

## INDIGENOUS PLANTS OF THE SHORES OF LAKE COLERIDGE

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Over the summer 1994-95 I surveyed the flora and vegetation of the shores of Lake Coleridge, in the middle Rakaia catchment (Fig. 1). This task was done for the Working Party convened by the Electricity Corporation of New Zealand to investigate many aspects of the hydrology, geomorphology, biology and human use of the lake, prior to reapplication for a water right for the operation of the Lake Coleridge Hydro-Electric Power Station. Apart from a short stretch of the lake shore along Kaka Hill, a longer stretch at the west end of Peak Hill and the island in the middle of the lake (Fig. 1), which were not able to be visited at the time, I traversed the entire lake shore on foot, making notes on the plant life in a zone from just below lake level to about 20 m above lake level. From these notes a report to the Working Party was compiled (C. Burrows, 1995a).

The present article comprises an updated species list (indigenous plants only) and two maps from the report (which is not widely available). Diverse terrain is present around the lake; habitats include rock cliffs, gravel cliffs, colluvial slopes, alluvial fans where streams enter the lake, muddy lake deposits, swampy areas and lagoons dammed behind gravel bars formed by wave action. Beaches are bouldery or gravelly and they are exposed to varying degrees as the lake level fluctuates with use of water for power generation (and inflows from the diverted Harper and Wilberforce Rivers). The altitude of the lake is relatively high (509.5 m); mountains around it rise to much higher elevations (Peak Hill 1240 m, Mt Oakden 1633 m, Mt Cotton 1470 m, Kaka Hill 994 m). Morainic downlands and ice-scraped rock border the lake at Coleridge Downs and the Peninsula. There and elsewhere, rocky cliffs plunge steeply into the lake.

Although forest is of limited extent around the shores of Lake Coleridge (Fig. 2), scrub is very abundant. The woody plant flora is moderately varied. Beech forest is mainly at the western end of the lake and broadleaved angiosperms are prominent in other forest patches. Common trees are *Cordyline australis*, *Griselinia littoralis*, *Pseudopanax crassifolius* and *Sophora microphylla*. *Metrosideros umbellata*, *Carpodetus serratus* and *Myrsine australis* are less common. *Olearia avicenniifolia* is prominent, and in certain places, so are *Coriaria arborea* and *Helichrysum lanceolatum*. Other locally abundant shrubs include *Kunzea ericoides*, *Coprosma lucida*, *C. crassifolia*, *Olearia paniculata* and *Myrsine divaricata*. The very common shrubs, however, are *Discaria toumatou*, *Corokia cotoneaster* and *Coprosma propinqua*. In many places they form almost impenetrable thickets, laced together with *Muehlenbeckia australis*, *M. complexa*, *Parsonia capsularis* and *Rubus squarrosus*. Other quite common vines are *Clematis paniculata* and *Fuchsia perscandens*.

Other species, normally local to rare so far inland in Canterbury, include *Adiantum cunninghamii*, *Pelargonium inodorum*, *Muehlenbeckia ephedroides*, *Tupeia antarctica*, *Scandia geniculata* and *Haloragis erecta*. *Anaphaloides trinervis* (a real rarity in our province), *Carmichaelia* cf. *corrugata* and *Carex* cf. *resectans* are other interesting finds. The *Adiantum* is very common on wet rock faces between the lake

and overhanging forest. This also is the habitat for the *Gnaphalium* but it was seen in only two places. *Scandia* and *Haloragis* are also found in many places at Lake Coleridge, in scrub and on gravelly cliffs, respectively.

Some of the striking species of wetland sites (marshes, swamps, lagoons and muddy beaches) include *Eleocharis gracilis*, *Leptinella maniototo*, *Pratia perpusilla*, *Hypsela rivalis*, *Schoenus concinnus* and *Leptocarpus similis*. The *Leptocarpus* was an important find; it is very rare inland in Canterbury, known by me, otherwise, only from one colony at the Lake Coleridge powerhouse tailrace, where it is now extinct. The population in the Lake Stream is extensive and thriving. I searched without success near the confluence of the Lake Stream with the Wilberforce River for *Lepidosperma australe* (square-stemmed sedge) which I found there in the 1950's.

