

Maryland Envirothon: Class Aves

WILDLIFE AND HERITAGE
SERVICE



Nov 2024 edit by K. Gorsuch/S. Wilcher, original author Kerry Winkler, all photos by K. Winkler unless otherwise stated.
Note: All scientific names are per field guide editions used by Envirothon; taxonomy may have changed.

Top: George Nickley
Bottom: Dean Newman, Wayne Zussman

Aves Overview

- >450 species in Maryland
- Extirpated species include:
 - Bewick's Wren
 - Greater Prairie Chicken
 - Red-cockaded Woodpecker
- "Allies" = similar species



American Woodcock (*Scolopax minor*) chick

Note: This guide is an overview of select species found in Maryland. The taxonomy and descriptions are based off Peterson Field Guide to Birds of Eastern and Central North America, 7th Ed.

Order: Anseriformes

- Web-footed waterfowl
- Family Anatidae
 - Ducks, geese, & swans



Male and Female Wood Ducks (*Aix sponsa*)

Order: Anseriformes

Left to right: Stephen Hayes,
Dean Newman

Cygnus - Swans



Mute Swan
(*Cygnus olor*)

Invasive. Adult black-knobbed orange bill tilts down; immature is dingy with pinkish bill; makes hissing and wheezing sounds, weak bugling

Tundra Swan
(*Cygnus columbianus*)

Winter resident. Adult bill black, usually with small yellow basal spot; immature is dingy in color with pinkish bill; makes mellow, high-pitched cooing

Trumpeter Swan
(*Cygnus buccinator*)

Winter resident. Adult all black bill with straight ridge; deep, nasal calls described as bugle-like

Order: Anseriformes; Family: Anatidae

Left to Right: Kerry Wikard, Matthew Bazal, some rights reserved (CC BY-NC); Top: Andrew M. Branstetter, some rights reserved (CC BY-NC); Bottom: Ronak, CC

Dabbling Ducks- feed by dabbling & upending



American Black Duck (*Anas rubripes*)

Year-round resident. Dusky black duck with white wing linings evident in flight; resembles a female mallard but has black borders on secondary wing feathers; can hybridize with mallards



Mallard (*Anas platyrhynchos*)

Year-round resident. Adult males have green head w/ white neck ring & females are mottled in color; resembles an American Black Duck mallard but has white borders on secondary wing feathers

Order: Anseriformes; Family: Anatidae

From left: Bull Hubick, Kerry Wikard

Diving Ducks- feed by diving; legs close to tail



Canvasback (*Aythya valisineria*)

Winter resident. Male is whitish with black chest & reddish brown head with sloping bill; male voice cooing noise & female a raspy *krrr*



Redhead (*Aythya americana*)

Winter resident. Male is gray with black chest & reddish head; has grayish bill with black tip; male voice a harsh *meow* & female a soft *krrr*

Order: Anseriformes; Family: Anatidae

Left: Judy Dalglishen, some rights reserved (CC BY-NC); Top: Andrew M. Branstetter, some rights reserved (CC BY-NC); Bottom: Ronak, CC

Mergansers- slender-bodied diving ducks w/spikelike bill



Common Merganser (*Mergus merganser*)

Winter resident. Male has whitish body w/ green/black head & white chest; female & immature have reddish head, white chin & white chest

Red-breasted Merganser (*Mergus serrator*)

Winter resident. Male has greenish head w/crest, white band on neck & mottled chest; female & immature are gray w/ crest and have rusty head that blends into chest

Order: Anseriformes; **Family: Anatidae**

From left: Bill Haddock, Matthew Addicks, Dave Giglio

Order: Galliformes

- "Chicken-like" birds
- Includes many upland game birds
- Family Odontophoridae
 - Northern Bobwhite
- Family Phasianidae
 - Grouse, turkeys, & the like

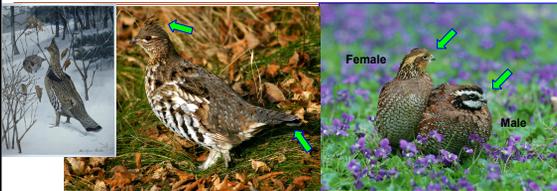


Wild Turkey (*Meleagris gallopavo*)

Above: Erik Yetter

Order: Galliformes

Gallinaceous Birds



Ruffed Grouse (*Bonasa umbellus*)

Year-round resident in western MD. Rusty or gray in color with broad, black band near tip of tail; male display includes drumming that sounds like distant motor; omnivore

Northern Bobwhite (*Colinus virginianus*)

Year-round resident. Small and round, males have white eyebrow stripe and chin white; females have buff marks; whistles bob-white; omnivore

Order: Galliformes

From left: Louis Agassiz Fuentes, Aurore Gieser/USFWS, Steve Mastowski/USFWS

**Order:
Pelecaniformes**

- Large, long-legged wading birds with large bills
- Family Ardeidae
 - Bitterns, herons & allies
- Storks in their own order



Cattle Egrets (*Bubulcus ibis*) are **adventive** (naturally expanded their range). They are medium-sized wading birds with buff orange crowns & beards during breeding season.

