

Looking at the wood, seeing the trees and more

Australia-New Zealand
Tree Ring Science Conference
21-23 January 2025

Waipapa Taumata Rau University of Auckland,
Tamaki Makaurau Auckland,
Aotearoa New Zealand



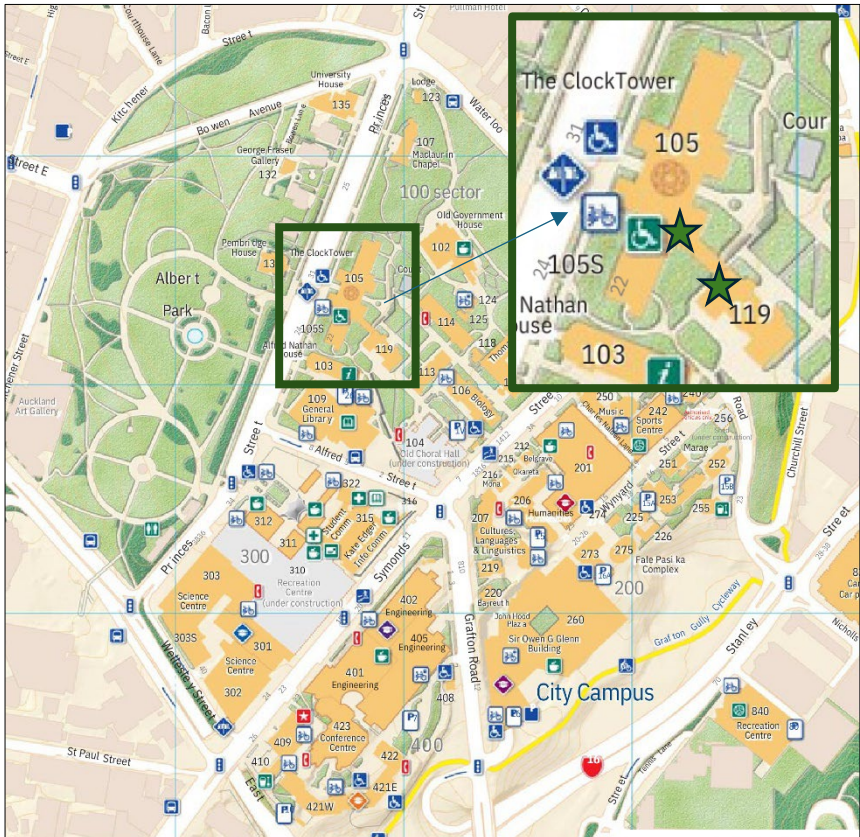
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Conference venue and map

The conference will be held in the **University Clock Tower (Building 105)** and **Clock Tower East Wing (Building 119)**, Princes Street, Auckland CBD.

- Registration, posters, and refreshments will be in the East Wing Foyer **119-120**
- The oral presentations will be in lecture theatre **105-029**.



Waipapa Taumata Rau University of Auckland City Campus.

Presentation schedule

Wednesday 22 January 2025

Time	Presenter	Session and Title
9:00	Committee	<i>Welcome</i>
Session 1: Climate reconstruction Chair: Kathryn Allen		
9:15	Jonathan Palmer (Keynote)	Reconstruction of the Indian Ocean Dipole (IOD) back to 800 CE from tree rings.
9:45	Jimmy Cordwell	Unpacking dendrochronological research in the Southern Hemisphere: opportunities for future research
10:00	Kathryn Allen	Seasonal common era temperature reconstructions for southeastern Australia

10:15- 11:00 *Morning tea*

11:00	Danielle Vernon-Kidd	Leveraging dendroclimatology for hydroclimate risk assessment: A Case Study from Tasmania, Australia
11:15	Casey Ryan	Reconstruction of fire histories of the Capes region of southwest Australia from speleothems and tree ring records
11:30	Tim Wardlaw (presented by Kathryn Allen)	Can dendrometry provide temperature response curves needed to inform adaptation responses to climate change in Tasmania's high productivity eucalypt forests?
11:45	Kathryn Allen	World Dendro 2025, Zambia

