#### Geranium Bicknellii Britton

### BICKNELL'S GERANIUM

This species is an annual or a biennial with pink flowers and has been found in many wooded parts of the Province, particularly on cleared or burnedover bush land. It is very plentiful on roads and pathways in the forests of the Cypress Hills. While very similar to the preceding species it may be separated by its open inflorescence and the longer narrow beak on the mature style column.

#### BUTTERCUPS

#### L.T. Carmichael

This family includes many of our most beautiful and cherished flowers. Among these are Buttercups, Pasque Flower, Canada Anemone, Marsh Marigold, and Columbines.

The family is believed to include the most primitive of seed plants now living and is considered to be the trunk of the family tree of the seed plants from which the more highly specialized groups have branched off at different times and through the ages.

Known by children the world over who study the reflection of its petals from their chins, as an indication of their fondness for butter, the plants are easy to recognize. Their yellow petals with a glistening metallic sheen and their much dissected leaves are distinguishing characteristics. They are sometimes confused with the cinquefoils, a group of the rose family which have five-petaled yellow flowers. These two groups, however, may be easily distinguished by a glance at the calyx. That of the buttercups is made up of five separate green or yellow sepals, while the sepals of the cinquefoils are united into a saucer-shaped calyx, having five main divisions and five alternating bractlets.

We have over a dozen spécies of buttercups in Saskatchewan but I will describe only some of the most common and conspicuous which I have collected.

> PRAIRIE BUTTERCUP (Ranunculus ovalis)

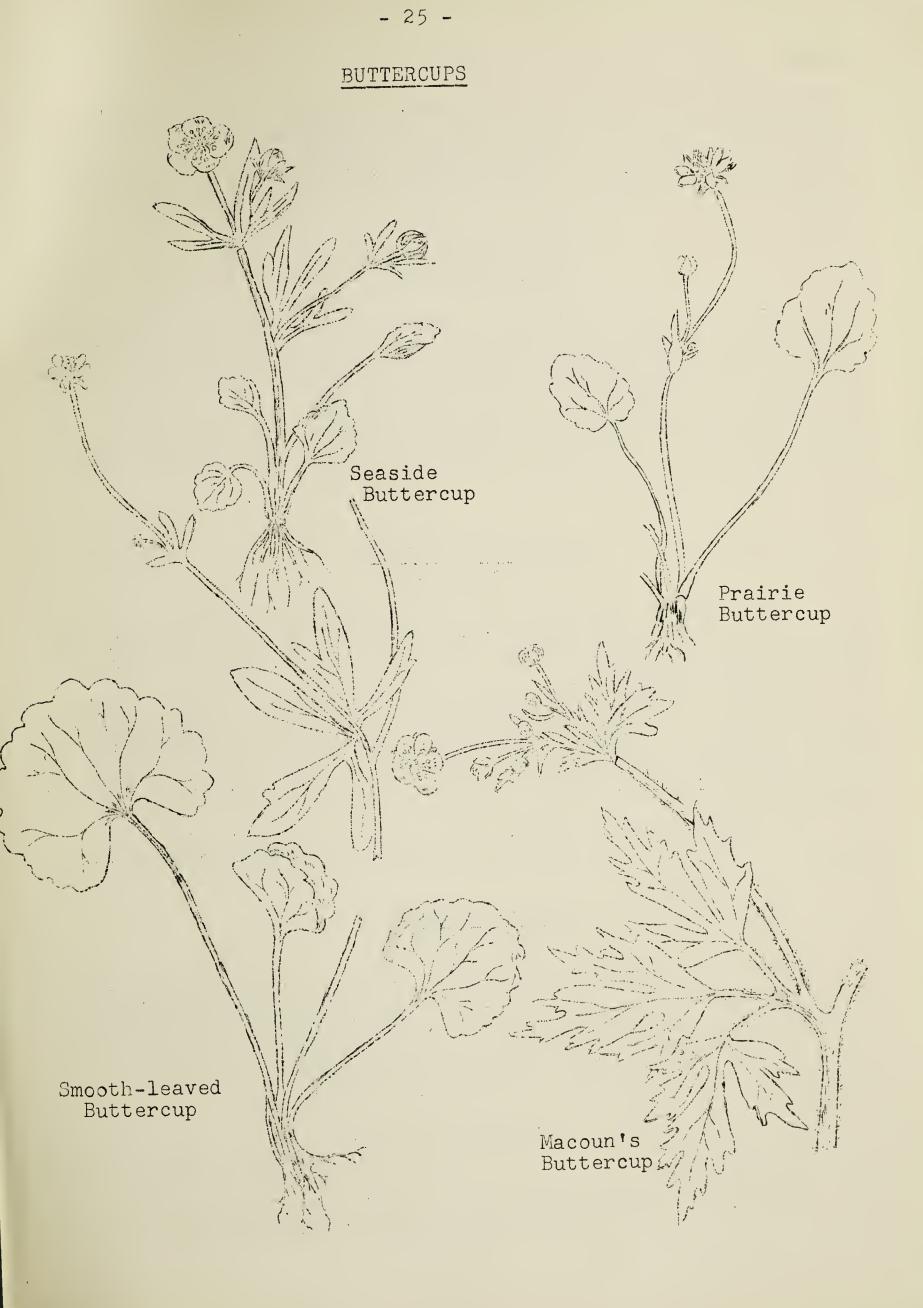
This is one of our earliest spring flowers coming into bloom on the moist prairie during the first week in May.

