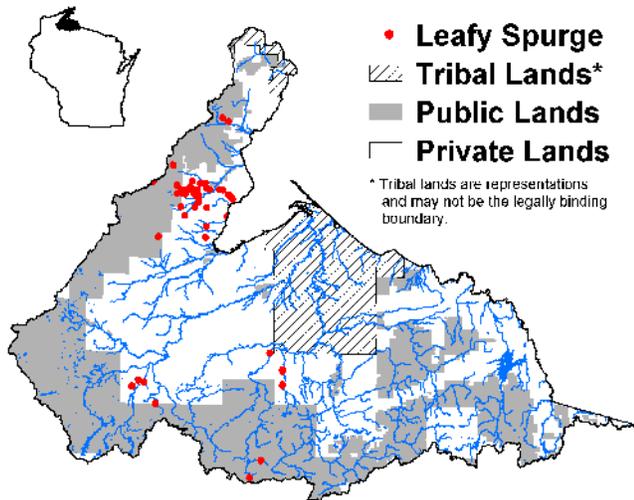




GLIFWC Multi-Agency Land and Water Education Grant: Invasive Non-native Plant Education Outreach

Focus Watershed: Bad River - Chequamegon Bay



INTRODUCTION

The Great Lakes Indian Fish and Wildlife Commission (GLIFWC) is an organization exercising delegated authority from 11 federally recognized tribes in Minnesota, Wisconsin, and Michigan. These tribes retain hunting, fishing, and gathering rights in the territories ceded to the United States through various treaties.

Healthy native plant communities provide the foundation for the exercise of treaty rights by providing food and habitat for culturally important game species, as well as subsistence foods and medicines for tribal members. Because they form the base of the food chain, impacts to native plant communities are felt throughout the ecological community.

There are several hundred non-native plant species present throughout the Chippewa ceded territories. However, they vary in their impact to natural ecosystems and feasibility of control. Invasive non-native plants threaten the health of native ecosystems and the subsistence foods harvested and utilized by tribal members by out-competing native species and altering the physical characteristics of soils and waters.

PROGRAM OVERVIEW

GLIFWC evaluated over 300 non-native plants species to determine which ones pose the greatest threats to local ecosystems and have the greatest likelihood for successful control. Leafy spurge, Eurasian honeysuckles, and buckthorn

ranked among the highest for non-native plants that merit additional management activities.

From previous experience with purple loosestrife, GLIFWC staff have determined that education is the most effective tool for managing invasive plants because human activities are responsible for the majority of new introductions and range expansions of invasive non-native plants.

OBJECTIVES

- (Prioritize species for management efforts.
- (Identify species with educational needs.
- (Evaluate existing educational efforts.
- (Identify gaps in educational outreach.
- (Select appropriate media formats.
- (Develop new educational materials.
- (Publicize new educational materials.
- (Coordinate educational outreach efforts.

ACCOMPLISHMENTS

- U Identified and prioritized 300+ non-native plant species for management.
- U Acquired and evaluated existing educational materials for leafy spurge.
- U Developed and published 50,000 *Target: Leafy Spurge* brochures.
- U Revised and published 50,000 *Plants Out Of Place* brochures.
- U Added and revised several species accounts to GLIFWC's web site.
- U Published article on leafy spurge and other exotics in GLIFWC's quarterly newsletter, *Mazina'igan*.
- U Presented accomplishments to tribal representatives at Voigt Intertribal Task Force meeting.
- U Presented accomplishments at 2 professional conferences.
- U Coordinated activities with cooperating agencies.

SETTING PRIORITIES

Within the Chippewa ceded territories, there are several hundred non-native plants that vary in their impact to natural ecosystems and feasibility of control. Because resources are limited, management efforts must be prioritized. GLIFWC developed a database that can be used to prioritize species for management, target educational outreach, and identify threats to treaty resources.

The conceptual approach sought to prioritize those species that posed the greatest threats to local ecosystems yet had the greatest likelihood for successful control. Initially, a pool of potentially invasive non-native plants was compiled from lists developed by Region 9 of the US Forest Service, two of the states encompassing the ceded territories, and field data collected in 2001. Each species was then prioritized based on a consistent set of ecological criteria and methods. Ecological criteria included cold hardiness, dispersal mechanisms, rate of spread, relative abundance, and available control options. A technical report describing the process in detail can be found on GLIFWC's web site (www.glifwc.org/epicenter) Among the top ten species were:

- ! Leafy spurge
- ! Common buckthorn
- ! Glossy buckthorn
- ! Eurasian honeysuckles
- ! Giant knotweed
- ! Japanese barberry

EXISTING RESOURCES

Existing educational materials were acquired and reviewed for the highest ranking species. TEAM LEAFY SPURGE (www.team.ars.usda.gov) provided a wealth of technical and educational materials on leafy spurge in the Great Plains states. These resources were acquired for educational outreach purposes and reviewed to help develop a new educational brochure tailored for the upper Great Lakes states.

