


# **WILD BASIN**

## **SELF-DISCOVERY GUIDE**

**Rocky Mountain National Park, Colorado**



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1978  
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PUBLISHED BY THE Rocky Mountain Nature Association, Inc.  
Estes Park, Colorado 80517

The Rocky Mountain Nature Association, which, as a cooperating agency of the National Park Service, Rocky Mountain National Park, assists in the interpretive program of the park. The association's activities include the publication of educational material pertinent to the park, the development of the park library, and similar objectives. Association publications may be obtained by mail from the above address.

IN COOPERATION WITH THE National Park Service  
U.S. Department of the Interior

text by Libbie Landreth  
illustrated by Marilyn Cowen



Every step into nature offers great possibilities.

"It does not matter whether the walker's destination is near or far, or whether he has a destination at all. He may be walking for a day, for many days, or for less than an hour. While he is walking he is a free spirit..."

-Aaron Sussman and Ruth Goode,  
The Magic of Walking, 1967

The National Park Service hopes that your day  
is pleasant and full of discoveries.

This guide is dedicated to the  
perpetuation of nature.

  
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This booklet will introduce you to some of the features of Wild Basin. The first section of the guide will familiarize you with facets of the surroundings up to Ouzel Falls which is 5 kilometers (3 miles) from the trailhead. The one-way hike to Ouzel Falls will take from 2 to 2½ hours, depending on your pace. Shorter hikes can be taken to Copeland Falls, .40 kilometers (¼ mile), or Calypso Cascades, 3.2 kilometers (2 miles). Copeland Falls can be reached in 15 minutes. The walk to Calypso Cascades may take 1 to 1½ hours.

The second segment of the guide describes some of the other Wild Basin components you may view should you decide to go beyond Ouzel Falls.

There are no trail markers; these have been left out purposefully to allow you to explore on your own. Self-discovery lets each individual experience nature in his own way.

To become acquainted with Wild Basin, you have to use your legs and feet as well as your senses. A lot can be discovered on a short walk. You are encouraged to explore on your own, to pause and enjoy the natural world around you.

Enos A. Mills, known as the Father of Rocky Mountain National Park, was instrumental in the establishment of the park. He described Wild Basin as follows:

"Wild Basin, a broken and glaciated region of twenty-five square miles, lies immediately south of Longs Peak. This basin is almost encircled by eight towering peaks, and the enormous St. Vrain Moraine thrusts out of its outlet and shows where the united ice-rivers formerly made their way from this basin. Within this wild area are lakes, forests, waterfalls, and a splendid variety of wild and lovely scenes."

Rocky Mountain Wonderland, 1915

AC 31042

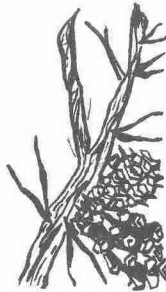
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**AVOID ACCIDENTS!**  
**USE CAUTION AROUND STREAMS AND WATERFALLS.**  
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The time of year you visit Wild Basin will largely determine the number of features you may see. The summer months provide the best viewing opportunities. You may have to look closely to find some of the plants described. You might want to read each segment of the guide in its entirety before you hike that section so that you will be able to recognize some of the features mentioned.

## THE TRAILHEAD TO COPELAND FALLS

The Wild Basin trailhead is at an elevation of 2591 meters (8500 feet). The first bridge traverses Hunters Creek. The trail parallels the North St. Vrain Creek.



The trail begins in a lodgepole pine (*Pinus contorta*) forest which is a part of the MONTANE ZONE. This zone is characteristic of elevations from 2130 to 2900 meters (7,000 to 9,500 feet). LODGEPOLE PINE grow on dry soils, in dense stands, allowing little sunlight to reach the forest floor; consequently, there is little vegetative growth beneath stands of lodgepole.



Another component of the montane zone is the QUAKING ASPEN (*Populus tremuloides*) which, unlike the lodgepole, grow on more moist soils. Aspen are common around streams. The identifying characteristic of the aspen is its smooth, white bark. Aspen ordinarily grow in clusters. Note the greater amount of vegetation under the aspen trees as compared to the lodgepole. Aspen and lodgepole thrive in burned-over areas. In time, spruce and fir will succeed the lodgepole and aspen, this process taking many years.



