

*Examples of two endangered species of bats...*




- Rodrigues Fruit Bat
- Indiana Bat

**IUCN "Critically Endangered" Bats**  
 "...considered to be facing an extremely high risk of extinction in the wild".  
 Full description of criteria and categories at:  
[http://www.iucnredlist.org/static/categories\\_criteria\\_3\\_1](http://www.iucnredlist.org/static/categories_criteria_3_1)


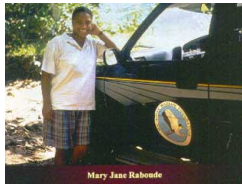
Bulmer's fruit bat	<i>Aproteles bulmerae</i>
Gallagher's free-tailed bat	<i>Chaerephon gallagheri</i>
Seychelles sheath-tailed bat	<i>Coleura seychellensis</i>
Lamotte's roundleaf bat	<i>Hipposideros lamottei</i>
Peters's tube-nosed bat	<i>Murina grisea</i>
Wroughton's free-tailed bat	<i>Otomops wroughtoni</i>
Vietnam leaf-nosed bat	<i>Paracelops megalotis</i>
New Guinea big-eared bat	<i>Pharotis imogene</i>
Anthony's pipistrelle	<i>Pipistrellus anthonyi</i>
Joffre's pipistrelle	<i>Pipistrellus joffrei</i>
Fijian monkey-faced bat	<i>Pteralopex acrodonta</i>
Bougainville monkey-faced bat	<i>Pteralopex anceps</i>
Guadalcanal monkey-faced bat	<i>Pteralopex atrata</i>
Montane monkey-faced bat	<i>Pteralopex pulchra</i>
Aldabra Flying Fox	<i>Pteropus aldabrensis</i>

**Golden Flying Fox; Rodrigues fruit bat**  
*Pteropus rodricensis*

Pteropodid "Flying Fox" fruit bat  
 3-ft wingspan, 300-350 g  
 Midwives (see Kunz paper)  
 Opportunistic diet of fruit & flowers; make spats  
 Limited to Rodrigues Island  
 35,000 people  
 104 km<sup>2</sup> (~10x6 miles)

Island endemic species threatened by habitat destruction; storms  
 IUCN "Critically Endangered"  
 In 1970s, declined to <100 individuals  
*Conservation efforts have been successful*  
 Populations on island have rebounded to 1,500-2,000 indivls  
 Breeding captive populations maintained in several zoos

<http://www.batconservation.org/content/Roddybatconservationprojec.html>

**ENDANGERED BATS in the UNITED STATES**


**Continental USA**  
[Indiana bat](#) (*Myotis sodalis*)  
[Gray bat](#) (*Myotis grisescens*)  
[Ozark big-eared bat](#) (*Corynorhinus (=Plecotus) townsendii ingens*)  
[Virginia big-eared bat](#) (*Corynorhinus (=Plecotus) townsendii virginianus*)  
[Lesser long-nosed](#) (*Leptonycteris curasoae yerbabuena*)  
[Mexican long-nosed bat](#) (*Leptonycteris nivalis*)

**US Territories**  
[Hawaiian hoary bat](#) (*Lasiurus cinereus semotus*) – Hawaii  
[Little Mariana fruit bat](#) (*Pteropus tokudae*) – Guam  
[Mariana fruit bat](#) (=Mariana flying fox) (*Pteropus mariannus mariannus*) – Guam

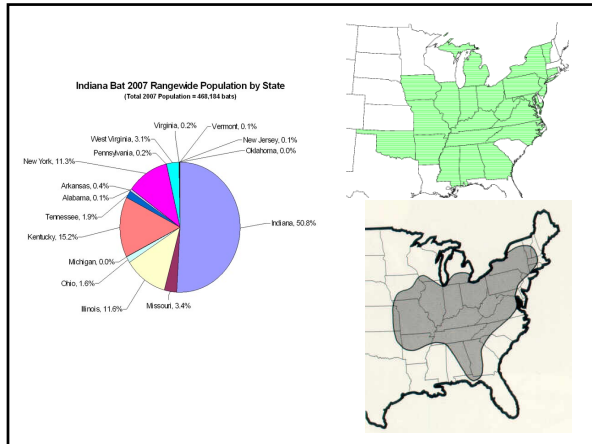
<http://www.fws.gov/Endangered/bats/bats.htm>

**The Indiana Bat (*Myotis sodalis*)**

Documented Population decline (Nowak 1999)  
 1960 – 650,000  
 1975 – 450,000  
 1993 – 350,000.  
 Listed as "endangered"



Link to US Fish & Wildlife Services Info and Conservation Plan  
<http://ecos.fws.gov/speciesProfile/SpeciesReport.do?spcode=A000>



**Threats to Indiana Bats**


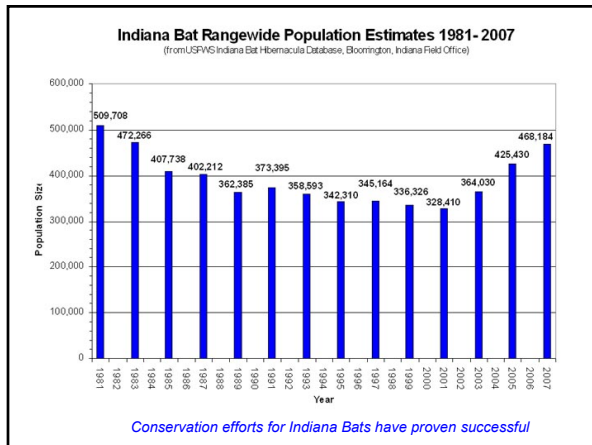
**WINTER RANGE**  
**Disturbance of hibernating bats**  
 Arousal can use up 10-30 days of stored fat.

**Cave degradation**  
 changes in a cave environment can it to become uninhabitable or abandoned.

**SUMMER RANGE**  
**Habitat modification**  
 Wooded riparian areas are needed by bats for foraging, roosting, and breeding.

**Loss of suitable roosting trees**  
 Indiana bats raise young and roost under the bark of trees in riparian and upland forests.

**Pesticides and pollution**

**In-class writing assignment:**

What do you say to someone who argues that extinction is a natural process, and feels that we should not bother trying to conserve endangered species?

- *So why should we care?*
- *Why should we bother to conserve endangered species?*