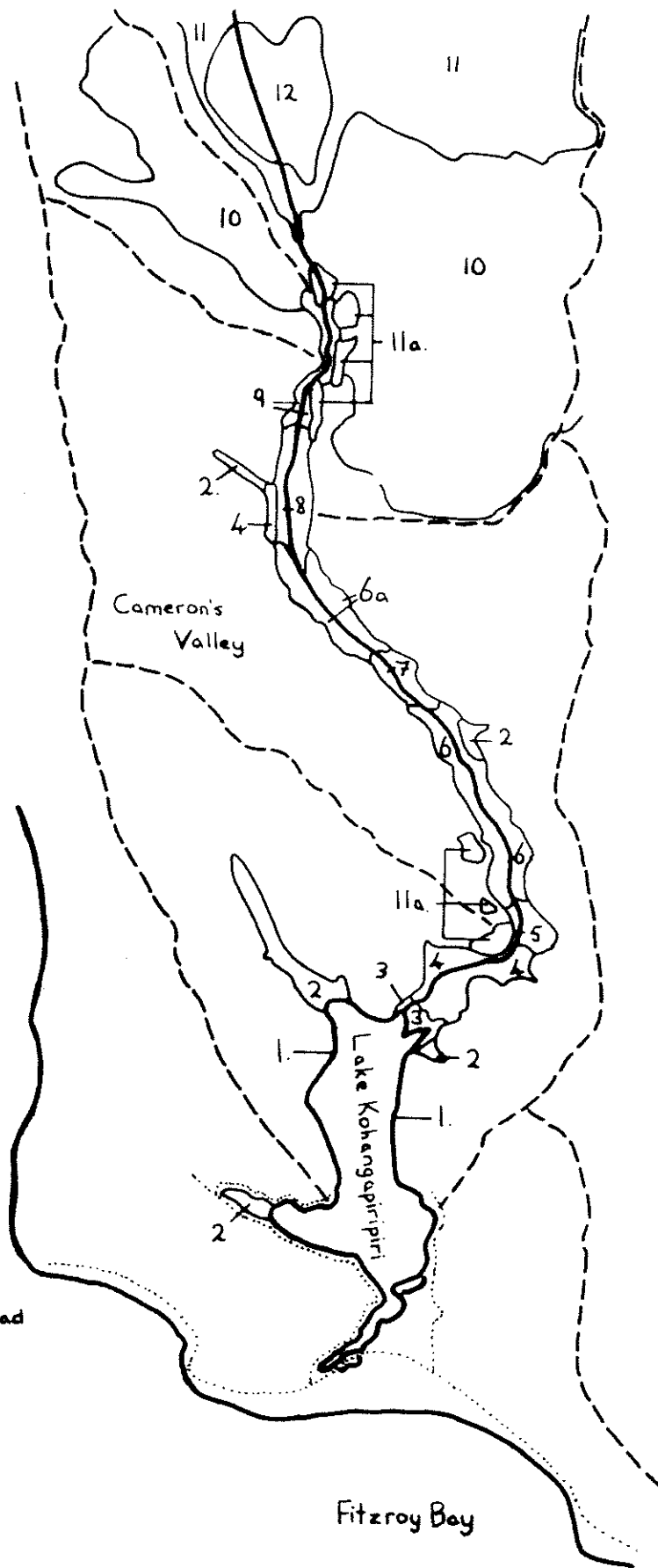


1 km

On bibliography



Key

- Vegetation boundary
- Tracks/Unsealed roads
- - - - - Ridges/Spurs
- Shorelines/Waterways

- For key to vegetation types refer to biological description.

Map 5

Cameron's Valley - Lake Kohangapiripiri

LOCATION

Near Pencarrow Head on eastern side of Wellington Harbour entrance.

AREA DESCRIPTION

Cameron's Valley is separated from Gollans Valley by a low ridge to the east. Lake Kohangapiripiri is the dominating feature and is situated at the toe of the valley. An extensive swamp fills the valley floor for about 2 km above the lake. The lake and swamp formed in the same way as Lake Kohangatera and wetlands in Gollans Valley, beginning as marine inlets which became raised in the earthquakes of AD 1460 and 1855. The lakes formed behind broad gravel bars which were deposited prior to being uplifted. Succession from estuarine to freshwater communities occurred as salinity in the wetlands dropped. The differences which now exist between the two lakes and wetland systems are partly to do with the difference in catchment size of each of the valleys. The small catchment of Cameron's Valley has meant that the flow of freshwater through the valley is low. This may explain why the swamp is drier than that in Gollans Valley and suffers from more stock intrusion. It may also explain the less well developed state of the lake vegetation which could be impeded by a low siltation rate. The higher abundance of *Leptocarpus similis* in Lake Kohangapiripiri than in Lake Kohangatera suggests a higher salinity in the former but this was not tested.