Another interesting group of lake shore plants includes those which usually live at much higher altitude, in alpine/sub-alpine habitats. Among them the commonest are *Celmisia spectabilis* var. *magnifica* and *Aciphylla aurea*. Small colonies of *Chionochloa rigida*, *Colobanthus acicularifolia*, *Erythranthera pumila*, *Leucogenes grandiceps*, *Myrsine nummularia*, *Pentachondra pumila* and *Exocarpus bidwillii* occur also. Table 1 lists the indigenous species found on the shores of Lake Coleridge.

Botanical studies of the upper Rakaia River have yielded many surprises already; there is still a great deal more ground to cover, however, before the flora of the catchment is as well known as is, for example, that of the Waimakariri, to the north. Complementing this article are one on the flora and vegetation of the island in Lake Coleridge (L. Burrows 1995) and another on finds of pygmy mistletoes (C. Burrows 1995).

#### ACKNOWLEDGEMENTS

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#### REFERENCES

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- Burrows, C. J. 1995b: Some localities for pygmy mistletoes in Canterbury. *Canterbury Botanical Society Journal* 29: 76–78.
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**Table 1.** Indigenous Flora of the Shore of Lake Coleridge

Species	Common name	Notes
<b>Woody plants of forest and scrub communities</b>		
<b>Trees</b>		
<i>Aristotelia serrata</i>	wineberry	only Kaka Hill, E. end Peak Hill
<i>Carpodetus serratus</i>	marble leaf	mod. common
<i>Cordyline australis</i>	cabbage tree	v. common
<i>Metrosideros umbellata</i>	southern rata	Kaka Hill, E. end Peak Hill, Peninsula
<i>Myrsine australis</i>	red mapou	only Kaka Hill, E. end Peak Hill
<i>Nothofagus solandri</i> var. <i>cliffortioides</i>	mountain beech	only 4 patches, 1 Kaka Hill; 1 Simois; 2 W. end Sheep Range
<i>Pittosporum tenuifolium</i>	kohuhu	only Peninsula
<i>Podocarpus hallii</i>	mountain totara	rare Kaka Hill (one plant)
<i>Pseudopanax crassifolius</i>	lancewood	v. common
<i>Sophora microphylla</i>	kowhai	v. common
<b>Shrubs</b>		
<i>Aristotelia fruticosa</i>	shrub wineberry	Kaka Hill, Oakden Fan, Sheep Range
<i>A. fruticosa</i> x <i>A. serrata</i>	hybrid wineberry	Kaka Hill, E. end Peak Hill
<i>Carmichaelia</i> cf. <i>angustifolia</i>	native broom	uncommon Kaka Hill
<i>C. australis</i>	native broom	mod. common
<i>Coprosma crassifolia</i>	thick-leaved coprosma	mod. common, esp. in forest
<i>C. linariifolia</i>	yellow-wood	mod. common, in forest
<i>C. lucida</i>	shining-leaved coprosma	Peninsula, Sheep Range
<i>C. microcarpa</i>	small-fruited coprosma	Peninsula
<i>Coprosma</i> species "T"	blotch-leaved coprosma	local, Sheep Range
<i>C. propinqua</i>	miki miki	v. common
<i>C. rhamnoides</i>	variable-leaved coprosma	Kaka Hill, Peninsula, Sheep Range
<i>C. rugosa</i>	blue-fruited coprosma	Sheep Range (scarce Kaka Hill)
<i>Coriaria arborea</i>	shrub tutu	common S. side of lake, Kaka Hill, Peninsula
<i>Corokia cotoneaster</i>	korokio	v. common
<i>Cyathodes juniperina</i>	prickly mingi mingi	v. common N. side of lake, Sheep Range, Peninsula
<i>Discaria toumatou</i>	matagouri	v. common
<i>Dracophyllum acerorum</i>	pale green dracophyllum	rare, Coleridge Downs cliffs
<i>D. longifolium</i>	long-leaved dracophyllum	local, Peninsula
<i>D. uniflorum</i>	single-flowered dracophyllum	rare, Peninsula
<i>Gaultheria antipoda</i>	bush snowberry	common
<i>G. crassa</i>	lily of the valley shrub	rare, Peninsula
<i>G. antipoda</i> x <i>G. crassa</i>	hybrid snowberry	rare, Peninsula
<i>Hebe</i> cf. <i>glaucophylla</i>	blueish-leaved hebe	local, Peninsula
<i>H. salicifolia</i>	koromiko	common
<i>H. cf. traversii</i>	Travers' hebe	mod. common
<i>Helichrysum lanceolatum</i>	shrub sungold	common N. side of lake, less so on S. side
<i>H. depressum</i>	dead sticks	rare, Harper Fan, Sheep Range
<i>H. intermedium</i>	whipcord sungold	rare, Peninsula
<i>Kunzea ericoides</i>	kanuka	common
<i>Leptospermum scoparium</i>	manuka	common W. end Sheep Range, v. common locally Peninsula, Kaka Hill
<i>Muehlenbeckia ephedroides</i>	cryptic pohuehue	rare, Black Cliffs
<i>Myrsine divaricata</i>	weeping mapou	Kaka Hill, E. end Peak Hill. W. end Sheep Range
<i>Olearia arborescens</i>	broadleaved ake ake	Fairly local, commonest W. end Sheep Range
<i>O. avicenniifolia</i>	grey-leaved ake ake	v. common
<i>O. bullata</i>	swamp olearia	local Peninsula, Lake Coleridge Downs
<i>O. lineata</i>	linear-leaved olearia	rare, Lake Stream

