

WATERTON LAKE

SELF-GUIDING NATURE TRAIL



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GLACIER NATIONAL PARK

United States Section of Waterton-Glacier International Peace Park



PUBLISHED BY THE GLACIER NATURAL HISTORY ASSOCIATION
IN COOPERATION WITH THE NATIONAL PARK SERVICE



Cover
Launch International at Upper End of Waterton Lake
Photo by T. J. Hileman

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WELCOME TO THE UNITED STATES SECTION OF WATERTON-GLACIER INTERNATIONAL PEACE PARK

*A symbol of the peaceful relations existing
between the United States and Canada, this
Peace Park was dedicated on June 18, 1932, as the first
International Peace Park in the World!*

WATERTON LAKE SELF-GUIDING NATURE TRAIL — LEAFLET NO. 5

By James W. Corson, Assistant Chief Park Naturalist

1. You are now at Goat Haunt, once a major stopover for horse parties on the "North Circle Tour" of Glacier National Park. Before construction of roads in and around the park, most visitors arrived by train and toured the park by saddle horses. One of the most popular trips started at Many Glacier and traveled to

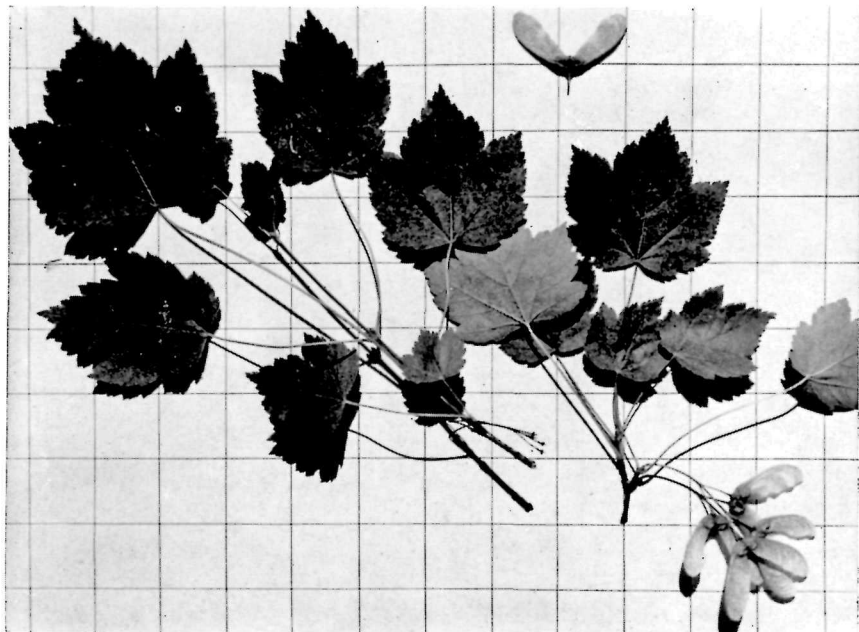


OLD GOAT HAUNT CHALET

Waterton Lake either by way of Granite Park or Crossley Lake, returning over the same or the alternate route. As a result, Goat Haunt Chalet saw many a saddle-weary visitor, sheltered him and with the aid of pure mountain air, the sound of the lake and the smells of the forest, restored not only his soul but the seat of his consciousness as well. With the coming of rapid transportation, the saddle traffic declined. During World War II, disuse and lack of funds for maintenance saw Goat Haunt and several other chalets decline beyond repair. The Goat Haunt Chalet buildings were removed in 1952.

2. The stately white-barked trees in this area are birch. The color and character of the bark are usually all that is necessary to identify them. Two species grow 40 to 50

feet tall in Glacier and Waterton. Their leaves are toothed and irregular. NORTH-WESTERN PAPER BIRCH* is the whiter of the two. WESTERN PAPER BIRCH is more reddish and less common. Both grow in this area. Can you tell them apart?



