

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.

.50¢

KNOWING OUR BIRDS

COOPERATIVE EXTENSION SERVICE

NEWAYGO COUNTY

6907 W. 48th St.

Fremont, MI 49412

Phone: 616/924-0500



4-H - Youth Programs
Cooperative Extension Service
Michigan State University

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.

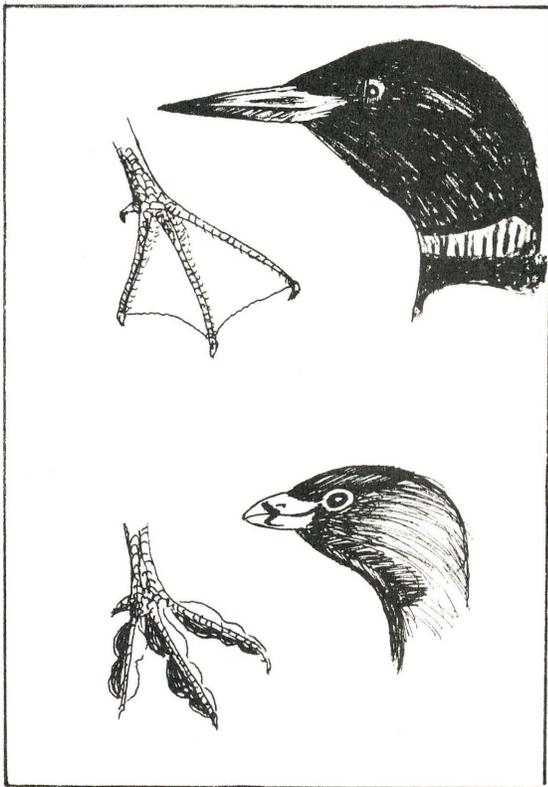
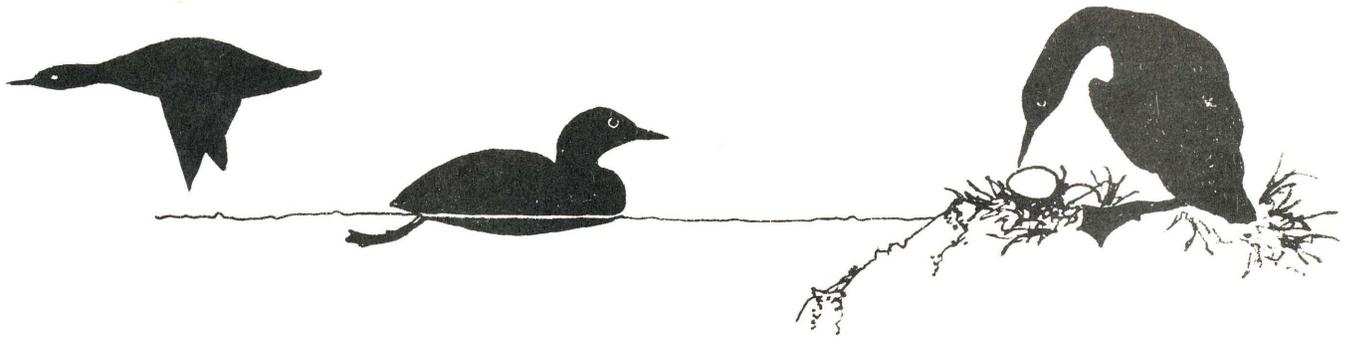
Reference to the suggested projects or teaching units, with activity guidelines added, can aid the student or 4-H member in gaining understanding in Wildlife Conservation - Birds.

*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

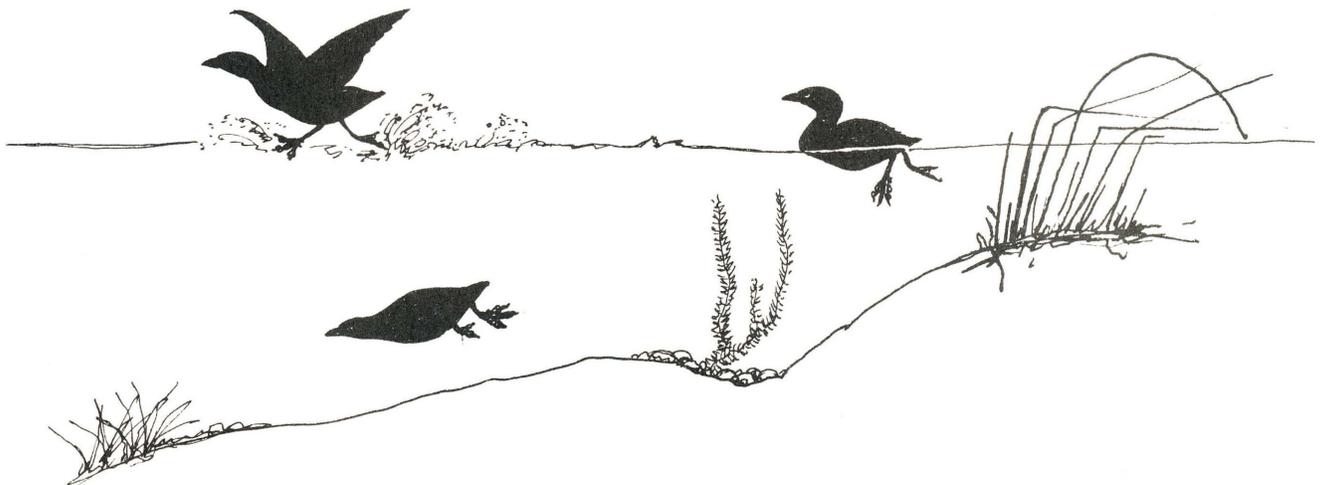
3P-3M-4/76-UP - Fifty cents

DIVING FISHERS



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 UTr

Code: Tr - Transient Sr - Summer Resident U - Uncommon
Wr - 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
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

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.

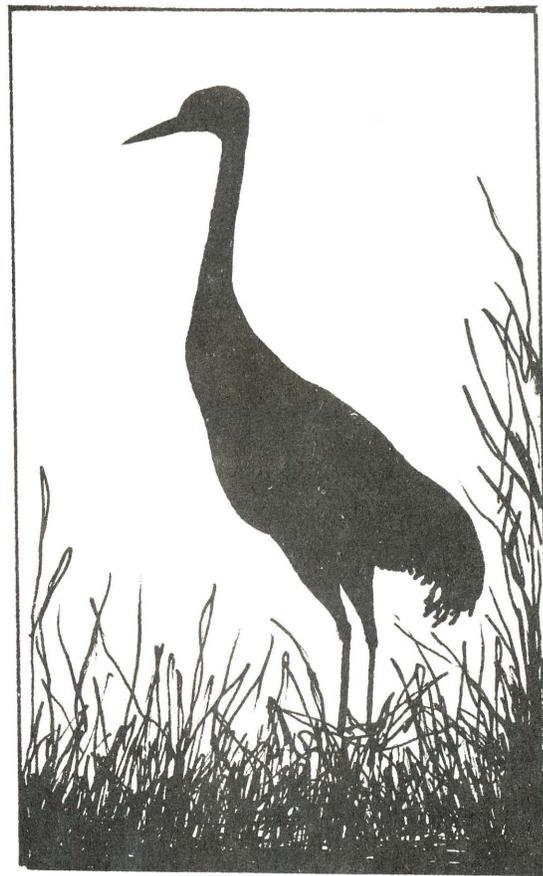
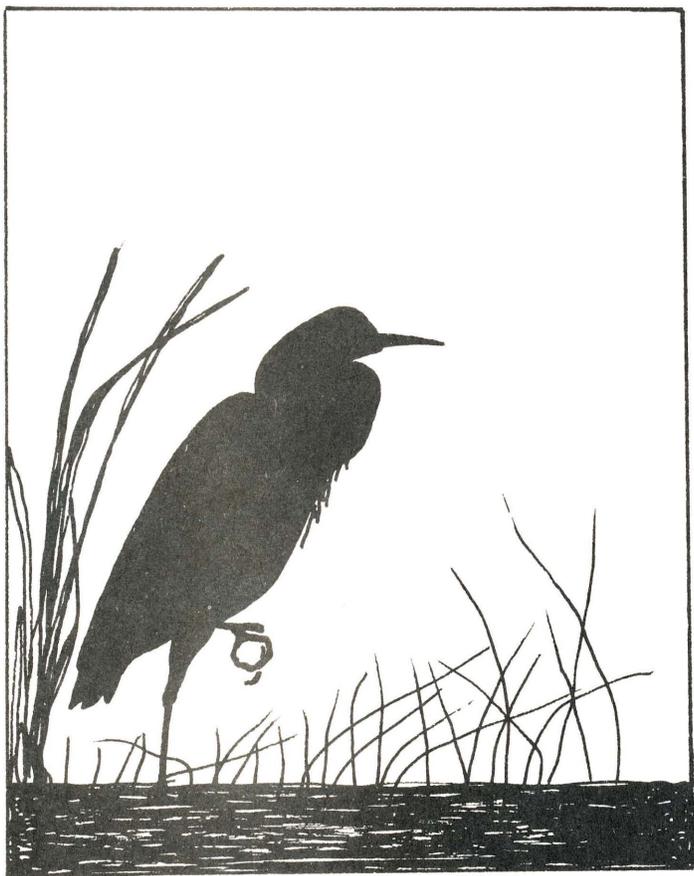
Field Guide to the Birds; Peterson, R.T.; Houghton Mifflin Co.

