MSU Extension Publication Archive

Archive copy of publication, do not use for current recommendations. Up-to-date information about many topics can be obtained from your local Extension office.

Knowing Our Birds – Leader/Teacher Guide
Michigan State University Cooperative Extension Service
4-H Club Bulletin
R. D. VanDeusen, Kellogg Bird Sanctuary; Dr. Robert W. George, Conservation Education
Issued April 1976
38 pages

The PDF file was provided courtesy of the Michigan State University Library

Scroll down to view the publication.
KNOWING OUR BIRDS

by

R. D. VanDeusen, Biologist in Charge
Kellogg Bird Sanctuary*

in cooperation with
Dr. Robert W. George, Project Leader
Extension Conservation Education

A TEACHING AID

Designed for leaders and teachers working with youth—for classroom units or club projects and activities. Eighteen "Avian Groups" are recognized, with each group shown on a separate page. The birds of any one group are characterized by similar feeding habits, and their "ecological niche in the natural 'community.'"

Basic to the suggested learning experiences and exploring activities listed with each avian group is the development of an understanding of the science involved in wildlife conservation.

The Avian Chart, prepared to supplement this guide, can help to relate one group to another, as well as show the interrelation of wildlife resources to other natural resources.

Reference to the suggested projects or teaching units, with activity guidelines added, can aid the student or 4-H member in gaining understanding in Wildlife Conservation—Birds.

*The staff of Kellogg Bird Sanctuary contributed greatly to this publication. Special thanks to W. S. Johnson for his assistance with the text. Cover art work by David Mohrhardt and bird silhouettes by Larry Babcock.

Michigan 4-H - Youth educational programs and all other Cooperative Extension Service programs are available to all without regard to race, color, or national origin. • Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Gordon E. Guyer, Director, Cooperative Extension Service, Michigan State University, East Lansing, MI 48824

3P-3M-4/76-UP - Fifty cents
LOON - Larger than a duck, black with back speckled with white; sexes alike. Feed primarily on fish. Known to nest throughout Michigan. Summer residents.

GREBE - Smaller than a duck, brownish in color; sexes alike; dive when alarmed. Feed primarily on fish and aquatic insects. Seldom seen in flight. Nest throughout Michigan. Summer residents.
SPECIES OF DIVING FISHERS FOUND IN MICHIGAN

LOONS

Common Loon Sr

GREBES

Pied-billed Grebe Sr

Horned Grebe Ur

Code: Tr - Transient Sr - Summer Resident Ur - Uncommon

W - Winter Resident Pr - Permanent Resident

BRIEF DESCRIPTION

The Loon and Pied-billed Grebe are two common diving fishers found in Michigan. The feet of the Loon are webbed, whereas the Grebes have lobed toes. The legs are flattened and located posteriorly, making swimming easy and walking on land difficult. For this reason, their nests are located on or near water.

THINGS TO LEARN

1. Identification: Name - Avian Group
   Coloration - Male, Female, Immature, seasonal changes
   Field Markings - size, color, shape, activity

   How foods obtained
   Nesting: type of habitat
   type of nest

3. Distribution: Summer areas
   Flyways
   Winter areas
   Effects of habitat on distribution

4. Adaptations: Bills, feet, feathers, etc.

5. Relationships: To habitat
   To other birds
   To other organisms

6. Management: Economic aspects

SELECTED BIBLIOGRAPHY

Birds of America; Pearson, T.G.; Garden City Books.

Birds of North America; Robbins, Bruun, Zim; Golden Press.

Ducks, Geese, and Swans of No. America; Kortright, F.H.; Stackpole Co.

GREAT BLUE HERON: Large grayish-blue herons of lake shores and marshes. Sexes are alike. Normally nest in trees; colonial nesting common in this species. In flight the neck is held in an "S" curve.

SANDHILL CRANE: Large red-gray birds of marshes and open fields. Sexes alike. Normally build nest in shallow marsh areas. In flight the neck is held straight forward.
SPECIES OF WADING FISHERS COMMON IN MICHIGAN

Great Blue Heron CSr  American Bittern CSr
Green Heron CSr  Least Bittern USr
Black-crowned Night Heron CSr  Sandhill Crane USr
Common Egret UV

Code:  Tr - Transient  Sr - Summer Resident  C - Common
       Wr - Winter Resident  Pr - Permanent Resident  U - Uncommon
                      V - Visitor

BRIEF DESCRIPTION

The members of this group have long, stilt-like legs and spear-shaped bills. Their diet consists mainly of fish, amphibians, and other aquatic organisms. The Sandhill Crane often feeds on waste grain in fields.

THINGS TO LEARN

1. Identification:  Name - Avian Group
                Coloration - Adult and Immature
                Field markings - size, color, shape, activity

               How foods obtained
               Nesting: type of habitat
               type of nest
               Where foods found

3. Distribution:  Summer areas
                Flyways
                Winter areas
                Effects of habitat on distribution

4. Adaptations:  Bills, feet, feathers, etc.

5. Relationships:  To habitat
                   To other birds
                   To other organisms

6. Management:  Conservation of; economic aspects

SELECTED BIBLIOGRAPHY

Birds of America; Pearson, T.G.; Garden City Books.