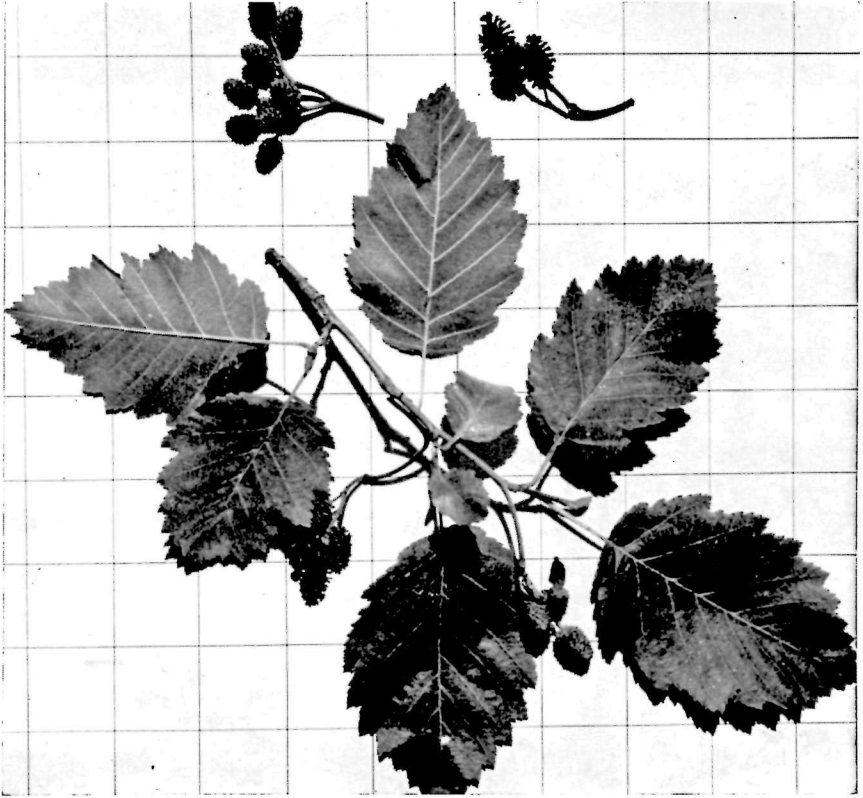
DOUGLAS MAPLE, WITH ITS TYPICAL MAPLE LEAVES AND WINGED FRUIT IS THE ONLY MAPLE IN THE PARK

3. DOUGLAS MAPLE, also known as mountain maple, is quickly recognized by its typical maple leaf. Usually growing 6 to 8 feet tall, these supply much of the red for Glacier-Waterton National Park's glorious fall coloration. Moose and elk browse the leaves but prefer other plants. Many birds enjoy the winged seeds. The colorful reddish edges occasionally seen on the maple leaves are caused by a mite. While the blight thrives on some of the maples, the maples themselves do not seem to be seriously damaged.

4. DOUGLAS-FIR is the easiest of the evergreens to identify **if it has cones**. Three-pointed bracts come out between the cone's scales. You say the tree you see has no cones? Kindly try another tree, or turn forward to Item No. 15 for more identifying characteristics.

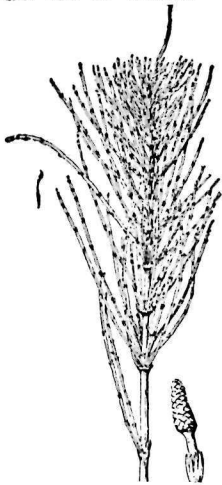
5. What are the plants that look like "Spanish moss" hanging from the trees? Those are LICHENS (like-ens), made up of an alga and a fungus living harmoniously together as one plant. Each is a separate plant, but happily gaining some of its livelihood from the other. This kind of living together is called symbiosis, and this kind of lichen is called "squaw hair" if it is black, or "goatsbeard" if gray or straw colored.

* If you are interested in the scientific names of any of these plants, please turn to page 7.



THINLEAF ALDER LEAVES AND CONES

6. ALDER. Two kinds of alder grow in Glacier and Waterton Lakes National Parks, usually no taller than the ones you see here. This is thinleaf alder. The tiny woody cones easily identify this as an alder. Its twigs provide browse for moose and elk in winter.



