

**BEFORE THE AUCKLAND UNITARY PLAN INDEPENDENT HEARINGS  
PANEL**

**IN THE MATTER OF** The Resource Management Act 1991 and  
the Local Government (Auckland  
Transitional Provisions) Act 2010

**AND**

**IN THE MATTER OF** Topic 081b Rezoning and Precincts  
(Geographical Areas)

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**REBUTTAL STATEMENT OF BERNARD MICHAUX**

**ON BEHALF OF**

**THE OKURA ENVIRONMENTAL GROUP**

**AND**

**THE LONG BAY-OKURA GREAT PARK SOCIETY**

**Terrestrial Ecology**

**Weiti Precinct**

**8 March 2016**

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## Summary of Evidence

1. The purpose of this report is to comment on the ecological evidence in relation to Topic 081 Rezoning and Precincts from Weiti Development LP on behalf of the Okura Environmental Society and Long Bay – Okura Great Park Society. In particular, I address the David Slaven's evidence on Terrestrial Ecology.

## Introduction

2. My name is Bernard Michaux.
3. I have a BA (Hons) from University College, Oxford in Natural Sciences (1973), an MPhil (1<sup>st</sup> Class Honours) in Ecology from the University of Auckland (1983), and a PhD in Evolutionary Biology from Auckland University (1986).
4. I have 31 peer-reviewed publications in scientific journals, have contributed four peer-reviewed chapters to books, and have published a book (Michaux, 2014). The New Zealand avifauna features as data in a number of these publications. In addition, I wrote entries for 13 species on the New Zealand Birds Online website (<http://nzbirdsonline.org.nz/>).
5. I am a member of Birds New Zealand (formerly the Ornithological Society of New Zealand) and have been active in monitoring waders for the past six years (winter and summer censuses at Mangawhai and Jordan's Island, Kaipara Harbour; New Zealand Dotterel breeding and post-breeding censuses at Mangawhai), monitoring tomtits (*Petroica macrocephala*) at Atuanui Scenic Reserve (Michaux, 2009), and monitoring the breeding success of Variable Oystercatchers (*Haematopus unicolor*) at Long Bay – Okura Great Park (Michaux, 2013).
6. I have been recording numbers and diversity of birds at the Okura Shell Bank (opposite the end of the Okura River Road), the Okura Estuary, and

Karepiro Bay since the opening of the Okura Bush Walk track in 2006 which allowed access to these areas. I have continuous written records in notebooks going back to 31/10/06 and have placed the last 4 years records (2012-2015) in a freely available electronic format on eBird (Appendix A of my primary evidence).

7. Other than where I state that I am relying on the evidence of another person, my evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

### **Existing Environment**

8. Karepiro Beach is a rare example of a pristine littoral environment close to Auckland City. It is the most important wader roost site on the east coast between Miranda and Mangawhai. For example, in 2015 (based on twenty-five samples) there was an average flock size of 250 South Island Pied Oystercatchers (*Haematopus ostralegus*) (January to July) and an average of 100 Bar-tailed Godwits (*Limosa lapponica*) (September to February) utilizing the Karepiro roost. Waders and other shore birds are under extreme pressure and we know that many species are in steep decline (Woodley, 2012).
9. Our most iconic wader and bird-of –the-year 2015 - the Bar-tailed Godwit (*Limosa lapponica*) - breeds in Alaska, while others breed in Siberia. Their migration route is known as the East Asian Flyway and the birds stop off along this route to feed and maintain condition before they arrive on the breeding sites in June. They need feeding and roosting sites so they arrive in a good enough condition to breed, and many of these sites along the East Asian Flyway have been lost to development (e.g. around the Yellow Sea). When the birds return here, the need for feeding grounds and more particularly roost sites, is just as great.

10. International conservation efforts are presently underway to protect the remaining roost and feeding sites by New Zealand, Chinese, Korean, Russian, and American scientists. Conservation of waders is a truly international problem.
11. Sensitive areas have been roped off since the winter of 2014 to help protect the dunes and shore bird nesting sites, extensive replanting of the area behind the beach has been undertaken, a pest control programme has been maintained by volunteers since 2014, and the production of educational resources to reduce disturbance of roosting birds is planned for 2016. These programmes have maintained the success of this roost site despite the popularity of the Okura Bush Walkway. Recent photos of the Karepiro roost site are presented in Appendix A.
12. Karepiro Bay and the adjacent shore lie within the Long Bay Okura Marine Reserve, and as such are afforded special protection.

