

# **THE FIFTH BRITISH EMPIRE FORESTRY CONFERENCE, 1947.**

By A. D. McKINNON.

The Conference assembled in London on the 16th June and remained in session in various parts of the country until the 19th July, 1947. It comprised 71 delegates, 38 associate delegates and one honorary delegate representative of all parts of the British Commonwealth and Empire, and, as guests, the Director of the United States Forest Products Laboratory, Madison, and two officers of the Division of Forestry and Forest Products of the United Nations Food and Agricultural Organization.

The main body of delegates visited various forests and other places of interest, including the Forest Products Research Laboratory at Princes Risborough. Delegates specially interested in forest products did not accompany the main party throughout, but visited various mills and factories of more particular interest to them.

The writer was privileged to attend the Conference as one of the New Zealand delegates. It is felt that an account of its activities may be of interest to New Zealand foresters. The discussion falls naturally into four main topics: (1) general impressions, (2) papers presented and subjects debated, (3) reports of technical committees and (4) resolutions of the Conference.

## **1. General Impressions.**

What is the purpose of such a Conference? What service does it render forestry? These questions will no doubt be uppermost in the minds of many. The major purpose is undoubtedly as a forum for the discussion of forest policy, not only as affecting the forest economy of individual countries or of the Empire as a whole, but also the policy of the several branches of forestry: education, research, forest products, to mention but three. With a body of experience derived from the administration of forests embracing a wide range of botanical, climatic, economic, and sociological conditions, well based opinions on forest policy can be formulated. Such considered opinions, placed before Empire governments, supplementing and reinforcing the opinions of the local forest authority, must lead to rational and co-ordinated forest policy throughout the British Commonwealth. A second important service rendered by the Conference may be described as monitoring the actual application of forest policy in member countries. It is not sufficient for a country to adopt a sound forest policy. That policy must be implemented. At an early stage in the proceedings of each Conference delegates report on progress made in implementing the resolutions of the previous conference and where little or no progress has been made an explanation is given.

A third service is a periodic review of Empire forest resources. Early statements were doubtless approximations only, but with each succeeding conference statements of forest areas, timber content, increment and annual consumption have developed into carefully considered estimates. In many countries where the forest inventory is incomplete or inadequate, forest surveys are in progress or pending. A target date of 1957 has been set provisionally for the completion of the Empire forest inventory and statements presented to the Conference in that year will be awaited with profound interest. A further benefit is the great stimulus accruing from periodic gatherings of members of any profession: the opportunity to discuss mutual problems, to exchange ideas, to hear varying points of view, to view one's own problems in the broad perspective of the profession as a whole. In a profession such as forestry this is of special significance. Forest officers are widely scattered, opportunities for group meetings few, and as a result individuals tend to lose touch with the development of the profession as a whole, tend to become absorbed in their own particular problems in their own particular localities. It was a heartening experience to meet foresters from all parts of the British Commonwealth, to note that though individual opinions differed considerably in matters of detail, there was an overall broad and sincere unity of purpose directed towards the betterment of forestry.

## **2. Papers Presented and Subjects Debated.**

Thirty-six Forest Authorities presented statements on Empire Forests and the War. Discussion on these statements showed how the war had affected Empire forests and indicated how the lessons learned should be applied to future forest policy. Papers presented to the Conference were taken as read in view of the limited time available, passing reference being made to relevant papers in the course of debates on specific subjects. A list of papers presented is appended.

The Conference sat on 18 days, and 28 sessions, each of half a day, were held. During the earlier sessions there was a feeling of disappointment amongst the younger delegates at the broad treatment of the subjects under discussion and the scarcity of detail and factual data. It was soon realised, however, that in such a conference, composed of delegates from a substantial portion of the globe, concerned with forests varying so extremely in condition and economic factors, it was impracticable to go beyond statements of general principles in the limited time available. Detailed discussions fall properly within the ambit of specialist conferences.