<i>O. paniculata</i>	golden ake ake	mod. common
<i>Ozothamnus fulvida</i>	yellow tauhinu	mod. common
<i>O. vauvilliersii</i>	mountain tauhinu	Peninsula, Sheep Range
<i>Pseudopanax colensoi</i>	three-finger	rare, Oakden fan
<i>Sophora prostrata</i> x <i>S. microphylla</i>	hybrid kowhai	rare, Oakden fan
<b><u>Vines</u></b>		
<i>Calystegia tuguriorum</i>	native convolvulus	v. common
<i>Clematis forsteri</i>	large green-flowered clematis	common
<i>C. marata</i>	small green-flowered clematis	local, Peak Hill, Coleridge Downs
<i>C. paniculata</i>	white-flowered clematis	Kaka Hill, E. end Peak Hill, W. end Sheep Range
<i>Fuchsia perscandens</i>	climbing fuchsia	common
<i>Muehlenbeckia australis</i>	pohuehue	v. common
<i>M. complexa</i>	scrub pohuehue	v. common
<i>Parsonia capsularis</i>	aka-kiore	common
<i>Rubus cissoides</i>	large-leaved lawyer	local Kaka Hill, E. end Peak Hill, Oakden Fan
<i>R. schmidelioides</i>	hairy-leaved lawyer	mod. common
<i>R. squarrosus</i>	narrow-leaved lawyer	v. common
<i>Scandia geniculata</i>	climbing aniseed	mod. common
<b><u>Parasites</u></b>		
<i>Exocarpos bidwillii</i>	leafless sandalwood	rare, Peninsula
<i>Ileostylus micranthus</i>	common mistletoe	common Intake, uncommon Peak Hill, rare elsewhere
<i>Tupeia antarctica</i>	white mistletoe	rare, Kaka Hill, Peninsula
<i>Korhalsella clavata</i>	pygmy mistletoe	rare, Sheep Range
<b>Herbs of forest and scrub</b>		
<i>Acaena anserinifolia</i>	common bidi bidi	common
<i>Arthropodium candidum</i>	delicate lily	rare. E. end Peak Hill, W. end Sheep Range
<i>Astelia fragrans</i>	big bush lily	mod. common
<i>A. nervosa</i>	subalpine bush lily	local, Kaka Hill, Sheep Range
<i>Cardamine debilis</i>	bittercress	mod. common
<i>Corybas</i> spp.	spider orchids	local, possibly several species
<i>Epilobium pubens</i>	downy willow herb	common
<i>E. rotundifolium</i>	round-leaved willow herb	common
<i>Galium tenuicaule</i>	native bedstraw	local, forest
<i>Gingidia montana</i>	big aniseed	local, beneath trees on rock
<i>Anaphalioides trinervis</i>	trinerved cudweed	rare (also very rare in Canterbury)
<i>Hydrocotyle moschata</i>	hairy pennywort	mod. common
<i>Lagenifera cuneata</i>	small daisy	mod. common
<i>L. strangulata</i>	small daisy	mod. common
<i>Libertia ixioides</i>	native iris	rare, shore between Peak Hill, Oakden Fan
<i>Nertera</i> cf. <i>scapanioides</i>	hairy creeping nertera	rare. W. end Sheep Range
<i>Phormium cookianum</i>	mountain harakeke	mod. common
<i>Poa breviglumis</i>	delicate poa	local, forest
<i>Ranunculus reflexus</i>	bush buttercup	local, forest
<i>Rytidosperma gracile</i>	hairy-sheathed danthonia	local, Sheep Range, Peninsula
<i>Senecio minimus</i>	fireweed	rare, Kaka Hill
<i>Stellaria parviflora</i>	bush chickweed	local, forest
<i>Uncinia uncinata</i>	large hook-sedge	local, forest
<b>Ferns and Lycopods of forest and scrub</b>		
<i>Adiantum cunninghamii</i>	maidenhair fern	common
<i>Asplenium colensoi</i>	fine-leaved spleenwort	local, in forest

