

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



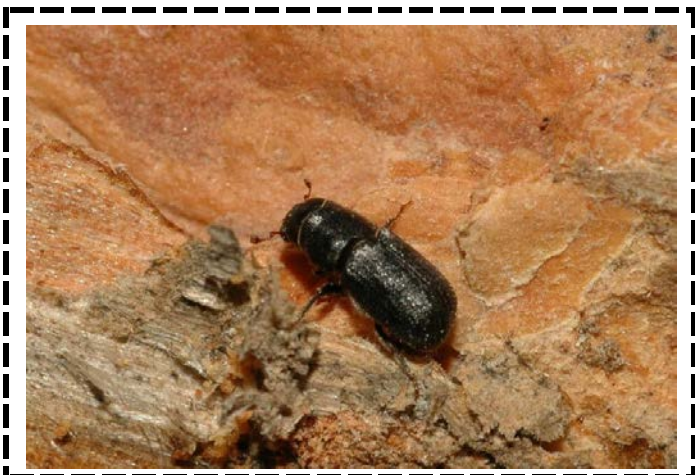
Northern Saw-whet owl



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.

Deciduous Forests



What is a deciduous forest?

A forest that is dominated by trees that lose their leaves in the fall is called a deciduous forest. Wyoming deciduous tree species include aspen, cottonwood, box elder, ash, mountain ash, poplars, willows, fruit trees such as the wild plum and less commonly oak and maple. Deciduous forests are often called "hardwood" forests.

Why are deciduous forests important?

Deciduous forests are most important as habitat areas. Many wildlife species rely on deciduous forests and trees as their primary sources of food and shelter. In Wyoming, most deciduous trees grow close to streams, rivers, or in moist areas. Their root systems help keep the soil from eroding and being washed away. Deciduous forests are also pleasing to our human senses, especially in the fall when their leaves turn yellow, orange, and red. They give us a place to enjoy the outdoors and observe nature. Unlike some coniferous forests in Wyoming, deciduous forests are not harvested on a commercially large scale.

Where are deciduous forests in Wyoming?

Near and along river and stream courses, adjacent to meadows and wetlands, in sheltered valleys and on moist north-facing slopes, and in mountainous areas where there is regular precipitation or adequate runoff. Deciduous trees are very dependent on water.

Deciduous Forest Ecosystem Flashcards

Bobcat



Red Fox



White-tailed Deer



Striped Skunk



Masked Shrew



Big Brown Bat



Deciduous Forest Ecosystem Flashcards

White-breasted Nuthatch



Wild Turkey



Bullocks Oriole



Great Horned Owl



Northern Goshawk



Millipede



Deciduous Forest Ecosystem Flashcards

Quaking Aspen



Green Ash



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Wild Strawberry



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Sticky Geranium



The Sun



Deciduous Forest Ecosystem Flashcards

Bobcat

Name: Bobcat
Scientific Name: *Lynx rufus*
Predators: Mountain lion, raptors
Prey or Food: Rabbits, small mammals

Did you know? It is rare to see these cats because they are "nocturnal," meaning active at night.

Red Fox

Name: Red Fox
Scientific Name: *Vulpes vulpes*
Predators: Raptors, mountain lions, bobcats
Prey or Food: Rodents, birds, seeds, fruits

Did you know? Fox will leap into the air and pounce on their prey.

White-tailed Deer

Name: White-tailed Deer
Scientific Name: *Odocoileus virginianus*
Predators: Humans, Mountain lions, wolves (adults), bobcat, coyotes, raptors (young)
Prey or Food: Plants, seeds, nuts, fruits

Did you know? This deer uses its tail as an alert to "flag" danger, serving as a warning sign to other deer near it.

Striped Skunk

Name: Striped Skunk
Scientific Name: *Mephitis mephitis*
Predators: Raptors
Prey or Food: Small mammals, eggs, insects, fruits

Did you know? The skunk's repellent odor or "musk" is also irritating to skin and eyes.

Masked Shrew

Name: Masked Shrew
Scientific Name: *Sorex cinerus*
Predators: Raptors, bobcats, fox
Prey or Food: Insects

Did you know? Shrews don't have a cheekbone, making it easier to root around the forest floor for insects.

Big Brown Bat

Name: Big Brown Bat
Scientific Name: *Eptesicus fuscus*
Predators: Owls
Prey or Food: Beetles, moths, other insects

Did you know? Bat's wings are actually double layers of skin stretched across modified hand bones; this allows them excellent maneuverability.

White-breasted Nuthatch

Name: White-breasted Nuthatch
Scientific Name: *Sitta carolinensis*
Predators: Raptors, mammals, snakes
Prey or Food: Insects in spring and summer, seeds in fall and winter

Did you know? Nuthatches use their slightly upcurved beaks to seek insects beneath tree bark.

Wild Turkey

Name: Wild Turkey
Scientific Name: *Meleagris gallopavo*
Predators: Coyotes, bobcats, raptors, snakes
Prey or Food: Seeds, nuts, insects

Did you know? At dusk turkeys will fly up to the limbs of trees to roost, usually in small groups.

Bullocks Oriole

Name: Bullocks Oriole
Scientific Name: *Icterus bullockii*
Predators: Larger birds and mammals prey on eggs, raptors prey on adults
Prey or Food: Fruit, nectar, insects, spiders

Did you know? These colorful birds build a pendant-shaped nest that hangs from branches.

Great Horned Owl

Name: Great Horned Owl
Scientific Name: *Bubo virginianus*
Predators: Raptors, snakes
Prey or Food: Mammals (including skunks), birds, bats

Did you know? The "horns" on this owl are actually feathered tufts used for communication and camouflage.

Northern Goshawk

Name: Northern Goshawk
Scientific Name: *Accipiter gentilis*
Predators: Bobcats, snakes, black bears, other raptors (mainly young & eggs)
Prey or Food: Birds, rodents, other small mammals

Did you know? This raptor is a fierce predator with speedy maneuverability through dense forest.

