

INVASIVE PLANT MANAGEMENT: BENEFITS OF A MULTIDISCIPLINARY RISK ANALYSIS APPROACH. Mark A. Tucker, Doug Doohan, Neal Hooker, and Jeff LeJeune, Associate Professor, Agricultural Communication, Purdue University, West Lafayette, IN 47907, Associate Professor, Department of Horticulture and Crop Science, Ohio State University, Wooster, OH 44691, Associate Professor, Department of Agricultural, Environmental, and Development Economics, Ohio State University, Columbus, OH 43210, and Assistant Professor, Food Animal Health Research Program, Ohio State University, Wooster, OH 44691.

Producer adoption of technological innovations such as improved seed stock and labor-saving practices is one of the major reasons for the ascendancy of U.S. agriculture over the last century. Promoted and diffused by mass media and agricultural experts, these innovations elevated agricultural productivity to record levels and transformed the food and farm sector. The theoretical diffusion model used to guide agricultural extension and communication efforts during this period continues to be widely used in the social sciences and throughout agriculture. Despite its successes, the model is not well-suited to encouraging producer adoption of practices required to contain or eliminate the spread of invasive plant species. Encouraging producers to adopt management practices to curb the spread of invasives has proven difficult because such practices are often not perceived by producers as necessary and most do not offer short-term economic advantages. These circumstances serve as barriers to the development of effective education and communication campaigns to encourage effective management of invasive plants. This poster outlines a risk-based multidisciplinary approach to adapt the traditional diffusion model to the unique challenges of helping manage invasive plants that threaten agricultural productivity and profitability.