<i>A. flabellifolium</i>	fan-leaved spleenwort	common
<i>A. hookerianum</i>	small spleenwort	local, in forest
<i>A. terrestre</i>	ground spleenwort	mod. common
<i>Blechnum chambersii</i>	lanceolate hardfern	common
<i>B. fluviatile</i>	stream hardfern	rare, Sheep Range
<i>B. penna-marina</i>	little hardfern	common
<i>B. cf. montanum</i>	big hardfern	common
<i>Botrychium australe</i>	parsley fern	rare, Peninsula
<i>Ctenopteris heterophylla</i>	comb fern	rare, Peninsula
<i>Cystopteris tasmanica</i>	bladder fern	mod. common
<i>Hypolepis millefolium</i>	soft fern	local, Kaka Hill, Sheep Range
<i>Lycopodium scariosum</i>	harsh lycopod	rare, Peninsula
<i>L. varium</i>	variable lycopod	rare, Sheep Range
<i>Phymatosorus diversifolius</i>	tongue fern	mod. common
<i>Polystichum richardii</i>	dark shield fern	common
<i>P. vestitum</i>	prickly shield fern	mod. common
<i>Pteridium esculentum</i>	bracken	v. common
<i>Pyrrosia eleagnifolia</i>	snake fern	local E. end Peak Hill, Peninsula

### Herbs and dwarf shrubs of grassland, rock, gravel

<i>Acaena caesioglauca</i>	blueish bidi bidi	common
<i>A. microphylla</i>	red-fruited bidi bidi	v. common
<i>A. novae-zelandiae</i>	bright green bidi bidi	mod. common
<i>Aciphylla aurea</i>	golden spaniard	local, grassland
<i>Anisotome filifolia</i>	fine-leaved aniseed	local, grassland
<i>Brachyscome sinclairii</i>	grass daisy	mod. common
<i>Carex breviculmis</i>	short grass sedge	mod. common
<i>C. colensoi</i>	brown grass sedge	local, Coleridge Downs
<i>C. cf. resectans</i>	pale sand sedge	rare, Sheep Range
<i>Carmichaelia cf. corrugata</i>	small native broom	rare, Ryton Spit
<i>Celmisia gracilentia</i>	dainty daisy	common
<i>C. spectabilis</i> var. <i>magnifica</i>	large alpine daisy	local, Kaka Hill
<i>Chionochloa rigida</i>	stiff snow tussock	local, Peninsula
<i>Colobanthus acicularifolia</i>	alpine pincushion	rare, Sheep Range
<i>C. strictus</i>	riverbed pincushion	mod. common
<i>Coprosma acerosa</i>	blue-fruited rock coprosma	local, Peninsula
<i>C. atro-purpurea</i>	wine-fruited coprosma	common
<i>C. petriei</i>	grassland bead coprosma	v. common
<i>C. sp. cf. prostrate microcarpa</i>	mauve-fruited rock coprosma	local, Sheep Range
<i>Coriaria cf. plumosa</i>	small tutu	local, Oakden Fan, Harper Fan
<i>C. sarmentosa</i>	tutu	v. common
<i>C. sarmentosa</i> x <i>cf. plumosa</i>	hybrid tutu	local, Oakden Fan, Sheep Range
<i>Crassula sieberiana</i>	reddish crassula	local, Boat Harbour, Peak Hill
<i>Dichelachne crinita</i>	plume grass	v. common
<i>Dichondra repens</i>	common two-seeds	mod. common
<i>Elymus cf. tenuis</i>	blue-grass	v. common
<i>Epilobium hectori</i>	small grassland willowherb	local, Sheep Range
<i>E. melanocaulon</i>	black-stemmed willowherb	v. common
<i>E. microphylla</i>	small-leaved willowherb	v. common
<i>Erythranthera pumila</i>	mountain tuft grass	local, Peninsula
<i>Festuca novae-zelandiae</i>	hard tussock	v. common
<i>Gaultheria depressa</i>	snowberry	mod. common
<i>Gentiana serotina</i>	autumn gentian	local, Peninsula, Sheep Range
<i>Geranium sessiliflorum</i>	common geranium	v. common
<i>Gnaphalium audax</i>	grey cudweed	common
<i>Gonocarpus aggregatus</i>	grassland notch-leaf	local, Harper Fan
<i>G. montanus</i>	mountain notch-leaf	mod. common
<i>Haloragis erecta</i>	tall notch-leaf	common
<i>Helichrysum bellidioides</i>	common everlasting	mod. common