Millipede

Name: Millipede
Scientific Name: *Diplopodia* class
Predators: Birds, mammals, bats
Prey or Food: Decomposing matter

Did you know? Although their name means "thousand feet," they often have less than 200.

Deciduous Forest Ecosystem Flashcards

Quaking Aspen

Name: Quaking Aspen
Scientific Name: *Populus tremuloides*
Predators: Mammals, birds
Prey or Food: Water, sun, soil, air

Did you know? Aspens can form huge colonies of clones that grow up from their roots.

Green Ash

Name: Green Ash
Scientific Name: *Fraxinus pennsylvanica*
Predators: Mammals, birds
Prey or Food: Water, sun, soil, air

Did you know? This tree turns golden yellow in the fall.

Wild Strawberry

Name: Wild Strawberry
Scientific Name: *Fragaria virginiana*
Predators: Mammals, birds, insects
Prey or Food: Water, sun, soil, air

Did you know? Although smaller than those found in stores, these fruits are much sweeter.

Sticky Geranium

Name: Sticky Geranium
Scientific Name: *Geranium viscosissimum*
Predators: Mammals, birds
Prey or Food: Water, sun, soil, air

Did you know? This plant's seeds are carried in pods that resemble stork bills.

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.

Mountain Habitat



What is a mountain habitat?

Mountain habitat is a broad term that defines the terrain rising above the foothills. Many separate habitats make up mountain habitat as a whole. These habitats include coniferous forests of several juniper and pine species, deciduous stands of aspen, meadows, lakes, streams, valleys, alpine tundra, talus slopes and open rocky terrain. Some small areas of the highest mountain habitat retain a blanket of snow all year. In Wyoming, mountain habitat is generally located above 7,000 feet and rises to above 13,000 feet.

Why are mountain habitats important?

Mountain habitat provides food, shelter, and breeding/nesting areas for many species of wildlife. It is also a very important source of snow. Snow that has fallen in the mountains over the winter melts in the spring and summer. This melt water runs into lakes, streams, rivers, and reservoirs, benefiting both wildlife and people.

Where is mountain habitat in Wyoming?

There are several distinct mountain ranges in Wyoming that run generally from the southeast to northwest corners of the state. The Medicine Bow, Laramie, Wind River, Big Horn, Absaroka, and Teton ranges are the most well-known. All of the Wyoming mountain ranges are part of the vast Rocky Mountain chain. Gannet Peak, found near Pinedale, is 13,804 feet high and rises above five glaciers.

Mountain Ecosystem Flashcards

Elk



Bighorn Sheep



Mountain Lion



Yellow-bellied Marmot



Least Chipmunk



Golden Eagle



Mountain Ecosystem Flashcards

Clark's Nutcracker



Mountain Bluebird



Mountain Chickadee



Raven



Boreal Toad



Mountain Fritillary



Mountain Ecosystem Flashcards

White Bark Pine



Subalpine Fir



Glacier Lily



Wyoming Paintbrush



The Sun



Elk

Name: Elk
Scientific Name: *Cervus elaphus*
Predators: Humans, wolves, mountain lion
Prey or Food: Sedges, grasses, woody plants, fallen leaves

Did you know? Native Americans named the elk "wapiti" which means white rump. Early settlers named it elk which is what they called their moose in Europe.

Bighorn Sheep

Name: Bighorn Sheep
Scientific Name: *Ovis canadensis*
Predators: Wolves, coyotes, mountain lions, bobcats, raptor
Prey or Food: Grasses, leafy plants

Did you know? The horns on an adult male can weigh up to 30 pounds which is more than all the bones in his body combined.

Mountain Lion

Name: Mountain Lion
Scientific Name: *Puma concolor*
Predators: Humans, occasionally bear or wolves
Prey or Food: Deer, elk, bighorn sheep, beaver, porcupine, other mammals

Did you know? These cats are ambush predators, they wait in silence then attack from above by leaping onto the shoulders of its prey.

Yellow-bellied Marmot

Name: Yellow-bellied Marmot
Scientific Name: *Marmota flaviventris*
Predators: Raptors, coyote, badger, bobcat, weasels, and marten
Prey or Food: Grasses

Did you know? Also called the rockchuck because they communicate with chucks, whistles, and trills.

Least Chipmunk

Name: Least Chipmunk
Scientific Name: *Tamias minimus*
Predators: Large mammals, reptiles, raptors, other birds
Prey or Food: Berries, seeds, mushrooms, eggs, hatchlings

Did you know? These critters keep busy collecting food to store in their underground burrows.

Golden Eagle

Name: Golden Eagle
Scientific Name: *Aquila chrysaetos*
Predators: No natural predators
Prey or Food: Mammals

Did you know? These "dragons of the sky" are big, fast flying, efficient predators.

Clark's Nutcracker

Name: Clark's Nutcracker
Scientific Name: *Nucifraga columbiana*
Predators: Raptors, reptiles, mammals
Prey or Food: Pine seeds

Did you know? These birds bury the seeds they pull from pinecones. Most are eaten later, but the ones they forget help to regrow the forest.

Mountain Bluebird

Name: Mountain Bluebird
Scientific Name: *Sialia currucoides*
Predators: Other birds
Prey or Food: Insects

Did you know? Male bluebirds arrive each spring before the females in order to establish a nesting site; usually it's an abandoned woodpecker cavity.

Mountain Chickadee

Name: Mountain Chickadee
Scientific Name: *Poecile gambeli*
Predators: Raptors, reptiles, mammals
Prey or Food: Insects, seeds, nuts

Did you know? To survive the winter months, these tiny birds must eat almost constantly to keep up their fat reserves.

Raven

Name: Raven
Scientific Name: *Corvus corax*
Predators: Raptors, humans
Prey or Food: Carrion, mammals, birds, garbage

Did you know? These smart birds will follow other birds in order to raid their nests or stores of food.

