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ACADIA NATIONAL PARK
BAR HARBOR, MAINE

This bulletin is issued bimonthly by the park naturalist of Acadia National Park. Its purpose is to make those who are interested in Acadia better acquainted with its plant and animal life and with its geologic story. Publications wishing to use these notes should give credit to the writer and to "Nature Notes from Acadia."

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THE TREES OF ACADIA NATIONAL PARK

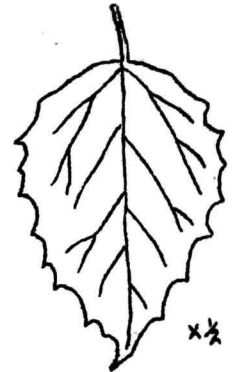
By Arthur Stupka, Park Naturalist

SECTION II. DECIDUOUS TREES

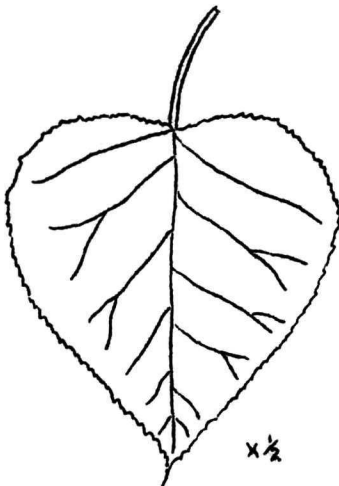


American aspen

Both the American aspen (*Populus tremuloides*) and the large-toothed aspen (*P. grandidentata*) are common soft wood trees in Acadia National Park. After forests have been burned or cut-over these medium-sized trees are among the first to invade the region where, under a variety of conditions, they grow rapidly. Their leaves, broadly wedge-shaped to ovate, are supported on slender and decidedly flattened petioles or little leaf stems, which cause them to flutter in the slightest breeze. Whereas the leaves of the American aspen have finely serrate margins, those of the large-toothed aspen have margins with considerably fewer and larger teeth. Leaves of both species turn a beautiful golden-yellow in autumn. The beaver appears to prefer these to all other plants.



Large-toothed aspen



Balsam poplar

The balsam poplar (*Populus balsamifera*) is closely related to the two species just discussed. Its broadly ovate leaves are margined with fine blunt teeth. The brown, sticky, aromatic winter buds give the tree its name. Like the aspens, the balsam poplar is a soft-wood hardy tree of rapid growth. It is fairly common in the towns near the park.

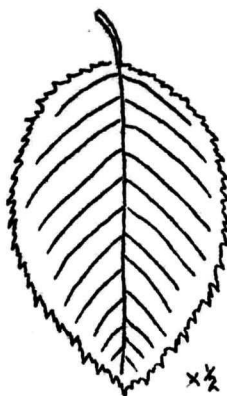
Although easily recognized as a group, the willows (*Salix* sp.), like the asters and goldenrods, are distinguished from one another with considerable difficulty. Even the trained botanists sometimes fail to agree as to their proper specific or sub-specific names. Willows are trees or shrubs which usually grow along stream-sides. Their leaves are often narrow and tapering and their flowers appear in early spring. Over a dozen species and sub-species are to be found growing on Mount Desert Island.

The hop hornbeam (*Ostrya virginiana*), a small slender tree which grows in cool shaded places, is rather uncommon in this region. Its grayish-brown bark is thin and roughened into rather loose longitudinal strips. The fruit it bears is hop-like in appearance, the little seeds being inclosed in small inflated bags. The leaves, two to three



Willow

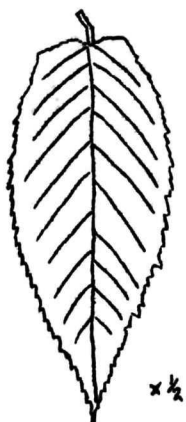
inches long, ovate, pubescent, and sharply pointed, have doubly-serrate margins. Few native woods are as strong and hard as the wood of this species.



Hop hornbeam

The yellow birch (*Betula lutea*), largest of our native birches, is immediately recognized by the brassy or golden color of its bark. Trees growing in the open tend to start branching from near the base while those in close stands are often free of lateral branches for a considerable distance. Its smooth leaves are narrower than those of the canoe birch. Although not as abundant as the canoe birch, it is, however, a common deciduous tree in the park.