Birds of North America; Robbins, Bruun, Zim; Golden Press

WATERFOWL

SWAN: Largest waterfowl, all white plumage. Seen in Michigan only during spring and fall migration. Transient

GEESE: The Canada Goose is the most common; brown body with black neck and white cheek patch. Nest in many areas of Michigan. Common transient.

DUCKS: Many species found in Michigan. The Mallard, with green head and gray body, is the most common. Some species nest in Michigan, while others are only seen as transient migrants.
## SPECIES OF WATERFOWL COMMON TO MICHIGAN

<table>
<thead>
<tr>
<th>SWANS</th>
<th>GEASE</th>
<th>DABBLERS</th>
<th>DUCKS</th>
<th>DIVERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whistling Tr</td>
<td>Canada Tr, Pr</td>
<td>Mallard Pr</td>
<td>Scaup Tr</td>
<td></td>
</tr>
<tr>
<td>Mute Tr</td>
<td>Snow Tr</td>
<td>Black Duck Pr</td>
<td>Redhead Tr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Blue Tr</td>
<td>Wood Duck Sr</td>
<td>Canvasback Tr</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pintail Tr</td>
<td>Bufflehead Tr</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teal Tr</td>
<td>Goldeneye Wk</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Baldpate Sr</td>
<td>Ringneck Sr, Tr</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gadwall Sr</td>
<td>Hooded Merganser Sr, Tr</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shoveler Sr</td>
<td>Common Merganser Sr, Tr</td>
<td>Red-breasted Merganser Sr, Tr</td>
</tr>
</tbody>
</table>

**Code:**
- **Tr** - Transient
- **Nr** - Winter Resident
- **Sr** - Summer Resident
- **Pr** - Permanent Resident

### BRIEF DESCRIPTION

Ducks are divided into two groups, as seen above. **Divers** are those ducks that dive underwater to feed; usually found on deep waters; often called "Bay ducks". **Dabblers** are those ducks that feed by tipping up to reach the bottom; they inhabit shallow water areas; often called "Puddle ducks".

### THINGS TO LEARN

1. **Identification:**
   - Name - Avian Group
   - Coloration - Male, Female, Immature
   - Field markings - size, color, shape, activity

2. **Habits:**
   - Feeding: Foods eaten
   - Nesting: type of habitat
   - How foods obtained
   - Type of nest
   - Where foods found

3. **Distribution:**
   - Summer areas
   - Flyways
   - Winter areas
   - Effects of habitat on distribution

4. **Adaptations:**
   - Bills, feet, feathers, etc.

5. **Relationships:**
   - To habitat
   - To other birds
   - To other organisms

6. **Management:**
   - Economic aspects

### SELECTED BIBLIOGRAPHY

- Ducks at a Distance (A waterfowl identification guide); U.S.D.I.
- Ducks, Geese, and Swans; Wong, Herbert H.; Lane Book Co.
- Ducks, Geese, and Swans of No. America; Kortright, F.H.; Stackpole Co.
BIRDS OF PREY: Habitat varies. They feed on varied diet of animal life - mammals, birds, insects, fish, amphibians, snakes.

Characteristic features are: a strong bill, strong feet with curved talons, excellent vision and hearing abilities.
## SPECIES OF BIRDS OF PREY FOUND IN MICHIGAN

<table>
<thead>
<tr>
<th>OWLS</th>
<th>SOARING HAWKS</th>
<th>ACCIPTERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screech Owl</td>
<td>CPR</td>
<td>Red-tailed Hawk</td>
</tr>
<tr>
<td>Long-eared Owl</td>
<td>UPr</td>
<td>Red-shouldered</td>
</tr>
<tr>
<td>Short-eared Owl</td>
<td>USr</td>
<td>Broad-winged Hawk</td>
</tr>
<tr>
<td>Great Horned Owl</td>
<td>CPR</td>
<td>Rough-legged Hawk</td>
</tr>
<tr>
<td>Barn Owl</td>
<td>UPr</td>
<td>Harrier (Marsh)</td>
</tr>
<tr>
<td>Barred Owl</td>
<td>UPr</td>
<td></td>
</tr>
<tr>
<td>Snowy Owl</td>
<td>UWr</td>
<td></td>
</tr>
<tr>
<td>Great Gray Owl</td>
<td>UV</td>
<td>Kestrel</td>
</tr>
<tr>
<td>Saw-whet Owl</td>
<td>USr</td>
<td>Merlin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peregrine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code:</th>
<th>Tr - Transient</th>
<th>Sr - Summer Resident</th>
<th>C - Common</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wr - Winter Resident</td>
<td>Pr - Permanent Resident</td>
<td>U - Uncommon</td>
<td>V - Visitor</td>
</tr>
</tbody>
</table>

### BRIEF DESCRIPTION

Members of this group are predators, with a varied diet of animal life - insects, mammals, birds, fish, amphibians, and reptiles. This group is characterized by a strong, hooked bill and strong feet with sharp curved talons (except Shrikes). Excellent vision and hearing abilities.

### THINGS TO LEARN

1. **Identification:** Name - Avian Group
   Coloration - Male, Female, Immature, seasonal changes
   Field Markings - size, color, shape, activity

2. **Habits:** Feeding: Foods eaten
   Nesting: type of habitat
   How foods obtained
   Where foods found

3. **Distribution:** Summer areas
   Flyways
   Winter areas
   Effects of habitat on distribution

4. **Adaptations:** Bills, feet, feathers, etc.