Land utilisation and forest policy were given particular attention and stress laid on the necessity for a supreme land-use authority in most countries of the Empire, such authority to have direction at the highest level. In the past forest policy has often been looked upon

as the policy of a Department whereas it should be an integral part of the general land policy of governments. The requirements of a healthy policy must include sound management of private forests and must ensure that state reserves are sufficient to meet the wood requirements not available from private sources.

Discussion on Empire needs of forest products centred firstly on immediate requirements and, secondly, on the long term requirement. To meet the former it was contended that, although the pulp and paper industry is of great importance and is short of supplies, priority should be given to the production of saw timber, pitprops, etc., to provide shelter and heat for the people. Opinion was general that, to meet the present emergency, overcutting was justified; but equally unanimous that such overcutting must be integrated with the principles of sustained yield, and planned with a view to adjustment during a clearly defined period. Regarding long-term needs, the United Kingdom was the dominant country as a buyer, and Canada, for softwoods, and Burma, Malaya, North Borneo and some African colonies for tropical hardwoods, were the principal sellers. Inadequacy of data on forest resources of the Empire laid emphasis on the urgency of forest surveys. To ensure that data required are obtained and are comparable, co-ordination of methods is essential. Relations with the United Nations Food and Agricultural Organisation (F.A.O.) were discussed, representatives from F.A.O. indicating that they were concerned with a review of the world position. Stress was laid on the necessity for co-ordination and avoidance of overlapping in order to hasten both world and Empire reviews. During the discussion on wood pulp it was stated that world production amounted to about 25 million tons per annum. The industry was fully alive to the necessity for conservation of forest resources and planned management and was, in fact, taking the lead in this direction in several countries. Faith was expressed, however, in the continued demand for saw timber, and the Conference stressed the importance of integrating pulpmills with sawmills to use up inferior timber and sawmill waste.

Considerable discussion took place on forestry in the United Kingdom, covering its history, the effects of the past two world wars, and future plans. Tours of many of the British Forestry Commission's areas and of private estates gave delegates an insight into the problems involved. Pressure of population restricts afforestation to degraded and impoverished soils. This, together with the complicated rights, privileges and land tenures render the task of afforestation and subsequent management a difficult one, particularly by comparison with New Zealand standards.

Discussion on silvicultural practice centred mainly on the subject of spacing and thinning viewed from the standpoint of South African experience over the past decade. Briefly, this prescribes wide spacing, and heavy, early and repeated thinning, combined with pruning of crop trees, with the object of obtaining saw timber as rapidly as

possible. It is admitted that this results in a smaller aggregate volume per acre, but the loss is offset by the greater percentage of saw-log volume. In countries with industries dependent on a maximum and regular supply of smallwood (pitprops, pulpwood, etc.) from thinnings, South African practice is not applicable.

The session on forest management confined itself to the subject of working plans. The opinion was unanimous that it was impossible to work a forest systematically on sustained yield basis without a working plan, though it was agreed that the elaborate type of plan characteristic of European countries is not necessary. The form of the plan should be adapted to local conditions and in many cases a very simple document would suffice. Lack of regular financial provision by governments was stated to be one of the most frequent causes of breakdown in working plan prescriptions.

The necessity for close co-operation between the forester and the forest products laboratory was stressed; the former to grow trees of dimension, quality and species best suited to market requirements to the extent consistent with site, sustained yields and economic factors; the forest products laboratory to understand the limitations imposed on the forester by site, sustained yield, and economic factors, to develop markets for the main product, and to investigate and develop markets for waste material (from intermediate thinnings or species at present unmerchantable).

In discussing fire protection, emphasis was placed on rapid detection and improvement of access. The consensus of opinion was that protection against insect and fungal attack was best effected by paying more attention to silvics, the practice of silviculture, and giving preference to mixed rather than pure stands.

On the subject of research there was general agreement that good silviculture was dependent on a thorough study of ecology. In no other way can there be gained an understanding of the relationship and interaction between forest and site. In considering genetic research the view was advanced that genetics and silviculture were not opposed but should be undertaken on parallel lines, the object being to produce a race corresponding to the results of improved silvicultural practice. Genetic research did not necessarily mean trying new species; the greater part of the work was concerned with improving species whose silviculture was well known. Because of their knowledge of the results required, close collaboration of foresters was essential in genetic research.

