

FLORA OF CANADA.

Hills no trees occur, unless along the borders of the streams in the valleys. The ponds, marshes and lakes are not even fringed with shrubs.

Large districts, especially in the Coteau de Missouri belt, are characterized by the absence of drainage valleys, the result being that the water in the lakes and ponds is generally saline, and that numerous alkali flats occur. The vegetation in such situations is very sparse and of course halophyte in character, the typical plants being *Distichlis spicata*, *Hordeum jubatum*, *Puccinellia airoides*, *Corispermum hyssopifolium*, *Atriplex* and *Chenopodium* species, *Salicornia prostrata*, *Suaeda depressa*, *Salsola Kali*, *Rumex mexicanus*, *Ranunculus cymbalaria*, *Plantago eriopoda*, *Heliotropium curassanicum*, *Pleurogyne fontana*, *Crepis runcinata*. In the saline ponds themselves, *Ruppia maritima* is common.

As mentioned above, the vegetation of the southern part of the third prairie steppe is decidedly xerophile. As a result, a number of species occur which approach desert types in being, in some way or other, protected against rapid transpiration. Such plants are: *Eriogonum flavum*, *Eurotia lanata*, *Opuntia polyacantha*, *Mamillaria vivipara*, *Potentilla Hippiana*, *Oxytropis splendens*, *Linum rigidum*, *Plantago Purshii*, *Aplopappus spinulosus*, *Artemisia frigida*, *A. cana*, *A. Ludoviciana*, *Senecio canus*, *Iva axillaris*, *Lygodesmia juncea*, and others.

Of other plants, characteristic of the southern part of the third prairie steppe, the following may be mentioned: *Bouteloua oligostachya*, *Munroa squarrosa*, *Schedonnardus paniculatus*, *Oryzopsis hymenoides*, *Stipa spartea*, *S. comata*, *Sporobolus Richardsonii*, *Calamagrostis americana*, *Danthonia intermedia*, *Agropyron dasystachyum*, *Zygadenus chloranthus*, *Rumex venosus*, *Oxybaphus hirsutus*, *Ranunculus cardiophyllus*, *Polanisia trachysperma*, *Chamaerhodos erecta*, *Oxytropis Lambertii*, *Hedysarum Mackenzii*, *Potentilla flabelliformis*, *Heuchera hispida*, *Linum Lewisii*, *Malvastrum coccineum*, *Oenothera triloba*, *O. serrulata*, *O. pallida*, *Gaura coccinea*, *Solanum triflorum*, *Pentstemon acuminatus*, *P. procerus*, *Orobanche fasciculata*, *Liatris punctata*, *Gutierrezia Sarothrae*, *Chrysopsis villosa*, *Solidago missouriensis*, *S. rigida*, *Aplopappus lanceolata*, *A. acaulis*, *Townsendia exscapa*, *Aster angustus*, *Erigeron caespitosus*, *E. pumilus*, *Antennaria aprica*, *Helianthus petiolaris*, *H. giganteus*, *Gaillardia aristata*, *Arnica pedunculata*, *Senecio integerrimus*, *Cirsium Drummondii*, *Lactuca pulchella*.

Rocky Mountain Foothills.—A great number of prairie species reach a considerable altitude in the foothills of the Rocky Mountains. On the other hand, a number of sub-alpine forms descend practically to the prairie, the result being that at the base of the foothills, where the two types of floras intermingle, the vegetation is very rich in species. As the foothills are ascended the prairie forms gradually disappear and are replaced by mountain species. The vegetation in general becomes more luxuriant in appearance, the herbaceous plants grow taller, shrubs begin to form an important feature in the flora and real forests are established. Besides typical mountain and prairie forms, the following species may be considered as characteristic of the foothills: *Stipa Richardsonii*, *Avena striata*, *Bromus Porteri*, *Elymus dasystachys*,