SCOURINGRUSH

7. SCOURINGRUSH OR HORSETAIL (the low stalks approximately 6 to 12 inches tall). The name, scouring-rush comes from their use by early pioneers to scour pots. Containing a lot of gritlike silica, their harsh stems will still do a fair job on a dirty pan. This plant faintly resembles asparagus during one part of its life cycle, while during another period it is branched and much greener. They are found throughout the world, except Australia, and are "fossil leftovers." During what is sometimes called the coal age, relatives of these small plants, known as calamites, grew to 12 inches in diameter and 30 feet tall or taller.

8. WILLOWS. Found in every area within these parks, willows are this park's most common shrub. Twenty-five species have been identified, ranging from 3 to 10 inches high in the alpine meadows to 30 feet tall in lower valleys. Most of the willows have narrow leaves with a pair of tiny ear-shaped leaflike growths at the base of the leaf stem.

9. COMMON COWPARSNIP is a member of the same family as the eastern "Queen Anne's Lace." This showy flat-topped plant is common throughout these parks.

10. WESTERN THIMBLEBERRY. A big maplelike leaf, a bright-red berry, that, like other raspberries, pulls off its stem and resembles a thimble, will identify one of these park's common eating berries. Try them.

11. SKIPPING STONES. Once this entire area was at the bottom of a shallow sea. Sediment drifting to the bottom formed shales of sedimentary rock which was laid down evenly in layers. Since that time, pressures have compacted and hardened the rock and changes in the earth's crust raised it. Streams cut small valleys. Climatic changes filled the valleys with ice. The glaciers thus formed carved the valleys into its present shape. Since then, gradually warming temperatures have caused the glaciers to disappear, leaving their rocky courses filled with lakes, such as Waterton Lake. The lake action, by steadily but gently pounding the rocks, by freezing and thawing and by dissolving some of the material that stuck the shales together, has created these little flat rocks (just for you to skip!)



COWPARSNIP

12. From this stretch of beach, if you look at the mountains on the left shore of the lake, you see Olson Mountain, Campbell Mountain and Richards Mountain. Richards, the mountain with the pronounced red band, is just the other side of the American-Canadian boundary.

To your right the first mountain is Goat Haunt. The second up the lake, Mt. Boswell, has the international boundary across its south shoulder. The trail to Crypt Lake in Waterton Lakes National Park is just beyond Mt. Boswell toward Waterton Park Townsite, and may be started at Crypt landing.

13. Do you recognize these shrubby trees with the tiny cones? If not, have another look at Item No. 6.

14. The red-stemmed shrubs here are RED-OSIER DOGWOOD. This has small typical dogwood flowers in summer, followed by bluish-white berries. The berries are as inedible as they look.



ENGELMANN SPRUCE

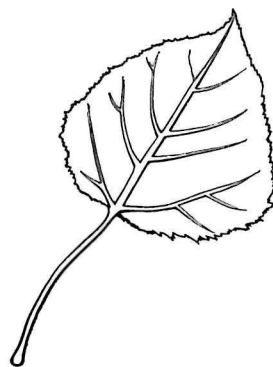
15. Common evergreen in this vicinity is the ENGELMANN SPRUCE. To tell if it is spruce grasp a bough. If it is it feels quite like a pincushion. Another characteristic requires closer examination still. The needles are square and so will roll between your fingers. The needles of firs and hemlocks are flat and will not roll.

16. BLACK COTTONWOOD. These roughly furrowed giants may grow as large as any tree in these parks. The largest discovered to date measures 14 feet in cir-



BLACK COTTONWOOD

cumference at 4½ feet above the ground, and is found near Quartz Creek bridge on the west side of Glacier National Park. Old trees are recognized by their size and by their deeply furrowed bark. The young trees are sometimes confused with aspen as the bark of both is similar, but the cottonwood leaf is longer and more lance shaped, while the leaves on the aspen are nearly round.



QUAKING ASPEN

17. From this spot looking straight ahead down the beach, you can see the top of the snowfield that feeds Janet Glacier. The present glaciers are not remnants of the glaciers that carved the major valleys. It is fairly certain that there were no glaciers in Glacier or Waterton Lakes National Parks approximately 8,000 to 4,000 years ago. Then, cooler weather or longer winters or more precipitation or all three factors combined to allow new glaciers to form. These glaciers reached their largest size about 100 years ago but have been shrinking rather steadily since that time.