Order: Pelecaniformes

Above: Wendy Crooks

Hérons- long-legged & long-necked wading birds

Great Blue Heron (*Ardea herodias*)

Year-round resident. Large, blue-gray bird w/ yellow, dagger-like bill; very common
Voice: deep, harsh croaks

Little Blue Heron (*Egretta caerulea*)

Summer resident on eastern shore. Small, slender heron with maroon-brown neck and bluish-gray back; grayish bill
Voice: loud, nasal scaah



Little Blue Heron

Great Blue Heron

From left: Jon Carcoron, J Patrick Brooks

Order: Pelecaniformes; Family: Ardeidae

Egrets- typically whitish herons



Great Egret (*Ardea alba*)

Summer resident w/ lower shore having year-round residents. Large, white heron w/ yellow bill & black legs and feet; found in marshes, ponds & shores



Snowy Egret (*Egretta thula*)

Summer resident w/ lower shore having year-round residents. Medium-sized w/ black bill & legs and yellow feet; lores yellow; found in marshes, swamps, & tidal flats

Order: Pelecaniformes; Family: Ardeidae

Left: Jennifer Donnelly
Right: Jonathan Inons, Bill Reichardt

Order: Charadriiformes

- Large group! Select families include:
 - Family Charadriidae
 - Plovers
 - Family Scolopacidae
 - Sandpipers, phalaropes, & allies
 - Family Laridae
 - Gulls, terns, & skimmers



The Black Skimmer (*Rhynchops niger*) is a state-endangered breeding bird that has an uneven bill that allows it to skim water for fish and other food.

Order: Charadriiformes

Above: Scott Houston

American Woodcock (*Scolopax minor*)

- Year-round/summer resident
- Woodland shorebird
- Long bill w/ large eyes
- Leaflike coloration
- Voice: nasally beezp



Order: Charadriiformes, Family: Scolopacidae

From left: Rob Holtz, Josh Emri, some rights reserved (CC BY-NC)

Order: Accipitriformes

- Day-flying (diurnal) raptors with hooked bill and pointed claws
- Family Accipitridae
 - Hawks, kites, eagles & allies
- Family Pandionidae
 - Ospreys
- Family Cathartidae
 - New World Vultures



Osprey

Order: Accipitriformes

Above: Amy Dosselt

Bald Eagle (*Haliaeetus leucocephalus*)



- National bird of US
- Adult: white head & tail w/ yellow bill
- 1st yr: mostly dark w/whitish wing linings
- 2nd & 3rd yr: mottled w/white on belly and back
- Voice: harsh, high-pitched cackle



Order: Accipitriformes; Family: Accipitridae

From left: Tasha Wadkins, Ink Byers

Accipiters- hawks w/ short, rounded wings



Sharp-shinned Hawk
(*Accipiter striatus*)

Year-round resident. Slim hawk w/ square tipped tail; adult w/ dark back & rusty-banded breast while immature has dark brown above
Voice: a high *kik, kik, kik*



Cooper's Hawk
(*Accipiter cooperii*)

Year-round resident. Like Sharp-shinned Hawk but larger; has rounded tail
Voice: rapid *kek, kek, kek*

Order: Accipitriformes; Family: Accipitridae

Left: Jim Szasz, Stephen John Davies
Right: Steve May, Stacy Steinberg

Buteos- stocky hawks w/ broad wings



Red-tailed Hawk
(*Buteo jamaicensis*)

Year-round resident. Common along roadsides. Notable red tail from top-side; light breast w/ dark belly-band
Voice: *keeeer-r-r*
Call commonly used for eagles in movies & tv



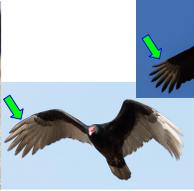
Red-shouldered Hawk
(*Buteo lineatus*)

Year-round resident. Adult has black and white bands on wings and tail w/ reddish shoulders, chest, & underparts
Voice: *key-yer*