WADING FISHERS



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.



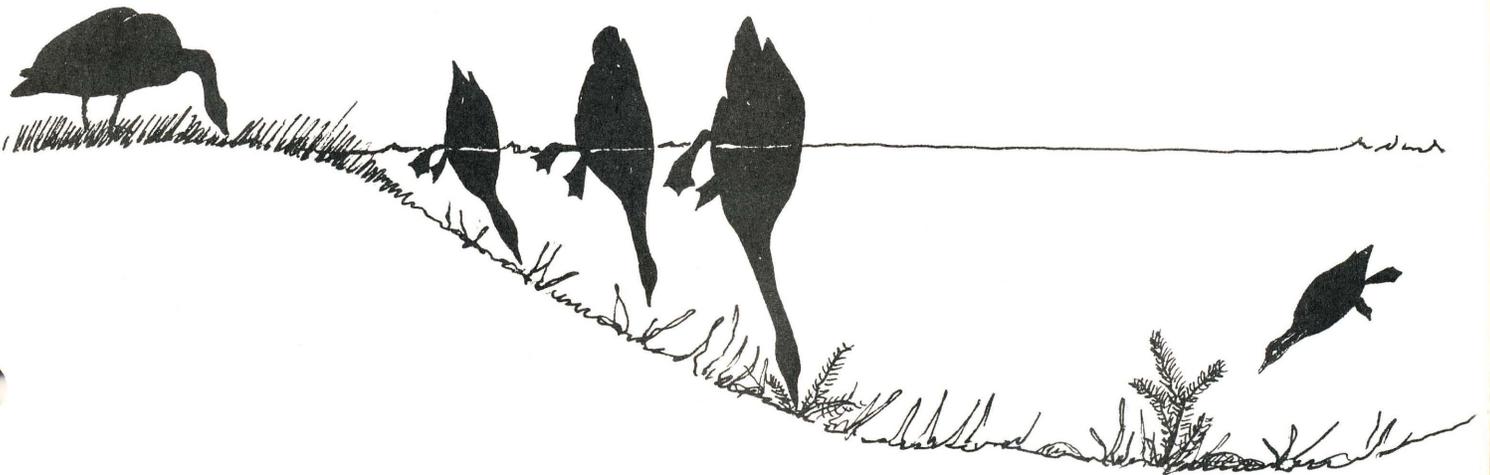
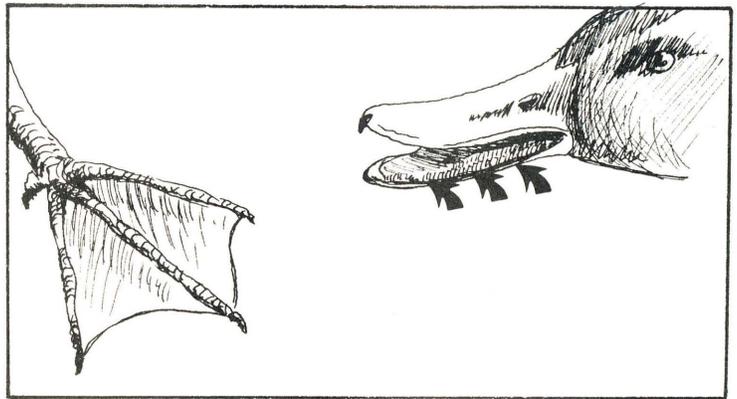
WATERFOWL



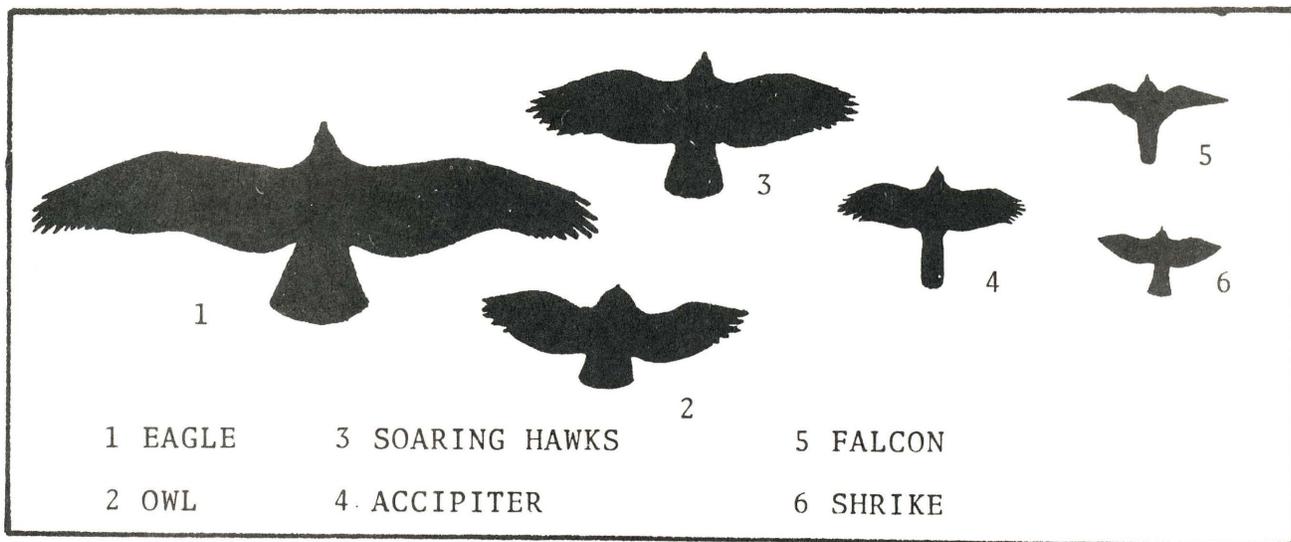
SWAN: Largest waterfowl, all white plumage. Seen in Michigan only during spring and fall migration. Transient

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.

