

1898

Bentley, Henry Lewis

Cattle Ranges of the Southwest: A History of the Exhaustion of the Pasturage and Suggestions for its Restoration

Washington DC: U.S. Dept. of Agriculture, 1898. 32p. (Farmers' Bulletin, No. 72)

NAL Call no: 1 Ag84F no.72

Full-text: Organic Roots, Organic Agriculture Information Access,

<http://quod.lib.umich.edu/n/nal/> (to be added June, 2007)

Other works by this author: *A Report upon the Grasses and Forage Plants of Central Texas* (1898); *Experiments in Range Improvement in Central Texas* (1902).

Bentley describes the early condition of central Texas ranges and the factors that contributed to their deterioration during the late 1800s. His recommendations on how the value of the stock ranges could be renewed through appropriate stocking rates, water conservation practices, hay production and the use of native grasses and forage plants seem remarkably contemporary. MVG

1898

Frank, Albert Bernhard, 1839-1900

A Manual of Agricultural Botany

Edinburgh; London: W. Blackwood and Sons, 1898. x, 199p. Translated from the German, *Pflanzenkunde für Mittlere und Niedere Landwirthschaftsschülen* (1894), by John Waugh Paterson. Illustrated with 133 woodcuts.

NAL Call no: 64 F85

Frank is best known for his research on plant-fungi symbiosis related to truffle production. He is credited with inventing the term, "mycorrhiza," in the paper, "On the Nourishment of Trees through a Root Symbiosis with Underground Fungi" (1885), *Proceedings of the German Botanical Association* (full-text in German: <http://www.biologie.uni-hamburg.de/b-online/fo33/frank/frank.htm>) (accessed Apr. 23, 2007). MVG
Cited in: Merrill (1983)

1900-1944

The rise of "scientific agriculture" and adoption of manufactured chemical fertilizers and pesticides

In the years after Liebig's revelations about soil chemistry and plant nutrition (see: Liebig, 1840), most farmers and agricultural researchers adopted chemically-oriented soil and crop management techniques that they saw as more scientific than traditional practices. The large-scale use of synthetic fertilizers came slowly, but surely. It was coupled, in the years following World War I and World War II, with the use of newly developed chemicals that were used to control insect pests and weeds.

Simultaneously, this shift to chemically- and technologically-intensive farming was accompanied by attitudinal and scientific changes that helped shape modern organic and sustainable agriculture. These included: the study and acceptance of "biological control" techniques; renewed interest in the role of humus and soil microorganisms in plant production; and innovative approaches to composting. There were also many scientific discoveries concerning human nutrition and the relationship among agricultural practices, food and human diseases.

During this period Americans were confronted with evidence of deteriorated of rangelands, soils and forests. The first critics of the new “industrial” agriculture emerged and a heightened conservation ethic began to take root. The New Zealand Soil and Health Association (originally called the “Humic Compost Club”) was founded in 1942, pre-dating both the British Soil Association (1946) and Rodale’s Soil and Health Foundation (1947).

1906

Hilgard, Eugene Woldemar, 1833-1916

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

New York: Macmillian, 1906. 593p. Includes index. List of authors referred to in text.

NAL Call no: 56 H54S

Full-text: Core Historical Literature of Agriculture, Cornell University,

<http://chla.library.cornell.edu/cgi/t/text/text-idx?c=chla;idno=2845620> (accessed Jan. 1, 2007)

This author published many other works on agricultural topics under the auspices of the Berkeley CA Agricultural Experiment Station including: *The “Bedrock Lands” of Sacramento County*, with R.H. Loughridge (1885); *The Distribution of the Salts in Alkali Soils*, with R.H. Loughridge (1895); *The Conservation of Soil Moisture and Economy in the Use of Irrigation Water*, with R.H. Loughridge (1898).

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.” JPG

Cited in: Merrill (1983); Pieters (1927)

1907

Elliot, Robert Henry, 1837-1914

The Clifton Park System of Farming and Laying Down Land to Grass

London: Simpkin, et. al., 1907. 260p. Includes index. First published in 1898 as *Agricultural Changes*. Introduction by Sir George Stapledon.

NAL Call no: 32 E152 (not listed in catalog, 1/2007)

Full-text (5th edition): Soil and Health Library, Steve Solomon; and Journey to Forever Online Library, <http://www.soilandhealth.org/01aglibrary/01principles.html>; http://journeytoforever.org/farm_library.html (accessed Jan. 1, 2007)

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 knows we knows, and what we don’t know we don’t want to know.” JPG

Cited in: Coleman (1976); Conford (1988); Harwood (1983); Harwood (1990)

1907

Fletcher, Stevenson Whitcomb, 1875-1971

Soils: How to Handle and Improve Them

New York: Doubleday, Page, 1907. 438p. Includes index. Appendix (includes crop rotation recommendations by state). Illustrated with photographs by the author. (The Farm Library)

NAL Call no: 56.7 F632

Full-text: Core Historical Literature of Agriculture, Cornell University,

<http://chla.library.cornell.edu/cgi/t/text/text-idx?c=chla;idno=2716150> (accessed Jan. 1, 2007)

Other works by this author: *The Strawberry in North America: History, Origin, Botany, and Breeding* (1917); *Pennsylvania Agriculture and Country Life, 1840-1940* (1955).