Order: Accipitriformes; Family: Accipitridae

Left: Fredrick Weener, Bill Hubrock
Right: Dave Gagliotti, Orietta Estrada

New World Vultures



Turkey Vulture
(*Cathartes aura*)

Year-round resident. Nearly 6 ft wingspan; adult has naked red head and two toned wings; primarily a scavenger

Black Vulture
(*Coragyps atratus*)

Year-round resident. Less than 5 ft wingspan w/ whitish patch toward wingtips; grayish/lightly feathered head

Order: Accipitriformes; Family: Cathartidae

From Left: Elena Gilroy, Susan Youngs, Chelsea Estrada, Elena Gilroy

Order: Strigiformes

- Mostly nocturnal birds of prey
- Large heads w/flat faces & hooked bills
- Family Tytonidae
 - Barn Owl
- Family Strigidae
 - "Typical" owls



Barn Owl (*Tyto alba*)

Order: Strigiformes

From left: Don C Johnson, Sarah Milbourne

Medium-Large Owls



Great Horned Owl
(*Bubo virginianus*)

Year-round resident. Common. Large owl w/ear tufts; white throat bib
Voice: hoo hu-hu-hu, hoo! hoo!

Barred Owl
(*Strix varia*)

Year-round resident. Common. Large owl w/o ear tufts; barred chest
Voice: who cooks for you

Snowy Owl
(*Bubo scandiacus*)

Irruptive (occasional winter visitor). Large, white owl with black flecks; yellow eyes

Order: Strigiformes; Family: Strigidae

From left: Shannon Berner, Scott Sutorio, Kerry Winkler

Eastern Screech Owl (*Megascops asio*)

- Year-round resident; small owl
- Common/ generalist w/ varied diet
- red or grey morph (color variations)
- Voice: mournful whiny or wail



Order: Strigiformes; Family: Strigidae

From left: Larry Hitchens, Sarah Milbourne

Order: Caprimulgiformes

- Family Caprimulgidae
 - Nightjars
 - Nocturnal birds w/ large tails
 - Rest on limbs or ground
 - Camouflaged by pattern



Common Nighthawks (*Chordeiles minor*) are best identified in flight by their white wing bars or by call which is a nasally *peer* or *pee-ik*.

Order: Caprimulgiformes; Family: Caprimulgidae

From left: Jonathan Iorns, some rights reserved (CC BY-NC); Bill Flanck

Order: Cuculiformes

- Cuckoos, roadrunners, & anis
- Family Cuculidae
 - Slender, long-tailed birds w/ curved bills



Black-billed Cuckoo (*Coccyzus erythrophthalmus*) has a black lower mandible & red orbital ring. This one is eating eastern tent caterpillars.



Yellow-billed Cuckoo (*Coccyzus americanus*) has a yellow lower mandible.

Order: Cuculiformes; Family: Cuculidae

From left: Bill Hamrick, Andy Connelly

Order: Piciformes

- Birds w/ chisel-like bills
- Have long tongues
- Zygodactyl feet
 - two toes in front & rear
- Family Picidae
 - woodpeckers & allies



The Red-headed Woodpecker (*Meienerpes erythrocephalus*) is a year-round resident in Maryland.

Order: Piciformes; Family: Picidae

Above: Matt Ferguson

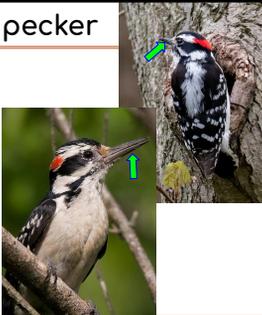
Downy vs Hairy Woodpecker

Downy Woodpecker (*Dryobates pubescens*)

Year-round resident. Common. White back w/ small bill; outer tail feathers spotted; males have red patch on heads
Voice: flat pick!

Hairy Woodpecker (*Dryobates villosus*)

Year-round resident. Common. White back w/ large bill and white outer feathers; male has red patch on head
Voice: sharp peek!



Order: Piciformes; Family: Picidae

From left: Frode Jacobsen, some rights reserved (CC BY-NC); Colin McNaught

Other Woodpeckers



Male

Red-bellied Woodpecker (*Meienerpes carolinus*)

Year-round resident. Adult stripe-backed w/red crown & neck on male and red neck on female



Male

Northern Flicker (*Colaptes auratus*)

Year-round resident. Barred brown back w/ gray cap & black ring on chest; males have black "mustache"



Male

Pileated Woodpecker (*Dryocopus pileatus*)

Year-round resident. Largest local woodpecker w/ flaming red crest; males have red "mustache"

Order: Piciformes; Family: Picidae

From left: Heather Betz, Michael Osborne, Theresa Shoup

Order: Passeriformes

• Very large group! Select families include:

