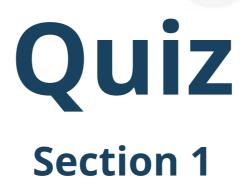
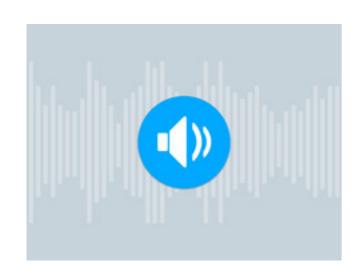
# Ornithology Div

This test will begin at 11:45. The first slide will ask you for your school, team and team members. 1 person should submit answers for the team. Once the section gets to 0:00, the test moves on but DOES record the answers you have clicked.

### Open Ended Question

Please list your School Name, Team (V, JV1, JV2, JV3), and team member FIRST names. Don't forget to hit submit to record your answers before the timer gets to 0:00.





Click on the audio file. Identify the bird call.

- Blue Jay
- Carolina Wren
- Great Crested Flycatcher
- Tufted Titmouse

True or False - Weight for weight, birds eat more food, consume less oxygen, move more rapidly, and generate more heat than any other vertebrate.

- True
- False

#### Which of the following is not a characteristic of birds?

- Feathers
- Wing
- Maintains constant body temperature
- Eggs with soft shells



#### What order does this bird belong to?

- Anseriformes
- Galliformes
- Gaviiformes
- Pelecaniformes



#### Which of these is NOT a suitable habitat for this bird?

- Forest floor
- Pond
- Open park
- Overgrown Field





#### Identify this bird.

- American goldfinch
- Yellow Bellied Sapsucker
- Yellow Headed Blackbird
- Yellow Warbler



### This bird is the only one in its subfamily to undergo what twice a year?

- caching
- migration
- laying eggs
- molting



These birds are among the strictest vegetarians in the bird world, selecting an entirely vegetable diet.

- True
- False



#### Is this picture a male or female of the species?

- Male
- Female
- The males & females of this species look the same



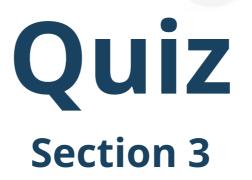
Females of this species will often 'baby sit' for other females.

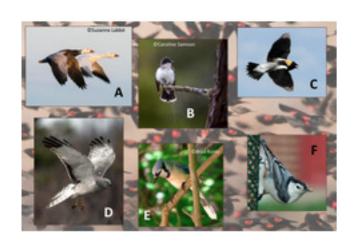
- True
- False



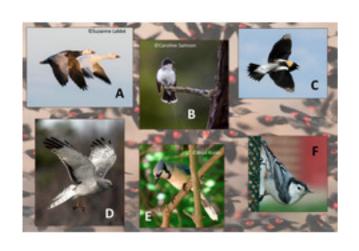
Unlike other ducks this bird builds its nest:

- in vegetation along the edges of water
- in tree cavities or nest box
- in open fields
- underground

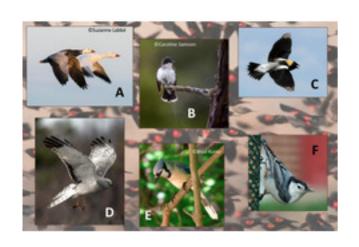




Which of these birds migrate? Click all that apply.



Which birds could be seen in NC in the winter? Click all that apply.



#### Which birds breed in NC? Click all that apply.

## Open Ended Question



(2pts) Why does the throat of this bird look red sometimes and black at other times? Be sure to hit Submit before the timer gets to 0:00 to record your answer.





#### What is the family name for this bird?

- Columbidae
- Phasianidae
- Odontophoridae
- Rallidae



#### Do these birds prefer the deep forest or open land?

- Deep forest
- Open land



#### This bird is difficult to find in North Carolina.

- True
- False



99% of this bird's diet is made up of:

- insects
- fruits & berries
- seeds
- mice



This bird will eat up to 20 percent of their body weight daily.

- True
- False



This bird will cling to suet feeders and perch at tube feeders.

