

**BEFORE THE HEARING PANEL**

Under **the Resource Management Act 1991**

And

In the matter of **the Proposed Kaipara District Plan,  
Ecosystems and Indigenous  
Biodiversity chapter**

By Kaipara District Council

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**Evidence of Dr Antony Julian Beauchamp  
(Terrestrial Ecology)**

**For the Director-General of Conservation / Tumuaki Ahurei**

**Submitter Number: 304**

**Dated: 22 May 2026**

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## **Introduction**

1. My full name is Antony Julian Beauchamp.
2. I have been asked by the Director-General of Conservation (DG) to provide ecological evidence on the Ecosystems and Indigenous Biodiversity chapter of the Proposed Kaipara District Council District Plan.

## **Qualifications and experience**

3. I hold the qualification of Ph.D in Zoology, and a post graduate diploma in Environmental Health.
4. As a member of the Health Protection team at Northland Health (1991-2001) I managed the environmental requirements of the National Shellfish Sanitary Programme, including seven oyster farms in North Kaipara Harbour and the tuatua harvesting at Ripiro Beach.
5. I have worked for the Department of Conservation (the Department) in Northland since 2001, firstly as Conservancy Advisory Scientist until 2008, and then as the Technical Support Officer Ecology and Environment and currently as a Senior Technical Advisor Biosecurity.
6. As a Technical Support Officer in the Department, I have provided operational and technical support for the Tara iti programme since 2006 and am a member of the Tara iti Recovery Group and Science Advisory Group.
7. I have experience in providing expert evidence on regional and district plans, resource consents and other statutory matters. For example, I was an expert witness for the DG in the Environment Court on the impacts of mangrove removal at Mangawhai on birds in 2012 and the provision of kauri dieback conditions in the Thames Coromandel and Whangarei district plans. I gave evidence about the impacts on kauri and the need for management plans in the Puhoi-Warkworth Motorway Board of Inquiry in 2014.

8. I have also given evidence to panels on the impacts of subdivision of the Ruakaka Racecourse land on Ruakaka shorebird values (2014) and the impact on Tara iti and other wader use of Mangawhai Harbour in the Mangawhai Harbour Wharf Trust hearing in 2020. In 2025, I provided evidence to panels on the impacts on tara iti of the Pakiri-Beach sand mining hearings and the solar farm at Glorit on the margin of Kaipara Harbour. I have also given evidence on the impacts of Northport's port expansion on shorebirds in 2023. I was a member of the Maturanga Māori Group set up to review the activities of the outer sand mining operation at Pakiri.
9. I was a member of the national Kauri Dieback Joint Agency planning and intelligence workstream (Ministry of Primary Industries, Northland Regional Council, Auckland Council, Waikato Regional Council, Te Roroa) from 2010-2021. In this role I designed surveillance programmes and managed the development of science programmes. I worked with a team to develop the track mitigation methods used on tracks with kauri.
10. I have been a member of the Ornithological Society of New Zealand (Birds New Zealand) since 1979, and the Regional Recorder of the birds in the region for the Northland branch since 2010. I have carried out many shorebird beach patrols for dead seabirds on Ripiro Beach in the Kaipara District.
11. I have published 42 papers on birds, weeds and frogs, including papers on mobile fauna that are more prevalent in introduced vegetation (pipits), wetland birds (grebes), tara iti and waders roost site use in harbours and bird use at Mangawhai (Beauchamp & Parrish 1999, 2008; Ismar *et al.* 2014; Ball *et al.* 2026).

### **Code of Conduct**

12. While this is a council hearing, I confirm that I have read the code of conduct for expert witnesses as contained in clause 9 of the Environment Court's Practice Note 2023 (the Code). I have complied with the Code when preparing my written statement of evidence.

