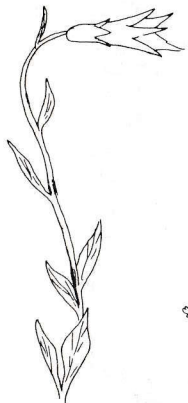


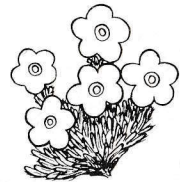
## THE TUNDRA COMMUNITY

Tundra plants are found beyond the limit of trees throughout the world, both on mountains and north of the arctic tree line. About half of the plant species found on Trail Ridge are also found in the American Arctic, and about one-fourth of the species are found in mountainous and arctic regions of the world over.

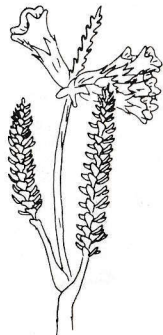
Tundra is characteristically composed of grasses, sedges, herbs, and a few dwarfed shrubs. Many lichens and mosses also grow in tundra. Tundra plants are typically small, low-growing, compact, and often have showy flowers. There seems to be an abundance of blossoms in proportion to the size and amount of foliage of the plants. Their small leaves are also protected from excessive water loss by masses of hairs or waxy substance. They frequently contain high amounts of red pigment that make the plants most conspicuous in spring and fall.



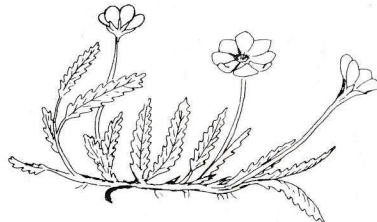
ALPINE  
HAREBELL



ALPINE  
FORGET-ME-NOT



SKY PILOT



MOUNTAIN  
DRYAD



ALPINE AVENS



FAIRY PRIMROSE



GREENLEAF  
BLUEBELL

## BRIEF, RAPID GROWTH

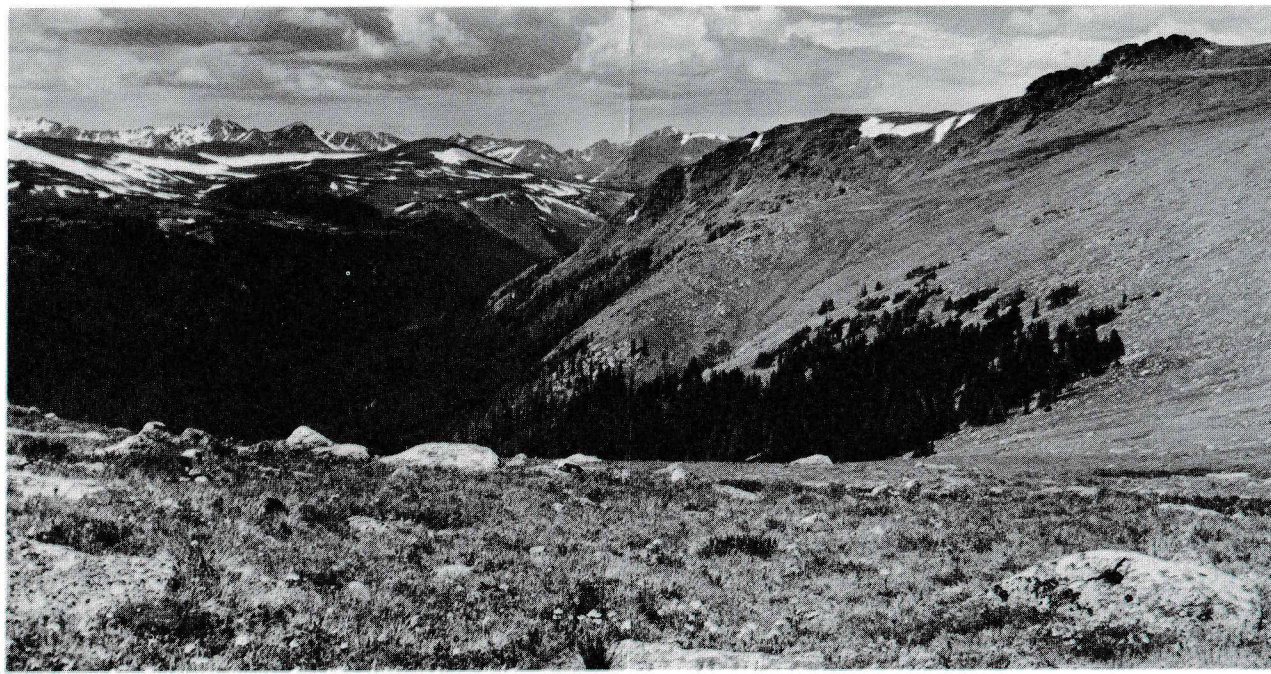
The alpine tundra summer is short, and as a result the growing season is brief. With variations in local snow conditions, growing seasons range from less than six weeks to about twelve weeks. So when growth starts, it proceeds rapidly. Those plants in areas free of snow, like windblown areas and windswept slopes, benefit from growing seasons longer than those in areas of heavy snow accumulation.

