ABOUT NRCS: HELPING PEOPLE HELP THE LAND

The Natural Resources Conservation Service (NRCS) is a USDA agency that works with landowners through conservation planning and assistance to benefit the soil, water, air, plants, and animals for productive lands and healthy ecosystems. Working in nearly every county in the Nation, NRCS employees understand local resource concerns and challenges to assist with conservation solutions that last. Land stewardship by private landowners is critical to the health of our Nation's environment. Science and technology are critical to good conservation. NRCS experts from many disciplines come together to help landowners conserve natural resources in efficient, smart and sustainable ways. NRCS succeeds through partnerships, working closely with individual farmers and ranchers, landowners, local conservation districts, government agencies, Tribes, Earth Team volunteers and many other people and groups that care about the quality of America's natural resources. More information about the NRCS is at www.nrcs.usda.gov.

1 Iture

Natural Resources Conservation Service

ABOUT ARS: LEADING AMERICA TOWARDS A BETTER FUTURE THROUGH AGRICULTURAL RESEARCH AND INFORMATION

The Agricultural Research Service (ARS) is the U.S. Department of Agriculture's chief scientific research agency. ARS conducts research to develop and transfer solutions to agricultural problems of high national priority and provide information access and dissemination to:

- Ensure high-quality, safe food, and other agricultural products
- Assess the nutritional needs of Americans
- Sustain a competitive agricultural economy
- Enhance the natural resource base and the environment, and
- Provide economic opportunities for rural citizens, communities, and society as a whole.

More information about the ARS is at www.ars.usda.aov.



ABOUT AFGC: LEADERSHIP FOR THE FORAGE AND GRASSLAND INDUSTRY

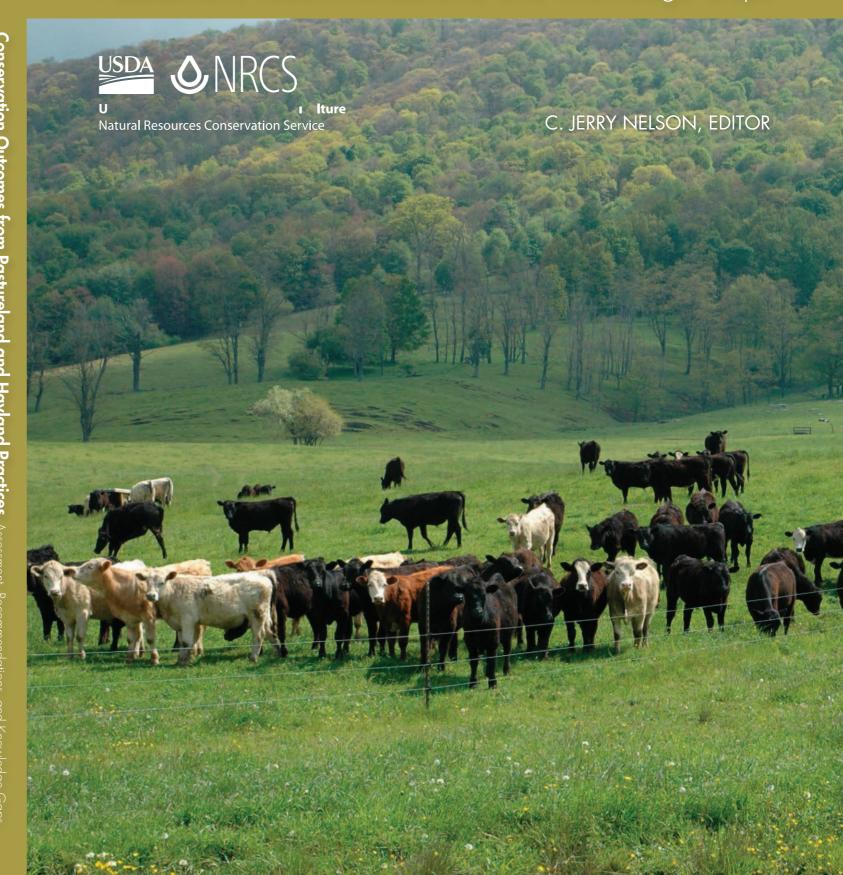
The American Forage and Grassland Council (AFGC) is an international organization made up of 22 affiliate councils in the United States and Canada with a total individual membership of about 2,500. Its primary objective is to advance the use of forage as a prime resource for feed and for natural resource conservation. Its members represent the academic community, producers, private industry, institutes and foundations. Together, they unite in a common cause to develop the forage industry and promote the profitable production and sustainable utilization of quality forage and grasslands. More information about AFGC is at www.afgc.org.