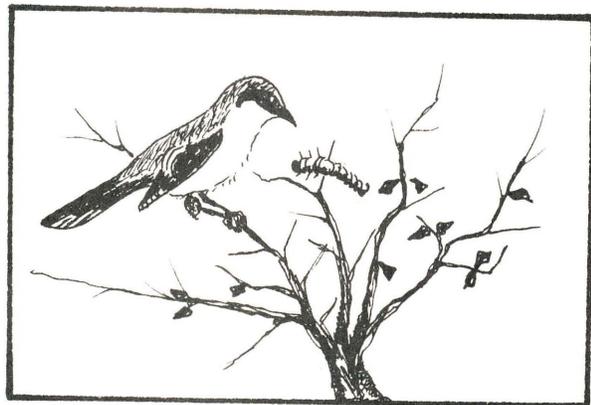
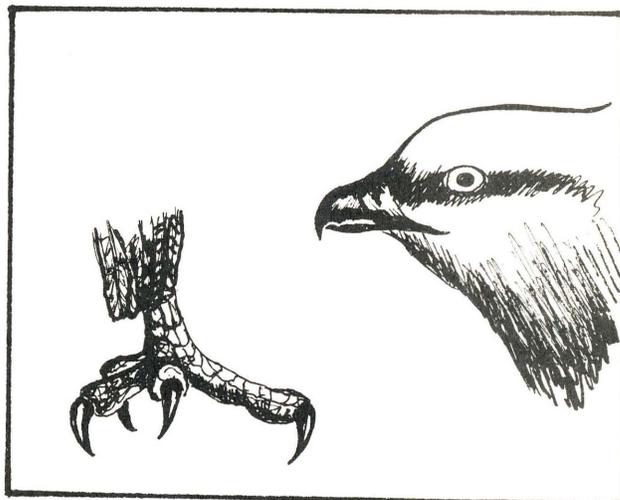


BIRDS OF PREY

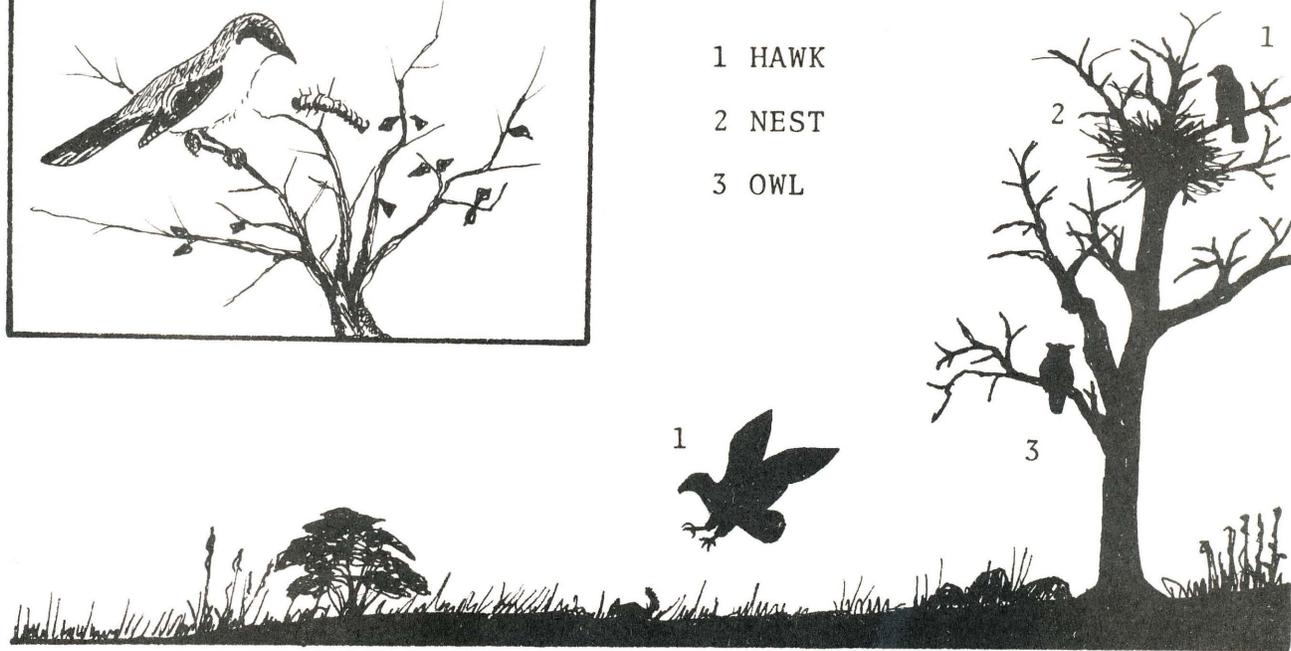


BIRDS OF PREY: Habitat varies. They feed on varied diet of animal life - mammals, birds, insects, fish, amphibians, snakes.

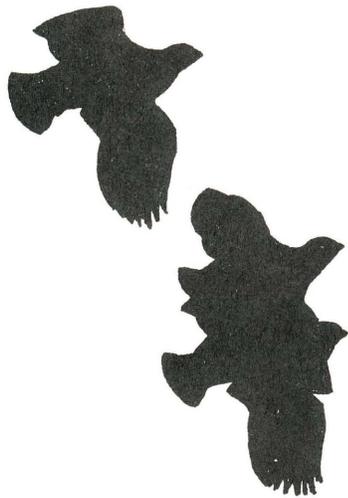
Characteristic features are: a strong bill, strong feet with curved talons, excellent vision and hearing abilities.



- 1 HAWK
- 2 NEST
- 3 OWL



UPLAND GAME BIRDS



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.

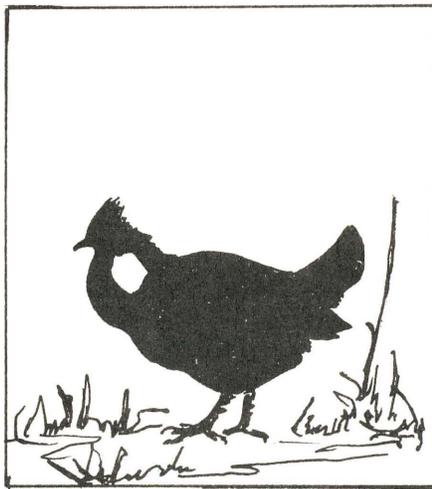
SHARP-TAILED GROUSE: Sexes similar; brownish in color with V-shaped marking on undersides; tail short and pointed. Found in prairie brushlands.

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

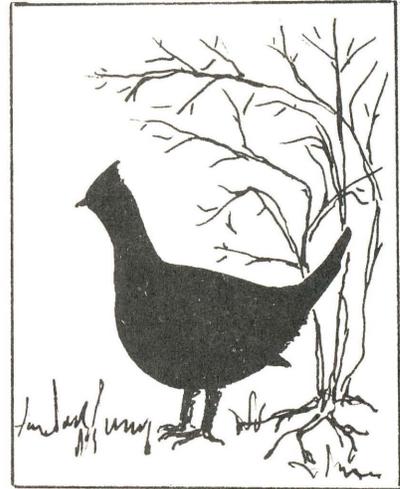
WILD TURKEY: Largest of game birds; male larger, but colors of both sexes similar. In general, brownish-black in color with bronze iridescence throughout plumage. Found in woodland areas.