5. **Relationships:** To habitat
   To other birds
   To other organisms

### SELECTED BIBLIOGRAPHY

- **Birds of America:** Pearson, T.G.; Garden City Books
- **Birds of North America:** Robbins, Bruun, Zim; Golden Press
- **Field Guide to the Birds:** Peterson, R.T.; Houghton Mifflin Co.
BOB-WHITE: Smallest of game birds; sexes are similar; male has white throat and stripe over eye; female with yellow chin and eye stripe; general coloration rusty-red. Normally found in agricultural areas.

PRAIRIE CHICKEN: Large brown hen-like bird; undersides with brown bars. Tail short and round. Sexes similar. Found in prairie grassland.

SHARP-TAILED GROUSE: Sexes similar; brownish in color with V-shaped marking on undersides; tail short and pointed. Found in prairie brushlands.

RUSSIFIED GROUSE: Sexes similar; reddish-brown or gray-brown in color; fan-shaped tail with black band near tip. Found in brushy woodlands.

WILD TURKEY: Largest of game birds; male larger, but colors of both sexes similar. In general, brownish-black in color with bronze iridescence throughout plumage. Found in woodland areas.
SPECIES OF UPLAND GAME BIRDS FOUND IN MICHIGAN

Bob-white Quail   CPR   Prairie Chicken   RPr
Ruffed Grouse   CPR   Spruce Grouse   RPr
Sharp-tailed Grouse   RPr   Wild Turkey   CPR

Code:
Pr - Permanent Resident
C - Common
R - Rare

BRIEF DESCRIPTION

Upland game birds are chicken-like birds, with bills and feet similar to those of the chicken. They vary in size from as small as robins to as large as turkeys. They feed primarily on insects, seeds, grain, and berries.

THINGS TO LEARN

1. Identification: Name - Avian Group
   Coloration - Male, Female, Immature
   Field markings - size, color, shape, activity

   How foods obtained
   Nesting: type of habitat
   Where foods found

3. Distribution: Effects of habitat on distribution

4. Adaptations: Bills, feet, feathers, etc.

5. Relationships: To habitat
   To other birds
   To other organisms

6. Management: Conservation of; economic aspects.

SELECTED BIBLIOGRAPHY

Birds of America; Pearson, T.G.; Garden City Books
Birds of North America; Robbins, Bruun, Zim; Golden Press
Life Histories of North American Gallinaceous Birds; Bent, A.C.;
   U.S. Nat. Museum, Washington, D.C.
Ruffed Grouse, The; Bump, Darrow, Edminster, Crissney; New York State Conservation Department
COOTS AND GALLINULES: These are the largest of this avian group. Quite chicken-like in appearance, with short conical white (Coot) or red bill (Gallinule). The Coot is often seen swimming in large rafts during the fall. Both species must run a considerable distance over the water before they become airborne. The Coot has lobed toes.

RAILS, SANDPIPERS, AND PLOVERS: Normally found in more dense cover than Coots and Gallinules. Vary in size from that of a large pigeon to as small as a sparrow. Not easily observed, as they are extremely secretive forms. Nests may be located in marsh vegetation (Rails) or on the rocky and sandy shoreline of water areas (Sandpipers and Plovers).
SPECIES OF WADING & SWIMMING INSECTIVORES FOUND IN MICHIGAN

<table>
<thead>
<tr>
<th>Species</th>
<th>Code</th>
<th>Code</th>
<th>Species</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sora Rail</td>
<td>CSr</td>
<td>CSr</td>
<td>Florida Gallinule</td>
<td>CSr</td>
</tr>
<tr>
<td>Virginia Rail</td>
<td>CSr</td>
<td>CSr</td>
<td>Semipalmated Sandpiper</td>
<td>CTr</td>
</tr>
<tr>
<td>King Rail</td>
<td>UV</td>
<td>UTr</td>
<td>Black-bellied Plover</td>
<td>UTr</td>
</tr>
<tr>
<td>Dunlin</td>
<td>CTr</td>
<td>UTr</td>
<td>Semipalmated Plover</td>
<td>UTr</td>
</tr>
<tr>
<td>Dowitcher</td>
<td>UTr</td>
<td>CTr</td>
<td>Spotted Sandpiper</td>
<td>CTr</td>
</tr>
<tr>
<td>Killdeer</td>
<td>CSr</td>
<td>CTr</td>
<td>Solitary Sandpiper</td>
<td>CTr</td>
</tr>
<tr>
<td>Common Coot</td>
<td>CSr</td>
<td>CTr</td>
<td>Greater Yellow-legs</td>
<td>CTr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Woodcock</td>
<td>CSr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Wilson's Snipe</td>
<td>CTr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Upland Plover</td>
<td>RSr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lesser Yellow-legs</td>
<td>CTr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pectoral Sandpiper</td>
<td>CTr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Least Sandpiper</td>
<td>CTr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stilt Sandpiper</td>
<td>UTr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Northern Phalarope</td>
<td>UTr</td>
</tr>
</tbody>
</table>

Code:  
- Tr - Transient  
- Sr - Summer Resident  
- C - Common  
- U - Uncommon  
- V - Visitor  
- R - Rare

BRIEF DESCRIPTION

The members of this group are among some of the most difficult birds to identify. They are easily recognized as shorebirds by their long legs; slender bill varies in length. Many species are similar in appearance. Through characteristic calls and field markings, they can be identified. Their diet consists mainly of aquatic insects and other small aquatic organisms.

