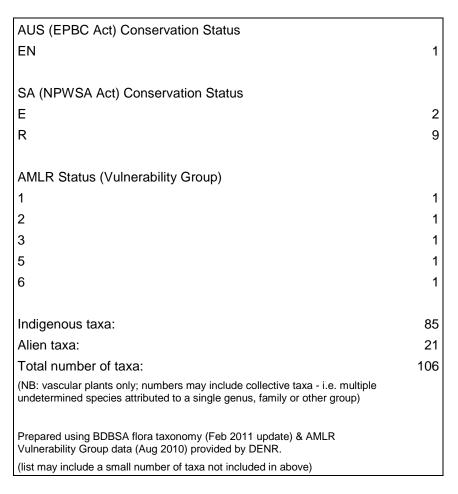
Stipiturus A12 Ramble Survey

| Survey date: | 06/02/2012 |
|---|---------------------------|
| Surveyor: | Marcus Pickett |
| Location: | 7 km WSW of Mount Compass |
| Area: | 2.5 ha |
| Approximate centre of proposed burn area (MGA94 Zone 54): | 277390 mE 6083490 mN |

Ramble Survey Summary



Vegetation Types

Mostly (~ 1.30 ha) Fleurieu Peninsula Swamp (nationally Critically Endangered threatened ecological community ("Swamps of the Fleurieu Peninsula") under *EPBC Act 1999*), variously comprising *Baumea rubiginosa* closed sedgeland, *Gleichenia microphylla*, *Gahnia sieberiana* mid closed fernland with emergent tall shrubs, and, mainly, *Leptospermum continentale*, *Melaleuca squamea* and/or *Sprengelia incarnata* mid–tall sparse–closed shrubland over closed low–mid ferns / mid sedges. Peripheral (i.e. to swamp) areas of, mainly, variable mid open mallee woodland to mid open forest dominated by *Eucalyptus obliqua* and/or *E. baxteri*, with understoreys of ± sparse low trees, over sparse–open mid shrubs/sedges, over mid sedges or low ferns, closed in places, with a substantial area (on edge of mapped burn area) of *Pteridium esculentum*, **Anthoxanthum odoratum* low open–closed fernland with emergent mid grass-trees/shrubs, and patches of *Leptospermum continentale* mid sparse shrubland to

shrubland over closed low sedges, the latter having affinities to Fleurieu Peninsula Swamp (i.e. transitional swamp-edge zone).

NW through central area to central S (~ 0.80 ha):

Melaleuca squamea and/or Leptospermum continentale tall open shrubland to closed shrubland

 over Gleichenia microphylla, Empodisma minus, Lepidosperma longitudinale, Gahnia sieberiana ± Leptocarpus tenax ± Baumea rubiginosa closed mid ferns (Fleurieu Peninsula Swamp)

Central W (~ 0.20 ha):

Baumea rubiginosa, Gleichenia microphylla, Empodisma minus, B. tetragona, Xyris operculata, Leptospermum continentale, Sprengelia incarnata ± Gahnia sieberiana mid closed sedgeland

(~ Baumea rubiginosa mid sedgeland over closed low ferns; Fleurieu Peninsula Swamp)

Central W, and central SW edge (~ 0.15 ha):

Leptospermum continentale, Sprengelia incarnata ± Melaleuca squamea ± Gahnia sieberiana mid sparse shrubland to open shrubland

 over Gleichenia microphylla, Empodisma minus, Leptocarpus tenax, Baumea rubiginosa, B. tetragona, Xyris operculata closed low ferns / mid sedges (Fleurieu Peninsula Swamp)

Edge of swamp at central N, and scattered patches (~ 0.15 ha):

Gleichenia microphylla, Gahnia sieberiana mid closed fernland

- with emergent *Melaleuca squamea*, *Leptospermum continentale* tall shrubs (Fleurieu Peninsula Swamp)

Patchy on N, NE and E edge (~ 0.25 ha):

Leptospermum continentale mid sparse shrubland to shrubland

 over Empodisma minus and/or Leptocarpus tenax, Pteridium esculentum, Patersonia fragilis ± *Anthoxanthum odoratum ± Schoenus lepidosperma closed mid sedges (highly variable; affinities Fleurieu Peninsula Swamp)

N, NE and E edges (~ 0.50 ha):

Pteridium esculentum, *Anthoxanthum odoratum low open fernland to closed fernland

- with ± emergent *Xanthorrhoea semiplana* mid grass-trees and/or *Leptospermum continentale* mid shrubs
- (~ low fernland over low closed grasses)

NE corner to central S (~ 0.30 ha):

Eucalyptus baxteri and/or E. obliqua mid open mallee woodland to low woodland

- over ± Acacia melanoxylon sparse low trees
- over Leptospermum continentale, Xanthorrhoea semiplana ± Gahnia sieberiana sparse-open mid shrubs
- over Pteridium esculentum, Lepidosperma longitudinale, *Anthoxanthum odoratum ± Leptocarpus tenax ± Patersonia fragilis low ferns, closed in places (highly variable)

Central N edge (~ 0.15 ha):

Eucalyptus obliqua mid open forest

- over Acacia melanoxylon sparse low trees
- over Gahnia sieberiana sparse mid sedges
- over Leptocarpus tenax, Pteridium esculentum, Patersonia fragilis, Schoenus lepidosperma, Lepidosperma longitudinale, *Anthoxanthum odoratum closed mid sedges

(Descriptions based on National Vegetation Information System framework; * introduced/alien taxon)

