



Caves & Bats in Indiana

Mapping Activity

Materials: Bat decals ● Indiana County Map (enlarged to 8.5 x 14) ● Indiana Karst Map (enlarged to 8.5 x 14) ● Tissue Paper ● Bat Hibernacula chart ● Markers, crayons, &/or colored pencils ● Glue

Challenge students to consult road maps and/or the Internet to see if they can locate five commercial cave sites in Indiana. What do they notice about the distribution of these?

Copy the Bat Decals and the “Caves & Indiana Bat Hibernacula by County” chart, one for each group. Enlarge the Indiana County map to at least 8 ½ x 14” and make a copy for each group. Enlarge the Indiana Karst Map by the same amount as the County Map and give one to each group along with tissue paper OR enlarge the Karst Map (map portion only) onto a transparency for each group, in addition to giving them a regular copy of the Karst Map. When enlarging maps, make sure to enlarge both by the same amount so they will line up when stacked together.

The five cave sites are:

- Bluespring Caverns (Lawrence County)
- Spring Mill State Park Caves (Lawrence County)
- Marengo Cave (Crawford County)
- Wyandotte Caves (Crawford County)
- Squire Boone Caverns (Harrison County)

Using the chart “Caves & Indiana Bat Hibernacula in Indiana by County,” and the large county map of Indiana, have students (working in groups):

- Develop a color key to plot caves by county and color the map accordingly
- Choose a different color for each priority level and have the students write the class’s color choices in the space provided. Do not choose the same colors that were selected to indicate the locations of caves. The students should color code the bat decals accordingly.
- On the map where students have plotted caves, have them glue the bat decals provided to indicate locations of Indiana Bat hibernacula.
- Optional: Have the students make a key to the priority level of the hibernacula on the map sheet.
- Discuss patterns. Are caves/hibernacula distributed evenly throughout the state? Have students predict some reasons for the distribution they see.
- Copy the Indiana karst area map onto a transparency for each group OR have each group trace it onto tissue paper. Lay the transparency/tissue over the colored/keyed map.
- Discuss with students: what is the relationship between Indiana karst areas and the distribution of caves/hibernacula? What is *karst* anyway?







Name _____

Caves and Indiana Bat Hibernacula in Indiana by County

HIBERNACULA*

County	Number of Caves	Priority 1	Priority 2	Priority 3	Priority 4
Bartholomew	10				
Brown	1				
Clark	63				
Clay	1				
Crawford	218	2		3	1
Decatur	19				
Delaware	3				
Dubois	13				
Floyd	5				
Fountain	2				
Greene	60	1		1	3
Harrison	632	2	2	2	
Jackson	4				
Jefferson	157				
Jennings	191				
Lawrence	490				5
Martin	124			1	1
Monroe	267	2		5	2
Morgan	12				
Orange	292				1
Owen	94				
Parke	2				
Perry	9				
Putnam	18				
Ripley	32				
Scott	1				
Shelby	5				
Tippecanoe	8				
Vanderburgh	4				
Wabash	4				
Washington	162		1	2	
TOTAL INDIANA CAVES	2902				
TOTAL (KNOWN) INDIANA HIBERNACULA		7	3	14	13

***Priority Current &/or Historic Population**

- 1 More than 10,000 Indiana bats
- 2 1,000 - 10,000 Indiana bats
- 3 50 - 1,000 Indiana bats
- 4 Less than 50 Indiana bats





