

Centre for Biodiversity and Biosecurity 10-year Strategy

August 2017 – August 2027

Approved by CBB Advisory Board July 2017

Strategy to be revised annually



Vision: Innovative science solutions to protect and enhance New Zealand's biodiversity in native and managed systems			
Mission: Delivering biodiversity and biosecurity knowledge and capability for NZ's native and managed systems			
Greatest Imaginable Challenge: Recognised globally as a leader in developing national capability through science of outstanding quality and relevance to inform policy, strategy and management in biodiversity and biosecurity.			
Key Partners <ul style="list-style-type: none"> Ministry for Primary Industries Department of Conservation Auckland Council (incl. Museum) Auckland Zoo Iwi Natural Resources Sector (e.g. MoE, LINZ) Predator Free New Zealand Community conservation organisations Better Border Biosecurity (B3) Industry (e.g. Fonterra) 	Value Proposition <p>#1 Combined resources of partners delivers higher impact, excellent research to address NZ's biodiversity and biosecurity issues</p> <p>#2 To improve capability in the biodiversity and biosecurity sector by producing high quality students well engaged with end-users through the JGS and undergraduate and postgraduate programmes</p>	Key Activities <ol style="list-style-type: none"> Conduct research to enhance biodiversity and biosecurity outcomes Build capability in biodiversity and biosecurity <ul style="list-style-type: none"> Supervising post grad students Teaching undergraduate courses Training opportunities for upskilling by those employed in sector Communication of research outcomes to ensure uptake by relevant agencies 	Key Resources <ul style="list-style-type: none"> People: staff & students, admin, project manager Website, blog etc Analytical capability Collections Labs Equipment Funding
Guiding principles <ul style="list-style-type: none"> Evidence- based decisions are critical for robust outcomes Combined capacity of Landcare Research & UoA leads to better outcomes i.e. CBB adds value and leads to synergy between partners UoA & Landcare Research actively seek opportunities (in good faith) that add to the success of the CBB. The CBB will build the next generation of highly-trained biodiversity/biosecurity researchers, practitioners and policy-makers Joint Graduate School and supervision of postgraduates is a critical core activity of the CBB and JGS students benefit from the expertise and resources of both UoA and Landcare Research The CBB is a valuable and valued entity that provides additional benefits beyond the Joint Graduate School Large joint funding bids add value CBB, including but not limited to the JGS, provides a structure and mechanisms to foster collaboration of mutual benefit Opportunity for international initiatives run by CBB 		Top Priority Work-streams <ul style="list-style-type: none"> Survey staff/students around CBB/JGS engagement Brief assessment of how other Centres at UoA operate and what we can learn from them Identify and promote collaborative research opportunities Improve engagement of CBB staff Identify ways we can add value to student experience Develop informative performance measures for CBB/JGS Develop a CBB communication plan Improve funding model Develop marketing plan Develop training opportunities for those already employed in sector 	



Objectives:

1. **Collaboration** – CBB will foster collaboration across biodiversity and biosecurity science, between the University of Auckland and Landcare Research with the goal of delivering science outcomes that synergistically use the skills and capacities of both organisations
2. **Impact** – the CBB will support high quality, high impact biodiversity and biosecurity research to improve environmental, social and economic outcomes
3. **Capability** – CBB, through the JGS, will contribute to the next generation of biodiversity and biosecurity science by increasing postgraduate numbers and ensuring timely and quality completions
4. **Investment** – the CBB will aim to increase external funding to support growth in research and postgraduate numbers
5. **Knowledge transfer** – through engaging with end-users, the CBB will ensure that research outputs are accessible, impactful and used

Work-stream	Short Description	Priority	Responsible	Support
1	Survey staff/students around CBB/JGS engagement	A	Margaret Stanley	Social Scientists (funded by CBB)
2	Identify and promote collaborative research opportunities	A	Director CBB, Director JGS	
3	Improve engagement of CBB staff	B	CBB Chair, Director CBB, Director JGS	
4	Identify ways we can add value to student experience	B	Director JGS	
5	Develop informative performance measures for CBB/JGS	A	Director CBB, Director JGS	
6	Develop a CBB communication plan	A	Director CBB, Director JGS	
7	Improve funding model	B	Director CBB	
8	Develop marketing plan	B	Director CBB, Director JGS	

Work-stream Details



1. Survey staff/students to evaluate CBB/JGS engagement

Description:

Conduct a survey of CBB staff and students to evaluate their awareness and engagement with CBB/JGS and identify ways to improve this. Also, solicit ideas for future CBB/JGS activities. Identify which groups are not engaged and why.

