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Pike and white fish exist in the lakes, and pike in the lakes and running water. There are four kinds of trout: speckled trout (bull trout), weighing up to  $5\frac{1}{2}$  pounds or more; the trout called the Arctic trout, a beautifully mottled fish; the rainbow trout, a trout carrying a rainbow band longitudinally along both sides of the body; a black speckled trout, growing to about two pounds in weight; all being a well flavoured, firm edible fish.

## QUOTATIONS FROM DIARY.

Reported from Dunvegan the ice moved out of the Peace river on Tuesday, April the 18th. May the 6th, grass quite green, reported 6 inches in length. May the 7th, the horses were hard to catch, being apparently loth to leave the green grass on the hillside. Evidences of growth on river bank, grass 6 inches, shrubs budding, balm of Gilead in full leaf, poplar in bloom, willows all in pollen.

Near the banks of the North Pine river. Monday, the 8th of May, wild gooseberry bushes on the plateau in half leaf, also squawberries. Wild pea vines 6 in. long almost in blossom. Wild strawberry leaves 11 inches long. Between the last two days plant life has developed rapidly and evidences are that growth will be continuous from this time. Growth on southern exposures of hills of the deep valleys of the various rivers appears to be a week in advance

of the northern exposures of the south banks.

In cutting road, went about 4 feet back from the face of the river bank, ground was moist to a depth of 13 inches from the surface, the prairie soil was clay loam, black to 12 inches from the surface; beneath this depth the clay soil was of a much lighter colour, and was quite dry, crumbling easily in the fingers; at a depth of 5 feet soil was so firm that it was necessary to use a pick in places. Up to that depth the spade was sufficient. The sand which was here mixed with clay is quite fine, not being more than one fourth of the size of the sand found in Ontario and Manitoba. The embankments breaking down along the river, are quickly disintegrated and carried into solution by the river, which is very muddy, increasing in density from the early spring until the period of highest water; this material in solution (mechanical solution) increasing to such an extent as finally to make the water unfit for domestic use. The approximate rate of current in centre channel at low water is about four miles an hour, increasing finally to five miles at the highest stage of water. The gravels and pebbles carried into the river through the disintegration of its banks are upheld by the strong current along the bottom, causing a continual swish or sound as they are moved along the bottom of the channel, caused by the constant friction and impact against its stony bed, and can be distinctly heard by persons on shore or in a boat.

The width of the river from a point directly below St. John is about thirteen hundred feet between the upper surfaces of its immediately inclosing banks. The elevation of the prairie surface (bottom valley) is about 20 feet above the present level of the river, which has now an elevation of about 5 feet above ice level of the river. Twenty-five years ago it was reported that the water overflowed the adjacent flats to a depth of 3 fee, which would give an elevation of between 25 feet or 30 feet above the present lowest water level. The general elevation of the inclosing banks is from 650 feet to 750 feet above the river, with a general average of channel width at the summit of upper prairie level of about two miles. The prairie surface is moderately rolling upland, generally lightly timbered with poplar and willow and with many openings entirely free from timber growth, well grassed and containing in growth many weeds, the weeds being so numerous in some places as to entirely obscure the growth of hay. We procured the hay for our horses on the eastern bank of the North Pine river; there was very little weed growth there. Many small lakes containing water made it a very

convenient winter location.

Thursday, the 18th of May. Picked some blue and white violets and strawberry blossoms on the hillside this a.m. Waxberry in full leaf. Wild currants in full leaf and flower. Honeysuckle in full leaf. This season's growth of vine 7 inches to date. Hard frost last night, ice one-sixteenth inch thick in basin this morning. Saturday the