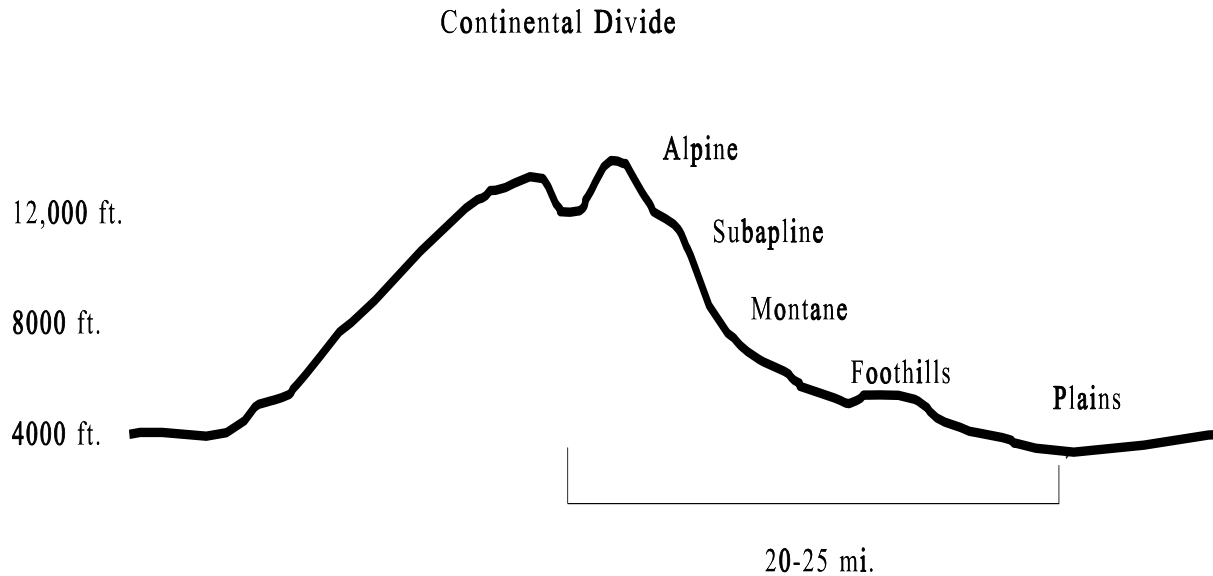


Life Zones of Boulder County



5 Major Zones Plains, Foothills, Montane, Subalpine, Alpine

14 Minor Zones Plains Grasslands, Lowland Riparian, Shrublands, Ponderosa Pine Forests, Mountain Grasslands/Meadows, Douglas-Fir Forests, Mountain Riparian, Quaking Aspen Groves, Lodgepole Pine Forests, Limber Pine Woodlands, Spruce/Fir Forests, Forest-Tundra Transitional, Alpine Tundra, Aquatic

Plant and animal communities are found together in groups called life zones. Boulder County has five life zones that can be subdivided into fourteen minor zones. The zones are associated with elevation, climate, topographic boundaries, and are defined by moisture and temperature regimes.

The **plains** life zone occurs up to an elevation of about 6,000 feet. This is an area of open grasslands and small shrubs. Trees are found infrequently, occurring primarily along riparian areas. Animals such as pronghorn antelope, jackrabbits, and burrowing mammals such as prairie dogs typically inhabit this zone. American bison were once found here in great numbers as well.

The **foothills** zone ranges from about 6,000 to 8,000 feet. It is a brushland of juniper, sagebrush, mountain mahogany, berry shrubs, grasses and forbs. Red fox, skunks, and raccoons inhabit this life zone.

The **montane** zone (8,000 to 10,000 feet) has varied plants dominated by ponderosa pine and Douglas fir, along with aspen, lodgepole pine, and limber pine.

The **subalpine** zone (10,000 to 11,500 feet) has homogeneous forests of Engelmann spruce and subalpine fir. Above treeline in the **alpine** zone are found low shrubs, hardy forbs and grasses, mosses, and lichens.