The plant is ordinarily from three to twelve inches high. Its golden petals, up to a quarter of an inch long glisten brightly among the new blades of grass.

The basal leaf-blades are from 1/4 to 1 1/4 inches wide. They are kidney-shaped to oval with round lobes. The upper stem leaves are sessile with linear divisions. When the petals drop the globular fruit-head with its short beaked achenes is still a distinguishing characteristic.

## SEASIDE BUTTERCUP (R. Cymbalaria)

This little buttercup is common in marshes or along the borders of sloughs and streams throughout the West. It is a low smooth plant, spreading by runners which take root at the joints. Both the flower stems and the leaf



#### FLOWERS

petioles are long, all arising from the base. The leaves which average about three-quarters of an inch in length are roundish with heart-shaped bases and rounded teeth. The 5 to 8 petals are about the same length or perhaps a little shorter than the sepals. The centre of the flower is distinctly cone-shaped. The plant starts blooming early in May and continues to bloom throughout the season.

#### SMOOTH-LEAVED BUTTERCUP (R. abortivus)

This is a native species with comparatively small flowers. It may be found about the first of June growing in damp woods or along the borders of shaded streams. The plant grows anywhere from six inches to two feet in height. Its distinguishing characteristics are its round heart-shaped basal leaves and pale yellow flowers with petals slightly shorter than its sepals. The sketch, which is natural size, shows some basal leaves and a portion of the upper part of the stem. As you will notice the stem leaves are quite different in shape from those at the base. They are usually 3-cleft.

### CELERY-LEAVED BUTTERCUP (R. sceleratus)

Among farmers this species is called Cursed Crowfoot because of its extremely poisonous properties and its injurious effect, which is especially dangerous to cows. Any small portion of the plant, if eaten, will cause severe pain and serious inflammation.

It is found growing in the mud along banks of sluggish streams and in shaded wet places. The plant, which is an annual, is hollow-stemmed and grows from six inches to two feet high. The basal leaves are rounded or heart-shaped, but the plant may always be distinguished by the peculiar shape of its stem leaves. The drawing shows one natural size. The stem is large, fleshy and very plainly ribbed.

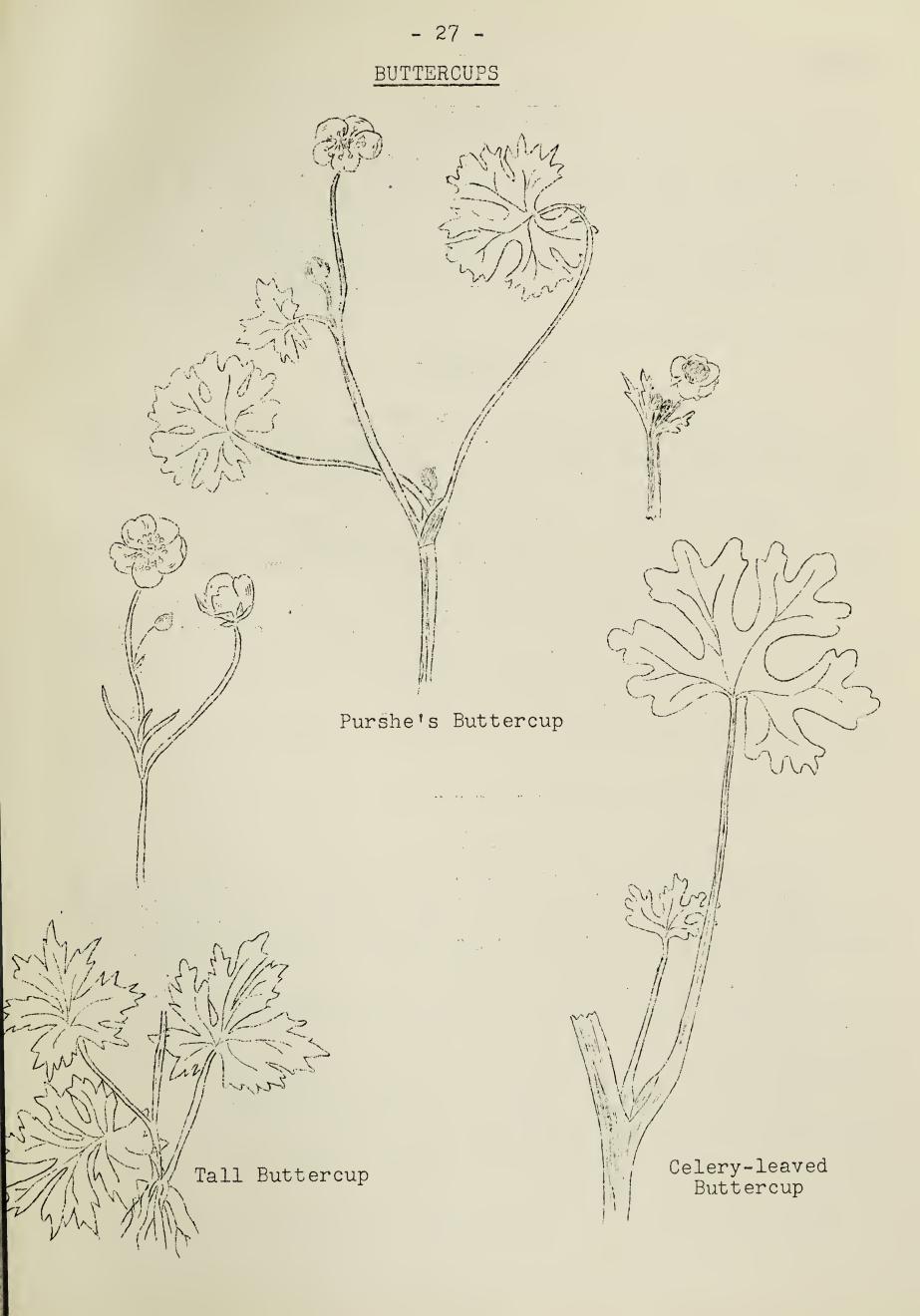
The flowers are pale yellow, about a quarter of an inch broad, the petals being about the same length as the sepals. The plants bloom from June to August

