THE DOLLARS & SENSE OF HUNTING

PURPOSE
To recognize sport hunting as a strategy to protect biodiversity.

KERA CONNECTIONS to Life Science
Core Content: Populations and Ecosystems
Academic Expectations: 2.2 Patterns, 2.3 Systems, 2.6 Change Over Time
Process Skills: Communication, Recognizing Personal Bias, Interpreting Data

OBJECTIVES
Students should be able to:
1. describe interactions between different animal populations
2. identify hunting as a means of population control
3. explain indirect benefits of sport hunting to biodiversity.

VOCABULARY
Teachers may wish to discuss the following terms: excise tax, market hunting, regulation, sport hunting and wildlife management area.

aFIELD NOTEBOOK
Ideas for Teachers
A. Invite a hunter into your classroom for a talk. Encourage your students to interview other hunters in their community. Students should write a narrative recounting one of the hunter’s favorite hunting trips. Why did they enjoy this particular trip? Does the storytelling describe the reasons why this hunter hunts?
B. Collect information from other wildlife organizations and their positions on hunting. Invite speakers with other views into your classroom. Have students identify persuasive techniques. Publish a class newspaper including objective news, editorial letters and cartoons about hunting or population control.
C. Ask students what is meant by the phrase “hunting is the sport of kings.” In Europe, wildlife and other natural resources belonged to royalty. Only the rich were financially able and legally allowed to hunt. American revolutionists rebelled against the king, taxation and other royal beliefs. Wildlife in the United States belongs to the people. How did this influence America’s wildlife history?
D. THE BUCK STOPS HERE - These fiscal year 1991 statistics show the contributions of U.S. hunters to wildlife: $529,895,000 spent on licenses and permits; for hunting equipment, such as firearms, $3.267 billion; federal duck stamps added $21.7 million; and conservation organizations, like the National Wild Turkey Federation, donated $138,576,000. What would happen to biodiversity without this

ANSWERS TO aFIELD NOTES
1. B
2. A
3. The hunter’s population also increases after a lag time determined by reproductive cycles.
4-5. Answers will vary. An inverse relationship is apparent in most competing animals. They could also overpopulate and crash at the same time.
6. Lloyd Wildlife Management Area (WMA)
7. Daniel Boone National Forest
8. Yellowbank WMA
9. Ballard County WMA
10. Fort Campbell Military Reservation
11. Answers will vary. Be sure to consider local parks, lakes and streams.
12.$35
13. Clark’s River National Wildlife Refuge
14.$28.38
15. Answers will vary.
funding? Manufacturers pay the federal aid excise tax directly to the U.S. Treasury, then pass on the cost to consumers. Discuss the difference between wholesale and retail prices.

E. Review the legislative process on how a bill becomes a law. For example, you may document how Senator Mitch McConnell’s bill established the Clark’s River National Wildlife Refuge. Get involved with the new “Teaming with Wildlife” initiative. Log on to http:\www.gorp.com\teamww to find out more about this long-term funding solution for nongame wildlife.

F. Analyze the lyrics of The Conservation Song. Does the author sound like a hunter? What story does the writer tell from history? Who are some of the “important people that started turning things around?” What happened during the 1930s to allow sportsmen to pay the bill? What is the main message conveyed by the lyrics? How would you define a sportsman? Students learning a musical instrument, like the recorder, could accompany singers by playing the melody of Puff the Magic Dragon.

Tasks for Students
1. Conduct a survey to determine average expenditures for a hunt. In Kentucky, wildlife and outdoor recreation boasts an annual income of $3.4 billion and supports 52,000 jobs. Which occupations are related to hunting? Is your family supported by money from sport hunting?
2. Write an editorial on whether the typical hunter supports biodiversity.
3. Write a song and produce a music video commemorating wildlife in Kentucky.
4. Enter Kentucky’s Junior Duck Stamp Contest. The contest deadline is March 15, 1998. How have waterfowl inspired hunters to conserve biodiversity?

WILD THINGS FOR TEACHERS
Become a volunteer hunter education instructor. Both hunters and nonhunters alike benefit from topics such as: ethics, wildlife identification, survival, first aid, firearms, ammunition, archery and muzzleloading. Certification, free materials and six one-hour videotapes are available to view “Hunter Education on KET.” For groups with 25 or more students, range work may be scheduled.

RECOMMENDED RESOURCES
* Kentucky Hunting Guide. Printed annually by the KDFWR.

ADDITIONAL ACTIVITIES
* Project WILD activities “Carrying Capacity” “The Hunter” and “Pro and Con: Consumptive and Nonconsumptive Uses of Wildlife”
THE DOLLARS & SENSE OF HUNTING

CHORD H

On a planet crowded with life forms, harmony is essential. One chord that organizes these pleasing relationships is hunting. Hunting? Images of a red-tailed hawk zeroing-in on a rabbit come to mind. Good for the hawk, but not-so-good for the rabbit. Or is it?

For the individual being hunted, hunting seems harsh and cruel. Yet, to have life, death is necessary and important. Survival, on a larger scale, is linked to populations rather than individuals. Released in an area with few predators, rabbits soon overpopulate. The plants that rabbits eat disappear. Other species are affected by a loss of plants. Mosquitos, groundhogs, bison and other grazers go hungry. Then gray bats may have no mosquitos to eat. Without bat wastes, cave critters run out of fuel. The chain reaction goes on. Eventually many individual rabbits and other species die anyway of starvation and disease. Hunting helps maintain harmony by keeping plant and animal populations in balance.

WHY DO PEOPLE HUNT?