Research in timber technology was focussed on conservation through better utilisation by the reduction of waste both in forest and factory. Stress was laid on the necessity for assigning raw materials to that branch of the wood-using industry which will use it to the greatest advantage. Consideration was given to the future of wood as a raw material. In view of it being a replaceable raw material of general availability, having great variety of uses and a high strength-weight ratio, it is likely to hold its own as a raw material.

With regard to education in forestry and more particularly to the university training of professional officers, it was generally agreed that the field of selection should be widened. It is desirable to select men, preferably with a degree in science, train them in forestry at the expense of the State or employer, and follow a period of active forest service with a refresher course at a university or forestry institute. The opinion was held that no forestry school should be established unless fully equipped and adequately staffed, that the standard of professional training should be raised. The necessity for sub-professional training was stressed and, in view of the essentially practical nature of such training, completely vocational in character and local in its application, each country must develop schools to suit its own requirements.

The Conference was told that the Empire Forestry Association had undertaken the compilation of an Empire Forest Terminology. Copies of draft terms and definitions for silviculture and management are available and have been approved by panels set up to consider these subjects. There has also been prepared a draft list of terms used in utilisation and the timber trade, including wood technology, forest engineering and wood industries. These drafts will be sent out for criticism.

### **3. Reports of Technical Committees.**

Technical committees were appointed to report on Land Use, Survey of Resources, Forest Management (Silviculture, Protection, and British Forests included), Forest Products Research, Timber Supply and Education. In certain cases specific items were referred to the relevant committee; in the main, however, discussions in committee were confined to an examination of opinions and views advanced in open debate. Committee reports were placed before the full Conference, debated, and, after minor amendments, adopted, salient points being incorporated in Resolutions of the Conference. In view of the latter, and limitations of space it is not proposed to comment further on these reports. Their contents merits further study and those interested are urged to consult the published "Summary Report, Resolutions and Reports of Committees of the Fifth British Empire Forest Conference, 1947."

### **4. Resolutions of the Conference.**

These are quoted verbatim from the above mentioned report.

#### *RESOLUTION I—Forest Policy.*

The Conference re-affirms Resolution No. 1 of the First British Empire Forestry Conference (Great Britain, 1920) which sets out the fundamental principles of sound forest policy. It reads as follows:—

### *A. Forest Policy.*

"In view of the great importance to the Empire as a whole, as well as to each of its component parts, of producing a sustained yield of all classes of timber, of encouraging the most economical utilisation of timber and other forest products, and of maintaining and improving climatic conditions in the interests of agriculture and water supply, each of the Governments of the Empire should lay down a definite forest policy to be administered by a properly constituted and adequate forest service.

### *B. Survey of Resources.*

The foundation of a stable forest policy for the Empire and for its component parts must be the collection, co-ordination, and dissemination of facts as to the existing state of the forests and the current and prospective demands on them.

### *C. Constitution and Status.*

In order to attain continuity in the development of forest resources it is desirable that certain elements of stability be secured in the constitution of the forest policy. This may be done by the following measures :—

- (1) The definition (where this has not been done already) of forest policy in a Forestry Act or Ordinance.
- (2) The reservation for the purpose of economic management and development of forest land under conditions which prevent the alienation of any which is primarily suitable for forest except for reasons consistent with the maintenance of the forest policy as a whole.
- (3) The assurance to the forest authority of funds sufficient to carry out the accepted policy for a series of years.
- (4) The grant to members of the forestry services of the status of civil servants with due provision for pension.
- (5) The appointment as the chief officers of the forestry service of persons having a high standard of training in forestry, their selection and promotion being by merit alone.
- (6) The establishment in each of the larger parts of the Empire and for the Colonies not possessing responsible government collectively, of an officer or officers, having special duties of advising as to forest policy and surveying its execution."