### **Waders and Shore Birds**

13. Slaven argues (3.8) that because Karepiro Beach would be subject to high levels of disturbance under the level of development proposed in the PAUP, there is no problem in degrading the environment further. Frankly, I'm flabbergasted that this should be presented as a serious argument. Karepiro Beach is part of a Marine Reserve and we should all be trying to enhance its ecological importance not degrade it further.
14. Slaven (3.8) contends that the shell spit at the Weiti River mouth is an alternative roost site. The shell spit at Weiti is only a secondary wader roost site utilised during the largest high tides, when the Karepiro roost is unavailable, or as an overflow site. My own primary evidence and that of Boffa Miskell (2007: Appendix 4C) show this to be the case.

15. The Weiti shell spit is too small to be handle the Karepiro population and too close to vegetation for shore birds to use as more than a temporary roost site. The major roost for waders is at Karepiro beach where there is room and clear sight lines free of vegetation, which the birds require.
16. For reasons outlined above I dispute Slaven's assertion (4.2) that "the additional development potential sought by WDLP is unlikely to result in any additional disturbance effects on resident shore birds to those already anticipated." If development is allowed to make Karepiro Beach unattractive as a roosting site, the current population will not transfer to the shell spit. Instead, they will leave the area completely. This will ultimately result in a reduction in population as alternative sites outside the Auckland area are already at capacity.
17. Slaven recognises the importance of the Wade River shell spit as a breeding site. This area has been managed by a care group and I submit a statement on their behalf:

Currently there are at least 9 dotterels out at the spit - 4 adults and 5 hatchlings. We've peaked at 11 this season. This is despite large losses. We lost two nests (total 6 eggs) to water inundation at high tide and three nests (9 eggs) to predators - probably dogs. There was also a nest abandoned early in the season - last August. So having 5 fully fledged is a great success.

A number of dog owners in Stillwater persist in bringing their dogs out to the spit. We also have one problem horse rider who rides right next to the dotterels around to the lagoon and is accompanied by a dog whose paw prints I have seen inside the tape on a couple of occasions this summer.

In terms of the longer term picture, we peaked at 17 dotterels the year prior to the storm that created the lagoon. They dropped to 4 the following year and have been increasing gradually since then.

18. However, this disputes his optimistic assessment that as “the spit is not a pedestrian destination” it will “allow shore birds breeding here to successfully fledge chicks” (4.3). I have observed pedestrian traffic on the spit frequently when I have visited this area, and this disturbance is likely to increase if additional houses are built on land overlooking the Wade River.

### **Marsh Birds and Ducks**

19. Apart from the birds mentioned by Slaven (3.14), I have also observed Brown Teal (*Anas aucklandica*) and Paradise Ducks (*Tadorna variegata*) on the creeks, and suspect Pied Stilts (*Himantopus leucocephalus*) breed in the wet areas within the Weiti boundary. While planting along the stream margins will improve the overall quality of the habitat, the other factors that Slaven argues will “greatly assist in keeping these habitats attractive to marsh birds post-development” are vague and unconvincing and likely to have little impact. If the developers are serious about protecting and enhancing biodiversity values then they should have a programme to reform wetlands and other fresh-water habitats, and maintain active pest control and monitoring programmes.

### **Terrestrial Birds**

20. Slaven states (3.13) that the native forest patches and proposed replantings will be “an important component” to the success of the North-West Corridor. Without an active pest control programme within these areas of native vegetation this claim is over-stated.

21. To reduce predation, all predatory pets should be disallowed, not just cats. There are no details about how pet compliance regulations will be

monitored and enforced. Like any predator management programme, active monitoring is an important part.

## **Conclusion**

22. The effects of increased development on birds of all types and on the Long Bay Okura Marine Reserve will be significant. Important roosting and breeding grounds for wading and shore birds will be lost.

23. Without significant and successful efforts to revegetate degraded areas and eradicate pest plants, and long-term pest control programmes that are actively pursued and monitored, terrestrial and marsh birds and ducks will be significantly affected.

24. Upon consideration of WDLP's evidence I concur with Mr Van Dylan's evidence which states;

*In my opinion, the proposed PAUP development of 1200 dwellings and the WDLP proposal of 1750 dwellings will have significant environmental impacts that cannot be mitigated. A reduction in the number of lots permitted for development preferably to 150 lots, in conjunction with a more comprehensive environmental/landscape management plan, and appropriate mitigation and monitoring, would be required to reduce the significant environmental effects to an acceptable level.*

**Appendix A: Karepiro roost site at high tide**