- True
- False



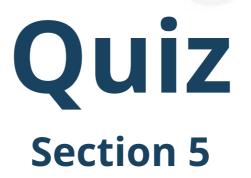
This bird nests solely in forests far from human habitations.

- True
- False



This bird may have up to 6 broods in a nesting season.

- True
- False



Most birds have unique physical and/or behavioral characteristics. What bird's characterisitics are described below? Can fly backwards.

- Belted Kingfisher
- Ruby-throated hummingbird
- Roseate Spoonbill
- Snowy Egret
- Snowy Owl
- Turkey vulture

Most birds have unique physical and/or behavioral characteristics. What bird's characterisitics are described below? Locates its food using its sense of smell.

- Belted Kingfisher
- Ruby-throated hummingbird
- Roseate Spoonbill
- Snowy Egret
- Snowy Owl
- Turkey vulture

Most birds have unique physical and/or behavioral characteristics. What bird's characterisitics are described below? Has a bill that looks like a spoon.

- Belted Kingfisher
- Ruby-throated hummingbird
- Roseate Spoonbill
- Snowy Egret
- Snowy Owl
- Turkey vulture

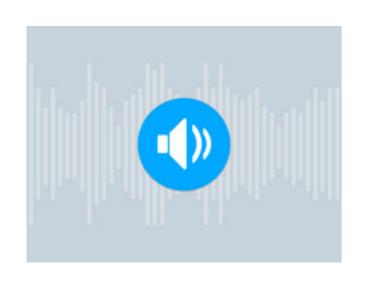
Most birds have unique physical and/or behavioral characteristics. What bird's characterisitics are described below? Has golden slipper for feet.

- Belted Kingfisher
- Ruby-throated hummingbird
- Roseate Spoonbill
- Snowy Egret
- Snowy Owl
- Turkey vulture

Most birds have unique physical and/or behavioral characteristics. What bird's characterisitics are described below? Looks like he has a bad hair day.

- Belted Kingfisher
- Ruby-throated hummingbird
- Roseate Spoonbill
- Snowy Egret
- Snowy Owl
- Turkey vulture





Identify this song.

- Common Loon
- Laughing Gull
- Mourning Dove
- Sora



#### Identify this bird.

- Common Yellowthroat
- House Sparrow
- Yellow-rumped warbler
- Yellow warbler



What is unusual about this species' winter migration pattern?

- It is the only species of its family that migrates to Central/South America for the winter.
- It does not go to Central/South America for the winter like others in its family.
- It migrates to Central North America
- The standard of the standard o



#### In the winter this bird eats:

- Spiders
- Wax Myrtle berries
- Thistle seed
- Peanuts



#### This species breeds in:

- Wetlands
- Open grasslands
- Coniferous forests
- Deserts



#### To what family does this bird belong?

- Ardeidae
- Phalacrocoracidae
- Procellariidae
- Tyrannidae

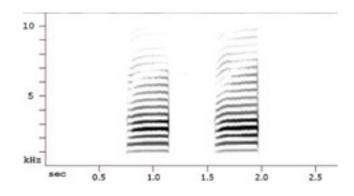


#### Both males and females care for the young.

- True
- False

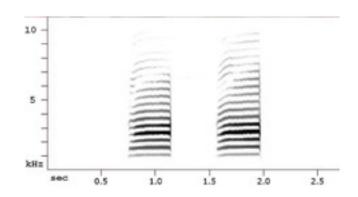






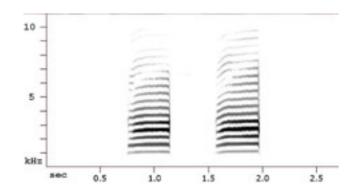
#### Which of the following is NOT true about this image?

- It is called a sonogram
- It is a graph of a bird's heart rate
- Ornithologists use this image to 'read' a bird song.
- All of the above are true



The image depicts pitch and duration of a bird song.

- True
- False



#### Is this a variable song?

- Yes
- O No



### Identify this bird.

- American Crow
- Black-billed Magpie
- Common Raven
- Sora



What part of the specimen's brain is larger than average for a bird?

