NEW ZEALAND INSTITUTE OF FORESTERS
INCORPORATED

OFFICERS 1950-52

President: A. N. Perham
Vice-President: G. H. Hocking
Secretary: A. P. Thomson
Treasurer: A. C. Forbes
Council: F. Allsop, A. E. Cooney, Owen Jones, R. B. Moorhouse

Annual General Meeting

The 1951 meeting was held at the Chateau Tongariro from 16th to 18th June with an attendance of 35 members. In spite of the almost continuous rain and the absence of all but one of the South Island members, it was quite a successful gathering, the emphasis throughout being on problems confronting the forester rather than on examples of effective management. The first day was devoted to formal business and the presentation of the following papers:

"New Zealand Forest Practice—a Review and a Preview," by D. Kennedy.
"Rainfall Statistics in the South-east of the Auckland Province," by C. S. Barker.

In the evening Mr. Ed. Stamm of the Crown-Zellerbach Corporation gave a most interesting informal talk on forestry and forest utilization problems and practices on the Pacific Coast.

The second day was taken up with a visit to Karioi and Rangataua State Forests where fortunately the weather was reasonably fine. On the final day the Taurewa Block of Tongariro State Forest was visited and pine planting on high tussock grassland and exotic interplanting of logged podocarp forest were seen through a heavy downpour. The weather was so bad that only a few members followed the afternoon itinerary through the Maori-owned West Taupo forests to the Ellis Veneer Company's factory at Manunui.

The following were the principal matters dealt with at the meeting:

Life Membership—There was much discussion on different bases of life membership, but it was apparent that many members doubted the wisdom of introducing this class of membership and finally the originators of the scheme withdrew their motion.

Forestry and Forest Products Research Advisory Committee—The Government's proposal to set up this committee with representation from the Institute of Foresters was welcomed. The Council's action in nominating Mr. E. A. Cooney as the Institute's representative was endorsed by the meeting.

Terminology Committee—This committee had been unable to bring the glossary into a form suitable for publication by the date of the Annual Meeting, but it was hoped that the incompleted sections would be finished within a few months. An additional committee was appointed to finalise the glossary and arrange publication.

Soil and Water Conservation—Considerable discussion took place on a motion viewing with alarm the condition of the vegetation in many important water catchments and urging on the authorities concerned the necessity of making a detailed and Dominion-wide survey of such catchments with a view to bringing down practical recommendations with respect to the restoration of vegetative efficiency.
or to the introduction of new types of vegetative cover such as can withstand the deleterious effects of introduced exotic animals. While there was general agreement on the extreme importance of the problem and the desirability of speeding up work upon it, it was felt that the Institute itself was not well enough acquainted with all the facts of the situation to make any immediate contribution to the problem. Finally a standing committee was set up to study the whole field of soil and water conservation and to keep the Institute fully informed, so that effective action might be taken looking to improved practices in solving this important national problem.

1952 Annual Meeting—It was decided that the next Annual General Meeting should be held in Southland, preferably in the first week-end of May. It was suggested that instead of having disconnected professional papers, there should be a symposium on a subject, such as thinning; also that firms supplying forestry tools be invited to arrange demonstrations.

Field Excursions—On the Sunday following the formal business of the annual meeting, members left the Chateau in a downpour of northerly rain which continued along the Desert Road, but fortunately at Karioi Forest under the lee of Mt. Ruapehu conditions were better.

On entering the forest a stop was made at a stand of 1927 insignis pine, part of the 912 acres of this species remaining out of the much larger area originally planted and severely damaged by Phomopsis strobi following frost. This stand still showed ample evidence of the early Phomopsis damage in multiple leaders and other malformations. However, an assessment at 21 years showed an average stocking of 385 living trees per acre with a total volume of 5,690 cu. ft., and there was virtually no Sirex damage to be seen. Discussion was mainly on the pros and cons of thinning; the consensus of opinion was against this course. After lunch at No. 8 Camp the party travelled 11 miles through the forest to species trial plots at 3,800 feet on the northern extremity. These plots planted between 1930 and 1932 comprised several acres each of Pinus ponderosa, P. murrayana, P. sylvestris, P. laricio, P. radiata, P. banksiana, Picea sitchensis and Larix decidua; in addition there were spot sown plots of the first three species. As could be expected at this altitude with 8 x 8 feet spacing there was a high proportion of malformation throughout. Ponderosa pine was the only species to show any promise; 21-year-old Sitka spruce, though only about 30 inches high, was healthy and its gradual invasion by volunteer lodgepole pine may produce interesting, if not significant, results.

