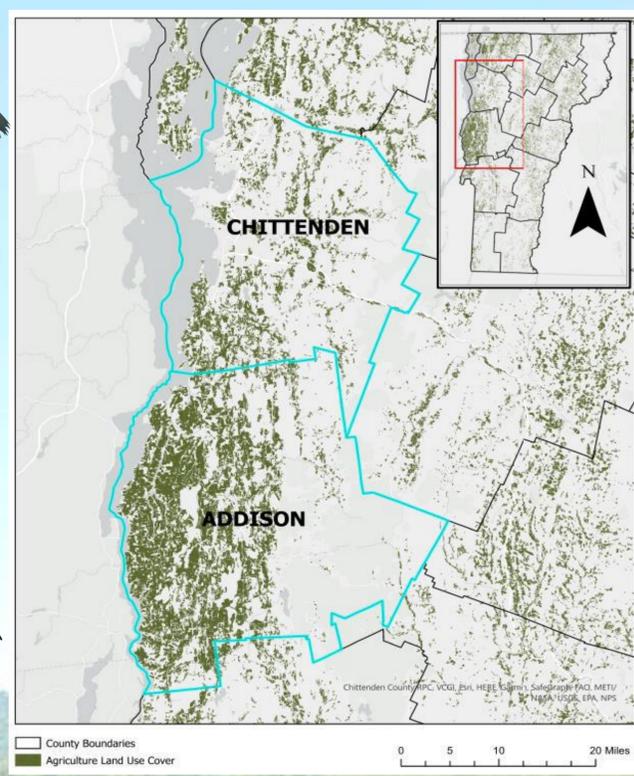


Developing a data-driven tool to advance bird and pollinator habitat evaluation and conservation in Vermont's working landscape

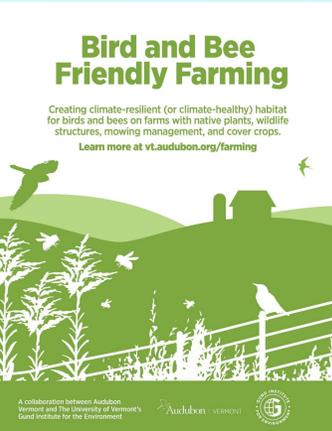
Cassandra Wolfanger and Margaret Fowle, Audubon Vermont



Issue: Birds and pollinators are essential to agricultural crop production, pest control, and general ecosystem biodiversity, but have declined sharply range-wide in recent decades, including in Vermont and the surrounding region.

Solution: Audubon Vermont's Bird and Bee Friendly Farming Program to promote and implement practices on farms that provide essential foraging, breeding, and shelter resources that benefit birds and pollinators.

Proposed improvement: An assessment tool that standardizes data collection, increases efficiency and consistency, and evaluates post-implementation success. We'll use a 3-year Conservation Innovation Grant (CIG) from the Natural Resource Conservation Service to support the design, development, and piloting of a tool on Vermont farms.



What is the tool?

A science-based, app-driven software platform to enhance data collection and conservation practice recommendations to improve bird and pollinator habitat on farms.

Design Team & Partners

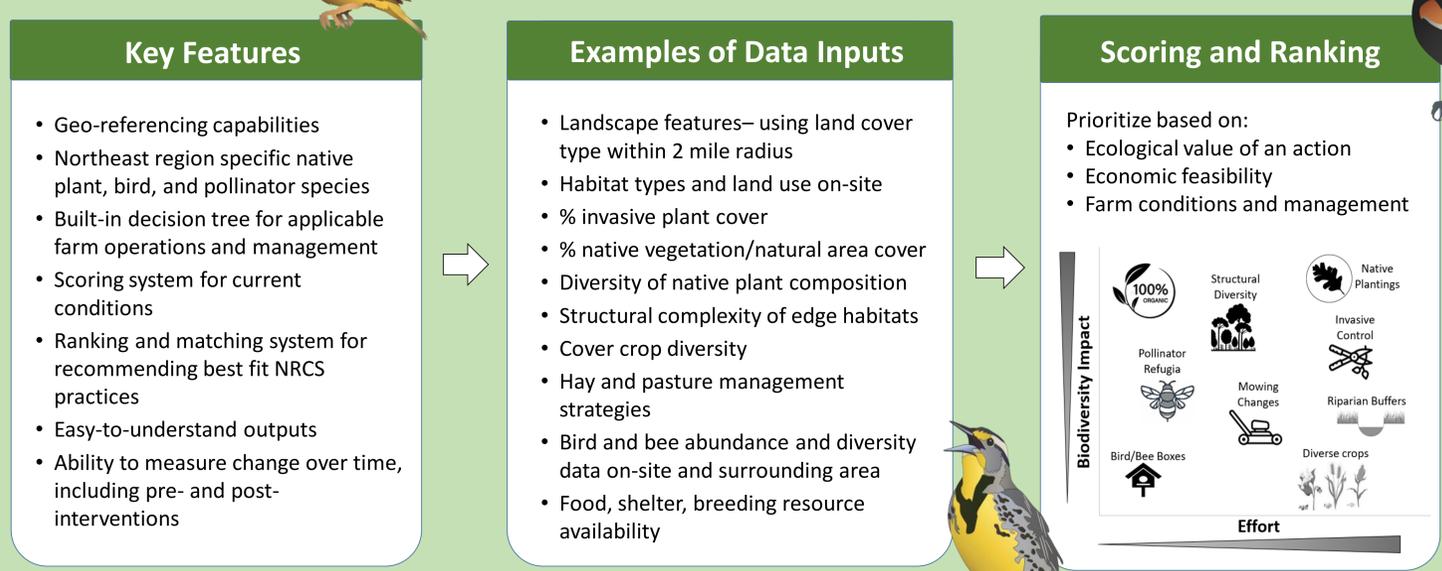
- Audubon Vermont
- National Audubon Society
- Private GIS consultant
- Natural Resources Conservation Service
- Wild Farm Alliance

Reference Platforms

- ArcGIS Field Maps; other Arc GIS apps
- Wild Farm Alliance Bird Habitat Tool
- Audubon Conservation Ranching
- Audubon Bird Friendliness Index
- Cool Farm Alliance Biodiversity Tool
- Xerces Society Forms

User Audience

Conservation Professionals (in-field) → Farm Managers (end report)



Target Areas

- Addison and Chittenden counties
- 6,800 farms statewide in Vermont, making up approximately 1,200,000 acres (UDSA, 2023).
- Estimate 3-5 farms to pilot tool in 2024
- Expand to network of over 30 farms to date



Expected Outcomes

- Improved communication with farmers and more effectively conveyed recommendations
- Increased engagement, understanding of importance of conservation
- Increased acres managed for birds and bees; reversed population declines
- Demonstration of accomplishments and tracking changes over time
- Multi-metric biological inputs supplement traditional assessment strategies (abiotic resources—water quality, soil health, nutrient pollution) for a more comprehensive, descriptive on-farm decision-making process that integrates biological diversity into ecosystem services.

End Product Written Report

Mapped site observations
Best match action recommendations
Farm operation & biodiversity scores

Credits
 Bird and Bee Friendly Farming program content: Margaret Fowle/Audubon Vermont
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 Illustrations: University of Maryland Center for Environmental Science Integration and Application Network at ian.umces.edu/media-library. Artists: Tracey Saxby, Dylan Tallie, Dieter Tracey, Kim Kraer, Lucy Van Essen, Emily Nastase, Sally Belle, Annie Carew, Jane Thomas, Jane Hawkey, Lucy Van Essen-Fishman.