- Cerebellum
- Hyperpallium
- Midbrain
- Thalamus



Which of the following statements are true about this bird's behavior? Click all that apply.

- They can work together to solve novel problems.
- The males build the nest without female help.
- They are not very territorial.
- They are acrobatic fliers.



What type of habitat does this bird breed in?

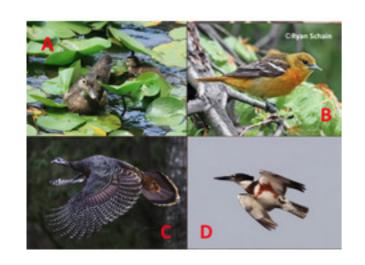
- Wetlands/marshes
- Pine forests
- Backyards
- Deserts



This bird is a highly monogamous species.

- True
- False

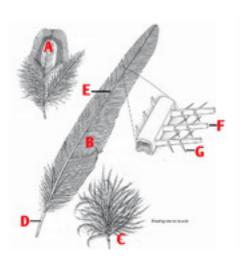
# Open Ended Question



(2pts) What do all these birds have in common? You can click the picture to make it bigger. Be sure to hit Submit before the timer gets to 0:00 to record your answer.



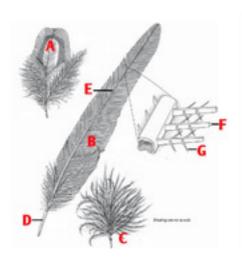




# Match the type of feather and feather structures. Which picture shows a BARB?

- $\cap$  A
- O E

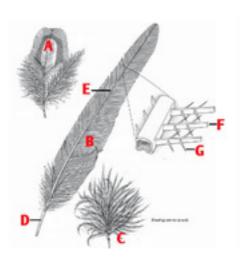
- o F



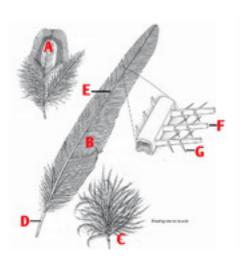
# Match the type of feather and feather structures. Which picture shows a BARBULE?

- $\cap$  A
- O E

- o F



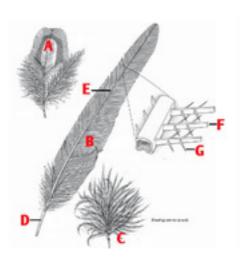
# Match the type of feather and feather structures. Which picture shows a CALAMUS?



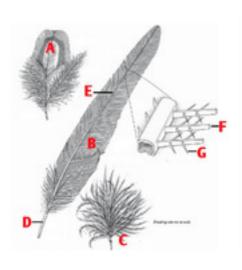
# Match the type of feather and feather structures. Which picture shows a CONTOUR FEATHER?

- $\cap$  A

- o F



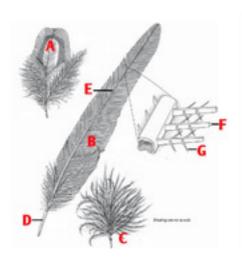
# Match the type of feather and feather structures. Which picture shows a DOWN FEATHER?



# Match the type of feather and feather structures. Which picture shows a FLIGHT FEATHER?

- $\cap$  A
- O E

- O F



# Match the type of feather and feather structures. Which picture shows a RACHIS?







#### Identify this bird.

- Cedar Waxwing
- Kentucky Warbler
- Ovenbird
- Wood Thrush



#### What does this bird eat?

- Mostly fruit
- Mostly insects
- Mostly seeds
- This bird eats almost anything from the list above.



Does this map match the range of this bird? You can click the picture to make it bigger.

- Yes
- O No

### Most birds migrate to some extent. Which of the following is NOT a threat to a successful migration?

- Weather
- Human structures
- Bird Feeders
- Predation
- Loss of habitat

### Which of the following are NOT methods used by ornithologists to study migration?

- Banding
- Radar
- Sonar
- Telemetry



Match the bird with its pneumonic vocalization. Which bird "says" Who cooks, who cooks for you?

