FORESTRY PERSPECTIVES ¹

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It is indeed an honour to be asked to address the opening session of this the second joint annual meeting of our two societies. I may say that I have had some concern since accepting this assignment, for there are obvious dangers in being responsible for the second of two successive keynote addresses—dangers of striking a wrong note, of being sadly out of tune, or, in another direction, of being simply an echo answering. Whether I am successful in avoiding these pitfalls will soon be apparent.

While it is recognized that the theme of a meeting such as this is intended primarily as a focal point for the immediate discussions, in the present case there seems some justification in viewing it as something of more lasting significance—a focal point for future action. Certainly, in this complex and competitive world, it must be greatly to the advantage of countries that share the same basic philosophy to develop a close association and identity of interests at every possible level.

The value of an objective approach to our subject is suggested in the words of the President of the United States when, in addressing the Canadian Parliament earlier this year on our community of interests, though in another context, he said "We do not seek unanimity that comes to those who water down all issues to the lowest common denominator . . . or to those who measure unity by standards of popularity and affection instead of trust and respect." I am sure you would all agree that to be meaningful a "common frontier" of action must be developed on the basis of ideals that are interpreted realistically.

Undoubtedly our two countries have many things in common, and perhaps that which comes immediately to mind is the fact that we share the benefits and responsibilities of a great heritage—the natural resources of the major portion of this continent. But beyond that, our peoples share an identity of basic aims and are in mutual agreement on a number of fundamental principles: the fact that we are good friends despite our being

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neighbours has been cited as the exception to a general rule in international relations. And, whether in support of this happy situation or not, there is undoubtedly taking place a steady integration of the North American Continent: waterways and energy, primary products and processing facilities, and capital investment for economic progress, as well as defense arrangements for mutual security, are often of continental as much as national significance.

But it must also be recognized that we have many differences—not only those of relative populations and degrees of industrialization, but, perhaps more significantly, in matters of procedure and interpretation; and one of the more obvious values of maintaining our two separate entities and authorities is the opportunity this provides, as on the present occasion, of looking at our mutual problems and responsibilities from two points of view, of finding out to what extent we complement one another, and in these and other ways attempting to develop a North American perspective. In this sense our common boundary, that undefended border about which so much has been said and written, and which is no doubt the envy of less secure nations, serves a useful purpose; without it life might be less complex, but it would also be less interesting.

Recently President Stratton of the Massachusetts Institute of Technology was quoted in the *Journal of Forestry* as saying that "Science and engineering no longer can be taken in isolation from the rest of the problems of our society—they are woven in the whole fabric of our industry, economy, and federal life." This must certainly be true of forestry and other forms of resource management which all too frequently are looked upon as something apart from the other factors of production and other aspects of government policy, even to the extent that for the layman forestry may appear as a unique and unexplained phenomenon—as something quite out of his world. But the basic importance of our resources, the many facets of life they touch upon, and the increasing complexity of their management make it imperative that they and the way in which we deal with them be recognized as an integral part of the social, economic, and political pattern as it is evolving in North America. Here lies a responsibility that should be recognized and accepted by the forestry profession; and in preparation therefor, it is important to establish forestry in proper perspective with the principles on which our society is based, and at the same time to recognize that this society is dynamic and subject to constant, and we hope progressive, change. It is to these matters that I should like to direct some of my remarks this morning.

In the first place, our two countries are strong supporters of the democratic principle; it has rightly been said that "nowhere else in the world is there so great a continuous stretch of territory or so large a population which has been so long and firmly devoted to the practice of freedom." We would agree, I am sure, that democracy to be successful, or in fact to survive at all, requires that the internal life of our society be healthy and growing and to this end that we understand as clearly as possible the democratic processes involved and their application in any major undertaking. Public education is generally considered as the key to both understanding and participation,

and the broader the education the greater is the chance that the democratic form of government will succeed.

