

# Kalamazoo County 4-H

## Ornithology Project Guidelines

**Project Leader or Superintendents: N/A**

**Project Social Media: N/A**

### Project Objectives & Life Skills\*

- Learn about different bird species and their characteristics
- Learn what roles birds play in the ecosystem
- Learn safe and responsible ways to explore nature
  
- **Head**
  - Keeping records
  - Wise use of resources
  - Goal setting
  - Learning to learn
- **Heart**
  - Communication
  - Social skills
  - Sharing
  - Nurturing relationships
- **Hands**
  - Responsible citizenship
  - Contribution to group efforts
  - Self-motivation
  - Leadership
- **Health**
  - Self-esteem
  - Personal safety
  - Stress management
  - Healthy lifestyle choices

*\*note these life skills are just some examples of what 4-H members will learn in this project*

#### Additional Resources:

[Michigan State Bird Observatory](#)  
[Michigan Native Plants for Bird-Friendly Landscapes](#)  
[Videos | Bird Academy • The Cornell Lab](#)  
[Merlin Bird ID App](#)  
[Bird Watching Activity Book—4-H Ontario](#)  
[Topography of a bird](#)  
[Cornell Lab--Bird Science Learning Activities](#)

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# Ornithology

## Guidelines:

- **WILD BIRD FEATHERS, PARTS, NESTS, OR EGGS ARE NOT ALLOWED** in the project or exhibit. A federal law, [The Migratory Bird Treaty Act](#), prohibits possessing these.
- Beginner ornithologists should observe and identify common birds and become familiar with a bird identification field guide.
- Intermediate ornithologists should continue to build their knowledge. Intermediate ornithologists should observe birds in their natural habitat, learn the general characteristics of common birds and the vocabulary used to describe them (webbed, lobed, crest, talons, perching, seed-eater, etc.). They should also pursue one or more particular areas of interest in a way that challenges them (barn owls, endangered species, decline of habitat, etc.)
- Advanced ornithologists should continue building their knowledge. Advanced ornithologists should reflect and display the effect, influence and/or relationship of birds in their own world (birds effect on some aspect of our environment such as crops or mosquito population, migration, detailed model of habitat requirements, etc.

## Section V–Bird Identification

- Ornithology notebook
  - Notebook should consist of a title page with your name, project area and the 4-H club name, a minimum of 10 bird watching [worksheet](#) filled out on birds you observed, any photographs/drawings of birds you have observed, any news or other educational or interesting information relating to ornithology, the [Topography of a Bird](#) sheet, Avian Groups sheet (last 2 pages of this document), and include any field notes/life list/bird count tally chart or any other checklists you find that help you in your bird watching habits.
    - Each year there should be an additional 10 bird watching worksheets added to your notebook.
  - Notebooks must be continuous and last year's information should be clearly marked with dividers.
- Drawn, Colored or collected pictures of birds
  - Exhibit your collection of pictures either drawn, colored, or collected during the current project year. Project should be in a notebook, folder or other such presentation mode. Loose papers will NOT be accepted for judging and will not be allowed to be exhibited.
- Observe and record birds seen
  - Choose a designated period, (i.e. a month, 3 months, 6 months etc.) and observe and record all the birds that you have seen in this time.
  - The exhibited project should be all your records, field notes, a count/tally chart of the different types of birds you seen and how many of each. Exhibit can be a poster, notebook, 3-D exhibit or any other display that shares your observations and records.
  - [Cornell Lab--Bird Science Learning Activities](#) has an activity about observing and recording birds over a designated period of time and would be a good start to your project.
- Any other related topic
  - Exhibit can be a poster, notebook, 3-D exhibit or any other type of display that shares your knowledge on bird identification.

## Section W–Habitat

- Exhibited projects can be a poster notebook, 3-D exhibit or any other type of display that shares your knowledge on a chosen habitat and its relation to birds.
  - Habitats can include wetlands, residential, or vanishing habitats as a few examples.

