Managing Grasslands, Shrublands and Young Forests for Wildlife

A Guide for the Northeast

The Northeast Upland Habitat Technical Committee 2006

Managing Grasslands, Shrublands, and Young Forest Habitats for Wildlife A Guide for the Northeast

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Preface

On the weekend of May 4 - 5, 2002, over 200 ecologists, forest managers, and private landowners from across the Northeast descended onto the campus of the University of New Hampshire to attend a conference that focused on the importance, status, and management of shrublands and young forest habitats in the region. My participation in this conference both as a presenter and audience member led to the realization that to effectively remediate the negative impacts of the decline of these habitats on wildlife more needed to be done to educate land managers and private landowners about their importance and how to manage them. Relatively little has been done in this regard. It is my hope that this guide will help to fill this void to some extent. Given that more than 73% of forestland in the region is privately owned, it is imperative that landowners and the professionals that provide resource management guidance help to address the decline of these habitats. The active participation of landowners and land managers in addressing this issue is the only way to ensure enough of these habitats will be available for the multitude of species dependent on them well into the future.

— James D. Oehler (June 30, 2004)

Acknowledgements

This guide is a publication of the Northeast Upland Habitat Technical Committee, sanctioned by the Northeast Association of Fish and Wildlife Directors. The Northeast Upland Habitat Technical Committee is comprised primarily of state wildlife agency biologists who specialize in upland habitat management. The committee was formed in 1998 by the Northeast (State) Wildlife Administrators Association to address the decline of grassland, shrubland, and young forest habitats in the region, and to develop recommendations and guidance to the administrators on the 2002 Farm Bill. Members of the committee as of June 2004 are:

Paul Rothbart (Chairman), Connecticut Department of Environmental Protection Charles Bridges, New Hampshire Fish & Game Department Andrew Burnett, New Jersey Division of Fish, Game & Wildlife Steve Capel, Virginia Department of Game & Inland Fisheries Darrel F. Covell, University of New Hampshire Cooperative Extension Scott Darling, Vermont Fish & Wildlife Department Richard Dressler, Maine Department of Inland Fisheries & Wildlife Gary M. Foster, West Virginia Division of Natural Resources Jean Gawalt, New York Department of Conservation Ron Helinski, Wildlife Management Institute Scott Klinger, Pennsylvania Game Commission John W. Lanier, New Hampshire Fish & Game Department Bob Long, Maryland Department of Natural Resources Jonathan McKnight, Maryland Department of Natural Resources Greg Moore, Delaware Division of Fish and Wildlife John Moulis, Maryland Department of Natural Resources James D. Oehler, New Hampshire Fish & Game Department Paul O'Neil, U.S. Fish & Wildlife Service Tim Post, New York Division of Environmental Conservation John J. Scanlon, Massachusetts Division of Fish & Wildlife Brian C. Tefft, Rhode Island Division of Fish & Wildlife Judy M. Wilson, Connecticut Department of Environmental Protection Bill Whitman, Delaware Division of Fish & Wildlife Scot Williamson, Wildlife Management Institute

Committee members acted as authors, reviewers, and/or supporters of the guide. I thank all members, past and present, for their efforts in helping to make this guide a reality. I would also like to thank all of the other authors that contributed to this guide who are not committee members. They graciously offered their expertise to help make this guide more complete. Thanks also go out to the talented individuals in the

Information and Education Section of the Massachusetts Division of Fisheries & Wildlife for providing their expertise in completing the formatting and layout of the guide. Robin Blum of the Connecticut Department of Environmental Protection offered her time and skill for copy editing.

The quality of this publication was substantially enhanced by the time and expertise provided by a talented pool of peer reviewers. In addition to committee members, peer reviewers included Robert Askins, Mark Banker, Joel Carlson, Alan Carter, Steve Clubine, Tim Cooper, Richard DeGraaf, Joseph Dowhan, Catherine Hibbard, Andrea Jones, Ron Joseph, Paul Karczmarczyk, Gary Kemp, David Kittredge, Hal Laskowski, John Litvaitis, Chris Mattrick, Chris Miller, Laura Mitchell, William Murphy, Holly Obrecht, William Patterson, John Randall, Charles Rewa, Ellen Snyder, Janath Taylor, and Mariko Yamasaki. Thanks to all of them for their considerable help.

Foreword

The wave of forest clearing that swept across the Northeast and Midwest beginning about 1750 is well known. Land that was cleared for agriculture was soon abandoned with the opening of the Erie Canal, the California Gold Rush, the Civil War, and the rise of industrial cities. Such clearing put a cultural premium on forests; they were rare compared to the open countryside, even though it was already reverting to forest with the decline of agriculture in the first half of the 19th century. Less well known is the extent and variety of early successional habitats that existed in much of the Northeast upon European settlement. Disturbances due to fire, hurricanes, floods, Native American burning and agriculture, and beaver, as well as native prairies, barrens, and oak openings imparted an open character to much of southern New England and the Mid-Atlantic region, and created patches of early successional and young forest habitats elsewhere. Such areas were tilled or grazed from earliest settlement; the loss of natural open habitats, once considerable, actually began centuries ago, and is now the most important wildlife habitat issue in the Northeast.

Today, once open habitats have either reverted to forest or are developed, fire is controlled, and periodic flooding prevented to the fullest extent possible. Except for wind, creation of early successional habitats by natural disturbance has been greatly curtailed for the past century or more, and wildlife populations dependent upon them have been quietly declining as well. Many of these species are habitat specialists, using only specific-stages of old fields, or brushlands, or regenerating forests. Now in critically short supply such habitats need to be maintained by periodic treatment or created in places where they did not exist historically.

This volume is a much-needed presentation of the specific management practices that are necessary to create or maintain early successional and young forest habitats on the northeastern landscape. In some cases they replicate the processes that historically created them, fire, or past agriculture practices such as mowing or grazing. Newer methods such as use of herbicides and new problems such as invasive exotic plants further challenge efforts to provide habitat for disturbance-dependent species.

With most of the landscape in forest cover, great opportunities exist to provide young forest habitat through timber management. Even-aged silviculture is well suited both ecologically and economically to most of the major forest types of the Northeast. Convincing the public and more landowners to use even-aged practices or larger group/patch selection practices, however, will not be easy. Most suburban residents and even some biologists view forestry activities not as periodic management of renewable resources, but rather as precursors to development. Today's wildlife agencies face the challenge of not only creating and maintaining diverse wildlife habitats in forest landscapes across myriad landownership classes in the Northeast, but of also educating the public in the overall values of such management for a wide variety of species. People need to understand that early-successional forest habitats are ephemeral by nature, and not permanent features on the landscape. Active forest management can create the vegetative conditions many early-successional species as well as humans use, and can influence the proportion and distribution of early-successional habitats over time. When practiced across essentially forested landscapes, a broad array of wildlife habitat values can be enhanced as well as conserved without sacrificing mature forest values. Taken in total, this guide gives managers and interested publics some excellent insights into the nature of this management challenge and the

numerous opportunities to positively influence the presence and maintenance of early-successional habitats in the Northeast now and in the future.

- Richard M. DeGraaf and Mariko Yamasaki

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