## TOWNSEND'S BIG-EARED BAT

(CORYNORHINUS TOWNSENDII)

Navajo/Federal Statuses: NESL G4 / not listed under the ESA.

<u>Distribution</u>: Range includes most western U.S. states from southern British Columbia southeast to SD and west to the Pacific Coast, south through TX and CA and throughout most of inland Mexico. Only two roost caves known on Navajo Nation (near Shiprock and Page), but potential throughout elevational range and habitats of Navajo Nation. Distribution is likely limited to areas with suitable roost sites. Reportedly common elsewhere in coniferous forests, but not yet documented from Chuska Mountains or Defiance Plateau.

<u>Habitat</u>: Roosts, raises young, and hibernates primarily in sandstone or limestone caves, lava tubes, mine tunnels, and other man-made structures; uses a variety of habitats for foraging, including coniferous forests and pinyon-juniper woodlands, deciduous riparian woodlands, and desertlands. During spring and summer, females form maternity colonies of < 100 adults in warm parts of mine/cave; males are solitary. During winter, they hibernate singly or in small groups in colder parts of mine/cave (near entrance and in well-ventilated areas).

<u>Similar Species</u>: Only 3 long-eared bats on Navajo Nation, *C.townsendii* has pale gray or brown fur on dorsum and buff-colored underparts; *Antrozous pallidus* (Pallid Bat) has creamy-yellow fur on dorsum and whitish underparts; *Euderma maculatum* (Spotted Bat) has white underparts, and black dorsum with 3 white spots.

## Phenology:

e.OCT-e.APR: hibernation (arouse frequently from hibernation)

l.OCT-l.FEB: mating season e.JUN-l.JUN: birthing of young

e.AUG-l.AUG: maternity colonies breakup, independence of young

<u>Survey Method</u>:  $\geq 1$  visual survey during 1 MAY-31 AUG, preferably with electronic bat-detector, at mine or cave portal for  $\geq 3$  hours at dusk; and, if possible, search interior of mine or cave during day for roosting bats.

<u>Avoidance</u>: No closure of occupied mines or caves (hibernacula, day- or maternity roosts) until consultation with Navajo Nation Department of Fish and Wildlife; feasibility of gating mine/cave opening should be considered; no activity within 60 m of occupied roost-site during 15 APR-31 AUG.

## **References:**

Hoffmeister, D.F. 1986. Mammals of Arizona. The University of Arizona Press. (description p.107)Kunz, T.H. and R.A. Martin. 1982. Plecotus townsendii; Mammalian Species, No.175, pp.1-6.American Society of Mammalogists.