THINGS TO LEARN

1. **Identification:** Name - Avian Group  
   - Coloration - Male, Female, Immature, seasonal changes  
   - Field markings - size, shape, color, activity

2. **Habits:** Feeding: Foods eaten, How foods obtained  
   Nesting: type of habitat, type of nest  
   Where foods found

3. **Distribution:** Summer areas, Winter areas  
   - Flyways  
   - Effects of habitat on distribution

4. **Adaptations:** Bills, feet, feathers, etc.

5. **Relationships:** To habitat  
   - To other birds  
   - To other organisms

6. **Management:** Economic aspects

SELECTED BIBLIOGRAPHY

Birds of America; Pearson, T.G.; Garden City Books

Birds of North America; Robbins, Bruun, Zim; Golden Press

BELTED KINGFISHER: Only Kingfisher in Michigan; larger than a robin. Blue-gray above with white undersides. Sexes similar, but female has red band across chest and down flanks. Normally seen over lake and stream areas; may locate nest great distances from water.

RING-BILLED GULL: Common sea gull of the Great Lakes area. Sexes similar in color; gray back and white undersides. The wing tips are black. Like most gulls, the tip of the bill has a slight hook. Black ring on bill is conspicuous.

COMMON TERN: Terns are small, more streamlined gull-like birds with forked tails. The Common Tern has a gray back with white undersides. The top of head is black and the tail is deeply forked. The bill is narrow and straight.
SPECIES OF FLYING FISHERS FOUND IN MICHIGAN

Belted Kingfisher CSr
Herring Gull CSr
Ringbill Gull CSr
Bonaparte's Gull UTr
Franklin's Gull UTr
Common Tern CSr
Black Tern CSr
Caspian Tern USr Tr
Royal Tern UTr

Code: Tr - Transient
Sr - Summer Resident
C - Common
U - Uncommon

BRIEF DESCRIPTION

The members of this group vary in size from as small as a robin to larger than a crow. All species, except the Kingfisher, have webbed feet. Their bills are long, stout, and pointed. These forms feed primarily on fish.

THINGS TO LEARN

1. Identification: Name - Avian Group
   Coloration - Male, Female, Immature, seasonal change
   Field markings - size, color, shape, activity

   How foods obtained
   Nesting: type of habitat
   type of nest

3. Distribution: Summer areas
   Flyways
   Winter areas
   Effects of habitat on distribution

4. Adaptations: Bills, feet, feathers, etc.

5. Relationships: To habitat
   To other birds
   To other organisms

6. Management: Economic aspects

SELECTED BIBLIOGRAPHY

Birds of America; Pearson, T.G.; Garden City Books
Birds of North America; Robbins, Bruun, Zim; Golden Press
DOVES

MOURNING DOVE: Only wild dove found in the eastern United States. Sexes similar—brown in color, with pointed tails. Outer tail feathers have white tips. Smaller and more streamlined than Rock Dove (Pigeon).
SPECIES OF DOVES COMMON IN MICHIGAN

Mourning Dove CSr UWr

Code:  Wr - Winter Resident
        Sr - Summer Resident
        C  - Common
        U  - Uncommon

BRIEF DESCRIPTION

There is only one species of dove found in Michigan. Another dove, the Passenger Pigeon, was once common in Michigan, but has been extinct for more than a half century. The Mourning Dove feeds primarily on weed seeds, insects, and waste grain. The doves are popular game birds in many states.

THINGS TO LEARN

1. Identification: Name - Avian Group
   Coloration - Male, Female, Immature
   Field markings - size, color, shape, activity

   How foods obtained type of nest
   Where foods found

3. Distribution: Summer areas Flyways
   Winter areas Effects of habitat on distribution

4. Adaptations: Bills, feet, feathers, etc.

5. Relationships: To habitat
   To other birds
   To other organisms

6. Management: In Michigan - a song bird or a game bird?
   What happened to the Passenger Pigeon?
   Economic aspects

SELECTED BIBLIOGRAPHY

Birds of America; Pearson, T.G.; Garden City Books

Birds of North America; Robbins, Bruun, Zim; Golden Press

SOARING INSECTIVORES

NIGHTHAWK: Sexes alike, brownish in color; wings narrow, with large white patch on underside. Common in larger cities and open field areas.

SWALLOWS: The Cliff and Barn Swallow have purple backs and buff undersides; both species build mud nests. The long, forked tail of the Barn Swallow easily separates the two species in the field. Bank and Rough-winged Swallows are brown above, with white undersides. The Bank Swallow has a distinct brown bar on the breast. Both species nest in tunnels burrowed in sand pits and clay banks. Purple Martins are the largest of the swallows. The male is entirely purple; the female is grayish-brown. Normally nest in "Martin houses" provided by man.