Fletcher, then at the Agricultural College of Michigan, attempts here to “set forth the important facts about the soil in a plain and non-technical manner.” JPG

Cited in: Harwood (1983); Harwood (1990)

1908

Pinchot, Gifford, 1865-1946

The Conservation of Natural Resources

Washington DC: U.S. Dept. of Agriculture, 1908. 12p. (Farmers' Bulletin, 327)

NAL Call no: 1 Ag84F no.327

Full-text: Organic Roots, Organic Agriculture Information Access,

<http://quod.lib.umich.edu/n/nal/> (to be added June, 2007)

Other works by this author: *The Fight for Conservation* (1910); *The Power Monopoly: Its Make-up and its Menace* (1928); *Breaking New Ground.*(1947); *The Conservation Diaries of Gifford Pinchot*, edited by Harold K. Steen (2001).

“We shall decide whether their [our children] lives, on the average, are to be lived in a flourishing country, full of all that helps to make men comfortable, happy, and strong, and effective, or whether their lives are to be lived in a country like the miserable outworn regions of the earth which other nations before us have possessed without foresight and turned in to hopeless deserts. We are no more exempt from the operation of natural laws than are the people of any other part of the world.” p. 12. Pinchot addresses not only the status and future of forest and soil resources in the United States, but “Waste through piecemeal planning” and the “Danger of monopoly.” MVG

1910

Carver, George Washington, 1864?-1943

George Washington Carver in his Own Words

Columbia MO: University of Missouri Press, 1987. xv, 208p. Edited by Gary R. Kremer. Includes index. Bibliography, p. 197-205.

NAL Call no: S417.C3C3

Lacking funds for research at Tuskegee Institute, Carver worked on improving soils, growing crops with few inputs and using species that fixed nitrogen (hence, the work on the cowpea and the peanut). He emphasized providing information that farmers needed, presented at the level they could use. “This pegs him as one of the first true sustainable agriculture educators and researchers.” Dennis Keeney, in *Leopold Letter*, Fall 1998. MVG

1910

Hopkins, Cyril George, 1866-1919

Soil Fertility and Permanent Agriculture

Boston: Ginn, 1910. 653p. Includes index. Appendix. See also: *History, and Present Position of the Rothamsted Investigations*, by Sir J. Henry Gilbert (Harrison, 1891) (full-text: Internet Archive, <http://www.archive.org/details/historypresentpo00gilbuoft>) (accessed Apr. 23, 2007). (Country Life Education Series)

NAL Call no: 56.6 H77

Full-text: Core Historical Literature of Agriculture, Cornell University,

<http://chla.library.cornell.edu/cgi/t/text/text-idx?c=chla;idno=3057996> (accessed Jan. 1, 2007)

Other works by this author: *The Story of Soil* (1910) (full-text: Soil and Health Library, Steve

Solomon, <http://www.soilandhealth.org/01aglibrary/01principles.html>) (accessed Apr. 23, 2007); *The Farm that Won't Wear Out* (1913) (full-text: Soil and Health Library, Steve Solomon, <http://www.soilandhealth.org/01aglibrary/01principles.html>) (accessed Apr. 23, 2007).

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). JPG
Cited in: Beeman (1993); Merrill (1983); quoted in King (1911)

1911

King, Franklin Hiram, 1848-1911

Farmers of Forty Centuries (or) Permanent Agriculture in China, Korea, and Japan

Madison WI: Mrs. F. H. King, 1911. 379p. Includes index. 209 illustrations. Preface by L.H. Bailey. Other editions: 2nd edition, edited by J.P. Bruce, London, 1927.

NAL Call no: 34.5 K58

Full-text: Core Historical Literature of Agriculture, Cornell University,

<http://chla.library.cornell.edu/cgi/t/text/text-idx?c=chla;idno=2917542> (accessed Jan. 1, 2007)

Other works by this author: *Destructive Effects of Winds on Sandy Soils and Light Sandy Loams: With Methods of Protection* (1894); *The Soil: Its Nature, Relations, and Fundamental Principles of Management* (1895); *Irrigation and Drainage: Principles and Practice of their Cultural Phases* (1899).

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. JPG

Cited in: Beeman (1993); Coleman (1976); Conford (2001); Esbjornson (1992); Harwood (1983); Harwood (1990); Heckman (2006); Kirschenmann (2004); Korcak (1992); Merrill (1983); Pieters (1927)

1911

U.S. Country Life Commission

Report on the Commission on Country Life

New York: Sturgis and Walton, 1911. 150p. Report first printed as 60th Congress, 2nd session, Senate document 705 (1909). Introduction by Theodore Roosevelt. Commission members: L.H. Bailey, Henry Wallace, Kenyon L. Butterfield, Walter H. Page, Gifford Pinchot, C.S. Barrett and W.A Beard. Other editions: Reprint published by Arno, 1975.