The little cabin that you see on the right of the trail is used to house summer park service personnel. This cabin was constructed in 1926.

Along the North St. Vrain Creek, look for the **NARROWLEAF COTTONWOOD** (*Populus angustifolia*), a member of the willow family. Other willow species are also abundant along the stream; willows have narrow leaves and slender stems. In the fall, members of the willow family turn brilliant shades of yellow and gold.



Your walk may be interrupted by the **GOLDEN—MANTLED GROUND SQUIRREL** (*Spermophilus lateralis*) who is quite a beggar. This squirrel has a striped back, but no stripes on its face unlike its smaller cousin, the **LEAST CHIPMUNK** (*Eutamias minimus*) that has stripes across its back and face. The least chipmunk is shy, ordinarily not as demanding as the golden-mantled ground squirrel. Only the golden-mantled ground squirrel truly hibernates during winter although the least chipmunk also spends much of the winter underground sleeping.

It is hazardous to the livelihood of these animals to feed them. When fed "human goodies", they may not eat natural foods necessary to their well-being.





Squirrels, deer, black bear, and birds are fond of KINNIKINNIK (*Arctostaphylos uva-ursi*) berries. The kinnikinnik plant has ever-green leaves which are shiny, thick, and oval-shaped. It is a low ground plant, no greater than 15 millimeters (6 inches) in height and more commonly 2-7 centimeters (approximately 1-3 inches) high. The kinnikinnik grows on sandy or rocky soils; it forms carpets and plays an important role in soil building. Small white or pink blooms can be seen in May and early June. Bright orange or red berries appear in autumn. The Indians used the leaves for medicine.

The kinnikinnik is well adapted to the Rocky Mountain dryness in that the firm waxy surface of the leaves reduces water loss. The dry mountain air constantly removes moisture from plant tissues. Coarse Rocky Mountain soils have little water-holding capacity. Plants that have the ability to reduce evaporation and can store water are the most successful in the Rocky Mountain environment.

The trail upon which you are walking is easily subject to erosion due to shallow and sandy Rocky Mountain soil. When people and horse riders use the trail, they compress the soil in the trail bed. As a result, water has the tendency to run across the top of the soil instead of seeping into the ground.

The trail can act as a pathway for rushing water (rain, melting snow, etc.). When this happens, a lot of soil is lost. To help prevent this type of damage to the trails, water bars are built. These are the drainage ditches that are built across the trail; they slope downward to divert the water off the trail. You may observe these from time to time as you hike.

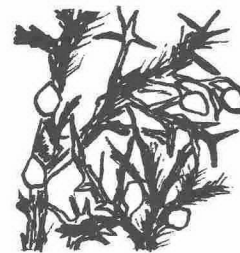
**PLEASE ALLOW PLANTS TO REMAIN IN THEIR  
NATURAL STATE SO THAT OTHERS WILL HAVE THE  
OPPORTUNITY TO VIEW THEM.**

A trailside plant to watch for is the **CREeping HOLLYGRAPE** (*Mahonia repens* or *Berberis repens*). Like the kinnikinnik, it grows low on the ground. This plant can be recognized by its spiny leaves. In shaded moist areas, the hollygrape leaves may remain green the year around. If exposed to the winter sun, the leaves may turn bright red.

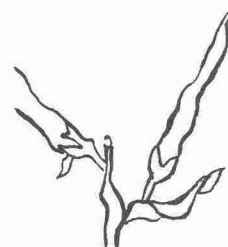


In spring, the hollygrape has clusters of yellow flowers; blue-colored berries develop later. The berries have been used to make jelly. Indians used the stems and roots for a diuretic, laxative, cough suppressant, and jaundice treatment. Pioneers used the hollygrape plant as a treatment for ulcers, rheumatism, heartburn, and tuberculosis.

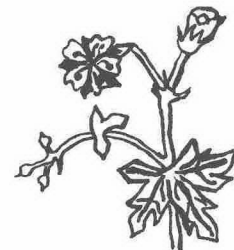
Another plant commonly seen is the **ROCKY MOUNTAIN JUNIPER** (*Juniperus scopulorum*), a low shrub which remains green all winter. Unlike other evergreens, it has no cones. Instead, it bears bluish-colored berries that take two seasons to ripen. You might want to smell this shrub for it has a distinctive odor.