SPECIES OF SOARING INSECT EATERS FOUND IN MICHIGAN

Purple Martin  CSr  Cliff Swallow  USr
Barn Swallow  CSr  Chimney Swift  CSr
Bank Swallow  CSr  Nighthawk  CSr
Tree Swallow  CSr  Whip-poor-will  USr
Rough-winged Swallow  CSr

Code: Sr - Summer Resident
C - Common
U - Uncommon

BRIEF DESCRIPTION

The members of this group are usually seen in flight. Long, pointed wings and slender bodies characterize the species of this group. Their feet are small and the bill is short and wide. They feed primarily on insects caught while in flight.

THINGS TO LEARN

1. Identification: Name - Avian Group
   Coloration - Male, Female, Immature
   Field markings - size, color, shape, activity

2. Habits: Feeding:
   Foods eaten
   How foods obtained
   Where foods found

Nesting: type of habitat
   type of nest

3. Distribution:
   Summer areas
   Flyways
   Winter areas
   Effects of habitat on distribution

4. Adaptations:
   Bills, feet, feathers, etc.

5. Relationships:
   To habitat
   To other birds
   To other organisms

6. Management:
   Economic aspects

SELECTED BIBLIOGRAPHY

Birds of America; Pearson, T.G.; Garden City Books

Birds of North America; Robbins, Bruun, Zim; Golden Press

RED-HEADED WOODPECKER: Blue-black wings with large white area. White undersides and red head separates this form from others. Sexes are alike in color.

DOWNY WOODPECKER: Smallest of the woodpeckers. General coloration is black and white; sexes similar; male has red bar on back of head. Hairy Woodpecker is similar in coloration, but is larger and has a longer bill.

WHITE-BREASTED NUTHATCH: Blueish-gray on top, with white undersides and black cap. Sexes alike in color. Only nuthatches can travel down a tree trunk head first.
SPECIES OF TREE TRUNK GLEANERS FOUND IN MICHIGAN

Yellow-shafted Flicker Sr  
Hairy Woodpecker Pr  
Downy Woodpecker Pr  
Red-bellied Woodpecker Csr UWr  
Red-headed Woodpecker Csr

Yellow-bellied Sapsucker CTr USr  
Pileated Woodpecker USr  
Brown Creeper USr  
Red-breasted Nuthatch UPr  
White-breasted Nuthatch CPr

Code:  Pr - Permanent Resident  C - Common  
Tr - Transient  U - Uncommon  
Sr - Summer Resident

BRIEF DESCRIPTION

The members of this group range in size from slightly smaller than a Crow to smaller than a House Sparrow. Their bills are long, slender, and pointed. In most forms the tail feathers are stiff, giving support while perched on the sides of trees and limbs. The foods eaten by this group consist mainly of adult and immature forms of insects found on and under the bark of trees.

THINGS TO LEARN

1. Identification: Name - Avian Group  
   Coloration - Male, Female, Immature, seasonal change  
   Field markings - size, color, shape, activity

   How foods obtained type of nest  
   Where foods found

3. Distribution: Summer areas Flyways  
   Winter areas Effects of habitat on distribution

4. Adaptations: Bills, feet, feathers, etc.

5. Relationships: To habitat  
   To other birds - Role of holes provided by these forms  
   To other organisms

6. Management: Economic aspects

SELECTED BIBLIOGRAPHY

Birds of America; Pearson, T.G.; Garden City Books  
Birds of North America; Robbins, Bruun, Zim; Golden Press  
RUBY-THROATED HUMMINGBIRDS: Metallic green back, with white undersides; the male has an iridescent red throat. The wing beats are so rapid that they appear blurred. The nest is normally placed on a horizontal branch and constructed of lichens, moss, spider webs, and fine grasses. Usually only two eggs are laid per nest.
SPECIES OF HUMMERS COMMON IN MICHIGAN

Ruby-throated Hummingbird CSr

Code: Sr - Summer Resident
C - Common

BRIEF DESCRIPTION

The Ruby-throated Hummingbird is the only species found in Michigan. It is the smallest bird found in the state. With the presence of the proper flowering plants and/or artificial feeders, Hummingbirds can be attracted to your area.

THINGS TO LEARN

1. Identification: Name - Avian Group
   Coloration - Male, Female, Immature
   Field markings - size, color, shape, activity

   How foods obtained
   Nesting: type of habitat
   type of nest
   Where foods found

3. Distribution: Summer areas
   Flyways
   Winter areas
   Effects of habitat on distribution

4. Adaptations: Bills, feet, feathers, etc.

5. Relationships: To habitat
   To other birds
   To other organisms

6. Management: Backyard management
   Economic aspects

SELECTED BIBLIOGRAPHY

Birds of America; Pearson, T.G.; Garden City Books
Birds of North America; Robbins, Bruun, Zim; Golden Press
EASTERN KINGBIRD: One of the largest and most aggressive of this group. Undersides white; back, tail, and head are black. White band on tip of tail is conspicuous at rest and in flight. Sexes alike in color.

PHOEBE: Plumage is brownish-gray. Absence of white wing bars and eye ring help to separate this form from all others. Sexes are alike in color.

