

## ORUAITI BEACH AREA

John F.F. Hobbs

Following our visit to Omaio Bay the previous day (see Omaio Bay in this issue), those who stayed over at Tim's bach took off again to the north-east to the Waihau Bay area.

Our first stop was at a roadside rest area opposite the Waihau Bay Fishing Club. This area is dominated by large old pohutukawa (*Metrosideros excelsa*) under which a variety of mainly exotic plants grew, but in areas with more light there were shore convolvulus (*Calystegia soldanella*), New Zealand spinach (*Tetragonia tetragonoides*) and pohuehue (*Muehlenbeckia complexa*). A rocky reef to some extent protects the shoreline where there were some interesting turf plant communities. On a more exposed area, several plants of sand buttercup (*Ranunculus acaulis*), an *Isolepis* sp. and arrow grass (*Triglochin striata*) were growing up amongst beach stones (see photo). Nearby there were sea rush (*Juncus*



Sand buttercup, arrow grass and *Isolepis* sp. (Photo J. Hobbs)

*kraussii* var. *australiensis*), sea primrose (*Samolus repens*), remuremu (*Selliera radicans*), three-square (*Schoenoplectus pungens*), oioi (*Apodasmia similis*) and shore lobelia (*Lobelia anceps*).

Our next stop was at another rest area on the bank of the Mangatoetoe Stream at the western end of the Department of Conservation Matapapa Recreation Reserve. This reserve occupies the area between SH 35 and the sea from just west of the Mangatoetoe Stream east-north-eastwards for some 600 metres. The rear dune topography is quite hummocky with two damp depressions towards the eastern end of the reserve. Across the boundary fence at the eastern end of the reserves are maritime pine (*Pinus pinaster*) and radiata pine (*P. radiata*). Wilding pines had been removed but we still found some to deal with.

The rear dunes were a mosaic of low growing herbaceous and grass species with occasional low shrubs such as pohuehue (*Muehlenbeckia complexa*) with a few dune oxalis (*Oxalis rubens*) scrambling up near the edges. There were some nice patches of perehia (*Lachnagrostis billardierei*) on the sides of some dunes and hard grass (*Catapodium rigidum*) was common in dune hollows. In the one of damp dune depressions there was a patch of manuka (*Leptospermum scoparium*) with a few grey willow (*Salix cinerea*) oioi (*Apodasmia similis*), and onion-leaf orchid (*Microtis unifolia*).

Opposite the Waihau Bay Motor Camp there are some large pohutukawa and puriri (*Vitex lucens*) under which surprisingly were several nikau palms (*Rhopalostylis sapida*) – surprising that was until it was pointed out that there were several large fruiting nikau in the motor camp grounds.

The beach foredune was fairly species deficient, the most obvious being pingao (*Ficinia spiralis*) and sea rocket (*Cakile maritima*). Back at the car park several species previously unvouchered in the Pukeamaru Ecological District were collected. Amongst these was a

grass I was curious about. The best I could do was either a *Bromus* sp. or a *Vulpia* sp. which, it turned out, was not too far off.

A year after the collection of this grass (still unidentified), I was in the herbarium helping to identify a backlog of plants which had been collected during this weekend's trip. Not being a great grass person, I asked Chris for a pointer as to the genus of this grass, whereupon he compared it with specimens of *Vulpia* held in the National Forestry Herbarium. There were two species present and with a cursory view of both, I concluded that it did not compare well with either. When Chris was informed of this, his adrenalin levels increased and he headed for the microscope with the sample under question and the herbarium vouchers. After careful comparison of all specimens, he came to a conclusion and informed me that he was in agreement with my deduction, which of course left open the question, what is it? After consulting all the books on grasses on his shelves, he was none the wiser. Then he remembered he had a CD on Australian grasses. Using the Ausgrass key he was eventually able to tentatively settle on *V. fasciculata*, a species previously unrecorded in New Zealand. However, before broadcasting this to all and sundry, he sent a query and photos to various herbaria around the world. One reply came back very quickly from Melbourne, Australia with the opinion that Chris's identification was the most likely. Several days later a reply came back from Kew with the information that if there were hairs on the ovary, his determination was correct. Back to the microscope and behold, there were hairs on the ovary. Well done Chris!

