

Focusing on Forest Protection

By Brian Richardson, GM Forestry Science, Scion, Conference* Chair

Forests make vital contributions to economies, the conservation of biodiversity, environmental protection and to global carbon and water cycles. These benefits are increasingly at risk from biosecurity threats resulting from growth in international trade and tourism and also from changing climates. The IUFRO International Forest Biosecurity Conference featured over 90 speakers from 14 different countries, representing a huge body of knowledge aimed at protecting forests from the risks posed by invasive pests, weeds and diseases.

What is biosecurity?

The term "biosecurity" refers to the exclusion, eradication, or effective management of pests (weeds, insects, diseases). There are many recent examples of the destruction of large forest areas, entire ecosystems, and even threats to species through the spread or change in risk patterns of forest pests and diseases. Examples include the pinewood nematode devastation in East Asia, which is an exotic parasite vectored by native insects; emerald ash borer spreading through parts of the USA and Canada; and *Phytophthora ramorum*, an invasive pathogen in California and Europe.

Trade risks

The economic and global relevance of biosecurity was well highlighted by a range of international keynote speakers sponsored by the Organization for Economic Co-operation and Development (OECD). Keynote presentations showed how the risks associated with invasive organisms are growing worldwide due to continuous growth in trade and tourism, and also from changing climates. The need for policy makers to recognize and address these risks is more critical than ever, particularly in terms of shutting down major pathways that enable the movement of pests. A serious risk pathway identified by several speakers was the trade of ornamental plants, often whole trees up to three meters tall including root balls and soil. Effective risk management is far more likely to be realized with greater international science cooperation, which was clearly one of the benefits of this conference.



Photo by courtesy of Scion: Delegates at the International Forest Biosecurity Conference visited New Zealand's Port of Tauranga to learn about phytosanitary methods for treating export logs

Multi-disciplinary approach

Delegates represented an enormous range of disciplines, all with an important role to play in supporting effective biosecurity systems. Included were forest pathologists, entomologists, weed ecologists, molecular biologists, meteorologists, modeling specialists and many others. A highlight of the conference program was a one-day workshop sponsored by the OECD during which international guest speakers discussed the challenge of integrating biosecurity research and science in policy, regulation and operational management. This diverse gathering highlighted the need for effective communication across science disciplines and between science and policy, which is what this conference facilitated.

* Report from the IUFRO International Forest Biosecurity Conference, 16-20 March 2009, Rotorua, New Zealand, hosted by New Zealand Crown Research Institute, Scion, involving IUFRO Units [7.02.00](#), [7.03.00](#), [1.01.04](#) and [8.02.02](#).

A total of 14 countries were represented: New Zealand, Australia, UK, USA, Canada, South Africa, Ireland, France, Switzerland, Finland, Czech Republic, India, Indonesia, and Korea. Over 90 oral presentations and 20 poster presentations were made at the conference. For more information and a publication of summaries, visit: www.forestbiosecurity.com