Boreal Toad

Name: Boreal Toad
Scientific Name: *Bufo boreas boreas*
Predators: Mammals, birds
Prey or Food: Insects

Did you know? The toads lay their eggs in mountain ponds and streams.

Mountain Fritillary

Name: Mountain Fritillary
Scientific Name: *Boloria alaskensis*
Predators: Mammals, amphibians, birds, reptiles
Prey or Food: Flower nectar

Did you know? It takes this butterfly two years to go from caterpillar to adult.

White Bark Pine

Name: White Bark Pine
Scientific Name: *Pinus albicaulis*
Predators: Mammals, birds
Prey or Food: Water, sun, soil, air

Did you know? This tree is important habitat, food, and shelter to a wide variety of mountain wildlife.

Subalpine Fir

Name: Subalpine Fir
Scientific Name: *Abies lasiocarpa*
Predators: Mammals, birds
Prey or Food: Water, sun, soil, air

Did you know? This tree may not produce cones for the first 20 years of its life.

Glacier Lily

Name: Glacier Lily
Scientific Name: *Erythronium grandiflorum*
Predators: Pollinators, bears and rodents eat the roots; deer and elk eat the pods
Prey or Food: Water, sun, soil, air

Did you know? This flower is also called "avalanche lily" because it is often found on steep mountain slopes.

Wyoming Paintbrush

Name: Wyoming Paintbrush
Scientific Name: *Castilleja linariaefolia*
Predators: Pollinators
Prey or Food: Water, sun, soil, air

Did you know? This is Wyoming's "State Flower."

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.

Shortgrass Prairie



What is a shortgrass prairie?

Shortgrass prairie habitat is flat to rolling terrain dominated by short grasses that form a nearly continuous carpet across the landscape. Grama grass and buffalo grass make up 70% to 90% of the plants growing on the shortgrass prairie. A few mid-grasses and forbs also grow there. Shortgrass prairie is the westernmost and driest of the true North American grasslands. Average annual precipitation is 10 to 12 inches.

Why are shortgrass prairies important?

Shortgrass prairies provide essential habitat for many species of wildlife that live nowhere else. Grazing buffalo, deer, and pronghorn as well as burrowing mammals are the iconic animals of this landscape. However, the grasses are the real star of this ecosystem. They can withstand the harsh climate better than any other plants and help to protect the essential topsoil. Without the grasses, we'd have no plant or animal life, just dust.

Where are shortgrass prairies in Wyoming?

Basically, shortgrass prairie is found in the eastern one-third of Wyoming, in the rain shadow of the Rocky Mountains. It gradually turns into sagebrush, grasslands and foothills shrub land as the terrain rises westward toward the Rocky Mountains.

Shortgrass Prairie Ecosystem Flashcards

American Badger



White-tailed Jackrabbit



Swift Fox



Northern Pocket Gopher



Ferruginous Hawk



Short-eared Owl



Shortgrass Prairie Ecosystem Flashcards

Western Meadowlark



Lark Bunting



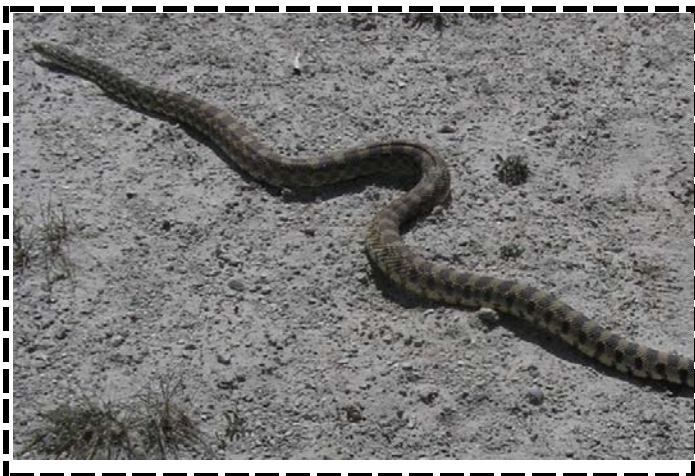
Upland Sandpiper



Plains Spadefoot Toad



Bullsnake



Two-striped Grasshopper



Shortgrass Prairie Ecosystem Flashcards

Blue Grama



Prairie Sandreed



Plains Prickly Pear



Prairie Sunflower



The Sun



American Badger

Name: American Badger
Scientific Name: *Taxidea taxus*
Predators: Coyotes, fox, mountain lions, wolves, raptors, humans
Prey or Food: Burrowing mammals, eggs, insects

Did you know? Many animals depend on abandoned badger holes for shelter.

White-tailed Jackrabbit

Name: White-tailed Jackrabbit
Scientific Name: *Lepus townsendii*
Predators: Coyotes, fox, mountain lions, wolves, raptors, humans
Prey or Food: Plant matter

Did you know? In addition to hearing, the long ears of this rabbit help to keep body temperatures cool.

Swift Fox

Name: Swift Fox
Scientific Name: *Vulpes velox*
Predators: Coyotes, humans
Prey or Food: rabbits, small rodents, birds, berries

Did you know? Pairs court for months before settling on a lifelong mate

Northern Pocket Gopher

Name: Northern Pocket Gopher
Scientific Name: *Thomomys talpoides*
Predators: Badger, fox
Prey or Food: underground plant parts

Did you know? Named for its fur-lined cheek pocket it uses to store food.

Ferruginous Hawk

Name: Ferruginous Hawk
Scientific Name: *Buteo regalis*
Predators: Larger Raptors, mammals and snakes will eat eggs
Prey or Food: Burrowing mammals, rabbits, birds, reptiles

Did you know? This is North America's largest hawk; it has a wingspan of almost 5 feet.

Short-eared Owl

Name: Short-eared Owl
Scientific Name: *Asio flammeus*
Predators: Raptors, large mammals
Prey or Food: Small mammals, other birds

Did you know? Unlike most owls, Short-eared owls nest on the ground.

