

Webquest: Grevy's Zebra Grant Request

Age Level: Middle School

Overview

Students perform a webquest to gather information about Grevy's zebras and conservation. The scenario: they are applying for a research grant from the Lotzamoni family. The family is well known for its support of conservation programs. The students' mission is to create a PowerPoint presentation about Grevy's zebras that will convince the family that Grevy's zebra conservation is necessary.

Objectives

Upon completion of this activity, students will be able to:

- Use the internet to gather information
- Understand issues affecting the survival of Grevy's zebras
- Describe the benefits of Grevy's zebra conservation
- Synthesize information from a variety of sources to complete a project
- Become familiar with Microsoft PowerPoint software

Important Words

- Equid
- Ex-situ
- In-situ
- Ungulate

Materials

Computer and printer, webquest instructions and grading rubrics, materials for notetaking, and a CD-rom recorder (optional).

Time Needed

120-180 minutes (2-3 class periods)

Teacher Preparation

Read the webquest instructions. Look over the websites in order to be familiar with the resources your students will be using. Read the rubric and make changes based on what you would like your students to learn. Print out enough instructions and rubrics for the entire class. Make sure your students are familiar with presentation software, such as Microsoft PowerPoint.

Webquest: Grevy's Zebra Grant Request

Background Information

The Saint Louis Zoo conducts a variety of field conservation programs around the world. They are grouped under a program known as the Saint Louis Zoo WildCare Institute. These programs have both ex-situ and in-situ components where the Zoo conducts research out in the field and also on Zoo grounds.

Grevy's zebra conservation in Africa is one of these programs. Grevy's zebras are **ungulates**, or hoofed mammals, that range from northern Kenya to southern Ethiopia. Their narrow stripes and white patches near their tails distinguish them from other species of zebras. They are threatened most significantly by loss of habitat, but face other threats to their survival as well. The Lewa Conservancy, an African organization dedicated to wildlife conservation, and the Saint Louis Zoo are working to reverse the decline of these wild equids.

Activity 1: Complete the WebQuest

60 minutes

1. Hand out copies of the webquest instructions and grading rubric to all students and go over them together. NOTE: Students can work independently or in pairs, depending on their reading levels and the availability of computers. Some webpages on the webquest are on a high school reading level and will require students to be proficient readers. Pair students who need reading support with stronger readers. Also, if you don't have enough computers for the entire class, students can share.
2. Let students spend the rest of the class gathering information.

Activity 2: Design presentation 60 minutes

1. Give students a copy of a map of Africa or have them print one out themselves. Using their information, they should research the range of Grevy's zebra habitats and a list of information (10 key facts) that they think the Lotzamoni family should know before they are considered for the grant. Students then prepare a PowerPoint presentation with at least five slides convincing the Lotzamoni family to fund future research and projects to help the Grevy's zebra. NOTE: This portion of the project can/may be completed out of school.

Activity 3: Sharing information

60 minutes

1. Students present their oral presentation accompanied by their slide show for the class, pretending that their classmates are the Lotzamoni family.
2. Have a discussion with students to find out the similarities and differences among the various presentations. Use the following list of questions to foster discussion either in small groups or as a large group. Whether circulating around the room to listen to small groups or listening to the large group discussion, keep track of student participation for grading (see rubric). Here is a list of questions, based on Bloom's taxonomy. Possible answers are listed in italics.
 - a. What is the major threat to Grevy's zebra survival? (*habitat loss*)
 - b. What are some of the social characteristics of zebras? (*Males are territorial and will live with only one male surrounded by females; there is a strong bond between the mother and foal, but not with the father, etc.*)
 - c. Explain in your own words some of the current conservation projects going on in Africa.

Webquest: Grevy's Zebra Grant Request

- d. How would you use your limited time with Lotzamani family members to help them understand the importance of preserving habitat for wild animals? Which presentations did this most effectively?
- e. What factors did you consider in creating a presentation that would convince somebody to donate money?
- f. Can you relate what you have learned about conservation, Africa and/or Grevy's zebras to conservation programs that might work in your own community?
- g. Now that you've seen and heard the presentations you and your classmates created, let's use these ideas to create the ultimate presentation. What would that look like?

