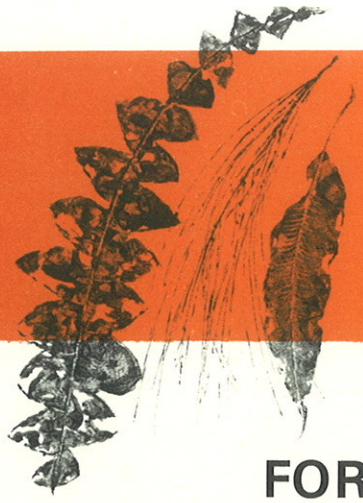

INFORMATION SHEET 13

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FORESTS AND CONSERVATION

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What is Conservation?

In attempting to answer this question, most people would use the word "preservation" in their explanation. They would be technically correct because the Oxford Dictionary, in part, defines conservation as "preservation from destructive influences, decay or waste".

When looking at the conservation of living resources such as forest, farmland or ocean, upon which the human community depends for its survival and well being, preservation is an inaccurate term because it is incomplete. Preservation suggests setting something aside, out of harm's way. Conservation on the other hand implies the continuing use of something while at the same time protecting it from destruction.

If a new plant is discovered, it is not unusual for it to be picked and sent to the herbarium where it would be described, named and mounted as a specimen for scientific record. In the unlikely event that this was the only plant of its kind, it may well have been made extinct by its picking, but it would still in a sense be preserved in the herbarium. As a living resource, it would have been destroyed and therefore not conserved. A botanist would not, of course, do this. He would collect only enough to allow the plant to be described and named, then he would endeavour to have the living community preserved so that it could continue to survive.

In due course the plant may be found to possess some property of importance to the human community. It may have medicinal value, its wood or bark may have special properties, its fruit may be edible, etc. Study of its growth habits may reveal that it can be harvested, and at the same time, be regenerated by using its capacity to seed or grow again from shoots. Careful management may increase its local occurrence and indeed may spread it far and wide as an exotic. Domestication would thus ensure its conservation, but in a sense it would no longer be preserved because its natural state may no longer exist.

The ideal would be to keep the original plant in its undisturbed natural state, while propagating it elsewhere as required. Its conservation would then be complete.

Plants seldom occur on their own, but are components of interdependent communities of many plants, animals and micro-organisms, which, with the soil they are grown in and the climate they depend on, are called ecosystems. If an ecosystem has trees as its tallest plant form, it is called a forest or woodland. Forests and woodlands are very useful to the human community because they produce many essential things such as wood, fresh water, animals, recreation, food, etc. They are therefore well worth conserving.

Conservation of living resources, however, goes much further than just maintaining natural ecosystems. The long-term benefit of the human community is the whole point and purpose of conservation. To feed itself, the human community needs crops, and if some soils are particularly well suited to crop growing, then parts of natural ecosystems should be cleared and replaced with simplified cropland ecosystems. If their productivity can be increased by better management, good conservation approves, provided that the resource can continue to produce. Again because a plantation of exotic trees may outproduce a natural forest, the needs of the community may dictate that such a plantation be established. Provided that renewability is retained, conservation can accept part of the natural forest ecosystem being replaced.

Though parts of natural ecosystems may need to be replaced for the benefit of society, it is equally important for society's long-term benefit that the natural ecosystems not be allowed to disappear entirely. To deliberately help species to disappear is not only morally wrong but is practically unwise—who knows what priceless information or special value may have disappeared for ever with it? Good conservation therefore requires that when parts of ecosystems are replaced, the remainder should get special attention. Not only should management ensure that continued use does not degrade or destroy it, but selected parts should be withdrawn from use and set aside (preserved) to ensure its survival intact.

In the state forests of Western Australia in excess of 20 per cent of the total area is now set aside from normal production and given a priority for management either for the conservation of flora, fauna and landscape or for recreation.

To return to the original question, how then can conservation be best defined? The most authoritative definition is that given by the International Union for Conservation of Nature and Natural Resources (I.U.C.N.) in the World Conservation Strategy (1980): Conservation is "the management of human use of the biosphere so that it may yield the greatest sustainable benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations. Thus conservation is positive, embracing preservation, maintenance, sustainable utilisation, restoration, and enhancement of the natural environment. Living resource conservation is specifically concerned with plants, animals and micro-organisms, and with the non-living elements of the environment on which they depend. Living resources have two important properties, the combination of which distinguishes them from non-living resources: they are renewable if conserved, and they are destructible if not."