

Newsletter – December 2019

Kia ora! Welcome to the first newsletter from the Centre for Biodiversity and Biosecurity (CBB). We have decided to produce a newsletter to keep CBB members and anyone else interested informed of events and new developments related to our Centre. Newsletters will be circulated via email and our [web site](#). We will solicit contributions from CBB members for future issues of the newsletter.

CBB Māori Engagement

CBB is looking to strengthen our engagement with Māori, with several new initiatives in 2019:

1. We have adopted a Māori name for CBB, Te Whare Tiaki Koiora - Mo te orangatonutanga o tō tātou Kanorau Koiora. This was announced at the first Joint Graduate School (JGS) student seminar day in June 2019 and it is great to see this popping up in email signatures and elsewhere.
2. CBB launched a new initiative in 2019 funding [summer research scholarships](#) for Stage one Māori students in the School of Biological Sciences (SBS). The scholarships are to encourage Māori students to study ecology through exposure/participation in our research, as well as to foster engagement of CBB staff with Māori students. Two students have recently started; Lenhy Massey is working with Dr Anne Gaskett on pollination ecology and animal behaviour, and Kaitlin Mansfield is based with Dr Kristal Cain learning different techniques and approaches used in ecology. Welcome Lenhy and Kaitlin!
3. CBB, along with New Zealand's Biological Heritage National Science Challenge, Manaaki Whenua - Landcare Research, and Te Pūnaha Matatini, provided funding to support production of a [special issue of the New Zealand Journal of Ecology on mātauranga Māori](#) (traditional ecological knowledge). The special issue was



Quotes from the papers included in the NZ J Ecology special issue were on display at the launch (left). Some of the guest editorial team gathered with advisor Rau Kirikiri (second from right) and the NZ Ecological Society's president, Assoc Prof Cate Macinnis-Ng (front left, CBB member). Photos Manaaki Whenua-Landcare Research.

launched at the New Zealand Ecological Society annual conference at Lincoln, December 2019. Prof Jacqueline Beggs was part of the guest editorial team and the issue included contributions from CBB staff as reviewers and authors (in bold):

McAllister TG, **Beggs JR**, Ogilvie S, Kirikiri R, Black A, Wehi PM. 2019 Kua takoto te manuka: matauranga Maori in New Zealand ecology. *NZ J Ecology* 43(3)

Veale AJ, de Lange P, **Buckley TR**, Cracknell M, Hohaia H, Parry K, Raharaha-Nehemia K, Reihana K, **Seldon D**, Tawiri K, Walker L. 2019 [Using te reo Māori and ta re Moriori in taxonomy](#). *NZ J Ecology* 43(3): 3388

Walker ET, Wehi PM, Nelson NJ, **Beggs JR**, Whaanga H. 2019 [Kaitiakitanga, place and the urban restoration agenda](#). *NZ J Ecology* 43(3): 3381

Wehi PM, **Beggs JR**, MacAllister TR 2019 [Ka mua, ka muri: the inclusion of mātauranga Māori in New Zealand ecology](#). *NZ J Ecology* 43(3): 3379.

Introducing

Each issue of the CBB newsletter will feature a CBB member, starting with a welcome to our new co-appointee to the Joint Graduate School in Biodiversity and Biosecurity (JGS), Assoc Prof Peter Bellingham. Peter's research focuses on temperate and tropical forest ecology. He studies the consequences of disturbance and biological invasions to plant community dynamics and ecosystem function. His publications in 2019 include:



Assoc Prof Peter Bellingham

Peltzer, D.A., Bellingham, P.J., Dickie, I.A., Houlston, G., Hulme, P.E., Lyver, P.O'B., McGlone, M., Richardson, S.J. & Wood, J. 2019. Scale and complexity implications of making New Zealand predator-free by 2050. *Journal of the Royal Society of New Zealand*.

Allen, R.B., MacKenzie, D.I., Bellingham, P.J., Wiser, S.K., Arnst, E.A., Coomes, D.A. & Hurst, J.M. 2019. Tree survival and growth responses in the aftermath of a strong earthquake. *Journal of Ecology*.

McLaren, K., Luke, D., Tanner, E.V.J., Bellingham, P.J. & Healey, J.R. 2019. Reconstructing the effects of hurricanes over 155 years on the structure and diversity of trees in two tropical montane rainforests in Jamaica. *Agricultural and Forest Meteorology*, 276-277, 107621.

Castro-Díez, P., Vaz, A.S., Silva, J.S., van Loo, M., Alonso, A., Aponte, C., Bayon, A., Bellingham, P.J., Chiuffo, M.C., DiManno, N., Julian, K., et al. 2019. Global effects of non-native tree species on multiple ecosystem services. *Biological Reviews*, 94, 1477-1501.

JGS Student Seminar Days

The JGS holds seminar days twice a year for postgraduate students to present and share their research. CBB students work on a wide range of biodiversity and biosecurity topics, and fantastic presentations this year have included everything from endophytes isolated from kauri root tissue (MSc student, Ki Taurangi Bradford) to using glitter as a dietary marker for stick insects (PhD student, Claudio Cubillos) and the home range and movement of feral cats (PhD student, Cathy Nottingham).

The November 2019 day was a special occasion as it marked the move of the University of Auckland out of the Tāmaki campus. School of Biological Sciences staff and students based at Tāmaki have now shifted to the city campus. To mark the transition CBB arranged guest speaker Prof Dianne Gleeson from the University of Canberra to join us for the day. Dianne is a wildlife geneticist previously based at Manaaki Whenua Landcare Research. She specialises in the application of DNA technologies for biodiversity conservation outcomes in both New Zealand and Australia.



Chinese Delegation

CBB hosted a visit from a Chinese Delegation at the University of Auckland on 14 May 2019. They were very interested in the concept of a centre focussed on biodiversity and biosecurity and the emphasis on capability and capacity building. There is potential for developing an ongoing relationship. Prof Jacqueline Beggs, Prof Zhi-Qiang Zhang and Prof Mick Clout met with:

1. Prof. LIU Shirong, President and professor in forest ecology, Chinese Academy of Forestry (CAF)
2. Prof. JIANG Zeping, Director of Research Institute of Forest Ecology, Environment and Protection, CAF, and professor in silviculture
3. Prof. CAI Daoxiong, Director of Experimental Centre of Tropical Forestry, CAF
4. Prof. WU Bo, Deputy Director of Institute of Desertification Studies, CAF, and professor in arid land/ecosystem management
5. Prof. LI Diqiang, Professor in nature conservation, Research Institute of Forest Ecology, Environment and Protection, CAF

CBB Strategy Action Plan

In July 2019, the CBB Board reviewed the decadal strategy for CBB. Based on our review and the 2018 survey of staff and students, we have drafted a priority action plan to guide us through the next few years. There are four strands, with objectives to:

1. Enhance CBB visibility (internally and externally)
2. Enhance member ownership of CBB
3. Increase the impact of CBB
4. Engage effectively with Māori

We welcome any feedback, including offers of help on any of the proposed initiatives. The draft document was emailed to CBB staff and students. Please email any responses to j.beggs@auckland.ac.nz by 31 January 2020.

Jacqueline Beggs
December 2019