13. For the avoidance of doubt, in providing this evidence as an expert witness in accordance with the Code, I acknowledge that I have an overriding duty to impartially assist the Panel on matters within my area of expertise. The views expressed are my own expert views, and I do not speak on the DG's behalf.
14. The data, information, facts and assumptions I have considered in forming my opinions are set out in my evidence to follow. The reasons for the opinions expressed are also set out in the evidence to follow. This includes, where relevant:
  - a. why other alternative interpretations of data are not supported.
  - b. any qualification if my evidence may be incomplete or inaccurate without such qualification.
  - c. any knowledge gaps and the potential implication of the knowledge gap.
  - d. if my opinion is not firm or concluded because of insufficient research or data or for any other reason; and
  - e. an assessment of the level of confidence and the likelihood of any outcomes specified in my conclusion.
15. Unless I state otherwise, this evidence is within my sphere of expertise, and I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

### **Scope of evidence**

16. I have been asked to provide evidence in relation to the notified Plan, Chapter Ecosystems and Indigenous Biodiversity and the DG's submission (304) and further submission (FS45).
17. My evidence addresses the following issues:
  - a. ECO-R1 and ECO-R2 - Need to consider Kauri dieback rules and reference to the Biosecurity (National Pest Management Plan) Order 2022.

- b. ECO-P1 and ECO-P2 - Need to use the Appendix 5 significance criteria of the RPS for wildlife who use habitats not dominated by indigenous vegetation and that use patchy environments.

**Policy ECO-PY managing pests and pet plants and animal species - need to include provisions for impacts beyond the boundaries of landowners.**

#### **Material Considered**

18. The key material that I have relied on in forming my opinions is listed/described/references are provided in **Appendix 1**. In preparing my evidence I have relied on the evidence of Mr Andrew Townsend, Dr Ilse Corkery and Mr Ronan Whitelock.
19. I have read the following:
  - a. The evidence of Mr Andrew Townsend.
  - b. The evidence of Dr Ilse Corkery.
  - c. The evidence of Mr Ronan Whitelock.
  - d. The DGs submission (304) and further submission (FS45)
  - e. The s32 report on the Ecosystems and Indigenous Biodiversity chapter
  - f. The s42a report on the Ecosystems and Indigenous Biodiversity chapter
20. I have visited areas in the Kaipara District hundreds of times to undertake scientific surveys and provide technical advice and operational assistance with tara-itī, shorebirds and kauri dieback.

#### **Glossary of abbreviations**

21. Kauri Hygiene Zone – means 3 times the maximum radius of the canopy dripline of a kauri tree (s3 Biosecurity (National PA Pest Management Plan) Order 2022 ‘the Biosecurity Order’).
22. MPI - Ministry of Primary Industries.

## ECO-R1 and ECO-R2 Kauri dieback rules and reference to the National Pest Management Plan

23. The rules (ECO-R1) provide for permitted activities for vegetation clearance and associated vegetation/land disturbance while undertaking various activities, but the chapter does not look at the implications if these areas contain kauri, or how kauri vegetation management is carried out to prevent the spread of kauri dieback.
24. Kauri dieback is caused by a microscopic organism (*Phytophthora agathidicida*) (PA) that infects the root system of kauri and causes death by restricting the water and nutrient movements between the crown of the tree and the root system. PA produces a microscopic spore (oospore) that is bound by a hard covering that is released into the soil from infected tree roots when they rot and can be found from the surface to metres below a tree. These oospores remain in the soil until they activate, and we do not know what causes them to activate and we do not have a means of activating them.
25. They can remain viable in soil for potentially multiple decades and be moved on the feet of cattle, or any equipment that moves soil. The spores can outlast the length of time that a ricker kauri tree 100 years old rots. Consequently, patches of native vegetation that had kauri, but now have no visible kauri may still be contaminated by oospores.
26. There are not obvious symptoms when a kauri is newly infected with PA, so all kauri are treated as contaminated and MPI has developed a Biosecurity Order (a link is included as Appendix 2 to my evidence) and system to deal with managing activities associated with kauri.
27. Kaipara District is one of the most contaminated parts of Northland because it was common practice for cattle to be moved between many properties, and they were set free in “the bush” in winter in Northland before 1970. Cattle grazing was still taking place under kauri in infected properties at Kaiwaka 15 years ago. Also, houses were being built at Mangawhai within kauri hygiene zones in the past 10 years. Highly contaminated sites include patches of old growth kauri on land

that was formerly predominantly cleared for farming and is now regenerating.

