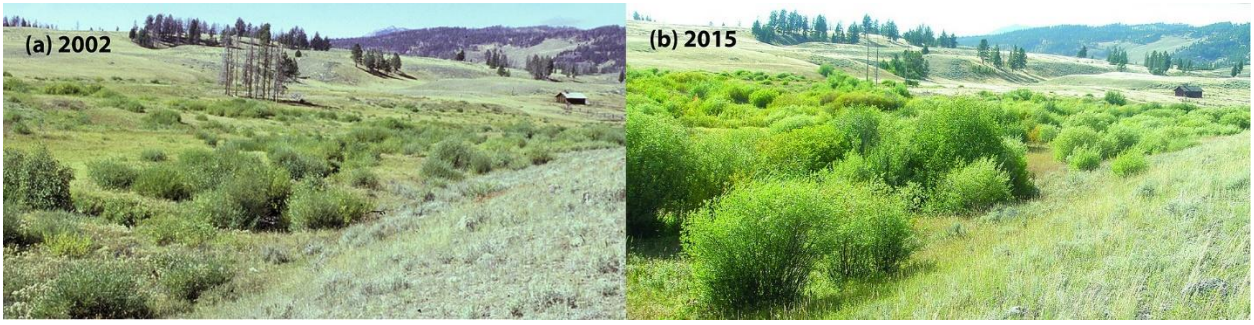
A keystone species is a plant or animal that plays an important ecological role, even though it may not be very abundant within a community. A keystone species affects the structure of an ecosystem by strongly influencing the different types and numbers of other organisms present within the environment. Much like an actual keystone in an arch where removing this critical piece causes the arch to collapse, removing a keystone species from the environment can have drastic consequences on the health and diversity of an ecosystem.

One example of a keystone species living throughout the hardwood forests of North America is the sugar maple, *Acer saccharum*. Sugar maples tend to be deep-rooted and help draw water from lower soil layers into the upper, drier layers. This benefits many other plants living nearby and creates a more diverse community than would otherwise exist. Keystone species may also be important predators that keep prey populations in check, such as the gray wolf in Yellowstone National Park. Reintroducing gray wolfs back into the Greater Yellowstone Ecosystem has helped prevent herbivores from over-grazing and allowed plant communities to recover.

Although it may be an oversimplification of a complex ecosystem, it's clear there is still much to learn about the profound affect these important species have on their environment and the other organisms they impact.

https://en.wikipedia.org/wiki/Beech-maple_forest

https://en.wikipedia.org/wiki/Wolf



Riparian willow recovery at Blacktail Creek, Yellowstone National Park, after reintroduction of wolves.

https://en.wikipedia.org/wiki/Keystone_species#/media/File:Fig._1_-Riparian_willow_recovery_(26485120926)_horiz.jpg