# BEAVERS

# Ways to help:

Beavers in the U.S. have long faced decline due to trapping and habitat destruction. Fortunately, awareness is growing, and people now recognize their vital role as a keystone species.

- Protect their habitat
- Advocate for coexistence
- Support beaver restoration projects
- Educate others on beavers' importance
- Volunteer or donate to conservation



#### Known as ecosystem engineers

Ecosystem engineers create, maintain, and modify habitat for other species. Beavers engineer their environments by building dams across streams with trees, other vegetation, and sediment that create ponds. The ecosystems beavers create are sometimes called "beaver wetlands" or "beaver-meadow complexes".

#### Beavers support high levels of biodiversity

Beaver wetland systems provide homes for a large diversity of other animals and plants. Many species of invertebrates, fish, amphibians, reptiles, birds, and mammals are attracted to beaver-meadow habitat and beaver lodges.

#### Beavers purify our water systems

Beaver wetlands increase water quality by filtering out pollutants such as disease pathogens and heavy metals.

#### They store water for wildlife and humans alike

Beaver dams help regulate and slow stream water flows, which increases the water table level, aquifer recharge, and groundwater storage capacity.

#### They help alleviate drought impacts

Beaver ponds retain water, and beaver dams slow the flow of water and can lessen the duration and frequency of drought events.

## Beavers reduce downstream flooding damage from large storms

In beaver wetlands, beaver ponds and dams can slow flooding and the flow of sediment in floodwaters, making large floods less extreme and damaging.

## They lessen damaging impacts of uncharacteristically severe wildfires

Beaver wetlands resist burning during large, high-severity megafires. Beaver wetlands can provide refugia (temporary habitat) for wildlife during wildfires.

# They create ecosystems that help combat climate change

Beaver wetlands help combat climate change by storing carbon in vegetation and sediment.

The Role of Beavers in Restoring U.S. Wetlands , Discover Wild Science.

Beaver: Nature's ecosystem engineers, Wiley Interdisciplinary Reviews: Water, 2021.

Why are beavers important to the ecosystem?, The Environmental Literacy Council.

Legacy Effects of Beaver Loss, Environmental Research Letters, 2021.

Ecosystem Services Provided by Beavers , Mammal Review, 2021.

- Check out these information sources

Smokey the Beaver, Ecological Applications, 2020.









Keystone sbecies

A plant or animal that plays a critical role in its ecosystem. If removed, the ecosystem would change drastically, leading to the loss of biodiversity, habitat degradation, and ecosystem collapse.