

Materials

Internet Device, Pencils, Notes/Textbook

Secondary 4 Science and Technology

Wolves in Yellowstone National Park: Ecology [Chapter 10]

Assessing the Problem

- 1) During the 20th century the forests of Yellowstone National Park shrank dramatically. The populations of Willow and Aspen trees were greatly reduced and forests gave way to fields. What are some things that could have caused this disturbance?

- 2) In the 1990s ecologists and park rangers came up with the idea of introducing wolves to Yellowstone National Park. Why would they choose to introduce wolves to solve a problem about trees?

How Wolves Change Rivers Video



<https://www.youtube.com/watch?v=ysa5OBhXz-Q>

Analyzing the Results

- 3) When the wolves were brought back to Yellowstone they affected several populations. What type of interaction did the wolves have with the following species and what were the consequences?

Species	Type of Interaction (With Wolves)	Trophic Level	Consequences
Elk (Large Deer)			
Coyotes			
Willow Trees			
Beavers			

- 4) How did introducing wolves affect the primary productivity of Yellowstone National Park?

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- 5) Once the populations of Elk fell and their browsing* behaviour changed forests began to regrow, first as shrubs then as full grown trees. What is this an example of?

*Browsing is a type of feeding that involves eating branches and leaves from short plants.

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