



ACTIVITY 8

Rank for Hank: Small Animals



RANCH LIFE SERIES / BOOK 3 / RANCH WILDLIFE

Chapters 4, 5 & 6

Content Area

Science & Social Studies

Topic

Animal Impact on Natural Resources

Objective

Students will study and assign value to animal contributions in a ranch's ecosystem and economic success.

Texas Essential Knowledge and Skills (TEKS)*

3.12A, 5.12AC & 1.9B, 1.16B, 2.7A, 2.15B, 3.15E, 4.11B, 4.19B, 5.12B, 5.23B





Rank for Hank: Small Animals

CONTENT AREA: Science & Social Studies

TOPIC: Animal Impact on Natural Resources

ACTIVITY MATERIALS:

- SECURITY BRIEFING (page A8-2): 1 per student or student group
- RANK FOR HANK: SMALL ANIMALS - NOTES (page A8-3): 1 per student
- RANK FOR HANK: SMALL ANIMALS - DATA RECORD (page A8-4): 1 per student or student group
- THE BOTTOM LINE (page A8-6): 1 per student or student group

READING STRATEGY:

- Review the terms “economic value” and “ecosystem value” with your students. See definitions and examples below.
- Students will read Chapters 4, 5 & 6. (Recommended reading can be done individually by students, student groups or be read aloud by a teacher.)
- Students will write notes during the reading on their RANK FOR HANK: SMALL ANIMALS - NOTES sheet, recording how an animal helps or harms a ranch with their presence and behavior.

ACTIVITY INSTRUCTIONS:

Students will complete the RANK FOR HANK: SMALL ANIMALS - DATA RECORD using their handwritten notes from the reading as a reference.

At the completion of the activity, students will have data to transfer to their THE BOTTOM LINE worksheet.

STUDENT SKILLS ASSESSMENT:

Have students (or student groups) complete THE BOTTOM LINE worksheet at the end of the activity.

ECOLOGICAL VALUE: On a ranch, ecological value is determined by the contribution of a species (*plant or animal*) to the healthy preservation of the ecosystem (*how organisms coexist with one another*).

EXAMPLES: Healthy grass is EXTREMELY VALUABLE to the ranch's ecosystem because it is needed to nourish and grow wildlife populations, such as cattle. Cattle grub insects would be VERY DESTRUCTIVE to the ranch's ecosystem because they can be fatal to a cattle population.

ECONOMIC VALUE: On a ranch, economic value is determined by the contribution of a species (*plant or animal*) to the *financial benefit* gained or lost in the business of ranching. Wildlife presence/behavior, the weather, and natural disasters greatly impact this value.

EXAMPLE: Healthy grass is EXTREMELY VALUABLE to a ranch's economics because it strengthens the goods and services of the ranch (it feeds cattle, improves the landscape, and provides natural wildfire management).

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SECURITY BRIEFING –

WORDS OF WISDOM FROM HANK THE COWDOG:

Well partners, this is Hank the Cowdog and I need your help. Sally Mae and Loper think we need to keep some **animals** on the ranch and frankly, this dog does not agree. You have read about coyotes, porcupines, and mice. Now it is time to calculate the **value** they bring to a ranch. Each of these animals can add or subtract value to our ranch. Now all of you know how I feel about coyotes, if it was up to me, I would never see one again! All of the animals interact with the **environment** and a healthy ecosystem on the ranch means a healthy herd of cattle! Each of these animals can also help Sally Mae and Loper put more money in their pockets, which means the Head of Security (that's me) might get an extra helping of dog food! You are going to help me figure out which animals are the **MOST** beneficial to the ranch. As Head of Security, it is important to know which animals for me to chase off and which ones help my ranch!

ACTIVITY MATERIALS:

- RANK FOR HANK DATA RECORDING SHEET
- NOTES: RANK FOR HANK
- Insert page numbers of each activity page onto the “Game Materials” section of the Educator’s Guide Page

ACTIVITY INSTRUCTIONS:

1. Each student will need a RANK FOR HANK NOTES PAGE
2. Have students write notes on the value of each animal on the ranch. Values should be categorized into Economic Value and Value to the Ecosystem.
3. When students are done with their notes, they will fill in the RANK FOR HANK DATA RECORDING SHEET

WRAP UP:

Fill out THE BOTTOM LINE worksheet after you have completed the activity.

Rank for Hank: Small Animals



NAME: _____ DATE: _____

READING NOTES

As your teacher reads, write down how each animal affects the different values of a ranch.

ANIMAL	ECOSYSTEM VALUE		ECONOMIC VALUE	
	List the way(s) this animal HELPS the ranch's ECOSYSTEM.	List the way(s) this animal HARMS the ranch's ECOSYSTEM.	List the way(s) this animal HELPS the ranch's ECONOMICS.	List the way(s) this animal HARMS the ranch's ECONOMICS.
Coyote				
Bobcat				
Mountain Lion				
Skunk				
Porcupine				
Raccoon				
Rodent				
Rabbit				
Prairie Dog				
Owl				

Rank for Hank: Small Animals



NAME: _____ DATE: _____

DATA RECORD

Reference your notes from the reading and the glossary below to compile information about each small ranch animal. Assign a number value to each animal that reflects your findings.