NAL Call no: 281.2 Un32 1911

Full-text (1909 edition): Core Historical Literature of Agriculture, Cornell University,

<http://chla.library.cornell.edu/cgi/t/text/text-idx?c=chla;idno=3319041> (accessed Jan. 1, 2007)

Healthy rural economies and communities are key components of a sustainable agriculture. This report, commissioned by Theodore Roosevelt, describes “corrective forces” that should be implemented to address “deficiencies in country life” including disregard for farmer and farm laborer rights, land speculation, waste in forests, soil depletion, transportation, health, women’s work and trade restraints. “We were founded as a nation of farmers and in spite of the great growth of our industrial life it still remains true that our whole system rests upon the farm, that the welfare of the whole community depends on the farmer. The strengthening of country life is the strengthening of the whole nation.” Introduction, T. Roosevelt. MVG

1913

Sampson, Arthur William, 1884-1967

Range Improvement by Deferred and Rotation Grazing

Washington DC: U.S. Dept. of Agriculture, 1913. 16p. (Bulletin of the U.S. Department of Agriculture. No. 34)

NAL Call no: 1 Ag84B no.34

Other works by this author: *Reseeding of Depleted Grazing Lands to Cultivated Forage Plants* (1913); *Range Preservation and its Relation to Erosion Control on Western Grazing Lands*, with Leon H. Weyl (1918); *Climate and Plant Growth in Certain Vegetative Associations* (1918) (full-text: Internet Archive, <http://www.archive.org/details/climateplantgrow00samprich>) (accessed Apr. 1, 2007); *Plant Succession in Relation to Range Management* (1919); *Range and Pasture Management* (1923); *Grazing Periods and Forage Production on the National Forests*, with Harry E. Malmsten (1926); *Range Management: Principles and Practices* (1952).

“Arthur William Sampson’s list of ‘firsts’ is impressive: first person in America to be called a range ecologist, first to promote deferred and rotational grazing strategies, first to develop usable concepts of indicator species and plant succession for evaluating range condition, first to write a college text on range management, first range ecologist hired by the Forest Service, and first director of what is now called the Intermountain Research Station.” *Utah History to Go* (http://historytogo.utah.gov/people/utahns_of_achievement/arthurwilliamsampson.html) (accessed Apr. 1, 2007) MVG

1915

Bailey, Liberty Hyde, 1858-1954

The Holy Earth

New York: Scribner’s, 1915. 117p.

NAL Call no: 30.4 B15

Full-text: Library of Congress, American Memory, The Evolution of the Conservation Movement, 1850-1920, <http://lcweb2.loc.gov/ammem/amrvhtml/conshome.html> (accessed Jan. 1, 2007)

Other works by this author: *Cyclopedia of American Agriculture: A Popular Survey of Agricultural Conditions, Practices and Ideals in the United States and Canada* (4-volumes, 1907-1909) (full-text: Core Historical Literature of Agriculture Library, <http://chla.library.cornell.edu/c/chla/browse/title/2949859.html>) (accessed Apr. 23, 2007).

“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.” JPG Cited in: Kirschenmann (2004); Merrill (1983); quoted in Bromfield (1947)

1915

United States Department of Agriculture

Social and Labor Needs of Farm Women

Washington DC: United States Department of Agriculture, 1915. (Report, 103)

NAL Call no: 1Ag848p no.103

Full-text: History Matters, <http://historymatters.gmu.edu/d/101/> (accessed Jan. 1, 2007)

Related USDA reports: *Domestic Needs of Farm Women*, Report 104 (1915); *Educational Needs of Farm Women*, Report 105 (1915); *Economic Needs of Farm Women*, Report 106 (1915).

This pioneering report, based on excerpts of letters from farm wives, provided important insights into farm and rural life, and the roles of men and women, that had not been studied before. It was published with three accompanying reports, cited above. MVG

1919

Albrecht, William Albert, 1888-1974

The Albrecht Papers

Kansas City MO: Acres U.S.A., 1982. 2 vols. Edited by Charles Walters Jr. Contains ~70 papers in 2 volumes: v. 1. Foundation concepts; v. 2. Soil fertility and animal health. Includes indexes and Albrecht Bibliography, p. 3-37.

NAL Call no: S441.A44 1982

Full-text: Several papers as well as a collection of journal and magazine articles, experiment station and other government publications, are available at the Soil and Health Library, Steve Solomon, <http://www.soilandhealth.org/01aglibrary/01principles.html> (accessed Jan. 1, 2007)

Other works by this author: *Artificial Manure Production on the Farm* (1927); *Legume Bacteria with Reference to Light and Longevity*, with Lloyd M. Turk (1929); *Nitrate Production in Soils as Influenced by Cropping and Soil Treatments* (1938); *Nitrogen Fixation and Soil Fertility Exhaustion by Soybeans under Different Levels of Potassium*, with Carl E. Ferguson (1941); *Soil Fertility and Animal Health* (1958).