# MACOUN'S BUTTERCUP (R. Macounii)

Around the edges of lakes or sloughs or sluggish streams growing in the mud among the grasses and sedges the Macoun's Buttercup may be found almost everywhere late in June and throughout July. Its distinguishing characteristic is the thick branching stem covered with a mass of silvery hairs. The plant grows from 8 to 24 inches high. Its leaves are divided into three main segments and each segment is deeply cleft and toothed. The sketch shows a leaf in its natural size.

The petals are small - a quarter of an inch or less in length. The sepals are a little shorter. The fruit head is nearly spherical and about three-eights of an inch thick.

The stems of a mature plant are very branched and leafy and bears a large number of buds, blossoms and fruiting heads at the same time.



### PURSH'S BUTTERCUP (R. Purshii)

Here is a buttercup commonly found growing in the water with its rounded and deeply cleft leaves floating on the surface. Smaller leaves, of much the same shape as those shown in the drawing remain under the water. The bright yellow flowers are larger than those species previously described. They are borne on slender stems several inches above the water and present a pretty picture in a still mud-bottomed pond of a slow flowing stream, early in July. Note in particular the shape of the leaves which are drawn the natural size.

# TALL BUTTERCUP (R. acris)

We have left the description of this species until the last, even although it is the most beautiful of all, with flowers up to an inch across. It occurs from coast to coast through Canada, especially in moist lands, pastures and meadows. It is not a native plant but was originally introduced from Europe.

Unfortunately it is seldom found on the open prairie, but is quite common in the semi-wooded and wooded areas of Saskatchewan's black soil zone and farther north. It is the most familiar buttercup of Eastern Canada - is recognized by all and especially loved by the children.

It is an erect hairy plant two to three feet high. The basal leaves are long stalked and are from three to seven parted. The flowers are a bright waxy yellow with roundish petals, two or three times the length of the pointed sepals. The fruit clusters are round, one-quarter to one-third of an inch broad.

There is one odd thing about buttercups - the honey is secreted in a tiny depression at the base of each golden petal and is there protected by a little scale.

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#### INSECTS

Trappers in the Yorkton District reported to Mr. Cliff Shaw towards the end of March that a large water-beetle was driving muskrats out of their houses. Donald McKen of Orcadia, who brought some specimens in for identification said that there were as many as a "bucket full" in most of the muskrat houses. Foxes found them edible and were tearing the houses open to eat the beetles.

Lloyd O. Peterson, officer in charge of the Dominion Entomological laboratory at Indian Head, said that the species appears to be Dytiscus marginalis Linn. Mr. Peterson said that he has had no reports of these insects having been reported in such large numbers before. He recalled that years ago, when he lived on a farm, it was the custom to water stock in winter at a lake and these beetles were very common in water holes opened in the ice.

The beetles are oval in shape, brownish-black in color, shiny and approaching the size of a person's thumb.

In the spring the species leaves the water to mate and are often attracted to street lights.

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