



ACTIVITY 3

Rank for Hank: Large Animals & Birds



RANCH LIFE SERIES / BOOK 3 / RANCH WILDLIFE

Chapters 2 & 3

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: Large Animals & Birds

CONTENT AREA: Science & Social Studies

TOPICS: Animals' Value to the Ranch Ecosystem and Economics of a Ranch

ACTIVITY MATERIALS:

- RANK FOR HANK DATA RECORDING SHEET (PAGE A3-3): 1 PER STUDENT OR STUDENT TABLE GROUP
- NOTES: RANK FOR HANK (PAGE A3 - 4): 1 PER STUDENT

READING STRATEGY:

- Review the terms "economic value" and "ecosystem value" with your students. Create a word wall or visual reference for students to refer to during the reading.
- The teacher can read aloud or have students read aloud with a group or partner. Every time you read something that has an animal gain or lose value (economic or in the ecosystem), write it down in your notes under that animal.

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).

ACTIVITY INSTRUCTIONS:

1. Each student or student group needs a page to write down notes.
2. Read the chapter aloud to your students.
3. As the teacher reads, students record gains and losses of value for each animal on the ranch.

STUDENT SKILLS ASSESSMENT:

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

Rank for Hank: Large Animals



SECURITY BRIEFING –

CONTENT AREA: Science & Social Studies

TOPICS: Animals' Value to the Ranch Ecosystem and Economics of a Ranch

ACTIVITY MATERIALS:

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- NOTES: RANK FOR HANK (PAGE A3 - 4): 1 PER STUDENT

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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.
Deer				
Pronghorn Antelope				
Feral Hogs				
Aoudad Sheep				
Bird Dogs				
Doves				
Quail				
Wild Turkeys				
Birds of Prey				
Buzzards				

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NAME: _____ DATE: _____

DATA RECORD

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

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	
	<i>Use a tally mark for each "help"</i>	<i>Use a tally mark for each "harm"</i>	0 = Very Destructive 1 = Harmful 2 = Neither Harmful or Valuable 3 = More Valuable Than Harmful 4 = Valueable 5 = Extremely Valueable	
Deer			Ecological Value	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
			Economic Value	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Pronghorn Antelope			Ecological Value	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
			Economic Value	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Feral Hogs			Ecological Value	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
			Economic Value	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Aoudad Sheep			Ecological Value	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
			Economic Value	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Bird Dogs			Ecological Value	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
			Economic Value	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Doves			Ecological Value	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
			Economic Value	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Quail			Ecological Value	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
			Economic Value	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Wild Turkeys			Ecological Value	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
			Economic Value	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Birds of Prey			Ecological Value	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
			Economic Value	☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Buzzards			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.

VALUE CHART ~ RANCH'S ECOSYSTEM										
6										
5										
4										
3										
2										
1										
0										
	Deer	Pronghorn Antelope	Feral Hogs	Aoudad Sheep	Bird Dogs	Doves	Quail	Wild Turkeys	Birds of Prey	Buzzards

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...

VALUE CHART ~ RANCH'S ECONOMICS										
6										
5										
4										
3										
2										
1										
0										
	Deer	Pronghorn Antelope	Feral Hogs	Aoudad Sheep	Bird Dogs	Doves	Quail	Wild Turkeys	Birds of Prey	Buzzards

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...