Dr. Albrecht's observations, research and teaching on soil and soil's relationship to plant, animal and human nutrition reflect the essence of sustainable soil management. A professor at the University of Missouri College of Agriculture, Albrecht wrote hundreds of reports, books and articles that span several decades, starting with his reports on nitrogen fixation and soil inoculation in 1919. MVG

Cited in: Coleman (1976); Merrill (1983)

1923

Gray, L. C., O. E. Baker, F. J. Marschner, B. O. Weitz, William Ridgely Chapline, Ward Shepard and Raphael Zon

The Utilization of Our Lands for Crops, Pasture and Forests

In *Agriculture Yearbook, 1923*. Washington DC: United States Department of Agriculture; Government Printing Office, 1923, p. 415-506.

NAL Call no: 1 Ag844 1923

Full-text: National Agricultural Library Digital Repository (NALDR),

<http://naldr.nal.usda.gov/NALWeb/Publications.aspx> (select "Yearbook..."; then search by author name and 1923) (accessed Jan. 1, 2007)

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.

JPG

Cited in: Pieters (1927)

1924

Steiner, Rudolf, 1861-1925

Agriculture: A Course of Eight Lectures

London: Bio-Dynamic Agricultural Association, Rudolf Steiner House, 1974 (oldest edition held by the National Agricultural Library). 175p. Translated from the German, *Geisteswissenschaftliche Grundlagen zum Gedeihen der Landwirtschaft* (1924), by George Adams. Preface by Ehrenfried Pfeiffer.

NAL Call no: S523.S8313 1974

Other works by this author: *Readings in Goethean Science*, with Johann Wolfgang von Goethe (1978); *What is Biodynamics? A Way to Heal and Revitalize the Earth: Seven Lectures* (2005).

This is the text which is based on the series of lectures Steiner gave in Koberwitz, Silesia in 1924. The lecture series marked the beginning of the biodynamic agriculture movement. JPG. [The biodynamic farm/food certification organization, Demeter, was also initiated in the 1920s. MVG]

Cited in: Conford (2001); Harwood (1983); Harwood (1990); Heckman (2006); Kirschenmann (2004); Scofield (1986)

1927

Elton, Charles Sutherland, 1900-1991

Animal Ecology

London: Sidgwick and Jackson, 1927. 207p. Introduction by Julian S. Huxley. List of references, p.192-200. Other editions: 3rd edition, 1950.

NAL Call no: 411 E18

Other works by this author: *Animal Ecology and Evolution* (1930); *The Ecology of Invasions by Animals and Plants* (1958).

Elton helped define the field of ecology by focusing on the study of animal populations as opposed to studying individual organisms or the more general “scientific natural history.” His approach, along with refinements established by Amyan Macfadyen (*Animal Ecology: Aims and Methods*, 1957) and others in the 1950s, laid the groundwork for “agroecology.” MVG. See also: Altieri, 1983 and Gliessman, 1998.

1927

Pieters, Adrian John, 1866-1940

Green Manuring: Principles and Practice

New York: Wiley, 1927. xiv, 356p. Includes index. Bibliography. (The Wiley Agricultural Series)

NAL Call no: 57.5 P61

Full-text: Soil and Health Library, Steve Solomon,

<http://www.soilandhealth.org/01aglibrary/01principles.html> (accessed Jan. 1, 2007)

Other works by this author: *Green Manuring*, with C.V. Piper (USDA Farmers’ Bulletin, no. 1250, 1922); *Soil-depleting, Soil-conserving, and Soil-building Crops* (USDA Leaflet, no. 165, 1938); *Legumes in Soil Conservation Practices* (USDA Leaflet, no. 163, 1938).

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. JPG

Cited in: Korcak (1992); Waksman (1936)

1928

Bennett, Hugh Hammond, 1881-1960, and William Ridgely Chapline, 1891-

Soil Erosion: A National Menace

Washington DC: United States Department of Agriculture, 1928. 36p. 16 plates of photographs. Bibliography, p. 35-36. (Circular, 33)

NAL Call no: 1 Ag84C no.33

Full-text: Organic Roots, Organic Agriculture Information Access,

<http://quod.lib.umich.edu/n/nal/> (to be added June, 2007)

Other works by Bennett: *Conservation Farming Practices and Flood Control* (1936); *Soil Conservation* (1939); *Thomas Jefferson, Soil Conservationist* (1944); *Our American Land: The*

Story of its Abuse and its Conservation (1946); *Elements of Soil Conservation* (1947). Other works by Chapline: *Range Research in the United States* (1937).

