

Considering the poplar type as a whole, one may state that it is in general a temporary type, the result of fire. At one time or another, most of this area was covered with spruce, and is capable of being reforested with that species under proper management. This is evidenced by the fact that, wherever conditions are at all suitable, spruce reproduction appears, even though the spruce seed-trees in mixture compose only one per cent or less of the stand. Many localities where the hemlock cover is too deep to allow spruce seeds to germinate show reproduction of balsam fir. This would undoubtedly, in the climax type, be largely replaced by spruce.

Along the alluvial benches of the streams flowing into Lesser Slave Lake from the south, the conditions of growth of balsam poplar (or both) are altogether different.

COTTONWOOD FLATS.

Along the Swan river, for instance, so-called 'cottonwood' flats are found where this species grows intermixed with some spruce. Here we find trees growing 100 feet high with 65 feet clear and a diameter at breast height of from 12 to 50 inches. The average will be about 24 inches. The older and larger trees are mostly defective from heart-rot, but the younger up to 2 inches in diameter are sound and beautiful timber.



Photo D. Roy Cameron, 1911.
PLATE 4.—Cottonwoods along Nineault Creek.

These patches are, however, very limited in area, and are generally confined to a strip one to three chains wide along the river or in narrow flats of one to five acres, formed by the sinuosities of the rivers. This tree in such locations has the fastest growth of any in the north country. Rings are often seen over half an inch wide.