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# PORT SORELL CROWN LAND — PLANT AND BIRD SURVEY

Philip A Collier & Noreen Stubbs 2 Garnett Street, Blackmans Bay, Tas. 7052 56 Watkinson Street, Devonport, Tas. 7310

## INTRODUCTION

The Federation of Field Naturalists' Clubs met at Port Sorell on 8 September 1990 and conducted a plant and bird survey of a block of crown land located approximately 1.5km west of Hawley Beach. We present here a description and the results of the survey.

#### BACKGROUND

Early in 1990 a member of the Latrobe Council asked the Devonport Field Naturalists' Club about the possibility of conducting a plant and bird survey of an area of approximately 57 hectares (140 acres) of bushland which is surrounded by extensive development. The area is not considered ideal for either housing development or tree plantations but might have potential as a reserve. It has one track through it from the nearby refuse dump to the northern boundary.

The Devonport Field Naturalists' Club was aware that it lacked necessary expertise to conduct the survey. The Federation of Field Naturalists' Clubs of Tasmania agreed to support the activity and produce a report.

#### METHOD

Four tracks were created by the Devonport Field Naturalists' Club through the crown land near Port Sorell. The clearly marked tracks radiated from a central rocky knoll and were limited to one-person width to allow quick recovery and closing over. A map of these tracks is shown in appendix 1. This map was used by the naturalists on 8 September 1990 when making the species lists.

A group of about six field naturalists followed each of the four tracks. One group was additionally detailed to inspect the rocky knoll carefully since this has a distinctive flora. Each group was equipped with a bag for collecting plant material and a booklet for noting all of the plant and bird species that were seen. The booklet was to be used to write down species as they were observed, to allow easier tracing of the species at a later date if necessary.

Each group of field naturalists had one or more members who were more or less familiar with native plants. Collections of plants were subsequently examined and positively identified by two botanists: Mrs Mary Cameron, honorary research associate in botany at the Queen Victoria Museum and Mr Phil Collier, honorary associate botanist at the Tasmanian Herbarium.

A few subsequent visits to the crown land occurred during October to observe some species not easily identified in September. Early in November all track markers were removed.

# **RESULTS**

A list of plant species collected by the four collecting groups was prepared. This list was consolidated and is summarised in appendix 2 to this report. About 150 separate taxa were recognised.

A list of the bird species noted is presented in appendix 3. Twenty-one species of birds were recorded.

## DISCUSSION OF RESULTS

The Port Sorell Crown Land contains a flora which is largely undisturbed, as evidenced by few introduced species being found.

The reserve contains several distinct habitats. Such a diversity is unusual in such a small area. Much of the block consists of soils derived from sandstone while soils on the rocky knoll and a small area on the northern fence-line are derived from fertile dolerite rock. While the dolerite soils are mostly at dry sites, the sandstone soils support marshy vegetation on flat sites through to heathy woodland where drainage is good.

Particularly significant is the rocky outcrop in the centre of the block which contains skeletal soil. Such a habitat is easily invaded by several species of garden weed which provide severe competition for some of the tiny native plants which exist there. A notable native plant in this category is *Triglochin centrocarpa* which is not commonly seen in the State. Additionally this rocky outcrop contains a reasonable population of *Spyridium obcordatum* which is a rare species restricted to a small region of central northern Tasmania. Few populations of *Spyridium obcordatum* are contained within parks or reserves of any kind.

A second notable habitat is also on dolerite rock at the northern boundary of

the reserve at approximate grid reference 600444. Here we found a patch of bare soil with a few plants of the pigmy club moss, *Phylloglossum drummondii*, growing. This is rarely seen in mainland Tasmania and is then usually found on peaty or sandy soils. This habitat contained several species not noted elsewhere on the block and is vulnerable to invasion from the neighbouring block should this be further developed.

Significant amongst the species that may have been overlooked are the orchids. We suspect that a summer fire may stimulate many orchid species to grow during the following spring. Such orchid species are known to remain dormant in this type of habitat between fires. (We are not advocating that a fire should be lit deliberately.)

#### SIGNIFICANCE

Such an untouched block is unusual close to settlements in Tasmania. The rocky outcrop has limited views south to the Western Tiers and to Bass Strait. However it should be recognised that the reason for the existence of the significant plant species noted above is that people have rarely if ever visited the area.

The significance of this block is enhanced by the recent subdivision of Hawk Trap Hill 1km to the south. This dolerite hill top supports similar vegetation to the rocky outcrop on the Crown Land. We expect that this will be compromised by the subdivision even though a tiny reserve is to be established right on top of the hill.