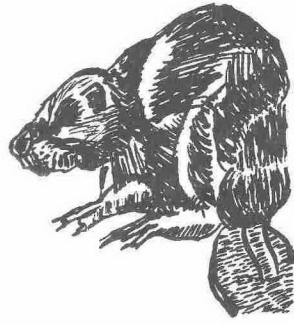
Keep an eye out for **GOLDEN BANNER** (*Thermopsis divaricarpa*). Generally occurring in patches, golden banner has yellow blossoms and bean-like pods. They bloom in April, May and June and are 30 to 60 centimeters (1-2 feet) tall. Each leaf is composed of three leaflets. These are found along streams and other moist areas.



**FREMONT GERANIUM** (*Geranium fremontii*) is a flowering plant that has pink blossoms. It blooms from May until July. The plant itself has five lobed leaves. The Indians used this plant for birth control. According to one source, "one dose kept a woman safe from pregnancy for an entire year."

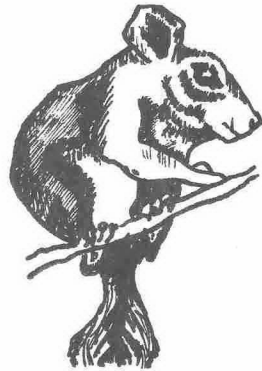


## COPELAND FALLS TO CALYPSO CASCADES

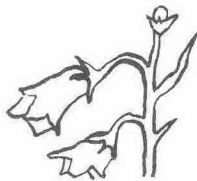


While hiking along the stream, watch for signs of **BEAVER** (*Castor canadensis*). You may note the trees cut by beaver shortly after passing Copeland Falls on the left of the trail. Piles of logs and sticks are seen occasionally in the stream, evidence of the beaver's work.

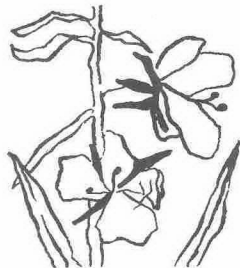
Beavers may weigh over 25 kilograms (55 pounds). They can remain submerged in water four to five minutes.



The **CHICKAREE** (*Tamiasciurus hudsonicus*) or tree squirrel may startle you. This squirrel makes his presence known by loud scolding when someone enters his domain. Even if you do not actually see the chickaree, you may see twigs from lodgepole, spruce, or fir lying in the trail indicating the food gathering habits of the chickaree. Chickarees are recognized by their solid gray color and white eye ring. Except during mating season, males and females defend separate territories.

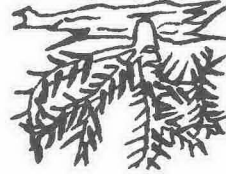


Many forest inhabitants relish the **HAREBELL** (*Campanula rotundifolia*) often called a bluebell. This plant begins blooming in late June, continuing into September. The flowers are violet-blue and bell-shaped.



Another flowering plant is **FIREWEED** (*Epilobium angustifolium*) which grows along streams. It has bright pink or lilac-purple blossoms and blooms from June through August. Flowers grow on long spikes and have four petals. The flower resembles a flame and it often establishes itself after a forest fire; thus, the name, fireweed.

OLD MAN'S BEARD (*Usnea strigosa*) a lichen, grows on spruce, fir and lodgepole. It is light green and hangs in wisps from tree branches. Old Man's Beard does no harm to the trees.



Close to the trail, ALPINE LADYFERN (*Athyrium americanum*) grows. This fern grows in large clumps. The fronds or leaves of the fern are 20 to 102 centimeters (8-40 inches) long.



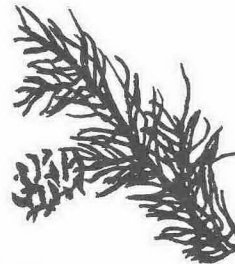
The gray, green, yellow, orange and black splotches that you see on the rocks are plant pioneers called LICHENS. The lichens gradually break the rock down into soil; the soil produced allows other plants to grow. Touch the lichen. What does it feel like? Do you see tiny particles of rock clinging to the lichen?

Did you notice the BEDROCK in the trail? This rock is exposed in the trailbed after you pass Copeland Falls. You have no choice but to walk directly on the bedrock. Bedrock is solid rock and extends down into the earth to undetermined depths.