AIR PHOTO

5497 E/16

SIZE

approx. 13 hectares open water
20 hectares wetlands

OWNERS

1. Crown: south end of lake.
2. Mr Riddiford: middle reaches
3. Mr Turvey: upper reaches

STATUS/CURRENT PROTECTION

Forms part of proposed Pencarrow Regional Park (Dept Lands and Survey W.R.P.A. 1975). A 20m wide esplanade reserve protects the lakeside vegetation for most of the shore length. Main body of swamp unprotected.

ACCESS

As for Gollans Valley - Lake Kohangatera. Cameron's Valley is slightly closer to Eastbourne so walking time is less.

JUSTIFICATION FOR RESERVE STATUS

1. Contains representative, early stage, freshwater wetland vegetation. This and the Gollans Valley wetlands are the only large areas of this type in the region.
2. Contains 16 species of regionally endangered or uncommon plants - the highest count for any location within the region.
3. Provides homes and breeding sites for many species of waterfowl, some of which are regionally uncommon.
4. Has considerable scientific, scenic and educational value.

RATING 0-10

SCENIC . 5 . .

SCIENTIFIC . 8 . .

RECREATION . 5 (7)

BIOLOGICAL DESCRIPTION

COMMUNITY TYPES

- | | % | RES | WGTN | RARE/UNCOMMON PLANTS | NCC STATUS | RES | WGTN |
|--|------|-----|------|--|---------------|-----|------|
| 1. Communities dominated by <i>Scirpus lacustris</i> , <i>Carex</i> spp. <i>Cyperus ustulatus</i> and <i>Juncus</i> spp. in narrow zonation from open water to dry land. <i>Leptocarpus similis</i> abundant at southwest margin of lake. | 4.5 | no | | <i>Crassula kirki</i>)
<i>Glossostigma submersum</i>)
<i>Ranunculus limosella</i>) also found in
<i>Potamogeton ochreatus</i>) Gollans Valley
<i>Ruppia polycarpa</i>) | - | no | |
| 2. <i>Carex geminata</i> - <i>Cyperus ustulatus</i> sedgeland. | 17 | no | | | - | no | |
| 3. <i>Scirpus prolifer</i> sedgeland with occasional <i>Carex secta</i> tussocks. | 3.5 | no | | <i>Cotula dispersa</i> ssp <i>dispersa</i>)
<i>Eryngium vesiculosum</i>) also found
<i>Hydrocotyle pterocarpa</i>) in Gollans
<i>Ranunculus macropus</i>) Valley and
<i>Microphyllum triphyllum</i>) elsewhere
<i>Limosella lineata</i>)
<i>Scirpus lacustris</i>)
<i>Glossostigma elatinoides</i>) | - | no | |
| 4. Raupo swamplands with toetoe and occasional flax. | 15.5 | no | | | - | no | |
| 5. Mosaic of raupo, toetoe, flax swamplands and <i>Scirpus prolifer</i> sedgeland with <i>Lotus pedunculatus</i> . <i>Carex</i> spp. <i>Cyperus ustulatus</i> and <i>Juncus</i> spp. form broad zones at margins, stock damage evident throughout this unit. | 4.5 | no | | | - | no | |
| 6. Toetoe wetlands with <i>Scirpus prolifer</i> . <i>Carex</i> spp., <i>Cyperus ustulatus</i> and <i>Juncus</i> spp. at margins. | 18 | no | | | - | no | |
| 6a. Toetoe wetlands with scattered raupo and <i>Scirpus prolifer</i> . Merges almost directly with pasture at margins. | 12.5 | no | | <i>Elatine gratioloides</i>) Lake Kohangapiri-
<i>Lepilaena bilocularis</i>) piri only. | - | no | |
| 7. Raupo wetlands with 10% toetoe and some raupo. Margins as for type 6a. | 5.5 | no | | <i>Zoysia minima</i>) Lake Kohangapiripiri and
elsewhere | - | no | |
| 8. Flax wetlands with toetoe and some raupo. Margins as for type 6a. | 11 | no | | | - | no | |
| 9. Mosaic of <i>Carex geminata</i> sedgelands, <i>Carex virgata</i> - <i>Cyperus ustulatus</i> - <i>Juncus sarophorus</i> sedgelands, pasturelands. Manuka, gorse, <i>Cassinia</i> at margins. | 8 | yes | | | | | |
| 10. Scrublands of gorse and young manuka with gorse mainly on spurs. Contains areas of <i>Cassinia</i> and Spanish heath. | - | yes | | Spotless crane
Pukeko
Giant kokopu | indeterminate | no | ? |
| 11. Manuka-kanuka forest and scrub with some broadleaved spp. and ferns in gullies. Some gorse on spurs. | - | yes | | A total of 6 species of native fish have been recorded from the lake. | | | |
| 11a. Small manuka-kanuka remnants of moderate age. Some parts on valley floor have sedges, rushes underneath. | - | yes | | | | | |
| 12. Black beech forest. | - | yes | | | | | |

