UTILITY OF HERBICIDE AND APPLICATION TECHNOLOGIES IN WILDLIFE HABITAT IMPROVEMENT PROGRAMS. Daniel D. Beran, Market Development Specialist, BASF, Des Moines, IA 50310, Byron B. Sleugh, Product Technology Specialist, Dow AgroSciences, Des Moines, IA 50266, Jack J. LeClair, Range and Pasture Specialist, DuPont, Wilmington, DE 19898, and Robert A. Masters, Product Development Leader, Dow AgroSciences, Indianapolis, IN 46268.

Invasive plants degrade wildlife habitat quality. Managing invasive plants requires use of integrated programs that favor desirable species and wanted changes in plant community structure. Reasons for the arrival, establishment, and spread of invasive plants should be understood before effective wildlife habitat improvement strategies are developed. Removing invasive plant species without attention to plant community dynamics often only opens niches for other undesirable species to occupy. The integrated weed management paradigm provides a context for managing invasive plants in a sustainable manner that leads to improved wildlife habitat quality. Prevention, detection, and control are key components of integrated management strategies. The suitability of weed control tools (biological, chemical, mechanical, and cultural) will vary according to the invasive plant and invaded site characteristics. The merits of each control measure when applied in appropriate sequences and combinations should be considered when developing habitat restoration programs. Herbicides can serve as catalysts to expedite vegetation change, which leads to improved wildlife habitat quality. The variety of herbicides currently available, with different modes of action and selectivity, and readily available precise and accurate application technologies provide restoration specialists with many options to selectively alter plant composition, manage plant community succession, and accelerate wildlife habitat quality improvement.

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