Western Meadowlark

Name: Western Meadowlark
Scientific Name: *Sturnella neglecta*
Predators: Raptors, large mammals, reptiles
Prey or Food: Insects

Did you know? This is Wyoming's "State Bird."

Lark Bunting

Name: Lark Bunting
Scientific Name: *Eremophila alpestris*
Predators: Raptors, large mammals, reptiles
Prey or Food: Insects, seeds

Did you know? Because they often coincided with the end of bad weather, some farmers would wait until Lark Buntings came back from their migration to plant crops.

Upland Sandpiper

Name: Upland Sandpiper
Scientific Name: *Bartramia longicauda*
Predators: Raptors, large mammals, reptiles
Prey or Food: Insects

Did you know? Early settlers used to eat the eggs.

Plains Spadefoot Toad

Name: Plains Spadefoot Toad
Scientific Name: *Spea bombifrons*
Predators: Birds, mammals, reptiles
Prey or Food: Insects, snails, caterpillars, plant matter

Did you know? These toads are named for the spade-shaped growths on their hind feet that they use to dig the holes where they spend most of their time.

Bullsnake

Name: Bullsnake
Scientific Name: *Pituophis catenifer sayi*
Predators: Raptors, skunks
Prey or Food: Mammals, birds, bird eggs

Did you know? Bull snakes hibernate in underground dens - often with other types of snakes such as rattlesnakes and gopher snakes.

Two-striped Grasshopper

Name: Two-striped Grasshopper
Scientific Name: *Melanoplus bivittus*
Predators: Birds, reptiles, amphibians, mammals
Prey or Food: Plants

Did you know? Grasshoppers have been known to destroy entire crops of cotton, clover, alfalfa and other grains.

Blue Grama

Name: Blue Grama
Scientific Name: *Bouteloua gracilis*
Predators: Birds, mammals
Prey or Food: Water, sun, soil, air

Did you know? Blue grama is a type of grass, the fruits of grasses are what we call grain.

Prairie Sandreed

Name: Prairie Sandreed
Scientific Name: *Calamovilfa longifolia*
Predators: Birds, mammals
Prey or Food: Water, sun, soil, air

Did you know? This grass begins to grow earlier in the spring than other grasses.

Plains Prickly Pear

Name: Plains Prickly Pear
Scientific Name: *Opuntia polyacantha*
Predators: Birds, mammals including pronghorn and deer, humans
Prey or Food: Water, sun, soil, air

Did you know? A cactus doesn't have leaves, instead the fleshy pads carry out photosynthesis.

Prairie Sunflower

Name: Prairie Sunflower
Scientific Name: *Helianthus petiolaris*
Predators: Birds, mammals
Prey or Food: Water, sun, soil, air

Did you know? In early spring, sprouts provide food for caterpillars, as the flower blooms in summer, they are a food source for pollinators; as seeds begin to develop in the fall, they feed birds and mammals.

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.

Riparian Habitat



What is a riparian habitat?

The word “riparian” means “related to a river or stream.” Riparian habitat is any habitat that is influenced by a river or stream or adjacent to a lake. Riparian habitats include shallow backwaters; marshes and oxbow lakes in flood plains; meadows of sedges and rushes; willow flats; and strands of cottonwood trees.

Why are riparian habitats important?

In a dry climate like Wyoming has, water is a precious thing for nearly all living things. Riparian habitats offer shelter and food near water and attract many wild animals as a result. Birds and mammals often use riparian areas as routes for their migrations as well.

How are riparian habitats doing?

Riparian habitats are thin ribbons in the Wyoming landscape. They have never been very common in our state. Rivers attract people as well as wildlife, and human uses of riparian habitats can cause problems for animals in the river and along its banks. We should be careful with our riparian areas. They are important to people and wildlife alike.

Riparian Habitat Flashcards

Beaver



Moose



Mink



Bald Eagle



Osprey



Great Blue Heron



Riparian Habitat Flashcards

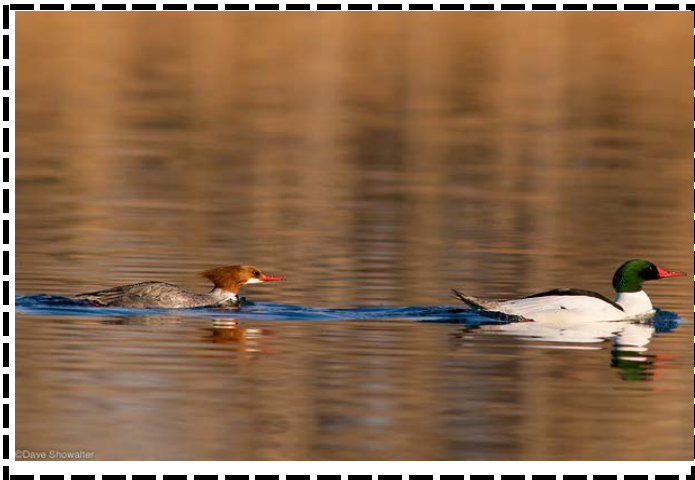
Yellow-headed Blackbird



American Dipper



Common Merganser



Yellow-billed Cuckoo



Common Snapping Turtle



Cutthroat Trout



Riparian Habitat Flashcards

Mayfly (larvae)



Mayfly (adult)



Plains Cottonwood



Willow



The Sun



Riparian Habitat Flashcards

Beaver

Name: Beaver
Scientific Name: *Castor canadensis*
Predators: Otter, mink, coyotes, raptors, humans (fur)
Prey or Food: Trees, roots

Did you know? Beavers teeth grow constantly to keep up with all the gnawing necessary for eating and gathering wood.

Moose

Name: Moose
Scientific Name: *Alces alces*
Predators: Bears, wolves, humans
Prey or Food: Willow, aquatic plants

Did you know? Moose can swim and even dive underwater.

Mink

Name: Mink
Scientific Name: *Mustela vison*
Predators: wolves, foxes, coyotes, raptors, humans (fur)
Prey or Food: mice, fish, frogs, crayfish

Did you know? Unlike its relative the weasel, the long bodied mink stays brown in winter.