Passing through upper parts of the forest the rapid invasion of unplanted land by volunteer lodgepole pine was noticeable. It is unfortunate that so much of this species on Karioi is of inferior type.

The next stop was at the crossroads by Compartments 25, 26, 39 and 40 at about 2,700 feet. A promising stand of 22-year-old lodgepole pine of better type was seen, though, at the 8 x 8 feet spacing general on this forest, the whorls were somewhat enlarged. There were still over 500 live trees per acre and thinning was urgently required. Corsican pine of the same age consisted of a mixture of types—good, bad and indifferent. Generally branching was heavy with an unusually high proportion of malformed stems. There was some discussion as to whether the fairly extensive similar areas of this species warranted as high priority in tending as ponderosa and better type of lodgepole pine. Douglas fir also planted in 1929 was considered to be one of the most promising stands on Karioi warranting early high pruning and thinning. On an adjoining frost flat Douglas fir and larch had failed; the area had been replanted with ponderosa pine 11 years later, but, as with other isolated areas of later planting, deer and wild horses had concentrated on it, but it was apparent that volunteer lodgepole pine would soon achieve a full stocking.

In Compartment 21, species trial plots planted in 1928 at 2,400 feet were seen. Lodgepole pine comparable to that seen in Compartment 25 had been high pruned and thinned to 330 trees per acre five years ago. There appeared to have
been a good crown and diameter response. Ponderosa pine had been thinned nearly 50% in 1950 and underplanted with Douglas fir. Corsican pine was mainly a mixture of inferior types. Though thinning had improved the appearance of the insignia pine plot it was apparent that the site was too hard for this species. As one would expect Lawson cypress, Douglas fir and western red cedar had failed on this harsh frost flat and been overplanted with ponderosa pine in 1955.

In Compartment 10 the party saw a mixture of ponderosa and inferior type lodgepole pine planted in 1932. A few years ago it appeared that the ponderosa would soon be suppressed unless early relief were given. However, the ponderosa now seems to be holding its own and may eventually outgrow the lodgepole, though thinning will be required fairly soon if satisfactory ponderosa crowns are to be developed. A similar mixture was seen on Golden Downs Forest during the 1950 meeting but there a better type of lodgepole pine planted 4 years after the ponderosa pine had achieved almost complete dominance.

Also seen in Compartment 10 was a stand of ponderosa pine planted 8 x 8 feet in 1932 and thinned from 610 to 317 stems per acre in 1950. At that time the crop height was only 31 feet, but 70% of the thinnings were multiple leaders, the balance being mainly rough “bull” type and suppressed trees. As there is little prospect of utilizing first thinnings of ponderosa on this forest, an early concentration of growth on the better stems seems to warrant this heavy early thinning.

It was generally agreed that the extensive areas of almost flat land at Karioi offered great scope for power saws for thinning; indeed the portable circular saw seemed to provide the only means of treating the very large areas which would become due for first thinning in the next few years. The absence of anything but quite insignificant Sirex damage was commented upon by many Rotorua members.

Time did not allow member to see much in the adjoining Rangataua State Forest. The route passed through the lower part of the forest where an area worked under an earlier timber concession was being re-worked on contract for hewn red beech and for silver beech sawlogs. Though some seedlings from the good seed year of 1949 were noticeable it was apparent that beech regeneration on these workings was quite inadequate due apparently to the heavy undergrowth. Interplanting with Douglas fir or other exotic species was suggested as a means of retaining much of this forest in a productive state.

The second field day was marred by continuous heavy rain. Only a brief view was obtained of ponderosa, Corsican and lodgepole pines planted during the past 12 years on bleak red tussock country between 2,500 and 3,000 feet at Taurewa. The most significant feature of these plantings was the Sirex damage in Corsican, ponderosa and lodgepole pines before the crowns had closed. Characteristically the top 10 feet were killed while the lower laterals remained alive.

