

of the fact that her gum trees are the tallest trees in the world, it is a shadeless land. So burning are the sun's rays, that the leaves of the predominating eucalyptus are so disposed as to present always their edge to the sky; the acacias have

delicate compound leaves, the ti-shrub has reduced its foliage to mere needles, and the wierd she-oak has dispensed with leaves altogether, string-like branchlets taking their place. The first impression of an inland Australian forest is one of

monotony in color and appearance, and of burning heat and desolation heightened by the flopping strips of the bark of the gum-trees, which is cast away as northern trees shed their leaves.

The Forests of Our Far Northwest

By Ernest G. Whitehead, Ottawa.

FROM Fort Smith, which is the natural gate-way of the North, timber can be seen growing on nearly all the islands of any size and on both banks of the river system to McPherson, within the Arctic Circle. As one goes farther north, it is observed they dwindle in size and quantity. The greater part of this timbered area is composed of spruce, tamarac, jack pine, poplar, larch, birch, willow. As far as can be observed these woods extend back two or three miles on each side of the rivers and are of good size and in commercial quantities.

In the Mackenzie District white and black spruce attain a height of 80 to 100 feet, and in the majority of cases, are straight and furnish at least two logs to a tree of good size. Below Fort Smith, during the summer of 1921, in an area of about a square mile two hundred logs were cut, averaging forty feet long and ten to eighteen inches in diameter. Spruce is found in scattered groups, but generally, the groups are large. Annual rings numbering one hundred were quite common. This timber, protected from forest fires should be enough to meet the requirements of the country for many years, although its export as pulpwood should be restricted.

The ground is a light soil with sandy sub-soil including many swampy areas. In the valleys especially the white spruce attains its full development in size and quantity. The lower half of the Slave River is well wooded in this respect. The bark of the spruce is used as roofing for log cabins.

Jack pine is a purely Canadian tree

having its southern limits in New Brunswick and extending across the country through the Northwest to Alaska. This tree attains the height of 100 feet, but not generally. The farther north its extension the smaller it becomes—finally decreasing into scrub. It is not well adapted to lumber, but is highly valuable for telegraph poles, railway ties and fuel. It is very prolific and whole areas of it are seen in the Mackenzie District. The sandy soil is especially adapted for its growth. It is noticed that after a forest fire that this species of pine is the first to spring up. This is accounted for by the fact that the heat of the fire bursts the cones from which the seeds fall. Jack Pine disappears entirely north of Bear River.

The poplar really constitutes the for-

but is better adapted for fuel, or pulp.

Forest Fires Needless.

A great enemy of the Northwest forest is fire. In most cases these fires are caused by pure carelessness on the part of the trapper, Indian or traveller, who do not see to it that their camp fires are extinguished. It is a commendable sign, however, in traversing these rivers and forests to see the various posters and warnings issued by the Dominion Forestry Branch, which call attention to the great danger of forest fires which destroy, not only the forest, but its wild life of every description. Too much propaganda cannot be used to constantly remind the people of the results of thoughtlessness in this respect.

The Tamarac is common to all Mackenzie District and generally leafs out before many of the other trees. Its habitat is in the swamps and muskegs. It is composed of a tough fibrous wood and generally used where such wood is required, especially as keels for boats, etc. It extends as far as the limit of the forest (barren land).

Northern Hardwoods.

The true hardwoods are extremely scarce in the Territories, with the exception of Birch.

According to an Hudson's Bay authority "The tract of country embraced by a line drawn west from the borders of the woods on the Anderson to the Mackenzie, southward, to Paeu de Livre river (Hare Indian river) at Good Hope is very well timbered."



Christmas Day on the Athabasca River below Fort McMurray.

ests of the Territories, in many places. It is found in conjunction with other trees wherever they grow. "The balsam poplar inhabits the entire length of Mackenzie waterways assuming its greatest size on the Athabaska, Slave, Peace and Liard rivers. Below Simpson it gradually thins out and is of inferior size." Its wood has been used in the building of log dwellings