- A
- B



Match the bird with its pneumonic vocalization. Which bird "says" Conka-ree?

- A
- C E



Match the bird with its pneumonic vocalization. Which bird "says" Kill-dee Kill-dee?

- A
- B





# Identify this bird.

- Icteridae
- Polioptilidae
- Sturnidae
- Turdidae



This bird loves to eat which of the following foods? Click all that apply.

- sunflower seeds
- thistle seeds
- mealworms
- insects



Birds of this species that live farther north and in the west of the range tend to lay fewer eggs than eastern and southern birds.

- True
- False



#### Where does this bird nest?

- Burrow nests
- Cavities/nestboxes
- Platform nests
- Underground nests



Native Americans and early settlers often gave 'local' names to birds they encountered. Match these birds with their 'local' name by putting the letter on your answer sheet. What is the local name for Bird A?

- Butcher Bird
- Redbird
- Snake bird
- Sparrow Hawk
- Timberdoodle
- Yellowhammer



Native Americans and early settlers often gave 'local' names to birds they encountered. Match these birds with their 'local' name by putting the letter on your answer sheet. What is the local name for Bird B?

- Butcher Bird
- Redbird
- Snake bird
- Sparrow Hawk
- Timberdoodle
- Yellowhammer



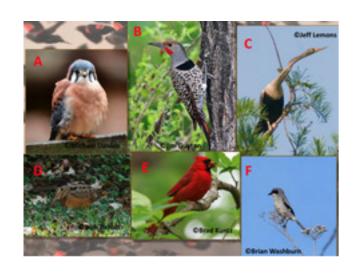
Native Americans and early settlers often gave 'local' names to birds they encountered. Match these birds with their 'local' name by putting the letter on your answer sheet. What is the local name for Bird C?

- Butcher Bird
- Redbird
- Snake bird
- Sparrow Hawk
- Timberdoodle
- Yellowhammer



Native Americans and early settlers often gave 'local' names to birds they encountered. Match these birds with their 'local' name by putting the letter on your answer sheet. What is the local name for Bird D?

- Butcher Bird
- Redbird
- Snake bird
- Sparrow Hawk
- Timberdoodle
- Yellowhammer



Native Americans and early settlers often gave 'local' names to birds they encountered. Match these birds with their 'local' name by putting the letter on your answer sheet. What is the local name for Bird E?

- Butcher Bird
- Redbird
- Snake bird
- Sparrow Hawk
- Timberdoodle
- Yellowhammer



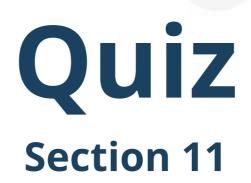
Native Americans and early settlers often gave 'local' names to birds they encountered. Match these birds with their 'local' name by putting the letter on your answer sheet. What is the local name for Bird F?

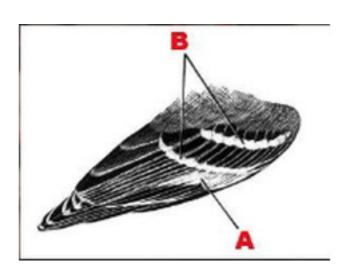
- Butcher Bird
- Redbird
- Snake bird
- Sparrow Hawk
- Timberdoodle
- Yellowhammer

# Open Ended Question



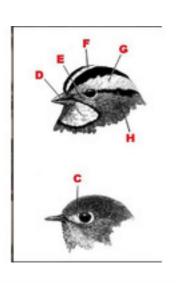
(2pts) Name one species on your list that is a known predator of this bird. Be sure to hit Submit before the timer gets to 0:00 to record your answer.



