

TABLE 14. Measurements of yellow-eyed penguin, South East Island.

	(mm)
Bill Length	56.6
Bill Depth at base	25.0
Head Length + bill	143.0
Heel to mid claw pad	123.5
Flipper Length	234.0

### Chatham Island pigeon

During the September visit, I carried out a number of observations of CI pigeons, in particular obtaining feeding and movement data from the two birds that had transmitters attached in July 1990. All these observations were put onto the Chatham Island Field Centre pigeon database so I will not summarise them here. One unusual sighting was a group of five CI pigeons together in a tarahinau in the Awatotara Valley on 27/9/90. These birds were displaying and chasing each other. A CI pigeon was seen in the Tuku Valley up from Taiko Hill on 24/9/90. Chatham Island pigeons were seen eating CI mahoe flowers and leaves, hoho leaves and green fruit, *Hebe barkeri* leaves, and karamu flowers and green fruit during September. A CI pigeon watch carried out by Andy Grant, Sharon Walker, John Andrew, Euan Kennedy and myself located 25 CI pigeons using the Awatotara and mid to lower Tuku Valley on 8/2/91.

One CI pigeon was seen roosting in a ribbonwood tree in the Kokopu Creek catchment on South East Island on 28/1/91. The bird seemed plump and healthy. No bands were visible when checked carefully from below.

### Flora of South East Island

While on South East Island, I recorded the species of plants present on the island and estimated their relative abundance (Appendix 3). The flora includes 134 species of vascular plants, 93 (70%) of which are native. Several plants were extremely rare and were known from less than five individuals. These included *Hebe barkeri*, *Dicksonia squarrosa*, *Corokia macrocarpa*, *Linum monogynum* and *Schoenoplectus pungens*.

In a survey of the summit area and western cliffs on 31/1/91, I noted that *Festuca coxii* was extremely abundant (1000's of plants). On a steep slope directly south of the Western Summit is a herbfield dominated by *Myosotidium hortensia* (100's of plants) and *Aciphylla dieffenbachii* (50-100 plants), some with yellow flower heads and others with seeds. I saw no evidence of *Aciphylla* weevil chewing on the stems of these plants. Three plants of *bergeria grandifolia* were present (one large plant with green seed capsules, one large plant with no seed capsules and one seedling). A few plants of *Lepidium oleraceum* were present and at least 11 plants were found on the ridge east of the Eastern Summit.

APPENDIX 3. FLORA OF SOUTH EAST ISLAND

SCIENTIFIC NAME	COMMON NAME	ABUNDANCE SCALE
FERNS (16)		
<i>Asplenium bulbiferum</i>	hen and chickens fern	R
<i>A. chathamense</i>	-	C
<i>A. oblongifolium</i>	shining spleenwort	R
<i>A. obtusatum</i>	shore spleenwort	O-C
<i>Blechnum</i> sp. 1 "capense"	kiokio	L
<i>B. durum</i>	-	O
<i>B. penna-marina</i>	-	L
<i>Cyathea dealbata</i>	silver fern	R
<i>C. ?smithii</i>	soft tree fern	R
<i>Dicksonia squarrosa</i>	rough tree fern	R
<i>Histiopteris incisa</i>	water fern	A
<i>Hypolepis lactea</i>	-	L
<i>Phymatosorus diversifolius</i>	hound's tongue	L
<i>Polystichum "chatham"</i>	shield fern	O
<i>Pteridium esculentum</i>	bracken	C
<i>Pyrrosia eleagnifolia</i>	leather-leaf fern	O

TREES, SHRUBS AND CLIMBERS - Native Dicots (22)

<i>Calystegia soldanella</i>	shore bindweed	R
<i>C. tuguriorum</i>	-	O
<i>Coprosma chathamica</i> "repens form"	karamu	O
<i>C. chathamica</i>	karamu	A
<i>Corokia macrocarpa</i>	-	R
<i>Corynocarpus laevigatus</i>	kopi	O
<i>Dracophyllum arboreum</i>	tarahinau	L
<i>Haloragis erecta</i>	toatoa	L
<i>Hebe barkeri</i>	koromiko	R
<i>H. chathamica</i>	-	O
<i>H. dieffenbachii</i>	-	A
<i>Macropiper excelsum</i>	kawakawa	A
<i>Meliccytus chathamicus</i>	Chatham Is mahoe	A
<i>Muehlenbeckia australis</i>	-	A
<i>Myoporum laetum</i>	ngaio	C
<i>Myrsine chathamica</i>	matipo	A
<i>Olearia chathamica</i>	keketererehe	LC
<i>O. traversii</i>	akeake	A
<i>Plagianthus regius</i>	lowland ribbonwood	A
<i>Pseudopanax chathamicus</i>	hoho	C
<i>Solanum aviculare</i>	poroporo	O
<i>Urtica australis</i>	southern nettle	C

*Indic*  
 TREES, SHRUBS AND CLIMBERS - Introduced Dicots (3)

<i>Calystegia sepium</i>	pink bindweed	L
<i>Physalis peruviana</i>	Cape gooseberry	R
<i>Rubus fruticosus</i>	blackberry	C

TREES, SHRUBS AND CLIMBERS - Native Monocots (2)

<i>Phormium tenax</i> "chatham"	NZ flax	C
<i>Ripogonum scandens</i>	supplejack	C

DICOT HERBS - Native (35)