<i>H. filicaule</i>	slender everlasting	mod. common
<i>Hydrocotyle novae-zelandiae</i>	common penny-wort	common
<i>Lachnagrostis</i> sp.	tumble grass	local, W. end of lake
<i>Leptinella squalida</i>	common cotula	local, damp grassland
<i>Leucogenes grandiceps</i>	N.Z. edelweiss	rare, Kaka Hill
<i>Leucopogon colensoi</i>	reddish mountain heath	local, Peninsula, Sheep Range
<i>L. fraseri</i>	bronze heath	mod. common
<i>L. sp. cf. fraseri</i> "dwarf"	small bronze heath	mod. common
<i>Luzula rufa</i>	reddish wood rush	mod. common
<i>L. rufa</i> var. <i>albicomans</i>	silvery wood rush	local, Sheep Range
<i>Mentha cunninghamii</i>	mountain mint	local, Kaka Hill, Peninsula
<i>Microtis</i> sp.	grass orchid	common
<i>Muehlenbeckia axillaris</i>	small pohuehue	v. common
<i>Myrsine nummularia</i>	creeping mapou	local, Kaka Hill
<i>Nertera setulosa</i>	hairy grassland nertera	local, Lake Stream
<i>Oreomyrrhis colensoi</i>	mountain myrrh	mod. common
<i>Oxalis cf. exilis</i>	yellow oxalis	mod. common
<i>Parahebe lyallii</i>	mountain parahebe	local, N. side of lake
<i>Pelargonium inodorum</i>	N.Z. pelargonium	rare, Coleridge Downs
<i>Pentachondra pumila</i>	dwarf blue heath	rare, Peninsula
<i>Pernettya macrostigma</i>	narrow-leaved heath	local, Sheep Range
<i>Pimelea oreophila</i>	mountain daphne	mod. common
<i>Plantago spathulata</i>	grassland plantain	common
<i>Poa cita</i>	silver tussock	v. common
<i>P. colensoi</i>	Little blue tussock	local, Sheep Range
<i>P. cf. large colensoi</i>	medium blue tussock	mod. common
<i>P. lindsayi</i>	riverbed poa	local, Harper Fan
<i>Prasophyllum</i> sp.	onion orchid	local, Coleridge Downs
<i>Pseudognaphalium luteo-album</i>	white cudweed	v. common
<i>Pyrranthera exigua</i>	mountain twitch grass	local, Peninsula, Sheep Range
<i>Ranunculus multiscapus</i>	grassland buttercup	local, Sheep Range
<i>Raoulia australis</i>	Pale green mat daisy	v. common
<i>R. glabra</i>	lax green mat daisy	local, riverbed
<i>R. haastii</i>	bright green mat daisy	local, riverbed
<i>R. hookeri</i>	whitish mat daisy	v. common
<i>R. monroi</i>	grey mat daisy	local, rock, Peninsula, Black Cliffs
<i>R. parkii</i>	Otago mat daisy	local, Sheep Range
<i>R. subsericea</i>	grassland mat daisy	common
<i>R. tenuicaulis</i>	fine-leaved mat daisy	local, Harper Fan, Sheep Range
<i>Rytidosperma setifolia</i>	bristle tussock	mod. common
<i>Scleranthus brockiei</i>	green grass cushion	local, Sheep Range, Coleridge Downs
<i>Senecio bellidioides</i>	yellow daisy	mod. common
<i>S. quadridentatus</i>	peka peka	common
<i>Thelymitra</i> sp.	sun orchid	local, Peninsula, Coleridge Downs
<i>Uncinia cf. divaricata</i>	mountain hook sedge	local Kaka Hill, Oakden Fan
<i>U. rubra</i>	red hook sedge	local Sheep Range, Oakden Fan
<i>Vittadinia australis</i>	small rock daisy	common
<i>Wahlenbergia albomarginata</i>	mountain bell-flower	v. common
<i>W. gracilis</i>	small bell flower	local S. side of lake