Name _____

Bat Decals

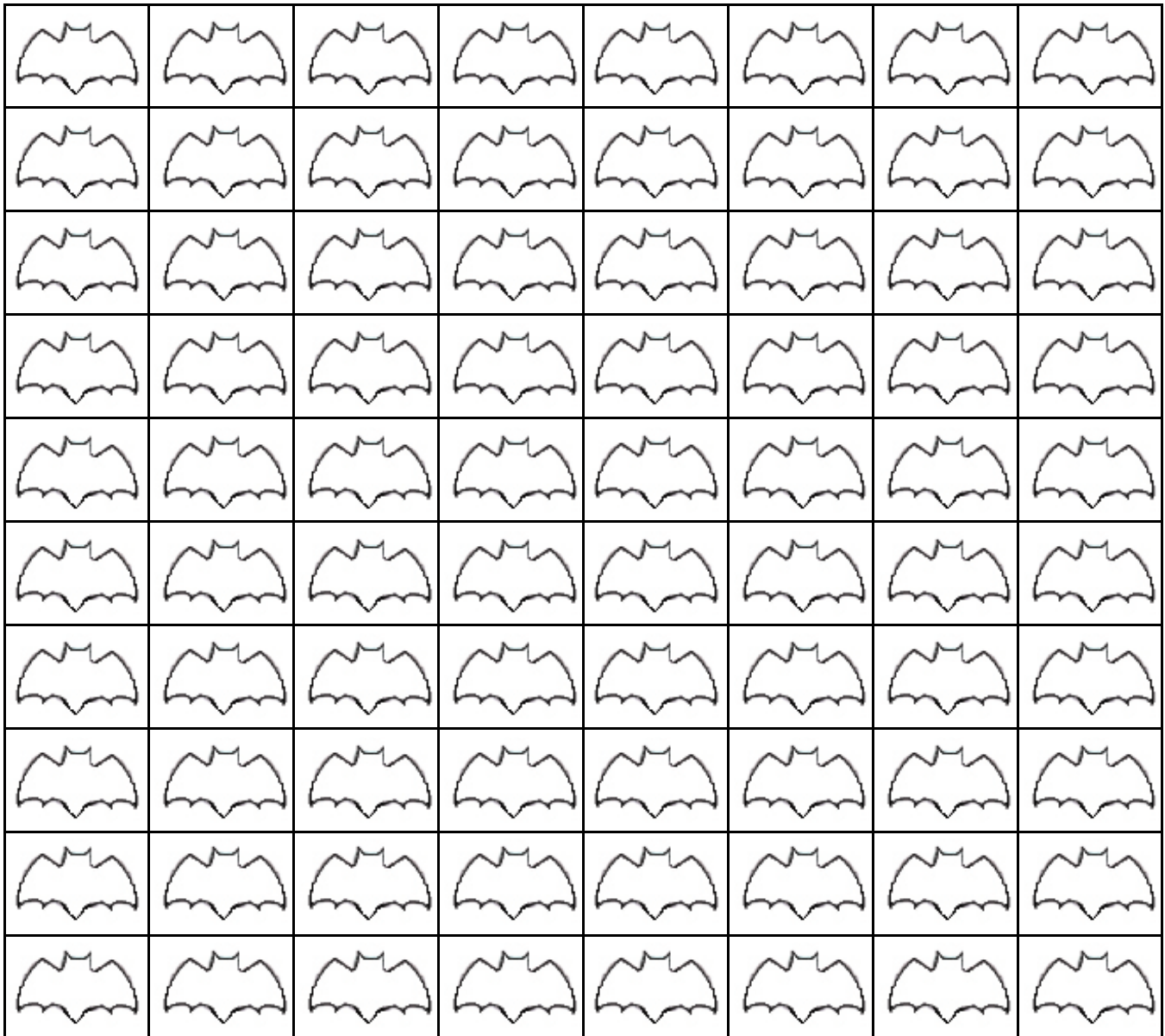
Color Code for Bat Decals:

