

**Chiropterology
Division BC
Arizona Trial Event**

1. **DESCRIPTION:** Participants will be assessed on their knowledge of bats, with an emphasis on North American Bats, South American Microbats, and African MegaBats.

A TEAM OF UP TO: 2

APPROXIMATE TIME: 50 minutes

2. **EVENT PARAMETERS:**

- a. 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. Sheet protectors, lamination, tabs and labels are permitted in the binder.
- b. 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.
- c. In addition to the binder, each team may bring one unmodified and unannotated copy of either the National Bat List or an Official State Bat list which does not have to be secured in the binder.

3. **THE COMPETITION:**

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

4. **SAMPLE TASKS/STATIONS/QUESTIONS:**

- a. Identify the order, family, and or genus of the provided sample.
- b. What conclusion can be drawn about the habitat of the given specimen?
- c. Consider the potential impact of human activities on the survival of bats?

5. **SCORING:**

- a. High Score Wins
- b. Selected questions can be used as tiebreakers.

RECOMMENDED RESOURCES:

Field Guide - Bats of the United States and Canada 1st Edition, Kindle Edition by Michael J Harvey (Author), J. Scott Altenbach (Author), Troy L. Best (Author)

<https://www.csu.edu/cerc/researchreports/documents/BatsActivityGuide.pdf>

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Bat List

Kingdom: ANIMILIA
Phylum: CORDATA
Subphylum: VERBRATA
Class: MAMMALIA
Order CHIROPTERA

Alcathoe bat (*Myotis alcathoe*)
Allen's big-eared bat (*Idionycteris phyllotis*)
Australasian bent-wing bat (*Miniopterus orianae*)
Big brown bat (*Eptesicus fuscus*)
Big free-tailed bat (*Nyctinomops macrotis*)
Broad-eared bat, or broad-tailed bat (*Nyctinomops laticaudatus*)
Brown mastiff bat (*Promops nasutus*)
California leaf-nosed bat (*Macrotus californicus*)
Cave myotis (*Myotis velifer brevis*)
Chapin's free-tailed bats (*Chaerephon chapini*)
Cinnamon dog-faced bat (*Cynomops abrasus*)
Common noctule (*Nyctalus noctula*)
Corben's long-eared Bat (*Nyctophilus corbeni*)
Daubenton's free-tailed bat (*Myotis daubentonii*)
Davies's big-eared bat or the graybeard bat (*Glypionycteris daviesi*)
Desert red bat (*Lasiurus blossevillii*)
Diadem leaf-nosed bat (*Hipposideros diadema*)
Dobson's epauletted fruit bat (*Epomops dobsonii*)
Dwarf dog-faced bat (*Molossops temminckii*)
Dwarf flying fox, least flying fox, or least fruit bat (*Pteropus woodfordi*)
eastern red bat (*Lasiurus borealis*)
Eastern water bat or Sakhalin bat (*Myotis petax*)
Evening bat (*Nycticeius humeralis*)
Fish-eating bat (*Myotis vivesi*)
Flat-headed myotis (*Myotis planiceps*)
Florida bonneted bat (*Eumops floridanus*)
Fringed myotis (*Myotis thysanodes*)
Geoffroy's bat (*Myotis emarginatus*)
Ghost-faced bat (*Mormoops megalophylla*)
Golden-mantled flying fox (*Pteropus pumilus*)
Greater horseshoe bat
Greater mouse-tailed bat (*Rhinopoma microphyllum*)
Greater short-nosed fruit bat (*Cynopterus sphinx*).
Greater western mastiff bat (*Eumops perotis californicus*)
Townsend's big-eared bat (*Corynorhinus townsendii*)
Tropical big-eared brown bat (*Histiotus velatus*)
Underwood's mastiff bat (*Eumops underwoodi*)
Welwitsch's bat (*Myotis welwitschii*)
Western barbastelle (*Barbastella barbastellus*)
Western long-eared bat (*Myotis evotis*)
Grey-headed flying fox (*Pteropus poliocephalus*)
Hairy fruit-eating bat (*Artibeus hirsutus*)
Hoary bat (*Lasiurus cinereus*)
Hodgson's bat or the copper-winged bat (*Myotis formosus*)
Honduran white bat (*Ectophylla alba*)
Lesser long-nosed bat (*Leptonycteris yerbabuenae*)
Lesser long-nosed bat (*Leptonycteris curasoae*)
Lesser Papuan pipistrelle (*Pipistrellus papuanus*).
Little brown bat (*Myotis lucifugus*)
Long-eared myotis (*Myotis volans*)
Long-legged myotis (*Myotis volans*)
Lyle's flying fox (*Pteropus lylei*)
Melissa's yellow-eared bat (*Vampyressa melissa*)
Mexican free-tailed bat (*Tadarida brasiliensis mexicana*)
Mexican long-tongued bat (*Choeronycteris mexicana*)
Northern little yellow-eared bat (*Vampyressa thuyone*)
Northern long-eared bat or northern myotis (*Myotis septentrionalis*)
Northern yellow bat (*Lasiurus intermedius*)
Occult little brown bat (*Myotis lucifugus occultus*)
Pallas's long-tongued bat (*Glossophaga soricina*)
Pallid bat (*Antrozous pallidus*)
Peters's flat-headed bat (*Platymops setiger*)
Peters's myotis or small black myotis (*Myotis ater*)
Pfeiffer's red bat (*Lasiurus pfeifferi*)
Pied bat or badger bat (*Niumbaha superba*)
Pocketed free-tailed bat (*Nyctinomops femorosaccus*)
Red Bat (*Lasiurus borealis*)
Seminole bat (*Lasiurus seminolus*)
Serotine bat (*Eptesicus serotinus*)
Silver-haired bat (*Lasionycteris noctivagans*)
Southern yellow bat (*Lasiurus ega*)
Southwestern myotis (*Myotis auriculus*)
Spix's disk-winged bat (*Thyroptera tricolor*)
Spotted bat (*Euderma macalatum*)
Tent-making bat (*Uroderma bilobatum*)
Thomas's big-eared brown bat (*Histiotus laephotis*)
Western pipistrelle or canyon bat (*Parastrellus hesperus*)
Western red bat (*Lasiurus blossevillii*)
Western small-footed myotis (*Myotis ciliolabrum*)
Whiskered bat (*Myotis mystacinus*)
Yuma myotis (*Myotis yumanensis*)