

1. **DESCRIPTION:** Participants will be assessed on their knowledge of North American birds.

A TEAM OF UP TO: 2

APPROXIMATE TIME: 50 minutes

2. **EVENT PARAMETERS:**

- Each team may bring one 2" or smaller three-ring binder, as measured by the interior diameter of the rings, containing information in any form and from any source along with one commercially produced field guide not contained in the binder. Sheet protectors, lamination, tabs and labels are permitted in both the binder and field guide.
- If the event features a rotation through a series of stations where the participants interact with samples, specimens or displays; no material may be removed from the binder throughout the event.
- In addition to a binder, each team may bring one unmodified and unannotated copy of either the 2020 National Bird List or a 2020 Official State Bird List which does not have to be secured in the binder.

3. **THE COMPETITION:**

- The competition may be run as timed stations and/or as a timed slides/PowerPoint presentation.
- Specimens/pictures will be lettered or numbered at each station. The event may include preserved specimens, skeletal material, recordings of songs, and slides or pictures of specimens.
- Each team will be given an answer sheet on which they will record answers to each question.
- No more than 50% of the competition will require giving common or scientific names.
- Participants should be able to do basic identification to the level indicated on the Official List. States may have a modified state or regional list. See your state web site.
- States may have a modified state or regional list which will be posted on the state website no later than November 1st.
- The National competition will be based on the 2020 National Bird List.
- Each specimen will have one or more questions accompanying it on some aspect of its life history, distribution, anatomy and physiology, reproduction, habitat characteristics, ecology, diet, behavior, conservation and biogeography.
- The ecology questions may pertain to any ecological aspect of the species, including behavior, habitat, niche, symbiotic relationships, trophic level, adaptive anatomy such as bill size and shape, migration, distribution or occurrence (i.e., rare, common, special concern, endangered).

4. **SAMPLE ACTIVITIES:**

- Identify the order, family, and/or genus of the provided sample.
- What conclusion can be drawn about the habitat(s) of the given specimens?
- Which of these animals does not fit within this taxon?
- What unique anatomical feature distinguishes the animal shown in the picture?
- Consider the potential impact of human activities on the survival of birds.

5. **SCORING:**

- High score wins.
- Selected questions may be used as tiebreakers.

Recommended Resources: The Science Olympiad Store (store.soinc.org) carries the Bio/Earth Science CD, Taxonomy CD, and *Peterson's Field Guide to Birds of North America*; other resources are on the event page at soinc.org.

Kingdom – ANIMALIA

Phylum – CHORDATA

Subphylum – VERTEBRATA

Class - AVES

Family Group (Family Name)

Common Name [Scientific name is in italics]

ORDER: Anseriformes

Ducks, Geese, and Swans (*Anatidae*)

Black-bellied Whistling-duck

Snow Goose

Canada Goose *Branta canadensis*

Trumpeter Swan [Ⓜ]

Wood Duck *Aix sponsa*

Mallard *Anas platyrhynchos* [Ⓜ]

Northern Shoveler

Green-winged Teal

Canvasback

Hooded Merganser

ORDER: Galliformes

Partridges, Grouse, Turkeys, and Old

World Quail (*Phasianidae*)

*Ring-necked Pheasant

Ruffed Grouse *Bonasa umbellus* [Ⓜ]

Wild Turkey *Meleagris gallopavo*

New World Quail (*Odontophoridae*)

Northern Bobwhite [Ⓜ]

ORDER: Gaviiformes

Loons (*Gaviidae*)

Red-throated Loon

Common Loon *Gavia immer* [Ⓜ]

ORDER: Podicipediformes

Grebes (*Podicipedidae*)

Pied-billed Grebe *Podilymbus podiceps*

Red-necked Grebe

ORDER: Procellariiformes

Albatrosses (*Diomedidae*)

Laysan Albatross

Shearwaters and Petrels

(*Procellariidae*)

Northern Fulmar *Fulmarus glacialis*

ORDER: Pelecaniformes

Pelicans (*Pelecanidae*)

American White Pelican

Pelecanus erythrorhynchos

Bitterns, Herons, and Allies (*Ardeidae*)

