CONFLICTS IN THE USE OF FOREST LAND IN THE ATLANTIC PROVINCES

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"Conflicts" is a strong word. To most of us it means a prolonged and bitter struggle between opposing factions. "Controversies" might be a better word to reflect the reactions to alternate uses of forest land in the Atlantic Provinces.

"Forest Land", as used in this paper, refers not only to the land supporting a forest, merchantable or not, but also to the roads and water courses within.

Ownership of the forest differs widely within the Atlantic Provinces, and between the Atlantic Provinces and the rest of Canada. This has a direct bearing on the incidence and intensity of conflicts in the use of "Forest Land". Prince Edward Island, where the forests are all privately owned, is free of all conflict except for one to which reference will be made later. Conflicts seem proportional to the amount of forest land in the public domain. In New Brunswick, Crown lands and freehold land are approximately equal in area. In Nova Scotia, only about 25% is owned by the Crown, whereas in Newfoundland the situation is similar to that of other Canadian Provinces, where much of the largest part of forest land belongs to the Crown.

Somehow, when we think of conflicts in the use of forest land, we think first of inroads made in the forest by civilization, the conversion of forest land to tilled fields and pastures. This must be a relic of pioneer days. Upon examination, we find that in the Atlantic Provinces no such conflict exists. In New Brunswick alone there are only 2,200,000 acres of farmland now, in comparison with 4,400,000 acres in 1891. In Nova Scotia 600,000 acres of highly productive white spruce forests now occupy agricultural lands of the early 1900's. Even in Prince Edward Island, the Garden of the Gulf, which has a larger proportion of good arable land than any of the other Atlantic Provinces, farms are reverting to forests. The days of hewing a farm from the wilderness are long past. On the contrary, the forest is slowly reclaiming land once wrested from it.

Before going on to discuss the two major conflicts in the use of forest land, I shall mention briefly a few minor ones.

The first conflict concerns particularly the Province of New Brunswick. This is the use of forest land for military training. In New Brunswick almost one and one-half per cent of the productive forest is under the control of the Department of National Defence at Camp Gagetown and other localities. This indeed seems to be a large proportion of forest land devoted to such a use, but in fact the greater part of these areas is now

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being managed by the Department of Forestry for the production of wood products as a service to the Department of National Defence. It is true that comparatively large areas have been cleared for training purposes but corresponding loss of raw materials is more than made up for by the boost to the economy of central New Brunswick by the establishment of a large military camp and the consequent enlargement of the village of Oromocto into a bustling town. There are many other military installations throughout the Atlantic Provinces but the area of forest land occupied is relatively unimportant. The Camp Gagetown area will probably be regarded in time as an excellent example of multiple use. The prime use, of course, is for military training but wood production and recreation, in the form of hunting and fishing, are important concomitant uses.

A conflicting use which is a particularly live issue in British Columbia does not cause much concern at present in the Atlantic Provinces. That is the use of forest land by hydro-electric installations. In the first place, well over half the power in Nova Scotia, New Brunswick and Prince Edward Island is generated by thermal and diesel plants. Most of the power generated in Newfoundland is by hydro-electric plants, but in spite of this not over 150 square miles of forest land have been converted to transmission line use or have been flooded to provide water reservoirs.

Urban and industrial development has not encroached on forest land in the Atlantic Provinces to the extent that it has in more populous and highly industrialized areas. Small forest areas have been cleared for housing developments and so-called industrial parks, but the proportion of this to the total forest area is infinitesimal.

Those engaged in blueberry harvesting and culture have caused public and private owners of forest land considerable anxiety because of the danger of fire to forests in the neighbourhood of blueberry barrens. The practice of burning these areas about every third year has threatened to get out of hand.

Mining activities in forested areas until now have been a minor source of trouble. Strip mining for coal has removed small areas permanently from wood production but by far the greatest production of coal has come from underground mines, in some cases reaching far under the ocean. Large reserves of base metals have been discovered in northern New Brunswick and Newfoundland, but so far any resulting conflicts have been minor. In New Brunswick mining permits for base metals, as well as timber leases, confer no surface rights; and mining interests are open to damage claims both from the Province and from holders of timber leases for any destruction of the forest resource. A future source of conflict may be the construction of smelters in northern New Brunswick, with the danger of poisonous fumes damaging all vegetation within their reach.

We come now to the two principal areas of conflict in the use of forest land—conflicts between what most of us in the Atlantic Provinces still think of as the prime use, production of wood, and recreation and wildlife management.