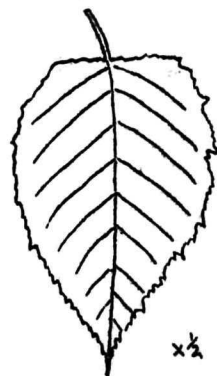
A so-called "weed tree" is the graceful little gray birch (*B. populifolia*), growing where other trees have not yet established a foothold. Frequently it is confused with its taller-growing cousin, the canoe birch. The facts that the bark of the gray birch does not peel off in thin paper-like scales and that its somewhat smaller leaves are roughly triangular in outline should help to identify it. This pioneer tree often grows in close clumps. Along the highway near the summit of Cadillac Mountain the tourist is struck by the wind-swept twisted condition of an extensive stand of this birch.



Yellow birch

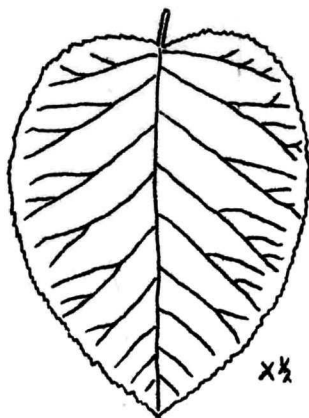


Gray birch

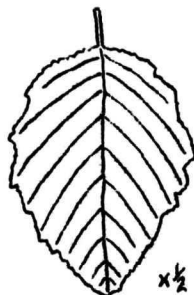


Canoe birch

The canoe birch (*B. papyrifera*), also known as white or paper birch, is undoubtedly one of the most beautiful trees in the Acadian forest. Singly or in groves, this white-barked, slender, tall-growing tree is attractive at all seasons. It served the Indian in so many ways that we readily associate this abundant species with the vanishing red man. Although attaining its best growth in the rich soil along margins of streams and lakes and on wooded hillslopes, it may be found in a variety of habitats. Its leaves, two to three inches in length, are ovate in outline, sharply toothed along the margins, and terminate in a sharp point. In the spring the two- or three-clustered staminate or male flowers (catkins) appear before the leaves.



Green alder



Speckled alder

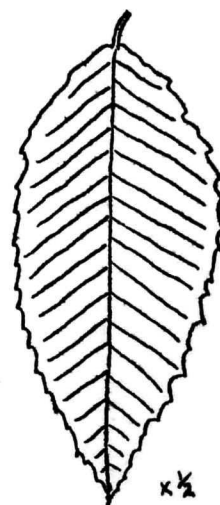


Smooth alder

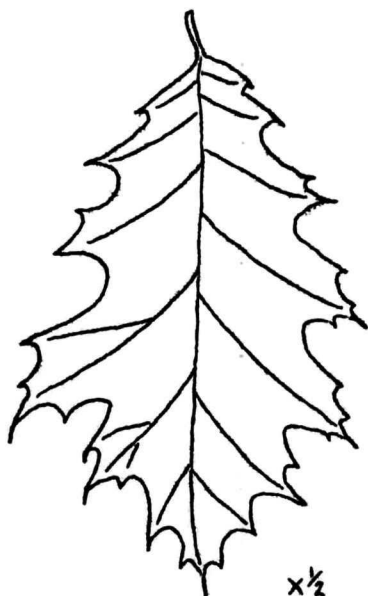
Three alders are to be found growing on Mount Desert Island. Of these, the green (*Alnus alnobetula*) and the speckled alders (*A. incana*) are common whereas the smooth alder (*A. rugosa*) is rare. All are rather small shrubs which often form thickets in favorable habitats. Their small cone-like woody fruits are characteristic and in the spring they, like the hazel and the birches, dangle their catkins in the breeze.

Sturdy, tall-growing, and distinguished in bearing, the beech (*Fagus grandifolia*) is one of the very finest of our deciduous trees. Its smooth gray somewhat mottled bark; its thin silken leaves with their straight parallel veins; its sweet triangular fruits inclosed within small prickly burs; its very slender, sharp pointed, reddish-brown buds - all

these are characteristic of the beech, a common tree in Acadia National Park.



Beech



Red oak

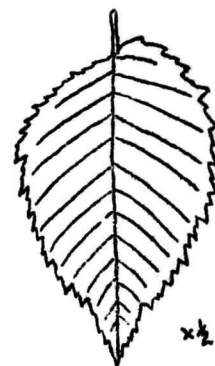
Of the oaks or acorn-bearing trees, but two species are native to Mount Desert Island. Of these the red oak (*Quercus borealis*) is by far the most abundant and grows wherever the soil is fairly well drained. It is a large tree which, when growing in the open, has a broad symmetrical crown. The leaves, 5 to 8 inches long, may have 5 to 11 coarse-toothed lobes. In autumn the red oak becomes a mass of colorful beauty. The acorns are ovoid in shape and about an inch long. Our only other oak, the so-called bear or scrub oak (*Q. ilicifolia*), is restricted to the upper regions of Acadia Mountain where it grows as a very low, shrubby, small-leaved species, readily distinguishable from the much larger red oak. This is the same oak which covers

thousands of acres on the hot sandy plains of Long Island and New Jersey. No one knows why here, on Mount Desert Island, it should be restricted to but one mountain summit.