“Hugh Hammond Bennett led the soil conservation movement in the United States in the 1920s and 1930s, urged the nation to address the ‘national menace’ of soil erosion and created a new federal agency and served as its first chief - the Soil Conservation Service, now the Natural Resources Conservation Service [NRCS] in the U.S. Department of Agriculture. He is considered today to be the father of soil conservation.” *A Story of Land and People: Biography of Hugh Hammond Bennett*, USDA, NRCS (<http://www.nrcs.usda.gov/about/history/bennett.html>) (accessed February 1, 2007). MVG Cited in: Beeman (1993); Worster (1985)

1929

Smith, Joseph Russell, 1874-1966

Tree Crops: A Permanent Agriculture

New York: Harcourt, Brace, 1929. xii, 333p. “List of articles in which the tree crops idea has been broadcasted,” p. 295. “Bibliography on soil erosion and its prevention,” p. 296-301. Other editions: 1950 edition (Devon-Adair) includes an introduction by Wendell Berry.

NAL Call no: 99 Sm6 1929

Full-text (selected chapters only): Journey to Forever Online Library, http://journeytoforever.org/farm_library.html (accessed Jan. 1, 2007)

Smith’s compilation of important trees and how to grow them was written to promote remedies for worn out soils, soil erosion on hillsides, flooding and degradation of arid lands. “Testing applied to the plant kingdom would show that the natural engines of food production for hill lands are not corn and other grasses, but trees.” Part I: “The Philosophy, Tree Crops - The Way Out.” MVG

1930

Jenny, Hans, 1899-1992

A Study on the Influence of Climate upon the Nitrogen and Organic Matter Content of the Soil

Columbia MO: University of Missouri, College of Agriculture, Agricultural Experiment Station, 1930. 66p. Bibliography, p. 64-66. (Research Bulletin, 152)

NAL Call no: 100 M693 (3) no.152

Other works by this author: *Factors of Soil Formation: A System of Quantitative Pedology* (1941, reprinted 1994) (full-text: Soil and Health Library, Steve Solomon, <http://www.soilandhealth.org/01aglibrary/01principles.html>) (accessed Apr. 23, 2007); *The Soil Resource: Origin and Behavior* (1980).

Jenny’s work, first at the University of Missouri (Columbia) and later at the University of California, Berkeley, focused on defining soil properties and the process of soil formation. His research on the effect of natural influences - climate, organisms, topography, time and parent material - on soil organic matter (SOM) dynamics was very influential during the mid-1900s and seems particularly relevant today, MVG Cited in: Worster (1985)

1932

Pottenger, Francis Marion, 1901-1967

Pottenger's Cats: A Study in Nutrition

La Mesa CA: Price-Pottenger Nutrition Foundation, 1995 (oldest edition held by the National Agricultural Library). xv, 123p. Bibliography: "The professional papers of Francis M. Pottenger, Jr., M.D.," p. 121-123. Edited by Elaine Pottenger with Robert T. Pottenger, Jr.
NAL Call no: TX537 .P67 1995

This compilation presents the observations made by Francis M. Pottenger, Jr., M.D., on the effects of deficient and optimum nutrition in cats and human beings as recorded in his articles and clinical records written between the years of 1932 and 1956. Pottenger's work focused on the nutritive value of heat-labile elements - nutrients destroyed by heat and available only in raw foods. He linked his observations of cats on deficient diets to Dr. Weston Price's studies (see Price, 1939) of human degeneration found in tribes and villages that had abandoned traditional foods. MVG
Cited in: Merrill (1983)

1935

Sears, Paul Bigelow, 1891-1990

Deserts on the March

Norman: University of Oklahoma Press, 1935. 231p. Most recent edition: 4th edition, University of Oklahoma Press, 1980.

NAL Call no: 277.12 Se1

Other works by this author: *Life and Environment* (1939); *Biology of the Living Landscape* (1964); *Lands Beyond the Forest* (1969).

In 1935, drought held sway over much of the United States and the Dust Bowl was at its worst. With an ecological approach, Sears writes eloquently about desertification, a problem that remains one of the primary challenges facing sustainability of agriculture world-wide.
MVG
Cited in: Conford (2001)

1935

Stapledon, Sir Reginald George, 1882-1960

The Land Now and Tomorrow

London: Faber and Faber, 1935. xvii, 336p. Includes foldout maps. Bibliography, p. 316-325.

NAL Call no: 282 St2

Other works by this author: *The Cultivation and Varieties of Oats* (1923); *Ley Farming*, with W. Davies (1941) (full-text, 1948 edition: Journey to Forever Online Library, http://journeytoforever.org/farm_library.html) (accessed Apr. 23, 2007); *The Way of the Land* (1949) (full-text: Soil and Health Library, Steve Solomon, <http://www.soilandhealth.org/01aglibrary/01principles.html>) (accessed Apr. 23, 2007).

