

Though Cannibal Bay may have an unfortunate name, derived from bones found to be moa not human, a fortunate group of thirteen 'BotSoccers' spent an enjoyable day in good weather and in good company, botanising a small piece of the south Otago coast on John Barkla's recent field trip.

Parking our cars near a group of severely topiaried mature totaras at the misnamed bay, we headed to a beach dominated by parallel rock formations, tilted sandstones of the Southland syncline, running out to sea. Above these clumps of *Anisotome lyallii* interspersed the endemic *Celmisia lindsayi* cascading down the cliffs. Nearby Nugget Point, where we would visit later in the day, is the northern limit for this southern coastal species of *Celmisia*.

Passing gatherings of juvenile Hooker sea lions, doing what loitering juveniles do - play fighting and annoying each other (which was better than annoying us), we headed to the dune flats/hollows, where a half yearly covering of water keeps the introduced lupin confined to the raised dunes, for some serious botanising!

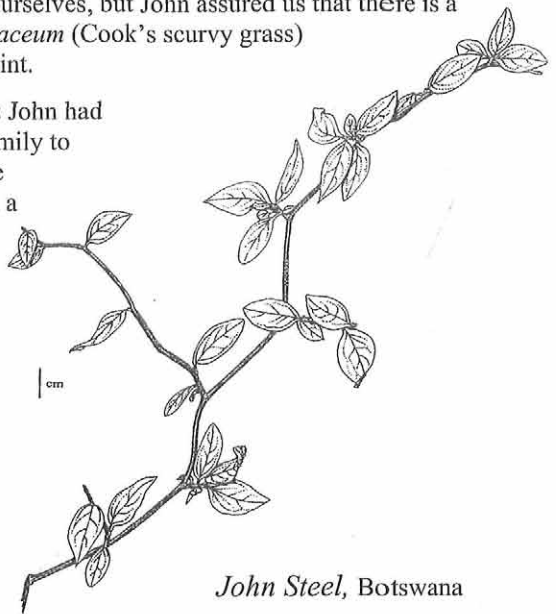
Here we found bouquets of cream scattered about us. The woody New Zealand daphne, *Pimelia lyallii*, an excellent food source for one of our native moths, was flowering in abundance. Other plants of interest were *Raoulia hookeri*, *Colobanthus apetalus*, *Hydrocotyle hydrophila*, *Myosotis pygmaea* var *pygmaea* in flower (we found only two plants of this rare gem), *Ranunculus acaulis*, *Aceana novae zelandiae*, *Apium prostratum*, *Coprosma acerosa*, *Libertia peregrinans* (with magnificent orange leaves), *Apodasmia similis* (jointed wire rush), *Anaphalioides bellidiodies*, *Potentilla anserinoides*, *Leptinella* sp., *Mazus arenarius*, silver tussock (*Poa cita*), *Coprosma propinqua*, two native orchids, *Microtis* sp. and large quantities of *Corybas* sp. and unfortunately rather an abundant amount of *Hieracium pilosella* (mouse eared hawkweed), marram grass and a variety of introduced weeds.

Having restored our blood sugar levels with a picnic in the sun, we headed back to the cars to follow the coast road to the Nuggets. Nugget Point, the sign says, "is the only place on the mainland where fur seals, Hooker sealions and elephant seals co exist with yellow-eyed and blue penguins and spotted shags". The reserve is also home to over 800 *Olearia* plants and the bouquet of one particular species greeted us as we headed down the track to the lighthouse. *Olearia fragrantissima* with a definite aroma of ripe peaches - well, so the consensus of the gathered group decided. Terrain and climate means any growth above knee height at the Nuggets receives quite severe 'behaviour' modification and there were some spectacular wind-shorn kowhai and mahoe to prove it. Demonstrating the effect of good shelter, *Clematis paniculata* was happily flowering on one of the most exposed parts of the headland near the lighthouse, nestled down in the bracken, *Pteridium esculentum*. Other plants of interest were the native *Linum*, *L. monogynum*, *Clematis foetida*, flowering magnificently, *Helichrysum lanceolatum*, *Rubus schmidelioides*, *Calystegia* sp., *Urtica ferox*, *Coprosma virescens* and *C. crassifolia*.

We didn't climb down to check it out ourselves, but John assured us that there is a considerable quantity of *Lepidium oleraceum* (Cook's scurvy grass) growing on the rocks below Nugget Point.

For several it was extended field trip as John had kindly invited us to join him and his family to stay overnight in the former light house keeper's house. Accommodation with a view par excellence and I understand the aroma of ripe peaches was even more luscious the next morning! Thanks John for an excellent botanical trip.

Olearia fragrantissima
Conservation Requirements of New Zealand's Nationally Threatened Vascular Plants. DoC 1999



John Steel, Botswana

Book review

The moss genus *Fissidens* in New Zealand, an illustrated key.

Beever, J.E.; Malcolm, W.M.; Malcolm, N. 2002. 91 pp. Spiral bound with CD ROM. Micro-Optics Press, Box 320, Nelson. \$NZ50 including p & p (\$60 air-mailed outside NZ)

Identifying mosses is often a bit daunting for the beginner (even the not-so beginner) but species from the genus, *Fissidens*, are a bit of gift – at least to genus level. Not only that, but they are also fairly significant in the moss flora of New Zealand with thirty-two species and varieties, sixteen of them in Otago and one of which, *Fissidens taylorii* var. *epiphytus*, is found only here (and Australia). The leaves (or phyllids) of *Fissidens* are in one plane and they are unusual in that each leaf has a prominent extra blade to it and this is easily spotted with a good hand lens.

Jessica Beever is the New Zealand expert on *Fissidens* (among other things) and she has combined with the Malcolms to produce what has to be one of the best, if not the best, monograph of a moss genus. It begins with an explanation of the leaf structure which is followed by an excellent vegetative key thereby avoiding the problems that arise when finding plants without sporophytes. Each couplet has the previous couplet indicated and also the page number where the identified species, can be found, making the whole more user friendly.

Next follows each species over two facing pages. The first has those wonderful colour photographs, several to a page, so typical of the Malcolms' work, and highlighting those features significant for identification. A line drawing of the entire leaf, shewing from where each photograph was taken, and the scale, finishes off the page. The facing page gives a description of the species with the important features highlighted, the distribution of the species and any important notes. Completing this