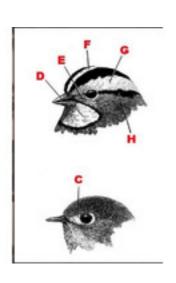


#### Which letter shows the WING BARS?

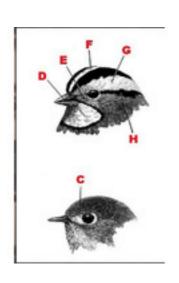




#### Which letter shows the LORE?

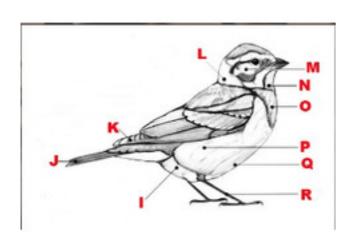


#### Which letter shows the EYE LINE?

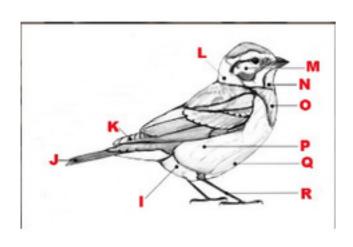


#### Which letter shows the EYEBROW STRIPE?

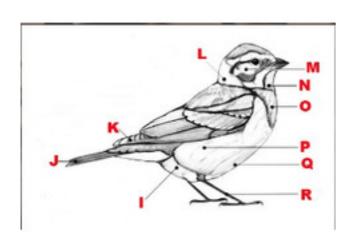
- O F



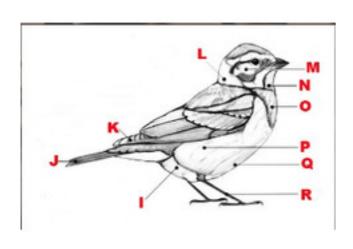
#### Which letter shows the NAPE?



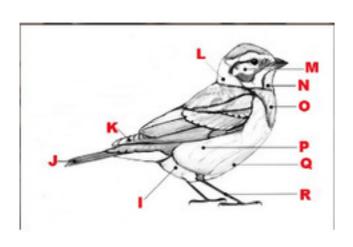
#### Which letter shows the BELLY?



#### Which letter shows the THROAT?



#### Which letter shows the VENT?



#### Which letter shows the TARSUS?





# To what family does this bird belong?

- Fringillidae
- Calcariidae
- Parulidae
- Sittidae



True or False. This is an irruptive species.

- True
- False



Which of the following statements are NOT true about this specimen? Click all that apply.

- they defend feeding territories during the breeding season
- they court with an elaborate display.
- They are a songbird without a song.
- They are very effective at finding spruce budworms.
- They build large sturdy nests.



### What species drilled the holes in this tree?

- Northern Flicker
- Pileated Woodpecker
- Red-headed woodpecker
- Yellow-bellied Sapsucker



These birds have been found drilling holes in more than 1,000 species of trees and woody plants, though they have a strong preference for oak and pine trees.

- True
- False



## Why do they drill holes?

- To look for insects
- To build a hole for a nest
- To drink sap
- To sharpen their beaks



#### **Does this bird breed in North Carolina?**

- Yes
- O No



# Do both sexes of this breed help build the nest?

- Yes
- O No



This bird has an "eye ring."

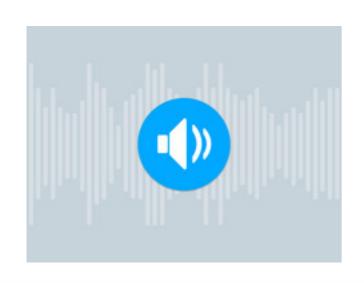
- **Yes**
- O No



The diet of this birds consists mainly of gnats.

- True
- False





#### Identify the bird in this call.

- American Bittern
- Laughing Gull
- Sora
- Whooping Crane



#### Identify this bird.

- Anhinga
- Black-crowned Night-Heron
- Crested Caracara
- Double-crested Cormorant



Which of the following statements are NOT true about this species? Click all that apply.

- Like most waterbirds, the Anhinga has waterproof feathers.
- Their dense bones help them slowly submerge their bodies under the water so they can hunt prey.
- Their name means "devil bird" or "evil spirit of the woods."
- It is rarely found in freshwater except during severe droughts
- It breeds in association with other waterbirds



What is the bird in the picture doing?

- Drying its waterlogged feathers.
- Performing to attract a mate.
- Expanding its size to scare a predator away from its nest.
- Doing the Hokey Pokey



To what family does this species belong?