### Ferns and Lycopods of grassland, rock, gravel

<i>Cheilanthes humilis</i>	rock fern	rare, Peak Hill
<i>Lycopodium fastigiatum</i>	mountain lycopod	common

### Herbs of wetland sites

<i>Bulbinella angustifolia</i>	Maori onion	local, Lake Stream, Homestead area
<i>Carex berggrenii</i>	small brown sedge	local, lagoons
<i>C. comans</i>	pale sedge	local, lagoons

<i>C. coriacea</i>	big green sedge	common
<i>C. diandra</i>	fine green sedge	local, Peninsula
<i>C. gaudichaudiana</i>	small green sedge	local, Sheep Range
<i>C. petriei</i>	medium red sedge	mod. common
<i>C. secta</i>	tussock sedge	mod. common
<i>C. sinclairii</i>	grass-leaved sedge	local, Lake Stream
<i>Colobanthus apetalus</i>	lax pincushion	local, Sheep Range
<i>Cortaderia richardii</i>	toe toe	mod. common
<i>Eleocharis acuta</i>	sharp spike sedge	common
<i>E. gracilis</i>	slender spike sedge	local, lagoons
<i>Epilobium cf. chionanthum</i>	swamp willow-herb	mod. common
<i>E. pernitens</i>	small shining willow-herb	local, lagoons
<i>Galium cf. perpusillum</i>	tiny bedstraw	v. common
<i>Glossostigma elatinoides</i>	short tongue-leaf	v. common
<i>Gnaphalium japonicum</i>	marsh cudweed	local, lagoons
<i>G. cf. laterale</i>	small white cudweed	local, lagoons
<i>Gonocarpus micranthus</i>	reddish bog notch-leaf	local, Peninsula, Coleridge Downs
<i>Hierochloa redolens</i>	holy grass	local, lagoons
<i>Hypericum japonicum</i>	small hypericum	local, swamps
<i>Hypsela rivalis</i>	hexangle-leaf	mod. common
<i>Isolepis aucklandicus</i>	small tuft sedge	mod. common
<i>I. cf. pottsii</i>	medium tuft sedge	local, Sheep Range
<i>Juncus gregiflorus</i>	stiff rush	v. common
<i>J. novae-zelandiae</i>	small rush	local, lagoons
<i>Lemna minor</i>	duckweed	local, Lake Stream, Homestead area
<i>Leptinella maniototo</i>	Otago cotula	common, lagoons
<i>Leptocarpus similis</i>	oioi	local, Lake Stream
<i>Lilaeopsis novae-zelandiae</i>	tape measure	common, lagoons
<i>Limosella lineata</i>	long tongue-leaf	common, lagoons
<i>Montia fontana</i>	water purslane	local, Lake Stream
<i>Myriophyllum pedunculatum</i>	small millfoil	mod. common, lagoons
<i>M. propinquum</i>	medium millfoil	v. common
<i>M. triphyllum</i>	large millfoil	v. common
<i>Neopaxia australasica</i> s.l.	mountain portulaca	v. common
<i>Phormium tenax</i>	harakeke	common
<i>Plantago triandra</i>	star plantain	common
<i>Potamogeton cheesemanii</i>	pond weed	common
<i>Potentilla anserinoides</i>	silverweed	local, Peninsula
<i>Pratia angulata</i>	hairless split-flower	mod. common
<i>P. perpusilla</i>	hairy split-flower	v. common
<i>Ranunculus amphitrichus</i>	waoriki	local, Lake Stream, Peninsula, Homestead area
<i>Rorippa microphylla</i>	watercress	local, Lake Stream
<i>Rumex flexuosus</i>	tumbleweed dock	local, Peninsula
<i>Schizilema trifoliolata</i>	three-leaf	v. common
<i>Schoenus concinnus</i>	wiry turf sedge	local, Peninsula, Homestead area
<i>S. pauciflorus</i>	red marsh sedge	v. common
<i>Typha orientalis</i>	raupo	mod. common
<i>Utricularia monanthos</i>	purple bladderwort	mod. common
<i>Viola cunninghamii</i>	common violet	local, Peninsula

