after two or three years." Turner boasts that the "herbal ley is my manure merchant, my food manufacturer, and my vet, all in one."

1964

Hunter, Beatrice T.  
Gardening without Poisons  
 Boston: Houghton-Mifflin  
 318 pp. Index. List of sources; List of suppliers of materials. Appendices. List of Organizations interested in gardening without poisons.  
 SB975 H91

One of the early works on biological control of insect pests, a 1971 postscript by the author cites research being done by the USDA.

1964

Poirot, Eugene M.  
Our Margin of Life  
 Raytown, Missouri: Acres USA  
 159 pp. Introduction by William A. Albrecht.  
 S624 ALP6  
 cited in: H, M

A farmer/author writes seriously about agriculture, the importance of the soil, and a philosophy based on his observations and beliefs.

1976

Koepf, H. H., et al.  
Biodynamic Agriculture: An Introduction  
Spring Valley, New York: Anthroposophic Press  
429 pp. Index. Bibliography.  
S605.5.K59  
cited in: H, M

This work was originally published in German so the bibliography is of unusual interest.

1977

Berry, Wendell  
The Unsettling of America: Culture and Agriculture  
San Francisco: Sierra Club Books  
228 pp. Chapter notes.  
HD1761.B47  
cited in: H

A review/criticism on agricultural policy today, this work presents the author's position: "the care of the earth is our most ancient and most worthy, and, after all, our most pleasing responsibility."

1978

Besson, J. M. and H. Vogtmann, eds.  
Toward a Sustainable Agriculture  
Oberwil, Switzerland: IFOAM  
243 pp. References at ends of articles.  
S605.5.T68  
cited in: H, M

These are proceedings of the 1st conference of the International Federation of Organic Agriculture Movements (IFOAM), in French, German, and English. All IFOAM proceedings are recommended.

1978

Oelhaf, R. C.  
Organic Agriculture: Economic and Ecological Comparisons  
 with Conventional Methods  
 Montclair, New Jersey: Allanheld, Osmun, and Company  
 271 pp. Index. References.  
 S605.5.066  
 cited in H, M

The author, trained in theology, science and engineering, looks at more than just comparative economic issues and presents a detailed study of internal and external costs and benefits of ecological and conventional agriculture.

1979

Jeavons, J.  
How to Grow More Vegetables Than You ever Thought Possible on  
 Less Land Than You Can Imagine  
 Palo Alto, California: Ten Speed Press  
 116 pp. Bibliography.  
 SB320.6.J43  
 cited in: H

Jeavons, a former systems analyst, writes a "primer on the life-giving biodynamic/French intensive method of organic agriculture." He is involved with "Ecology Action" in Palo Alto, California.

1979

Walters, Charles, Jr. and C. J. Fenzau  
An ACRES U.S.A. Primer  
 Raytown, Missouri: ACRES U.S.A.  
 465 pp. Glossary. Index. Field notes. Lists of  
 Eco-suppliers.  
 S605.5.W34  
 cited in: H, M

A "first reader" in eco-agriculture, this book is written from an organic perspective on the basis of plant and soil science, agronomy and pest control.

1980

Boeringa, R., ed.  
Alternative Methods of Agriculture  
 Amsterdam: Elsevier  
 199 pp. References.  
 S601.D4 Vol.10  
 cited in: H, M

A translation of selections of the famous Dutch report of 1976, this work includes descriptions of each school of ecological agriculture, and a literature review on techniques, yields, food quality, impact on the environment, and research recommendations.

1980

Jackson, Wes  
New Roots for Agriculture  
 Lincoln, Nebraska: University of Nebraska Press  
 151 pp. New edition 1985. References & notes at ends of chapters.  
 S441.J25  
 cited in: H

The new edition has a foreword by Wendell Berry and an "afterward" to its conclusion, pp 133-148. Both Berry and Jackson are leaders in the movement today.

1980

U.S. Department of Agriculture Study Team on Organic Farming.  
Report and Recommendations on Organic Farming  
 Washington, D.C.: USDA  
 94 pp. References at ends of chapters.  
 aS605.5 U52

Compiled with the assistance of the Rodale Press survey of The New Farm readers, this study was "conducted to learn more about the potential contributions of organic farming as a system for the production of food and fiber." A first for the U.S., it is a general overview of the status of organic agriculture in the United States: methods, implications for environmental and food quality, economic assessment, and research recommendations.

1981

Stonehouse, B., ed.

Biological Husbandry: A Scientific Approach to Organic Farming

London: Butterworths

352 pp. Index.

16 S605.5. S7

cited in: H, M

This includes "most of the papers" presented at the 1st international symposium of the International Institute of Biological Husbandry, 1980. Sections include: soil structure, flora and fauna, agricultural methods, biological husbandry in the tropics, systems of agriculture, and comparative studies.

1982

Hill, S. B. and P. Ott, eds.

Basic Techniques in Ecological Farming (Proceedings of the 2nd International Conference, Montreal, 1978)

Basel: Berkhauser Verlag

366 pp.

S605.5.B39

cited in: H, M

This volume and other available proceedings of IFOAM (International Federation of Organic Agriculture Movements) conferences are highly recommended.

1983

Altieri, Miguel

Agroecology; the Scientific Basis of Alternative Agriculture

Berkeley, California. University of California.

173 pp.

S589.7 A4

A review of temperate and tropical agroecology, theory and practice, this work includes chapters on the design of sustainable systems, traditional peasant agriculture, polyculture, tree cropping, live mulches, minimum tillage, and pest control.



1984

Lowrance, Richard, Benjamin R. Stinner and Garfield J. House, eds.

Agricultural Ecosystems; Unifying Concepts

New York, John Wiley.

233 p. Index. References at ends of chapters.

S589.7 A36

Written by 21 of the foremost thinkers on the subject of agroecosystems, the majority of the chapters were presented initially at a 1982 symposium held during a meeting of the Ecological Society of America.

1985

Fukuoka, Masanobu

The Natural Way of Farming: the Theory and Practice of Green Philosophy

Tokyo, Japan Publications

280 pp. Index. Translated from the Japanese.

S606.6 F72

Fukuoka, author of The One Straw Revolution, reiterates his five major principles: no tillage, no fertilizer, no pesticides, no weeding, and no pruning. His book deals almost exclusively with farming in Japan, but his message can be viewed from a universal perspective.

\*\*\*\*\*

\*References cited in the Introduction

1983

Harwood, R.R.

"International Overview of Regeneration Agriculture,"  
Proceedings of Workshops on Resource-Efficient Farming  
Methods for Tanzania, May 16-20, 1983

Emmaus, Pennsylvania: Rodale Press

12 pp.

1983

Merrill, M.C.

"Eco-Agriculture: A Review of its History and Philosophy,"  
Biological Agriculture and Horticulture

volume 1, pp. 181-210

1986

Scofield, A.M.

"Organic Farming--The Origin of the Name," Biological  
Agriculture and Horticulture

volume 4, pp. 1-5.