The Conference draws the attention of Governments of the Commonwealth to the fact that the above statement has been critically examined by successive Empire Forestry Conferences and the soundness of the principles enunciated has remained unquestioned. These principles, however, had not been applied in all parts of the

Commonwealth at the beginning of the world economic depression, which affected forestry severely. The advent of war caused further widespread dislocations and largely prevented normal progress towards sound management of the Commonwealth's forest resources. The present world shortages of forest products, particularly saw timber, impose demands for critical examination of forest policies by all member governments. The Conference, while stressing the necessity of maintaining the concept of sustained yield, realises that normally allowable current cutting quotas may have to be increased, to meet emergency conditions. Temporary excess fellings should, however, be part of overall plans which will make adequate provision for compensatory measures to restore growing stock and maintain productive capacity of Commonwealth forests.

### *RESOLUTION II.—Land Use.*

The Conference approves the report of the Land Use Committee and calls the attention of the Governments of the Commonwealth to the recommendations contained therein, and particularly to the following :—

- (1) That there is urgent need for clear-cut planning based on the allocation of each type of land to the purpose for which it is best suited in the long-term interests of the national economy. Individual governments should enact legislation, where it does not already exist, for the establishment of a supreme land use authority, having adequate forest representation, with directive at the highest level, and with the power and funds necessary to implement an approved land planning policy, based on suitable land use surveys and supported by vigorous educational campaigns.
- (2) That further research into problems of land utilisation and conservation and restoration of the soil should be carried out, and that adequate funds should be made available for this purpose.
- (3) That Governments should take early steps to ensure that private or commercially owned forests and woodlands are managed in accordance with the principles of sound forestry.
- (4) That, in some countries of the Commonwealth, the encouragement of the practice of sound forestry on private, or on leased crown lands, will require adjustment of the incidence of taxation and conditions of tenure.

### *RESOLUTION III.—Survey of Resources.*

The Conference adopts the Report of the Committee on Survey of Resources and calls the attention of the Governments of the Commonwealth to the recommendations made therein, particularly to the following :—

- (1) That a preliminary survey of forest resources be undertaken or continued by all members of the Commonwealth, to be completed by December, 1957, full advantage being taken of recent developments in aerial survey technique, and of all information available from military and civil authorities or organisations.
- (2) That His Majesty's Government in the United Kingdom of Great Britain and Northern Ireland set up a Technical Committee on Aerial Survey of Forests, to provide guidance and advice on technique and to disseminate information on improved methods; such Committee to include members appointed from Forest Authorities of the Commonwealth.
- (3) That the topographical survey of the Colonial territories be accelerated to ensure completion of forest areas by 1955, and that Forest Authorities participate in such survey through allocation of specially recruited and trained personnel.

*RESOLUTION IV.—Forest Management, Silviculture and Protection.*

The Conference approves the report of the Committee on Forest Management, Silviculture and Protection and asks the Governments of the Commonwealth to give serious consideration to the following points:—

- (1) That all forest areas should be managed under working plans approved by the highest competent authority, with adequate safeguards against unnecessary deviations.
- (2) That, as the long-term element is basic to proper forest management, forest authorities must be assured of continuity in the provision of adequate finance.
- (3) That a comprehensive programme of research is a necessary corollary to efficient forest management. Special attention is directed to the importance in afforestation of further studies in soils, ecology, genetics, nutrition and growing space.
- (4) That the importance of protection of forests cannot be over-emphasised; that adequate legislation and efficient control services are essential; and that these must be supplemented by research in fire control methods and appliances, and by studies of preventive measures against insects and disease carried out by specially trained personnel.
- (5) That, in many parts of the Commonwealth, both protection of existing forests and the afforestation of degraded lands demand control of shifting cultivation and limitation of the incidence and extent of grazing.



The Conference also recommends that the section of the Committee's report dealing with British Forestry be brought specially to the attention of His Majesty's Government in the United Kingdom of Great Britain and Northern Ireland.