Priority 1 Hibernacula _____

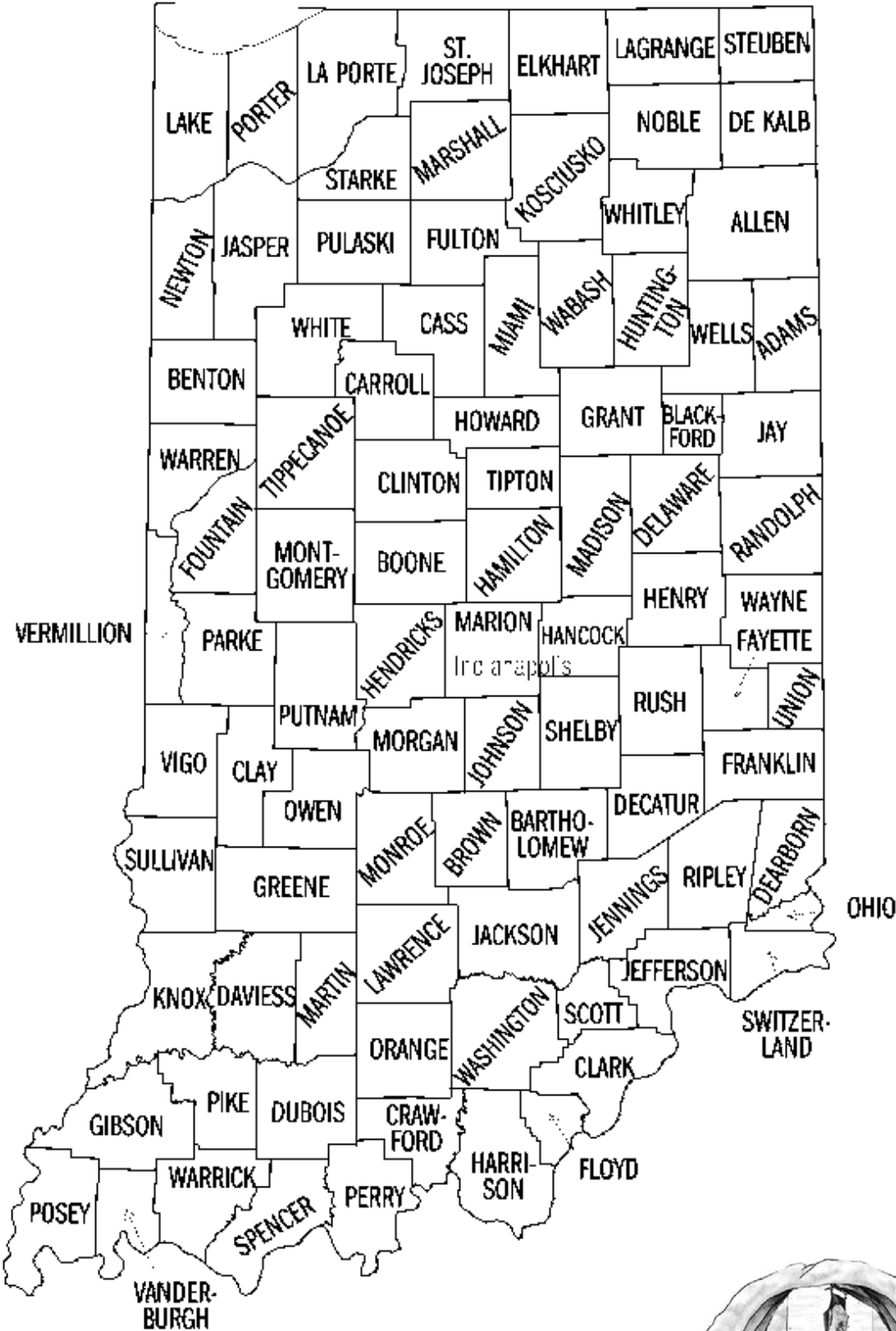
Priority 2 Hibernacula _____

Priority 3 Hibernacula _____

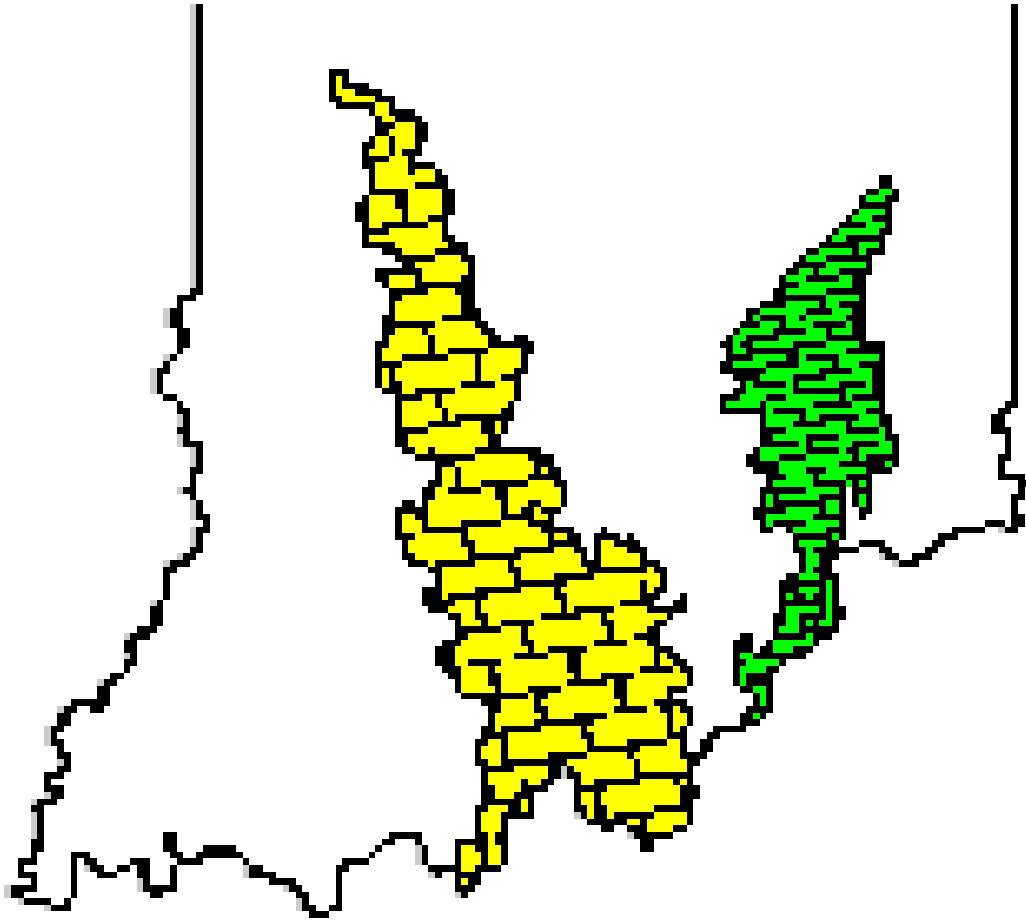
Priority 4 Hibernacula _____



Indiana County Map



Indiana Karst Map



Major Karst Regions in Indiana

1. Mitchell Plateau (Mississippian Limestone): extends from eastern Owen County in the north to the Ohio River in Harrison County on the south.
2. Muscatatuck Plateau (Silurian & Devonian Limestone): in southeastern Indiana, from the Ohio River in Clark County in the south to Decatur County in the north.

