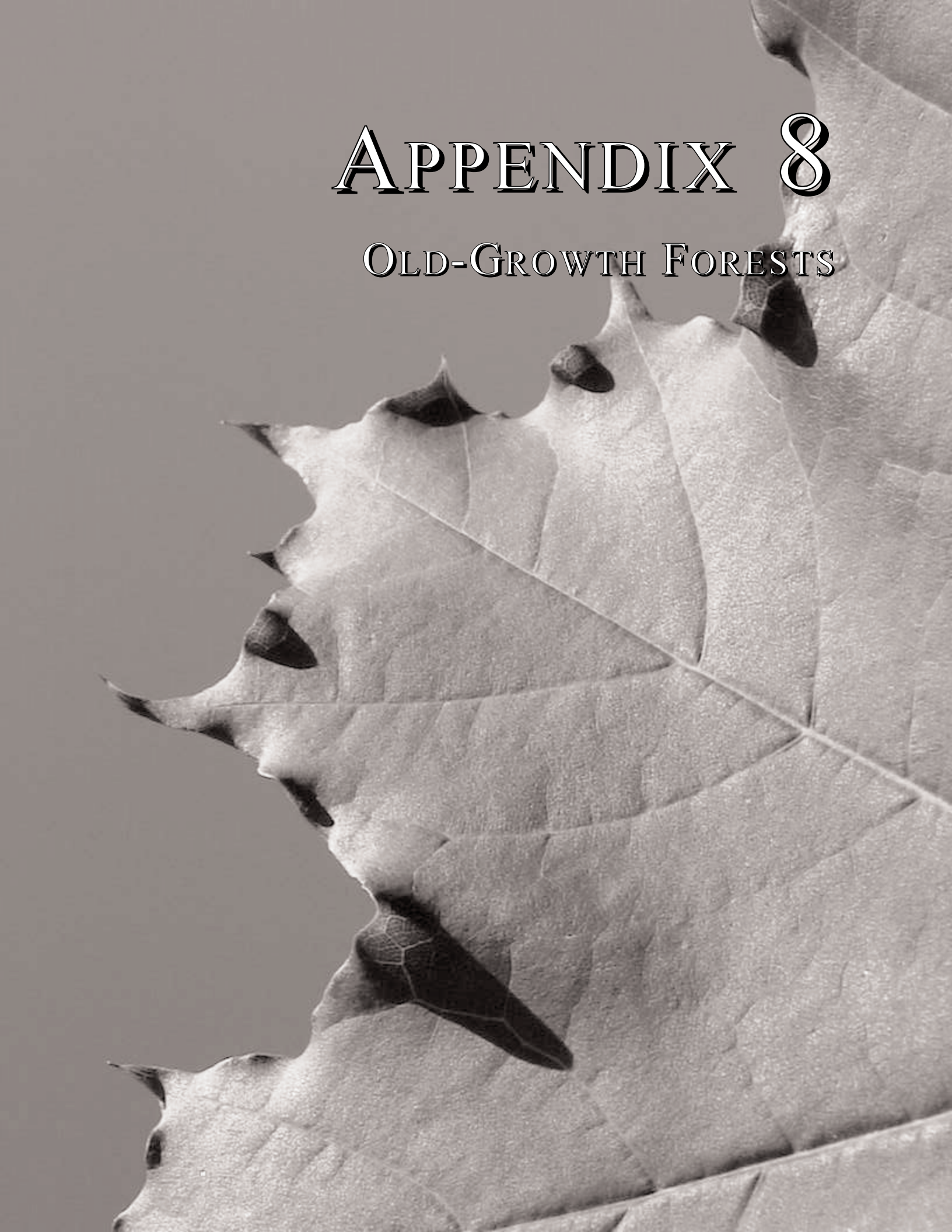
Appendix 8

Old-Growth Forests



Discussions pertaining to old-growth forests has been debated during the past five years with respect to: what is old-growth forest, how much old-growth forests exist in the Province and how should this forest condition be managed. These forests are best understood within the general context of forest disturbance. Disturbances occur over a wide range of spatial and temporal scales and normally interact with each other to produce a complexity of forest types across the landscape. Within the Province, fires, insects and wind are the major natural disturbances, and from a disturbance perspective, old-growth forests are common in areas with infrequent stand replacing disturbances.

Oliver and Larson (1996) defined the following structural characterisitcs of old growth forests:

- A reverse -J shape diameter distribution;
- A variety of trees species and other vegetation;
- Many large, old trees, often at a wide spacing;
- A relatively continuous vertical distrubution of foliage;
- Standing dead trees - snags;
- Large logs on the ground;
- A relatively equilibrium state volume, where growth equals mortality;
- A relatively equilibrium nutrient condition, where a large amount of internal recycling occurs.

Based on these structural characteristics, the NFS defines old growth forests as:

> "a forest of live and dead trees of varying sizes, areas and spacing which includes large snags and down logs of varying decay classes, gaps in the tree canopy and a multiple layered canopy."

It is impossible to retain old-growth stands permanently. All stands are subject to disturbances. Even when stands are protected from human intervention, there is a natural disturbance cycle typical for each stand type and location. With this understanding, the amount and location of old-growth forests (based on the definition) will be determined and management actions in this forest will be consistent with their natural processes incorporating an adaptive management framework. This means in old-growth forests selection harvesting techniques will be employed, as well, different harvesting techniques will be tested to establish to test alternative harvesting methodologies.