Somewhere along the trail, you will pass a backcountry camping area. If you are interested, take a tour of these campsites. The sites can be used by backpackers who have acquired a FREE permit.

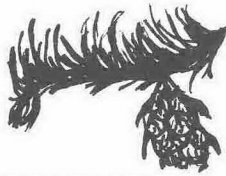
In 1964, the National Park Service had to take steps toward protecting the fragile landscape due to increasing numbers using the backcountry. Designated campsites concentrate use in small areas which limits environmental damage.

You will eventually cross the North St. Vrain Creek, the stream that flows on the left of the trail. A large bridge spans the creek. Upon reaching the bridge, you have entered the SUBALPINE ZONE. This change is due to elevation gain; the subalpine zone occurs at altitudes from 2700 meters to 3500 meters (9,000 to 11,500) feet.



ENGLEMANN SPRUCE





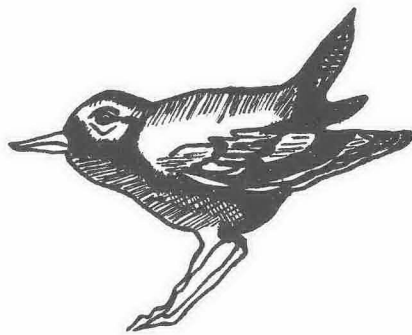
Spruce and fir are characteristic of the sub-alpine zone. Moisture is more abundant in this zone as compared to the drier montane zone of lower elevations.

#### DOUGLAS FIR

At Calypso Cascades, note the tree stump on the right of the first bridge. It is full of woodpecker holes.

Calypso Cascades is a series of little waterfalls totaling a height of 61 meters (200 feet). The Cascades are a result of glacial action, created by scouring pressure of ice and snows. The large boulders seen at the Cascades were left by the glaciers.

#### CALYPSO CASCADES TO OUZEL FALLS



At the Cascades, Ouzel Falls, or anywhere the stream is fast-flowing, watch for a bird called the WATER OUZEL or DIPPER (*Cinclus mexicanus unicolor*). This chunky gray bird has a distinguishing characteristic — it bobs up and down. The dipper feasts on aquatic insects. Its nest is built of moss and is commonly found near waterfalls. This bird is remarkable in that it can actually propel itself under water.

Between Calypso Cascades and Ouzel Falls, there are several places where you can view Longs Peak, elevation 4345 meters (14,255 ft.) and Mt. Meeker, elevation 4240 meters (13,911 ft.). These mountains are seen on the right as you are hiking toward Ouzel Falls. As you face the peaks, Longs is on the left and Mt. Meeker is on the right.

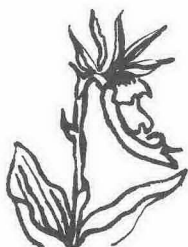
Longs Peak is the highest mountain in Rocky Mountain National Park. The first white man's climb of Longs Peak was in 1868 from Wild Basin. Prior to this ascent, Longs Peak was thought to be "unclimbable".

The 1868 climbing party was led by Major John Wesley Powell, a one-armed veteran of the Civil War. After two unsuccessful tries to reach the summit, L.W. Keplinger, a college student, volunteered to make a preparatory exploration; Keplinger came within several hundred feet of the summit. The following day, the party reached the summit.

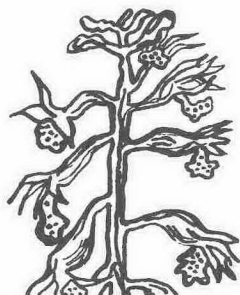
William N. Byers, editor of the Rocky Mountain News was a member of the Powell party. He had this account of the first ascent;

“There was no extraordinary obstacle until within seven or eight hundred feet of the summit. Above that point, the mountain presents the appearance, in every direction, of being a great block of granite, perfectly smooth and unbroken. Close examination, however, removed this delusion in some degree, and we were most agreeably surprised to find a passable way, though it required great caution, coolness, and infinite labor to make headway; life often depending upon a grasp of the fingers in a crevice that would hardly admit them. Before ten o'clock the entire party stood upon the extreme summit without accident or mishap of any kind.”