28. The only way to stop the spread of kauri dieback is to control or stop the movement of contaminated soil. In this chapter ECO-R1 permitted activity (d) refers to any activity to *“**Remove** (my emphasis) a pest species in accordance with any approved pest management plan or biosecurity operational plan, or to control unwanted organisms as a response to directions of a person authorised under the Biosecurity Act 1993”*.
29. The two pathways permitted by this wording are removal in accordance with a plan or control in response to a direction. But the management of kauri dieback is not necessarily carried out to remove the organism - even when carried out under a kauri dieback earthworks management plan.
30. Management is generally carried out to remove kauri that may be contaminated that pose a health and safety risk, or to remove kauri for infrastructure related activity. But removing the organism would require substantial earthworks.
31. Also, because all kauri are considered contaminated then a management plan is needed to ensure that a tree is felled in such a way that it does not become contaminated by the soil in the kauri hygiene zone. Any activity that can move soil from within a kauri hygiene zone needs to consider the hygiene practices, the locations for leaving potentially contaminated material (including bits of kauri that touched soil) within the kauri hygiene zone or removing that material to an approved landfill.
32. The Biosecurity Order, rule 5 (clause 19) requires a kauri dieback earthworks management plan for most activities within the kauri dieback hygiene zone. If a Kauri Hygiene Zone is within an area to be cleared, then permitted activities under ECO-R1 and ECO-R2 can only be applied to areas outside that zone.

33. The Biosecurity Order (allows district councils to include provisions covering earthworks management plans in kauri hygiene zones (clause 19. 6 (c) i-vii.), and other functions (clause 26), or leave the administration of the rules to MPI.
34. As MPI is the authority administering the Biosecurity Order then for effective management of this risk, it is recommended that the district plan needs a rule or an Advice Note to ensure that if kauri hygiene zones are present, or a site had kauri and is known to be contaminated with dieback spores, that this site cannot be cleared without a kauri dieback management plan. Mr Whitelock has explained how this could be achieved in planning terms in his evidence (paragraphs 110-116).

**ECO-P1 and ECO-P2 - Need to use significance criteria for wildlife who use habitats not dominated by indigenous vegetation, and that use patchy environments**

35. I acknowledge and agree with the s32 officer statement that:  
“...mapping of SNAs/significant indigenous biodiversity is recognised as best practice to protect these areas and provide certainty to all parties on their values, location and extent. In the interim period prior to mapping there may be adverse effects and cumulative loss of significant indigenous biodiversity allowed by the permitted activity rules”<sup>1</sup>. However, I consider it even more difficult to appropriately manage significant habitats if there is no guidance in rules as to how habitats for indigenous species are to be assessed and what the results, of any assessment means until such time as there is mapping.
36. Firstly, in my view it is not appropriate to only consider controls on removal of indigenous vegetation (as provided in ECO-R2 1 for indigenous vegetation clearance annually “*Activity status: Permitted. Where: a. It does not exceed 500 m2 per site in any calendar year in the Maori purpose zone, General rural zone and rural lifecycle zone;*

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<sup>1</sup> S32 report Ecosystems and Indigenous biodiversity pg 17.  
Beauchamp Evidence, 22 May 2026, Proposed Kaipara District Plan, Ecosystems and Indigenous Biodiversity chapter

*or b. It does not exceed 250m<sup>2</sup> per site in any calendar year in all other zones”)* as the only factor affecting the value of habitat to native fauna.

37. It is more appropriate to use criteria like Appendix 5 of the Northland Regional Policy Statement or Appendix 1 of the National Policy Statement Indigenous Biodiversity 2023 (NPS-IB) (see Mr Townsend’s and Dr Ilse Corkery’s evidence) to define the importance of habitat to indigenous species so that Policies ECO-P1 and ECO-P2 are met and plan users have a means of implementing recommended protection.
38. A second issue is that not all indigenous fauna in particular threatened species, are impacted by just changes to indigenous vegetation; as their habitat now includes introduced species, and they can be impacted by the removal of non-indigenous vegetation and development where small amounts of vegetation remain.
39. For example, the Australasian Bittern (nationally critical) have been recorded booming at a site at Mangawhai near proposed Private Plan Change 85 – Mangawhai East (PPC85) and the proposed Mangawhai-Murphy Property Development Ltd Private Plan Change (Wild Ecology 2025), site and using drains for foraging within the private plan change footprints (Fig. 1). The swamp that a bittern is booming at (using for breeding) is about 1 ha so would only gradually be impacted by vegetation clearance under ECO-R2 1 rules, but the drains that are being used by bittern are far smaller and could be cleared in a season under the provisions of ECO-R2 or just be cleared because they are not predominantly indigenous vegetation. If even some of these drains were cleared of vegetation, this could impact the viability of the site for occupation and breeding of bittern. The only way to assess the importance of this habitat is to look more holistically at the value of the vegetation/habitat to indigenous fauna and not just the size of that in indigenous vegetation.

