

# Agenda

Introduction: Background information on ecology

POV evidence gathering activity

Think, Pair, Share





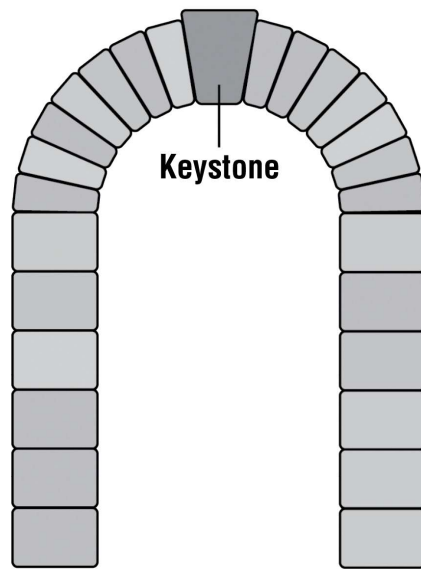




# Ecology

- ▶ Ecology - the study of ecosystems
- ▶ Ecosystem - a geographic area where plants, animals, and other organisms, as well as weather and landscape work together to form a bubble of life





## Keystone species

- ▶ Wolves are what we call keystone species in their ecosystems.
- ▶ A keystone species is an organism that helps define an entire ecosystem. Without its keystone species, the ecosystem would be dramatically different or cease to exist altogether.
- ▶ They keep the balance in Yellowstone by keeping the elk populations in check.





Even though wolves do all these great things for the ecosystem in Yellowstone, the ranchers in the area didn't like the wolves because they kill their livestock. In the early 1900s, ranchers nearly killed off all the wolves in the whole Northwestern United states.



## To hunt or to protect? Western states struggle with wolf management

- ▶ So, there are two sides to this controversy, people who believe that we were better off without wolves because they killed our livestock, and people who believe that the original ecosystem in Yellowstone should be restored and protected.



## Think, Pair, Share

- ▶ Pair up with a partner.
- ▶ One of you will grab a red car and the other will grab a green card.
- ▶ Find a place to sit together.
- ▶ Read the article or watch the video separately and look for evidence to support your perspective.

# POV Evidence Gathering Activity

## Pro Wolves:

- Biologists
- Conservation Groups
- Fishers

## Against Wolves

- Ranchers
- Hunters
- Tourists

## Evidence Example

- ▶ If you are a rancher and you read in the article that wolves eat livestock, that is evidence to support your claim that wolves should not have been reintroduced in the area.





## Annotations based on your POV

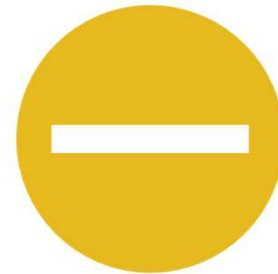
- ▶ As you read the article or watch the video write **three pieces of evidence** that supports your assigned point of view
- ▶ Put your pencils down when you are finished



Should we have reintroduced wolves in Yellowstone? Why or why not?



Yes



No

How many wolves should have been reintroduced in the area?

20

40

60

80+



# Who should be responsible for killed livestock?

U.S. Fish and Wildlife Services

The Ranchers

Yellowstone Wolf Project

Other?

If we removed wolves, how are we going to control elk populations?

Introduce more grizzly bears

Give rewards for hunting elk

Let the elk populations decrease naturally (starvation)

Other?

# How can we protect our livestock without killing wolves?

Electric fences

Guards

Sheep and cattle dogs

Other??



## Exit Ticket

- ▶ What is your personal opinion about whether or not wolves should have been reintroduced in Yellowstone and why?
- ▶ If you had to make a decision today, would you decide to keep the wolves in Yellowstone or not?
- ▶ What other information would you like in order to make a better decision?