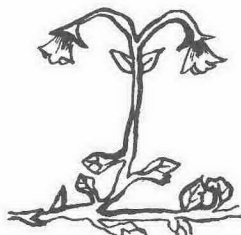
August 23, 1868



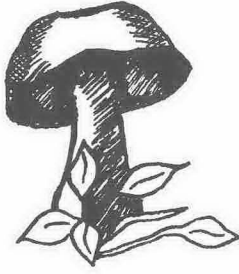
The CALYPSO ORCHID or FAIRY SLIPPER (*Calypso bulbosa*) has a dainty fragrant pink flower. Look for this one in the shade of the forest on top of decayed logs. Only one flower develops on a stalk. It blooms in May and June. The survival of the orchid is threatened because of its fragility and human abuse.



Another member of the orchid family which you may observe is SPOTTED CORALROOT (*Corallorhiza maculata*), blooming in June and July. There are no leaves and it lacks green coloring. These plants are found in decaying plant material in shady locations. The stems are 15 to 45 millimeters (6-18 inches) tall; the flowers have a white lip with crimson or purple spots.



Also found in the moist, shady understory of the forest is TWINFLOWER (*Lonicera involucrata*). This plant bears fragrant pairs of pink or white bell-shaped flowers. The stems divide into two at the top. Twinflower blooms in June, July, and the first part of August.



Many varieties of MUSHROOMS are found in Wild Basin. Mushroom development is dependent upon moisture and decayed matter. Mushrooms reproduce themselves through spores, rather than seeds; the spores are invisible to the naked eye. Like all plants in the park, mushrooms are protected.

There are some short switchbacks in the trail between the Cascades and Ouzel Falls. Switchbacks are built in steep places to help keep the trail from eroding. Log supports were also put in to hold the soil in place. Use of the switchbacks assists in keeping the landscape natural.

### **OUZEL FALLS**

The elevation gain from the trailhead to Ouzel Falls is 44 meters (940 feet). The altitude at Ouzel Falls is 2877 meters (9,440 feet).

Before you cross the bridge at Ouzel Falls, take a side trip to the base of the falls by climbing up the stream a short way. You will be rewarded with a spectacular view of Ouzel Falls, named after the water ouzel or dipper mentioned earlier.

Ouzel Falls is a result of glacial action. Glaciers carved the valley below the falls, causing the stream to drop to the new valley floor. The falls plummet over bedrock, about 15 meters (50 feet).

Looking downstream from the bridge are the remains of a beaver dam.

At Ouzel Falls, you may encounter the GRAY JAY (*Perisoreus canadensis capitalis*), the CLARK'S NUTCRACKER (*Nucifraga columbiana*), or the STELLAR'S JAY (*Cyanocitta stelleri*). The gray jay has a white-capped head with a light gray underneath and dark gray back and wings. The Clark's nutcracker also has a gray underneath, but differs from the gray jay in that it has conspicuous white patches on its black wings and tail. Stellar's jay is identified by its blue and black color; it is distinguished by its crest.

If you take a short jaunt up the trail from Ouzel Falls, a panoramic view of the valley can be seen. The long ridges that you see rising above the valley floor are LATERAL MORAINES, formed by glaciers.

### **DID YOU KNOW?**

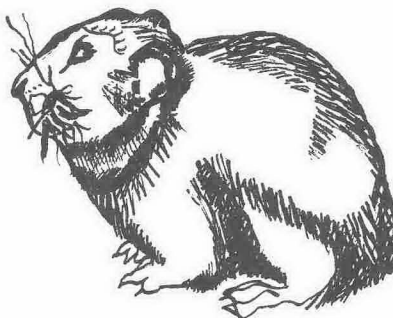
Average temperature is decreased approximately 3° Fahrenheit for every 305 meters [1,000 feet] of altitude gained.

This portion of the guide will give you insights on natural features, history and hiking possibilities in Wild Basin.

Wild Basin has a slightly wetter climate than other areas on the east side of the park. The wet environment encourages abundant flower growth. Most of Wild Basin is covered by dense underbrush. Due to a thick canopy of trees, open viewpoints are limited.

Located above Frigid Lake in Wild Basin is Moomaw Glacier. Although not a true glacier, it is one of the park's ten ice bodies. It is named after Jack Moomaw, a former Rocky Mountain National Park ranger.

