

Lesson Plan

Of a Different Stripe

Book: *Zebras*

Series: Animals of Africa

Level: Beacon

Objective

To help students practice conducting research and working as a group, as well as to learn more about zebra habitats and conservation efforts.

Supplies

- *Zebras* book
- International Union for Conservation of Nature (IUCN) Red List web pages for each of the three kinds of zebras:
 - Plains zebra: <http://www.iucnredlist.org/details/41013/0>
 - Grevy's zebra: <http://www.iucnredlist.org/details/7950/0>
 - Mountain zebra: <http://www.iucnredlist.org/details/7960/0>
- Whiteboard
- Paper and pencils

Before the Activity

Read through the *Zebras* book, or assign it to students to read on their own. Write the following questions on the whiteboard:

1. What is this zebra's scientific name?
2. What is this zebra's IUCN Red List category?
3. What is the total population estimate?
4. Is this zebra's population trend stable, increasing, decreasing, or unknown?
5. In what countries, if any, does this zebra natively occur?
6. In what countries, if any, is this zebra regionally extinct?
7. What habitats does this zebra inhabit?
8. Is this kind of zebra hunted for meat?
9. Is this kind of zebra hunted for skins?
10. What are the major threats to these zebras?

Activity

Choose one student to read pages 6 and 7 out loud. Ask the students to list the three different kinds of zebras. (Answer: Plains zebras, Grevy's zebras, and mountain zebras.)

Divide the students into three groups. Assign each group a different type of zebra. Each group should use the IUCN Red List web page to find the answers to the questions on the whiteboard. They should write their answers down on a sheet of paper.

After each group has recorded its answers, have each group choose a spokesperson to present the group's answers to the rest of the class. Then ask the following questions:

- What do all these kinds of zebras have in common? (Possible answers: All live in Africa, all face some kind of hunting, all are threatened to some extent by fences/livestock.)
- What are some of the differences between the kinds of zebras? (Possible answers: Different population numbers and trends, different endangered status, different threats, different habitats.)

Evaluation

Using the attached answer key, give each group 2 points for each correct answer, for a total of up to 20 points.

Standards

This lesson may be used to address the Common Core State Standards' reading informational texts standards, grade 3 and 4 (RI 3.2; RI 4.1; RI 4.2), and the National Science Education Standards' Content Standard C, grades K–4.

ANSWER KEY: Plains Zebra

1. What is this zebra's scientific name?

Equus quagga

2. What is this zebra's IUCN Red List category?

Near Threatened

3. What is the total population estimate?

Over 500,000 individuals (150,000 to 250,000 mature individuals)

4. Is this zebra's population trend stable, increasing, decreasing, or unknown?

Decreasing

5. In what countries, if any, does this zebra natively occur?

Angola, Botswana, Democratic Republic of Congo, Ethiopia, Kenya, Malawi, Mozambique, Namibia, Rwanda, South Africa, South Sudan, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe

6. In what countries, if any, is this zebra regionally extinct?

Burundi, Lesotho

7. What habitats does this zebra inhabit?

Grasslands, plus all African habitats except rain forests, deserts, and dune forests

8. Is this kind of zebra hunted for meat?

Rarely

9. Is this kind of zebra hunted for skins?

Yes

10. What are the major threats to these zebras?

Mostly hunting but also fences that block their migration patterns

ANSWER KEY: Grevy's Zebra

1. What is this zebra's scientific name?

Equus grevyi

2. What is this zebra's IUCN Red List category?

Endangered

3. What is the total population estimate?

2,860 individuals (1,956 mature individuals)

4. Is this zebra's population trend stable, increasing, decreasing, or unknown?

Stable

5. In what countries, if any, does this zebra natively occur?

Ethiopia, Kenya

6. In what countries, if any, is this zebra regionally extinct?

Somalia, Sudan

7. What habitats does this zebra inhabit?

Arid and semi-arid grassland and shrubland

8. Is this kind of zebra hunted for meat?

Only at a subsistence level

9. Is this kind of zebra hunted for skins?

No

10. What are the major threats to these zebras?

Loss of habitat because of grazing livestock, competing with livestock for food and water, hunting for meat, disease from livestock, crossing with other kinds of zebras, and predators

ANSWER KEY: Mountain Zebra

1. What is this zebra's scientific name?

Equus zebra

2. What is this zebra's IUCN Red List category?

Vulnerable

3. What is the total population estimate?

9,000 mature individuals

4. Is this zebra's population trend stable, increasing, decreasing, or unknown?

Unknown

5. In what countries, if any, does this zebra natively occur?

Namibia, South Africa

6. In what countries, if any, is this zebra regionally extinct?

None

7. What habitats does this zebra inhabit?

Rugged mountains with plenty of water and grass

8. Is this kind of zebra hunted for meat?

Only at a subsistence level

9. Is this kind of zebra hunted for skins?

Yes

10. What are the major threats to these zebras?

Hunting for skins, crossing with other kinds of zebras, and not being able to access water due to fences built for livestock