Bald Eagle

Name: Bald Eagle
Scientific Name: *Haliaeetus leucocephalus*
Predators: Humans (Pesticides and Oil)
Prey or Food: Fish, mammals, birds

Did you know? These raptors were once endangered by pesticides, now they are increasing in numbers.

Osprey

Name: Osprey
Scientific Name: *Pandion haliaetus*
Predators: Humans (Pesticides and fishing lines)
Prey or Food: Fish

Did you know? Osprey are also called sea hawks.

Great Blue Heron

Name: Great Blue Heron
Scientific Name: *Ardea Herodias*
Predators: Coyotes, raccoons, reptiles eat eggs/young
Prey or Food: Fish, amphibians, reptiles, mammals

Did you know? Herons use their sharp bills to impale their prey.

Yellow-headed Blackbird

Name: Yellow-headed Blackbird
Scientific Name: *Xanthocephalus xanthocephalus*
Predators: Humans (herbicides and pesticides), magpies, gulls
Prey or Food: Insects, seeds

Did you know? These birds often communicate with terns to keep watch for predators.

American Dipper

Name: American Dipper
Scientific Name: *Cinclus mexicanus*
Predators: Raptors, cats, fish
Prey or Food: Aquatic insects, flying insects

Did you know? Dippers get their name from how they are seen constantly dipping their heads in water for prey.

Common Merganser

Name: Common Merganser
Scientific Name: *Mergus merganser*
Predators: Raccoon, fox, snakes
Prey or Food: Aquatic insects, aquatic plants, seeds

Did you know? Sometimes ducklings catch a ride on their mamma's back.

Yellow-billed Cuckoo

Name: Yellow-billed Cuckoo
Scientific Name: *Coccyzus americanus*
Predators: Raptors
Prey or Food: Insects, caterpillars, seeds and fruit

Did you know? These secretive birds migrate to South America in the fall.

Common Snapping Turtle

Name: Common Snapping Turtle
Scientific Name: *Chelydra serpentina*
Predators: Humans, large mammals and reptiles will eat eggs
Prey or Food: Decaying plant and animal matter, fish, insects, reptiles, amphibians, mammals

Did you know? These turtles "snap" as a defense because they are too large to fit inside their shells.

Cutthroat Trout

Name: Cutthroat Trout
Scientific Name: *Oncorhynchus* spp.
Predators: Other fish
Prey or Food: Aquatic insects

Did you know? These fish are named for the red marking under their jaw

Mayfly (larvae)

Name: Mayfly (larvae)
Scientific Name: *Baetis* spp.
Predators: birds, fish, amphibians
Prey or Food: aquatic plants and aquatic insects

Did you know? Adult mayflies have wings and live above water, the young live underwater.

Mayfly (adult)

Name: Mayfly (adult)
Scientific Name: *Baetis* spp.
Predators: Birds, fish, amphibians
Prey or Food: None (they only feed as larvae)

Did you know? These insects are often used as bait for fishing.

Plains Cottonwood

Name: Plains Cottonwood
Scientific Name: *Populus sargentii*
Predators: Moose, beaver
Prey or Food: Water, sun, soil, air

Did you know? This is Wyoming's "State Tree."

Willow

Name: Willow
Scientific Name: *Salix* spp.
Predators: Moose, beaver
Prey or Food: Water, sun, soil, air

Did you know? There are many types of willow in Wyoming, some are trees and others are short shrubs.

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.

Sagebrush Steppe Ecosystem



What is the Sagebrush Steppe?

The Sagebrush Steppe Ecosystem is a type of grassland that doesn't have trees, is hot and dry in the summer, is cold and windy in the winter, has a high elevation, and is mostly flat. Does that sound like places you know in Wyoming? Almost half of the state of Wyoming is considered a Sagebrush Steppe Ecosystem.

So how do plants and animals live in this ecosystem?

Plants that live there, like sagebrush, use the plentiful sunlight to make their food. Many plants will store water when it is available so that they can survive times when it is dry. Animals, like the pronghorn and the sage-grouse, depend on sagebrush for food, shelter, and even water that is stored in the plant.

Why is the Sagebrush Steppe important?

To humans, the Sagebrush Steppe Ecosystem can look empty, without any life at all, but when you take a closer look at these large open areas covered with sagebrush, grasses, and other plants you can see that there are actually quite a lot of animals who call the Sagebrush Steppe Ecosystem their home. In fact, 400 types or species of plants provide habitat, food, and even water for over 250 species of animals.

Sagebrush Ecosystem Photos

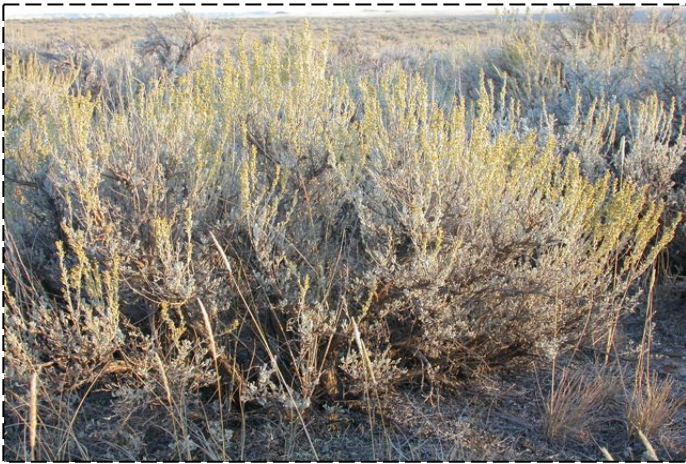
White-tail Jackrabbit



Short-horned Lizard



Sagebrush



Scarlet Globemallow



Coyote



Darkling Beetle



Sagebrush Ecosystem Photos

Sage Thrasher



White-tail Prairie Dog



Rabbitbrush



Prairie Falcon



Greater Sage-grouse



Pronghorn



Sagebrush Ecosystem Photos

Sagebrush Vole



Brewer's Sparrow



Harvester Ant



Western Wheatgrass



The Sun



White-tailed Jackrabbit

Name: White-tailed Jackrabbit
Scientific Name: *Lepus townsendii*
Predators: Coyotes, fox, raptors
Prey or Food: Plant matter

Did you know? The jackrabbit can camouflage with brown fur in the summer and white fur in the winter.