Turning off the highway at Taurewa village and proceeding down the Pokaka Timber Company’s road through Tongariro Forest, 1938 and 1939 plantings of western red cedar and Lawson cypress were seen on matai-totara-rimu forest which had been logged and accidentally burnt. The cedar looked very well in a fully stocked stand; the local staff were less happy about the Lawson cypress which was continuing to suffer a rather high Armillaria mellea mortality. Proceeding, the party saw more recently logged areas interplanted with Douglas fir in 1949 and 1950.

After lunch at Tokaanu most northern members proceeded home via Taupo but a smaller party continued over the Waitui Saddle to Manunui. The weather was too bad for a visit to a typical logging operation in these West Taupo forests, but a most interesting and instructive time was spent at the Ellis Veneer Company’s factory at Manunui. Our thanks are due to Mr. Basil Maude for demonstrating the various processes in the manufacture of rotary and sliced veneer and plywood, and for entertaining the party at afternoon tea prior to its dispersal homeward.
Rotorua Section

The Rotorua Section of the Institute had another successful year with a membership of 56.

At the seventh Annual Meeting on 25th August, Mr. A. N. Sexton was elected Chairman, Mr. S. E. Masters Secretary and Messrs. D. D. Dun, H. V. Hinds and F. E. Hutchinson to the Programme Committee.

Addresses given during the year were:

- "Some Impressions of the Papers on Forestry Delivered at the 1951 Royal Society Science Congress at Christchurch," by Mr. A. P. Thomson.
- "Some Aspects of Australian Forestry," by Mr. F. E. Hutchinson.
- "The Soils of the Central North Island Plateau," by Mr. I. L. Baumgart.
- "The Estimation of Animal Populations," by Mr. Thane Riney. This lecture was illustrated with lantern slides.

PUBLICATIONS RECEIVED

Receipt of the following publications during 1951 is acknowledged by the New Zealand Institute of Foresters.

Institute members are reminded that forestry literature received by the Institute and listed in the Journal annually is available on application to Mr. R. S. Macarthur, Forest Research Institute, Private Bag, Whakarewarewa, Rotorua.

Australia, Commonwealth Scientific and Industrial Research Organization, Division of Forest Products,
Reprint No. 112 : The Mechanical Properties of Red Tulip Oak.
Reprint No. 114 : Rheological Changes During Gel Formation in Adhesive Systems.
Reprint No. 127 : Tree Growth Stresses. III. The Origin of Growth Stresses.
Reprint No. 128 : The Swelling Behavior of Conifer Tracheids and the Concept of a Skin Substance.
Reprint No. 130 : Wood Structure in Relation to Growth in Eucalyptus gigantea Hook. f.
Reprint No. 132 : The Variation in Cell Length within a Growth Ring of Certain Angiosperms and Gymnosperms.
Reprint No. 142 : Creep in Initially Green Wooden Beams.
Reprint (unnumbered) : An Electronic Microscopic Investigation of the Cell Wall Organization of Conifer Tracheids and Conifer Cambium.
Reprint (unnumbered) : Tannin-Formaldehyde Resins as Adhesives for Wood.
Reprint (unnumbered) : Aromatic Aldehydes from the Oxidation of Some Australian Woods and their Chromatographic Separation.
Reprint (unnumbered) : The Development of Synthetic Resin Adhesives for Improved Wood. I. Alkane-Formaldehyde Resins in Phenolic Adhesives. II. Cast Phenolic Adhesives.
Reprint (unnumbered) : Equipment for Simultaneous Determination of Thermal Conductivity and Diffusivity of Insulating Materials Using a Variable-State Method.
Australia, Forests Commission of Victoria.
Australia, Forestry and Timber Bureau.

275

British Forestry Commission.

Annual Reports for the Years Ending 30th September, 1949 and 1950.


Forest Record No. 7: General Volume Tables for Birch in Great Britain.

Forest Record No. 10: General Volume Tables for Norway Spruce in Great Britain.

Forest Record No. 11: General Volume Tables for Corsican Pine in Great Britain.

Booklet No. 3: Chestnut Blight.

Britain's Forests: Tintern.

Britain's Forests: Coed y Brenin.

Britain’s Forests: Cannock Chase.

Guide to the National Pinetum and Forest Plots at Bedgebury.