In the Report of the Fifth World Forestry Congress, it is noted "that advancement of forestry depends on broad public understanding and support." In commenting at that Congress on factors unfavourable to forestry progress over the past decade, Dr. Egon Glesinger, Director of the Forestry and Forest Products Division of FAO, cited as a main reason the fact "that governments, legislators, and administrators still fail to appreciate fully the importance of forest development and conservation." These remarks were not, of course, directed especially to North American countries—perhaps quite the contrary. Nevertheless, in view of our basic philosophy of government, we in the United States and Canada have a definite responsibility to ensure that the public, and particularly those in positions of authority, are informed, not only of the needs and methods of resource management and conservation, but, even more important, of the principles involved and the implications associated therewith.

I have seen it suggested that the public education phase of North American forestry is so well advanced that relatively less time and effort need be devoted to it in comparison, for example, to the development of methods and techniques; this may be true for some areas and certain aspects of public education. However, from my own experience and in support of what I have said earlier, it seems doubtful if any great proportion of laymen clearly understand the bases on which forest-land use and management policies are being developed, and with the increasing pressures on such land for a variety of uses, both within and outside the jurisdiction of foresters, it becomes ever more important that the public be made aware, in terms of personal interest at least, of the implications of these pressures and of the different kinds and intensities of forest-land use that are being required and advocated.

Referring again to the Report of the World Forestry Congress of last year, it was recommended to the less advanced countries that they seek out and adopt the successful methods of public education developed elsewhere. This seems to emphasize further our special responsibility if we are concerned that the management of our resources be recognized as an integral part of the democratic process.

Perhaps the point of greatest similarity between the United States and Canada is that they are both federal states, though with a somewhat different distribution of authority and responsibility between the central and member-state governments. Brought into being in the first instance as rather loose associations to meet the problems of the day, they have each developed rapidly, especially during the past fifteen to twenty years, towards a co-operative type of federation—in other words, governments at various levels are increasingly sharing "a divided responsibility for regulating a single economic and social structure." Among the factors bringing this about have been, first, the increasing demand for, and cost of, public services, second, and as a corollary of that, greatly improved transportation and communication within the free trade area that each federation provides, and third the uneven

distribution of natural wealth and opportunity for industrial development in each federation.

In the United States, forestry was one of the first areas in which the principle of co-operation between various levels of government and between government and the private owner was introduced and promoted legislatively; the patterns established first by the Weeks Act and later the Clarke-McNary Act, the Norris-Doxey Act, and its successor the Co-operative Forest Management Act, have, I believe, been cited as guides in planning federal co-operation with other agencies.

In Canada the pattern has developed somewhat differently, as under the Act of Confederation the provincial authorities were given full jurisdiction over the public forest lands within their respective boundaries. However, in recognition of the importance of forestry to the country as a whole and also of the great variability of problems and conditions from province to province, an important step towards inter-government co-operation was taken with the passing of the Canada Forestry Act in 1949. This has been followed within the past year by the establishment of a federal Department of Forestry, signaling among other things an intensification of co-operative programs.

Thus our two countries are going through the same evolutionary process in federal administration, though along somewhat different lines, and in each case forestry, because of its over-all importance and many ramifications, serves in a sense as a prototype. The differences in approach and procedure in the two countries may in some degree be complementary and provide the background for a "common frontier" of co-operative effort.

Undoubtedly co-operative federalism and all it implies in a willingness on the part of authorities at different levels to work together will become increasingly significant both at home and abroad. Many of the newly-emerging countries in the relatively underdeveloped parts of the world are beginning life as federations in the classical sense, and their ultimate success will surely depend on the speed and degree with which their member states can establish a common approach to their more pressing problems.

Perhaps the hallmark of our society as much as anything is the economic philosophy with which our history is so intimately involved. In both Canada and the United States, we are in general agreement as to the place and value of private enterprise in promoting industrial development and a high standard of living. Traditional capitalism and its modern counterpart have played a dominant role in the growth and design of North America, and in this process the forests of the Continent have served both as a means of capital formation and as one of the more severe testing grounds for the relations between government and industry; undoubtedly in both countries there have been periods of tension between the forest entrepreneur and the public interest as represented by government. While these may not have completely disappeared, marked changes have taken place, largely as a result of changing forest conditions, but also perhaps in relation to more general evolutionary trends typified by a move away from economic individualism towards what has been termed a mixed economy: this is represented on the one hand by governments that are many things to all men and on the other by large corporations, trade associations, and labour unions, all of which are of national

and interrelated significance. Associated with this change and with the object perhaps of attaining a greater economic stability, there appears to be developing, in some areas at least, a closer identity of interests and responsibilities between government and industry. In this connection, it is of interest to note that at a meeting of the International Chamber of Commerce held in Copenhagen last spring, a point that was given special emphasis as a means of furthering the well-being of mankind (and with reference particularly to assistance for underdeveloped countries) was the closer co-operation of government and industry—a partnership it was suggested that would be the means of achieving optimum development.