*RESOLUTION V.—Forest Products Research.*

The Conference adopts the Report of the Committee on Forest Products Research and calls the attention of Governments of the Commonwealth to the recommendations contained therein, particularly to the following:—

- (1) That a standing Forest Products Committee, as proposed by the 1935 Conference, be set up, whose functions shall include yet closer co-ordination with forestry, co-operation in extra-national investigations, and promotion of uniformity in research methods.
- (2) That Corresponding Committees should be set up for the purpose of interchange and collation of information on specific research programmes, and to co-ordinate subsequent action thereon.
- (3) That co-ordination of research between the forest products laboratories of the Commonwealth requires meetings of specialist officers from time to time, and that these meetings should be supplemented by such staff visits to other laboratories and forestry centres as may be possible to arrange.
- (4) That the importance of economic considerations in forest products laboratory programmes requires for some laboratories the appointment of officers specially trained in economics.
- (5) That provision should be made for the appointment of trained utilisation officers to those Colonial forest departments where experimental stations do not exist.

*RESOLUTION VI.—Timber Supplies and Marketing.*

The Conference adopts the Report of the Committee on Timber Supplies and Marketing. It is satisfied that there will be a shortage of forest products, particularly of saw timber, for an indeterminate period and certainly until the devastation caused by the war has been repaired. The Conference directs the attention of the Governments of the Commonwealth to the Committee's recommendations, and notably to the following:—

- (1) That a considerable all-round and immediate effort in timber production by all members of the Commonwealth is necessary if the Commonwealth is to play its part in restoring the general level of internal and world prosperity.

- (2) That regulated overcutting during the emergency period is necessary and justified, but demands that Governments of the Commonwealth shall pay adequate attention to forest protection and later correction of the overcut by working plan revisions.
- (3) That priority in allocation of logs should go to production of saw timber, poles, props, and plywood ; and every effort should be made to service other forest products industries with smaller sized material and utilisable waste. Further research to this end by forest products laboratories is an urgent requirement.
- (4) That attention should be paid to the possible increase in use of timber derived from tree species now considered of secondary importance, both for the purpose of alleviating current shortages and to provide for more economic working of mixed forests.
- (5) That a better understanding between producers and consumers and a revision of specifications would lead to closer utilisation. This could be facilitated by personal contacts and through visits and inspections.

#### *RESOLUTION VII.—Education.*

The Conference adopts the Report of the Committee on Education and calls the attention of the Governments of the Commonwealth to the recommendations contained therein, and particularly to the following :—

- (1) That the provision of adequately trained personnel both in the professional and sub-professional grades is essential to proper forestry.
- (2) That forestry schools should be created or maintained only under conditions providing the full time services of an adequate staff with field experience. Professional schools should concentrate on basic principles as a foundation for practical experience. Research by teaching staff and post-graduate students should be facilitated.
- (3) That, inasmuch as exploiting agencies are an integral part of planned management, provision should be made for sub-professional grade training of personnel necessary to enable such agencies to co-operate fully with the forestry services.
- (4) That, in many parts of the Commonwealth, recruitment of an adequate trained staff requires pre-selection of forest officer candidates in advance of completion of professional training. In such cases cadet training in the field is an invaluable guide to selection.
- (5) That qualifying courses on a scholarship basis should be provided for the promotion of outstanding men from sub-professional to professional grades.

### RESOLUTION VIII.—*Imperial Forestry Institute.*

This Conference recommends that further support should be given by Governments of the Commonwealth to the Imperial Forestry Institute to enable it to carry out more fully the purpose for which it was founded, i.e., to form a centre of higher studies and research in forestry. The provision of scholarships for post-graduate work at the Institute, and of facilities for travel and study in Commonwealth countries by members of the Institute staff, are suggested as forms such support could most usefully take. The Conference considers that the Institute is well staffed and equipped for training forest officers, and for supervising research work in forestry subjects, and it recommends that greater use should be made by Commonwealth foresters of the facilities provided for special study and tours.

The Conference notes with satisfaction that the Institute will shortly have a more adequate building and considers it especially appropriate that it should be well furnished in Commonwealth timbers. The Conference accordingly recommends to Commonwealth Governments that they should help with contributions of suitable material.