Stapledon, Professor of Agricultural Botany at University College of Wales Aberystwyth, founded the Welsh Plant Breeding Station in 1919. He was concerned with ley farming and improvement of grass plants. MVG
Cited in: Conford (2001)

1936

McCarrison, Sir Robert, 1878-1960

Nutrition and Health, being the Cantor Lectures Delivered before the Royal Society of Arts, 1936, together with two earlier essays, by Sir Robert McCarrison, and a postscript by H. M. Sinclair

London: Faber and Faber, 1953 (oldest edition held by the National Agricultural Library). 125p. Published in 1936 under title: *Nutrition and National Health*. (Royal Society of Arts, London, Cantor Lectures)

NAL Call no: 389.1 M125N 1953

Full-text (McCarrison lectures only): McCarrison Society Scottish Group,

<http://www.foodforhealthscotland.org/nutritionandnationalhealth.html> (accessed Jan. 1, 2007)

Other works by this author: *Studies in Deficiency Disease* (1921) (full-text: Soil and Health Library, Steve Solomon, <http://www.soilandhealth.org/01aglibrary/01principles.html>) (accessed Apr. 23, 2007); *The Work of Sir Robert McCarrison*, edited by H.M. Sinclair (1953).

Dr. McCarrison spent most his career in the Indian Medical Service. Through his studies in India and Britain, dating from the 1930s, he concluded that the relationship of food to nutrition and of both to health and disease was the key to maintaining good “national health.” MVG

Cited in: Conford (1988); Conford (2001); Merrill (1983)

1936

Waksman, Selman Abraham, 1888-1973

Humus: Origin, Chemical Composition, and Importance in Nature

Baltimore: Williams and Wilkins, 1936. 526p. Subject and author indexes. Extensive bibliography.

NAL Call no: 56 W13H

Full-text: Core Historical Literature of Agriculture, Cornell University,

<http://chla.library.cornell.edu/cgi/t/text/text-idx?c=chla;idno=2828925> (accessed Jan. 1, 2007)

Other works by this author: *Principles of Soil Microbiology* (1927); *Soil Microbiology* (1952); *Soil Organic Matter and the Living Plant*, with A.W. Blair (1938); *Guide to the Classification and Identification of the Actinomycetes and their Antibiotics*, with Hubert A. Lechevalier (1953); *My Life with the Microbes* (1954).

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.” JPG

Cited in: Balfour (1943); Beeman (1993); Blum (1993); Coleman (1976); Conford (2001); Harwood (1983); Harwood (1990); Korcak (1992); Merrill (1983); author cited extensively by Pfeiffer

1938

Pfeiffer, Ehrenfried, 1899-1961

Bio-dynamic Farming and Gardening: Soil Fertility Renewal and Preservation

New York; London: Anthroposophic Press; Rudoff Steiner Pub. Co., 1938. vii, 2 leaves, 220p.

Translated from the German, *Die Fruchtbarkeit der Erde* (1937), by Fred Heckel. Bibliography, p. 217-220. 18 illustrations.

NAL Call no: 30 P47

Full-text (American edition): Core Historical Literature of Agriculture, Cornell University,

<http://chla.library.cornell.edu/cgi/t/text/text-idx?c=chla;idno=3138977> (accessed Jan. 1, 2007)

Other works by this author: *Practical Guide to the Use of the Bio-dynamic Preparations* (revised edition, 1945); *The Earth's Face and Human Destiny* (1947); *The Compost Manufacturers Manual; the Practice of Large Scale Composting* (1956); *Weeds and What They Tell* (reprint, 1981).

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. JPG

Cited in: Coleman (1976); Conford (2001); Harwood (1983); Harwood (1990); Merrill (1983)

1938

United States Department of Agriculture

Soils and Men: The Yearbook of Agriculture, 1938

Washington DC: U.S. Government Printing Office, 1938. 1232p. Includes index. Glossary. Literature cited.

NAL Call no: 1 AG844 1938

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." JPG

Cited in: Blum (1993); Conford (2001); Merrill (1983)

1939

Jacks, Graham Vernon, 1901-1977, and Robert Orr Whyte, 1903-1986

The Rape of the Earth: A World Survey of Soil Erosion

London: Faber and Faber, 1939. 313p. Includes index. 47 illustrations. Published in America under the title *Vanishing Lands; a World Survey of Soil Erosion*.

NAL Call no: 56.7 J13

Other works by Jacks: *Soil* (1954). Other works by Whyte: *Crop Production and Environment* (1946; revised, 1960); *Land, Livestock and Human Nutrition in India* (1968); *Tropical Grazing Lands: Communities and Constituent Species* (1974).

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

Cited in: Balfour (1943); Conford (1988); Conford (2001); Howard (1940); Merrill (1983); Northbourne (1940); Scofield (1986)

1939

Price, Weston Andrew, 1870-1948

Nutrition and Physical Degeneration; a Comparison of Primitive and Modern Diets and Their Effects

New York; London: P. B. Hoeber, 1940 (oldest edition held by the National Agricultural Library). xviii, 431p. Foreword by Earnest Albert Hooton. References at end of some of the chapters.

Includes 134 figures (primarily photographs taken by the author). Other editions: A 50th anniversary edition, 1989, includes forewords from the original editions by Earnest Albert Hooton, Granville Frank Knight, M.D., William A. Albrecht, Ph.D., and new introductions and reminiscences specially written for the Golden Anniversary Edition by Abram Hoffer, M.D., Ph.D., H. Leon Abrams, Jr. and Donald Delmage Fawcett.