Short-horned Lizard

Name: Short-horned Lizard
Scientific Name: *Phrynosoma douglassi*
Predators: Coyotes, birds, snakes
Prey or Food: Insects

Did you know? To escape predators, short-horned lizards can inflate their bodies up to twice their size.

Wyoming Big Sagebrush

Name: Wyoming Big Sagebrush
Scientific Name: *Artemisia tridentate*
Predators: Pronghorn, birds, small mammals
Prey or Food: Water, sun, soil, air

Did you know? Cowboys used to rub sagebrush on themselves to combat bad odors before heading to town.

Scarlet Globemallow

Name: Scarlet Globemallow
Scientific Name: *Sphaeralcea coccinea*
Predators: Bees, butterflies, birds (pollen) and herbivores
Prey or Food: Water, sun, soil, air

Did you know? This plant survives well in the sagebrush ecosystem because it doesn't need a lot of moisture and can withstand strong winds.

Coyote

Name: Coyote
Scientific Name: *Canis latrans*
Predators: Humans, wolves
Prey or Food: small mammals, eggs, carrion

Did you know? The coyote's ability to eat a wide variety of prey has allowed them to live in almost every habitat in the US.

Darkling Beetle

Name: Darkling Beetle
Scientific Name: *Eleodes hispilabris*
Predators: Reptiles, amphibians, birds, mammals
Prey or Food: decaying matter, cow dung

Did you know? When disturbed, this beetle can spray a foul-smelling chemical.

Sage Thrasher

Name: Sage Thrasher
Scientific Name: *Oreoscoptes montanus*
Predators: Raptors, fox, coyotes, badger (eggs)
Prey or Food: Insects, berries

Did you know? Sage thrashers can imitate the songs and calls of other birds.

White-tail Prairie Dog

Name: White-tailed Prairie Dog
Scientific Name: *Cynomys leucurus*
Predators: Badgers, ferrets, raptors
Prey or Food: Plant matter

Did you know? Prairie dog "towns" are complex societies with vast underground burrows and sophisticated communication system.

Rubber Rabbitbrush

Name: Rubber Rabbitbrush
Scientific Name: *Ericameria Nauseosa*
Predators: Bees, butterflies, birds (pollen) and herbivores
Prey or Food: Water, sun, soil, air

Did you know? Rabbitbrush was used to make a yellow dye, chewing gum, and can produce a rubber-like substance.

Prairie Falcon

Name: Prairie Falcon
Scientific Name: *Falco mexicanus*
Predators: Other raptors
Prey or Food: Small mammals, other birds, reptiles

Did you know? Prairie falcons build their nests on cliffs.

Greater Sage-grouse

Name: Greater Sage-grouse
Scientific Name: *Centrocercus urophasianus*
Predators: Raptors, fox, coyotes, badger (eggs)
Prey or Food: sagebrush, grasses, flowers, insects

Did you know? The boom of strutting males during mating season can be heard a mile away.

Pronghorn

Name: Pronghorn
Scientific Name: *Antilocapra americana*
Predators: Pronghorns used to be hunted by the now extinct American Cheetah.
Prey or Food: Sagebrush, other shrubs, grasses

Did you know? The pronghorn can sprint as fast as 60mph and can sustain a speed of 30 mph for miles.

Sagebrush Vole

Name: Sagebrush Vole
Scientific Name: *Lemmyscus curtatus*
Predators: Coyotes, fox, raptors
Prey or Food: Sagebrush, rabbitbrush, flowers

Did you know? Sagebrush voles have been known to shelter in and even eat undigested plant matter from cow "pies."

Brewer's Sparrow

Name: Brewer's Sparrow
Scientific Name: *Spizella breweri*
Predators: Raptors, fox, coyotes, badger (eggs)
Prey or Food: Insects, grass, seeds

Did you know? This little brown bird can be hard to spot but easy to hear singing to establish territories.

Harvester Ant

Name: Harvester Ant
Scientific Name: *Pogonomyrmex occidentalis*
Predators: Reptiles, amphibians, birds, mammals
Prey or Food: seeds, pollen

Did you know? They gather food items to store in their mounds for winter months.

Western Wheatgrass

Name: Western Wheatgrass
Scientific Name: *Pascopyrum smithii*
Predators: Rodents
Prey or Food: Water, sun, soil, air

Did you know? This is Wyoming's "State Grass."

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.

Schoolyard Habitat



Schoolyards as habitat?

Absolutely! Many schoolyards have grassy areas and trees. Some schoolyards even have gardens. Whenever the essential items that make up a habitat are provided, wildlife will appear. What are the essentials? Water, food, and shelter.

Lions, Tigers, Bears?

Chances are that you won't find any of the larger animals at your school because there just isn't enough space, food, or water to support them. However, if you look under a rock you are likely to find insects, spiders, worms, snails, and maybe even a salamander. A view above into the sky might reveal a hawk, dove, or sparrow.

Signs of Life?

Sometimes all you'll get is a sign that an animal has been in your schoolyard while you were at home. Oftentimes you find dog, rabbit, deer, and mouse "scat" (that's what scientists call animal poop) scattered throughout the yard. Take a closer look at the ground when it is muddy or snowy to find animal tracks. Examine the trees in your schoolyard to find nests, woodpecker holes, and feathers. You may even find the holes of burrowing animals like mice, squirrels, and snakes in the fields. No matter where you look, we are sharing space with wildlife. Be sure to pick up your trash, leave growing things to grow, and be kind to all the wild things you find in your "schoolyard habitat."