Riparian areas run across all these life zones. These are creek and river corridors with their own plant and animal species. Cottonwoods and willows are common here. Beaver and aquatic birds such as American dippers are seen in this zone. Many kinds of fish and insects live in and around the water.

Aquatic areas occur where water pools into ponds or lakes. Water-adapted plants thrive in areas where the water is calm. Several species of lake-dwelling fish and insects live in bodies of water.

Plains

Plains Grasslands

Lowland Riparian

Foothills

Shrublands

Ponderosa Pine Forests

Lower Montane

Mountain Grasslands / Meadows

Douglas-Fir Forests

Montane

Mountain Riparian

Quaking Aspen Groves

Upper Montane

Lodgepole Pine Forests

Subalpine

Limber Pine Woodlands

Spruce / Fir Forests

Alpine

Krummholz Forest / Tundra Transition

Alpine Tundra

Life Zone	Elevation	Plants	Animals
Plains Grasslands	< 5,600 ft.	rabbitbrush sagebrush saltbush big bluestem grass little bluestem grass buffalo grass blue gramma grass Junegrass needle-and-thread grass three-awn grass western wheatgrass yucca prickly pear sunflower evening primrose goldenrod milk vetch broom snakeweed	spadefoot toad western box turtle bullsnake prairie rattlesnake bald eagle golden eagle peregrine falcon red-tailed hawk Swainson's hawk ferruginous hawk American kestrel western meadowlark lark bunting burrowing owl American badger desert cottontail jackrabbit gopher black-tailed prairie dog coyote swift fox deer mouse
Lowland Riparian	< 5,600 ft.	plains cottonwood narrowleaf cottonwood peach-leaf willow boxelder green ash hackberry hawthorn coyote willow gooseberry wax currant wild plum wild cherry Wood's rose snowberry poison ivy wild licorice sunflower bulrush cattail prairie cordgrass western wheatgrass	northern leopard frog western chorus frog American bullfrog tiger salamander garter snake painted turtle snapping turtle red-winged blackbird Canada goose ducks hawks great blue heron magpie American robin barn swallow northern flicker white-tailed deer red fox deer mouse muskrat skunk fox squirrel American beaver raccoon

Life Zone	Elevation	Plants	Animals
Shrublands	5,600 - 6,500 ft.	mountain mahogany rabbitbrush skunkbush chokecherry serviceberry buckbrush bitterbrush ninebark winterfat broom snakeweed Arizona fescue blue gramma grass needle-and-thread grass three-awn grass Indian rice grass big bluestem grass alkali sacaton grass western wheatgrass copper mallow goldenrod sulfur-flower locoweed yucca prickly pear	prairie rattlesnake bullsnake fence lizard sage grouse scrub jay northern tree lizard spotted towhee rock wren bobcat coyote mule deer jackrabbit deer mouse black-tailed prairie dog skunk rock squirrel gray fox mountain lion
Ponderosa Pine Forests	5,600 - 9,000 ft.	ponderosa pine Rocky Mountain juniper common juniper kinnikinnick wax currant bitterbrush buckbrush mountain mahogany blue gramma grass Junegrass spike fescue grass needle-and-thread grass mountain muhly grass Pasque flower miner's candle sulfur-flower greenleaf penstemon wild geranium mountain ball cactus gumweed	bullsnake fence lizard western bluebird mountain chickadee red crossbill Cooper's hawk Steller's jay dark-eyed junco pygmy nuthatch common poorwill chipping sparrow western tanager solitary vireo Colorado chipmunk Nuttall's cottontail mule deer porcupine Abert's squirrel

Life Zone	Elevation	Plants	Animals
<p>Mountain Grasslands/ Meadows</p>	<p>7,500 - 10,000 ft.</p>	<p>shrub willows shrubby cinquefoil wax currant Wood's rose barley foxtail Canada bluegrass Idaho fescue grass blue gramma grass tufted hairgrass Junegrass mountain muhly grass needle-and-thread grass spike-rush wild iris sage paintbrush locoweed geranium wild strawberry yarrow</p>	<p>boreal toad tiger salamander garter snake mountain bluebird Lincoln's sparrow hummingbird common nighthawk elk bighorn sheep yellow-bellied marmot ground squirrel shrew vole weasel</p>
<p>Douglas-fir Forests</p>	<p>6,500 - 9,000 ft.</p>	<p>Douglas-fir Rocky Mountain maple common juniper mountain lover kinnikinnick wild raspberry ninebark heart-leaved arnica false Solomon's seal</p>	<p>dark-eyed junco ruby-crowned kinglet downy woodpecker great-horned owl hermit thrush black bear pine squirrel red-backed vole</p>