We do not believe that the Asbestos Range National Park should be used as an argument for not preserving this block since the National Park largely reserves flat coastal plains and steep ridges. The Port Sorell Crown Land is a rounded low hill.

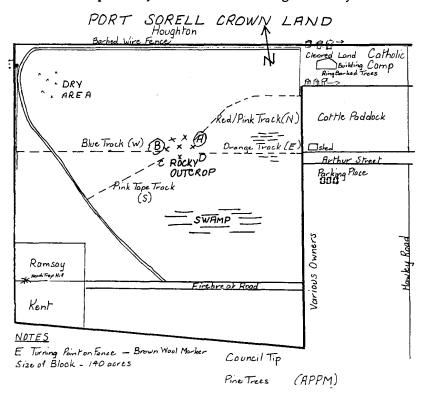
#### CONCLUSION

A report was written on behalf of the Federation of Field Naturalists' Clubs of Tasmania containing most of the material in this paper. It recommends that: "The Port Sorell Crown Land be reserved as a low-profile nature reserve to preserve the outstanding variety of plant life found in such a small area. The lack of management and interference to date has served the area very well. Encouraging visits by people will undoubtedly lead to weed invasion with subsequent degradation of the rare flora. The nearby Asbestos Range National Park provides excellent facilities for recreation."

A the date of writing no decision has been taken by the Port Sorell Council about the future of the block of Crown Land.

# **APPENDIX 1**

# Map used by field naturalists during the survey



#### GROUPS

- A. Take red/pink track to fence; walk north to second row of plastic bag covers (no fence); turn west and follow dirt track beside fence to corner; turn south to meet'made' track at E and follow it to the blue track. Turn east to ROCKY OUTCROP.
- B. Take blue track west to boundary fence (crossing 'made' track); turn north to meet'made' track at E. Turn south on 'made' track to pink tape junction. Return on pink tape track to ROCKY OUTCROP.
- C. Follow pink tape track to firebreak road and return same way. (Possible bird walk).
- D. Cover ground between A, B, C and D and take orange track as far as swamp area and return. (An orchid area).

# **APPENDIX 2**

# Port Sorell Crown Land — Plant Species List

# Apiaceae

Daucus glochidiatus Hydrocotyle callicarpa Hydrocotyle foveolata Xanthosia pilosa

#### Asteraceae

Brachyscome sp.
Gnaphalium involucratum
Helichrysum scorpioides
Hypochaeris glabra
Leptorhynchos squamatus
Olearia lirata
Olearia ramulosa
Senecio sp.

# Campanulaceae

Wahlenbergia gracilenta Wahlenbergia sp.

# Caryophyllaceae

# Sagina apetala (I) Casuarinaceae

Allocasuarina littoralis Allocasuarina monilifera Allocasuarina verticillata

# Centrolepidaceae

Centrolepis arisata Centrolepis strigosa

#### Crassulaceae

Crassula sieberiana

# Cyperaceae

Baumea acuta
Gahnia grandis
Lepidosperma concavum
Lepidosperma elatius
Lepidosperma filiformis
Lepidosperma longitudinale
Lepidosperma viscidum
Schoenus tenuissimus

#### Dilleniaceae

Hibbertia empetrifolia Hibbertia sericea Hibbertia procumbens

#### Droseraceae

Drosera peltata ssp. auriculata Drosera peltata ssp. peltata

# Epacridaceae

Acrotriche serrulata
Astroloma humifusum
Epacris impressa
Epacris lanuginosa
Leucopogon australis
Leucopogon ericoides
Leucopogon virgatus
Leucopogon virgatus
Monotoca glauca
Sprengelia incarnata
Styphelia adscendens

# Euphorbiaceae

Amperea xiphoclada Poranthera microphylla

#### Fabaceae

Aotus ericoides
Bossiaea cinerea
Bossiaea prostrata
Dillwynia glaberrima
Gompholobium huegelii
Kennedia prostrata
Platylobium formosum var. parviflorum
Pultenaea adaphnoides
Pultenaea stricta

#### Gentianaceae

Centaurium erythraea (1)

#### Geraniaceae

Pelargonium australe

#### Goodeniaceae

#### Goodenia lanata

# Haloragaceae

Gonocarpus micranthus Gonocarpus tetragynus

# Hypericaceae

Hypericum gramineum Hypericum japonicum

#### Iridaceae

Patersonia fragilis

#### **Juncaceae**

Juncus capitatus (1)