### RESOLUTION IX.—*Imperial Forestry Bureau.*

The Conference records its appreciation of the work of the Imperial Forestry Bureau, and particularly of the publication *Forestry Abstracts*, which most efficiently provides a valuable means of keeping foresters up to date in the literature of their profession. It notes with approval the expansion in cover of *Forest Products and Utilisation*.

The Conference considers it desirable that the Bureau should continue to deal with both the management and utilisation sides of forestry. *Forestry Abstracts* should cover both sides in a single publication; but the abstracts on forest products and utilisation should also continue to be issued separately. It recommends Commonwealth Governments to make *Forestry Abstracts* much more generally available to their forest officers by purchasing and distributing more copies.

The Conference would like the Bureau's *News Bulletin* to be continued, and is further of opinion that a translation service would form a valuable addition to the activities of the Bureau.

### RESOLUTION X.—*Empire Forestry Association.*

The Conference thanks the Empire Forestry Association for the very useful work it is doing :—

- (1) In promoting greater interest in forestry throughout the Empire.
- (2) In assisting in the development of a forest sense in the general public, through its Review and other publications.
- (3) In undertaking the preparation of an Empire Forestry Terminology.

The Conference urges foresters, the timber trade, and the general public to give ever increasing support to the Association to enable it to extend its activities.

*RESOLUTION XI.—Co-operation with the Food and Agriculture Organisation of the United Nations.*

The Conference records its appreciation of the co-operation received from the Food and Agriculture Organisation of the United Nations in sending forestry officers to attend certain Conference Sessions and to explain the work of the F.A.O. Forestry Division in which Commonwealth Forest Authorities are closely interested. The Conference fully expects that the understandings reached will be of mutual advantage to Commonwealth countries and to F.A.O.

**Papers Presented to Conference.**

*General Forestry.*

Private Forestry in Great Britain. *E. Wynne Jones.*

The Forest Situation in the United States. *L. F. Watts.*

Tabulation and Presentation of Colonial Forestry Data. *C. Swabey*  
Land Use in Tanganyika Territory. *L. T. Wigg.*

Farm Forestry in India. *A. P. F. Hamilton.*

The Imperial Forestry Institute in 1947. *Prof. H. G. Champion.*

The Imperial Agricultural Bureaux. *Sir Herbert Howard and Dr.*  
*C. F. C. Beeson.*

Regional Forest Training. *F. H. Landon.*

Regional Training of Forest Staff in Nigeria. *F. S. Collier and R. W.*  
*J. Keay.*

*Fundamental Natural Laws of the Forest.*

The Conservation of Existing Forests and the Need to Plant Forest  
Trees for Effective Soil Conservation in the Union of South  
Africa. *W. E. Watt.*

Water and Soil Conservation in Tanganyika Territory. *W. P. Steele.*

Hydrological Research in South African Forestry. *C. L. Wicht.*

The Place of Forestry in Land Utilisation with special reference to  
Soil and Water Conservation. *R. R. Waterer.*

The Place of Forestry in Land Utilisation in Australia with special  
reference to Soil and Water Conservation. *A. V. Galbraith.*

Forest Ecology in Canada. *G. A. Mulloy.*

Tropical Ecology and Research. *N. L. Bor.*

Ecology—Forestry's Fundamental Science. *Dr. J. S. Beard.*

Forest Vegetation in the Savannah Regions of Nigeria. *R. W. J.*  
*Keay.*

A New Viewpoint on the Origin of Montane Grasslands of Ceylon.  
*R. A. de Rosayro.*

The Potentialities of Genetic Research in South African Forestry.  
*S. P. Sherry.*

Field Trials of Geographical Races of *Pinus pinaster* in South Africa.