LEAST FLYCATCHER: General coloration is olive-gray; conspicuous white undersides, eye ring, and wing bars aid in identity. The Acadian and Alder Flycatchers are almost identical to this form. Habitat and voice aid in the separation of these three species.
SPECIES OF FLYING INSECTIVORES FOUND IN MICHIGAN

Eastern Kingbird Sr Acadian Flycatcher Sr
Crested Flycatcher Sr Alder Flycatcher Sr
Olive-sided Flycatcher Sr Wood Pewee Sr
Yellow-bellied Flycatcher Sr Phoebe Sr
Least Flycatcher Sr

Code: Sr - Summer Resident

BRIEF DESCRIPTION

The members of this group vary in size from as small as a robin to smaller than a sparrow. They often perch in an upright position and sit quite motionless. Characteristically, they will fly from a branch to obtain food and then return to the same branch.

THINGS TO LEARN

1. **Identification:** Name - Avian Group
   Coloration - Male, Female, Immature
   Field markings - size, color, shape, activity

2. **Habits:** Feeding:
   Foods eaten
   How foods obtained
   Where foods found
   Nesting:
   type of habitat
   type of nest

3. **Distribution:**
   Summer areas
   Winter areas
   Flyways
   Effects of habitat on distribution

4. **Adaptations:**
   Bills, feet, feathers, etc.

5. **Relationships:**
   To habitat
   To other birds
   To other organisms

6. **Management:**
   Economic aspects

SELECTED BIBLIOGRAPHY

*Birds of America*; Pearson, T.G.; Garden City Books

*Birds of North America*; Robbins, Bruun, Zim; Golden Press

CROWS: Both sexes all black. Common in agricultural and woodland areas.

BLUE JAY: Sexes alike; bright blue in color, with white trim on wings and tail; whiteish-gray undersides. Active and noisy birds of wooded areas. Form part of winter bird flock.

VULTURE: Sexes alike; nearly eagle size. Dark blackish-brown in color; head bare, reddish in color.
SPECIES OF SCAVENGERS COMMON IN MICHIGAN

<table>
<thead>
<tr>
<th>Common Crow</th>
<th>CPr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Raven</td>
<td>UPr</td>
</tr>
<tr>
<td>Turkey Vulture</td>
<td>USr</td>
</tr>
</tbody>
</table>

Bluejay CPr  
Canada Jay CPr

Code: Sr - Summer Resident  
Pr - Permanent Resident  
C - Common  
U - Uncommon

BRIEF DESCRIPTION

The Scavengers vary greatly in size and morphology. The Vulture is the largest of this group and has long, broad wings and a strong, hooked bill. The feet of these forms are weak, used for walking or perching. The bills of the rest of the group are long and stout. The food that these forms feed on is varied: Vultures feed primarily on carrion - whereas crows, ravens, and jays will feed on insects, young animals, amphibians, and carrion.

THINGS TO LEARN

1. Identification: Name - Avian Group  
Coloration - Male, Female, Immature  
Field markings - size, color, shape, activity

How foods obtained  
Nesting: type of habitat  
Type of nest  
Where foods found

3. Distribution: Summer areas  
Winter areas  
Effects of habitat on distribution

4. Adaptations: Bills, feet, feathers, etc.

5. Relationships: To habitat  
To other birds - Predation  
To other organisms

6. Management: Control  
Economic aspects

SELECTED BIBLIOGRAPHY

Birds of America; Pearson, T.G.; Garden City Books

Birds of Minnesota; Roberts, T.S.; University of Minnesota Press

Birds of North America; Robbins, Bruun, Zim; Golden Press

TITMICE: Both sexes mostly gray; active and noisy birds of woodland areas; form part of winter bird flocks.

CHICKADEE: Both sexes gray with black cap and white cheek; active and friendly birds of woodland areas.

WRENS: Both sexes brownish; very energetic. Usually seen in shrubbery or brush areas.


WARBLERS: Blue-gray or olive-green; males usually with patches of bright color. Birds of woods, parks, and brushy areas.

VIREOS: Both sexes olive-green. Active birds of parks, woods, and thickets. More deliberate in movement than warblers, with habit of pausing and ogling about.
SPECIES OF SHRUB-FOLIAGE GLEANERS COMMON IN MICHIGAN

<table>
<thead>
<tr>
<th>Species</th>
<th>Common Name</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow Warbler</td>
<td>Kirtland's Warbler</td>
<td>Pr</td>
</tr>
<tr>
<td>Yellow-throat</td>
<td>Chestnut-sided Warbler</td>
<td></td>
</tr>
<tr>
<td>Palm Warbler</td>
<td>Black &amp; White Warbler</td>
<td>Sr</td>
</tr>
<tr>
<td>Wilson's Warbler</td>
<td>Golden-winged Warbler</td>
<td>Sr</td>
</tr>
<tr>
<td>Ovenbird</td>
<td>Blue-winged Warbler</td>
<td>Sr</td>
</tr>
<tr>
<td>Redstart</td>
<td>Blackburnian Warbler</td>
<td></td>
</tr>
<tr>
<td>Myrtle Warbler</td>
<td>Cape May Warbler</td>
<td>Sr</td>
</tr>
<tr>
<td>House Wren</td>
<td>Black-throated Green Warbler</td>
<td></td>
</tr>
<tr>
<td>Winter Wren</td>
<td>Tufted Titmouse</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Golden-crowned Kinglet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ruby-crowned Kinglet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Red-eyed Vireo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Warbling Vireo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Philadelphia Vireo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yellow-throated Vireo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Black-capped Chickadee</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Blue-gray Gnatcatcher</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cape May Warbler</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Short-billed Marsh Wren</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Black-throated Green Warbler</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tufted Titmouse</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Golden-crowned Kinglet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ruby-crowned Kinglet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Red-eyed Vireo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Warbling Vireo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Philadelphia Vireo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yellow-throated Vireo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Black-capped Chickadee</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Blue-gray Gnatcatcher</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cape May Warbler</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Short-billed Marsh Wren</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Black-throated Green Warbler</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tufted Titmouse</td>
<td></td>
</tr>
</tbody>
</table>