We'll consider recreation first, and in this field national parks first, because the area in provincial and municipal parks is relatively small. In the Atlantic Provinces there are 630 square miles in national parks, most of this large area being forested. The dedication of the parks policy to education, cultural pursuits, recreation and the provision of wilderness areas where people can enjoy solitude, is one with which it is difficult to quarrel. With increasing use it is of course becoming more difficult to maintain the wilderness atmosphere.

Inherent in park administration is the non use of the forest for production of wood. It is this principle which is making it more difficult to obtain provincial lands for national parks. In New Brunswick there has recently been considerable pressure for expansion of the Fundy Park. The Province's position is best illustrated in Premier Robichaud's own words as reported in the *Telegraph Journal* of July 19, 1962:

"It is suggested that it would also be untimely to remove additional forest land, that the southern part of the province can ill afford, from productive use when extensive efforts are being made to expand forest industry in that area."

Forests of the Atlantic Provinces are now accessible, except in rather small areas on the island of Newfoundland and large areas in Labrador. In the last few years there has been a tremendous increase in the building of forest access roads, both by the provinces and industrial organizations. Enlarged recreational demands have created increasing pressures for the use of these roads, posing considerable problems for wood-using industries. An increasing number of private vehicles interfere with the free movement of logging trucks and road-building equipment, accompanied by constant concern with possible litigation because of accidents. Fire hazards are increasing and logging crews are exposed to considerable danger from the occasional careless hunter.

With more leisure, more money and more cars, more people want a camp in the woods. In New Brunswick alone there are now eight hundred camp site leases on Crown lands. These are favoured sites, either because of accessibility, proximity to fresh water or some other natural advantage. These often interfere with free choice by companies for their own facilities. In spite of these conflicts of interest, the forest industries are aware that in one way or another rapidly increasing demand makes it imperative that they share their roads and wilderness areas with those in pursuit of woods recreation in its many forms.

Perhaps the most publicized conflict, one discussed frequently in the press, and one inspiring resolutions and recommendations by several associations, is that between the use of forest land for the production of wood products and its use as a habitat for wildlife. Most of the publicity deals with the damage done to various forms of wildlife by practices concerned with forest exploitation and protection. To describe some of this damage, I will refer to a pertinent article by Bruce S. Wright, Director of the Northeastern Wildlife Station, Fredericton, N.B. This article appeared in the *Atlantic Advocate* for September, 1962, and is entitled "When Wildlife and Pulpwood Meet". This describes the effect of the river drive on the whole riparian environment. Discussing woodcock habitat, Mr. Wright said: "When the pulpwood

operators move into a new area and cut it, they open up many square miles of new nesting habitat for woodcock . . . However, the feeding areas are in the alders along the streams and it is here that bulldozers move in to clear log landings. This destruction of the feeding grounds more than offsets the benefits derived from the new nesting areas in the hillsides above".

Mr. Wright followed the drive from landing to holding boom. In referring to driving improvements on smaller streams he said: "The loss of water to the new channels bulldozed across the bends will radically change, if not dry up entirely, the resting pools and spawning beds of the stream, with drastic effects upon the fish. Such a stream becomes an efficient sluice but a biological desert. The driving operation puts another major obstacle in the way of fish movements. The feeder streams at the head of the rivers where the drive originates are studded with small driving dams. Most of these have no provision for fish ladders or any other means for the passage of fish". He referred to the sweep following the drive on larger streams and rivers:

"The removal of the plant growth down to and including the roots by bulldozing and trampling greatly accelerates bank erosion and siltation of the river, which in turn destroys the spawning beds of salmon by covering them with silt. All bank burrows of mink, muskrat, otter and beaver, are destroyed by the weight, if not the blade, of the bulldozer, and at the season the young are in these burrows. Any unhatched nests of late nesting or renesting ducks, or shorebirds, below high-water mark on the bank are either destroyed, or left so exposed by the destruction of the vegetation as to be at the mercy of any predator."

And again he discussed the adverse effect of perhaps miles of logfilled rivers at the holding boom on duck habitat, salmon runs and oxygen content of the river waters.