- Anatidae
- Gaviidae
- Pelecanidae
- Phasianidae



This species has been expanding their range in the southern U.S.

- True
- False



Females of this species are known to do what?

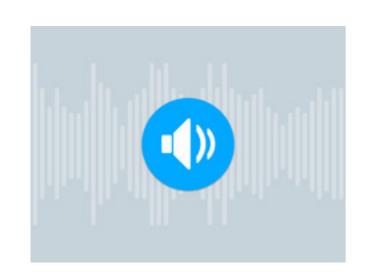
- Egg-caching
- Egg-dispersing
- Egg-dumping
- Egg-tossing



Are these birds sexually dimorphic?

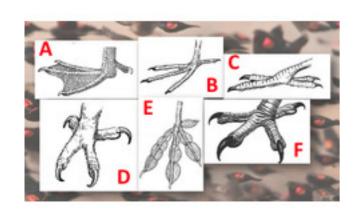
- Yes
- O No

# Open Ended Question



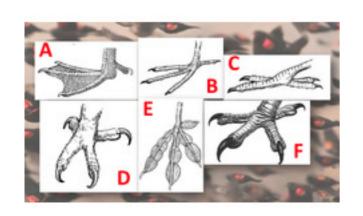
(2pts) Identify the bird making this call. Make sure to hit submit before the timer gets to 0:00 to record your answer.





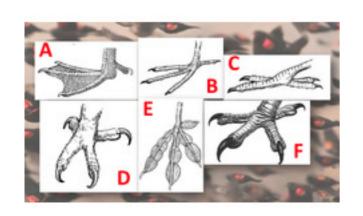
### Match the feet with the correct activity. Click all that apply. Catching Prey

- A
- B



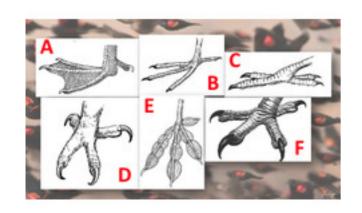
## Match the feet with the correct activity. Click all that apply. Swimming

- A
- B



## Match the feet with the correct activity. Click all that apply. Perching

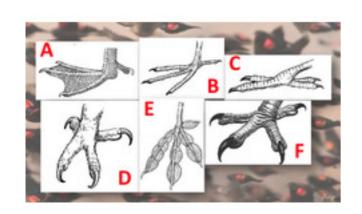
- A



#### Which foot belongs to a Barred Owl?

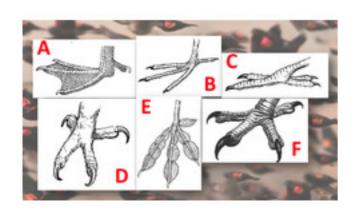
- Λ A

- O F



#### Which foot belongs to a Laughing Gull?

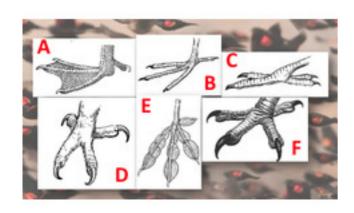
- A A
- B



Which foot belongs to a Pied-bill Grebe?

- Λ A
- O E

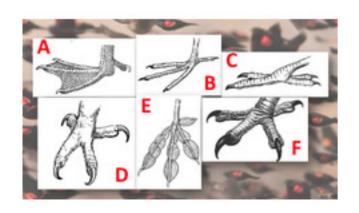
- O F



Which foot belongs to a Red-headed Woodpecker?

- Λ A

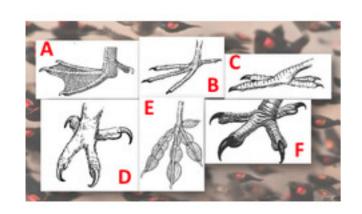
- O F



Which foot belongs to a Red-tailed Hawk?