In North American forestry, the relations between industry and government have been and are today strongly influenced by the pattern of land ownership. Thus in the United States there are, in addition to State land and small private holdings, extensive areas of productive forest land under two distinct forms of ownership and management policies, those of the federal government being aimed primarily at developing the forest to serve the public interest, while those of industry are concerned in the first place with ensuring a profitable operation. Under these conditions each authority would be expected to develop plans and practices best suited to the primary objective of management, these being modified in some degree within a multiple-use pattern as social and economic pressures increase: in this way, whether the two authorities co-operate directly or not, there should develop in time a considerable body of common or complementary experience, interest, and responsibility.

In Canada where the land/man ratio is much higher than in the United States, the demands involving multiple use of forest land are only gradually developing, though more rapidly in some regions than others; where these do occur, they must be dealt with in most cases on land exclusively under public ownership. At present much of this land is under license to industry and administered by government regulation for timber production, but increasingly there are indications of support from representatives of both government and industry for closer co-operation in management practices; this, if properly developed, might well result in greater efficiency of operation and at the same time confound the views of those who advocate that government should be both the administrator and operator of all natural resources. Growing demands for alternative or supplementary uses of forest land may complicate the situation and will require a careful evaluation and balancing between the needs of a healthy forest economy and those of the general public who in the process must, as I have suggested earlier, be fully informed of the implications of policies and practices developed on their behalf.

So much for the framework within which we live and must develop our "common frontiers." It may be felt that I have over-stressed this approach, but ours is a dynamic society, and the relationship of forestry to the principles we support and the differences in these relationships as between the United States and Canada seem to me pertinent to our present theme and to our future progress.

Increasingly we hear the use of such expressions as "it's tomorrow that matters—not yesterday." As for today, it is presumed that as we are just passing through, we really haven't the time to be greatly concerned. In any case, the emphasis is on tomorrow, and in the time remaining I should like to say a few words about that unknown quantity, the future, for it is with this that the title of my paper "Forestry Perspectives" is more properly concerned; and if I understand the analogy correctly, the purposes of a "common frontier" are both as a means of consolidation and as a base from which to move outward in time as well as space.

Referring again to last year's World Forestry Congress, the question was asked by one of the main speakers, "Will forests still have an essential role to play in the world's further economic development?" While the answer, amply supported by statistics, appears to be clearly in the affirmative, the question itself may be used to illustrate an uncertainty as to the means of future economic growth and stability, whether national, hemispheric, or global. In both the United States and Canada in recent years, numerous surveys have been undertaken, committees and commissions appointed, and conferences organized with the aim, in part at least, of providing the information on which to base and project plans for the future. In Canada, the current effort in this direction is the "Resources for Tomorrow" conference to be convened three weeks hence. This conference is a further example of co-operative federalism at work, as it is being sponsored jointly by the central government and that of each of the provinces with a mandate "to probe, print, and palaver on existing shortcomings in present resources policies and programs." It may be added that the emphasis is not to be so much on resource development as on economic development and the relation of natural resources to that process.

In nearly all cases these surveys and discussions, in whatever country they may be undertaken, are trying to establish a national perspective, but in doing so will inevitably be concerned with matters of regional and international significance. An example, and one that I think is relevant here, is the study of markets as a means of gauging the future needs for goods and services based on natural resources.