BOB-WHITE



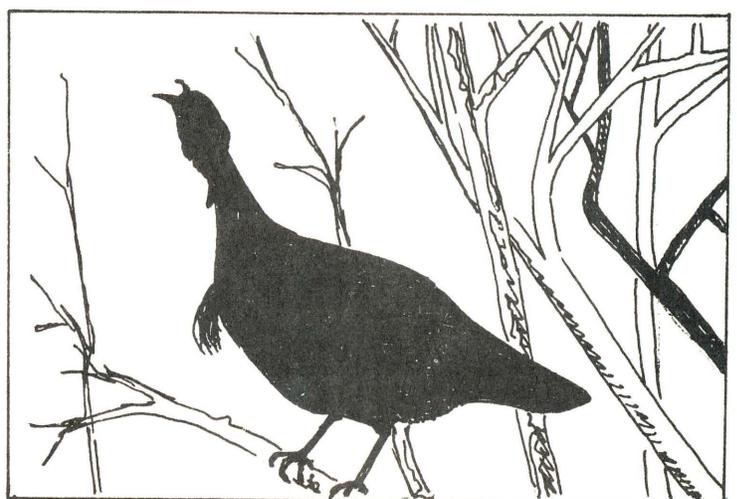
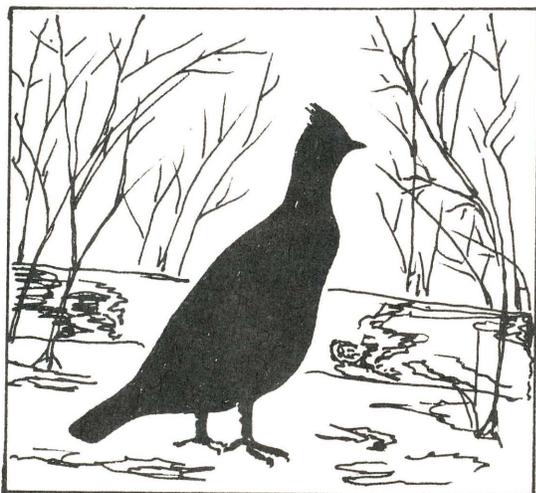
PRAIRIE CHICKEN



SHARP-TAILED GROUSE

RUFFED GROUSE

WILD TURKEY



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

Field Guide to the Birds; Peterson, R.T.; Houghton Mifflin Co.

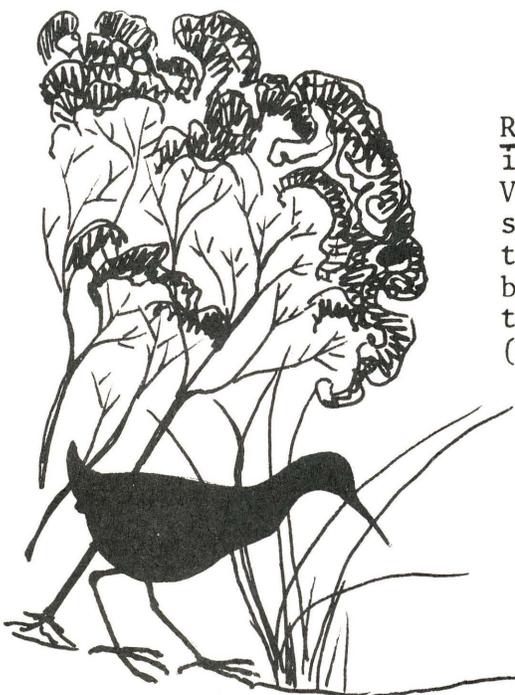
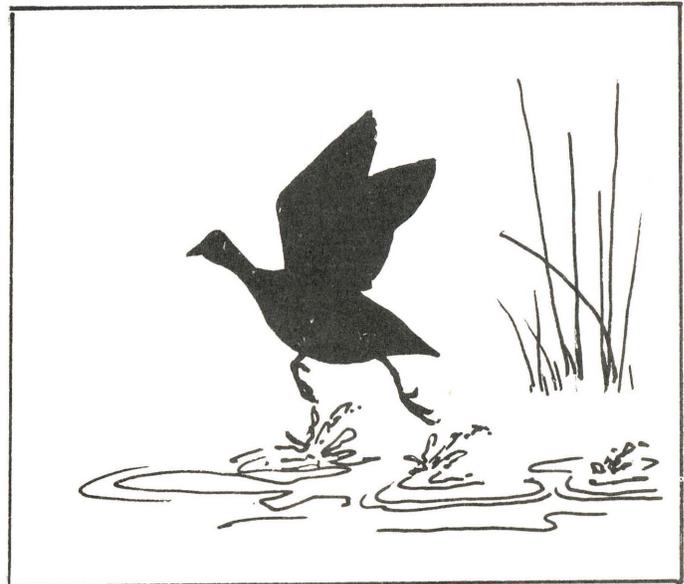
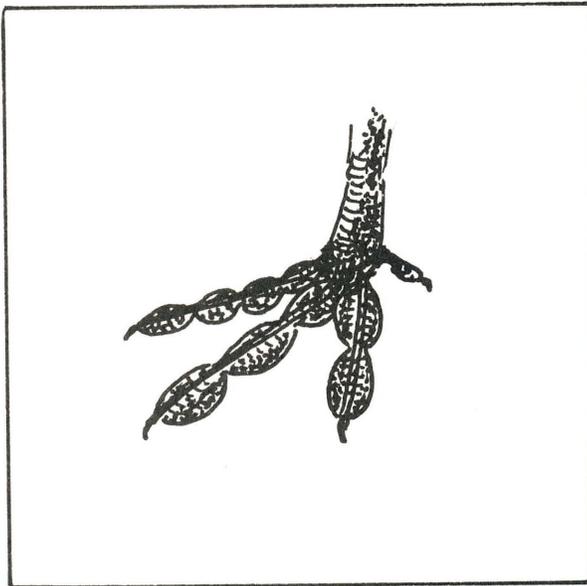
Life Histories of North American Gallinaceous Birds; Bent, A.C.;
U.S. Nat. Museum, Washington, D.C.

Prairie Grouse of Michigan, The; Ammann, G.A.; Mich. Dept. Conservation

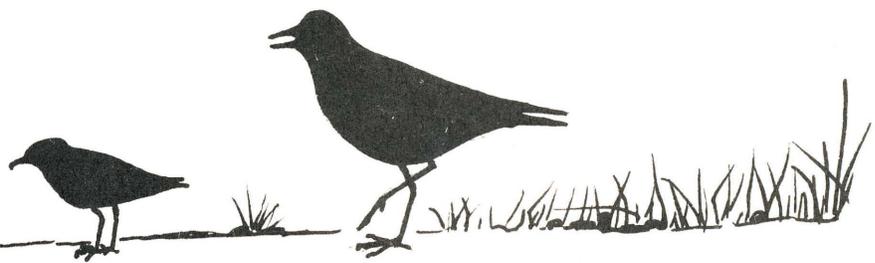
Ruffed Grouse, The; Bump, Darrow, Edminster, Crissney; New York State
Conservation Department

WADING AND SWIMMING INSECTIVORES

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).



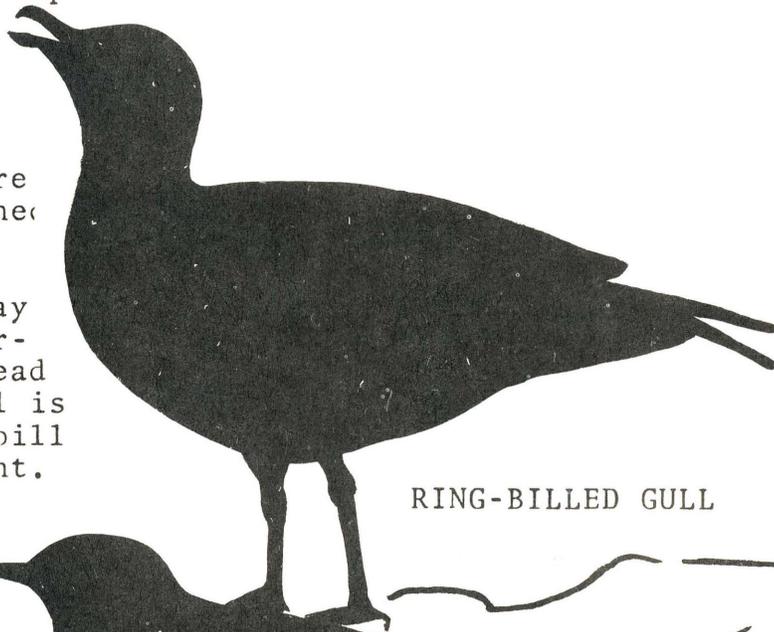
FLYING FISHERS

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.



BELTED KINGFISHER

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.



RING-BILLED GULL

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.

