

MONITORING FOREST SONGBIRDS

SURVEY INFORMATION

Key Habitat Types	Definition	Identifying Features
Riparian Area	Land adjacent to rivers or streams.	Lush, water-loving plant species like willows and sedges; dark, moist soils, with signs of erosion or flooding.
Upland	Higher elevation, dry land away from bodies of water.	Dry adapted plant species like oaks and grasses; sandy or rocky soil.
Slope	Inclined surface of land.	Noticeable change in elevation over short distance. Vegetation varies by slope direction.
Old Field	Abandon farmland in a state of natural regrowth.	Young trees, grasses, and forbs; signs of past farming.
Young Forest	Early-stage forest (1-20 yo).	Dense thickets of saplings and shrubs; open canopy and diverse ground cover.
Mature/Old Forest	Well-developed forest with older trees.	Tall trees with thick trunks; multiple complex layers of vegetation, and presence of snags.
Edge	Transition zone between habitat types.	Gradual or abrupt change vegetation types, mix of wildlife species from adjacent habitat types.
Interior	Large core area of habitat away from edges or disturbances.	Deep within forest or grassland patches, less wind and light penetration, supports disturbance-sensitive species.

GETTING STARTED

The table above describes the primary habitat types to survey on your property. There are also pictures of Depending on the survey method you choose, point counts or transects, you'll collect data within some of these habitats to capture the full diversity of bird species present.

To begin surveying, the observer will need binoculars, notebook/data sheet, smartphone, and a field guide. They should intend on monitoring songbirds during the breeding season (early May and mid-June).

Surveys should be conducted 3-5 times per breeding season. Use point counts when you want to monitor bird presence and activity at fixed locations within specific habitats, especially in smaller or more defined areas. Use transects when surveying larger areas or when you want to assess bird distribution across multiple habitat types.

SURVEY METHODS

Before spotting birds, use the reference images on your data sheet to identify habitat types and estimate overall vegetation like ground cover, canopy cover, and shrub density. To begin, stretch out your arms to define a circular area that is about a 1-meter radius. For point counts, make this survey from one central location; for transects, choose a central or representative spot along the path.

Standard 10-Minute Count

- Points per habitat type: 2-3
- Count duration: 10 minutes
- Detection: Visual, auditory, Merlin app
- Spacing: At least 500 ft between points
- Primary Use: General survey, useful to determine habitat preference and quality

Standard Line Transect

- Route length: 0.5 mile
- Pace: Walk slowly (~1 mile/hour)
- Duration: Varies by length, typically 30 minutes
- Detection: Visual, auditory, Merlin app
- Primary Use: General survey purposes, useful across larger distances



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TOOLS AND GUIDES

Digital Tools and Apps

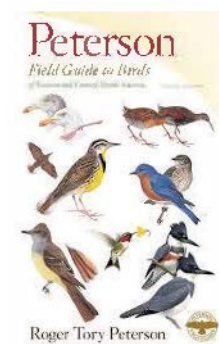
- www.allaboutbirds.org
- www.ebird.org
- Merlin app
- Audubon Bird Guide app



Images from: <https://extension.purdue.edu/forestry-natural-resources-with-the-merlin-bird-id-app/> and <https://play.google.com/store/apps/details?id=com.audubon.birds>

Field Guides

- Birds of Indiana Field Guide- Stan Tekiela, 2022
- The Sibley Guide to Birds; 2nd Edition- David Sibley, 2014
- Peterson Field Guide To Birds Of Eastern & Central North America, Seventh Edition- Roger Peterson, 2020



Images from: <https://extension.purdue.edu/forestry-natural-resources-with-the-peterson-field-guide/> and <https://play.google.com/store/apps/details?id=com.sibley.birds>

Forestry for the Birds Pocket Guide