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\* denotes naturalised species

|                               |                     | Waihou Bay<br>rest area | Matapapa<br>Rec Res |
|-------------------------------|---------------------|-------------------------|---------------------|
| <b>Ferns</b>                  |                     |                         |                     |
| <i>Microsorium pustulatum</i> | hound's tongue fern | x                       | x                   |
| <i>Pteridium esculentum</i>   | bracken             |                         | x                   |
| <i>Pyrrosia eleagnifolia</i>  | leather-leaf fern   | x                       |                     |

## Gymnosperms

|                               |               |  |   |
|-------------------------------|---------------|--|---|
| * <i>Cupressus macrocarpa</i> | macrocarpa    |  | X |
| * <i>Pinus pinaster</i>       | maritime pine |  | X |
| * <i>Pinus radiata</i>        | radiata pine  |  | X |

## Dicot plants

|   |                         |   |   |
|---|-------------------------|---|---|
| * <i>Anagallis arvensis</i> var. <i>arvensis</i>  | scarlet pimpernel       | X |   |
| * <i>Arctotheca calendula</i>                     | Cape weed               | X |   |
| * <i>Aster subulatus</i>                          | sea aster               |   | X |
| * <i>Atriplex prostrata</i>                       | orache                  | X | X |
| * <i>Bellis perennis</i>                          | daisy                   | X |   |
| * <i>Cakile edentula</i> × <i>C. maritima</i>     |                         |   | X |
| * <i>Cakile maritima</i>                          | sea rocket              |   | X |
| <i>Calystegia sepium</i> subsp. <i>roseata</i>    | pohue                   |   | X |
| <i>Calystegia soldanella</i>                      | panahi                  | X | X |
| * <i>Cirsium vulgare</i>                          | Scotch thistle          | X |   |
| * <i>Conyza parva</i>                             | smooth fleabane         |   | X |
| * <i>Conyza sumatrensis</i>                       | broad-leaved fleabane   |   | X |
| <i>Coprosma macrocarpa</i>                        | large-seeded coprosma   |   | X |
| <i>Coprosma repens</i>                            | taupata                 | X |   |
| <i>Coprosma robusta</i>                           | karamu                  |   | X |
| * <i>Crepis capillaris</i>                        | hawksbeard              |   | X |
| * <i>Daucus carota</i>                            | wild carrot             | X | X |
| * <i>Digitalis purpurea</i>                       | foxglove                | X |   |
| * <i>Dipsacus fullonum</i>                        | wild teasel             | X | X |
| * <i>Galium aparine</i>                           | cleavers; bedstraw      | X | X |
| * <i>Geranium molle</i>                           | dove's foot cranesbill  | X |   |
| * <i>Hypochoeris radicata</i>                     | catsear                 | X | X |
| * <i>Lactuca serriola</i>                         | prickly lettuce         |   | X |
| * <i>Leontodon taraxacoides</i>                   | hawkbit                 | X | X |
| <i>Leptospermum scoparium</i>                     | manuka                  |   | X |
| * <i>Linum bienne</i>                             | pale flax               |   | X |
| <i>Lobelia anceps</i>                             | punakuru                | X |   |
| * <i>Lonicera japonica</i>                        | Japanese honeysuckle    | X | X |
| * <i>Lotus pedunculatus</i>                       | lotus                   | X | X |
| * <i>Lotus suaveolens</i>                         | hairy birdsfoot trefoil |   | X |
| * <i>Lupinus arboreus</i>                         | tree lupin              | X | X |
| * <i>Lycium ferocissimum</i>                      | African boxthorn        | X |   |
| <i>Macropiper excelsum</i> subsp. <i>excelsum</i> | kawakawa                | X | X |
| * <i>Malus</i> × <i>domestica</i>                 | apple                   |   | X |
| * <i>Medicago arabica</i>                         | spotted bur medick      | X |   |
| * <i>Melilotus indicus</i>                        | King Island melilot     | X | X |
| <i>Metrosideros excelsa</i>                       | pohutukawa              | X | X |
| <i>Muehlenbeckia australis</i>                    | puka                    |   | X |

