

# HELLHOLE CAVE PENDLETON COUNTY, WEST VIRGINIA

## TOTAL NUMBER OF BATS FOR THE FEBRUARY 2013 SURVEY

COMMON NAME	SCIENTIFIC NAME	NUMBER
Little brown myotis	<i>Myotis lucifugus</i>	2,461
Indiana myotis	<i>Myotis sodalis</i>	2,540
Small-footed myotis	<i>Myotis leibii</i>	4
Eastern pipistrelle	<i>Perimyotis subflavus</i>	24
Big brown bat	<i>Eptesicus fuscus</i>	4
Virginia big-eared bat	<i>Corynorhinus townsendii</i>	7,640
TOTAL		12,673

Comments: Three crews consisting of a total of 15 people conducted the survey. These crews surveyed the following portions of the cave: 1) The Bat Room and the Plecotus Room route; 2) The route to the Shipp Room; and 3) The Entrance Room and North Passage area. White-Nose Syndrome (WNS) was confirmed in little brown bats flying out of the cave in January 2010. On the day of the 2013 survey there were still bats flying out of the cave entrance and a Cooper's hawk was observed catching and eating 7 bats near the cave entrance that day. The main goals of the surveys were to document the effects of WNS on the various species of bats, get a good count of the numbers of the endangered bats, photo-document the large concentrations of bats, and to retrieve and replace temperature/relative humidity loggers. All bats were counted and the numbers represent the actual numbers of bats observed. Indiana bats in large clusters were counted using photographs taken during the survey. Smaller clusters of Indiana bats were counted "live" during the survey.

Endangered Bats: Indiana bats (*Myotis sodalis*) were down approximately 86% from the 2010 number. Virginia big-eared bats (*Corynorhinus townsendii virginianus*) were also down, but still up around 2,500 from the pre-WNS count in 2007. Summer counts at maternity colonies indicate the population is increasing. The decline seen this winter is probably due to some of the bats being in another portion of the cave we do not know about. A few Indiana bats showed signs of WNS in 2013; no Virginia big-eared bats exhibited signs of WNS in 2010 or 2013.

We thank Harvey Harper for his continued support in monitoring and protecting the bats in this important bat cave.

## ENDANGERED BAT SUMMARY

### *Corynorhinus townsendii virginianus*

LOCATION	NUMBER 2007	NUMBER 2010	NUMBER 2013
Breakdown to Plecotus Rm	1,866	261	4,347
Small passage before Plecotus Rm	0	233	111
Plecotus Room	1,610	6,922	201
Small Room below Plecotus Rm	0	0	5
Breakdown – west end of Ent. Rm	11	9	0
Breakdown to Shipp Rm	1,514	2,600	2,976
Above Shipp Room	4	0	0
Upper <i>M. sodalis</i> Area	1	0	0
<b>TOTAL</b>	<b>5,006</b>	<b>10,025</b>	<b>7,640</b>

### *Myotis sodalis*

LOCATION	NUMBER 2007	NUMBER 2010	NUMBER 2013
Back of Bat Rm	506	377	40
Breakdown to Plecotus Rm	0	0	1
Plecotus Room	200	180	89
Small Rm off Plecotus Rm	0	47	112
Ent. Rm to Upper Sodalis Site	0	253	207
Climb from Plecotus Rm to Bat Rm	0	0	1
Upper Sodalis Site	2,594	3,682	25
Top of Guano Slide	0	200	200
Little Hellhole to Laundry Chute	6,810	6,457	1,736
Passage S of Laundry Chute	2,747	7,361	129
Above Shipp Room	1	0	0
<b>TOTAL</b>	<b>12,858</b>	<b>18,557</b>	<b>2,540</b>