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Environmental Effects of Conservation Practices on Grazing Lands

A Conservation Effects Assessment Project (CEAP) Bibliography



Environmental Effects of Conservation Practices on Grazing Lands

A Conservation Effects Assessment Project (CEAP) Bibliography

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Abstract

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This bibliography is one in a multi-volume set developed by the Water Quality Information Center at the National Agricultural Library in support of the U.S. Department of Agriculture's Conservation Effects Assessment Project (CEAP). This bibliography is a guide to recent scientific literature covering environmental effects of conservation practices on grazing lands. This information is useful in designing both policies and on-the-land conservation systems that foster practical and environmentally sound grazing practices.

Keywords: grazing, conservation practices, environmental management, pastures, rangelands, pasture plants, soil quality, land use, fish, wildlife, biodiversity, plant ecology

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Preface

This is one in a series of bibliographies developed by the Water Quality Information Center at the National Agricultural Library in support of the U.S. Department of Agriculture's Conservation Effects Assessment Project (CEAP).

The purpose of CEAP is to study the environmental effects of conservation practices implemented through various U.S. Department of Agriculture conservation programs. A national assessment covers cropland, wetlands, wildlife and grazing lands. Conservation practices that will be assessed include conservation buffers; erosion control; wetlands conservation and restoration; establishment of wildlife habitat; and management of nutrients, irrigation, tillage, pests, and grazing on rangeland and pastureland. More information about this and other components of CEAP is available at www.nrcs.usda.gov/technical/nri/ceap/.

The current titles in this series are

- *Environmental Effects of U.S. Department of Agriculture Conservation Programs*
Special Reference Briefs 2004-01
- *Implementing Agricultural Conservation Practices: Barriers and Incentives*
Special Reference Briefs 2004-02
- *Data and Modeling for Environmental Credit Trading*
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- *Agricultural Conservation Practices and Related Issues: Reviews of the State of the Art and Research Needs*
Special Reference Briefs 2004-04
- *Wetlands in Agricultural Landscapes*
Special Reference Briefs 2006-01
- *Environmental Effects of Conservation Practices on Grazing Lands*
Special Reference Briefs 2006-02

Each of the documents, as well as bibliographies on similar topics, is accessible online from the Water Quality Information Center at www.nal.usda.gov/wqic/.

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The center gratefully acknowledges these organizations who granted permission to use their citations and abstracts.

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www.csa.com
- Elsevier/Scopus
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- National Information Services Corporation (NISC)
www.nisc.com
- Thomson Corporation/Thomson Scientific
scientific.thomson.com

The following databases were used to develop this bibliography:

- **AGRICOLA** (National Agricultural Library)
- **Aquatic Science and Fisheries Abstracts** (CSA)
- **BIOSIS Previews** (Thomson Scientific)
- **CAB Abstracts** (CABI Publishing)
- **Fish and Fisheries Worldwide** (NISC)
- **Scopus** (Elsevier)
- **Treesearch** (USDA Forest Service)
- **Water Resources Abstracts** (CSA)
- **Wildlife and Ecology Studies Worldwide** (NISC)
- **Zoological Record** (Thomson Scientific)

In addition, support from the Natural Resources Conservation Service (NRCS) for the development of these bibliographies is greatly appreciated. Special thanks to Leonard Jolley, NRCS, for his valuable assistance with this volume. Helpful guidance was also provided by Jim Dobrowolski, Lisa Duriancik, Bruce Menzel, Matt Sanderson, and Mark Weltz.

About This Bibliography

This bibliography is a guide to recent scientific literature covering environmental effects of conservation practices on grazing lands. This information is useful in designing both policies and on-the-land conservation systems that foster practical and environmentally sound grazing practices.

Most citations are categorized as relating to either pastureland or rangeland. However, due to the limited information available and the difficulty of distinguishing documents covering pastureland from those covering rangeland, assignment to either group is not precise. A third category, "Other Relevant Studies," contains citations that cover both pastureland and rangeland issues or other related topics.

The Society for Range Management¹ defines pastureland as "grazing lands, planted primarily to introduced or domesticated native forage species, which receive periodic renovation and/or cultural treatments such as tillage, fertilization, mowing, weed control and irrigation." Rangeland is "land on which the indigenous vegetation (climax or natural potential) is predominantly grasses, grass-like plants, forbs, or shrubs and is managed as a natural ecosystem. If plants are introduced, they are managed similarly. Rangeland include natural grasslands, savannas, shrublands, many deserts, tundras, alpine communities, marshes and meadows."

Citations are further categorized by effects on soil and water, fish and wildlife, and plant ecology and biodiversity. This last grouping also includes a few citations covering other environmental effects, such as carbon sequestration, and documents addressing multiple effects.

There are 1,303 citations with abstracts (when available) in this bibliography. Citations were found through literature searches of the AGRICOLA database, produced by the National Agricultural Library, and several commercial bibliographic databases. In addition, Water Quality Information Center staff created citations for documents that were located by other means. Documents cited were published from 1980 through early 2006. URLs are provided for online documents that are freely available. The inclusion or omission of a particular citation does not imply endorsement or disapproval.

Within sections, citations are arranged alphabetically by title. To locate information on a specific topic, for example, "fencing," use the subject index beginning on page 341. To ensure that you see all the relevant citations for a particular topic, be sure to also look up related terms in the subject index, such as "exclosure experiments, fences, exclosure," etc., from the example above. An author index is also available beginning on page 375.

To obtain a specific document, please contact your local library. Information on how to obtain documents from the National Agricultural Library can be found at www.nal.usda.gov/services/request.shtml.

¹ Bedell, T.E. (Chairman). 1998. *Glossary of Terms Used in Range Management: A Definition of Terms Commonly Used in Range Management*. 4th Edition. Glossary Update Task Group, Society for Range Management. Denver, Colorado: The Society.