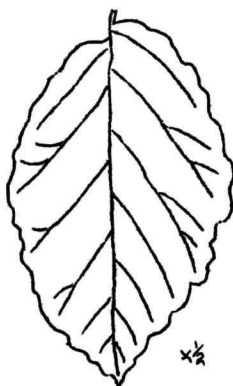
Bear oak

The American elm (*Ulmus americana*) is uncommon here. It is a large handsome symmetrical tree with thick roughened gray bark and ovate leaves which are unequal at the base. It prefers to grow in bottomlands and in rich soils. Often the branching results in a graceful vase-shaped or umbrella-shaped crown which wins for it praises as our most beautiful shade tree.



American elm

Whether we call the witch hazel (*Hamamelis virginiana*) a shrub or a small tree doesn't matter, it remains one of our most interesting plants. Its broad oval leaves have wavy margins and an uneven base, and the plant seems to prefer to send its roots into fairly moist rocky soils. Strangely enough, the witch hazel unfurls its golden flower ribbons in autumn, bearing its mature fruits at the same time, the flowers of this year producing the fruits of the next. Its seeds are scattered by a bombardment from the oval nut-like capsules. The witch hazel extract of commerce is made from the bark of roots and young twigs.



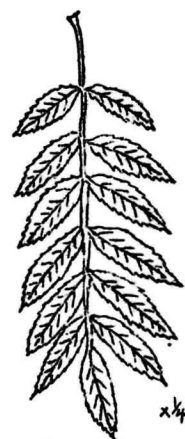
Witch hazel

Both the American mountain ash (*Sorbus americana*) and the variety known as the western mountain ash (*S. americana sitchensis*) grow in Acadia National Park. The former is a common small tree which grows on rocky hillsides and in rather moist situations. Its compound leaves are made up of 11-17 lanceolate and sharply serrate leaflets which give the tree a somewhat "ferny" appearance. Its large, showy, flat-topped berry clusters, bright orange to red in color, may persist into the winter. On Mount Desert Island grosbeaks, starlings, robins, and other birds often feed upon the brightly-colored fruits to such an extent that these may disappear before the end of the year.

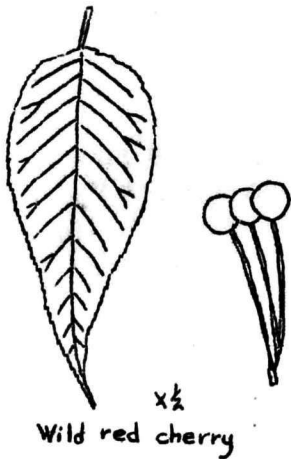


Shadbush

Two species of shadbush (*Amelanchier canadensis* and *A. laevis*) are to be found in this region. This beautiful small tree, sometimes going by other common names such as sugar pear, Juneberry, and service berry, is shrubby in growth and prefers open situations, often growing along stream-sides or at the edge of the forest. Its very showy attractive white blossoms appear in May, when the leaves are just beginning to unfold. These are followed by small purplish fruits which ripen in mid-summer and which are in great favor with birds and various furbearers, including man.