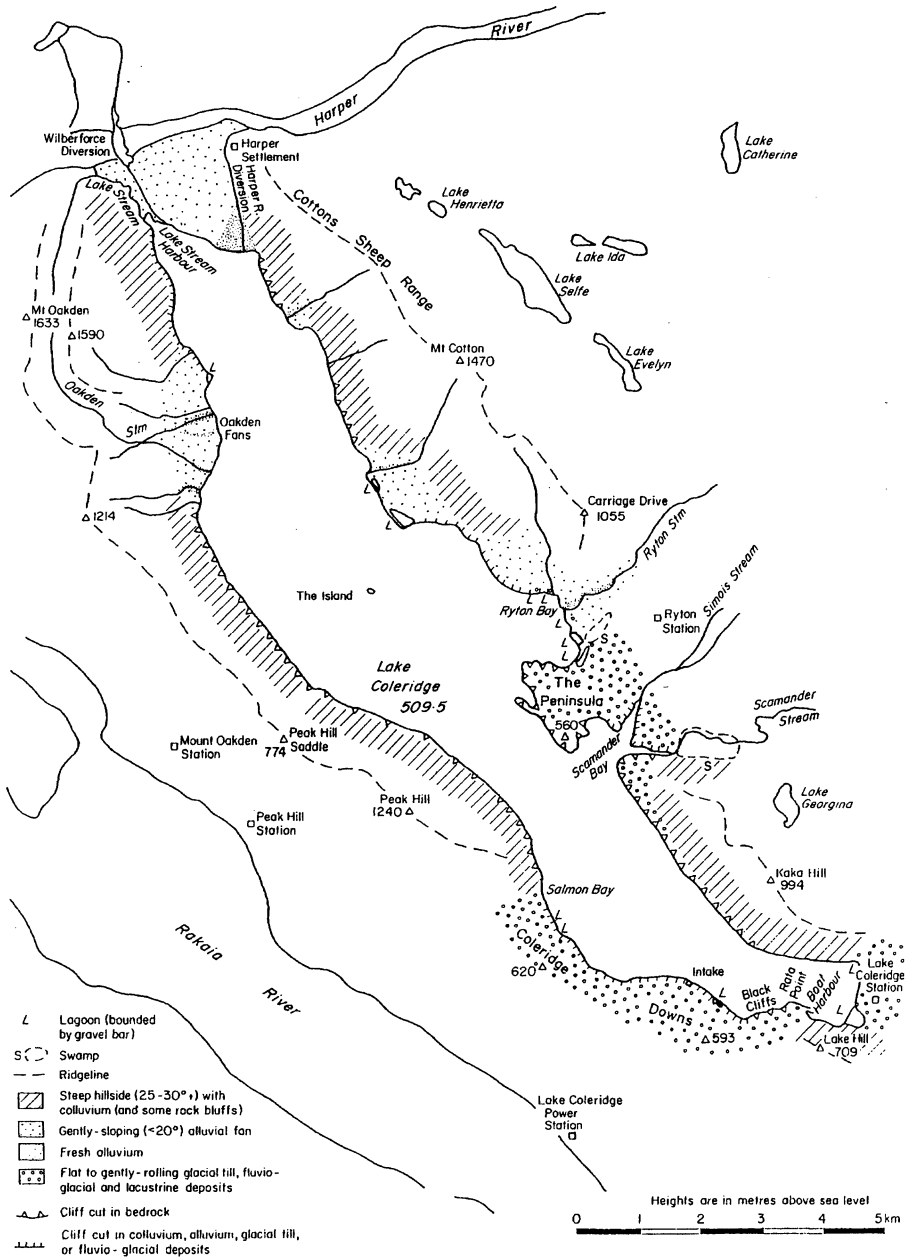


Fig. 1. Lake Coleridge: places and landforms.