40. In order to capture important habitats for threatened species like bittern the definition of “vegetation clearance” could be broadened to encompass that mix of exotic and indigenous vegetation that makes up the habitat of those species. In some instances, it has been found that young bitterns are threatened by a lack of food, so it is the quality of the habitat that is important not the origin or the plant community surrounding it (Williams 2025).



Figure 23: Showing the results of the bittern observations and booming records study carried out by Mangawhai Ecology Inc between 2022 and 2023

FIG 1. Recent Example: Figure 23 – Bittern locations and the boundary of the proposed Murphy property development Ltd application (Wild Ecology 2025).

41. Secondly, other small key habitats that are critical include shorebird spring tide roosts which may only be used for only a few hours a year. These roosts can be amongst mown land around building or grazed farmland. Sites like the beach front and road verges at Kelly’s Bay beach are significant wader roosts for South Island variable oystercatchers (At-Risk declining). The maintenance of this roost is not dependent on the management of indigenous vegetation alone but

requires management of development, pets, introduced grasses and human disturbance there.

42. Thirdly some mobile indigenous fauna with poor flight capacity, like the mātātā/North Island fernbird (At-Risk declining) preferentially use wetland and shrubland vegetation but were necessary use mixes of indigenous and exotic vegetation along stream margins to enable them to maintain connectivity. If this vegetation is removed this can lead to the isolation of groups of fernbirds and the loss of fernbird populations.
43. If key sites are not identified in processes like those that determine SNA status (including critical habitat outside of SNAs, see Mr Townsend's paragraph 65), in the proposed plan, and vegetation is cleared because it is permitted to be felled as part of indigenous vegetation rules in the proposed plan (ECO-R1 or ECO-R2), then Policy ECO-P1 1. b. and ECO-P2 1 b. will not be met.
44. In my view, the plan also needs to clearly define how it will assess all consent activities and protect the non-indigenous permanent and temporal habitats of Threatened or At-Risk species should that be needed, before SNAs are mapped. The process could follow that outlined in Mr Whitelock's evidence (paragraphs 94-98).

#### **Policy ECO-PY managing pests and pet plants and animal species**

45. I agree with the inclusion of new Policy ECO-PY to apply to pets and pests within the properties of landowners, but I do not consider that this policy adequately addresses the impacts of pets on surrounding areas.
46. Pet densities and impacts on the surrounding environment can increase because new residences are added to a property as a minor residential unit, second dwelling or relocated dwelling onto an existing record of title. Pets may also increase if the property is rented to other people with pets, the owner decides to add more animals under their care, or animals are not neutered and breed. These animals may not be obvious to the landowner when they are not the resident.

