Three rare and endangered plants are present.

Cotula dioica ssp Monoica is a little "batchelor's button" growing vigorously in one place where earth had been thrown up from a ditch last century. Colin Ogle, Society member and a Wildlife Service botanist, has produced a plant list for the reserve. He excitedly showed me this native plant, saying it was a threatened species only present elsewhere on the Makara coast some 40 km away. Needless to say Colin has grown many cuttings of this plant for expanding its numbers in the reserve.

Mimulus repens, New Zealand musk, is also a rare plant of the Wellington region, known from only one other locality. It was found in a drain within the reserve.

Hiding in one location among the sea of reeds, is a small very rare reed of the Wellington region, *Schoenus nitens*. Its protection is now thankfully assured within the reserve, which is possibly its only site.

## Wildlife aplenty

The whole reserve is built on thick beds of shells apparently overwhelmed by silt run-off from the catchment when it was cleared of forest during the last century. These beds are almost a metre thick — whole shells unbroken as if they had been suffocated in their prime. Now the mud flats are the lively home of the same bivalves, turrets, pipis, cockles and the large wedge shells *Tellina* (*Macomona*) liliana. The sand burrowing and surface dwelling whelks are also common.

Of great interest are the mudflat snails

Amphibola crenata. These archaic snails have lungs and represent a stage in the evolution of animals leaving the sea for the land. Plentiful in tidal pools, they choose to concentrate along the high tide fringes where the water covering lasts only an hour or so. They burrow beneath the surface when the tide arrives and emerge with the ebb to resume their feeding on the rich organic food of the muds. Feeding continuously, they produce an endless trail of almost pure faecal matter.

Also near high tide mark are the little burrowing crabs, *Helice crassa* whose tunnel entrances are everywhere. Their companion species is the stalk-eyed mud crab, *Macrophthalmus hirtipes*. While building the water control structures I noticed these crabs indulging in free rides on the tide. One was seen to travel up-stream for 100 metres! When the tide was at full spate over the weir, hundreds of small yellow-eyed mullet took the roller-coaster run into the basin beyond. Needless to say, the resident white faced herons busied themselves marshalling these fish into the shallows of the basin before gobbling them up.

On 25 and 26 November 1984 high tides were trapped and held for the first time by the southern flap gate, and the birds arrived on cue to enjoy the water which thankfully didn't ebb away.

The increase in birdlife was immediate. For the first time, three caspian terns were sighted and the pied stilt residents rose from 5 to 30. A rare pectoral sandpiper arrived, also two spur winged plovers and there was an immediate increase in ducks, not all of them mallards. Sharp-tailed sandpipers faced

the wind in a flock of 15.

We rushed around sealing up leaks in the basin and went home satisfied with the words of an Ornithological Society bird counter who had spent the day surveying Pauatahanui Inlet: "We only found one tern, I came here and most of the birds are in the reserve". That said it all for us.

The work ahead includes the building of two bridges and the completion of nearly 3 km of tracks. Two out of the planned seven fresh water ponds have been established and one of the seven hides has been built. The planting of thousands of shrubs, drain clearance, contouring, pond and island formation and the building of a visitor/reserve centre are yet to be completed.

All this first phase is planned to be finished by the end of 1986, at a cost of \$77,000, but because of helpful assistance from the Stout Trust and the QEII National Trust, plus other funding, there remains just \$35,000 to be subscribed. A national appeal has been set up to raise this, to ensure the completion of the planned first phase, which will allow members and the public to use the reserve and its facilities

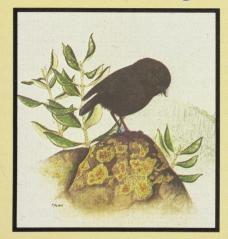
## How To Help

Please send any donations to: Royal Forest and Bird Protection Society, PO Box 631, Wellington. Every donor of \$50 or more will receive a certificate as a Founder Subscriber.

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