Plant Species of Conservation Significance

Eleven plant species of conservation significance recorded—one Endangered (EN/E) nationally and in SA and Vulnerability Group 1 in AMLR (Regional Recovery Plan) region, one Endangered (E) in SA and Vulnerability Group 2 in AMLR, one Rare (R) in SA and Vulnerability Group 3 in AMLR, one Rare in SA and Vulnerability Group 5 in AMLR, one Rare in SA and Vulnerability Group 6 in AMLR, and six Rare in SA.

| Scientific Name | Common Name | AUS | SA | AMLR | Comments |
|--|------------------------|-----|----|------|---|
| Allocasuarina robusta | Mount Compass Oak-bush | EN | Е | 1 | x2 (few?) at central S, in patch of trees ~ 60 m N of S corner |
| Thelymitra cyanea | Veined Sun-orchid | | Е | 2 | few at NW, ~ 50 m SE of NW corner |
| Lycopodiella lateralis | Slender Clubmoss | | R | 3 | x2 at NW, ~ 50 m SE of NW corner |
| Xyris operculata | Tall Yellow-eye | | R | 5 | common in swamp, except taller/denser shrubland areas |
| Melaleuca squamea | Swamp Honey-myrtle | | R | 6 | common in swamp, mainly at N, NE, E & central S |
| Drosera binata | Forked Sundew | | R | | common in swamp, mainly at central W & SW where ground layer relatively open (e.g. on/by animal tracks) |
| Gleichenia microphylla | Coral Fern | | R | | common in swamp |
| Leucopogon hirsutus | Hairy Beard-heath | | R | | uncommon near swamp edges in tall shrubland at NE & few scattered |
| Schoenus lepidosperma ssp. lepidosperma | Slender Bog-rush | | R | | common in swamp & most swamp edges at central N, NE & E |
| Sprengelia incarnata | Pink Swamp-heath | | R | | common in swamp |
| Viminaria juncea | Native Broom | | R | | x1 ~ 30 m E of SW corner |

Notable Weeds

Swamp very clean of notable weeds, with woody weeds (Montpellier Broom, Blackberry) mainly outside swamp or on swamp edges at N, NE and E, and common weedy grasses

and forbs outside swamp at N, NE and E (e.g. Sweet Vernal Grass (very common), Yorkshire Fog (common), Rough Cat's Ear (common), St John's Wort (uncommon, few patches), South African Orchid (uncommon, scattered)).

| Scientific Name | Common Name | WONS * | Declared Plant | Comments |
|-----------------------|-------------------|-----------|-------------------|--|
| Genista monspessulana | Montpellier Broom | | | common (mainly juveniles) on N, NE & E edges (outside swamp) |
| Rubus anglocandicans | Blackberry | Y | Y | uncommon, scattered, on N, NE & E edges (mainly outside swamp proper); may include an additional Rubus sp. |

^{*} Weed Of National Significance

Notes on Fauna Habitat

(Cursory notes only, not intended as a comprehensive assessment of potential fauna values)

Few small (~ 5–10 cm) hollows in standing and fallen timber.

The following taxa of conservation significance have been recorded in the proposed burn area (pers. obs):

- Mount Lofty Ranges Southern Emu-wren Stipiturus malachurus intermedius (Endangered nationally and in SA; commonly recorded 1998–2011, but not recorded this survey)
- Yellow-tailed Black-Cockatoo Calyptorhynchus funereus (Vulnerable in SA; occasionally observed overhead 2001–2011; several observed this survey)
- Lewin's Rail *Lewinia pectoralis* (Vulnerable in SA; occasionally observed; not observed this survey, but x1 observed nearby to S on 08/02/2012)
- Swamp Rat Rattus lutreolus (Rare in SA; occasionally observed 1998–2012; sign (runways) observed this survey)

Area includes potential habitat (e.g. areas with dense ground layers on swamp edge) for Southern Brown Bandicoot *Isoodon obesulus obesulus* (Endangered nationally, Vulnerable in SA).

Miscellaneous Comments

- Mostly (~ 1.30 ha) Fleurieu Peninsula Swamp (nationally Critically Endangered threatened ecological community ("Swamps of the Fleurieu Peninsula") under EPBC Act 1999.
- Peat swamp (~ 1.30 ha swamp proper, plus peaty sandy soils on swamp edges).
- Sphagnum Moss Sphagnum novo-zelandicum present at central N/NW of swamp (~ 10 patches < 0.1 m² each).
- The following vascular plants of conservation significance, additional to those in the associated ramble-survey list, have been recorded in the proposed burn area (pers. obs):

| Scientific Name | Common Name | AUS SA A | AMLR | Comments |
|-------------------------|-------------------|----------|------|---|
| Utricularia lateriflora | Small Bladderwort | V | 2 | few at NW (1998-2011) |
| Cryptostylis subulata | Moose Orchid | V | | few (leaves only) at SE (possibly outside burn boundary; 1999–2001) |
| Schizaea bifida | Forked Comb-fern | V | 3 | x1 at NW (~ 2000?) |

^{**} Declared plant under Natural Resources Management Act 2004.

| Pultenaea dentata | Clustered Bush-pea | R | 5 | few at central S, ~ 60 m N of S corner (1999–2001) |
|---------------------------------------|------------------------|---|---|--|
| Baumea acuta | Pale Twig-rush | R | | few? at E (1999–2001) |
| Gonocarpus micranthus ssp. micranthus | S Creeping Raspwort | R | | few at E (1999–2001) |
| Spiranthes australis | Austral Lady's Tresses | R | | few at W/NW (1999–2001) |

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