F.A.O.

Bibliography of Forestry and Forest Products, September 1950-January 1951.


Forestry and Forest Products Studies No. 2: Forest Policy, Law and Administration.


Forestry Abstracts. Vol. 12, Nos. 2 and 3.


Great Britain, Department of Scientific and Industrial Research, Forest Products Research Laboratory.

Forest Products Research, 1948.


Indonesia, Forest Research Institute.

Communication No. 31: Forest Tree Species for Planting on a Large Scale.

Communication No. 32: Carbonization of Some Indonesian Woods in an Electrical Laboratory Oven.

Communication No. 33: Distribution, Ecology and Silvicultural Possibilities of the Trees and Shrubs of the Savana Forest Region in Eastern Sambawa and Timor.

Report No. 47: Tabellarisch Overzicht van de Beste Afmetingen van Stumps van een Aantal Houtsoorten en Groenbamesters.

Tectona. Deel 41, Afl. 1 and 2, 1951.

Irish Forestry. Vol. 8, No. 1, 1951.

New York State College of Forestry.

Wood Decay in Houses.

New Zealand Forest Service.


Information Series No. 9: Insignis Pine.

Information Series No. 10: Principles of Wood Preservation.

New Zealand Gardener. Vol. 7, Nos. 5—12; Vol. 8, Nos. 1—4, 1951.


New Zealand Geographical Society Record. No. 9, 1950.

New Zealand Government.

The New Zealand Economy, 1939 to 1951.

New Zealand Journal of Science and Technology.

Sect. A. Vol. 31, Nos. 4 and 5; Vol. 32, Nos. 1—6; Vol. 33, Nos. 1—4.

Sect. B. Vol. 31, Nos. 1—6; Vol. 32, Nos. 1—6; Vol. 33, Nos. 1—3.


Norway, Forest Research Institute.

Reports No. 38, 1950.

276
Portugal, Department of Forestry.
Subericulture.
Royal Society of New Zealand.
Spain, Instituto Forestal de Investigaciones y Experiencias.
Ano 21, Num. 53: La Celulosa de Agotados de Madera de Castano.
Ano 21, Num. 54: Resiacion con Estimulantes Quimicos.
Ano 21, Num. 55: Analisis de Sueos Forestales Espanoles.
Ano 22, Num. 57: Salicaceas de Espana.
Sudan, Ministry of Agriculture.
Bulletin No. 4: Distribution of Tree Species in the Sudan in Relation to Rainfall and Soil Texture.
Sweden, Forest Research Institute.
Newsletter No. 64.
Sweden, Royal School of Forestry, Stockholm.
Bulletin Nos. 5 and 6.
Union of South Africa, Department of Forestry.
Bulletin No. 35: The Pines of Mexico and British Honduras.
United States, Department of Agriculture.
Agricultural Monograph No. 6: Management of Ponderosa Pine in the South West.
Agricultural Handbook No. 9: Southwestern Trees.
Forest Resources Report No. 1: Forest Resources of the Lake States Region.
Yale University.
Bulletin No. 56: Ecology and Silviculture of Whitecedar and Associated Hardwoods in Southern New Jersey.
School of Forestry, 1951-52.

ROLL OF MEMBERS

Honorary Members
Year elected
1929 Leonard Cockayne, Esq., C.M.G., Ph.D., F.R.S., F.R.S.N.Z.
1929 Professor H. B. Kirk, M.A., F.R.S.N.Z.
1931 Right Hon. Sir H. F. D. Bell, P.C., G.C.M.G., K.C.
1932 Roderick Macrae, Esq., c/o T. Lindsay, Esq., 11 Malfroy Road Rotorua.
1933 Professor A. J. Cajander.
1937 Professor R. S. Troup, C.I.E., C.M.G., D.Sc., F.R.S.

277
1937 D. Tannock, Esq., O.B.E., A.H.R.H.S., 33 Montgomery Avenue, Dunedin.
1939 Professor Emeritus H. H. Chapman, M.F., Sc.D., School of Forestry, Yale University, New Haven 11, Connecticut, U.S.A.
1936 H. Roche, Esq., Beach Road, Tahunui, Nelson.
1951 F. W. Foster, Esq., B.A., B.Sc. (For.), Onehuka Road, Lower Hutt, Wellington.