✓ <i>Acaena novae-zelandiae</i>	bidibid	C
✓ <i>Aciphylla dieffenbachii</i>	coxella	L
✓ <i>Apium prostratum</i>	native celery	C
✓ <i>Chenopodium glaucum</i>	glaucous goosefoot	C
✓ <i>Colobanthus muelleri</i>	-	R
✓ <i>Cotula coronopifolia</i>	buttonweed	O
✓ <i>Crassula moschata</i>	-	LA
✓ <i>Dichondra repens</i>	Mercury Bay weed	O
<i>Disphyma papillatum</i>	Chatham ice plant	A
<i>Einadia allanii</i>	-	L
<i>E. trigonos</i>	-	C
<i>Embergeria grandifolia</i>	Chatham sowthistle	R
<i>Epilobium billardiereanum</i>	-	O
<i>Geranium traversii</i>	-	O
<i>Hydrocotyle novae-zeelandiae</i> "chatham"	pennywort	R
<i>Lagenifera pumila</i>	-	O
<i>Lepidium oleraceum</i>	Cook's scurvy grass	R
<i>Leptinella ?squalida</i>	bachelors'buttons	C
<i>Linum monogynum</i>	rauhua	R
<i>Lobelia anceps</i>	shore lobelia	O
<i>Myosotidium hortensia</i>	Chatham forget-me-not	L
<i>Oreomyrrhis colensoi</i>	-	R
<i>Parietaria debilis</i>	-	O
<i>Potentilla anserinoides</i>	silverweed	L
<i>Pratia arenaria</i>	-	O
<i>Pseudognaphalium luteoalbum</i>	Jersey cudweed	C
<i>Ranunculus reflexus</i>	hairy buttercup	O
<i>Rumex neglectus</i>	shore dock	O
<i>Samolus repens</i>	-	C
<i>Sarcocornia quinqueflora</i>	glasswort	LC
<i>Selliera radicans</i>	-	O
<i>Senecio lautus</i>	shore groundsel	C
<i>S. radiolatus</i>	-	C
<i>Stellaria parviflora</i>	native chickweed	O
<i>Tetragonia trigyna</i>	native spinach	O

DICOT HERBS - Introduced (26)

<i>Achillea millefolium</i>	yarrow	R
<i>Anagallis arvensis</i> s.s.	scarlet pimpernel	O
<i>Carduus tenuiflorus</i>	winged thistle	R
<i>Cerastium fontanum</i>	mouse-ear chickweed	O
<i>C. glomeratum</i>	annual mouse-ear chickweed	R
<i>Chenopodium murale</i> 1029	nettle-leaved fat-hen	LC
<i>Cirsium vulgare</i>	Scotch thistle	O
<i>Coronopus didymus</i>	twin cress	R
<i>Geranium molle</i>	dove's foot cranesbill	R
<i>Hypochoeris radicata</i>	catsear	L
<i>Leontodon taraxacoides</i> 1030	hawkbit	O
<i>Lotus pedunculatus</i>	birdsfoot trefoil	L
<i>Plantago ?australis</i>	hairy plantain	O
<i>P. coronopus</i>	buck's horn plantain	C
<i>P. lanceolata</i>	narrow-leaved plantain	L
<i>Rorippa nasturtium-aquaticum</i>	watercress	O
<i>Rumex acetosella</i>	sheep's sorrel	O
<i>R. pulcher</i> 1031	fiddle dock	O
<i>Sagina procumbens</i>	pearlwort	O
<i>Solanum tuberosum</i>	potato	L
<i>Sonchus oleraceus</i>	puha	C
<i>Taraxacum officinale</i>	dandelion	R
<i>Trifolium dubium</i>	suckling clover	O

T. repens	white clover	O
Vicia sativa	vetch	O
Vicia sp.	-	O

MONOCOT HERBS, RUSHES, SEDGES (11)

Carex trifida	-	A
Carex sp.	-	A
Eleocharis acuta	-	L
Isolepis cernua	-	C
I. nodosa	-	O
Luzula banksiana var. acra	coastal woodrush	L
Microtis unifolia	onion orchid	O
Schoenoplectus pungens	-	R
Thelymitra sp.	sun orchid	O
Triglochin striatum	arrow-grass	L
Uncinia uncinata	hook grass	R

GRASSES - Native (7)

Dichelachne crinita	plume grass	O
Deyeuxia billardierei	sand wind-grass	O
Festuca coxii	-	A
Hierochloa redolens	holy grass	L
Poa chathamica	-	C
Rytidosperma sp	-	R
Trisetum antarcticum	-	O

GRASSES - Introduced (12)

Agrostis tenuis	browntop	A
Aira caryophyllea	silvery hair-grass	C
Anthoxanthum odoratum	sweet vernal	R
Bromus hordeaceus	soft brome	C
B. willdenowii	prairie grass	C
Dactylis glomerata	cocksfoot	A
?Digitaria sanguinalis 1033	summer grass	L
Holcus lanatus	Yorkshire fog	C
Hordeum murinum	barley grass	O
Lolium perenne	perennial ryegrass	C
Poa annua	annual poa	L
Vulpia bromoides	squirrel-tail fescue	O

ABUNDANCE SCALE

A = Abundant      O = Occasional      L = Local  
 C = Common      R = Rare