

Coastal Dunes at Ocean Beach, Cape Kidnappers



A view of the sand dunes on Ocean Beach



This reserve is 3,000ha of private land protected by a pest-proof fence

About the dunes:

- 28 ha of dunes within fenced-off area
- Plant control: Maritime pines removed (2007), blackberries sprayed (2008)
- Mammalian control: pest trapping (ongoing), livestock exclusion (2006)



Site of the skink traps and one area of the invertebrate transect

Why we care:

- Cape Kidnappers is privately owned and operated, making it a new model for conservation.
- Iwi value pingao and spinifex for cultural purposes (i.e. weaving)
- Site of endemic, endangered katipo spider
- Large, complete dune ecosystem protected from predators
- Archaeologically significant middens



View from the back of the dune system towards the ocean

What we did:

- Vegetation survey: 25 transects (20m) to identify species and changes across dunes
- Faunal survey:
 - Pit-fall traps to identify invertebrates (12 sites along a 288m line), and skinks (16 sites in a 20x20m grid)
 - Observation of animal presence, tracks and droppings



Recording data from a skink

Fauna found:

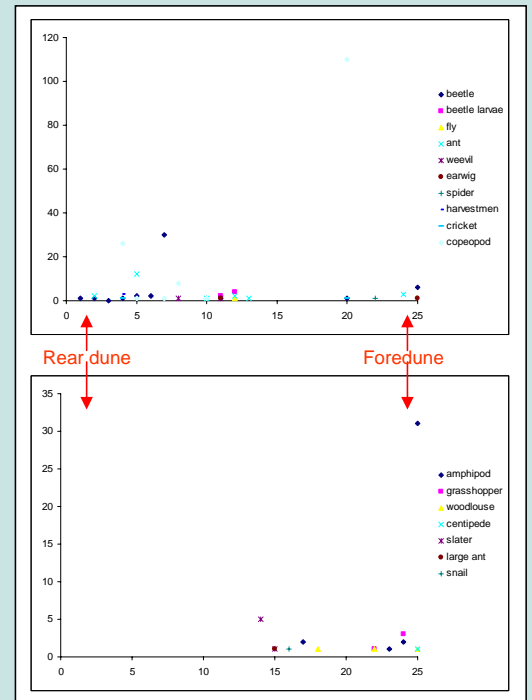
- Invertebrates: Copepods, ants and beetles were the dominant populations
- Herpetofauna: Common skinks and speckled skink
- Avifauna: Black Shag, Black-backed Gull, Pied Stilt, Swallow
- Tracks: Rabbit, scarab beetle, dog, bird
- Droppings: Rabbit (abundant), cow

Vegetation found:

- Native: Knobby Club Rush, Nihinihi, Pingao, Sand Coprosma, Spinifex, Tauhinu, Various Grasses
- Exotic: Buffalo Grass, Buttercup, California Thistle, Catsear, Dandelion, Harestail, Lotus, Marram, Primrose, Sand Poppy, Various Grasses
- Observations: we did not find marram grass in large quantities in the areas surveyed



Pingao and spinifex (note the rabbit tracks)



The invertebrate distribution in samples 1-25 (non replicated). The foredune and reardune assemblages should be investigated further

What needs to be done now:

- Immediate control of invasive plants can eliminate exotics such as marram grass
- Mammalian pest control, especially on rabbits that browse on pingao
- Once threatening plant and animals are under control, re-vegetation can proceed
- Native fauna can return once the area becomes a predator-free, suitable habitat