What Does Success Look Like?

- We achieve a high response rate for the survey (>30%)
- We have a clear understanding of the current successes and limitations as perceived by staff and students.

Start & Ends Dates

3 July 2017 – March 2018

RASCI:

Responsible: Margaret

Support: Social scientist(s) – CBB funded; Director CBB, Director JGS, CBB admin

Approval: CBB Board, Human ethics

Informed: CBB Board and staff

Action Items:

- Design and surveys - one for staff and one for students (will need to be different)
- Engage staff and students in survey and conduct with resulting high response rate
- Survey data to be collated and analysed

2. Identify and promote collaborative research opportunities

Description:

Enact the value proposition that the combined resources of partners deliver higher impact, and excellent research to address NZ's biodiversity and biosecurity issues than could be achieved by either party alone. Foster collaborative opportunities between Landcare Research and University of Auckland.

What Does Success Look Like?

- New high impact, high quality collaborative research initiatives, including but not limited to external funding, carried out under the auspices of the CBB.
- Number of CBB joint publications and other research activities continue to increase.
- CBB recognised and sought after as a provider of research on biodiversity and biosecurity because of the enhanced capability provided by synergies between the partner organisations.

Start & Ends Dates

March 2018 – Informed by survey (1)

RASCI:

Responsible: Director CBB, Director JGS
Support: CBB admin
Approval: CBB Board
Informed: CBB Board, staff

Action Items:

- Use CBB funds to seed new collaborations between UoA and Landcare Research
- Organise workshops/meetings/forums to foster collaboration
- Evaluate the purpose and usefulness of developing research themes within CBB, potentially aligning these with the Environment and Conservation Roadmap. Implement if appropriate.

3. Improve engagement of CBB staff

<p>Description: Identify how to engage CBB staff to ensure potential synergy of CBB is realised</p>
<p>What Does Success Look Like?</p> <ul style="list-style-type: none">• Building on survey (1) we identify and prioritise strategies for improving engagement and outcomes for staff. Staff are proud to be part of the CBB and can articulate the benefits of being part of the CBB• All potential CBB staff from both partners have self-nominated to join the CBB• CBB valued by both Landcare Research and UoA management and actively engage
<p>Start & Ends Dates March 2018 – Informed by survey (1)</p>
<p>RASCI: Responsible: CBB chair, Director CBB, Director JGS Support: CBB Admin Approval: CBB Board Informed: CBB Board, staff, Landcare Research & UoA management</p>
<p>Action Items:</p> <ul style="list-style-type: none">• Explore opportunities for Honorary appointments for non-UoA researchers (e.g. Landcare Research, Auckland Council, etc.)• Take findings from staff survey and identify/implement priority actions to enhance staff engagement (e.g communication, clear statement of intent/purpose of the CBB)

4. Identify ways the JGS can add value to student experience

Description:

How to increase student engagement and ensure we provide additional value to the postgraduate experience, e.g. internships, short courses

What Does Success Look Like?

- Building on (1) we identify and prioritise strategies for improving engagement and outcomes for JGS students
- Students value JGS membership and can clearly articulate the benefits
- Prospective students seek to join the JGS
- High quality, relevant research completed by our students that supports our vision of enhanced biodiversity and biosecurity.

Start & Ends Dates

March 2018 – Informed by survey (1)

RASCI:

Responsible: Director JGS

Support: CBB admin

Approval: CBB Board

Informed: CBB Board, staff, students

Action Items:

Take findings from student survey and identify/implement priority actions to enhance student engagement and provide a high quality student experience.