Life Zone	Elevation	Plants	Animals
Mountain Riparian	5,600 - 10,000 ft.	quaking aspen narrowleaf cottonwood thinleaf alder river birch bog birch chokecherry Rocky Mountain maple shrub willows hawthorn dogwood wild plum common gooseberry honeysuckle giant angelica bittercress chiming bells cow parsnip star gentian horsetail Canadian reedgrass rush sedges arrowleaf senecio virgin's bower Boulder raspberry	western chorus frog northern leopard frog tiger salamander black-capped chickadee American dipper belted kingfisher spotted sandpiper common snipe Lincoln's sparrow tree swallow vireo warblers goldfinch common raven beaver muskrat meadow vole deer mouse river otter racoon moose black bear
Quaking Aspen Groves	5,600 - 10,000 ft.	quaking aspen chokecherry kinnikinnick Wood's rose Colo. blue columbine cow parsnip bracken fern white geranium common lupine American vetch	mountain bluebird black-capped chickadee northern flicker hummingbirds violet-green swallow warbling vireo house wren black bear elk weasels western jumping mouse northern pocket gopher masked shrew montane vole

Life Zone	Elevation	Plants	Animals
<p>Lodgepole Pine Forests</p>	<p>7,500 - 10,000 ft.</p>	<p>lodgepole pine broom huckleberry blueberry common juniper kinnikinnick sticky-laurel heart-leaved arnica pine drops wintergreen</p>	<p>mountain chickadee evening grosbeak dark-eyed junco ruby-crowned kinglet gray jay Clark's nutcracker nuthatch common raven porcupine pine squirrel vole bushy-tailed woodrat American marten</p>
<p>Limber Pine Woodlands</p>	<p>7,500 - 11,000 ft.</p>	<p>limber pine common juniper kinnikinnick sticky-laurel alpine penstemon stonecrop Junegrass mountain muhly grass</p>	<p>mountain chickadee gray jay dark-eyed junco Clark's nutcracker yellow-rumped warbler white-breasted nuthatch least chipmunk pine squirrel yellow-bellied marmot</p>

Life Zone	Elevation	Plants	Animals
Spruce/Fir Forests	9,000 - 11,000 ft.	subalpine fir Engelmann spruce blue spruce blueberry broom huckleberry currant heart-leaved arnica Colo. blue columbine Jacob's ladder wintergreen	mountain chickadee olive-sided flycatcher northern goshawk dusky grouse gray jay dark-eyed junco ruby-crowned kinglet Clark's nutcracker Williamson's sapsucker Townsend's solitaire yellow-rumped warbler snowshoe hare lynx American marten pine squirrel vole
Forest / Alpine Transitional	9,000 - 11,000 ft.	limber pine subalpine fir Engelmann spruce Shrub willow common juniper kinnikinnick	mountain chickadee dark-eyed junco Clark's nutcracker yellow-rumped warbler common raven least chipmunk pine squirrel

Life Zone	Elevation	Plants	Animals
Alpine Tundra	11,000+ ft.	arctic willow bog birch alpine bluegrass tufted hairgrass kobresia sedge rush alpine avens alpine bistort marsh marigold	rosy finch American pipit white-tailed ptarmigan white-crowned sparrow common raven elk weasels American pika yellow-bellied marmot northern pocket gopher
Aquatic	<5,600 - 13,000	bulrush broad-leaved cattail pondweed rushes sedges	caddisflies mayflies midges stoneflies water-boatmen scuds snails fathead minnow green sunfish suckers bass catfish trout western chorus frog tiger salamander painted turtle northern leopard frog