Members

Allsop, F., Forest Research Institute, Private Bag, Whakarewarewa, Rotorua.
Barker, C. S., Railway Forestry Office, Private Bag, Wellington.
Biggs, C., N.Z. Forest Service, P.O. Box 149, Nelson.
Birch, T. T. C., N.Z. Forest Service, P.O. Box 894, Wellington.
Campbell, R. D., 22 Platina Street, Remuera, Auckland, S.E.2.
Cooney, E. A., Selwyn Plantation Board, P.O. Box 48, Darfield.
Cutten, E. Y., Forest Research Institute, Private Bag, Whakarewarewa, Rotorua.
Darby, S. A. C., N.Z. Forest Service, P.O. Box 387, Palmerston North.
Dolamore, N. J., 14 Chapel Street, Tauranga.
Duff, G., Forest Research Institute, Private Bag, Whakarewarewa, Rotorua.
Entrican, A. R., N.Z. Forest Service, P.O. Box 894, Wellington.
Fail, V. T., Afforestation Proprietary Ltd., P.O. Box 181, Taupo.
Field, J. F., 58 Avenal Street, Invercargill.
Forbes, A. C., Forest Research Institute, Private Bag, Whakarewarewa, Rotorua.
Foresman, J. W., N.Z. Forest Service, Kaingaroa Forest, Private Bag, Rotorua.
Foweraker, C. E., Canterbury University College, P.O. Box 1026, Christchurch.
Goudie, H. A., P.O. Box 25, Rotorua.
Hinds, H. V., Forest Research Institute, Private Bag, Whakarewarewa, Rotorua.
Hocking, G. H., N.Z. Forest Service, P.O. Box 387, Palmerston North.
Holloway, J. T., N.Z. Forest Service, P.O. Box 513, Christchurch.
Hutchinson, F. E., N.Z. Forest Products Ltd., P.O. Box 14, Tokoroa.
Johnson, J., N.Z. Forest Service, P.O. Box 894, Wellington.
Jolliffe, W. H., N.Z. Forest Service, P.O. Box 894, Wellington.
Jones, Owen, 10 Grey Street, Rotorua.
Kennedy, D., N.Z. Forest Service, P.O. Box 25, Hokitika.
Lyght, J. F., N.Z. Forest Service, P.O. Box 211, Rotorua.
McGavock, A. D., 433A Papanui Road, Christchurch.
McKinnon, A. D., N.Z. Forest Service, P.O. Box 894, Wellington.
Masters, S. E., Forest Research Institute, Private Bag, Whakarewarewa, Rotorua.
Moorhouse, R. B., N.Z. Forest Products Ltd., P.O. Box 14, Tokoroa.
Perham, A. N., Palfrey Street, Upper Hutt.
Poole, A. L., N.Z. Forest Service, P.O. Box 894, Wellington.
Rawlings, G. B., Forest Research Institute, Private Bag, Whakarewarewa, Rotorua.
Reid, J. S., N.Z. Forest Service, P.O. Box 894, Wellington.
Sando, C. T., N.Z. Forest Service, P.O. Box 894, Wellington.
Sexton, A. N., N.Z. Forest Service, P.O. Box 7, Tapanui.
Skipworth, M. R., Botanic Gardens, Dunedin.
Smith, C. M., Botany Division, 8 The Terrace, Wellington.
Stewart, E. V., 16 Standen Street, Karori, Wellington.
Sutherland, Miss M., Extension Division, Dept. of Agriculture, Wellington.
Thulin, I. J., Forest Research Institute, Private Bag, Whakarewarewa, Rotorua.
Thompson, T. S., N.Z. Forest Service, P.O. Box 149, Nelson.
Thomson, A. P., N.Z. Forest Service, P.O. Box 894, Wellington.
Ward, W. C., N.Z. Forest Service, P.O. Box 894, Wellington.