### Section X–Distinctive Characteristics

- Exhibited projects can be a poster notebook, 3-D exhibit or any other type of display that shares your knowledge on distinctive characteristics of one of the below between different birds
  - Nests/Eggs
  - Feeds
  - Topography of a bird
  - Any other distinctive characteristics
- Monitoring specific bird during nesting season
  - Exhibit can be any poster, notebook, 3-D exhibit or any other type of display that shares what you learned from monitoring a specific bird during their nesting season

### Section Y–Avian Groups

- Exhibited projects can be a poster, notebook, 3-D exhibit or any other type of display that shares your study of 1 of the 18 Avian Groups (found on the last 2 pages of this document), an in-depth study of a specific bird or any other avian group related topic.

### Section Z–Environmental Education

- Exhibited projects can be a poster, notebook, 3-D exhibit or any other type of display that shares your study of the food chain that includes birds, the effect that birds have on their environment, an in depth study of an endangered bird species or any other environmental education in relation to birds.

### Section ZA–Travel

- Exhibited projects can be a poster, notebook, 3-D exhibit or any other type of display that shares your study of bird migration patterns, resident birds, bird banding or any other travel topics in relation to birds.

## **AVIAN GROUPS (Divided by feeding habits & body structure)**

1. DIVING FISHERS
  - a. Common Loon, Pied-billed Grebe, Horned Grebe
2. WADING FISHERS
  - a. Black-crowned Night Heron, Great Blue Heron, Green Heron, Great Egret, American Bittern, Least Bittern, Sandhill Crane
3. WATERFOWL
  - a. Swans Whistling Swan, Mute Swan Geese Canada Goose, Snow Goose Ducks Mallard, American Black Duck, Wood Duck, Common Pintail, American Wigeon, Gadwall, Northern Shoveler, Lesser Scaup, Redhead, Canvasback, Bufflehead, Common Goldeneye, Ring-necked Duck, Common Merganser, Hooded Merganser, Red-breasted Merganser, Blue-winged Teal, Green-winged Teal
4. BIRDS OF PREY
  - a. American Kestrel, Merlin, Peregrine Falcon, Osprey, Loggerhead Shrike, Cooper's Hawk, Sharp-shinned Hawk, Northern Goshawk, Bald Eagle, Common Screech Owl, Long-eared Owl, Short-eared Owl, Great Horned Owl, Barn Owl, Barred Owl, Snowy Owl, Great Gray Owl, Saw-whet Owl Soaring Hawks Red-tailed Hawk, Red-shouldered Hawk, Broad-winged Hawk, Rough-legged Hawk, Northern Harrier
5. UPLAND GAME BIRDS
  - a. Common Bobwhite, Ruffed Grouse, Sharp-tailed Grouse, Greater Prairie Chicken, Spruce Grouse, Wild Turkey
6. WADING AND SWIMMING INSECTIVORES
  - a. American Coot, Dowitcher, Dunlin, Common Gallinule, Killdeer, Northern Phalarope, Black Bellied Plover, Piping Plover, King Rail, Virginia Rail, Sanderling, Greater Sandpiper, Least Sandpiper, Spotted Sandpiper, Pectoral Sandpiper, Semipalmated Sandpiper, Solitary Sandpiper, Stilt Sandpiper, Upland Sandpiper, Common Snipe, Sora, Lesser Yellowlegs, American Woodcock
7. FLYING FISHERS
  - a. Bonaparte's Gull, Franklin's Gull, Herring Gull, Ring-billed Gull, Belted Kingfisher, Black Tern, Caspian Tern, Common Tern, Royal Tern
8. DOVES
  - a. Mourning Dove
9. SOARING INSECTIVORES
  - a. Purple Martin, Barn Swallow, Bank Swallow, Tree Swallow, Rough-winged Swallow, Cliff Swallow, Chimney Swift, Common Nighthawk, Whip-poor-will
10. TREE TRUNK GLEANERS
  - a. Common Flicker, Hairy Woodpecker, Downy Woodpecker, Red-bellied Woodpecker, Redheaded Woodpecker, Yellow-bellied Sapsucker, Pileated Woodpecker, Black-backed Three-toed Woodpecker, Brown Creeper, Red-breasted Nuthatch, White-breasted Nuthatch
11. HUMMERS
  - a. Ruby-throated Hummingbird
12. FLYING INSECTIVORES
  - a. Eastern Kingbird, Eastern Pewee, Eastern Phoebe Flycatchers Acadian Flycatcher, Alder Flycatcher, Great-crested Flycatcher, Least Flycatcher, Olive-sided Flycatcher, Yellow-bellied Flycatcher, Willow Flycatcher
13. SCAVENGER
  - a. Common Crow, Northern Raven, Turkey Vulture, Blue Jay, Gray Jay

