The NZ Logging Industry Research Organisation (LIRO) was formed as a result of the recent (July 1991) merger of the two groups working on harvesting research, the Harvesting Planning Group of FR1 and the Logging Industry Research Association (LIRA). It currently employs a director, 20 researchers and five support staff.

As a successful applied research organisation, it has some distinctive characteristics. One is its close links with industry which provide direction and focus for much of the research work; another is the number of mechanisms that exist for providing rapid feedback of trial results, through brief publications, videos, seminars, industry meetings and field days. A strong emphasis is given to close liaison with logging contractors, who play a key role in the introduction and implementation of new methods and technology, with the support of forest owners. It also has one of the best collections of logging literature in its information centre featuring computer access using key words, and access to overseas data bases.

The main challenge facing the organisation at the present time is the negotiation of an organisational relationship with the new Forest Research Institute structure that satisfactorily meets the requirements of both groups.

Formation of NZFRI as a Crown Research Institute with liability for taxation and return on investment requirements increased the need for clarification of the relationship. A Memorandum of Understanding has been agreed between the Board of LIRO and the Board of NZFRI whereby LIRO will be recognised as a division of NZFRI while retaining the industry membership funding structure as in the past.

The organisation has a three-year research programme which is developed through close consultation with the forest industry with mechanisms for identifying high priority projects. Funding is obtained from both industry (on a levy basis) and Government (through the Foundation for Research Science and Technology). Restructuring of the research programme, following the merger, saw an increased emphasis on Environmental Research, reflecting the impact of the Resource Management Act.

NZ forest resource data now available

Two major statistical reports detailing New Zealand’s plantation forest resource are now available.

The eighth edition of the National Exotic Forest Description provides a summarised inventory of New Zealand’s production forest resource as at April 1, 1991. Forest area data are compiled annually from surveys of forest growers and consultants who own, manage or administer plantation forest areas.

Area information is provided by age class and territorial authority for four species groups – radiata pine, Douglas fir, other introduced conifers and introduced hardwoods – and in terms of four broad tending regimes.

This data is particularly relevant to resource planning and determining investment opportunities in forest development and processing.

Combining the yield tables and the area information enables accurate calculation of the total wood volume available for harvest, and prediction of future timber volumes.

The National Exotic Forest Description is seen nationally and internationally as the most authoritative and comprehensive description of the New Zealand plantation forest resource.

Also available is the National Exotic Forest Description Yield Tables, published for the first time in a separate publication. It is the first time that such a comprehensive set of yield tables, covering the whole of New Zealand, has been brought together in a single publication.

The tables indicate yields and tending regimes for the four species groups in 10 regions, covering New Zealand – Northland, Auckland, central North Island, East Coast, Hawkes Bay, southern North Island, Nelson/Marlborough, Canterbury, West Coast, Otago/Southland.

Combining the yield tables and the area information enables accurate calculation of the total wood volume available for harvest, and prediction of future timber volumes.
The research programme is divided into four major areas:
- environmental research
- human
- logging systems
- transportation

A number of projects of interest are listed below under the major headings.

Environmental
The emphasis of the environmental work is on the identification, development and promotion of cost-effective harvesting techniques that meet environmental requirements. Major projects include the management of riparian areas, a variety of trials dealing with measurement and amelioration of soil erosion and compaction, the rehabilitation of landings and spur roads, and the utilisation or disposal of harvesting residues. Roading work includes investigations into low impact methods, prefabricated bridges, and documentation of best management practices.

Human Factors
The objective is to assist industry to provide a safer and healthier work environment without adversely affecting productivity. This is achieved through a number of projects which include the ongoing collection and analysis of accident statistics, an assessment of current accident follow-up procedures, the development and promotion of protective equipment, an analysis of the forestry and logging workforce in Otago/Southland, an assessment of the effectiveness of Polytechnic training for new entrant loggers, measurement of the physiological workload of logging tasks, and a programme to improve value recovery of logging operations.

Logging Systems
These continue the studies into improved felling and delimbing practices, and identifying and developing and improving the productivity of mechanical harvesting systems, cable systems, and ground-based systems. It also includes business management programmes to develop the skills of contractors in the areas of planning and financial management.

Transportation
The objective of the transportation programme is the evaluation of a range of material handling options to reduce costs and increase profitability. This includes modelling work on truck scheduling as well as ongoing work into the economics of trucking, truck performance and evaluation of technological developments in the transportation industry.

1993 NZIF Conference
Theme: “Managing New Zealand’s Forests for Future Markets”.
Details on inside back cover of November 1992 NZIF Forestry.

14th Commonwealth Forestry Conference
Theme: “People, the Environment and Forestry - Conflict or Harmony”.
Malaysia will be hosting the 14th Commonwealth Forestry Conference at the Shangri-La Hotel, Kuala Lumpur from September 13 to 18, 1993.
The objective of this conference is to show how forests in tropical and temperate regions can be managed in a sustainable way for the benefit of present and future generations to provide opportunities for economic development, to promote the well-being of rural people, and to conserve the forest as a habitat and for other environmental benefits. It will provide an opportunity for the exchange of views among Commonwealth forestry personnel and enable them to see for themselves the application of sustainable forestry development in the tropics.

There will be a pre-conference tour from September 8-12, 1993 to enable the participants to see forests managed under the traditional Malayan Uniform System and the current management practice of the Hill Dipterocarp Forests under the Selective Management System. Sarawak and Sabah, the eastern regions of Malaysia, will be the venues for the post-conference tour from September 19-23. There will also be a Half Day Tour and Accompanying Persons Programme during the conference.

1993 Conference – Institute of Foresters of Australia Inc.
Theme: “Australasian Forestry and the Global Environment”.
The IFA is holding its 15th Biennial Conference at Alexandra Headlands in Queensland, Australia from September 19 to 24, 1993.
The contact for registration is Peter Francis, IFA Conference Convener, GPO Box 1097, Brisbane, Queensland 4001. Telephone (07) 254-0105, Facsimile (07) 234-1200.

Forest Industries 1994 International Conference and Exhibition
Theme: “Quality”.
Forest Industry 1994 will combine a two-day conference, three-day exhibition and a two-day in-forest harvesting demonstration.
Contact: Antonia Mason, Special Events Manager, Forest Industries 1994, PO Box 5544, Wellesley Street, Auckland. Telephone: (09) 358-5455, Facsimile: (09) 358-5462.

BOOK REVIEWS

CONIFERS
Confiers: Morphology and Variation, by Mirko Vidakovic. Published 1991 by Grafecki Zavod Hrvatske, Price SNN2217.

This comprehensive work is said to be based on the author’s belief that confiers should be considered in terms of their evolution and variation, conditioned by genetics, the natural environment and man’s activities that lead to the development of new types, races, cultivars and hybrids. Originally published in Croatian, the book has been expanded and revised for this English language edition.

The book covers over 2,150 species and lower taxa, which are presented alphabetically by genera from Abies to Widdringtonia. It is very well presented and lavishly illustrated with over 450 drawings and photographs, many of them in colour. Distribution maps are provided for over 100 species.

It is a pity that this book was published at the same time as the first volume of The Conifer Manual by Humphrey...