Conservation Outcomes from Pastureland and Hayland Practices

Assessment, Recommendations, and Knowledge Gaps



On the cover: Beef stockers grazing a mixed species pasture in a scenic area of Vermont. Photo is courtesy of NRCS.

Nelson, C.J. (ed.) 2012. Conservation Outcomes from Pastureland and Hayland Practices: Assessment, Recommendations, and Knowledge Gaps. Allen Press, Lawrence, Kansas.

Printed by Allen Press, Inc. 810 E. 10th Street Lawrence, KS 66044

Funding was provided by the USDA Natural Resources Conservation Service, with cooperation from the USDA Agricultural Research Service, through a partnership with the American Forage and Grassland Council in support of the Conservation Effects Assessment Project.





Natural Resources Conservation Service





The expressed goal of this synthesis is to inform deliberations of managers and policymakers regarding the current effectiveness and potential improvements to pastureland and hayland conservation programs. As such, this synthesis represents a scientific assessment that was reached independently of the current position or policy of the US Department of Agriculture or the United States government.

USDA is an equal opportunity provider and employer.

ISBN 978-0-9849499-2-2

Print Date: December 2012

CONTRIBUTORS AND EXTERNAL REVIEWERS

Academic Coordinator

C. Jerry Nelson

NRCS Coordinator Leonard W. Jolley

USDA-ARS Liaison Matt A. Sanderson

PASTURELAND AND HAYLAND IN THE USA: LAND RESOURCES, CONSERVATION PRACTICES AND ECOSYSTEM SERVICES

Team Leader—Matt A. Sanderson Members - Leonard W. Jolley and James P. Dobrowolski

FORAGE AND BIOMASS PLANTING

Team Leader—David J. Barker

Members - Jennifer W. MacAdam, Twain J. Butler, R. Mark Sulc

PRESCRIBED GRAZING ON PASTURELANDS

NRCS Advisor to Team—Chuck Stanley

EXTERNAL REVIEWERS

Reggie Blackwell Team Leader - Lynn E. Sollenberger Members - Carmen T. Agouridis, Eric S. Vanzant, Sid Brantly Alan J. Franzluebbers, Lloyd B. Owens Marty Chaney NRCS Advisor to Team - Kevin Ogles Wayne Coblentz Gene Fults **FORAGE HARVEST MANAGEMENT Team Leader**—C. Jerry Nelson Tom Griggs Members - Daren D. Redfearn, Jerry H. Cherney NRCS Advisor to Team—Gene Fults

Rachel Gilker **Bob Hendershot** Walter Jackson Rob Kallenbach **NUTRIENT MANAGEMENT ON PASTURES** Mark Kennedy AND HAYLANDS Alan Knapp **Team Leader**—C. Wesley Wood Eileen McLellan Ron Morrow

Members - Philip A. Moore, Brad C. Joern, Randall D. Jackson, Miguel L. Cabrera NRCS Advisor to Team—Bob Hendershot

Kevin Ogles Matt Sanderson Ken Spaeth Roger Staff Chuck Stanley Chris Teutsch Mimi Williams

SYNTHESIS AND PERSPECTIVES

Team Leader—C. Jerry Nelson Members - David J. Barker, Lynn E. Sollenberger, C. Wesley Wood, Matt A. Sanderson NRCS Advisor to Team—Ken Spaeth