

**BEFORE THE ENVIRONMENT COURT
AT AUCKLAND**

IN THE MATTER

of the Resource Management Act
1991 ("the Act")

AND

IN THE MATTER

of an appeal pursuant to Clause 14 of
the First Schedule of the Act

BETWEEN

**CATO BOLAM CONSULTANTS
LIMITED**

(ENV-2007-AKL-000188)

(ENV-2007-AKL-000190)

(ENV-2007-AKL-000187)

AND

**CITADELTOWERS
LIMITED**

(ENV-2007-AKL-000218)

AND

**ENVIRONMENTAL DEFENCE
SOCIETY**

(ENV-2007-AKL-000206)

AND

AUCKLAND REGIONAL COUNCIL

(ENV-2007-AKL-000213)

AND

HAKA INTERNATIONAL LIMITED

(ENV-2007-AKL-000213)

Appellants

RODNEY DISTRICT COUNCIL

Respondent

STATEMENT OF EVIDENCE OF MARK BELLINGHAM

INTRODUCTION

1. My name is Mark Bellingham and I am the North Island Conservation Manager for the Royal Forest and Bird Protection Society. I hold a PhD in Planning from Auckland University and I am a full member of the New Zealand Planning Institute. I have been a practising planning and ecological consultant for more than 20 years. I have also lectured in Environmental Planning at Auckland and Massey Universities and Ecology at Auckland University of Technology. I have served on the Ministerial Advisory Committees for the Review of Protected Area Legislation (1989-90) Oceans Policy (2002-4), and as an Auckland Regional Councillor. I have been a contributing author to the 1992 and 2002 editions of the Handbook of Environmental Law. I am a technical advisor on pest management and conservation planning matters to the Auckland Regional Council (ARC) and Forest and Bird's Ark in the Park Open Sanctuary in the Waitakere Ranges. I am familiar with operational pest management projects and their funding.
2. I have particular ecological expertise in shore bird conservation and management and restoration and management of indigenous duneland vegetation.
3. I was employed by the NZ Wildlife Service (1981-84) surveying shorebirds on harbours in Northland (Parengarenga, Houhora, Rangaunu and Whangarei). I helped organise the first national wader census for the Ornithological Society in 1984, coordinating observers in Northland and the Kaipara. I have assisted with Department of Conservation's (DOC) management and recovery programmes for NZ dotterel, Chatham Islands oystercatcher and NZ shore plover (in the Chathams and on the mainland). I prepared the nomination for the Firth of Thames onto the Ramsar listing of Wetlands of International Importance and the draft nomination for the Kaipara Harbour. Both of these Ramsar nominations have been based on the importance of these areas for shorebirds, and the Kaipara Harbour nomination is based of much of my research on shorebirds there¹.
4. I initiated and still manage the Te Henga/Bethells Beach duneland restoration project, New Zealand's longest running ecological restoration project of dunelands (1993-2010). This community project of Auckland's West Coast is

¹ Haggitt, Mead s, T, Bellingham M (2008) Review of Environmental Information on the Kaipara Harbour Marine Environment. ARC Technical Publication No. 354.

progressively restoring indigenous plant and animal communities to 40ha of dunes. The research and management work there has provided significant insights into the dune restoration for projects in the Auckland Region and further afield.

5. I have visited the Te Arai site many times, the first being during the organising for the 1984 national wader census. Other times have included the field work for the 1998 resurvey of Significant Natural Area sites for the preparation of the Proposed Rodney District Plan 2000 (PRDP), and for the inspection of sites in the Te Arai locality that have been proposed for various subdivisions and land use changes. Consequently I am familiar with the coastal strip from Mangawhai to Pakiri and the adjoining lands over the past 25 years.
6. I am aware that RDC and some of the other parties to these appeals, including the appeal by ARC, have reached a joint position they are putting to the Court. I have read the proposed settlement, but I was not involved in any of the negotiations which resulted in that agreement, and I am not familiar with how it was developed.
7. I have read the Environment Court's Code of Conduct for Expert Witnesses, and I agree to comply with it. My qualifications as an expert are set out above. I confirm that the issues addressed in this statement of evidence are within my area of expertise.

SCOPE OF EVIDENCE

8. In my evidence I will:
 - describe the values of the Te Arai area; and
 - state my concerns about further subdivision and development at Te Arai.

ADVERSE EFFECTS ON INDIGENOUS FAUNA & HABITATS

9. The Te Arai area and contiguous coastal area to the north and south is a nationally outstanding habitat for shorebirds. Of the eight indigenous shorebird taxa (species and subspecies) that breed in the area, four are endemic and five are threatened. The area is one of national significance for four taxa and the two of most conservation concern are the New Zealand fairy tern and the northern NZ dotterel.