Code:  
Pr - Permanent Resident (Titmice and Chickadees)  
Sr - Summer Resident (all others are Sr only)

BRIEF DESCRIPTION

The Shrub-Foliage Gleaners are smaller than House Sparrows. Their bills are small, slender, and pointed and are used for removing adult insects and their immature forms from leaves and twigs. Extremely active birds, spending most of the day eating and singing.

THINGS TO LEARN

1. Identification: Name - Avian Group  
   Coloration - Male, Female, Immature,  
   Seasonal changes  
   Field markings - size, color, shape, activity

   Nesting: type of habitat  
   How foods obtained  
   Where foods found  
   Nesting: type of nest

3. Distribution: Summer areas  
   Winter areas  
   Flyways  
   Effects of habitat on distribution

4. Adaptations: Bills, feet, feathers, etc.

5. Relationships: To habitat  
   To other birds  
   To other organisms

6. Management: Economic aspects

SELECTED BIBLIOGRAPHY

Birds of North America; Robbins, Bruun, Zim; Golden Press

Life Histories of No. American Titmice & Allies; Bent, A.C.; Natl. Museum

Life Histories of No. American Vireos & Allies; Bent, A.C.; Natl. Museum

Life Histories of No. American Wrens & Allies; Bent, A.C.; Natl. Museum

Warblers of North America; Griscom and Sprunt; Devin-Adair Co.
CEDAR WAXWING: Sleek, crested, brown bird, with yellow band on tip of tail; sexes similar. Usually seen in trees and shrubs searching for berries and buds. Uncommon winter visitor.

CUCKOO: Long tailed; brown back with white undersides. Found in thickets and shrub areas.

CATBIRD: Both sexes entirely gray with black crown. Found in thickets and shrub areas. Often nest in lilac bushes in suburban areas.

ROBIN: Sexes similar, gray back and reddish breast. Male somewhat darker than female. Young have speckled breasts. Familiar bird of orchards and backyards.
SPECIES OF BERRY & GROUND FEEDERS FOUND IN MICHIGAN

Cedar Waxwing  
Catbird  
Brown Thrasher  
Mockingbird  
Bluebird  

Robin  
Veery  
Wood Thrush  
Hermit Thrush  

Swainson's Thrush  
Gray-cheeked Thrush  
Black-billed Cuckoo  
Yellow-billed Cuckoo  

All birds in this group are Summer Residents - Sr.

BRIEF DESCRIPTION

The members of this group are larger than sparrows and smaller than pigeons. Food consists mainly of adult insects - as well as their immature forms - and fruits and berries in season. Some of the species in this group are quite secretive and difficult to observe.

THINGS TO LEARN

1. **Identification:** Name - Avian Group  
   Coloration - Male, Female, Immature, seasonal change  
   Field markings - size, color, shape, activity

2. **Habits:**  
   **Feeding:** Foods eaten  
   How foods obtained  
   Where foods found  
   **Nesting:** type of habitat  
   type of nest

3. **Distribution:**  
   Summer areas  
   Winter areas  
   Flyways  
   Effects of habitat on distribution

4. **Adaptations:**  
   Bills, feet, feathers, etc.

5. **Relationships:**  
   To habitat  
   To other birds  
   To other organisms

6. **Management:** Economic aspects

SELECTED BIBLIOGRAPHY

*Birds of America;* Pearson, T.G.; Garden City Books  
*Birds of North America;* Robbins, Bruun, Zim; Golden Press  
BALTIMORE ORIOLE: Male, orange and black; female and young, olive above and yellow below with two white wing bars.

RED-WING BLACKBIRD: Male, black with red shoulder patch; female and young, brown with heavily streaked breast.

COWBIRD: Male, black with dark brown head; female and young, entirely brown.

MEADOWLARK: Sexes similar - brownish streaked back and head; yellow undersides with black "V" on breast.

COMMON GRACKLE: Large iridescent blackbirds; female smaller and less iridescent than male. Young are dark brown with no iridescence.
SPECIES OF BLACKBIRDS COMMON IN MICHIGAN

Baltimore Oriole Sr Eastern Meadowlark Sr
Orchard Oriole USr Western Meadowlark Sr
Red-winged Blackbird Sr Common Grackle Sr
Bobolink Sr Brewer's Blackbird USr
Brown-headed Cowbird Sr Scarlet Tanager Sr

Code: Sr - Summer Resident
U - Uncommon

BRIEF DESCRIPTION

Members of this group are larger than House Sparrows and smaller than pigeons. Their bills are strong, medium in length, and pointed. They feed mainly on insects and seeds. Some forms are colonial nesters, while most are solitary.