# Juncaginaceae

Triglochin centrocarpa

#### Lauraceae

Cassytha glabella Cassytha melantha Cassytha pubescens

### Liliaceae

Chamaescilla corymbosa Dianella tasmanica Dianella revoluta Hypoxis vaginata Laxmannia orientalis Wurmbea uniflora

# Loganiaceae

Mitrasacme paradoxa

#### Mimosaceae

Acacia mearnsii Acacia myrtifolia Acacia sophorae Acacia suaveolens Acacia terminalis

Acacia verticillata var. ovoidea
Acacia verticillata var. verticillata

# Myrtaceae

Eucalyptus amygdalina Eucalyptus ovata Leptospermum lanigerum Leptospermum scoparium

Baeckea ramosissima

Melaleuca ericifolia Melaleuca squarrosa

Acianthus exsertus

#### Orchidaceae

Caladenia carnea
Chiloglottis reflexa
Corybas sp.
Cyrtostylis reniformis
Diuris corymbosa
Glossodia major
Microtis sp.
Pterostylis longifolia
Pterostylis sp.

#### Oxalidaceae

Oxalis corniculata

Thelymitra sp.

## Pittosporaceae

Billardiera scandens Bursaria spinosa var. macrophylla Bursaria spinosa var. spinosa

# Plantaginaceae

Plantago hispida

#### Poaceae

Aira elegantissima (1) Agrostis sp. Danthonia sp. Poa sp. Stipa sp.

Tetrarrhena distichophylla Themeda australis

# Polygalaceae

Comesperma volubile

#### Portulacaceae

Calandrinia calyptrata

#### Primulaceae

Anagallis arvensis (I)

#### Proteaceae

Banksia marginata Lomatia tinctoria Persoonia juniperina var. juniperina

#### Restionaceae

Empodisma minus Hypolaena fastigiata Leptocarpus tenax Restio complanatus

# Rhamnaceae

Pomaderris apetala Pomaderris elliptica Pomaderris pilifera Spyridium obcordatum

# Rosaceae

Acaena echinata Aphanes arvensis (I)

# Rubiaceae

Galium australe Opercularia ovata Opercularia varia

#### Santalaceae

Exocarpos cupressiformis Leptomeria drupacea

# Sapindaceae

Dodonaea viscosa ssp. spathulata

# Stackhousiaceae

Stackhousia monogyna

# Stylidiaceae

. Stylidium graminifolium

# Thymelaeaceae

Pimelea linifolia ssp. linifolia

# Tremandraceae

Tetratheca pilosa

# Violaceae

Viola hederacea

# Xanthorrhoeaceae

Lomandra longifolia

# **Ferns**

#### Adiantaceae

Adiantum aethiopicum Cheilanthes austrotenuifolia

#### Dennstaedtiaceae

Pteridium esculentum

#### Gleicheniaceae

Gleichenia dicarpa

# Lindsaeaceae

Lindsaea linearis

# Lycopodiaceae

Phylloglossum drummondii

# Ophioglossaceae

Ophioglossum lusitanicum

# Selaginellaceae

Selaginella uliginosa

### Notes

(I) denotes an introduced species

# **APPENDIX 3**

# Port Sorell Crown Land — List of Bird Species noted on 8 September 1990

Circus approximans Cacomantis flabelliformis Chrysococcyx lucidus Dacelo novaeguineae Hirundo neoxena Coracina novaehollandiae Colluricincla harmonica Rhipidura fuliginosa Malurus cyaneus Sericornis frontalis humilis Acanthiza pusilla Anthochaera paradoxa Meliphaga flavicollis Phylidonyris pyrrhoptera Phylidonyris novaehollandiae Acanthorhynchus tenuirostris Pardalotus punctatus Pardalotus striatus Emblema bella Cracticus torquatus

Swamp Harrier Fantail Cuckoo Shining Bronze Cuckoo (H) Kookaburra (H) Welcome Swallow Black-faced Cuckoo-shrike Grey Shrike Thrush Grey Fantail Superb Blue Wren Brown Scrub Wren Brown Thornbill Yellow Wattlebird Yellow-throated Honeyeater Crescent Honeyeater (H) New Holland Honeyeater Eastern Spinebill Spotted Pardalote Yellow-tipped Pardalote (N) Beautiful Firetail Finch (H) Grey Butcher-bird (H) Forest Raven

#### Notes

(N) denotes a nesting bird

Corous tasmanicus

(H) denotes a bird that was heard