American Bittern [Ⓜ]

Great Blue Heron *Ardea herodias*

Snowy Egret *Egretta thula*

Green Heron

Black-crowned Night-heron

Ibises and Spoonbills

(*Threskiornithidae*)

Roseate Spoonbill *Platalea ajaja*

ORDER: Suliformes

Cormorants (*Phalacrocoracidae*)

Double-crested Cormorant

Phalacrocorax auritus

Darters (*Anhingidae*)

Anhinga *Anhinga anhinga*

Frigatebirds (*Fregatidae*)

Magnificent Frigatebird

ORDER: Ciconiiformes

Deep-water Waders (*Ciconiidae*)

Wood Stork

ORDER: Falconiformes

Caracaras and Falcons (*Falconidae*)

Crested Caracara

American Kestrel

Peregrine Falcon *Falco peregrinus*

ORDER: Accipitriformes

Osprey (*Pandionidae*)

Osprey *Pandion haliaetus*

Hawks, Kites, Eagles, and Allies

(*Accipitridae*)

Bald Eagle *Haliaeetus leucocephalus* [Ⓜ]

Northern Harrier

Cooper's Hawk *Accipiter cooperii*

Red-tailed Hawk *Buteo jamaicensis* [Ⓜ]

Golden Eagle

ORDER: Cathartiformes

New World Vultures (*Cathartidae*)

Turkey Vulture *Cathartes aura*

California Condor

ORDER: Gruiformes

Rails, Gallinules, and Coots (*Rallidae*)

Clapper Rail *Rallus longirostris*

Sora [Ⓜ]

Purple Gallinule

American Coot

Cranes (*Gruidae*)

Whooping Crane *Grus americana* [Ⓜ]

ORDER: Charadriiformes

Lapwings and Plovers (*Charadriidae*)

American Golden-Plover

Killdeer *Charadrius vociferus* [Ⓜ]

Oystercatchers (*Haematopodidae*)

American Oystercatcher

Stilts and Avocets (*Recurvirostridae*)

Black-necked Stilt

American Avocet *Recurvirostra*

americana

Sandpipers, Phalaropes, and Allies

(*Scolopacidae*)

Spotted Sandpiper

Ruddy Turnstone

Dunlin *Calidris alpina*

Wilson's Snipe

American Woodcock *Scolopax minor*

Gulls, Terns, and Skimmers (*Laridae*)

Laughing Gull [Ⓜ]

Ring-billed Gull

Herring Gull *Larus argentatus*

Least Tern *Sternula antillarum*

Caspian Tern

Black Tern

Black Skimmer *Rynchops niger*

Auks, Murres, and Puffins (*Alcidae*)

Common Murre *Uria aalge*

Tufted Puffin

ORDER: Columbiformes

Pigeons and Doves (*Columbidae*)

Mourning Dove *Zenaida macroura* [Ⓜ]

Common Ground-Dove

*Rock Pigeon *Columba livia*

ORDER: Cuculiformes

Cuckoos, Roadrunners, and Anis

(*Cuculidae*)

Black-billed Cuckoo [Ⓜ]

Greater Roadrunner

ORDER: Strigiformes

Barn Owls (*Tytonidae*)

Barn Owl *Tyto alba*

Typical Owls (*Strigidae*)

Great Horned Owl *Bubo virginianus* [Ⓜ]

Snowy Owl

Barred Owl *Strix varia* [Ⓜ]

Screech Owl

1) Special Characters: [Ⓜ] indicates vocalizations that may be tested & * indicates an introduced, widespread Species

2) The taxonomic scheme is based upon the 7th edition Checklist of North American Birds, American Ornithologists' Union, and www.allaboutbirds.org
2019 Cornell University Laboratory of Ornithology.