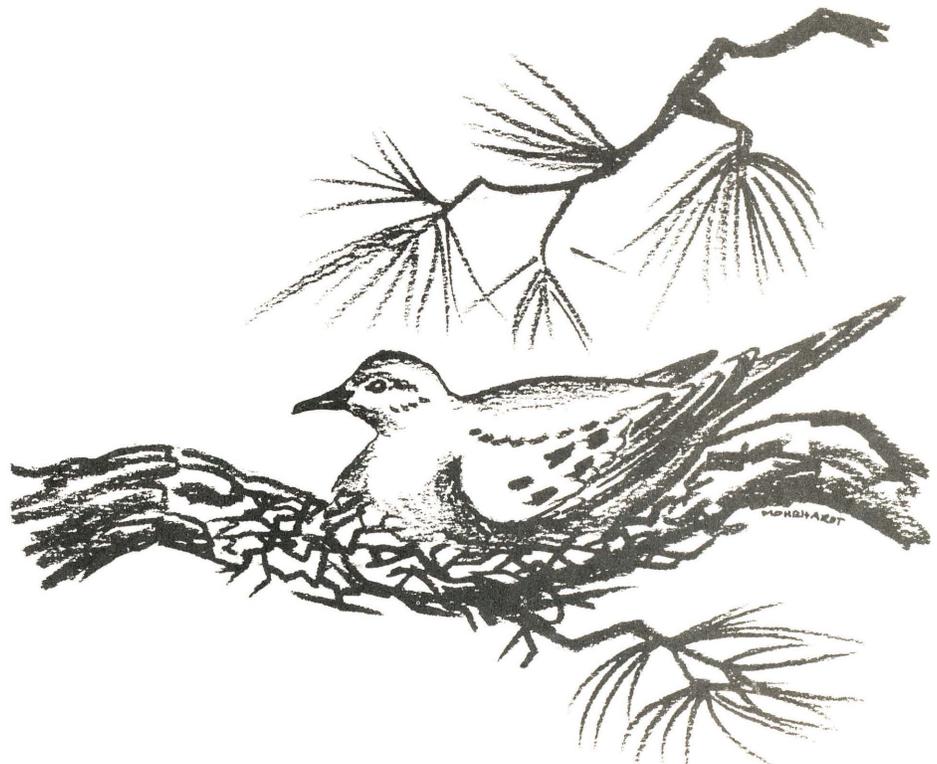


COMMON TERN

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

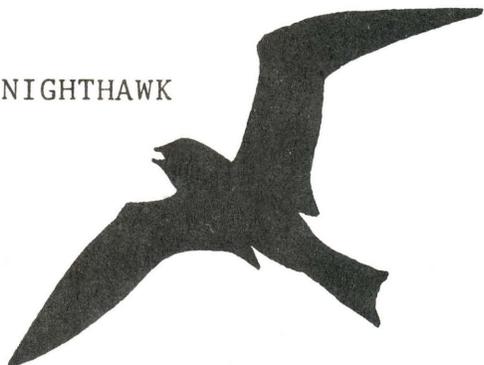
SELECTED BIBLIOGRAPHY

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

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

Field Guide to the Birds; Peterson, R.T.; Houghton Mifflin Co.

NIGHTHAWK



CLIFF SWALLOW



BARN SWALLOW



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

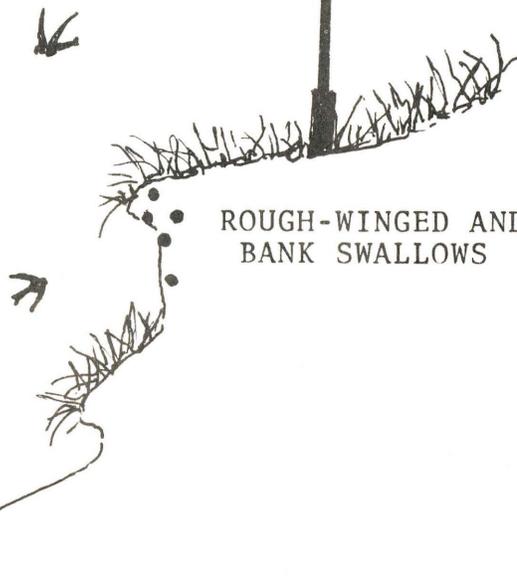
SWALLOWS: The Cliff and Barn Swallow have purple backs and buff undersides; both species build mud nests. The long, forked tail of the Barn Swallow easily separates the two species in the field. Bank and Rough-winged Swallows are brown above, with white undersides. The Bank Swallow has a distinct brown 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.

CHIMNEY SWIFT: Smallest form in this group. Entirely dark brown in color. Wings long and narrow; tail short. Flight is extremely rapid. Common in larger cities.

PURPLE MARTIN



ROUGH-WINGED AND BANK SWALLOWS



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

- Identification: Name - Avian Group
Coloration - Male, Female, Immature
Field markings - size, color, shape, activity
- Habits: Feeding: Foods eaten Nesting: type of habitat
How foods obtained type of nest
Where foods found
- Distribution: Summer areas Flyways
Winter areas Effects of habitat on distribution
- Adaptations: Bills, feet, feathers, etc.
- Relationships: To habitat
To other birds
To other organisms
- Management: Economic aspects

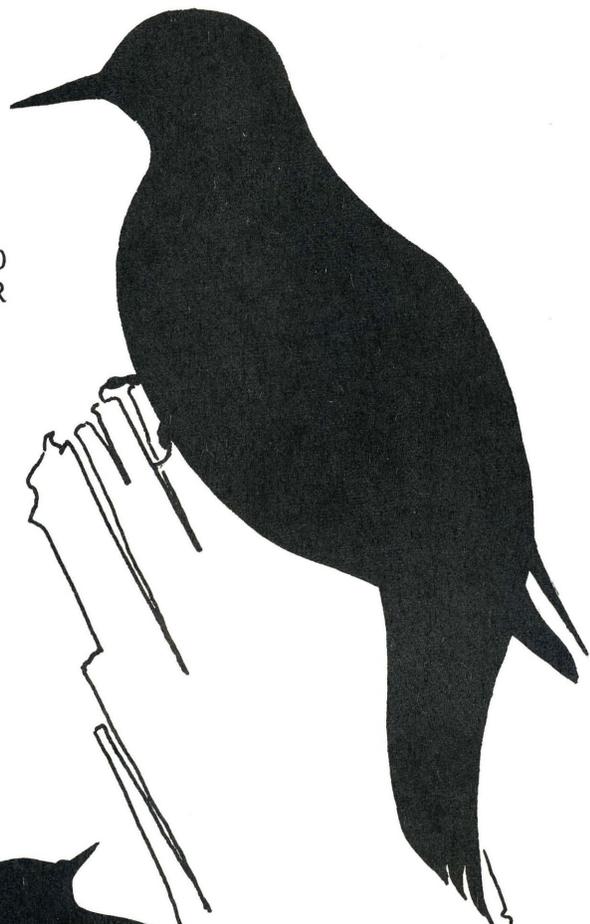
SELECTED BIBLIOGRAPHY

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.

TREE TRUNK GLEANERS

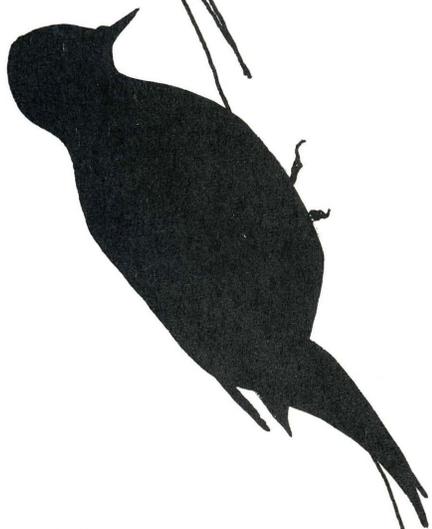
RED-HEADED
WOODPECKERRED-HEADED WOODPECKER:

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.