NAL Call no: 389.1 P93

Full-text: Journey to Forever Online Library, http://journeytoforever.org/farm_library.html (accessed Jan. 1, 2007)

A practicing dentist, Price set out to discover why certain “primitive” peoples exhibited perfect teeth while the majority of individuals from modern societies had such poor ones. His travels and work of the 1920s and 1930s produced broad nutritional studies that linked many of modern society’s health problems to diet and to how modern food is grown and prepared. MVG

Cited in: Conford (2001); Merrill (1983)

1940

Bruce, Maye Emily, 1879-

From Vegetable Waste to Fertile Soil (Quick Return Compost)

London: C.A. Pearson, 1940. 64p. Bibliography, p. 63. Foreword by L.F. Easterbrook.

NAL Call no: 57.4 B83

Other works by this author: *Common-sense Compost Making by the Quick Return Method* (1946) (full-text: Journey to Forever Online Library, http://journeytoforever.org/farm_library.html) (accessed Apr. 23, 2007); *Compost Making: Practical Advice on Nature’s Method of Restoring Life in the Soil* (1947).

Bruce was a composting pioneer, along with Sir Albert Howard. Both became founding members of the Soil Association in England. MVG

Cited in: Coleman (1976); Conford (2001); Harwood (1983); Harwood (1990)

1940

Howard, Sir Albert, 1873-1947

An Agricultural Testament

Oxford: Oxford University Press, 1940. 253p. Includes index. Literature. Bibliographies at ends of chapters.

NAL Call no: 56.6 H83A

Full-text: Soil and Health Library, Steve Solomon; and Journey to Forever Online Library, <http://www.soilandhealth.org/01aglibrary/01principles.html>; http://journeytoforever.org/farm_library.html (accessed Jan. 1, 2007)

Other works by this author: *Soil and Health: A Study of Organic Agriculture* (1947).

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. JPG

Cited in: Balfour (1943); Blum (1993); Coleman (1976); Conford (1988); Conford (2001); Esbjornson (1992); Harwood (1983); Harwood (1990); Heckman (2006); Kirschenmann (2004); Korcak (1992); Kuepper, Gegner (2004); Merrill (1983); Northbourne (1940); Scofield (1986)

1940

Northbourne, Walter Ernest Christopher James Lord Baron, 1896-1982

Look to the Land

London: Dent, 1940. 206p. Includes index. Bibliography.

NAL Call no: 30 N81

Other works by this author: *Religion in the Modern World* (1963); *Looking Back on Progress* (1970).

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) JPG

Cited in: Blum (1993); Coleman (1976); Conford (2001); Harwood (1983); Harwood (1990); Kirschenmann (2004); Korcak (1992); Scofield (1986)

1941

Beeson, Kenneth Crees, 1903-1998

The Mineral Composition of Crops with Particular Reference to the Soils in Which They Were Grown: A Review and Compilation

Washington DC: United States Department of Agriculture, 1941. 164p. “The work represented by this publication was supported by the Bankhead-Jones Research Fund. It was initiated in the Bureau of Chemistry and Soils (now the Bureau of Agricultural Chemistry and Engineering) and was later transferred to the Bureau of Plant Industry.” Bibliography, p. 59-90. “Sources of unpublished material,” p. 91. (Miscellaneous Publication, 369)

NAL Call no: 1 Ag84M no.369

Full-text: Organic Roots, Organic Agriculture Information Access, <http://quod.lib.umich.edu/n/nal/> (to be added June, 2007)

Although he found “confusion and contradictory results” in the fertilizer studies he read, Beeson did arrive at a couple of important conclusions with this review. One, “...empirical investigations have quite definitely shown that Liebig’s ‘law of the minimum’ never represented the mechanism of absorption of nutrients by plants and that the actual facts seem to indicate that when one of the principal nutrients is deficient in the soil solution, the others are taken up by the plant in amounts greater than normal...”; and two, that “...fundamental studies of what changes take place in the soil when the fertilizers are applied and the effect these changes will have on the plant are lacking.” Scientists continue to struggle with researching these same issues. MVG

1941

Graham, Michael

Soil and Sense

London: Faber and Faber, 1941. 274p. Preface by Sir E. John Russell. “This book grew out of articles in *Riding* [magazine].”

NAL Call no: 32 G762

Full-text: Soil and Health Library, Steve Solomon,

<http://www.soilandhealth.org/01aglibrary/01principles.html> (accessed Jan. 1, 2007)

Other works by this author: *A Natural Ecology* (1973).

In Great Britain, the unprecedented cultivation of traditional pastureland and the introduction of “modern” tillage and fertilization practices during World War II provided much needed food. However, Graham and many others saw this as “land-robbery,” and feared for the future of soils and food production there. Graham emphasized the need to

return to integrated grassland and animal production and stated, "...whenever the public purse is used to help farming, that the money should go to good farmers who feed the land as tradition says it should be fed and that none should go to those who merely exploit it."

