

Activity 10: What's the Plan, Stan?



Summary

Students create an endangered species recovery plan for their community.

Objectives

Students will be able to:

- Explain the need for laws and policies to regulate science and species management
- Describe and explain the means by which groups meet the needs of individuals, societies, and organisms
- Describe cooperation among individuals in creating a recovery plan
- Produce a recovery plan

Standards

English Language Arts CCSS.ELA-LITERACY.W.8.3

Social Studies: B.8.9, E.8.5, and E.8.14

Materials Needed:

- Paper
- Pens or pencils
- Illustration material

Background:

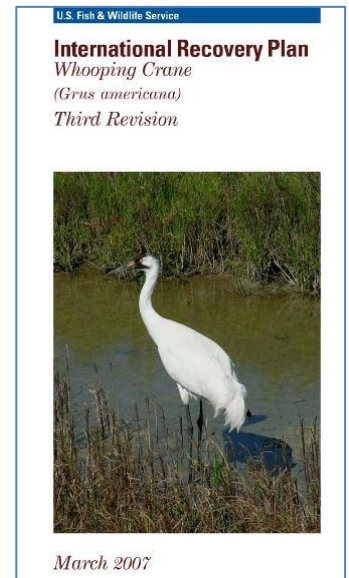
A recovery plan is a tool that is used by decision makers to help guide them in completing a project. The purpose of a recovery plan is to explain the specifics of a project, such as the background, the purpose, the goals, and, most importantly, to provide guidance in the methods for accomplishing those goals. A recovery plan sets the stage for work on a project, but it can also be modified along the way as the needs and priorities of the project itself change.

The *International Whooping Crane Recovery Plan* was compiled by people with a variety of specialties and interests. Individuals from government and non-government organizations in Canada and the United States, non-profit groups, and the general public all pitched in to develop the priorities and guidelines for restoring the world's population of Whooping Cranes. It is important to include a wide range of interests when developing a recovery plan for an endangered species. That way, the interests of everyone involved, such as biologists, refuge managers, landowners, and the public, are all considered.

Compiling a recovery plan often takes a lot of work because there are so many different viewpoints, and sometimes they are conflicting. One of the hardest parts can be trying to reach a consensus within a group about how to set certain protocols. For example, there may be different ideas about how closely people should approach a Whooping Crane in the wild. Another difficult part may be determining what the priorities should

be. For example, one person may think that a priority for the Whooping Crane project should be developing a top-notch tracking system that would be able to locate any bird at any given time. Another person's priority may be educating people in the community about the restoration project. Others may be more concerned that new land restrictions are not established for the cranes, such as closing established hunting grounds. For others, the risk of disease and environmental contaminants may be of interest. A successful recovery plan should address all interests and important issues.

Let's examine what it takes to put together a recovery plan.





Procedure:

- 1) Divide students into groups of four or five. Present students with the following scenario, and let them examine the *International Whooping Crane Recovery Plan* for guidance in creating their own plans:

A bird species in your state is on the verge of extinction. One hundred years ago, there were almost 3,000 birds in the population. Today, there are less than 100 birds left, and most of them live in your county.

It is up to you and the members of your group to devise a recovery plan in order to save this endangered species. First, you must come up with a name and description for the bird. How big is it? What does it look like? Where does it live? What does it like to eat? What size habitat does it require for nesting? What size habitat does it require for foraging? Does it migrate somewhere to spend the winter? If so, where? Be creative, and make sure to include illustrations.

- 2) Next, students should develop a brief history of the bird over the last 100 years. What were the reasons for its decline? Was it over-hunted? Was its habitat destroyed? Was the population affected by disease or contaminants in the environment?
- 3) Once students have described their fictional bird species, have them develop some guidelines on how to manage the bird with the ultimate goal of restoring its population. Have students create a recovery plan with the following sections. Each section should be discussed by the group as a whole, but students should each pick one section to write individually.
 - a) **Background, Introduction, and Purpose:** Who are you and why are you putting a recovery plan together? What does it mean for a species to be endangered and why does that make it important to put together a recovery plan for this species? What is the purpose of your recovery plan? What do you hope to achieve with it? Specifically state your goals.
 - b) **Species Description - Biology and Ecology:** What does your bird look like? How long does it live? What type of habitat does it prefer? What does it like to eat? What other animals feed on it? How often does it reproduce? How many eggs does it usually lay? What does its call sound like? Make sure to include illustrations of your bird.
 - c) **History and Current Distribution:** Where was the bird found 100 years ago? Where is it found today? Does it migrate? What happened over the last 100 years that led to the bird's decline? Are the birds that are still living today healthy? If not, why? What are the major threats to the population today? How many individuals are there in the population today? How many males? Females? Chicks?
 - d) **Management and Monitoring:** What is the goal of your recovery plan (make sure the goal that you state here is consistent with the goal stated in the Introduction)? What is currently being done to restore the population? What precautions are you taking to protect the birds from harmful events like disease outbreaks or natural disasters? Are your breeding birds in captivity? Do you occasionally capture birds to make sure they are healthy? What type of monitoring are you doing to keep track of the birds? Are they marked or banded in some way?



- e) **Project Needs:** What do you still need to figure out about the species? What don't you know yet? Why would it be important to fill in this missing information? What are you doing or planning on doing to try to get the missing information? What are you doing to educate people about the bird?

Extensions:

- 1) Students should discuss the obstacles they faced in compiling their recovery plan. Have each student write a report detailing the easiest and more difficult parts of putting together their plan. What made certain parts simple and other parts more complex?
- 2) Have each group present their bird species to the class. What type of plan did they put together to help restore the species? How did they go about developing this plan?