In rock piles at higher elevations, you may see the PIKA (*Ochotona princeps*), a member of the rabbit family. A good place to look for this fellow are the rocks slides before you get to Bluebird Lake. The pika is known as the "haymaker" due to its habit of gathering grasses, leaving the grass to dry on the rocks. Since the Pika does not hibernate, these grasses are consumed in the winter, when food is scarce. The Pika is about 1/5 the size of a cottontail rabbit.



Brown in color, the YELLOW-BELLIED MARMOT (*Marmota flaviventris*) thrives in areas where there are boulders and lush vegetation. You may have the opportunity to view the marmot at Copeland Falls or near Bluebird Lake. When in danger, the Marmot may emit a high shrill whistle. These mammals spend a great deal of time sunning themselves on rocks. The Marmot is up to four times as large as a Cottontail.



Wild Basin is relatively unmarred by the human element; however, during the early 1900's, the wife and son of Frank P. Arbuckle filed for water rights on five lakes in Wild Basin. Frank Arbuckle was a prominent Denver citizen and political figure. The Arbuckles ran a summer resort below Wild Basin.

In 1902, dams were begun on two of the lakes, Pear Lake and Bluebird Lake. The water rights were sold in 1904 to a group of Longmont businessmen who called themselves, The Arbuckle Reservoir Company. According to a 1906 filing, a dam 3.35 meters (11 feet) high was to be built at a cost of \$400.00 at Pear Lake.

The largest dam, called Arbuckle Reservoir #2, was built at Bluebird Lake. Construction started in 1902; the working season was short due to the fact that the lake is above treeline and snows remain most of the year. Above the outlet, the dam was 62 meters (203 feet) long and 17 meters (57 feet) high. The stored water was to be used to irrigate the sugar beet fields in the St. Vrain vally near Longmont.

A 25-horsepower gasoline engine was torn apart and reassembled at Bluebird Lake to supply power for crushing rock.

“ . . . the cement has to be brought upon burros over a six mile trail. The trail is steep and rough and also swampy in some places, and many of the heavier parts of the machinery had to be transported over the snow on sleds.”

Successful Methods, 1921

One of the surveyors of the Bluebird project is said to have worn out three pairs of shoes in eight days due to the rugged terrain around Bluebird Lake.



Bluebird dam, constructed in 1902 and enlarged between 1912-1919.



The City of Longmont bought Pear, Bluebird, and Sandbeach (another Arbuckle reservoir) in 1933 for \$92,000. Only Sandbeach reservoir is still in use today, this dam having been built around 1910. All of the dams have badly deteriorated.

Water storage facilities were also said to have been built on Box Lake in 1914 and in 1915 on Thunder Lake, Eagle Lake, and Snowbank Lake. Little, if any, evidence of such construction remains.

Trained by Enos Mills, Elizabeth F. Burnell became a nature guide in the early 1900's in Rocky Mountain National Park. She and her sister, Esther B. Mills, are said to have been the first women guides. Around the time Bluebird reservoir was constructed, Elizabeth was guiding trips into Wild Basin and other areas of the park. Being very much at home in the wilds, Miss Burnell would camp by herself to study nature. In late September, around 1918, this lady spent a week alone in Wild Basin. During this time, she climbed Mt. Copeland, Mt. Tanimas, Chiefs Head and Mt. Alice.

