

Proactive Management of Imperiled Species to Avoid Federal Listing: Monarch Butterfly Habitat Enhancement on Mined Lands¹

K. L. Dodson²

Abstract: The eastern population of the monarch butterfly has declined by 80% within the past 20 years leading several non-profit organizations to petition the USFWS to list the species for protection under the Endangered Species Act. Utilizing a proactive pre-listing approach to conservation of the species, a Mid-America Monarch Conservation Strategy is being developed that involves multiple stakeholders and sectors (e.g. utility corridors, road rights-of-ways, agriculture, private lands, reclaimed mined lands). Efforts are focused on voluntary habitat restoration/enhancement and promotion of land management best practices to avoid federal listing and subsequent regulatory requirements. Federal listing of a species with such a broad range across coal mining states could have a significant impact on permitting and reclamation requirements and a potential economic impact for permittees. The Illinois Department of Natural Resources/Land Reclamation Division participated in the regional strategy by drafting a chapter section focused on non-rights-of-way energy infrastructure. Information was gathered through discussions with OSMRE and by polling states with abandoned mined lands and regulatory programs located in the eastern core monarch population range. The chapter section presents current habitat enhancement initiatives on mined lands, outlines strategies for improvement of current efforts, explores the limitations unique to mined land reclamation, and details the potential scale restoration efforts on mined lands could contribute to the pre-listing approach to monarch butterfly conservation. Based on information obtained from nine responding states, at minimum half a million acres across the Midwest are bonded with post-mining land uses conducive to monarch butterfly and native pollinator habitat restoration. Educational outreach to permittees, consideration of pollinator seed mixes that adequately control erosion, development of BMPs specific to mined lands, and fostering partnerships that provide incentives for the voluntary adoption of higher priced seed mixes are necessary to move a mined lands monarch butterfly conservation initiative forward.

Additional Key Words: habitat restoration incentives, Mid-America Monarch Conservation Strategy, pollinator habitat, pre-listing approach to conservation.

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 2. Kristi L. Dodson, Natural Resources Specialist and Certified Wildlife Biologist, Illinois Department of Natural Resources/Land Reclamation Division, Springfield IL, 62702.