Associate Members

Allison, K. W., 73 Lonsdale Street, Mornington, Dunedin.
Anderson, W. S., Whakatane Board Mills Ltd., Te Teko.
Baigent, P. L., N.Z. Forest Service, P.O. Box 191, Masterton.
Boardman, W. N., N.Z. Forest Service, P.O. Box 894, Wellington.
Bronte, J. M., Box 8, Upper Hutt, Wellington.
Buckett, M. R., N.Z. Forest Products Ltd., P.O. Box 1884, Auckland.
Buckinghamham, F. O., N.Z. Forest Service, P.O. Box 211, Rotorua.
Carter, W. G. S., N.Z. Forest Service, P.O. Box 894, Wellington.
Chavasse, C. G. R., N.Z. Forest Service, P.O. Box 47, Otautau.
Collett, R. G., N.Z. Forest Service, P.O. Box 894, Wellington.
Conway, M. J., N.Z. Forest Service, P.O. Box 3, Reefton.
Cooney, H. J., N.Z. Forest Service, P.O. Box 45, Westport.
Currie, J. T., N.Z. Forest Products Ltd., Pinedale, Putaruru.
Cruttwell, C. R., N.Z. Forest Service, P.O. Box 69, Invercargill.
Davies, L. T., N.Z. Forest Service, P.O. Box 17, Ohaume Junction.
Dun, D. D., N.Z. Forest Service, P.O. Box 211, Rotorua.
Ensor, E. E., N.Z. Forest Service, P.O. Box 25, Hokitika.
Ewart, J. W., c/o Box 70. New Plymouth (for re-addressing).
Faulkner, J. R., Matakania Island, P.O. Box 74, Tauranga.
Foley, T. A., Commonwealth Forest School, Canberra, A.C.T., Australia.
Grainger, M. B., N.Z. Forest Service, P.O. Box 894, Wellington.
Grayburn, A. W., N.Z. Forest Service, Kaingaroa Forest, Private Bag, Rotorua.
Groome, J. G., N.Z. Forest Service, P.O. Box 387, Palmerston North.
Harrison-Smith, J. L., Whakatane Board Mills Ltd., Te Teko.

279
Henry, J. E., N.Z. Forest Products Ltd., Private Bag, Putaruru.
Irvine, R. E., Forest Research Institute, Private Bag, Whakarewarewa, Rotorua.
Janson, R. W. G., N.Z. Forest Service, P.O. Box 387, Palmerston North.
Lawn, J., N.Z. Forest Service, P.O. Box 25, Hokitika.
Lawrence, R. J., N.Z. Forest Service, P.O. Box 348, Napier.
McDonald, F. J., Hickson's Impregnation Ltd., P.O. Box 2035, Auckland.
McEnaney, J. B., 87 Peel Street, Westport.
McKibbin, W. J., N.Z. Forest Service, P.O. Box 38, Te Kuiti.
Macarthur, R. S., Forest Research Institute, Private Bag, Whakarewarewa, Rotorua.
Mapsleden, P. W., N.Z. Forest Service, P.O. Box 942, Auckland.
Martin, R. M., N.Z. Forest Service, P.O. Box 513, Christchurch.
Miller, F. L., Forest Research Institute, Private Bag, Whakarewarewa, Rotorua.
Miller, J. T., N.Z. Forest Service, P.O. Box 7, Tapanui.
Moir, T., N.Z. Forest Service, Kaingaroa Forest, Private Bag, Rotorua.
Moore, A. M., N.Z. Forest Service, P.O. Box 393, Gisborne.
Morgan, F. D., N.Z. Forest Service, P.O. Box 894, Wellington.
Mountain, C. G., Mount Stewart, Katikati, Bay of Plenty.
Murrell, N. S., N.Z. Forest Service, P.O. Box 69, Invercargill.
Naylor, K., N.Z. Forest Service, P.O. Box 3, Reefton.
Orman, H. R., Forest Research Institute, Private Bag, Whakarewarewa, Rotorua.
Ormerod, J. L., N.Z. Forest Service, P.O. Box 17, Okahune Junction.
Overington, J. R., N.Z. Forest Service, P.O. Box 211, Rotorua.
Perham, F. J., N.Z. Forest Service, P.O. Box 942, Auckland.
Ranger, F. J., N.Z. Forest Service, P.O. Box 149, Nelson.
Reeves, P. A., N.Z. Forest Service, P.O. Box 69, Invercargill.
Reynolds, C. J. M., N.Z. Forest Service, P.O. Box 2, Kaikohe.
Scrivens, C. O., N.Z. Forest Service, P.O. Box 3, Reefton.
Stanton, J. G., N.Z. Forest Service, P.O. Box 47, Otatara.
Stringer, T. E., N.Z. Forest Service, P.O. Box 78, Thames.
Ure, J., N.Z. Forest Service, P.O. Box 211, Rotorua.
Verey, J. G. H., N.Z. Forest Service, P.O. Box 149, Nelson.
Wade, A. C. B., c/o Police Station, Whangarei.
White, A., Parks and Reserves Dept., City Council, Lower Hutt.
Williams, A. W., N.Z. Forest Service, P.O. Box 211, Rotorua.
Williams, R. W. M., N.Z. Forest Service, P.O. Box 47, Otatara.
Wright, W. F., N.Z. Forest Service, P.O. Box 894, Wellington.

