Keystone Species Video (3:59 mins)

<https://www.youtube.com/watch?v=PqGzhRmn5IU>

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are those that play a unique and crucial role in ecosystems function and they have a disproportionately large effect on their environment relative to their abundance.
2. Efforts to manage and protect keystone species can help \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the entire biological community.
3. There are 5 general categories of Keystone species:

Keystone predators

Keystone modifiers

Keystone prey

Keystone mutualists

Keystone host

1. Predators

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ keep the number of elk in check which protects the plants in the

ecosystem from being over grazed.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ prey on mussels and keep them from overpopulating an area.

Opens up habitats for other organisms.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ prey on fish, reptiles, amphibians, birds, and mammals

1. Modifier- change the environment making it more hospitable to other species

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- dig depressions in the ground that fill with water that fill with fish and other aquatic species during the dry season.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ keeps grasslands properly maintain with a variety of plant species that benefit other species such as cattle and pronghorn. Make burrows that aerate compacted soil and allow water to penetrate deeper into the ground. Many other species use the burrows for shelter. They are important food source for coyotes, foxes, hawks, and the endangered black footed ferret.

1. Keystone Prey (affect predators’ densities)

Salmon vital food source

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ salamanders-provide a lot of protein biomass

1. Keystone mutualist (mutually beneficial relationships)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-pollenate only highly specialized plants

1. Keystone host

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- -create an open canopy that harbors diverse on the forest floor)

9. The greater biodiversity that keystone species help maintain afford

Protection of water resources and soil

Nutrient storage and recycling

Pollution control

Unpredictable environmental events