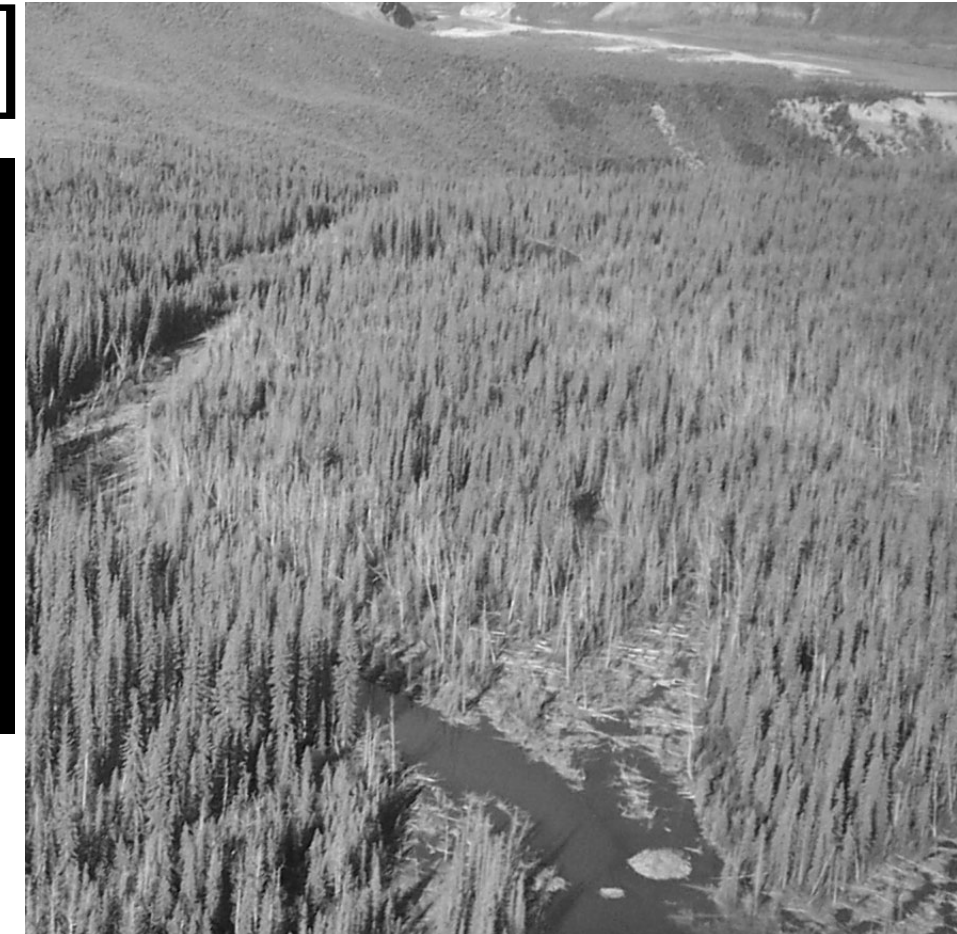


# forest cover from aerial photography

Trees can be dense in the riparian zones of the Peel River Watershed. [RR]



Even the most inhospitable habitats, like these steep scree slopes, are often found to have some trees clinging to them. [RR]



One way to get an idea for the vegetation in a remote area like the Peel Watershed without spending a lot of time and money on fieldwork in the area is to look at aerial photographs. Using a stereoscope and aerial photographs, a skilled technician can identify different stands of trees, delineate wetlands, identify meadows, and more.

In the 1980's, the Forest Management Section of the Northern Affairs Program completed a small scale reconnaissance inventory of the Yukon (Forest Resources, 2001). Using medium scale photography (1:50,000 to 1:70,000) and with the assistance of some satellite

imagery, they produced forest cover maps for most of the Yukon at a scale of 1:250,000. The objective of the program was to provide broad estimates of area, volume and biomass of trees. Unfortunately, since their mandate was forest management, information on other vegetation, besides general wetland location, was not collected.

In more recent years, more detailed inventories were conducted to create more accurate and detailed forest cover maps at a scale of 1:50,000. These inventories have focused on regions in southern Yukon, where forestry is more likely to be viable than in the area of interest in this atlas (Forest Resources, 2001). Therefore, the information shown on Map 10 is based on the older, coarser reconnaissance inventory. Although some ground-truthing of the data was conducted, this was not extensive enough to result in a reliable, accurate forest inventory for the Peel Watershed. The information must be treated as a general

description of the forest types in the region and boundaries are not to be considered exact.

On the map, a large part of the Mackenzie Mountains, Ogilvie Mountains and Richardson Mountains are classified as "non-productive". This term was used by Forest Resources for any areas where forest cover was less than 15%. The term does not necessarily mean that the habitat in these locations is non-productive, merely that the timber resources are not commercially viable with regards to timber harvesting. A look at Maps 9 & 11 will show that the areas identified as non-productive here correspond with the areas identified as alpine ecosystems, lichen habitats and barren lands.

Most of the treed areas (areas with greater than 15% forest cover) are in the valley bottoms, Eagle Plains and on the Peel Plateau. Only small patches of mixed forests (containing both coniferous and deciduous trees) occur in the watershed, mainly along the main stems of the

larger rivers. Patches of mature forest stands mainly occur along the lower Wind, Snake and Bonnet Plume Rivers. We used the criteria that stands had to consist of more than 75% coniferous trees and the canopy cover had to be greater than 50% for a stand to be classified as "mature". Although this is not a very refined and sophisticated way of identifying mature forest stands, it was all the criteria we could use, given the limited information provided by the reconnaissance inventory dataset.

The limitations of both the forest reconnaissance inventory shown here and those of the satellite imagery data shown on Map 11 clearly indicate that land use planning processes and any other land management processes would greatly benefit from improved vegetation data in the Peel River watershed.