5. Develop informative performance measures for CBB, including the JGS

Description:

Devise suitable performance measures so that we can clearly describe the outcomes and value of CBB/JGS. This would include tracking graduates, scientific papers, financial performance, number of graduates, impact, measures of student experience (prizes, scholarships etc.) and satisfaction

What Does Success Look Like?

- Transparency and consistency in measuring performance of CBB/JGS
- Clarity of purpose and objectives

Start & Ends Dates

August 2017 – February 2018

RASCI:

Responsible: Director CBB, Director JGS

Support:

Approval: CBB Board

Informed: CBB Board, staff, Landcare Research & UoA management

Action Items:

- Draft performance measures
- Consult with relevant parties on appropriateness
- Implement in time for 2017 annual report

6. Develop a communication plan

Description:

Develop a strategy to improve CBB communication to both internal and external parties. This should include how to progress website development and maintenance, social media etc and might include initiatives such as an international/national high profile conference. What is the best way of getting research findings to end users? An implementation plan needs to be incorporated.

What Does Success Look Like?

- The CBB/JGS have a high profile, both internally and externally
- Communication is regularly updated and effective so that CBB staff/students and external parties are well informed about CBB activities and research outcomes

Start & Ends Dates

March 2018 – informed by survey (1)

RASCI:

Responsible: Director CBB, Director JGS

Support:

Approval: CBB Board

Informed: CBB Board, CBB staff and students

Action Items:

Hold a meeting with those responsible + support to develop framework and identify critical components of plan

7. Improve funding model

Description:

Develop a sustainable funding model so that we have an ability to implement strategic plan and grow our activity/impact.

What Does Success Look Like?

An efficient and effective funding model that fosters strategic development of the CBB

Start & Ends Dates

June 2018

RASCI:

Responsible: Director CBB

Support: CBB Admin

Approval: CBB Board, Landcare Research & UoA

Informed: CBB Board, Landcare Research & UoA, staff

Action Items:

- Investigate potential for establishing an external research trust similar to that used by the Auckland Zoo.
- Identify additional sources of external funding.

8. Develop marketing plan

<p>Description: Develop a roadmap to ensure we obtain the research funding and student enrolments required to dramatically improve the success of the CBB/JGS.</p>
<p>What Does Success Look Like?</p> <ul style="list-style-type: none">• Staff and students engaged in growing the success of the CBB/JGS• Increased revenue from research and student enrolments
<p>Start & Ends Dates March 2018 – Dependent on survey (1)</p>
<p>RASCI: Responsible: Director CBB, Director JGS Support: Approval: CBB Board Informed: CBB Board, Landcare Research & UoA, staff</p>
<p>Action Items: Identify our potential funders, collaborators and stakeholders and their precise wants and needs as they relate to the services we offer) Develop a strong unique selling proposition Detail the positioning we desire and a strategy for reaching customers</p>

Additional Material



Threats	Opportunities
<ul style="list-style-type: none"> • A lot of competition in this space <ul style="list-style-type: none"> • NSC – Biological Heritage • B3 • Other Universities: Victoria, Waikato, Otago, Massey, Canterbury – JGS in Biodiversity • Centre of Excellence for Biosecurity Risk Analysis • CRC – plant biosecurity • Lincoln Core (bio-protection) • Co-location about to be destroyed • Maintaining brand of partners as well as CBB • Financial cost to UoA of co-appointees • Focus has been on vertebrates and then invertebrates • Lose focus and try and cover everything – currently applied/conservation focus • Lack of identity • Current vision is pedestrian 	<ul style="list-style-type: none"> • Define a point of difference • Build collaborations/synergy with other centres • Other organisations joining e.g. DoC, Auckland Council, MPI • Roadmap on Conservation Environment • Submissions on relevant consultations e.g. Biosecurity 2025 • Predator Free NZ • Broaden social/economic capacity (Landcare & UoA has strength here) • Connecting biology with other disciplines e.g. bioinformatics • Greater engagement with Māori (noting Nick Waipara is on CBB Board) • Develop research themes to help external people engage (e.g. B3 has 5 themes which are well explained on their website) • Increase profile of CBB • Different models for partnering (centres, models). Look at other successful models • Productive sector biodiversity and biosecurity • Wildlife health (plant and animals) – biosecurity threats poorly known. Needs transdisciplinary approach. • Build on fungi, microbial strengths. To date lack of incorporation into CBB (co-appointees). Biggest mycology unit in NZ (ranked 4/128 in world) • Biosecurity 2025 out for consultation (Anna Probert biosecurity champion) • Opportunity to be national, not just regional • International opportunities e.g. Pacific (PII/ISSG)
Weaknesses	Strengths
<ul style="list-style-type: none"> • Potentially confusing having JGS and CBB/ Do we need both? • Need better engagement with staff/students (UoA and Landcare Research) • Lack of capacity of staff to engage • Website static and difficult to manage • Not a strong brand in some sectors (e.g. Auckland Council) • Lack of social/economic perspective 	<ul style="list-style-type: none"> • Stakeholder engagement from Board • Funding from both partners • Strong brand – CBB (perceived by DoC, NSC – but not universal) • Combination of biodiversity and biosecurity – breadth not captured elsewhere • Urban ecology – important with growth of urbanisation • Auckland location – biosecurity hub + offshore islands • Signed agreement between the partners • Landcare Research collections • Research area provides demonstrable societal impact