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EXAMPLE: Healthy grass is EXTREMELY VALUABLE to a ranch's economics because it strengthens the goods and services of the ranch (it feeds cattle, improves the landscape, and provides natural wildfire management).

ANIMAL	CONTRIBUTION TO RANCH		VALUE TO THE RANCH						
	ADDS VALUE	SUBTRACTS VALUE	Compare number of "Helps" to "Harms" to the ranch to RATE EACH ANIMAL'S VALUE						
	Use a tally mark for each "help"	Use a tally mark for each "harm"	0 = Very Destructive 1 = Harmful 2 = Neither Harmful or Valuable 3 = More Valuable Than Harmful 4 = Valueable 5 = Extremely Valueable						
Coyote			Ecological Value	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
			Economic Value	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Bobcat			Ecological Value	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
			Economic Value	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Mountain Lion			Ecological Value	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
			Economic Value	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Skunk			Ecological Value	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
			Economic Value	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Porcupine			Ecological Value	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
			Economic Value	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Raccoon			Ecological Value	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
			Economic Value	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Rodent			Ecological Value	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
			Economic Value	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Rabbit			Ecological Value	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
			Economic Value	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Prairie Dog			Ecological Value	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
			Economic Value	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Owl			Ecological Value	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
			Economic Value	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5



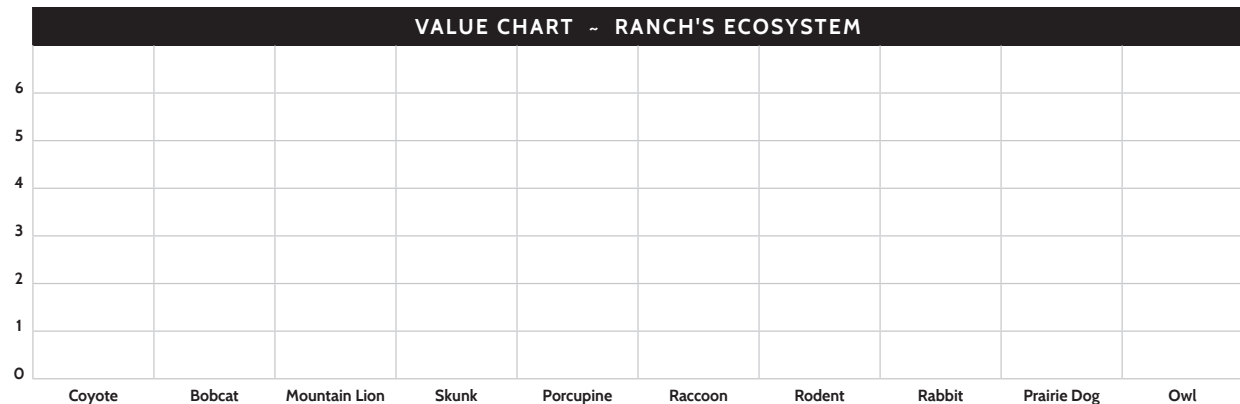
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NAME: _____ DATE: _____

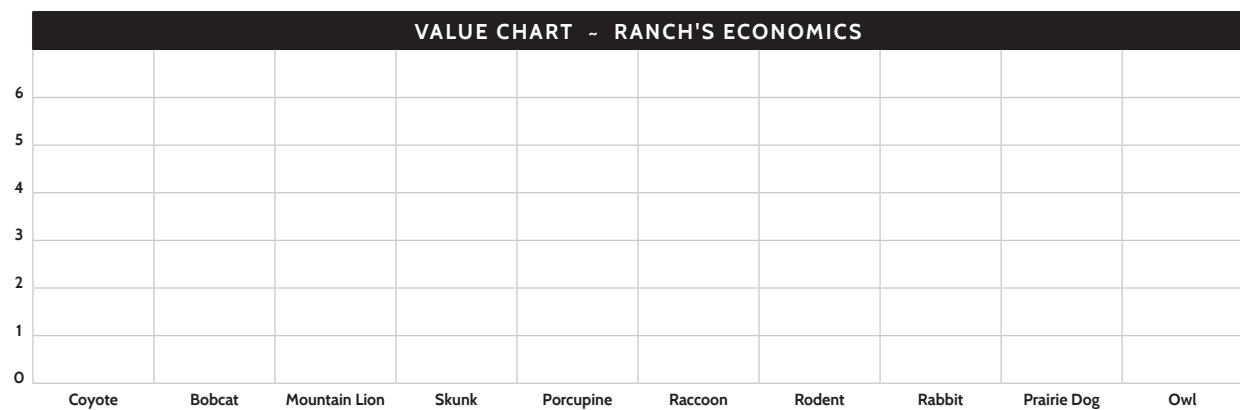
THE BOTTOM LINE

Transfer the values you assigned to each animal on your DATA RECORD to the charts below, then answer the questions, giving justifications for your answers.



I think the _____ brings the MOST value to the ranch's ECOSYSTEM because...

I think the _____ brings the LEAST value to the ranch's ECOSYSTEM because...



I think the _____ brings the MOST value to the ranch's ECONOMICS because...

I think the _____ brings the LEAST value to the ranch's ECONOMICS because...