18. SNOWBERRY is named for its snow-white fruit. Common throughout the United States and Canada, relatives of these shrubs are often grown as ornamentals. Berries are inedible but bears, deer, and chipmunks eat them even though the berries seem quite indigestible.

19. The ARROWHEAD RAGWORT or ARROWLEAF GROUNDSEL, is the common shaggy, golden-yellow flower found here. Members of the composite (sunflower) family are numerous and difficult to identify. One other flower common most of itself for the most part to orms found all season. One other flower common most of the season is the tall leafy bract (purple) aster. Birds which you may see along this trail include warblers, juncos, grosbeaks, siskins, thrushes, hawks, owls, water ouzels, water birds on the lake, and the magnificent osprey. Other animals found in the area include moose, deer, rabbits, squirrels, beaver, and black and grizzly bears.

20. BLACK HAWTHORN or WESTERN THORNAPPLE. This is an unusually fine specimen. One hundred different species of hawthorn are found in the Pacific Northwest. The thorns make this an excellent cover for animals and birds. Blossoms are similar to apple or pear. The fruit is edible but tastes mostly like seeds.

21. The buildings ahead, which you saw from the launch, are the ranger station, stables, and other buildings required for operating this area. Trails leave here for Boulder Pass to Kintla Lake, Fifty Mountain, Granite Park, Logan Pass, Crossley Lake, Many Glacier area; and all points south. In all, Glacier National Park has over 1,000 miles of trails.



BLACK HAWTHORN FOLIAGE, SHOWING FRUIT AND THE LONG, SHARP THORNS

LIST OF COMMON AND SCIENTIFIC NAMES

- ALDER, THINLEAF—*Alnus tenuifolia*
 ASTER, PURPLE—*Aster foliaceus frondeus*
 Tall leafybract—(see purple aster)
 BIRCH, NORTHWESTERN PAPER—*Betula papyrifera subcordata*
 BIRCH, WESTERN PAPER—*Betula papyrifera commutata*
 COTTONWOOD, BLACK—*Populus trichocarpa*
 COWPARSNIP, COMMON—*Heracleum lanatum*
 DOGWOOD, RED-OSIER—*Cornus stolonifera*
 DOUGLAS-FIR—*Pseudotsuga menziesii*
 GOATSBEARD (LICHEN)—*Usnea barbata*
 GROUNDSEL, ARROWLEAF—*Senecio triangularis*
 HORSETAIL (see scouringrush)
 HAWTHORN, BLACK—*Crataegus douglasii*
 LICHEN (see goatsbeard and squaw hair)
 MAPLE, DOUGLAS (MOUNTAIN MAPLE)—*Acer glabrum douglasii*
 RAGWEED, ARROWHEAD (see arrowleaf groundsel)
 SCOURINGRUSH—*Equisetum* spp.
 SNOWBERRY, COMMON—*Symphoricarpos albus*
 SPRUCE, ENGELMANN—*Picea engelmannii*
 SQUAW HAIR (LICHEN)—*Alectoria fremontii*
 THIMBLEBERRY, WESTERN—*Rubus parviflorus*
 THORNAPPLE (see hawthorn)
 WILLOWS—*Salix* spp.

— NOTES —

Don't Be A Litterbug!



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The Superintendent
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Waterton Park, Alberta, Canada

or

The Superintendent
Glacier National Park
West Glacier, Montana

GLACIER NATURAL HISTORY ASSOCIATION, Inc.

Glacier National Park

West Glacier, Montana

Organized for the purpose of cooperating with the National Park Service by assisting the Division of Interpretation of Glacier National Park in the development of a broad public understanding of the geology, plant and animal life, history, Indians, and related subjects bearing on the park region. It aids in the development of the Glacier National Park library, museums, and wayside exhibits; offers books on natural history for sale to the public; assists in the acquisition of non-federally owned lands within the park in behalf of the United States Government; and cooperates with the Government in the interest of Glacier National Park.

Revenues obtained by the Association are devoted entirely to the purposes outlined. Any person interested in the furtherance of these purposes may become a member upon payment of the annual fee of one dollar. Gifts and donations are accepted for land acquisition or general use.