Understanding the context

Identify the more significant drivers at work in the environment – drivers that CBB will have to respond to if it is to remain relevant and excel

1. Global social, economic and climate/environmental change
2. Predator free NZ
3. Auckland changes – changing demographic, economic etc.
4. Need for better understanding between nature and well-being. e.g. what will investment in conservation contribute to NZ economy?
5. Regulation for biodiversity coming e.g. regional council regulations require consideration of biodiversity before you can do any land-use change. National Policy Statement (Federated Farmers + Forest & Bird)
6. Changing technologies e.g. genomics. Broadens taxa under consideration. IT capability
7. Big data
8. Groundswell of interest in restoration + citizen science
9. Increasing pressure on the border (passengers, cargo etc.)
10. Needs higher priority from government (signs this is starting)
11. Emerging and re-emerging diseases and pests e.g. Zika, Ebola, Crusty bum (kākāpō disease), clover root weevil
12. Social license to operate
13. International political changes e.g. Brexit, US election
14. Expectations of shift to multidisciplinary, collaborative approach (against a background of competition) e.g. One Health movement, National Science Challenge. Also reflected at UoA level (against a background of individual competition).
15. Increasing expectations around end-user engagement – partnerships (GIA, Māori)
16. Awareness and response to global wildlife smuggling has increased (plants and animals). Specifically reptiles in NZ
17. Bioprospecting e.g. soils
18. Loss of habitat for migratory seabirds for which we are a centre.

Reflections from strategy workshop

Need:

Better integration of Landcare staff

Historic lack of engagement frustrating; need to incentivise engagement

Clear articulation of what CBB is

Identify research gaps in biodiversity and biosecurity

Relevant research themes important to MPI/other end users

To crystallise benefit of CBB to Landcare and UoA (what can CBB do that we can't do otherwise?)

Benefits:

Graduates great source of capability

Network valued; CBB opportunity for connecting across UoA and other institutes

Broad engagement important to maintain

Opportunity for international connection (e.g. future earth)

Good potential in CBB – challenge is to resource and realise potential

Opportunity to make things happen (UoA \$35mill to bring in international teams)

Useful structure to facilitate linkage between UoA/Landcare

Strategy – what is it? Why is it important?

Strategy is the internal response of an organization to the demands of an external environment. It's a plan for change.

Each year it's important to tweak the strategy to get the best outcomes for the current environment.

Strategic planning helps us to:

- Establish priorities
- Create a game plan
- Choose actions
- Allocate resources

A strategic plan helps to ensure everyone in the organisation is on the same page.

It answers the questions:

- Where are we now?
- Where do we need to be?
- How will we close the gap?
- How will we monitor our progress?

RASCI for Planning & Delivery

Use RASCI for planning & delivery of workstreams:

- **R**esponsible
- **A**pproval
- **S**upport
- **C**onsulted
- **I**nformed