

## **Looking At Nature**

### **Spencer Mountain: The Dark Side of the Valley@**

Helping to frame our valley on its south side lies Spencer Mountain. It rises 1,000 feet from the valley floor, separated from Tennessee Mountain on its east flank by Marysville Gulch and running into Ute Mountain to the west. Spencer Mountain=s fame lies in the fact that it was the center of mining activity during the boom just before the turn of the century.

Spencer Mountain is the dark side of the valley. North-facing, it receives far less sunlight and warmth than Eldorado Mountain across the way. At times parts of the mountain receive no sunlight during a day. The snow gets deep and remains powdery. In spring when Eldorado Mountain is clear of snow, one can sometimes still ski up the Enterprise road to the top of Spencer. The climate is similar to the Indian Peaks Wilderness to the west.

Because of the cooler and moister climate on Spencer the vegetation is also similar to higher elevations. It is subalpine in character. The climax forest will be co-dominated by Engelmann spruce and subalpine fir trees. These are trees that have evolved in regions with lots of snow. Both have a slender conical shape with branches angling downward to allow for the shedding of snow, minimizing damage to the tree. Both tree types have single needles attached to stems. Engelmann spruce needles are square; they can be rolled between your fingers. Additionally, they are sharp to the touch. (spruce-square-sharp). Subalpine fir needles are flat, cannot easily be rolled between the fingers, and are softer to the touch (fir-flat-friendly).

Spencer is no where near representing a climax stand of spruce and fir because of a major fire that occurred in the 1800s. Most of you have seen early photographs from the town=s mining years which show the mountain looking rather naked except for charred dead trees. The origin of the fire is not known. Kemp in his writings mentions it had been thought by some that the fire had been set by Indians. However, the possibility of the fire originating from an accident by early settlers, or even intentionally set by miners cannot be ruled out. Tice, in his 1872 book *Over the Plains and on the Mountains*, reported that some fires were set Amerely to clear away the fallen leaves so as to expose the naked rocks to the observation of the prospector.@ Although the mining districts outlawed forest burning and imposed severe fines, the burning continued. In 1871 in Boulder County, there were 51 indictments for illegal fires. During the settlement period (1860 - 1910) over half the forests in the county were cut or burned.

The fire, by removing the existing forest, made the mountainside just right for sun loving trees such as aspen and lodgepole pine. Photographs of Spencer from the 1930s through 60s show greater coverage by aspen. But aspen and lodgepole are their own worst enemy. As they grow tall and full bodied they shade the ground inhibiting development of their own seedlings and suckers (also, dominant trees in aspen clones produce substances that inhibit the production of young shoots). However, this creates the perfect environment for shade tolerant tree types like spruce and fir. Until there is another fire, the mountainside will increasingly become dominated by the subalpine conifers while aspen and lodgepole pine will disappear. Today as you walk the beginning of the Enterprise Road, notice that most of the young trees underneath the tall aspen are conifers. Someday, it will all be theirs.

Of course there will be another fire at some point. Because of the cool and moist climates of north-facing hillsides, the interval between major fires can be quite long; 200 years or more at our elevation. We are only about half way there. But this is only an average. Mother Nature=s fickle climate combined with human error can sometimes pay little respect to the law of averages.

The wind can also influence the trees on Spencer. In the windiest locations, particularly near the top, limber pines are abundant. Judging by their scientific name, *Pinus flexilis*, these hearty trees have what it takes to withstand gale force winds; they bend but don't break. The easiest way to identify this pine is by looking at the needles; they are in clusters of five.

The forest understory is filled with plants that love cool, shady and moist environments. Many species are the same or similar to those found in northern boreal forests. Common shrubs include broom huckleberry (*Vaccinium scoparium*), blueberry (*Vaccinium myrtillus*), gooseberry (*Ribes montigenum*), buffaloberry (*Shepherdia canadensis*), mountain-lover (*Paxistima myrsinites*), and high-bush cranberry (*Viburnum edule*). One of the showiest wildflowers is the yellow composite arnica (*Arnica latifolia* and *A. cordifolia*).

Many of the wildflowers tend to be pale in color and diminutive in size with members of the Wintergreen and Orchid families well represented. Pipsissewa (*Chimaphila umbellata*), one-flowered wintergreen (*Moneses uniflora*), rattlesnake-plantain (*Goodyera repens*) and twinflower (*Linnaea borealis*) are a few of the flowers. Possibly the prettiest and most delicate flower is fairy slipper (*Calypso bulbosa*); found in moist locations, the bulb of this pink or rose colored orchid is shaped like a tiny slipper.

### Field Notes

While winter lingers, signs of spring appear in the land. The sighting of the first mountain bluebird on the fence of the Arapaho Ranch occurs sometime in March on one of those days when the sun has been warm and you think there really will be an end to winter.

Even earlier, in February, some events herald a change. One of the first birds to return to the valley are red-winged blackbirds. Some nice day in February a small flock of them will appear at someone's feeder in town, bringing with them a chorus of sound that is in great contrast to the normal winter quiet. Sometimes the blackbirds overwinter in Nederland; a few may even stay at the Arapaho Ranch. But the migration up the valley is a sign of spring.

Another sign of spring to occur in February is the singing of a dipper, or sometimes called water-ouzel. These little gray birds live along streams and wade in the water to obtain food. Though many will move to lower elevations during winter, a few may be found along Middle Boulder Creek. But some calm February day, normally around dusk, if you are near the creek you just might hear this beautiful songster. John Muir described the dipper's song: *At the more striking strains are perfect arabesques of melody, composed of a few full, round, mellow notes, embroidered with delicate trills which fade and melt in long slender cadences. In a general way his music is that of the streams refined and spiritualized. The deep booming notes of the fall are in it, the trills of rapids, the gurgling of margin eddies, the low whispering of level reaches, and the sweet tinkle of separate drops oozing from the ends of mosses and falling into tranquil pools.* @ Upon hearing that song your spirits will drift toward spring.

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