- Family Mimidae
 - Mimic thrushes
- Family Parulidae
 - Wood-warblers
- Families Emberizidae & Passerellidae
 - Buntings & Sparrows
- Family Cardinalidae
 - Cardinals & allies
- Family Icteridae
 - Blackbirds, orioles, grackles



Male Baltimore Oriole

Order: Passeriformes

Above: Bob Weingart

Mimidae



Brown Thrasher
(*Toxostoma rufum*)

Mostly **year-round resident**. Chestnut brown above w/ heavily streaked breast; has curved bill & long tail
Voice: similar to Gray Catbird but in pairs

Gray Catbird
(*Dumetella carolinensis*)

Mostly **year-round resident**. Gray bird w/ black cap & rusty patch undertail
Voice: catlike mewling

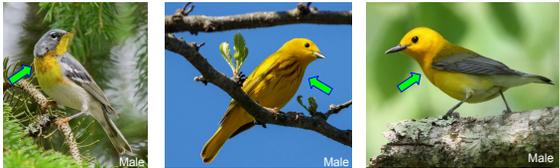
Northern Mockingbird
(*Mimus polyglottos*)

Year-round resident. Gray robin-sized bird w/ large white patches on wings and tail
Voice: varied mimics often repeated a half dozen times

Order: Passeriformes; Family: Mimidae

From left: Bradley Simpson, Mark Johnson, Mark Johnson

Warblers



Northern Parula
(*Setophaga americana*)

Summer resident. Pale bluish above w/ yellow throat & breast; adult male has dark breast-band
Voice: zeeeeeeeeee-up!

Yellow Warbler
(*Setophaga petechia*)

Summer resident. Mostly yellow; male has rusty breast streaks
Voice: tsee-tsee-tsee-tsee-titi-weee

Prothonotary Warbler
(*Protonotaria citrea*)

Summer resident. Golden color; male breast & head are yellow w/ blue-gray wings
Voice: zweet zweet zweet zweet zweet zweet

Order: Passeriformes; Family: Parulidae

From left: Lawrence Martin, Dennis Murphy, Litan Gardner

Winter Sparrows



White-throated Sparrow
(*Zonotrichia albicollis*)
Winter resident. Adult has gray breast w/ white throat & yellow above lores; bill gray

White-Crowned Sparrow
(*Zonotrichia leucophrys*)
Winter resident. Adult has clear, grayish breast w/ black & white striped crown

Dark-eyed Junco
(*Junco hyemalis*)
Winter resident. Dark gray bird w/white belly & light bill; common feeder visitor

Order: Passeriformes, Family: Passerellidae

From left: Frank Yantis, Jon Coronado, Elena Gilroy

Cardinals & Allies



Northern Cardinal
(*Cardinalis cardinalis*)
Year-round resident. Male all red w/ crest & black patch around conical bill
Voice: clear, slurred whistles repeated

Blue Grosbeak
(*Passerina caerulea*)
Summer resident. Adult male blue w/ rusty wing bars, female brown w/ rusty wing bars
Voice: warbling song w/ phrases rising & falling

Indigo Bunting
(*Passerina cyanea*)
Summer resident. Breeding male blue & small; female & miniature medium brown
Voice: lively song, usually paired with sweet-sweet

Order: Passeriformes, Family: Cardinalidae

From left: Matthew Addicks, Eric Yellor, Monica Martin

Migratory Bird Treaty Act of 1918

- International treaty w/Canada, Japan, Mexico, Russia
- Protects all native species of birds, their nests, eggs, parts, etc.
- Prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species
- Excludes non-native & invasive species
 - Ex: European Starlings, House Sparrows, etc



Birds like herons were once exploited due to their feathers. The Act prohibits taking feathers from protected bird species.

<https://www.fws.gov/law/migratory-bird-treaty-act-1918>

Left: Library of Congress, 1912
Right: Library of Congress, 1886

For Additional Information

For more information on Maryland's birds, please visit our webpage at: dnr.maryland.gov/wildlife
Additional information can be found in the following resources.

Book Resources:

- Peterson Field Guide to Birds of Eastern and Central North America, 7th Ed

Online Resources:

- [Maryland Environment \(Wildlife and Heritage Service\)](#)
- [Birds of Maryland \(MDC, DNR\)](#)
- [Maryland Biodiversity Project \(Birds\)](#)
- [The Cornell Lab of Ornithology: All About Birds](#)



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For questions about this presentation, contact Sarah Wichee at sarah.wichee1@maryland.gov.