*H. B. Bycroft and C. L. Wicht.*

Forest Tree Breeding in Canada. *J. F. Farrar.*

### *Silviculture.*

A Decade of Silvicultural Research in Ceylon, 1937—1946. *C. H. Holmes.*

Developments in Silvicultural Practice in Malayan Evergreen Forests.  
*E. J. Strugnell.*

India's Tropical Wet Evergreen Forests. *A. L. Griffith.*

Practical Silviculture in the Rain Forests of Nigeria. *D. R. Rosevear.*

The Influence of Modern Trends in Timber Utilisation on Silvicultural  
Policy in British Honduras. *A. F. A. Lamb.*

The Silviculture of Exotic Conifers in South Africa. *I. J. Craib.*

Seed, Seed Supplies, and Silviculture. *C. M. Smith.*

Exotic Forests of New Zealand. *F. W. Foster.*

The Technique of Afforestation in Great Britain. *Lord Robinson.*

Treatment of Devastated Woods. *M. V. Laurie.*

### *Forest Utilisation. Forest Technology.*

Modern Trends in Timber Utilisation. *H. A. Cox.*

Forest Products Research in the United States in War and Peace.  
*G. L. Hunt.*

Forest Products Research in Canada. *T. A. McElhanney.*

Conservation by Better Utilisation. *T. A. McElhanney.*

The Forest Products Research Laboratory, Princes Risborough,  
England. *Dr. F. H. Henderson.*

Co-operative Research in the Development of the Empire's Timber  
Resources. *B. J. Rendle.*

Short Review of Current Research Work on Forest Products at Forest  
Research Institute. Dehra Dun. *D. Stewart.*

Review of Work in Progress at the Forest Products Institute, Pre-  
toria, South Africa. *M. H. Scott.*

Forestry Research—Co-operation in the Caribbean. *John Cater.*

The Quality of Mature *Pinus patula* and *P. insignis* Timber Grown in  
South Africa. *M. H. Scott and R. P. Stephens.*

Review of the Pulp and Paper Industry in India. *M. P. Bhargava.*

Exploitation of Minor Forest Products. *S. Krishna and R. L. Badh-  
war.*

Malayan Timbers for Export. *J. P. Edwards.*

Some Factors Affecting Wood Density in Pine Stems. *J. M. Turnbull.*

The Adaptation of Scandinavian Sawing Practices to the Conversion  
of Exotic Softwoods in New Zealand. *W. C. Ward and J. W.  
Syme.*

The Comparative Efficacy of Preservatives in Wood Exposed to  
Termites and Decay. *P. M. D. Krogh.*

### *Forest Injuries and Protection.*

Research in the Measurement of Forest Fire Danger. *H. W. Beall.*

Forest Fire Danger Tables (Provisional). *H. W. Beall.*

Forest Entomology in Canada. *J. J. de Gryse.*

Some Timber Insect Problems in Utilisation in the Tropics. *R. C. Fisher.*

Prevention and/or Control of Insect Borers and Fungal Stains and Decay on *Malboda myristica dactyloides* Gaertn. *C. H. Holmes.*

### *Forest Management.*

Forest Management in Australia. *V. Grenning.*

Forest Management in British Columbia. *F. S. McKinnon.*

Some Developments in the Use of Air Photographs for Forest Surveys. *H. E. Seely.*

Determination of Tree Heights from Shadows in Air Photographs. *H. E. Seely.*

National Forest Survey in New Zealand. *A. P. Thomson.*

Survey of India's Forest Resources. *P. S. Chengpa, S. Krishna, R. L. Badhwar and M. P. Bhargava.*

Post War Timber Supply in Australia and its Effect on Forest Utilisation. *L. S. Hudson.*

### *Forest Policy.*

Relations of Empire Forestry with the United Nations Food and Agriculture Organisation. *Prof. H. G. Champion.*

Forest Policy and Legislation in Great Britain. *W. L. Taylor.*

Forest Policy and Legislation in British Columbia. *C. D. Orchard.*

Forest Policy and Legislation in Nigeria. *F. S. Collier.*

Forestry Aims in the African High Commission Territories. *O. B. Miller.*

The Development of Forest Policy in Relation to Agriculture in the Greater Antilles. *C. Swabey.*