MODIFICATIONS AND TRENDS

A moderate amount of damage has been caused by stock browsing and trampling at the lake and swamp margins and in parts of the swamp. Most of the swamp is not penetrated by stock and remains undamaged. Where stock have penetrated, areas have become opened up with patchy remnants of the original vegetation. Invasion by exotic grasses has occurred in these opened up areas. The wetlands have remained free of large scale infestations of exotic plants and have largely retained their natural form. The surrounding land has been cleared for pasture development and fires continue to prevent regeneration. Some drainage channels have been dug but these have not had a major effect on the wetlands.

THREATS

1. Continued stock intrusion will cause more extensive and long lasting damage. Cattle in particular pose a major threat.
2. A proposed sewage treatment site immediately above Lake Kohangapiripiri would cause large scale disruption to the wetlands and lake. [Proposed 1973, Hutt Valley Drainage Board].
3. Off road vehicles, on gravel bar mainly.
4. Subdivision.

IMPROVEMENTS NEEDED

1. Fencing of perimeter of lake and wetlands to exclude stock and vehicles.

COMMENTS, RECOMMENDATIONS

Lake Kohangapiripiri and the Cameron's Valley swamp form a distinct biological unit. Because of this it was decided that it should be dealt with separately from Gollans Valley swamp and Lake Kohangatera. In most other respects the two valleys are best considered together. The Pencarrow Lakes, as they are collectively known, form the centrepiece of the proposed Pencarrow Regional Park. In 1975 a report was published jointly by the Wellington Regional Planning Authority and the Wellington District Office of the Department of Lands and Survey in which was presented detailed information on the historical, archeological, biological, scenic and recreational values of the area. It presented management proposals and made recommendations based on the potential of this area for public use and enjoyment, and the needs of the area as a natural resource of regional and potentially national importance. The recommendations made in the report were briefly as follows: All land in the area which is publicly owned should be designated "Proposed Regional Park" on the district scheme; the whole area, regardless of ownership, be placed within a special regional park zone on the district schemes; all land as it is acquired be placed under unified control at a regional level. This study supports those recommendations and stresses the need for urgency in this matter. Slowly yet surely the lakes and wetlands will deteriorate unless they are protected from all harmful influences. Few such areas have been reserved in New Zealand of the few that actually exist. If this trend continues, more will become permanently lost along with the uncommon plants and animals they support.

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1. Stephenson, G., 1975. Report on proposed Pencarrow Regional Park. Jointly Dept Lands and Survey, Wellington District Office: Wellington Regional Planning Authority.
2. Moar, N.T., 1949. A study of some mires in SW Wellington Province. Victoria University.
3. Moar, N.T., 1950. *Journal Wellington Botanical Society* 22.

BY

DJC, DC

MONTH January

198.4

COMMON VASCULAR PLANTS OF LAKES KOHANGATERA AND KOHANGAPIRIPIRI
AND LOWER REACHES OF GOLLANS AND CAMERON'S VALLEYS

Trees and shrubs

Brachyglottis repanda
Carmichaelia arborea
Carpodetus serratus
Cassinia leptophylla
Coprosma areolata
C. propinqua
C. rhamnoides
C. propinqua x C. robusta
Cordyline australis
Corynocarpus laevigatus
* *Erica lusitanica*

Geniostoma rupestre var
Hebe stricta var *atkinsonii*
H. stricta var *macroura*
Hedycarya arborea
Knightia excelsa
Leptospermum ericoides
L. scoparium
Leucopogon fasciculatus
Macropiper excelsum
Meliccytus ramiflorus
Nestegis sp

Olearia paniculata
O. rani
O. solandri
Pennantia corymbosa
Plagianthus divaricatus
Rhopalostylis sapida
* *Salix fragilis*
* *Sambucus nigra*
* *Ulex europaeus*
Urtica ferox

Climbers, lianes, etc.