ORDER: Caprimulgiformes

Nightjars and Allies (*Caprimulgidae*)

Chuck-will's-widow [♫]

Common Nighthawk

ORDER: Apodiformes

Swifts (*Apodidae*)

Chimney Swift *Chaetura pelagica*

Hummingbirds (*Trochilidae*)

Ruby-throated Hummingbird [♫]

ORDER: Coraciiformes

Kingfishers (*Alcedinidae*)

Belted Kingfisher *Megasceryle alcyon* [♫]

ORDER: Piciformes

Woodpeckers and Allies (*Picidae*)

Red-headed Woodpecker

Yellow-bellied Sapsucker

Downy Woodpecker

Northern Flicker *Colaptes auratus* [♫]

Pileated Woodpecker

ORDER: Passeriformes

Tyrant Flycatchers (*Tyrannidae*)

Olive-sided Flycatcher

Eastern Phoebe *Sayornis phoebe*

Vermilion Flycatcher

Great Crested Flycatcher [♫]

Eastern Kingbird

Scissor-tailed Flycatcher

Shrikes (*Laniidae*)

Loggerhead Shrike

Vireos (*Vireonidae*)

Warbling Vireo

Red-eyed Vireo *Vireo olivaceus*

Jays and Crows (*Corvidae*)

Steller's Jay

Blue Jay *Cyanocitta cristata* [♫]

Black-billed Magpie

American Crow [♫]

Common Raven *Corvus corax*

Larks (*Alaudidae*)

Horned Lark

Swallows (*Hirundinidae*)

Purple Martin

Cliff Swallow

Barn Swallow *Hirundo rustica*

Chickadees and Titmice (*Paridae*)

Black-capped Chickadee [♫]

Tufted Titmouse *Baeolophus bicolor* [♫]

Nuthatches (*Sittidae*)

Red-breasted Nuthatch *Sitta*

canadensis [♫]

White-breasted Nuthatch

Creepers (*Certhiidae*)

Brown Creeper *Certhia americana*

Wrens (*Troglodytidae*)

Cactus Wren

Marsh Wren

Carolina Wren [♫]

Dippers (*Cinclidae*)

American Dipper *Cinclus mexicanus*

Kinglets (*Regulidae*)

Golden-crowned Kinglet

Ruby-crowned Kinglet

Gnatcatchers (*Poliophtilidae*)

Blue-gray Gnatcatcher

Thrushes (*Turdidae*)

Eastern Bluebird

Wood Thrush [♫]

American Robin *Turdus migratorius* [♫]

Mockingbirds and Thrashers

(*Mimidae*)

Gray Catbird

Northern Mockingbird *Mimus*

polyglottos [♫]

Brown Thrasher *Toxostoma rufum*

Waxwings (*Bombycillidae*)

Cedar Waxwing *Bombycilla cedrorum*

Wood-Warblers (*Parulidae*)

Yellow Warbler

Magnolia Warbler *Dendroica magnolia*

Yellow-rumped Warbler

Black-throated Green Warbler

Black-and-white Warbler *Mniotilta*

varia

American Redstart

Ovenbird

Kentucky Warbler

Common Yellowthroat [♫]

New World Sparrow

(*Passerellidae*)

Spotted Towhee *Pipilo maculatus* [♫]

Black-chinned Sparrow

Lark Sparrow

Harris's Sparrow

White-crowned Sparrow

Chipping Sparrow

Dark-eyed Junco *Junco hyemalis*

Longspurs and Buntings (*Calcariidae*)

Lapland Longspur

Snow Bunting

Cardinals and Allies (*Cardinalidae*)

Northern Cardinal *Cardinalis*

cardinalis [♫]

Indigo Bunting

Painted Bunting *Passerina ciris*

Scarlet Tanager

Blackbirds (*Icteridae*)

Bobolink

Red-winged Blackbird [♫]

Western Meadowlark [♫]

Yellow-headed Blackbird

Common Grackle

Brown-headed Cowbird *Molothrus ater*

Baltimore Oriole *Icterus galbula* [♫]

Fringillids and Allies (*Fringillidae*)

Red Crossbill *Loxia curvirostra*

American Goldfinch *Carduelis tristis*

Evening Grosbeak

House Finch

Pine Siskin

Old World Sparrows (*Passeridae*)

*House Sparrow *Passer domesticus*

Old World Starlings (*Sturnidae*)

*European Starling *Sternus vulgaris*

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