Due to the short and frequently interrupted growing season, most alpine plants have a life of more than two years. Many also develop their buds for the coming year during the late fall and winter. In this way they are prepared for rapid growth and burst into blossom with the first warm days of summer. Thus the flowering, pollination and ripening of seeds can be compressed into a short growing season, remarkable adaptations for a remarkable world.

# TUNDRA WORLD



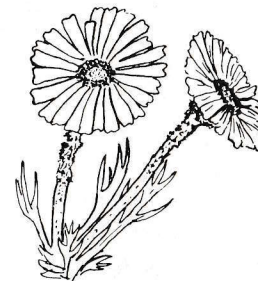
ROCKY MOUNTAIN  
NATIONAL PARK



### A UNIQUE PARK FEATURE

**TUNDRA.** The very word conjures images of cold, of flatness and wasteland. Yet this is a flower-rich meadowland, which grows beyond the limit of trees. It is a word like "forest", "grassland" or "desert". Alpine tundra, seen here, is found on mountains above tree line; arctic tundra occurs beyond the limit of trees in the far north or south.

**TUNDRA IS FRAGILE** and is permanently damaged when repeatedly walked upon. This damage is especially severe, because it takes many of these plants several hundred years to achieve the growth that you see. A five-year-old tundra plant may be only one-fourth inch in diameter! Therefore, stay on the path and leave the plants and rocks for others to enjoy. You are able to enjoy them because thousands before you have not picked or damaged plants and other features. Please leave them undisturbed for the thousands who will follow you.

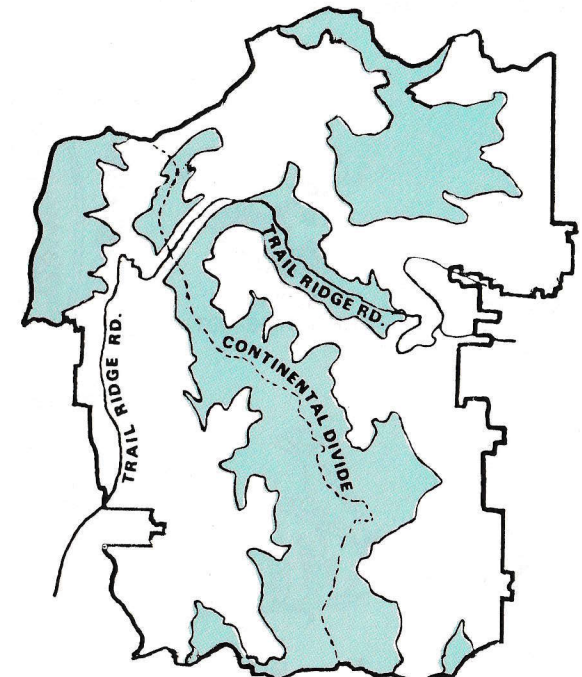


RYDBERGIA

### THE ALPINE CLIMATE

Above tree line, the landscape of Trail Ridge is so similar to arctic regions of the world that visitors frequently remark on this feature. This is not surprising or accidental, for the climates are similar, except for the Arctic's continuous sunlight in summer and continuous darkness in winter. Still, climate has the greatest influence on the landscape you see.

The alpine climate is rigorous. Severe weather conditions can be expected at any time. Periods of drought may occur both summer and winter, and winter blizzards are frequent. Temperatures are below freezing all winter and sometimes drop below freezing in midsummer. High velocity winds (50 - 70 miles per hour) may occur, although summer velocities are commonly 15 - 30 miles per hour. Be aware of lightning hazards during frequent summer thunderstorms. Get off high places and ridges, or get in your car.



The shaded areas indicate distribution of tundra in Rocky Mountain National Park.