

On-farm biodiversity: Digital tools and collaboration drive conservation in the Agricultural Landscape

Tim Fredricks, Pamela Bachman, Sabrina Liu, Aimee Hood





Agro-ecosystems: complex System to Manage



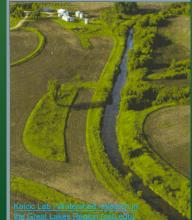


















John Deere See & Spray **Precision Application**



Precision Sowing















Alternative Management Zones Tool

(in development)

RCPP - Precision Farm Data & Strategic Buffer Project in MO







Putting Habitat in the Landscape

Partnerships - Examples





The Bee and Butterfly Habitat Fund: Provide pollinator seed and habitat establishment support free or at reduced cost to landowners with >2 acres of need and located in the Upper Midwest. So far, 457 projects, 4400 acres of habitat established, 17M Milkweed seeds planted:



National Fish and Wildlife Foundation: Dedicated to sustaining, restoring and enhancing the nation's fish, wildlife, plants and habitats for current and future generations 123 projects to date; 353,000 acres restored or enhanced: 3,000 lbs. of milkweed seeds collected; 1.1M native milkweed seedlings propagated; 1,600 workshops or meetings hosted.



Farmers for Monarchs: Industry-wide collaboration to ensure consistent messaging and provide resources to the agricultural community regarding monarch recovery efforts & habitat creation. Farmers For Monarchs website, social media and communication strategy launched targeted for farmers, ranchers and landowners.



Pheasant Forever + Quail Forever: Establishment of habitat at over 70 Bayer research and manufacturing sites; >800 acres of upland habitat establishment by youth through education programs.



Integrated Vegetative Management (IVM) Partners: Scientific studies of best vegetation management practices to improve pollinator and wildlife habitat on rights-of-way and natural areas. Over 30 case study sites on rights-of-way, golf courses, farms and rangeland in partnerships with landowners used for educational outreach and training.



Putting Habitat in the Landscape

Partnerships - Examples





Monarch Watch: Production of milkweed plugs provided to school/education project and restoration projects through an application process. >600K milkweed plugs produced and distributed.



Project Apis M Seeds for Bees: Planting of cover crops to increase the density, diversity, and duration of bee forage in California orchards, farms, and vineyards, while improving soil health. >1400 participants, 63,000 acres established



Habitally: Development of app to give farmers, ranchers, landowners and private citizens an easyto-use tool to record data about their habitat conservation efforts. Documented 738 additional acres of pollinator habitat including 27,330 milkweed stems.



Feed a Bee: Wildflower seeds distributed, habitat establishment, and consumer awareness campaign. >3.5 billion pollinator seeds distributed. Habitat projects planted in all 50 states.