12:00- 13:30 *Lunch*

Session 2: Ecology and event reconstruction

Chair: Pauline Grierson

13:30	Sabine Kasel (Keynote)	Population dynamics of <i>Perseosia arborea</i> (Tree Geebung) in response to disturbance: implications for its conservation and management.
14:00	Alessia Bono	Rethinking potential carbon storage in New Zealand conifers by studying wood density in relation to global warming and tree age
14:15	Luitgard Schwendenmann	Diagnosing forest health: kauri dieback and dendrochronology

14:30- 15:00 *Afternoon tea*

15:00	Chris Lusk	Dynamics of southern beech (<i>Nothofagus</i>) stands in the lowland North Island of New Zealand
15:15	Sophie Newsham	Using tree-ring growth anomalies and cohort establishment to date great earthquakes on the Alpine Fault
15:30	Luitgard Schwendenmann	Wrap up of the day

16:00-18:00 Poster session with drinks and food

Poster	Kathryn Allen	How old is that macadamia tree?
Poster	Kathryn Allen	Could Australian <i>Adansonia gregorii</i> (Boab) provide multi-centennial climate records for Australia's northwest?
Poster	Melanesia Boserén, Luitgard Schwendenmann, Gretel Boswijk	Seasonal water uptake patterns in kauri trees (<i>Agathis australis</i>) using stable isotopes
Poster	Gretel Boswijk	Loaded up and sailed away: where did the kauri go?
Poster	Martina Ayelén Chacón	Can trees in a semi-arid region shrink and grow at the same time?

Poster Alexandra McKenzie The dendroecological potential of cool temperate rainforest in northern New South Wales

Thursday 23 January 2025

Session 3: Challenging trees Chair: Luitgard Schwendenmann

Time	Presenter	Session and Title
9:00	Nathan Brooks-English	Determining the age and growth rate of <i>Acacia harpophylla</i> in central Queensland, Australia, using radiocarbon in trees lacking annual rings.
9:15	Ashleigh Ford	What is a ring? Characterising ring structures in <i>Acacia aneura</i> for dendroecological analysis
9:45	Oscar Clendon	Learnings from the first attempt in creating a dated chronology for the widespread New Zealand forest tree, <i>Beilschmiedia tawa</i> .
10:00	Heather Haines	The application of tropical Australian conifer species for dendrochronological research: A review of existing work and roadmap for future priorities

10:15–11:00 *Morning tea*

Session 4: Stable isotopes and radiocarbon Chair: Gretel Boswijk

11:00	Neil Loader (Keynote)	Exploring the potential of stable isotope dendrochronology in Aotearoa New Zealand
11:30	Oliver Medd	A new LA-IRMS for stable isotope dendrochronology in Australia

11:45	Matthew Goodwin	A novel grey mangrove oxygen isotope record from the Hunter Wetlands National Park, Newcastle, New South Wales
12:00	Alan Hogg	The role of dendrochronology in Southern Hemisphere radiocarbon calibration
12:15	Rowan McBride	AMS wiggle-match dating in New Zealand archaeological contexts: Constraints, limitations and potential of the technique.

12:30 – 14:00 *Lunch*

Session 5: Dendroarchaeology

Chair: Gretel Boswijk

14:00	Dilys Johns, Malcolm Patterson	Nui ake i te tūnga i te wā- more than a placement in time: calendar dates and a Māori experience with taonga appraisal
14:15	Em Sharp	Reassessing the potential of <i>Podocarpus totara</i> (totara) for dendrochronology
14:30	Danielle Verdon-Kidd	Dendrochronological analysis of historic turpentine timber from Catherine Hill Bay, New South Wales, Australia
14:45	Gretel Boswijk (Keynote)	Reflections on dendroarchaeology in New Zealand
15:15	Committee	Closing address

15:30 – *Farewells*

Haere Ra!

Thank you for
attending our conference