

## Coniferous Forests



### WHAT IS A CONIFEROUS FOREST?

A coniferous forest is dominated by coniferous, or cone-bearing, trees. These include pine, spruce, and fir. In Wyoming, the coniferous forests are found in the mountains rather than down on the plains.

### WHY ARE CONIFEROUS FORESTS IMPORTANT?

Conifers survive drought and short growing seasons better than trees that shed their leaves, which makes them well suited to the growing conditions in the Rocky Mountain West. These trees produce a steady supply of oxygen into the atmosphere through photosynthesis, and they keep the soil in place with their roots. They provide most of the lumber used for homes and furniture, plywood and the pulpwood for the various manufactured wood products. Many species of Wyoming wildlife utilize the habitat provided by conifer forests. People like forests too. They give us a place to play and a sense of peace and serenity.

### HOW ARE CONIFEROUS FORESTS DOING?

In parts of Wyoming, coniferous forests are suffering from extended periods of extreme drought and mild winters. Overgrown and dense forests, combined with severe drought, can lead to disastrous consequences as insect and disease epidemics spread more easily, and wildfires can result in destructive effects over unusually large areas. In certain forest types, such as ponderosa pine, periodic low-intensity fires have historically been beneficial to the forest. Low-intensity fires do not kill the majority of mature trees, due to their thick protective bark, but the fire will consume much of the understory brush and smaller trees. This helps keep forest density down, which increases forest health. However, increasing stand density has gone unchecked in many of these forests while fires have been suppressed. This has resulted in dense forest conditions where wildfires can be very large and detrimental to the forest dynamics. Historically, disturbances have played a pivotal role in keeping forests healthy. Today, prescribed fires, timber harvest, and other disturbances are used to mimic historical disturbances and to keep these forests healthy into the future. When done responsibly, both fire and harvest can provide a means of managing coniferous forests and their unique requirements. The future of our forests depends on how we manage fire and timber cutting.

Coniferous Forest Flashcards

Black Bear



Porcupine



Uinta Chipmunk



Townsend's Big-eared Bat



Northern Flicker



Western Tanager





Coniferous Forest Flashcards

Dusky Grouse



Downy Woodpecker



Northern Saw-whet owl



Army Cutworm Moth



Mountain Pine Beetle



Lodgepole Pine





Coniferous Forest Flashcards

Ponderosa Pine



Douglas-fir



Buffaloberry



Arrow-leaf Balsamroot



The Sun



Coniferous Forest Flashcards

Black Bear

Name: Black Bear  
Scientific Name: *Ursus americanus*  
Predators: Humans, other bears  
Prey or Food: Berries, moths, seeds, leaves, roots, small mammals, garbage

Did you know? To prepare for its winter slumber, a bear must eat thousands of calories each day.

Porcupine

Name: Porcupine  
Scientific Name: *Erethizon dorsatum*  
Predators: Humans, vehicles, Great-horned owls  
Prey or Food: Leaves, twigs, buds, and bark

Did you know? Porcupines don't "throw" their quills, rather they lash their tails at a would-be predator.

Uinta Chipmunk

Name: Uinta Chipmunk  
Scientific Name: *Tamias umbrinus*  
Predators: Raptors, mammals, snakes  
Prey or Food: Conifer seeds, nuts, berries

Did you know? Chipmunks get their name from the different calls or "chips" they communicate with.

Townsend's Big-eared Bat

Name: Townsend's Big-eared Bat  
Scientific Name: *Plecotus townsendii*  
Predators: Owls, nocturnal mammals  
Prey or Food: Moths, other flying insects

Did you know? In addition to their mouths, these bats can also catch insects with their "wing" membranes.

Northern Flicker

Name: Northern Flicker  
Scientific Name: *Colaptes auratus*  
Predators: Raptors, mountain lions, bobcats, fox  
Prey or Food: Insects, some fruits and berries

Did you know? Flickers excavate nest holes in dead or diseased tree trunks that other animals will use once they abandon it.

Western Tanager

Name: Western Tanager  
Scientific Name: *Piranga ludoviciana*  
Predators: Raptors, mammals, snakes  
Prey or Food: Insects, fruit

Did you know? Tanagers get their red color from the food they eat.

Dusky Grouse

Name: Dusky Grouse  
Scientific Name: *Dendragapus obscurus*  
Predators: Large Mammals including humans, raptors  
Prey or Food: Conifer needles, insects, seeds

Did you know? Dusky grouse males "display" by clapping their wings, hooting, hopping and strutting with their tail feathers fanned to impress females.

Downy Woodpecker

Name: Downy Woodpecker  
Scientific Name: *Picoides pubescens*  
Predators: Raptors, mammals, snakes  
Prey or Food: Mainly beetle larvae, other insects, seeds, nuts

Did you know? Woodpeckers have long, pointy, rigid-tipped tongues used for probing under bark on tree trunks for insects.

Northern Saw-whet owl

Name: Northern Saw-whet owl  
Scientific Name: *Aegolius acadicus*  
Predators: Other raptors  
Prey or Food: Small mammals such as rodents

Did you know? Owls swallow their prey whole, digest the flesh and cough up the bones and fur in a tightly packed "owl pellet."

Army Cutworm Moth

Name: Army Cutworm Moth  
Scientific Name: *Euxoa auxiliaris*  
Predators: Bears, owls  
Prey or Food: Nectar (adults), leaves (young)

Did you know? These moths are also known as "miller moths."

Mountain Pine Beetle

Name: Mountain Pine Beetle  
Scientific Name: *Dendroctonus ponderosae*  
Predators: Woodpeckers, bats, mammals  
Prey or Food: Ponderosa Pine

Did you know? Once the larvae kill a tree, adults will emerge to infest another tree.

Lodgepole Pine

Name: Lodgepole Pine  
Scientific Name: *Pinus contorta*  
Predators: Birds, mammals (seeds)  
Prey or Food: Water, sun, soil, air

Did you know? Heat from fire opens lodgepole pinecones, releasing the seeds.

Ponderosa Pine

Name: Ponderosa Pine  
Scientific Name: *Pinus ponderosa*  
Predators: Birds, mammals (seeds)  
Prey or Food: Water, sun, soil, air

Did you know? Across the Rocky Mountain region, ponderosa pines are being infected and killed by mountain pine beetles.

Douglas-fir

Name: Douglas-fir  
Scientific Name: *Pseudotsuga menziesii*  
Predators: Birds, mammals (seeds)  
Prey or Food: Water, sun, soil, air

Did you know? Douglas-firs are often used as Christmas trees.

Buffaloberry

Name: Buffaloberry  
Scientific Name: *Shepherdia argentea*  
Predators: Birds, mammals (including humans)  
Prey or Food: Water, sun, soil, air

Did you know? Most everything in the forest enjoys eating buffaloberries.

Arrow-leaf Balsamroot

Name: Arrow-leaf Balsamroot  
Scientific Name: *Balsamorhiza sagittata*  
Predators: Birds (seeds)  
Prey or Food: Water, sun, soil, air

Did you know? In the spring, whole mountainsides can be covered with these sunflowers.

The Sun

Plants use the sun's energy to grow through a process known as photosynthesis. Because plants are the beginning of all food chains, all plants and animals transfer the sun's energy when they eat.