#### 14. SHRUB-FOLIAGE GLEANERS

- a. American Redstart, Tufted Titmouse, Ruby-crowned Kinglet, Golden-crowned Kinglet, Bluegray Gnatcatcher, Common Yellowthroat, Yellow-breasted Chat, Northern Waterthrush, Louisiana Waterthrush, Ovenbird Chickadees Black-capped Chickadee, Boreal Chickadee, Carolina Chickadee, Vireos Philadelphia Vireo, Red-eyed Vireo, Solitary Vireo, Warbling Vireo, Yellow-throated Vireo Warblers Blackburnian Warbler, Black & White Warbler, Black-throated Blue Warbler, Black Throated Green Warbler, Blue-winged Warbler, Cape May Warbler, Canada Warbler, Cerulean Warbler, Chestnut-sided Warbler, Connecticut Warbler, Golden-winged Warbler, Hooded Warbler, Kirtland's Warbler, Magnolia Warbler, Mourning Warbler, Nashville Warbler, Northern Parula Warbler, Palm Warbler, Pine Warbler, Prairie Warbler, Prothonotary Warbler, Tennessee Warbler, Wilson's Warbler, Yellow Warbler, Yellow-rumped Warbler Wrens Bewick's Wren, House Wren, Marsh Wren, Sedge Wren, Winter Wren

#### 15. BERRY AND GROUND FEEDERS

- a. Eastern Bluebird, Gray Catbird, Black-billed Cuckoo, Yellow-billed Cuckoo, Northern Mockingbird, American Robin, Brown Thrasher, Gray-cheeked Thrush, Hermit Thrush, Swainson's Thrush, Wood Thrush, Veery, Cedar Waxwing

#### 16. BLACKBIRDS

- a. Baltimore Oriole, Orchard Oriole, Brewer's Blackbird, Red-winged Blackbird, Rusty Blackbird, Bobolink, Brown-headed Cowbird, Eastern Meadowlark, Western Meadowlark, Common Grackle, Scarlet Tanager

#### 17. SEED EATERS

- a. Snow Bunting, Northern Cardinal, Red Crossbill, White-winged Crossbill, Dickcissel, American Goldfinch, Common Redpoll, Rufous-sided Towhee, Dark-eyed Junco, Pine Grosbeak, Rosebreasted Grosbeak, Evening Grosbeak, Indigo Bunting, Horned Lark, House Finch, Purple Finch, Lapland Longspur, Pine Siskin Sparrows American Tree Sparrow, Chipping Sparrow, Clay-colored Sparrow, Field Sparrow, Grasshopper Sparrow, Harris Sparrow, Henslow's Sparrow, Leconte's Sparrow, Lincoln Sparrow, Savanna Sparrow, Song Sparrow, Vesper Sparrow, Swamp Sparrow, White-crowned Sparrow, White-throated Sparrow,

#### 18. INTRODUCED TO MICHIGAN BIRDS

- a. House Sparrow, Starling, Ring-necked Pheasant, Rock Dove (Pigeon), European Starling, Gray Partridge