Another activity which has been the cause of considerable controversy, particularly in New Brunswick, has been the use of insecticides. You all are aware of the aerial spraying program against the spruce budworm carried on by Forest Protection Limited. In his submission to the Committee on Forestry and Natural Resources of the Legislative Assembly of New Brunswick, (fifteenth annual report of that Committee, dated April 1962) Mr. B. W. Flieger, Manager of the Company, had this to say "We have had a real and continuing area of conflict with Atlantic Salmon. This has been unavoidable. It is true that insecticide kills young small salmon . . . From the beginning it was expected that we would experience some unpleasant results from spraying and it was in this mood that the decision was taken." Mr. Flieger, however, could not resist continuing as follows: "After ten years of spraying there was according to the newspapers some small flurry of interest shown on March 14th of this year at an auction held on these premises. I believe it was reported that the auctioneer almost completely sold his stock—his stock of ten year salmon angling leases! I think you will agree that buyers do not come to an auction and act in this fashion without a good reason. They must know that the fishery has endured in spite of our activities."

Mr. Wright discussed damage to wildlife habitat and Mr. Flieger the killing of salmon, but there is another viewpoint—damage to the forests

by wildlife. In the Atlantic Provinces extensive forest areas have been set aside as game sanctuaries, encouraging the increase of browsing animals to numbers excessive for the range. It may be argued that it is the condition of the forest that promotes excessive browsing rather than the fact that it is in a game sanctuary. There seems to be no question that a closed forest is poor habitat and that a forest opened up by fire or cutting provides much more food for moose and deer. It is quite evident in the Atlantic Provinces that deer in particular find the margins of civilization a more pleasing habitat than the remote areas of forest. In any case, the damage done by moose and deer browsing is most difficult to assess. It is certain though that moose and deer have in one case ruined a research experiment on the value of coppice in regenerating sugar maple stands, and it was concluded that a high population of moose and deer and the production of quality hardwood timber are not possible together on the same ground. This incident was reported by M. H. Drinkwater in "What Price Browsing" published in *Timber of Canada*, August, 1958. Red pine, which we had not considered a favoured food of deer, was heavily browsed in a provenance testing plantation in Nova Scotia. It is probably significant to mention that the following spring there were found twenty-seven deer that had died of starvation. Under certain circumstances it is apparent that moose and deer will browse on almost any species available. Just a month ago during inspection of an area being managed for balsam fir Christmas trees in Nova Scotia, it was noticed that many leaders and terminal buds had been nipped. This damage in spruce or fir in the Atlantic Provinces is usually blamed on squirrels, and they are undoubtedly responsible for much of it, but the culprit responsible in this instance was the pine grosbeak.

Besides causing the damage mentioned above, the squirrel caches great numbers of cones to provide winter food. The varying hare is blamed for considerable damage to young seedlings; and, of course, the porcupine unquestionably girdles many species in our eastern forests. There does not seem to be unanimity of opinion with respect to damage done by beaver. They can be most persistent in their efforts to flood roads by damming culverts, but it is possible that their ponds, although they do flood some forested areas, can be helpful in the conservation of water.

I was in doubt about mentioning one conflict, not knowing with certainty whether it came within our terms of reference. However, it is a conflict, sometimes reflecting the true meaning of that word more than others previously discussed. This conflict occurs when well entrenched interests are expected to share the source of their raw materials to make room for new wood-using industries.

We in this panel are of necessity confined to discussing specific conflicts, offering no solutions and propounding no philosophy of forest land use. It will be most interesting to hear about this later.

I can think of no better way of closing my remarks than by quoting from an address to the Presidential Conference on Conservation in Washington on May 24, 1962, by Secretary of the Interior Stewart L. Udall:

"We need also to be realistic about the nature of our association in the conservation community. Each of us has some paramount interest in the natural environment we are committed to protect. Yet ours is an age of inevitable competition for resources. An increased population enjoying a higher standard of living will intensify the inherent conflict among the various conservation values which have been traditionally regarded as mutually consistent parts of a unified movement. Controversy between park enthusiasts and hydro-electric power advocates, dam builders and salmon fishermen, industrial needs and scenic values—all of these will become more frequent and more divisive unless we construct and adhere to a higher order of conservation statesmanship.

"Insistence upon a purist, 'all or nothing' position on complex issues can only dilute our influence. The resulting inaction will mean lost opportunities in a period of 'last chances'. To avoid ultimate failure of all our efforts we must face up to our differences and reconcile them for mutual gain."

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over twice the relative decline of all extractive industries. Decreases in use of lumber have only recently been balanced by increases in consumption of pulp, paper, and plywood. Demands for wood surely will continue to change rapidly and will become less important in relation to North American needs for water and recreation.

We must learn to plan flexibly for balanced forestry in order to hold and, if possible, expand our share of markets. Improved technology must be matched by vital new concepts of management.

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