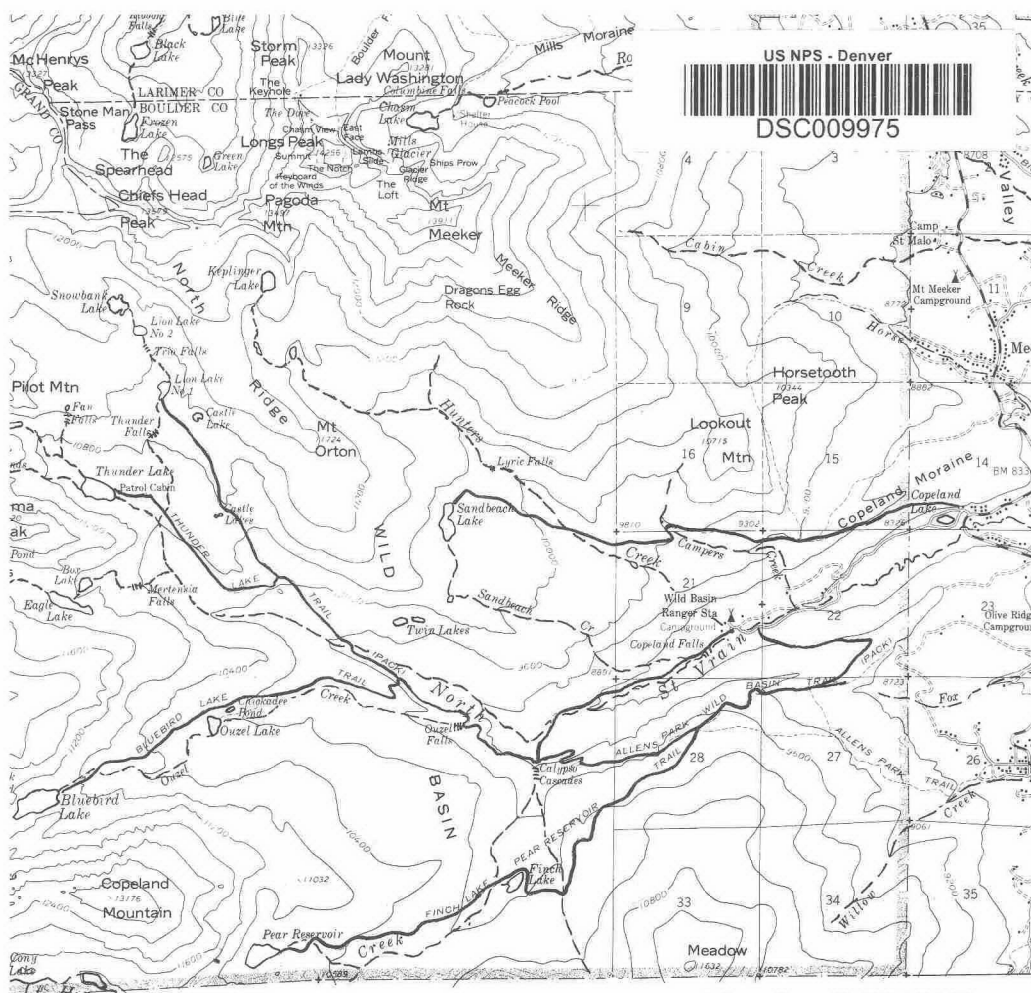
On this trip, she wrote the following:

"The lakes of Wild Basin are its charm. They give beauty and repose. All the ingenuity of the Ice King has been centered here in this small area to carve and fashion basins of every type."

-from collection of Enda Mills Kiley



Elizabeth F. Burnell, Rocky Mountain nature guide



Hiking in Wild Basin offers many challenges; the following information will give you an idea of some of the hiking opportunities.

	Distance	Elevation Gain	Estimated Travel Time	Lake Elevation Level
PEAR LAKE	11.75 km. (7.3 miles) (Wild Basin trailhead)	643.74 m. (2,112 ft.)	6 hours	3225.39 m. (10,582 ft.)
	10.62 km. (6.6 miles) (Finch Lake cut-off)			
FINCH LAKE	8.37 km. (5.2 miles) (Wild Basin trailhead)	439.52 m. (1,442 ft.)	3 hours	3021.18 m. (9,912 ft.)
	7.24 km. (4.5 miles) (Finch Lake cut-off)			
BLUEBIRD LAKE	10.4 km. (6.5 miles)	755.29 m. (2,478 ft.)	4-5 hours	3346.10 m. (10,600 ft.)
THUNDER LAKE	11 km. (7 miles)	632.16 m. (2,074 ft.)	6 hours	3222.96 m. (10,574 ft.)
OUZEL LAKE	7.88 km. (4.9 miles)	463.3 m. (1,520 ft.)	3-5 hours	3054.10 m. (10,020 ft.)
LION LAKE NO. 1	12.87 km. (8 miles)	801.62 m. (2,630 ft.)	6 hours	3377.18 m. (11,080 ft.)
SANDBEACH LAKE	6.8 km. (4.2 miles) (Copeland Lake Trailhead)	600 m. (1,971 ft.)	3-4 hours	3134.26 m. (10,283 ft.)

"The trail compels you to know yourself . . ."

-Enos A. Mills, Your National Parks, 1917.