Clematis forsteri
Metrosideros perforata

Muehlenbeckia complexa
Parsonsia heterophylla

Passiflora tetrandra

Grasses, rushes and like plants

* *Agrostis stolonifera*
* *A. tenuis*
* *Aira caryophyllea*
* *Ammophila arenaria*
* *Anthoxanthum odoratum*
* *Bromus mollis*
Carex dissita
C. flagellifera (coastal form)
C. geminata ss
C. secta
C. solandri
C. virgata
Cortaderia toetoe
* *Cynosurus cristatus*
* *C. echinatus*
Cyperus ustulatus

* *Dactylis glomerata*
Desmoschoenus spiralis
Dichelachne crinita
Echinopogon ovatus
Eleocharis acuta
E. gracilis
Gahnia pauciflora
* *Holcus lanatus*
* *Hordeum murinum*
* *Juncus articulatus*
* *J. bufonius*
Juncus distegus
* *J. effusus*
J. gregiflorus
J. maritimus var *australiensis*
J. pallidus

J. planifolius
J. sarophorus
* *J. tenuis*
Leptocarpus similis
* *Lolium perenne*
Poa anceps var *anceps*
* *Poa annua*
Scirpus cernuus
S. lacustris
S. nodosus
S. prolifer
Spinifex hirsutus
Uncinia uncinata
* *Vulpia bromoides*

Herbs

Aciphylla squarrosa ss
* *Anagallis arvensis*
Astelia fragrans
* *Bellis perennis*
Callitriche petriei ssp *petriei*
Callitriche stagnalis
* *Capsella bursa - pastoris*
* *Centaurium erythraea*
Centella uniflora
* *Cerastium fontanum* ssp *triviale*
* *Cirsium arvense*
* *C. vulgare*
* *Conyza 'floribunda'*
Corybas trilobus
Cotula coronopifolia
C. dispersa ssp. *dispersa*
Craspedia uniflora var
* *Digitalis purpurea*
Eryngium vesiculosum
* *Euphorbia peplus*
* *Galium aparine*
* *Geranium molle*
* *G. robertianum*
Gnaphalium sphaericum
Hydrocotyle americana

H. moschata
H. novae-zelandiae
H. pterocarpa
* *Hypochaeris radicata*
Lemna minor
Lilaeopsis sp
(cf. *L. novae-zelandiae*)
* *Linum marginale*
* *Lotus pedunculatus*
* *Mentha pulegium*
* *Mimulus guttatus*
* *M. moschatus*
* *Myosotis laxa* ssp *caespitosa*
Myriophyllum propinquum
* *Nasturtium officinale*
Oxalis sp
* *Parentucellia viscosa*
Parietaria debilis
Phormium cookianum
P. tenax
* *Plantago coronopus*
* *P. lanceolata*
* *P. major*
* *Polygonum aviculare*
* *P. hydropiper*

* *P. persicaria*
Potamogeton cheesemanii
* *Prunella vulgaris*
Pterostylis banksii
Ranunculus hirtus
* *Ranunculus repens*
* *R. sp* (*R. fluitans* auct. NZ)
* *Rumex acetosella*
* *R. sp*
Selliera radicans
* *Senecio jacobaea*
* *Sisymbrium officinale*
* *Sisyrinchium iridifolium*
* *Solanum nodiflorum*
* *Sonchus asper*
* *S. oleraceus*
* *Stellaria media*
* *Torilis nodosa*
* *Trifolium dubium*
* *T. repens*
Typha orientalis
* *Verbascum thapsus*
* *Vicia sativa*
Wahlenbergia sp (*W. gracilis*)

