

## Western Bat Working Group

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### Species Accounts

Developed For the 1998 Reno Biennial Meeting

Updated at the 2005 Portland Biennial Meeting

#### *Eumops underwoodi*

#### UNDERWOOD'S MASTIFF BAT

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I. DISTRIBUTION: *Eumops underwoodi*, a member of the Family Molossidae, is known in the United States only from a few localities in Pima County, Arizona. This species' range extends from southern Arizona through western Mexico, as far south as Honduras. The subspecies found in Arizona, *E.u. sonoriensis*, is limited to Arizona and Sonora, Mexico. It is found in sonoran desert habitat in Arizona, and has been found in pine-oak forest at 1,495-1,800 m elevation in Mexico.

II. STATUS: Global Rank - G4. State Ranks: AZ - S1. Although this species can be predictably encountered at at least one locality in Arizona, its status and distribution are not well understood. A former category 2 candidate species.

III. IDENTIFYING CHARACTERISTICS AND LIFE HISTORY: *E. underwoodi* can be distinguished from all other North American molossid (=free-tail) species based on size. With a forearm of 65-77 mm, it is smaller than *Eumops perotis* (forearm = 73-83 mm) and larger than *Nyctinomops macrotis* (forearm = 58-64 mm). *Eumops* species have a smooth upper lip, in contrast to a wrinkled upper lip in *Nyctinomops*. In *E. underwoodi* the tragus is small and rounded, in *E. perotis* it is broad and square. While *E. underwoodi* is presumed to roost primarily in rock crevices on cliff-faces, the only identified roost was in a large, hollow tree in Jalisco, Mexico. *E. underwoodi* apparently gives birth to a single young in late June or July. No information is available on colony size. Based on limited samples, the diet of *E. underwoodi* appears to be predominantly beetles (scarabs and long-horned) and short-horned grasshoppers, with some leafhoppers and moths. No information is available on seasonal movements.

IV. THREATS: No threats have been identified. Assuming that this species is primarily cliff-dwelling, it could be threatened by any activities that disturb or destroy cliff habitat (e.g., recreational climbing, water impoundments, highway construction, quarry operations). Grazing and pesticide applications in agricultural areas could impact foraging habitat.

V. GAPS IN KNOWLEDGE: More surveys are needed to delineate the range of this species in the southwestern U.S. More information is needed on distribution of breeding colonies, seasonal movements, roosting and foraging requirements. Methods need to be developed for assessment and on going monitoring of population size. Call features need to be described to determine whether this species can be distinguished from other large molossids acoustically.

#### VI. SELECTED LITERATURE:

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