MVG

Cited in: Coleman (1976); Harwood (1983); Harwood (1990)

1942

Barlow, Kenneth Elliott, 1906-2000

The Discipline of Peace

London: C. Knight, 1971 (oldest edition held by the National Agricultural Library). 147p. Other editions: 2nd edition, 1971, includes a new Introduction by the author and preface by Robert Waller. (Classics of Human Ecology, 2)

NAL Call no: GN320.B3 1971

Other works by this author: *A Home of Their Own* (1946); *The Law and the Loaf* (1978); *Soil, Food and Health in a Changing World*, co-edited with Peter Bunyard (1981); *Recognising Health* (1988).

A medical doctor in Britain, Barlow completed this publication during World War II. It examines the ecological basis of a sustainable and "fulfilling civilization" in the context of post-war reconstruction. "Current concerns about food quality and the dangers of a technological attitude to the environment were anticipated 60 years ago by Barlow and a farsighted group of agriculturalists, doctors and writers. They developed an organic philosophy and established the Soil Association to put principles into practice; Barlow was a founder member." "Obituary: Dr Kenneth Barlow," by Philip Conford, in *The Independent* (London), Mar 1, 2001.

(http://www.findarticles.com/p/articles/mi_qn4158/is_20010301/ai_n14375583) (accessed Feb. 1, 2007) MVG

Cited in: Conford (2001); Harwood (1983); Harwood (1990)

1942

Billington, Francis Howard, -1947

Compost for Garden Plot or Thousand-acre Farm: A Practical Guide to Modern Methods

London: Faber and Faber, 1942. 88p. Includes a glossary and annotated "Brief Bibliography of Non-technical Works," p. 85-88. Other editions: 4th edition of this work, revised by Ben Easey, 1956.

NAL Call no: 57.4 B49

Written in Britain during World War II, during a shortage of chemical fertilizers, this small volume organized a growing body of information about composting - bio-dynamic practices in Germany, Sir Albert Howard's Indore methods and the "Quick Return" compost system - into an instructive manual for gardeners and farmers. MVG

Cited in: Coleman (1976); Harwood (1983); Harwood (1990)

1943

Balfour, Lady Evelyn Barbara, 1899-1990

The Living Soil

London: Faber and Faber, 1943. 248p. Includes index. Glossary. Bibliography. Other editions: *The Living Soil; Evidence of the Importance to Human Health of Soil Vitality, with Special Reference to Post-war Planning* (1944); *The Living Soil and the Haughley Experiment* (1975).

NAL Call no: 56.5 B19

Full-text: Soil and Health Library, Steve Solomon; and Journey to Forever Online Library, <http://www.soilandhealth.org/01aglibrary/01principles.html>; http://journeytoforever.org/farm_library.html (accessed Jan. 1, 2007)

Other works by this author: *Towards a Sustainable Agriculture - The Living Soil* (speech presented at the 1977 International Federation of Organic Agriculture Movements (IFOAM) conference in Switzerland) (full-text: Journey to Forever Library, http://journeytoforever.org/farm_library/balfour_sustag.html) (accessed Apr. 23, 2007).

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." JPG
Cited in: Blum (1993); Coleman (1976); Conford (1988); Conford (2001); Harwood (1983); Harwood (1990); Heckman (2006); Kirschenmann (2004); Korcak (1992); Merrill (1983); Scofield (1986)

1943

Faulkner, Edward Hubert, 1886-1964

Plowman's Folly

New York: Grosset and Dunlap, 1943. 155p.

NAL Call no: 56.7 F27

Full-text: Soil and Health Library, Steve Solomon; and Journey to Forever Online Library, <http://www.soilandhealth.org/01aglibrary/01principles.html>; http://journeytoforever.org/farm_library.html (accessed Jan. 1, 2007)

Other works by this author: *Practical Farming for the South*, with B. F. Bullock (1944); *Uneasy Money* (1946); *A Second Look* (1947); *Ploughing in Prejudices* (1948); *Soil Restoration* (1953).

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. JPG

Cited in: Beeman (1993); Coleman (1976); Conford (2001); Harwood (1983); Harwood (1990); Heckman (2006)

1944

Henderson, George

The Farming Ladder

London; Boston: Faber and Faber, 1974 (oldest edition held by the National Agricultural Library). 246p.

NAL Call no: S455.H423-1978

Full-text: Soil and Health Library, Steve Solomon, <http://www.soilandhealth.org/01aglibrary/01principles.html> (accessed Jan. 1, 2007)

Other works by this author: *Farmer's Progress* (1950) (full-text: Soil and Health Library, Steve Solomon, <http://www.soilandhealth.org/01aglibrary/01principles.html>) (accessed Apr. 23, 2007); *The Farming Manual* (1960).

Henderson's readable books describe farming from the farmer's point of view. "The preservation of fertility is the first duty of all that live by the land... There is only one rule of good husbandry - leave the land far better than you found it." Henderson's books are highly recommended by Eliot Coleman. MVG

Cited in: Coleman (1976)