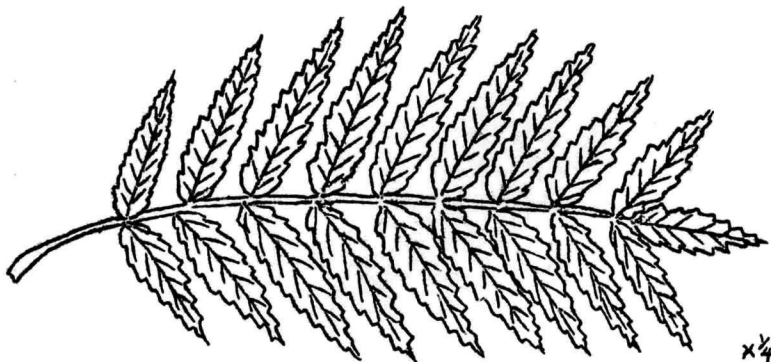
American mountain ash



Wild red cherry

Three cherries grow in this region. Of these the small wild red or fire cherry (*Prunus pennsylvanica*) is very common, growing well in rocky soil. It flowers in May, and its attractive bright red sour fruits ripen in mid-summer. The chokecherry (*P. virginiana*) is a common low-growing shrubby tree along fence rows and, to some extent, in woods. Its fruits more abundantly than the previous species, the fruit, astringent and darker in color, being arranged in drooping clusters. The wild black cherry (*P. serotina*) grows to be a larger tree than the two preceding species. Its white flowers, like those of the chokecherry, are borne in drooping racemes - those of the fire cherry are borne in umbels. Fruits of the wild black cherry are dark, almost black in color. This tree is uncommon in the region. All our cherries have oval to oblong-lanceolate sharp-pointed leaves whose margins are finely serrate. Their fruits form an important food item for certain birds and for some fur-bearers, including man.

The staghorn (*Rhus hirta*) is our only native sumac. It is small and shrubby in growth and prefers fairly dry upland habitats. This attractive shrub is readily recognized by its long compound leaves which are made up of from 11 to more than twice that number of leaflets, by the dark velvety pubescence which covers its stout twigs, and by its persistent reddish fruits which are arranged in erect cone-like clusters. The leaflets, dark green above with considerably paler under-surfaces, are oblong and tapering, with serrate margins. Few of our shrubs or small trees become arrayed in brighter autumnal colors than the staghorn sumac. It is not poisonous.



Staghorn sumac

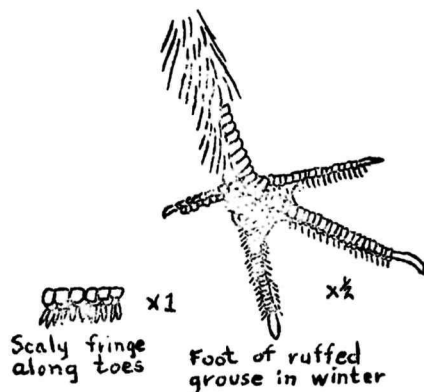
(To be continued in the next issue)

THE SEASON

What a wild quaint chatter constitutes the babble of the talkative Old Squaws! There is something about it reminiscent of the distant cry of migrating geese - something ancient, primitive - a conversation which is today what it probably was untold hundreds of thousands of years ago. Its freedom and wildness belong to the changeless open sea.

In the gullet of a Ruffed Grouse, an individual which was brought to me in early March after having met death by flying into the street wires, I found a number of staminate aments of birch. It is largely due to the bird's ability to thrive on such fare that the grouse is very well able to withstand the rigors of the most severe winters. The warmth-retaining property of the heavy under-coat of soft silvery-gray feathers is another consideration in favor of the bird - I could not help but marvel at such an insulation, reminiscent of the feathering of an owl. Then too the bird's "snowshoes" are a factor - a double fringe of scales on each toe which aid the bird in bearing its weight on the snow.

Not infrequently grouse spend the cold winter nights in the deep snowdrifts. Last winter, upon following a grouse which I had flushed and which settled again in a nearby stand of open woods I again startled the bird who took wing for a short distance and then disappeared from sight by deliberately diving into the deep snow. Along the carriage roads in and near Acadia National Park a careful observer may find depressions in the snow where lone birds had spent the night.



The first chipmunk of the year was reported on March 19. Five days later three more of these winter sleepers were sighted.

On March 22 the singing of song sparrows in Bar Harbor assured me of the fact that the almanac was not at fault. Spring had come to Acadia. On the 25th the woodcock returned, and on the last day of March three wild geese were sighted flying low over Town Hill.

The Season (continued)

By the end of March the pussy willows, with their spring promises wrapped in soft silvery-gray packets, become symbols of a season new-born. Alder and aspen catkins lengthen, soon to sow their golden dust on the wings of the wind. Hardy insects venture into the weak March sunlight, while such forms as centipedes, millepedes, pill-bugs, slugs, mites, and spiders are to be found more or less active in old well-rotted logs. The face of the fields may be dappled with the lingering snows of winter, but under the surface a myriad forms are awaiting the call of the warm spring winds.

How eager we were to shed the icy fetters after experiencing one of the very coldest winters on record! When February, the Hunger Moon, gave way to March, the Awakening Moon, the aspect out-of-doors was a frigid one indeed, but by the end of March the snow blanket in the fields had sagged greatly while in the towns on Mount Desert Island almost all the snow had disappeared.

On April 5, Mr. Vernon Lunt of Town Hill saw a garter snake in the big meadow at the east foot of Champlain Mountain, and three days later he collected 10 garter snakes in the same locality - all being within a small area circumscribed by lingering snow. Apparently the serpents had just left their hibernaculum.

The first trailing arbutus was reported on April 13.

A.S.