IMPACTS OF THE RENA OIL SPILL ON NEW ZEALAND SEABIRDS



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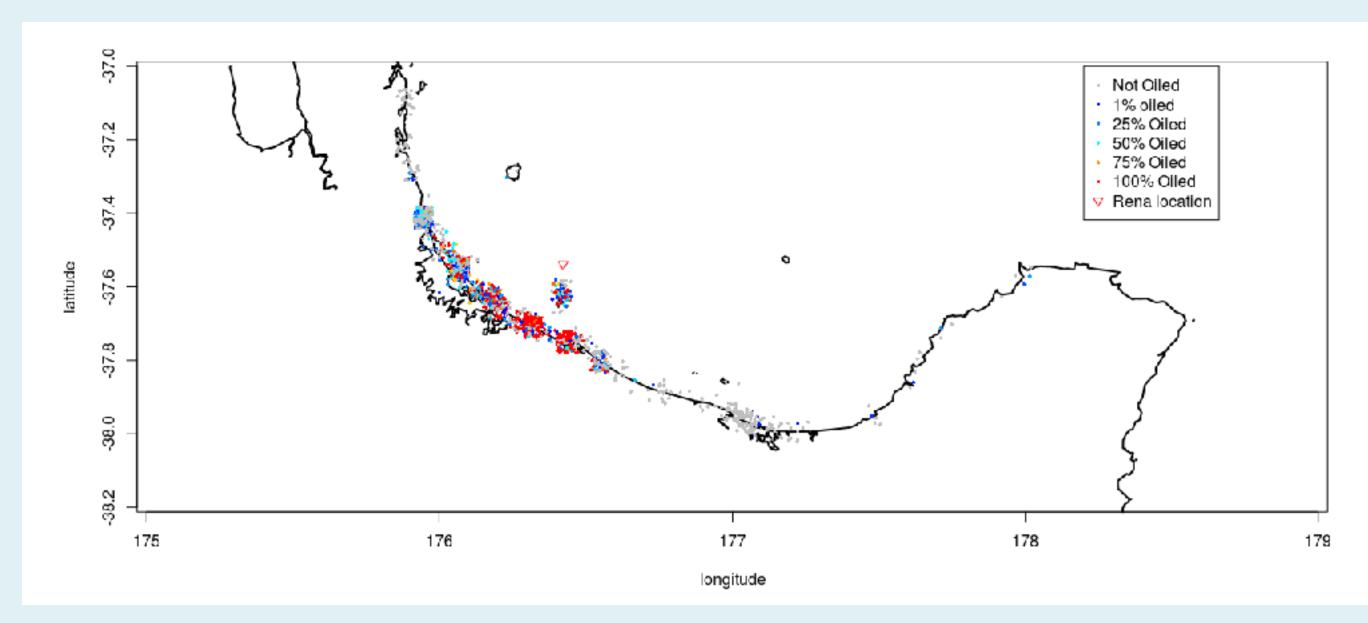


The container ship *C.V. Rena* ran aground on the Astrolabe Reef 22 km off the Tauranga coast (Bay of Plenty, New Zealand) on 5 October 2011. The resulting spill of c.350 tonnes of heavy fuel oil over the following 6 weeks caused the largest oiled wildlife incident in New Zealand history, and triggered a large and complex oiled wildlife response (managed by the Massey University veterinary team and Maritime New Zealand). We summarise information obtained from over 2000 dead birds handled following the Rena oil spill.

Oiled birds found dead

More than 1350 oiled seabirds of 23 species were recovered dead. The main species affected (with the number of oiled individuals recovered dead) were common diving petrel, fluttering shearwater, Buller's shearwater, little penguin, white-faced storm petrel, sooty shearwater, and little shearwater. None of these species is listed as Threatened under the New Zealand threat classification system, however, all seven taxa are listed as At Risk.





Common seabirds that were not found oiled in large numbers included grey-faced petrel, flesh-footed shearwater, Australasian gannet, pied shag; little shag, southern black-backed gull, red-billed gull and white-fronted tern.