DOWNY WOODPECKER

WHITE-BREASTED
NUTHATCH

HUMMERS



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
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: Backyard management
Economic aspects

SELECTED BIBLIOGRAPHY

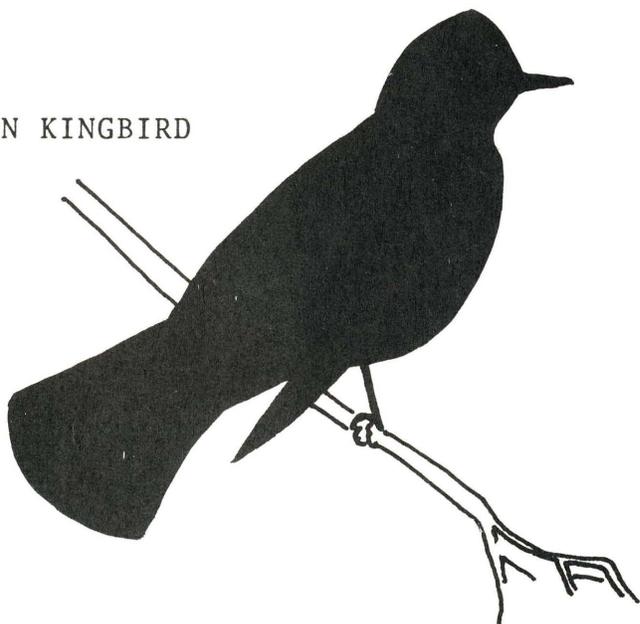
Birds of America; Pearson, T.G.; Garden City Books

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

Field Guide to the Birds; Peterson, R.T.; Houghton Mifflin Co.

FLYING INSECTIVORES

EASTERN KINGBIRD

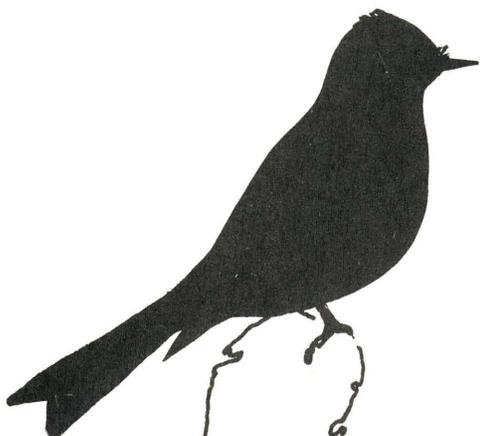
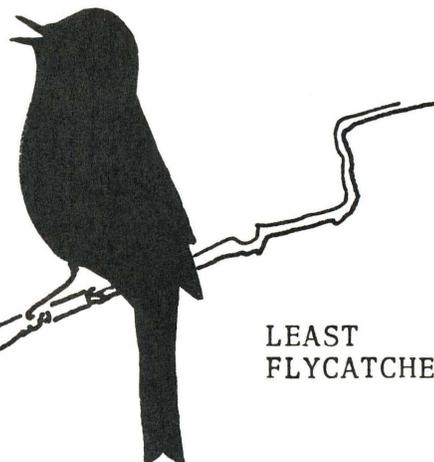


EASTERN KINGBIRD: One of the largest and most aggressive of this group. Undersides white; back, tail, and head are black. White band on tip of tail is conspicuous at rest and in flight. Sexes alike in color.

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.

PHOEBE

LEAST
FLYCATCHER

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 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

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.

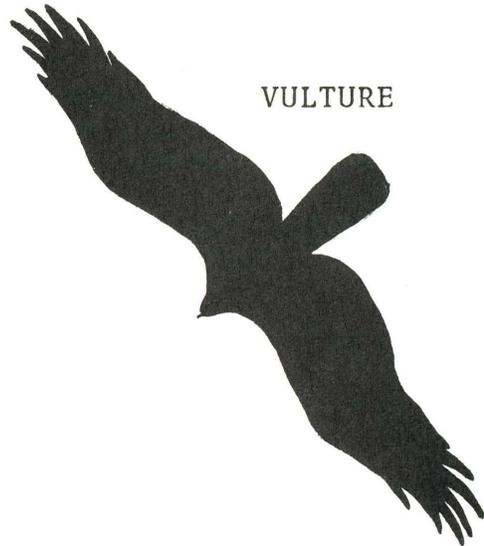
SCAVENGERS



CROW



BLUEJAY

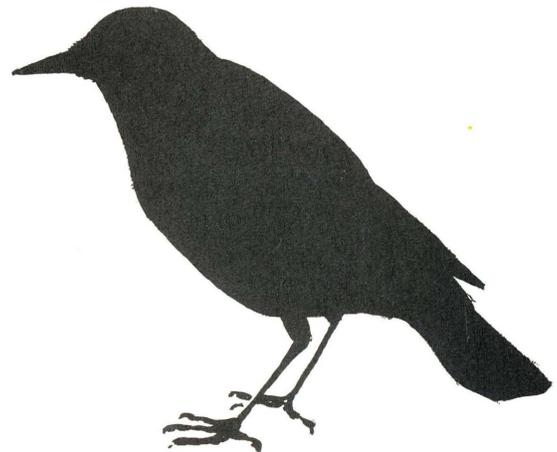
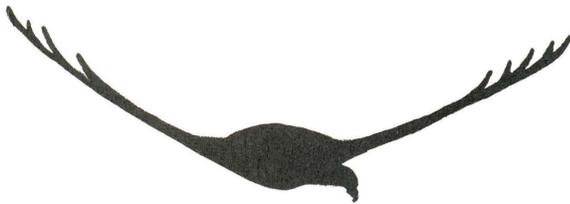
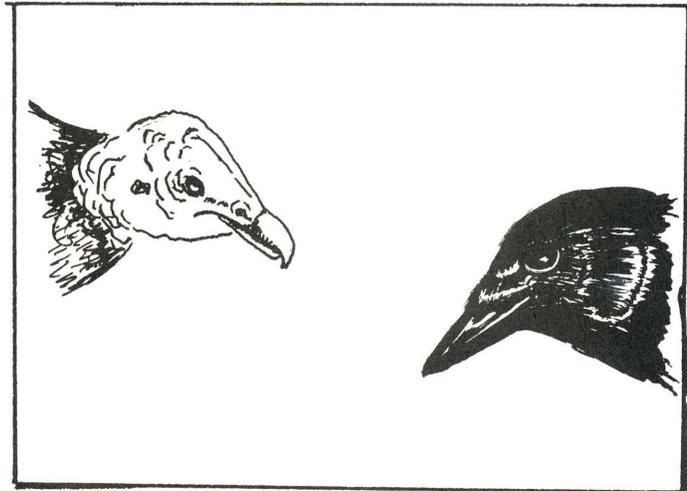


VULTURE

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

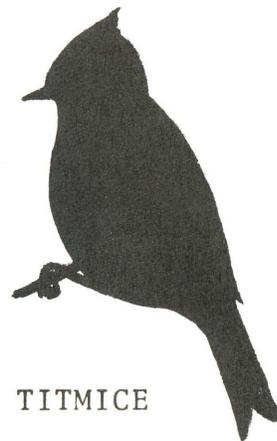
BLUE JAY: Sexes alike; bright blue in color, with white trim on wings and tail; whiteish-gray undersides. Active and noisy birds of wooded areas. Form part of winter bird flock.

VULTURE: Sexes alike; nearly eagle size. Dark blackish-brown in color; head bare, reddish in color.

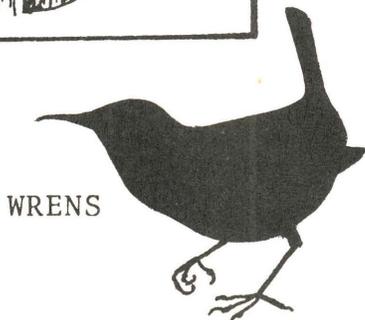




CHICKADEE



TITMICE



WRENS

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.