Ask this question of hunters and you’ll get many different answers. Throughout history, humans have hunted for food, clothing and other items needed for survival. Market hunting, like commercial angling, was a way of life for Annie Oakley and other early Americans. Today’s hunters cite reconnecting with nature, sharing a family tradition, relaxation and recreation as reasons to hunt.

Humans are important predators now that cougars, wolves and bears are no longer part of the equation. In ten years with no hunting, Kentucky’s white-tailed deer population would leap to two million animals. Vehicle collisions would increase from 4,000 to 32,000 annually. As natural food supplies ran out, deer would eat more than 9 billion pounds of crops. Sport hunters create equilibrium between wildlife populations, habitat and human needs.

aFIELD NOTES

November 5, 1997

Analyze this population graph.

1. Which animal is the hunter?
2. Which is being hunted?
3. What happens to the hunter’s population when the prey’s population increases?
4-5. How would a graph look with two competing plant-eaters and no predators? Explain your answer.

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years
Number of Animals

years
Number of Animals
HUNTERS AS AMERICA’S FIRST CONSERVATIONISTS

As human population increased and wildlife decreased, hunters led the fight to protect remaining wildlife species. National leaders, like Gifford Pinchot and George Grinnell, along with legislators worked to find long-term solutions to the loss of wildlife diversity. Hunters voted to ban market hunting and place user-fees on sport hunting. Additional funds were raised through license sales. Conservationists set their sights on establishing parks, refuges and wildlife management areas. With the combined efforts of research, law enforcement, wildlife management and regulated hunting, many animal populations rebounded to healthy levels.

The KDFWR manages about 1.5 million acres (less than 3% of Kentucky) for wildlife and owns 75,000 acres.

Using a state highway map, identify these public hunting areas.

6. ____________________________
7. ____________________________
8. ____________________________
9. ____________________________
10. ____________________________

11. Locate public wildlife areas in your county.
THE BUCK STOPS HERE - INCOME FROM HUNTING

Why is the dollar bill also nicknamed a buck? Deerskins were traded like money. The sport of deer hunting still raises money for state wildlife agencies. Kentucky hunters contribute $8 million annually through licenses and permits.

Backed by hunters nationwide, Nevada Senator Key Pittman and Virginia Congressman A. Willis Robertson sponsored the Federal Aid in Wildlife Restoration Act in 1937. Manufacturers pay an 11% excise tax on sporting firearms, ammunition and archery tackle to a special fund exclusively for wildlife conservation programs. An additional 10% tax on handguns helps finance hunter education programs. The Federal Aid in Wildlife Restoration Act (or P-R, short for Pittman and Robertson) has contributed more than $3.6 billion to state wildlife agencies over the past 60 years. Studies funded through P-R, such as those on lead shot toxicity and forest habitat improvement, benefit game animals as well as nongame species. Hunters continue to pay to protect biodiversity.

12. If a hunting license costs $12.50, a Kentucky Waterfowl Stamp $7.50 and a federal duck stamp $15, how much money does a Kentucky goose hunter contribute to wetlands conservation?

Along with the Migratory Bird Conservation Act, money raised from federal duck stamps purchases national wildlife refuges.

13. What is the name of the newest national wildlife refuge located in Kentucky?

14. The manufacturer valued the goose hunter’s shotgun at $250 and steel ammunition at $8. How much P-R excise tax was collected from the goose hunter’s equipment?

DO YOU HELP PAY FOR WILDLIFE?

In Kentucky, many people do not pay for conservation. Hunters, anglers and donors to special programs (Nature License Plate and Nature and Wildlife Income Tax Fund) contribute the most to wildlife. Nonhunters may pay for wildlife, too, by supporting legislation that increases state sales tax or an excise tax on outdoor-related products.
The Conservation Song

lyrics by Rodger Coombs

sing to the tune of Puff the Magic Dragon

God made the wildlife for you and me
most of us don’t understand conservation is the key.
The wildlife of Kentucky are important, you see
if it wasn’t for the sportsman, I wonder where they’d be.

First settled this country
an abundance was seen
cougar, bear, deer and elk, the passenger pigeon
all kinds of birds, fish, mammals and clean streams.
They said it would never end
but it vanished like a dream.

Oh, God made the wildlife for you and me
most of us don’t understand conservation is the key.
The wildlife of this nation are important, you see
if it wasn’t for the sportsman, I wonder where they’d be.

Turn of the century
conservation was not known,
nobody seemed to care that everything was gone.
But then some important people started turning things around,
started thinking about our environment
started building, not tearing down.

Oh, God made the wildlife for you and me
most of us don’t understand - conservation is the key.
The wildlife of this country are important, you see
if it wasn’t for the sportsman, I wonder where they’d be.

Since the 1930s, sportsmen paid the bill
wildlife are returning to the forest, lakes and fields.
Some people don’t know, some don’t want to share
for wildlife to continue on - everyone must care.

Oh, God made the wildlife for you and me
most of us don’t understand - conservation is the key.
Some people don’t know, some don’t want to share
for wildlife to continue on
EVERYONE MUST CARE!

The Conservation Song, copyrighted 1992 by Reid & Walls, published courtesy of Music Man Records, P.O. Box 303, Springfield, KY 40069.

Fish and Wildlife Program Leader, Rodger Coombs combines his love for music with the outdoors to convey a special conservation message. The Backwoods to Backyards slide show includes interactive “bluegrass” songs that educate, as well as entertain, students about Kentucky’s wildlife resources. The 45-minute performance is offered free for school assemblies.