Causes of mortality unrelated to oil

Large numbers of unoiled seabirds of a few species were also recovered dead on Bay of Plenty beaches following the *Rena* grounding. These included 177 common diving petrels, 171 sooty shearwaters, 66 Buller's shearwaters, 64 flesh-footed shearwaters, 30 fluttering shearwaters, 22 little penguins and 22 white-faced storm petrels. Many of these birds were in poor condition and had probably starved. However, most of the unoiled flesh-footed shearwaters were in good body condition and had apparently been killed as a result of interactions with recreational fishers.



Seabirds recovered dead from Bay of Plenty beaches following the grounding of *C.V. Rena*, showing numbers and percent of each species recorded as having oil on their plumage.

| Species | Total | Unoiled | Oiled | % oiled |
|---|-------|---------|-------|---------|
| Little penguin <i>Eudyptula minor</i> | 112 | 22 | 90 | 80 |
| Wandering albatross <i>Diomedea exulans</i> | 1 | 0 | 1 | 100 |
| White-capped mollymawk <i>Thalassarche cauta steadi</i> | 1 | 0 | 1 | 100 |
| Chatham Island mollymawk <i>T. eremita</i> | 1 | 1 | 0 | 0 |
| Northern giant petrel <i>Macronectes halli</i> | 3 | 0 | 3 | 100 |
| Cape petrel <i>Daption capense</i> | 5 | 3 | 2 | 40 |
| Grey-faced petrel <i>Pterodroma macroptera gouldi</i> | 5 | 3 | 2 | 40 |
| White-headed petrel <i>Pt. lessonii</i> | 1 | 1 | 0 | 0 |
| Mottled petrel <i>Pt. inexpectata</i> | 3 | 2 | 1 | 33 |
| Blue petrel <i>Halobaena caerulea</i> | 23 | 11 | 12 | 52 |
| Antarctic prion <i>Pachyptila desolata</i> | 7 | 2 | 5 | 71 |
| Fairy prion <i>P. turtur</i> | 16 | 6 | 10 | 63 |
| Prion sp. <i>Pachyptila sp.</i> | 3 | 3 | 0 | 0 |
| White-chinned petrel <i>Procellaria aequinoctialis</i> | 2 | 2 | 0 | 0 |
| Buller's shearwater <i>Puffinus bulleri</i> | 222 | 66 | 156 | 70 |
| Flesh-footed shearwater <i>P. carneipes</i> | 69 | 64 | 5 | 7 |
| Sooty shearwater <i>P. griseus</i> | 211 | 171 | 40 | 19 |
| Fluttering shearwater <i>P. gavia</i> | 270 | 30 | 240 | 89 |
| Little shearwater <i>P. assimilis</i> | 21 | 1 | 20 | 95 |
| White-faced storm petrel <i>Pelagodroma marina</i> | 80 | 22 | 58 | 73 |
| Common diving petrel <i>Pelecanoides urinatrix</i> | 880 | 177 | 703 | 80 |
| Red-tailed tropicbird <i>Phaethon rubricauda</i> | 1 | 0 | 1 | 100 |
| Australasian gannet Morus serrator | 34 | 30 | 4 | 12 |
| Little shag <i>Phalacrocorax melanoleucos</i> | 2 | 2 | 0 | 0 |
| Black shag <i>P. carbo</i> | 2 | 2 | 0 | 0 |
| Pied shag <i>P. varius</i> | 15 | 12 | 3 | 20 |
| Little black shag <i>P. sulcirostris</i> | 3 | 3 | 0 | 0 |
| Spotted shag <i>Stictocarbo punctatus</i> | 5 | 3 | 2 | 40 |
| Shag sp. (Phalacrocoracidae) | 2 | 1 | 1 | 50 |
| Southern black-backed gull Larus dominicanus | 7 | 5 | 2 | 29 |
| Red-billed gull <i>L. novaehollandiae scopulinus</i> | 8 | 6 | 2 | 25 |
| White-fronted tern <i>Sterna striata</i> | 1 | 1 | 0 | 0 |
| Total | 2016 | 652 | 1364 | 68 |

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