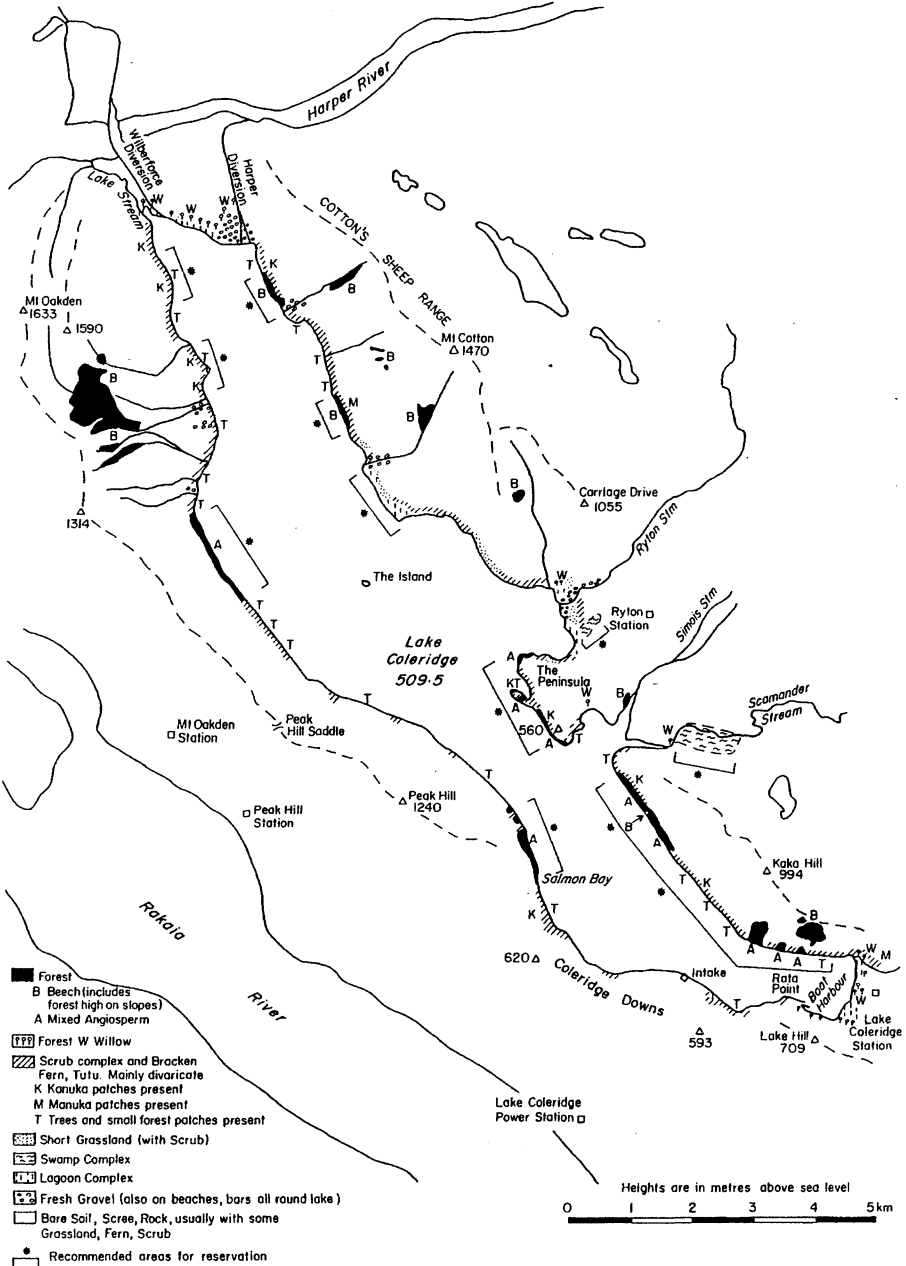


Fig. 2. Lake Coleridge: vegetation cover on lake shores