KINGLETS

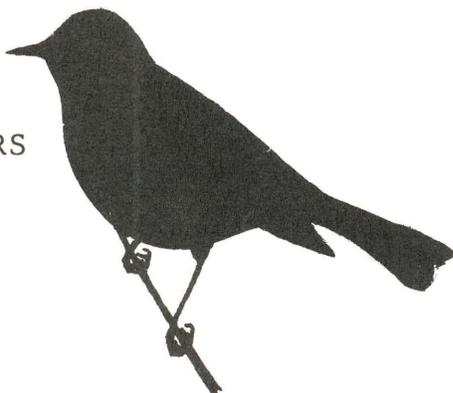


KINGLETS: Both sexes olive-gray. Birds of brush areas. Nervously flick wings while feeding.

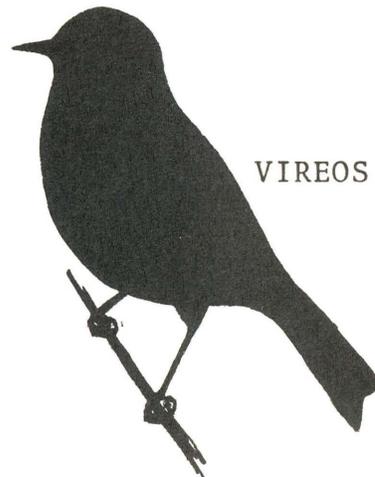
WARBLERS: Blue-gray or olive-green; males usually with patches of bright color. Birds of woods, parks, and brushy areas.

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.

WARBLERS



VIREOS



SPECIES OF SHRUB-FOLIAGE GLEANERS COMMON IN MICHIGAN

Yellow Warbler	Kirtland's Warbler	Golden-crowned Kinglet
Yellow-throat	Chestnut-sided Warbler	Ruby-crowned Kinglet
Palm Warbler	Black & White Warbler	Red-eyed Vireo
Wilson's Warbler	Golden-winged Warbler	Warbling Vireo
Ovenbird	Blue-winged Warbler	Philadelphia Vireo
Redstart	Blackburnian Warbler	Yellow-throated Vireo
Myrtle Warbler	Cape May Warbler	Black-capped Chickadee
House Wren	Black-throated Green Warb.	Blue-gray Gnatcatcher
Winter Wren	Tufted Titmouse	Long-billed Marsh Wren
		Short-billed Marsh Wren

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

BRIEF DESCRIPTION

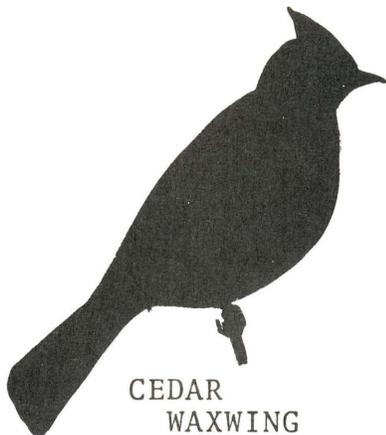
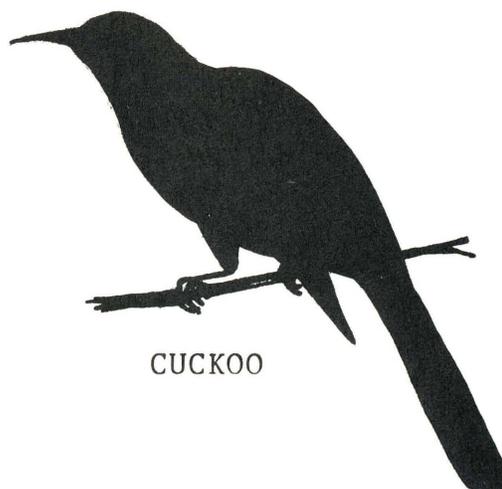
The Shrub-Foliage Gleaners are smaller than House Sparrows. Their bills are small, slender, and pointed and are used for removing adult insects and their immature forms from leaves and twigs. Extremely active birds, spending most of the day eating and singing.

THINGS TO LEARN

- Identification: Name - Avian Group
Coloration - Male, Female, Immature,
Seasonal changes
Field markings - size, color, shape, activity
- Habits: Feeding: Foods eaten Nesting: type of habitat
How foods obtained type of nest
Where foods found
- Distribution: Summer areas Flyways
Winter areas Effects of habitat on distribution
- Adaptations: Bills, feet, feathers, etc.
- Relationships: To habitat
To other birds
To other organisms
- 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

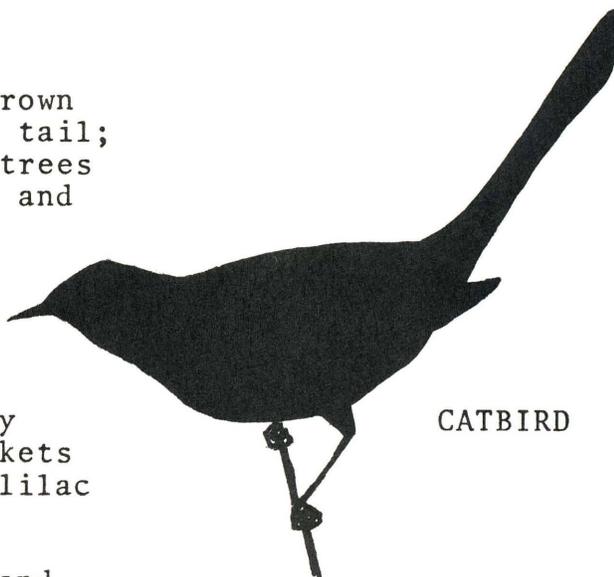
CUCKOO

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.

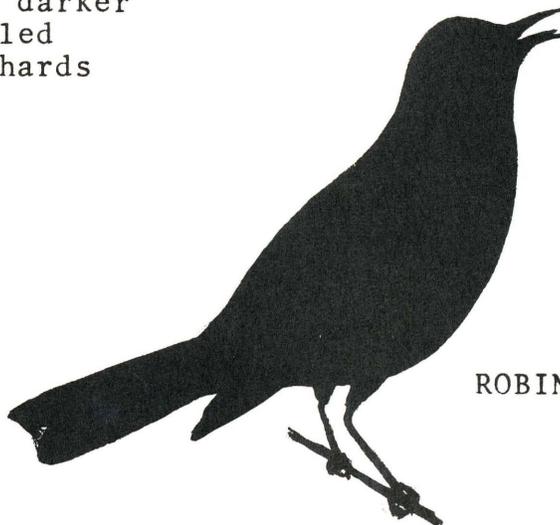
CUCKOO: Long tailed; brown back with white undersides. Found in thickets and shrub areas.

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.



CATBIRD



ROBIN

SPECIES OF BERRY & GROUND FEEDERS FOUND IN MICHIGAN

Cedar Waxwing	Robin	Swainson's Thrush
Catbird	Veery	Gray-cheeked Thrush
Brown Thrasher	Wood Thrush	Black-billed Cuckoo
Mockingbird	Hermit Thrush	Yellow-billed Cuckoo
Bluebird		

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 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

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

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

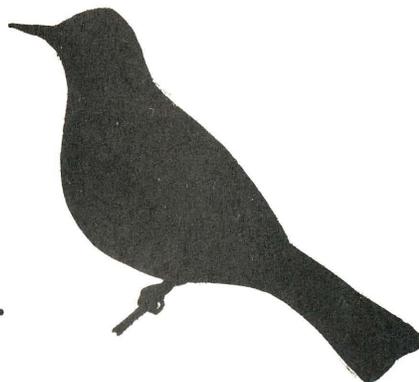
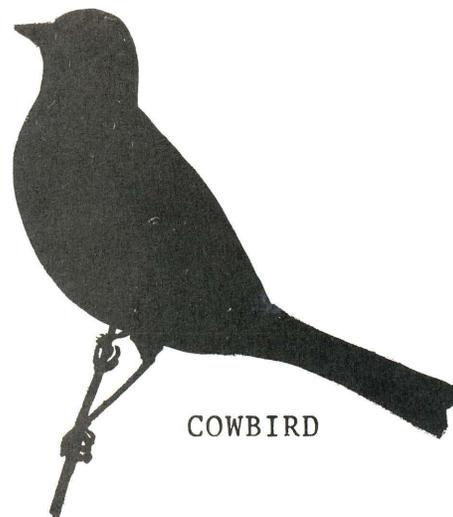
Field Guide to the Birds; Peterson, R.T.; Houghton Mifflin Co.

