Chiropterology (Bats)

- 1. **<u>DESCRIPTION</u>**: Participants will be assessed on their knowledge of bats, with an emphasis on North American Bats, South American Microbats, and African MegaBats.
- 2. A TEAM OF UP TO: 2 EYE PROTECTION: None IMPOUND: No

APPROXIMATE TIME/EVENT TIME: 50 minutes

3. 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.

4. 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. Stated 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.

5. 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?

6. **SCORING**:

- a. High Score Wins
- b. Selected questions can be used as tiebreakers.
- 7. 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

Bat List Updated 9-17-2021

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

Common name	Scientific Name	Common name	Scientific Name
Alcathoe bat	Myotis alcathoe	Long-eared myotis	Myotis evotis
Allen's big-eared bat	Idionycteris phyllotis	Long-legged myotis	Myotis volans
Big brown bat	Eptesicus fuscus	Lyle's flying fox	Pteropus lylei
Big free-tailed bat Broad-eared bat, or broad-	Nyctinomops macrotis	Madagascan flying fox	Pteropus rufus
tailed bat	Nyctinomops laticaudatus	Mariana fruit bat	Pteropus mariannus Tadarida brasiliensis
Brown mastiff bat	Promops nasutus	Mexican free-tailed bat	mexicana Choeronycteris
Buettikofer's epauletted fruit bat	Epomops buettikoferi	Mexican long-tongued bat Northern little yellow-eared	mexicana
California leaf-nosed bat	Macrotus californicus	bat	Vampyressa thyone
California Myotis	Myotis californicus	Northern long-eared bat or northern myotis	Myotis septentrionalis
Cave myotis	Myotis velifer brevis	Northern yellow bat	Lasiurus intermedius
Chapin's Free-Tailed Bat	Chaerephon chapini	Occult little brown bat (Arizona Myotis)	Myotis lucifugus occultus
Cinnamon dog-faced bat	Cynomops abrasus	Pallas' Mastiff Bat (Velvety Free-tailed bat)	Molossus molossus
Common noctule	Nyctalus noctula	Pallas's long-tongued bat	Glossophaga soricina
common vampire bat	Desmodus rotundus	Pallid bat	Antrozous pallidus
Corben's long-eared Bat	Nyctophilus corbeni	Peters's flat-headed bat	Platymops setiger
Davies's big-eared bat or the graybeard bat	Glyphonycteris daviesi	Peters's myotis or small black myotis	Myotis ater
Desert red bat	Lasiurus blossevillii	Pfeiffer's red bat	Lasiurus pfeifferi
Dobson's epauletted fruit bat	Epomops dobsonii	Pied bat or badger bat	Niumbaha superba
Dwarf dog-faced bat	Molossops temminckii	Pocketed free-tailed bat	Nyctinomops femorosaccus
Eastern (Queensland) tube- nosed bat	Nyctimene robinsoni	Rafinesque's Big-eared bat (Southeastern Big-eared bat)	Corynorhinus rafinesquii
Eastern Pipistrelle / Tricolored bat	Perimyotis subflavus	Red Bat	Lasiurus borealis
Eastern red bat	Lasiurus borealis	Seminole bat	Lasiurus seminolus
Eastern small-footed myotis	Myotis leibii	Serotine bat	Eptesicus serotinus
Eastern water bat or Sakhalin bat	Myotis petax	Silver-haired bat	Lasionycteris noctivagans
Evening bat	Nycticeius humeralis	Southeastern Bat	Myotis austroriparius
Fish-eating bat	Myotis vivesi	Southern Long-nosed bat or Lesser long-nosed bat	Leptonycteris curasoae

Common name	Scientific Name	Common name	Scientific Name
Florida bonneted bat	Eumops floridanus	Southern yellow bat	Lasiurus ega
Fringed myotis	Myotis thysanodes	Southwestern Bat	Myotis auriculus
Geoffroy's bat	Myotis emarginatus	Southwestern myotis	Myotis auriculus
Ghost bat	Macroderma gigas	Spix's disk-winged bat	Thyroptera tricolor
Ghost-faced bat	Mormoops meglophylla	Spotted bat	Euderma macalatum
Golden-mantled flying fox	Pteropus pumilus	Tent-making bat	Uroderma bilobatum
Gray Bat	Myotis grisescens	Townsend's big-eared bat	Corynorhinus townsendii
Greater horseshoe bat	Rhinolophus ferrumequinum	Tropical big-eared brown bat	Histiotus velatus
Greater Long-nosed Bat	Leptonycteris nivalis	Underwood's mastiff bat	Eumops underwoodi
Greater mouse-tailed bat Greater short-nosed fruit	Rhinopoma microphyllum	Wagner's bonneted bat (Wagner's mastiff bat)	Eumops glaucinus
bat .	Cynopterus sphinx Eumops perotis	Welwitsch's bat	Myotis welwitschii
Greater western mastiff bat	• •	Western barbastelle	Barbastella barbastellus
Grey-headed flying fox	Pteropus poliocephalus	Western long-eared bat	Myotis evotis
Hairy fruit-eating bat	Artibeus hirsutus	Western Mastiff Bat Western pipistrelle or	Promops nasutus
Hammer-headed bat	Hypsignathus monstrosus	canyon bat	Parastrellus hesperus
Hoary bat	Lasiurus cinereus	Western red bat	Lasiurus blossevillii
Hodgson's bat or the copper-winged bat	Myotis formosus	Western small-footed myotis	Myotis ciliolabrum
Honduran white bat	Ectophylla alba	Western Yellow Bat	Lasiurus xanthinus
Indiana Bat	Myotis Sodalis	Whiskered bat	Myotis mystacinus
Jamaican flower bat	Phyllonycteris aphylla	Wrinkle-faced bat	Centurio senex
Jamaican Fruit-eating Bat	Artibeus jamaicensis	Yuma myotis	Myotis yumanensis
Keen's myotis	Myotis keenii		
Kitti's hog-nosed bat	Craseonycteris thonglongyai		
Lesser long-nosed bat	Leptonycteris yerbabuenae		