

Reprinted with permission from: 2001 Spurgefest II Symposium Proceedings, Medora, ND. June 19-21, 2001. p. 12.

Published by: North Dakota State University, Fargo, ND.

Management approach for leafy spurge control

ANDREW CANHAM¹, DENNIS MANN², JERRY MOLLER³, and LARRY NELSON⁴

¹Andrew Canham, School and Public Lands, 500 East Capitol Avenue, Pierre, S.D. 57501. ²Dennis Mann, Game Fish and Parks, 3305 West South Street, Rapid City, S.D. 57792. ³Jerry Moller, Bureau of Land Management, 310 Roundup Street, Belle Fourche, S.D. 57717. ⁴Larry Nelson, Box 3, Redig, S.D. 57776.

Abstract:

Implementing various control methods by land managers for leafy spurge has had a wide array of success and failures. Part of the problem is not having current knowledge of field conditions and accurate history of field operations. Because of the increase in noxious weeds and vast acreages to manage, the most efficient methods available must be used to address weed problems in our day-to-day operations as well as their long range planning. Some of the most useful components of a weed management plan will identify areas of concern, the degree of infestation and a history of control methods used.

Using GIS & GPS technology, a complete geographical inventory of invasive species, land ownership, topography, and land use has been developed. By utilizing trained, experienced personnel, Trimble GPS receivers, and USGS digital quads, base accuracy of 2-3 meters was maintained for this project. This project has provided land managers and county weed districts with an example of the cost effectiveness of conducting inventory and survey of invasive species.

A database of field-collected data will enable matching of site-specific needs with predetermined methods. A coordinated effort now exists with private and governmental entities in identifying and managing invasive vegetation on the Moreau River watershed in northwestern South Dakota.

The results of this project have demonstrated the effectiveness of inventory methods and database design in creating an overall Integrated Management Plan dealing with invasive species.