

## BUTTERFLY HABITAT RESTORATION ON RECLAIMED MINED LAND OF *THE WILDS* IN SOUTHEASTERN OHIO

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*Abstract:* Butterflies are critical components of many ecosystems and have suffered from habitat loss. *The Wilds*, located on almost 10,000 acres of reclaimed surface mined land, has lost much of its original forest and natural vegetation, which has had negative impacts on native butterfly populations. Since 2003, *The Wilds* has been working on restoring large areas of land in order to enhance habitat for butterfly populations. Restoration and management techniques have included the large-scale replacement of non-native grassland areas with assemblages of native prairie species, the establishment of various nectar and host plants along wetlands, forests and meadows, the use of mechanical and chemical means for management and control of invasive plants, and the use of prescribed fire. In order to track long-term changes in butterfly populations, weekly transects have been run since 2004 (April – October) following the methodology used by The Ohio Lepidoptera Society, Long-term Monitoring Program (Pollard and Yates, 1993). In 2004, an average of 653 butterflies were recorded over a 23 week period. In 2005, there was a 21% increase. By 2007, an average of 1926 butterflies were recorded, a 26% increase since 2006 and an overall 195% increase since the initiation of the project in 2004. Species richness has also increased 42% over the 4 years of monitoring. These results are attributed to the successful establishment of nectar and host plant species in an environment that was previously lacking these needed resources.