47. Subdivisions can be placed within or beside significant habitat for wildlife including kiwi that are attractive to dogs. Wildlife can enter private land and be killed. This happened during the aviary-based release of weka from an aviary at Karangahake where a vegetation corridor passed through the property of a pet dog. This dog killed 80% of dispersing birds while constrained to its owners back yard (Beauchamp et al. 2000).
48. Subdivisions can also be placed next to significant areas for wildlife including those of nationally critical species like Tara iti and Australasian bittern. At Waipu in 2008, a cat killed at least one (probably 2) incubating tara iti in the same night. A local resident was found to be feeding many cats within the cats' walking distance to the estuary. Subsequently, cat free subdivisions were put in place at Waipu next to the Wildlife Refuge.
49. Similar examples of the multiple loss of kiwi to just one dog exist throughout Northland and are well documented at Waitangi (Taborsky 1988) and on Kawau Island. On Kawau Island, six North Island kiwi, representing 75% of the known population in Mansion House Historic Reserve were killed in two weeks by a dog that was a guest at a house in neighbouring housing in Schoolhouse Bay.
50. Pet dogs held on small (600-1,000 m<sup>2</sup>) sections need to be walked and this often takes place outside of the boundaries of subdivision. In the recent PPC85 application at Mangawhai I presented evidence on the issues surrounding disturbance from the presence of dogs on the Mangawhai Estuary. Jacob Ball's (2023) work had found that 9.1% (*n* = 38) of the dogs on leash and 35.4% (*n* = 145) of the dogs off leash caused wildlife disturbance when present at low tide on Mangawhai Harbour. This high level of disturbance took place within areas where tara iti maintained foraging areas that are critical to their existence and breeding. These areas are used to supply females with food before laying and to raise chicks just after they fledge. At both stages the females and young rest on the shoreline and fly poorly. The proposed

subdivision abutted Mangawhai Harbour and the presence of pets would potentially add to the threats tara iti faced.

51. The existing systems for controlling pet dogs to their owner properties fail frequently. In 2022-23, 34.6% of the service requests to the Animal Management team at Kaipara District Council were for wandering dogs. So, the only way to increase certainty of protection of indigenous biodiversity is to carefully consider the wider implications of pet presence and restrict dog and cat ownership accordingly.
52. Many people want to have a pet dog or cat so it is important that councils consider where significantly threatened indigenous wildlife need to be protected and where pet (including dog) bans should be instigated and signalled. In my view, the plan needs to specify the criteria that must be used to assess the presence of threatened and At-Risk species (to meet policy ECO-P1 and ECO-P2) and significance of habitat not only in private plan change and subdivisions areas, but also the impact of the types of pets over likely neighbouring expected-use areas (where dogs could be walked, where cats are active).

## **Conclusion**

53. In my view the proposed chapter needs to provide more guidance on how policies will be implemented in the absence of mapped significant natural area (SNA) designations in the period before Kaipara District Council considers how it will map SNAs in a future plan change. Especially as these areas are currently being recommended as part of current private plan changes (i.e. PPC85).
54. The vegetation clearance rules need to consider the provisions of the Biosecurity Order to prevent the movement of kauri dieback. The vegetation clearance permitted activities in ECO-R1 and ECO-R2 should only occur when kauri hygiene zones are absent. A note should be used to inform the public about the presence of the

Biosecurity Order and direct how the Kaipara District Council want that notice to be followed.

55. The rules as written do not spell out how they will assess the environment to meet the requirement of policies ECO-P1 and ECO-P2 and ECO-PX in the absence of mapped SNAs. In my opinion there needs to be reference to criteria that must be applied to ensure that habitats are assessed. I support the method proposed by Mr Whitelock to provide an effects management hierarchy in ECO-P2 using the RPS Appendix 5 criteria, but ultimately it would be better to implement the NPS-IB mapping and apply criteria (see Dr Corkery and Mr Townsends' evidence).
56. The coverage required in proposed policy ECO-PY should be expanded to cover nearby areas where pet or animals will have access. There needs to be a requirement for private plan changes or subdivisions to take account of the wider collective impacts of proposed development on neighbouring habitats of Threatened and At-Risk species so that conditions can be imposed when necessary.

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Dr Antony Julian Beauchamp

DATED this 22 day of May 2026

## Appendix 1 – Literature cited

Ball, J. 2023. Foraging ecology and habitat suitability of the critically endangered New Zealand fairy tern or tara iti (*Sternula nereis davisae*) in Northland, New Zealand: a thesis presented in partial fulfilment of the requirements for the degree of Master of Science in Conservation Biology at Massey University, Albany, New Zealand.

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Williams, E.M.; Jarman, T.; Battley, P.F. 2025. Bone marrow fat content analysis confirms starvation as a cause of death for Australasian bitterns (*Botaurus poiciloptilus*) in New Zealand. *New Zealand Journal of Zoology* 52: 654-664.

## **Appendix 2 - Link to the Biosecurity Order for managing Kauri Dieback**

[Biosecurity \(National PA Pest Management Plan\) Order 2022 | New Zealand Legislation.](#)