Student Members

Bell, J. P., c/o Hickson's Impregnation Ltd., Marton.
Bell, Mrs. J. P. (nee Wilson), c/o Hickson's Impregnation Ltd., Marton.
Bell, L., N.Z. Forest Service, P.O. Box 513, Christchurch.
Bibby, Miss K. M., Forest Research Institute, Private Bag, Whakarewarewa, Rotorua.
Brown, C. H., Commonwealth Forestry School, Canberra, A.C.T., Australia.
Cameron, R. J., N.Z. Forest Service, P.O. Box 942, Auckland.
Chevis, A. F., N.Z. Forest Service, P.O. Box 894, Wellington.
Church, J. A., N.Z. Forest Products Ltd., P.O. Box 14, Tokorua.
Clifton, N. C., N.Z. Forest Service, P.O. Box 894, Wellington.
Cornwell, W. L., 27 Marewa Road, Greendale, Auckland, S.E.4.
Cunningham, A., N.Z. Forest Service, P.O. Box 894, Wellington.
Familton, A. K., 265 Barbadoes Street, Christchurch.
Fenton, R. T., N.Z. Forest Service, P.O. Box 894, Wellington.
Hall, A. W., N.Z. Forest Service, P.O. Box 513, Christchurch.
Harris, J. M., Forest Research Institute, Private Bag, Whakarewarewa, Rotorua.
Harrison, H. V., 101 Hackthorne Road, Cashmere Hills, Christchurch, S.2.
Hughes, J. W., Rai Valley, Marlborough.
Janson, F. G., N.Z. Forest Service, P.O. Box 69, Invercargill.
Johnson, T. W., Aranoni, Clifton, Sumner, Christchurch.
Kerr, C. J., N.Z. Forest Service, P.O. Box 17, Ohakune Junction.
Lancaster, Miss M. E., Forest Research Institute, Private Bag, Whakarewarewa, Rotorua.
Levy, J. W., N.Z. Forest Service, P.O. Box 2, Kaikohe.
Lloyd, R. C., N.Z. Forest Service, Private Bag, Port Fitzroy, Great Barrier Island.
Molloy, G. J., N.Z. Forest Service, P.O. Box 894, Wellington.
Morris, J. Y., N.Z. Forest Service, P.O. Box 513, Christchurch.
McKelvey, P. J., Forest Research Institute, Private Bag, Whakarewarewa, Rotorua.
Nicholls, J. I., N.Z. Forest Service, P.O. Box 513, Christchurch.
Perham, B. W. ("K" Force), c/o A. N. Perham, Palfrey Street, Upper Hutt.
Pullar, D. A., College House, Rolleston Avenue, Christchurch.
Raymond, D. G., N.Z. Forest Service, P.O. Box 47, Otatara.
Reed, J. M., Forest Research Institute, Private Bag, Whakarewarewa, Rotorua.
St. John, D., Forest Research Institute, Private Bag, Whakarewarewa, Rotorua.
Usmar, A. K., N.Z. Forest Service, P.O. Box 894, Wellington.
Wakelin, L. F., N.Z. Forest Service, P.O. Box 894, Wellington.
Weston, C. G., Forest Research Institute, Private Bag, Whakarewarewa, Rotorua.
Williamson, J. A., N.Z. Forest Service, P.O. Box 513, Christchurch.
Wilson, H. H., N.Z. Forest Service, P.O. Box 387, Palmerston North.