New Zealand fairy tern

10. The New Zealand fairy tern is classified as “Nationally Critical”, for this indigenous species that has only 12 breeding pairs, between 38 and 43² individual birds (fewer individuals than the kakapo) and it is struggling to survive in the last few stretches of the Auckland/Northland coast that are not over-run by people, dogs and vehicles. In pre-European times it was found around the coast of the North Island and Nelson/Golden Bay. The main threat to fairy tern (and dotterel) comes from disturbance by people, dogs, vehicles and predators (cats and mustelids).
11. I am familiar with fairy tern from their breeding sites at Mangawhai, Waipu, Pakiri and on Kaipara South Head, but their specialised habitat selection choices mean that they nest and often roost on sandy beaches and stream mouths where they are constantly threatened by human disturbance during breeding. Fairy tern appear to be one of the least tolerant shorebirds to disturbance, and this may be as important as predation in their decline. The tern habitat within the Te Arai area is part of an area that covers the Mangawhai Sandspit down to the Te Arai Stream, and this area is of international significance.
12. Mangawhai Sandspit is also the single most important breeding site for these birds. Five of the twelve breeding pairs are at Mangawhai, and six of last years’ nine chicks were fledged there. Fairy tern have nested at Te Arai Stream mouth in the past and could do so again.
13. The most important fairy tern post-breeding flocking site is at Te Arai Stream, where 12-14 birds were regularly recorded until recently. Significant disturbance from vehicles and dogs in the past 2-3 years has meant fewer birds are using this site. But the local Te Arai Preservation Society have now enforced vehicle and dog control, and it is likely that many of the birds will return as it is the closest roost to feeding areas in Te Arai Stream and on Slipper and Spectacle Lakes. From this site, they travel over to the Kaipara Harbour, when the young birds have learnt how to catch fish. Their main winter roosts are at Walker Island on the Tauhoa River and Papakanui Spit.

² These bird counts come from the Ornithological Society’s database.

14. I have reviewed the two Fairy Tern Recovery Plans and although these plans have identified the serious threats posed by people and dog disturbance from urban and peri-urban developments adjacent to the last few fairy tern breeding and roosting sites, in my view the Department of Conservation has consistently failed to address these through the statutory planning processes. Adjacent or nearby housing developments do produce higher predator numbers (cats, dogs, rats and black-backed gulls), more pedestrian traffic and more vehicles (especially four-wheel drive vehicles, quad and trail bikes). The only effective way to control these is to exclude them around any sensitive wildlife site.
15. In my opinion, a buffer zone is required around the fairy tern sites where people-intensive development is excluded, and this should be provided for in the PRDP. If development is allowed to go ahead too close to the sites of significance to the fairy tern, the additional birds from Mangawhai will have nowhere to breed or roost and in my view the recovery of this indigenous species will fail and it will be doomed to extinction.
16. With only 12 breeding pairs of fairy tern left, every effort must be made to ensure their long-term survival which relies on their ability to breed successfully. Proposed development in the vicinity poses a serious threat to the expansion of fairy terns from Mangawhai to Te Arai Stream and ultimately their recovery. They have bred at Te Arai Stream in the past and it remains a potential breeding site for fairy tern and the proposed development and associated activities would likely preclude them from nesting there again.

New Zealand Dotterel

17. I have had 28 years experience with NZ dotterel management. This species has a similar range of threats as fairy tern, but they are less particular about where they nest. There are 40-45 pairs of dotterel that nest between Mangawhai Spit and Te Arai, with 8-9 pairs around Te Arai Stream mouth, making this coastal strip a nationally important site for this species too. The intensive management for terns benefits dotterel as well and helps to support marginal dotterel sites on beaches in North Auckland and lower Northland.
18. Many of the mechanisms to reduce these impacts that can be proposed at the time of subdivision or for inclusion within the PRDP are generally sound in theory. However, in my experience neither the applicants, DOC or local authorities have the ability in any practical or effective way to control the people

that development generates, especially in summer, from disturbing critical habitats such as this. Those impacts include:

- Disturbance to breeding birds from people and their dogs
- Non-compliance with pet regulations
- Use of vehicles on beaches and dunes

19. My PhD thesis investigated the ability of RDC to manage the biodiversity conservation objectives of the Rodney District Plan. I have found that this council, in common with most other district councils, fails to monitor the cumulative effects of developments on sensitive sites for indigenous biodiversity (especially wildlife) and to effectively implement the biodiversity conservation provisions of their district plans. In my view there is an opportunity to entrench the current de facto protection zone on this coast that protects the breeding and flocking sites for fairy tern and dotterel, as a buffer zone from intensive development. Without this security for this most important shorebird breeding and flocking site, New Zealand fairy tern could become extinct.

20. Provisions in district plans that determine success tend to be the things that we can easily see, such as the degree of canopy closure. My concern is that success in places like Te Arai needs to be as much about pest and people management.

21. In the context of the recent RDC hearings on the Te Arai private plan change, I assessed the pest management proposals and concluded, based on my experiences, that:

- actual costs are high, being over \$850 000 for integrated rat and stoat control for a property the size of that subject to the private plan change, with further costs for cat, dog and people control;
- a major challenge for the ongoing mitigation of significant adverse effects is to ensure the consent holder and council's obligations are upheld; and
- the risks of failure are such that the risk should be avoided in the first place.

CONCLUSION

22. In my view, creating increased subdivision opportunities for this land is likely to have significant impacts on shorebirds and the natural character of this coastline and coastal environment. Clearly, improved management of

shorebirds at Te Arai without the risks associated with proposed subdivision is preferable.

Mark Bellingham
7 May 2010