Conclusion

5 minutes

1. Congratulate the students on their work. Encourage them to do more research if they are interested. Ask them to summarize what they learned about Africa, zebras and/or conservation methods.

Webquest: Grevy's Zebra Grant Request

Student Worksheet

WebQuest Instructions

1. Introduction

Africa is home to some of our planet's most amazing wild places and to some very unique animal species, including Grevy's zebras. The Saint Louis Zoo and other organizations study the fauna, or animal life, of Africa and work to conserve its resources.

2. Your Task

This is your big chance! You are applying for a grant from the Lotzamoni family. The Lotzamoni family is well-known for its contributions to conservation research, but it's not familiar with the plight of the Grevy's zebra. You must create an oral presentation that would convince the Lotzamoni family to donate money for you to do further conservation work with the Grevy's zebra. You will create a PowerPoint presentation of at least 5 slides to accompany and support your presentation. The presentation must include a map of Africa showing the regions where Grevy's zebras live, and a list of 10 key facts that you want the Lotzamoni family to learn. Be sure to tell them why you need their money and how it would be used. You should also be prepared to discuss important issues in zebra conservation.

3. The Process

Read the following web pages and take notes, keeping in mind your presentation requirements. Feel free to explore links to and from these pages as well. They will teach you about Africa, Grevy's zebras, and conservation methods.

<http://www.stlzoo.org/animals/abouttheanimals/mammals/hoofedmammals/grevyszebra.htm>

<http://www.stlzoo.org/conservation/conservationstatus.htm>

<http://www.stlzoo.org/wildcareinstitute/grevyszebrasinthehornofafr.htm>

<http://www.stlzoo.org/animals/caremanagement/speciessurvivalplans/>

<http://www.lewa.org/>

<http://www.earthwatch.org/expeditions/muoria.html>

You may also consult other websites to increase your understanding.

Once you have completed your research, work on your PowerPoint presentation. Consult the rubric to make sure you have completed all the requirements for the project.

Webquest: Grevy's Zebra Grant Request

4. Evaluation

Requirements	Exceeds expectations	Meets Expectations	Needs Improvement	Unacceptable
Presentation	Original and creative. Presentation includes map of Africa, 10 important facts and a plan for using donated money. May include additional information or pictures. Oral presentation is supported by the slide show, not an explanation of the slides.	Shows a basic knowledge of the location of Grevy's zebra in Africa and 10 facts relating to conservation of the Grevy's zebra. Includes how donated money would be used. Oral presentation is supported by the slide show, not an explanation of the slides.	Missing some information and/or parts are incomplete (no map and/or less than 10 facts and/or you didn't ask for any money). The oral presentation is an explanation of the slides.	Presentation is missing most or all of the required information.
Slide Show	At least 5 slides created. Combination of words and pictures create a good visual representation of interesting facts about Grevy's zebras, their conservation stories and how money could be used for further projects. The slide show is a strong visual aid for the oral presentation.	5 slides created. Slides use a combination of words and pictures to teach the audience about Grevy's zebras, their conservation stories and how money could be used for further projects. The slide show is a visual aid for the oral presentation.	Some parts of the slide show are missing or below satisfactory, such as using fewer than 5 slides, using too much text or too many pictures, or using inconsistent transitions in the slides.	The slide show is too incomplete to evaluate.
Class discussion	Participated in discussion. Showed a thorough understanding of zebras and the problems they face in Africa as well as conservation methods.	Participated in discussion. Showed a basic understanding of Grevy's zebras and conservation issues.	Participated in discussion. Showed minimal understanding of Grevy's zebras and conservation issues.	Did not participate in discussion and could not answer questions when asked.
Grammar and spelling	There are no errors.	There are a few errors.	There are many errors, but the content is still readable.	Too many errors to understand information.

Webquest: Grevy's Zebra Grant Request

5. Conclusion

Congratulations! You've completed your webquest and hopefully learned something new about conservation, Africa, and Grevy's zebras. If you're interested in learning more about the Saint Louis Zoo's conservation programs around the world, go to the following webpage:

<http://www.stlzoo.org/wildcareinstitute/>