



1600 Riverside Road  
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auduboncnc.org  
(716) 569-2345

## **Audubon Classroom Program – PA**

### **Before the Audubon presenter comes:**

Please review the Curriculum Integration Guide information and materials with your class. We don't need you to teach the lesson, but it helps if students have some basic background in the concepts that we are teaching.

### **When the Audubon presenter is in your class:**

Please remember that we are guests in your school. We appreciate you being present during the lesson, helping with discipline and making connections between our lesson and other things that your students are doing.

### **After the Audubon presenter leaves:**

Please keep the learning going. There is a post visit activity to do, along with other ways to continue to explore this topic.

There is a teacher survey at <http://auduboncnc.org/classroomevaluation> that you can complete to tell us how we are doing and what we can do to better suit your needs.

# The Seven Sleepers

## Curriculum Integration Guide

### Pre-visit activities

- Ask students to think about winter and the things people do to prepare for winter and survive the cold.
- Tell the students that Audubon educators have found that most people don't know which mammals hibernate and which ones don't. Have them make their own predictions.
- Do your students know what makes a mammal a mammal?

### Extend the learning

- Have each student pick a local animal and find out how it survives winter.
- Create a bulletin board in your classroom, or in the hallway outside of your classroom that shows a winter scene. Students can add their animals to the scene, showing how they spend winter.
- Do Black Bears hibernate or go dormant? After the lesson, learn more about why there is more than one point of view among scientists:  
<http://www.sciencemag.org/news/2011/02/secrets-bear-hibernation>

### Books for students

- *Do Not Disturb: The Mysteries of Animal Hibernation and Sleep* by Margery Facklam. Cover how mammals, birds, and fish prepare for winter.
- *Animals Hibernating: How Animals Survive Extreme Condition* by Pamela Hickman and Pat Stephens. Includes activities, experiments and fun facts about hibernators and sleepers.

### PA Biology Education Standard

**3.1.3.A1.-** Describe characteristics of living things that help to identify and classify them.

**3.1.3.C1.-** Recognize that many plants and animals can survive harsh environments because of seasonal behaviors (e.g. hibernation, migration, trees shedding leaves).

### Objective of the program

This program deals with behavioral adaptations of mammals for survival through our cold winters. Misconceptions about hibernation will be cleared. The difference between true hibernation and dormancy is addressed.

## Seven Sleepers

### Post-visit Activity

Today you learned about how mammals in the region get through winter. Complete the questions below to review what you learned.

List four things to look for to know an animal is a mammal.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

What 3 things change when a mammal TRULY hibernates?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

What do most mammals do in the winter?

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## Seven Sleepers Answer Key

### Post-visit Activity

List four things to look for to know an animal is a mammal.

1. Bones or backbone (vertebrate)
2. Fur or hair
3. Warm-blooded
4. Live birth (also drink milk as babies)

What 3 things change when a mammal TRULY hibernates?

1. Heart rate decreases
2. Breathing rate decreases
3. Body temperature decreases

What do most mammals do in the winter?

Stay active



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### **SEVEN SLEEPERS LULLABY**

Sung to the tune of *Rock-a-bye Baby*

*Lyrics by Jennifer Schlick, Program Director, Jamestown Audubon Society*

True hibernators eat to get fat  
Four hibernators – one is a **bat**  
The **groundhog**, the **bear** and the **jumping mouse**  
They eat and they eat till they're big as a house

Winter is coming; they must find places  
To curl up inside and cover their faces  
They may find a cave, or go underground  
Their bodies get cold and they don't make a sound

Heart rates slow down to a few every minute  
Breathing rates, too, just a few every minute  
They almost look dead, but don't become blue -  
They'll wake up in springtime, all good as new...

There are three other sleepers: they don't hibernate.  
One is the **skunk** whom you may love to hate.  
One is the **chipmunk** and one the **raccoon**.  
These small sleepers also belong in this tune.

These guys will sleep, but then they'll wake up.  
They'll roam around and have a light supp – er.  
Back to their dens to do some more snoozin'.  
But true hibernation they'll be refusin'.

**Note:** *this song is based on the seven mammals in Western New York and Northwestern Pennsylvania that are considered "sleepers" in the winter.*