BLACKBIRDS

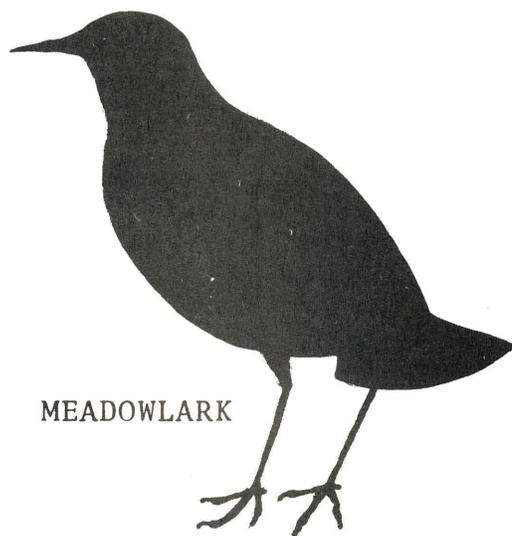
BALTIMORE ORIOLE: Male, orange and black; female and young, olive above and yellow below with two white wing bars.

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

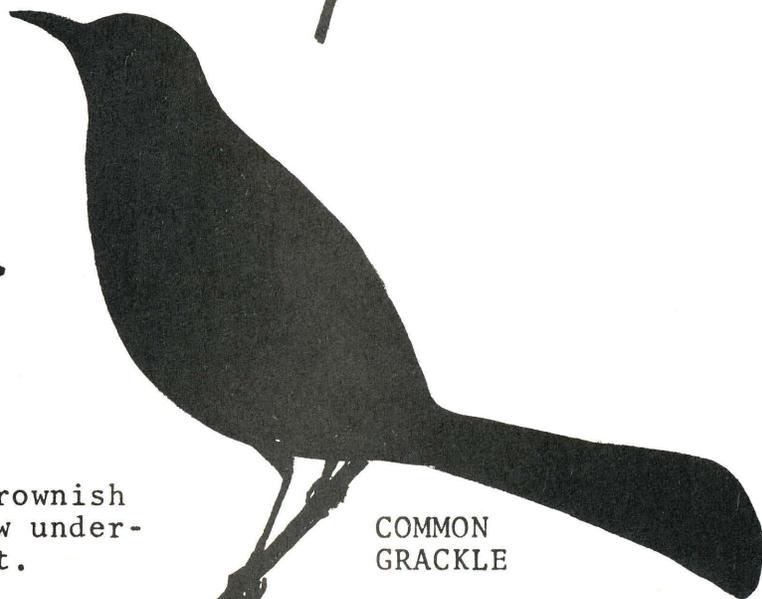
COWBIRD: Male, black with dark brown head; female and young, entirely brown.

BALTIMORE
ORIOLERED-WING
BLACKBIRD

COWBIRD



MEADOWLARK

COMMON
GRACKLE

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

- Identification: Name - Avian Group
Coloration - Male, Female, Immature,
seasonal change
Field markings - size, color, shape, activity
- Habits: Feeding: Foods eaten Nesting: type of habitat
How foods obtained type of nest
Where foods found
- Distribution: Summer areas Flyways
Winter areas Effects of habitat on distribution
- Adaptations: Bills, feet, feathers, etc.
- Relationships: To habitat
To other birds - Parasitism
To other organisms
- Management: Economic aspects

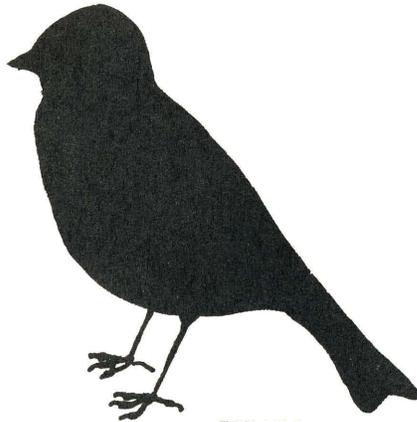
SELECTED BIBLIOGRAPHY

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.

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



JUNCO



SONG SPARROW

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.

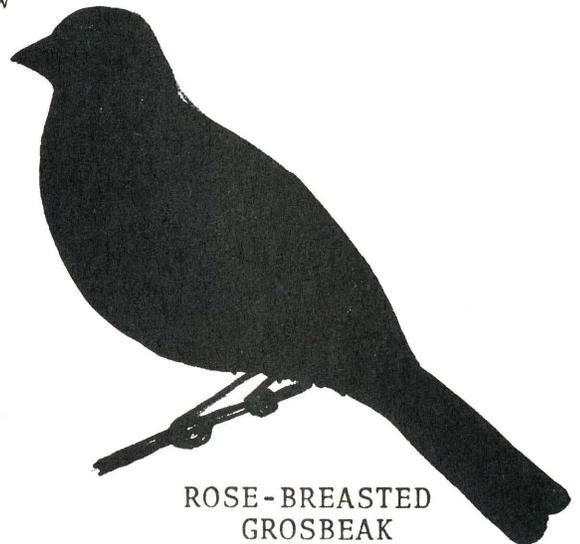
CARDINAL: Male, only all-red bird with crest, larger than sparrows. Female, yellowish-brown with thick red bill.



CARDINAL

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.

ROSE-BREASTED
GROSBEAK

GOLDFINCH

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.



HOUSE SPARROW



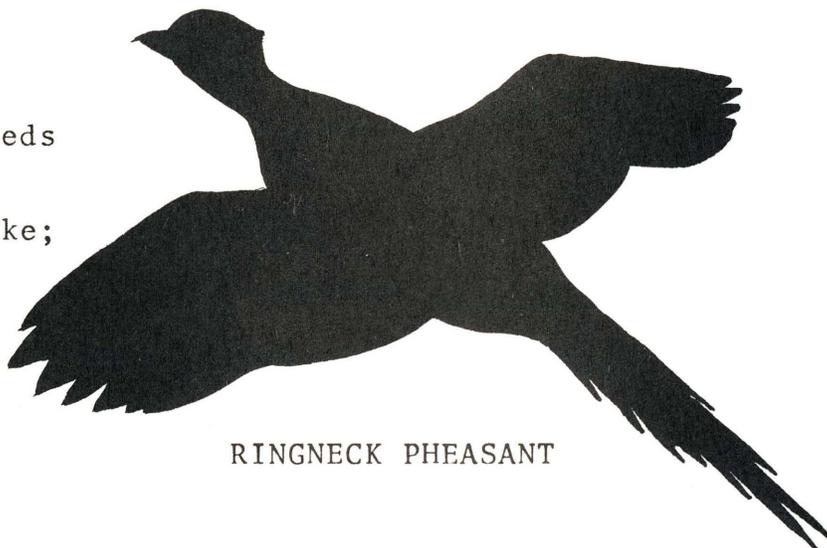
STARLING



ROCK DOVE OR PIGEON

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.



RINGNECK PHEASANT

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

- Identification: Name - Avian Group
Coloration - Male, Female, Immature,
seasonal changes
Field markings - size, color, shape, activity
- Habits: Feeding: Foods eaten Nesting: type of habitat
How foods obtained type of nest
Where foods found
- Distribution: Introduction site
Effects of habitat on distribution
- Adaptations: Bills, feet, feathers, etc.
- Relationships: To habitat
To other birds - Competition
To other organisms
- Management: Economic aspects Other introduced species
Reasons for introduction Future introductions

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.