- A A

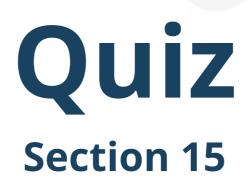
- O F

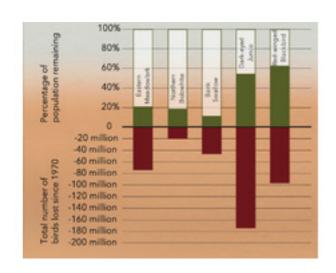


#### Which foot belongs to a Warbling Vireo?

- Λ A
- O E

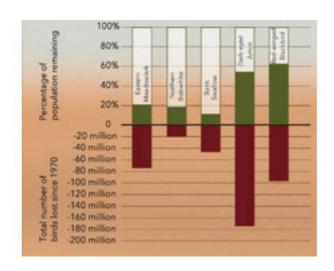
- O F





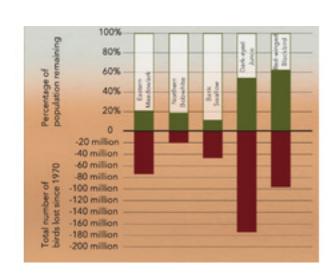
This chart comes from the 2019 State of the Birds report. It reflects the species population losses since 1970. Using the data from this chart answer the following. Which species lost the largest portion of their population?

- Eastern Meadowlark
- Northern Bobwhite
- Bank Swallow
- Dark-eyed Junco
- Red-winged Blackbird



This chart comes from the 2019 State of the Birds report. It reflects the species population losses since 1970. Using the data from this chart answer the following. Which species lost the most individuals?

- Eastern Meadowlark
- Northern Bobwhite
- Bank Swallow
- Dark-eyed Junco
- Red-winged Blackbird



This chart comes from the 2019 State of the Birds report. It reflects the species population losses since 1970. Using the data from this chart answer the following. The Meadowlark and Bobwhite lost about the same percentage of their population, which species started with a larger population?

- Eastern Meadowlark
- Northern Bobwhite



In what region of North Carolina does this bird breed?

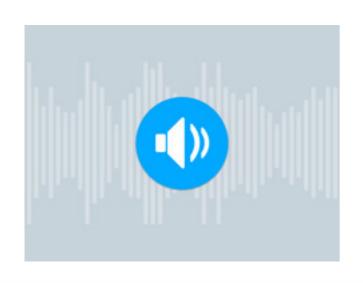
- Coast
- Mountains
- Piedmont
- Sandhills



### This bird is a member of the Passeriformes. To which of these species are they closely related?

- American Goldfinch
- Evening Grosbeak
- Red-eyed Vireo
- White-crowned sparrow





#### Identify this bird call.

- American Robin
- Black-billed Cuckoo
- Northern Mockingbird
- Red-winged Blackbird

#### Which of the following is NOT a flight adaptation in birds?

- hollow bones
- air sacs
- **down feathers**
- napidly beating heart

Which of the following are adaptations to the digestive system? Click all that apply.

- Crop
- Air sac
- Gizzard
- Syrinx

Wing shape is related to how a bird flies.

- True
- False



Do males or females of this species have longer beaks?

- Males
- Females



This species has a group of nerves located in the tip of their beaks. What is this bundle of nerves called?

- Globus pallidus
- Herbst corpuscles
- Hypophysis
- Infundibulum

# Open Ended Question



(2pts) To what order and family group does this bird belong? Don't forget to hit Submit before the timer gets to 0:00 in order to record your answer.





#### Which of these birds is an American Robin?

- A
- O E



Which of these birds is a Red-bellied Woodpecker?

- A
- B



#### Which of these birds is a Northern Cardinal?

- A
- B



#### Which of these birds has a leucistic condition?

- A
- **B**



#### Which of these is a normal immature bird?

- A
- B



### Which of these birds has a condition related to feather molt?

- A A
- B



Which of these birds is sick? Click all that apply.

- A
- B
- None of them

# Open Ended Question

\*YES, we are asking again!\* Please list your School Name, Team (V, JV1, JV2, JV3), and team member FIRST names. Don't forget to hit submit to record your answers before the timer gets to 0:00.

## You Are Done!



What Darwin didn't know about natural selection