|  |                           |   |   |
|--|---------------------------|---|---|
| <i>Muehlenbeckia complexa</i>                        | pohuehue                  | x | x |
| * <i>Orobancha minor</i>                             | broomrape                 |   | x |
| <i>Oxalis rubens</i>                                 | sand-dune oxalis          |   | x |
| * <i>Parentucellia viscosa</i>                       | tarweed                   |   | x |
| * <i>Phytolacca octandra</i>                         | inkweed                   | x |   |
| * <i>Plantago lanceolata</i>                         | narrow-leaved plantain    | x | x |
| * <i>Plantago major</i>                              | broad-leaved plantain     | x |   |
| * <i>Polycarpon tetraphyllum</i>                     | allseed                   |   | x |
| * <i>Prunella vulgaris</i>                           | selfheal                  |   | x |
| <i>Pseudopanax crassifolius</i> × <i>P. lessonii</i> |                           | x |   |
| <i>Pseudopanax lessonii</i>                          | houpara                   |   | x |
| <i>Ranunculus acaulis</i>                            | sand buttercup            | x |   |
| * <i>Rubus fruticosus</i> agg.                       | blackberry                | x | x |
| * <i>Rumex acetosella</i>                            | sheep's sorrel            | x |   |
| * <i>Rumex brownii</i>                               | hook dock                 |   | x |
| * <i>Rumex conglomeratus</i>                         | clustered dock            |   | x |
| * <i>Rumex crispus</i>                               | curled dock               |   | x |
| * <i>Salix cinerea</i>                               | grey willow               |   | x |
| <i>Samolus repens</i>                                | makaokao                  | x |   |
| <i>Selliera radicans</i>                             | remuremu                  | x |   |
| * <i>Senecio bipinnatisectus</i>                     | Australian fireweed       | x |   |
| <i>Senecio lautus</i> var. <i>lautus</i>             | shore groundsel           | x |   |
| * <i>Silene gallica</i>                              | catchfly                  |   | x |
| <i>Solanum nodiflorum</i>                            | small-flowered nightshade | x |   |
| * <i>Sonchus oleraceus</i>                           | puha                      | x | x |
| * <i>Taraxacum officinale</i>                        | dandelion                 | x |   |
| <i>Tetragonia tetragonoides</i>                      | kokihi                    | x |   |
| * <i>Trifolium repens</i>                            | white clover              | x | x |
| * <i>Verbena bonariensis</i>                         | purple-top                | x |   |
| <i>Vitex lucens</i>                                  | puriri                    |   | x |

### Monocot plants

|  |                      |   |   |
|--|----------------------|---|---|
| * <i>Anthoxanthum odoratum</i>               | sweet vernal         |   | x |
| <i>Apodasmia similis</i>                     | oioi                 | x | x |
| <i>Bolboschoenus medianus</i>                |                      |   | x |
| * <i>Briza maxima</i>                        | large quaking grass  |   | x |
| * <i>Briza minor</i>                         | shivery grass        |   | x |
| * <i>Bromus diandrus</i>                     | ripgut brome         |   | x |
| * <i>Bromus willdenowii</i>                  | prairie brome        |   | x |
| <i>Carex pumila</i>                          | sand sedge           |   | x |
| * <i>Catapodium rigidum</i>                  | hard grass           |   | x |
| * <i>Cortaderia selleana</i>                 | pampas               |   | x |
| * <i>Cynodon dactylon</i>                    | Indian doab          | x |   |
| <i>Cyperus ustulatus</i> f. <i>ustulatus</i> | giant umbrella sedge | x |   |

|  |                      |   |   |
|--|----------------------|---|---|
| * <i>Dactylis glomerata</i>                      | cocksfoot            | x | x |
| * <i>Elytrigia pycnantha</i>                     | sea couch            |   | x |
| <i>Ficinia nodosa</i>                            | wiwi                 | x | x |
| <i>Ficinia spiralis</i>                          | pingao               |   | x |
| * <i>Holcus lanatus</i>                          | Yorkshire fog        |   | x |
| <i>Isolepis cernua</i>                           |                      | x |   |
| <i>Juncus kraussii</i> var. <i>australiensis</i> | wi; sea rush         | x | x |
| <i>Lachnagrostis billardierei</i>                | perehia              |   | x |
| * <i>Lagurus ovatus</i>                          | haretail             |   | x |
| * <i>Lolium perenne</i>                          | rye grass            | x | x |
| <i>Microtis unifolia</i>                         | onion-leaf orchid    |   | x |
| * <i>Paspalum dilatatum</i>                      | paspalum             | x |   |
| * <i>Paspalum vaginatum</i>                      | saltwater paspalum   | x |   |
| * <i>Pennisetum clandestinum</i>                 | kikuyu grass         | x |   |
| <i>Phormium tenax</i>                            | harakeke, flax       |   | x |
| <i>Poa anceps</i> agg.                           |                      | x |   |
| <i>Rhopalostylis sapida</i>                      | nikau                |   | x |
| * <i>Schedonorus arundinaceus</i>                | tall fescue          | x | x |
| <i>Schoenoplectus pungens</i>                    | three-square         | x |   |
| * <i>Setaria pumila</i>                          | yellow bristle grass | x |   |
| * <i>Sporobolus africanus</i>                    | ratstail             |   | x |
| <i>Triglochin striata</i>                        | arrow grass          | x |   |
| * <i>Vulpia fasciculata</i>                      | dune fescue          |   | x |
| * <i>Vulpia myuros</i> var. <i>myuros</i>        | vulpia hair grass    | x | x |



*Vulpia fasciculata*, Oruaiti Beach, J.F.F. Hobbs, 22 November 2009 (NZFRI 28234)  
(Photo: Wendy Hurren)