Schoolyard Habitat Flashcards

House Cat



Nuttall's Cottontail



Fox Squirrel



Red-tailed Hawk



American Robin



American Crow



Mourning Dove



House Sparrow



Tiger Swallowtail



Crab Spiders



Ants



Boxelder Bug



Boxelder



Colorado Blue Spruce



Common Dandelion



Kentucky Bluegrass



The Sun



House Cat

Name: House Cat
Scientific Name: *Felis catus*
Predators: Raptors, dogs, fox
Prey or Food: Rodents, birds

Did you know? Scientists believe that cats are responsible for over 3 billion bird deaths each year

Nuttall's Cottontail

Name: Nuttall's Cottontail
Scientific Name: *Sylvilagus nuttallii*
Predators: Carnivorous mammals, raptors, snakes
Prey or Food: Grasses, flowers, sagebrush

Did you know? Look for these rabbits in the morning and evening when they come out of hiding to forage.

Fox Squirrel

Name: Fox Squirrel
Scientific Name: *Sciurus niger*
Predators: Crows, raptors, cats, dogs
Prey or Food: seeds, berries, mushrooms, eggs

Did you know? A "squirrel drey" is a nest made in tree branches with leaves, sticks, or mistletoe.

Red-tailed Hawk

Name: Red-tailed Hawk
Scientific Name: *Buteo jamaicensis*
Predators: Eagles
Prey or Food: Rodents, birds, snakes

Did you know? Other raptors have red tails, but these hawks also have a dark band across their chest.

American Robin

Name: American Robin
Scientific Name: *Turdus migratorius*
Predators: Raptors, cats, pesticides and herbicides
Prey or Food: Worms, insects, fruit

Did you know? A robin's song sounds like "cheerily, cheer up, cheer up, cheerily, cheer up."

American Crow

Name: American Crow
Scientific Name: *Corvus brachyrhynchos*
Predators: Raptors
Prey or Food: Seeds, fruit, insects, carrion, eggs, garbage

Did you know? Crows sometimes make and use tools.

Mourning Dove

Name: Mourning Dove
Scientific Name: *Zenaida macroura*
Predators: Humans, cats, dogs, raptors
Prey or Food: Seeds

Did you know? With a population of an estimated 350 billion, mourning doves are one of the most widespread and abundant birds in the US.

House Sparrow

Name: House Sparrow
Scientific Name: *Passer domesticus*
Predators: Cats, raptors
Prey or Food: Seeds, insects, garbage

Did you know? This bird was introduced from Europe and quickly invaded the whole country, preferring to live near human populations.

Tiger Swallowtail

Name: Tiger Swallowtail
Scientific Name: *Papilio rutulus*
Predators: Birds, reptiles, amphibians, other insects, spiders
Prey or Food: Nectar

Did you know? As a defense, this butterfly mimics the colors of another butterfly that is poisonous. The caterpillar can emit a foul smell.

Crab Spiders

Name: Crab Spiders
Scientific Name: *Thomisidae* spp.
Predators: Birds, other spiders
Prey or Food: Bees, flies, butterflies

Did you know? Crab spiders are capable of camouflage, changing color to match the color of the flowers they visit.

Ants

Name: Ants
Scientific Name: *Formicidae* Family
Predators: Birds, rodents, larger insects
Prey or Food: Other ants and insects, decaying matter, fungus

Did you know? A fossil of an ant as large as a hummingbird was found in Wyoming in 2011.

Boxelder Bug

Name: Boxelder Bug
Scientific Name: *Boisea trivittata*
Predators: Birds, rodents, other insects, spiders
Prey or Food: Boxelder seeds, other seeds

Did you know? These bugs seek out warm buildings for shelter in colder months.

Boxelder

Name: Boxelder
Scientific Name: *Acer negundo*
Predators: Insects, birds, small rodents (seeds)
Prey or Food: Water, sun, soil, air

Did you know? Boxelders have a double winged fruit (seed) called a samara.

Colorado Blue Spruce

Name: Colorado Blue Spruce
Scientific Name: *Picea pungens*
Predators: Insects, birds, small rodents (seeds)
Prey or Food: Water, sun, soil, air

Did you know? These trees are often used in "living fences" to protect buildings and roads from wind and snow.

Common Dandelion

Name: Common Dandelion
Scientific Name: *Taraxacum officinale*
Predators: Insects, birds, small rodents (seeds)
Prey or Food: Water, sun, soil, air

Did you know? A fun experiment is to choose a dandelion in the spring and measure it daily to see how fast it grows.

Kentucky Bluegrass

Name: Kentucky Bluegrass
Scientific Name: *Poa pratensis*
Predators: Insects, birds, small rodents (seeds), bees, birds, butterflies (pollen)
Prey or Food: Water, sun, soil, air

Did you know? This grass was introduced from Europe to use for lawns. Today, most American lawns have this water-hogging grass.

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.

Wetlands



What is a wetland?

A wetland is an area that usually holds shallow, slow-moving, or stationary water. Animals and plants living in or near wetlands are adapted to and often dependent on wet conditions for at least one part of their life cycle. An area does not need to be wet constantly to be considered a wetland. Water and soil moisture levels change and wetlands can sometimes even be dry for part of the year.

Why are wetlands important?

There are many reasons wetlands are important. Most obviously, wetlands provide essential breeding, nesting, feeding, and cover habitat for many species of wildlife, especially migratory birds and amphibians. Wetlands also act as giant filters and clean the water that will eventually enter streams, rivers and underground aquifers by absorbing silt, sediments and decomposing organic matter. Erosion and flooding is held in check by wetlands slowing down, holding and then slowly releasing water. In these ways, wetlands benefit all other habitats.

Where are wetlands in Wyoming?

Wetlands occur on the prairies, between the rolling hills, in the mountains and they even occur in the deserts. Wetlands make up only 2% of Wyoming's land area but they provide food, water and shelter for over 80% of Wyoming's wildlife.