THINGS TO LEARN

1. Identification: Name - Avian Group
   Coloration - Male, Female, Immature, seasonal change
   Field markings - size, color, shape, activity

   How foods obtained type of nest
   Where foods found

3. Distribution: Summer areas Flyways
   Winter areas Effects of habitat on distribution

4. Adaptations: Bills, feet, feathers, etc.

5. Relationships: To habitat
   To other birds - Parasitism
   To other organisms

6. Management: Economic aspects

SELECTED BIBLIOGRAPHY

Birds of America; Pearson, T.G.; Garden City Books

Birds of North America; Robbins, Bruun, Zim; Golden Press


Life Histories of Blackbirds, Orioles, and Tanagers of No. America;
Bent, A.C.; U.S. Natl. Museum
SEED EATERS

JUNCO: Smaller than House Sparrow; slate gray with white belly; conspicuous white outer tail feathers.

SONG SPARROW: Mostly brown with heavily streaked breast. Brown spot in center of breast. Sexes similar.

CARDINAL: Male, only all-red bird with crest, larger than sparrows. Female, yellowish-brown with thick red bill.

ROSE-BREASTED GROSBEAK: Male, black back and white underparts with large patch of rose-red on breast. Female, brownish with streaked breast and white line over eye. Thick bill distinguishes this bird from similarly colored sparrows.

COMMON GOLDFINCH: Smaller than House Sparrow. Male, mostly yellow with black wings and crown. Female, olive-yellow with dark wings and two white wing bars.

GOLDFINCH

GROUP 17
SPECIES OF SEED EATERS FOUND IN MICHIGAN

Song Sparrow Sr Slate-colored Junco Pr Savannah Sparrow Sr
Vesper Sparrow Sr Grasshopper Sparrow Sr Snow Bunting Wr
Tree Sparrow Tr White-throated Sparrow Sr Lapland Longspur Wr
Swamp Sparrow Sr White-crowned Sparrow Sr Indigo Bunting Sr
Field Sparrow Sr Chipping Sparrow Sr Pine Siskin Wr
Cardinal Pr Clay-colored Sparrow Sr Red Crossbill Tr
Goldfinch Sr Wr Rose-breasted Grosbeak Sr Dickcissal Sr
Redpoll Tr Wr Evening Grosbeak Wr Horned Lark Sr
Towhee Sr Pine Grosbeak Wr Purple Finch Tr
White-winged Crossbill Tr

Code: Tr - Transient Sr - Summer Resident
Wr - Winter Resident Pr - Permanent Resident

BRIEF DESCRIPTION

Seed Eaters range in size from smaller than House Sparrows to the size of Robins. Bills are characteristically short and thick (conical). These forms feed primarily on seeds, but will also eat insects when available.

THINGS TO LEARN

1. Identification: Name - Avian Group
   Coloration - Male, Female, Immature, seasonal changes
   Field markings - size, color, shape, activity

   How foods obtained type of nest
   Where foods found

3. Distribution: Summer areas Flyways
   Winter areas Effects of habitat on distribution

4. Adaptations: Bills, feet, feathers, etc.

5. Relationships: To habitat
   To other birds
   To other organisms

6. Management: Economic aspects

SELECTED BIBLIOGRAPHY

Birds of America; Pearson, T.G.; Garden City Books

Birds of North America; Robbins, Bruun, Zim; Golden Press

INTRODUCED MICHIGAN BIRDS

HOUSE SPARROW: Familiar sparrow of inhabited areas. Brownish color male has black bib and gray chest. Conical, stout bill; feeds on insects and some grain.

STARLING: Near robin size; black with buff or brown flecking. Bill long and straight; tail short. Common in fields, parks, cities. Feeds on insects and some grain.

ROCK DOVE: Common Pigeon. Smaller than Crow; varies in color; pointed wings and long square tail. Feed on weed seeds and grain.

RINGNECK PHEASANT: Chicken-like; plump body, long tail, short rounded wings. Male, brightly colored; female, buff with dark brown speckling. Found in agricultural areas. Feed on insects, wild and domestic seed, fruits, and berries.
INTRODUCED MICHIGAN BIRDS

House Sparrow 1880's  Pr  Ring-necked Pheasant 1892  Pr
Starling 1886  Sr  Rock Dove (Pigeon)  ??  Pr

Code:  Sr - Summer Resident
       Pr - Permanent Resident

BRIEF DESCRIPTION

These forms have been successfully introduced into the United States. Since their introduction, they have expanded their range over much of the continent.

THINGS TO LEARN

1. Identification:  Name - Avian Group
               Coloration - Male, Female, Immature, seasonal changes
               Field markings - size, color, shape, activity

               How foods obtained
               Where foods found
               Nesting:  type of habitat
                       type of nest

3. Distribution:  Introduction site
                   Effects of habitat on distribution

4. Adaptations:  Bills, feet, feathers, etc.

5. Relationships:  To habitat
                   To other birds - Competition
                   To other organisms

6. Management:  Economic aspects
                 Reasons for introduction
                 Other introduced species
                 Future introductions

SELECTED BIBLIOGRAPHY

Birds of America; Pearson, T.G.; Garden City Books

Birds of North America; Robbins, Bruun, Zim; Golden Press