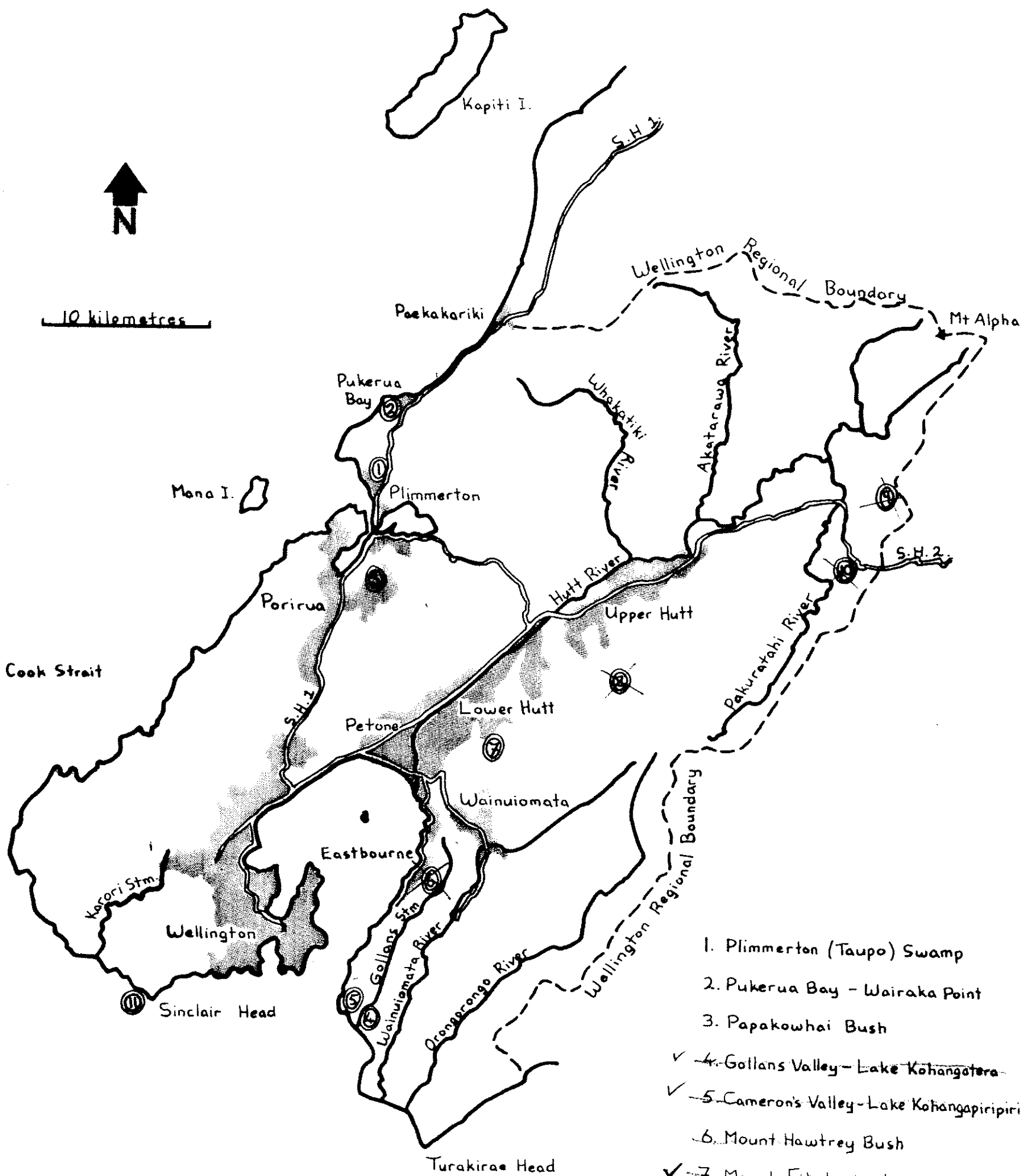
Ferns

Adiantum cunninghamii
Alsophila tricolour
Asplenium flabellifolium
A. flaccidum
A. oblongifolium
Azolla rubra
Blechnum chambersii

B. filiforme
B. minus
B. sp (*B. capense* agg.)
(common lowland species)
Hypolepis sp
(*H. tenuifolia* auct. NZ)
Lastreopsis glabella

* *Pellaea rotundifolia*
Phymatosorus diversifolius
Pneumatopteris pennigera
Polystichum richardii
Pteridium esculentum
Pyrrhosia serpens

* ADVENTIVES.



Locality Map

- Wellington Region showing location of surveyed sites.

- 1. Plimmerton (Taupo) Swamp
- 2. Pukerua Bay - Wairaka Point
- 3. Papakowhai Bush
- ✓ 4. Gollans Valley - Lake Kohangotera
- ✓ 5. Cameron's Valley - Lake Kohangapiripiri
- 6. Mount Hawtrey Bush
- ✓ 7. Mount Fitzherbert
- 8. Blue Mountains Bush
- 9. The Puffer
- 10. Rimutoka Bush - A & B
- 11. Red Rocks to Karori Stream