



Black Bears - How Many Bears?

Materials:

- Set of food cards
- Envelopes
- White board with stand; dry erase markers
- Thumb tacks
- Pictures of bears and bear sign

Preparation:

1. Gather materials listed above.
2. Create chart on white board with student names listed vertically and the different food cards listed horizontally.
3. Cut out cards and spread out on table. There should be less than 80 pounds of food per participant on the table.

Instructions:

1. Share with the participants that the pieces of paper represent various kinds of bear food but do not share specifics on what each card means. (N=Nuts, B=Berries, I=Insects, M=Meat, P=Plants. The number beside each letter represents how many pounds of that food item they have collected.)
2. Have participants place their envelopes on the wall. This will represent their den site.
3. Share with the participants that they are all black bears but not all black bears are alike. Assign one participant to be the injured bear and they must hunt with only one hand. Assign another participant as the mother bear.
4. When it is time to begin, participants will pick up one piece of food and return it to their den site.
5. When all the colored squares have been picked up, explain to the participants what the colors and numbers represent. Have participants total the weight of food they gathered.
6. Compile the total food on the board, labelling the injured and mother bear. Share with the participants that each bear needed 80 pounds of food to survive and explain what each card represents. Which bears survived? Is there enough to feed all the bears? How many pounds did the injured bear collect? Will she survive? What about the mother bear? Did she get twice the amount needed to survive?
7. Have participants total all the food they gathered. Divide the total by the 80 pounds needed by an individual bear in a 10-day period. How many bears could the habitat support? Discuss limiting factor and carrying capacity of the forest.
8. Extension activities – Have participants total the amount of food they gathered for each category. Convert those numbers into percentages of the total poundage of food each gathered.

What the Zoo is doing to help this species:

When you think of Texas wildlife, a few animals probably come to mind – armadillos, cougars, longhorns, rattlesnakes...maybe even the whooping crane. Chances are the American black bear wasn't on your radar, but thanks to its gradual return to Texas it soon will be. Many years ago, four

of the 16 subspecies of black bear once roamed the state of Texas. Unfortunately, as the lone star state grew in popularity with settlers throughout the 19th century, the number of black bears began to dwindle as a result of habitat loss and unregulated hunting of the species. By the beginning of the 20th century, seeing a black bear within state lines was considered extremely rare. Today, at least two subspecies of black bear are making their way back into Texas due in large part to the growing populations of black bears in the surrounding states of Louisiana, Arkansas, and Oklahoma, but for those of us living outside of East Texas the black bear remains largely unheard of.

The recent opening of the Hamill Foundation's Black Bear Exhibit at the Houston Zoo gives Houstonians the opportunity to see the bears up close and learn about what the Zoo is doing to protect them in the wild. The Zoo is participating in state protection planning through the [Texas Black Bear Alliance](#). The alliance is focused on ensuring black bears return to their historic range in Texas by bringing together individuals, organizations, and state and federal government representatives to support the species' recovery. Because black bears are still considered a rare species in the state, the Texas Parks and Wildlife Department investigates each reported sighting in order to gain a better understanding of the number and rate at which black bears are returning to Texas. Having a clearer picture of the population size allows researchers to create wildlife management plans as well as offer educational outreach activities to community members living near black bear habitat. In conjunction with these efforts the Zoo designed the Texas black bear reporting signs that are used all over the state.

Living outside of the black bears' home range can make it tricky to know what actions you can take to protect this native Texan. Thankfully, small changes to your everyday routine can make a big difference. Bears need trees to live, so by using less paper or recycled-content paper products, fewer trees are cut down meaning you are contributing to saving black bears in the wild! Consider going paperless for billing or even when purchasing tickets for your next visit to the Zoo. Just last year the Houston Zoo saved 735 mature trees by committing to better paper choices and using digital documents! And remember, every time you visit the Zoo, you're helping to save black bears like our very own Belle and Willow in the wild. See them, Save them – its as simple as that.

You:

The Houston Zoo uses paper made of recycled materials for our admission tickets. Reduce your use of paper to save forests that bears need to survive.

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