Wetland Habitat Flashcards

Raccoon



Muskrat



Western Grebe



Sandhill Crane



Mallard



Red-winged Blackbird



Wetland Habitat Flashcards

American Avocet



Fathead Minnow



Northern Leopard Frog



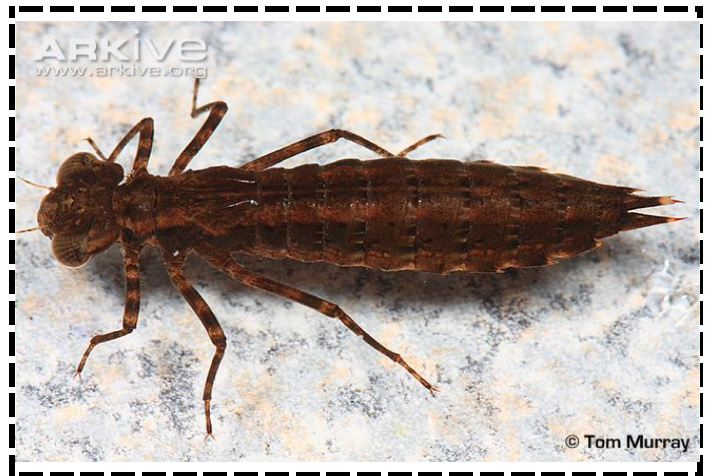
Tiger Salamander



Painted Turtle



Blue Darner (larvae)



Wetland Habitat Flashcards

Blue Darner (adult)



Crayfish



Broadleaf cattail



Pondweed



The Sun



Wetland Habitat Flashcards

Raccoon

Name: Raccoon
Scientific Name: *Procyon lotor*
Predators: Raptors, fox
Prey or Food: Eggs, crayfish, berries, garbage

Did you know? Raccoons will "wash" their hands and food before eating

Muskrat

Name: Muskrat
Scientific Name: *Ondatra zibethicus*
Predators: Raccoons, Fox, Raptors
Prey or Food: Cattails, sedges, crayfish

Did you know? You can tell a muskrat den from a beaver den because they use only leaves not branches.

Western Grebe

Name: Western Grebe
Scientific Name: *Aechmophorus occidentalis*
Predators: Raccoons will eat eggs
Prey or Food: Fish, aquatic insects

Did you know? These birds build floating nests.

Sandhill Crane

Name: Sandhill Crane
Scientific Name: *Grus canadensis*
Predators: Raccoons, raptors
Prey or Food: Grains, insects, frogs

Did you know? These birds have a beautiful courtship "dance" with leaps, hops, and bowing with wings outstretched.

Mallard

Name: Mallard
Scientific Name: *Anas platyrhynchos*
Predators: Coyotes, humans
Prey or Food: Aquatic plants/algae

Did you know? Only male mallards have the signature green head, the females are a drab brown.

Red-winged Blackbird

Name: Red-winged Blackbird
Scientific Name: *Agelaius phoeniceus*
Predators: Raccoons, snakes, raptors, fox, coyote
Prey or Food: Insects, seeds

Did you know? These birds are very protective of their nests, they'll chase away much larger birds and other predators.

American Avocet

Name: American Avocet
Scientific Name: *Recurvirostra americana*
Predators: Dogs, raptors, raccoons and foxes eat eggs
Prey or Food: Aquatic insects

Did you know? Avocets use their long up-curved bills to probe mud and shallow water for food.

Fathead Minnow

Name: Fathead Minnow
Scientific Name: *Pimephales promelas*
Predators: Reptiles, larger fish, birds, raccoons
Prey or Food: Aquatic insects, algae

Did you know? This minnows are a great biological control of mosquito larvae.

Northern Leopard Frog

Name: Northern Leopard Frog
Scientific Name: *Rana pipiens*
Predators: Fish, snakes, birds, salamanders
Prey or Food: Insects, small birds, snakes

Did you know? Much of Wyoming's leopard frog population is suffering from an infectious disease caused by a fungus.

Tiger Salamander

Name: Tiger Salamander
Scientific Name: *Ambystoma tigrinum*
Predators: Raccoons, turtles, birds
Prey or Food: Aquatic insects

Did you know? Some tiger salamanders live their entire lives underwater while others live in moist areas above ground.

Painted Turtle

Name: Painted Turtle
Scientific Name: *Chrysemys picta bellii*
Predators: Fox (eggs), raccoon (adults)
Prey or Food: Crayfish, aquatic insects and plants

Did you know? Painted turtles get their name from their brightly colored carapace, or shell.

Blue Darner (larvae)

Name: Blue Darner (larvae)
Scientific Name: *Aeshna multicolor*
Predators: Frogs, turtles, snakes, water birds, fish
Prey or Food: Aquatic insects

Did you know? These juvenile dragonflies are voracious predators of water insects.

Blue Darner (adult)

Name: Blue Darner (adult)
Scientific Name: *Aeshna multicolor*
Predators: Frogs, turtles, snakes, water birds, fish
Prey or Food: Mosquitoes, flies, gnats

Did you know? The adult dragonfly is a voracious predator of other flying insects.

Crayfish

Name: Crayfish
Scientific Name: *Orconectus* spp.
Predators: Raccoons, turtles, birds, fish, frogs, humans
Prey or Food: Aquatic plants, snails, decomposing matter

Did you know? Crayfish, or crawdads, are related to lobsters, shrimp, and crabs.

Broadleaf cattail

Name: Broadleaf cattail
Scientific Name: *Typha latifolia*
Predators: Muskrat, ducks, geese, birds (seed)
Prey or Food: Water, sun, soil, air

Did you know? Cattails are important hunting perches for many wetland birds.

Pondweed

Name: Pondweed
Scientific Name: *Potamogeton* spp.
Predators: Fish, waterfowl, turtles
Prey or Food: Water, sun, soil, air

Did you know? In spring, wetlands will be brown from rain and snowmelt, but as summer comes, algae growing in ponds turn waters green.

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.