Comparing our own two countries, the United States, with a relatively large population and high degree of industrialization, is a net importer of forest products, while Canada, with a low population density and extensive forest resources, is an exporter. Indeed, it must export to survive economically. In 1959, Canada marketed 20 per cent of all wood pulp and 55 per cent of all newsprint produced in non-communist countries, and is ranked as the world's leading exporter of lumber, pulp, and paper.^a In that year (1959), the value of its exports of forest products totalled \$1.5 billion, and of this total the United States took 79 per cent and the United Kingdom 11 per cent. As a consequence, perhaps the most obvious "common frontier" in the minds of Canadians attending this meeting is that foresters in both countries

^a See Wilson, D. A. Demand prospects for forest products. *Resources for Tomorrow*. Vol. II, 1961 (627-40).

are developing programs aimed at providing forest products to serve largely a single market—that of the United States. This may be an entirely sound procedure, though I don't think that it has been formally recognized as such; and the question is of special significance just now because, despite the postwar efforts towards multi-lateral trade arrangements, there is an increasing trend towards regionalisation of world trade—a fact that must be of particular importance to those nations that depend heavily on export markets. It is natural, therefore, that Canada should be concerned at the present time with questions as to its future trade policy—a policy which inevitably involves the wood-using industries to a major extent. Should this policy concentrate on North America, seek European alignment, attempt to promote a wider Atlantic association, or depend on the possibility of favourable multi-lateral arrangements being established and maintained? Although such questions may be basically the concern of other disciplines, the answers can have an important bearing on Canadian forestry policies and programs in the future.

But over and above those problems within the pattern of our immediate economy are others that may be of even more far-reaching significance and must be considered in attempting to form a perspective, whether national or international: these are problems involved in what might be termed terrestrial planning (in contrast perhaps to spatial exploration) and are associated in our minds partly with the tremendous changes that are taking place as a result of technological development and partly with the expected increases in national and world populations (the latter estimated as growing from three to four billion over the next twenty years). The significance of these trends is amplified by the relatively low level of technology in some areas of high population and the increasing urbanization and more leisure time for people in industrialized countries. Both trends may have important and conflicting influences on forestry development: thus advances in technology, while improving the yield of forest land and expanding and diversifying the use of its products, may threaten the replacement of these products with synthetic substances or those produced from other raw materials; and growth in population, while undoubtedly increasing the demand for manufactured products, will also cause a shrinkage in the area of accessible land available for timber production and will require increasingly the use of forest land as an "amenity" resource.

Have we a perspective that permits us to deal effectively with the problems of today while at the same time preparing for the more complex situation of tomorrow? Undoubtedly the majority of foresters in Canada and the United States are of necessity concerned with the immediate tasks of harvesting, protecting, and managing the forest lands for which they are responsible, and their success in this will have a very important bearing on our future prosperity and well-being. It must be recognized, however, that as pressures on land increase and there develops a broadening concern for the relationship of people to natural resources, there will also be a breakdown of clear-cut divisions of responsibility and the interweaving of disciplines other than forestry in the pattern of resource management; this, of course, has been going on for some time, but increasingly the problems associated with the broad

field of conservation will spread across the various specialized areas of study, across departments and committees of government, and across the borders of professional societies. If the forestry profession is to maintain a leading role in this situation, we must establish clearly in our own minds and in the minds of all responsible people the principles upon which our philosophy and practices are based and be prepared to fight for policies and programs we feel are necessary; at the same time we should understand the objectives and methods of those in other disciplines, who are interested in the field of natural resources, and be prepared to establish what in the parlance of this conference may be termed "common frontiers" of interest and action where this seems promising.

In conclusion, I would say, and I think this is in keeping with what has already been said, that if there is a keynote to be struck for the future, in matters both national and international, it should be a double note compounded of the two elements of education and co-operation: education to provide increasingly a background of knowledge and understanding that will be needed to deal with the problems of the future, and co-operation to furnish the framework for more effective action. H. G. Wells has spoken of history as "a race between education and catastrophe," and in our own experience we are increasingly aware of this and of the fact that the race is getting closer all the time. Co-operation in the promotion of education at the international level may be one of the few really effective means of easing world tensions and thus influencing the outcome. Professor Heiberg has made the point well in a recent paper on this subject when he states "For years many have realized the need for world co-operation and that our responsibility towards humanity is on a par with our responsibility to race, nation, or tribe. Today this need for co-operation is not only a means for making a better world to live in. It appears crystal clear that *understanding* and *co-operation* are necessary for our very existence."