Old Forests, New Management

An international conference entitled “Old Forests, New Management” was held in February 2008 in Hobart, Tasmania, Australia. The conference covered the ecology and silviculture of temperate and boreal old forests, and included insights from many large-scale, long-term, multidisciplinary experiments.

Biology, ecology and silviculture
The subtitle of the conference was Conservation and use of old-growth forests in the 21st century. Its core was biology, ecology and silviculture, surrounded by presentations on social, historical and regulatory aspects. The two plenary speakers captured the mood of the conference: Professor Jerry Franklin, from the University of Washington, USA, gave an overview of the biological values of old forests, noting how continued disturbance is often needed for their renewal, but also how legacy structures surviving disturbance are vital for developing complexity in the regenerating forest. Professor Jürgen Bauhus from the University of Freiburg, Germany, described the importance of silvicultural systems that develop, maintain and retain old-growth features in stands of various ages across the forested landscape.

Modern management of old forests
The success of the conference could be attributed to the simultaneous timeliness of the subject matter at local, national and international levels. The similarity of issues, and silvicultural and management responses, on four continents, namely Australia, North and South America, and Europe, was striking, and variable retention silviculture, a stand-level management and conservation approach using nature as a guide, is now recognized as the global standard for harvesting of old forests. The three Rs of modern management of old forests, retention, restoration and reservation, were also commonly acknowledged. One of the main messages of the conference was that a structural definition of old-growth was to be preferred to a time-since-disturbance definition since biodiversity responds to forest structural elements. Participants also pointed out the importance of a landscape-scale view of forest management outcomes. Finally, the influence of climate change was discussed from various perspectives. Climate change will change the forest landscape in unpredictable ways, most especially through altered disturbance regimes. It was also noted that old-growth forests have a complex interaction with the carbon cycle as they store substantial amounts of carbon but can either absorb or release carbon.

The program, details of speakers, and many of the presentations can be found at the conference website www.oldforests.com. Selected conference papers will be published in a special issue of Forest Ecology and Management, with selected papers of more regional interest being published in a special issue of Tasforests.

The "Old Forests, New Management” conference attracted 270 registrants from 20 countries. It was funded through the Tasmanian Community Forest Agreement between the Australian Commonwealth and the Tasmanian State governments, and additional sponsorship was obtained from the Sir Mark Oliphant International Frontiers of Science and Technology conference series. The conference was hosted by Forestry Tasmania and the Cooperative Research Centre for Forestry, with the support of IUFRO Units 4.00.00 Forest Assessment, Modelling and Management and 1.05.00 Uneven-Aged Silviculture.

The conference included a field trip to the Warra Long-Term Ecological Research site in Tasmania’s southern forests (www.warra.com), site of a silvicultural systems trial investigating alternatives to clear-felling in tall eucalypt forests.