- ! *Purging Spurge: Corraling an Ecological Bandit* - A 30 minute video describing the origins and ecological impacts of leafy spurge in North America, historical control efforts, and general information on integrated pest management techniques.
- ! *Leafy Spurge Biological Control Information and Photo Resource Gallery* - A multimedia CD ROM containing a wealth of educational outreach resources including digital photos and a PowerPoint presentation.
- ! *Purge Spurge: Leafy Spurge Database* - A multimedia CD ROM containing technical reports on all aspects of leafy spurge ecology, impacts and control.
- ! *Biological Control of Leafy Spurge* - A comprehensive

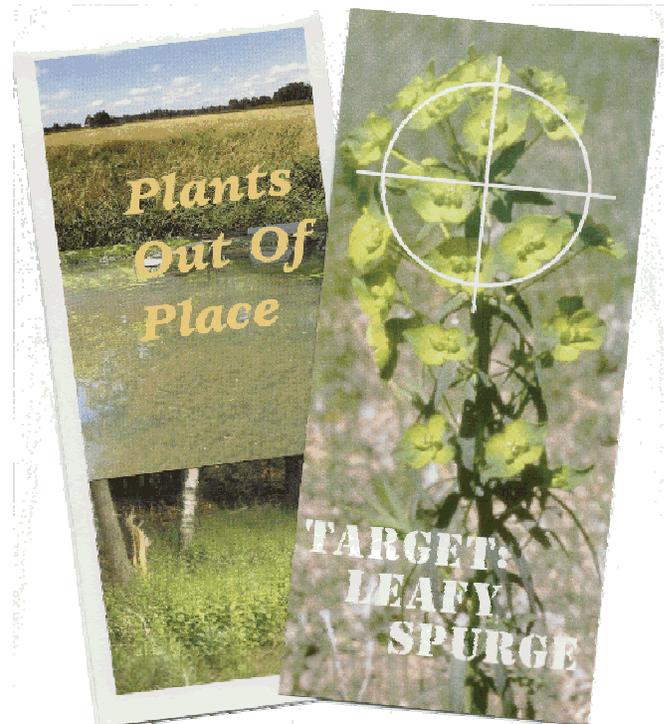
manual on biological control options.

- ! *Multi-species Grazing and Leafy Spurge* - A comprehensive manual on grazing control options.
- ! *Herbicide Control of Leafy Spurge* - A comprehensive manual on chemical control options.

NEW RESOURCES

- ! *Target: Leafy Spurge* - NRCS EQIP funds were used to leverage additional contributions, as well as editorial assistance from several county, state, federal, and non-government organizations. *Target: Leafy Spurge* provides general information on the ecological and economic impacts of leafy spurge in the upper Great Lakes as well as detailed information on Integrated Pest Management and regional contacts for technical assistance.
- ! *Plants Out Of Place* - Initially published in 2001 with the help of NRCS EQIP funding, this popular brochure was updated and 50,000 copies were reprinted. *Plants Out Of Place* provides information on the ecological, social, and economic impacts of invasive non-native plants in general and how they spread across the landscape. The reverse side highlights several invasive plants of concern (including purple loosestrife, leafy spurge, Eurasian honeysuckles, and buckthorn) in the upper Great Lakes and provides suggestions for slowing their spread and regional contacts for technical assistance.

COORDINATION



Northwoods Weed Initiative

An ad hoc forum called the “Northwoods Weed Initiative” (NWI) has met regularly since the fall of 1998 to share information, coordinate activities, and discuss future collaborations. Participants include:

- ! Chequamegon-Nicolet National Forest
- ! GLIFWC
- ! Inland Sea Society
- ! Lac Courte Oreilles Band
- ! Natural Resources Conservation Service
- ! Sigurd Olson Environmental Institute
- ! The Nature Conservancy
- ! UW - Extension

A recent accomplishment of this effort was the development of a draft management plan for leafy spurge in northwestern Wisconsin. The plan emphasizes education as the primary means to contain and prevent the further spread of this invasive plant. The group has compiled a mailing list of locally affected landowners to target for education outreach efforts, met with town officials, and worked with the media and local schools to raise awareness of this important issue.

Professional Conferences

GLIFWC staff were invited to several professional conferences over the course of this grant to share knowledge and expertise with other conservation agency staff:

- ! Michigan Society of American Foresters - Houghton, Michigan
- ! Natural Areas Conference: Invasive Plants Symposium - Madison, Wisconsin.

WORKING WITH THE MEDIA

Several articles have been published to raise awareness of leafy spurge in local newspapers and newsletters. Media coverage has included general information on the impacts and control options available for leafy spurge with an emphasis on local management activities, distribution maps, and local points of contact.

PROGRAM IMPACTS

The implementation of GLIFWC’s multi-agency land and water education grant has far exceeded initial expectations. With the help of NRCS EQIP funds, GLIFWC was able to respond effectively when local landowners expressed concern about local leafy spurge infestations. The information compiled and educational materials developed over the course of this grant proved to be valuable tools for local citizens, policy makers and cooperating agencies as they planned and initiated a course of action to address this emerging threat.



The success and recognition of GLIFWC’s educational program is also indicated by:

- ! Requests for technical assistance.
- ! Requests for educational materials.
- ! Referrals from cooperating agencies.
- ! Invitations to share accomplishments at professional conferences.

REMAINING NEEDS

Commercially available invasive plants remain a serious threat to both terrestrial and aquatic ecosystems in the upper Great Lakes. GLIFWC’s invasive plant database will be updated in the near future to identify those species that are still available commercially to help identify and target future educational outreach efforts.

Prepared by Miles Falck, Great Lakes Indian Fish and Wildlife Commission, October 22, 2003.