Friends of Tasman Island

Part 2: Flora report 23 November – 2 December 2023 working Bee

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Whilst on the island for this working bee, the following questions were followed up:

1. **What orchids grow on Tasman Island; are we able to expand on the known list of species?**
    - Only two orchids were found in flower, both were collected and have been accessioned by the Tasmanian Herbarium.
        - *Microtis arenaria* – which confirmed Penny Tyson's 2012 collection of this species, but instead of being located in the north-west corner of the island it was found it at a new location just south of the Lighthouse.
        - *Thelymitra pauciflora* – has been identified for the first time as the species of *Thelymitra* growing on Tasman Island. This was also found just south of the lighthouse. Until now it was only listed as *Thelymitra* sp.
    - It was too late in the season to see any *Pterostylis* (Greenhood) species in flower.

    There is still further work to do to follow up on Tasman Island orchids.

2. **A gladiolus specimen in flower, plus bulb, growing in the north-east corner of the pond needs to be submitted to the Tasmanian Herbarium for confirmation of its species, which is thought to be *Gladiolus* x *colvillii*.**
    - The red Gladioli found growing on Tasman Island was collected for and accessioned by the Tasmanian herbarium. It is confirmed as *Gladioli x colvillii* – Scarlet Gladioli. (see photo below.). This is an old species of Gladioli first described in 1823 and would have been introduced to Tasman Island during the days of the lighthouse keepers.


Photo. A Carle

    - Brett Hall's FoTI November 2023 weeding report details that this plant was found in flower in the area of the pond/damsite where it was sighted in January 2023. In addition six additional nearby clumps and a second site west of the helipad where two separate clumps were found. This is a FoTI Active Priority Species and targeted for eradication.

3. **Are *Leptecophylla oxycedrus* and *Leptecophylla abietina* both growing on Tasman Island?**
    - The only *Leptecophylla* found growing was *Leptecophylla oxycedru*s. We saw NO evidence of *Leptecophylla abietina* growing on the island. If it grows there it would be expected to be found on the exposed east or west coasts. Future botanists on the island should continue to keep an eye out for it.

4. **Does *Epacris marginata* (and *Cyathodes glauca)* grow on Tasman Island? (Both not sighted since 1987.)**
    - These two plants were actually collected from Cape Pillar in 1987 by RA Brothers, but as it was early in the GPS era it was recorded with a GPS accuracy of 1km, which is why they were appearing on the Tasman Island plant list. We confirm that neither species has been found growing on Tasman Island. The species list for the island will be edited accordingly.

5. **Determine if *Correa reflexa* or any of its subspecies grow on Tasman Island.**
    - The only Correa seen during the Nov-Dec 2023 working bee was the common *Correa alba* var. *rotundifolia*. This question should remain on the list of future plants to look for on Tasman Island.

6. **Determine if there are any members of the Restionaceae family growing on Tasman Island, none have been collected to date.**
    - None were sighted, but this should remain on the list of future plants to look for on Tasman Island.

7. ***Cerastium fontanum***
    - A specimen of this plant was collected and accessioned by the Tasmanian herbarium as discussed in Carle & McEldowney 2023. It has tentatively been identified by the Tasmanian herbarium as the perennial plant *Cerastium fontanum* and not the annual *Cerastium vulgare. Cerastium fontanum* is not listed on the 2023 edition of the Census of the Vascular Plants of Tasmania. However Matthew Baker advises that further work needs to be done on both *C. fontanum* and *C. vulgare* in Tasmania. It is interesting that *Cerastium fontanum* been also recorded as growing on Maatsuyker Island.

8. **Verify if the *Pittosporum bicolor* x *undulatum* hybrid is still present on the Island (not sighted since 2007) and if parent plant(s) of *Pittosporum undulatum* can be located.**
    - Time did not permit the follow up of this question, but prior to departure we did obtain maps providing the location of this and a number of other species (including orchids.) This question should be followed up during future working bees.
    - Click to open this link

Tasman_Island_Whole_AC_edited.pdf

9. **What other new, as well as previously known, small native and introduced plant species are growing/flowering, particularly on the dry and rocky cliff tops towards the east, south east and south west?**
    a) **37 herbarium specimens** were collected whilst on the island and these were submitted to the Tasmanian Herbarium for confirmation of identification on 5 January 2024. **See appendix 1**

Appendix 1 Tasman Is Herbarium specim

    b) **Native plants**
        - Amanda Thomson collected on the east coast cliff walk with Chris Creese a small specimen, tentatively identified by me as *Olearia ramulosa* (AC20) However Matthew Baker at the Tasmanian Herbarium has reported that this is an undescribed taxon that Andre Messina at the Melbourne Herbarium is working on. It

seems closest to *Olearia ramulosa* and is therefore described on Appendix 1 as *Olearia* aff. *ramulosa*.
NOTE: The Tasmanian herbarium is requesting that a specimen (large enough to fill a sheet of the Mercury newspaper) is collected by the next botanist on the island and submitted to the Tasmanian Herbarium. They will need to be holding a Plant Collecting Permit.

- A species of *Luzula* was collected and it was identified by the Tasmanian herbarium possibly as *L. densiflorus.* This genus is notoriously difficult to identify even with an herbarium specimen. It was posted to iNaturalist at: *https://inaturalist.ala.org.au/observations/192033727*
  Luzula densiflorus has already been recorded for Tasman Island and was collected for the herbarium by Nigel Brothers in 1977.
- A native daisy *Brachyscome aculeata* was collected from the west coast dolerite rock crevices. Its identity was confirmed and the specimen accessioned by the Tasmanian herbarium. It was also posted to iNaturalist at
  See: *https://inaturalist.ala.org.au/observations/194559768*
  This species had already been recorded for Tasman Island and was collected by Penny Tyson in 2007.
- Two other native plants which grow on Tasman Island larger than usual were collected and accessioned by the Tasmanian Herbarium.
  - *Hydrocotyle hirta* on Tasman Island often scrambles above the usual below the surrounding vegetation (instead of more typical below the surrounding vegetation.)
    See: *https://inaturalist.ala.org.au/observations/194561180*
  - *Drymophila cyanocarpa* found growing to at least its maximum height of c. 40cms high
    See: *https://inaturalist.ala.org.au/observations/192031856*

c) Introduced plants

- One **new** introduced plant species was collected and accessioned by the Tasmanian herbarium;
  1. *Vicia tetrasperma* – Slender Vetch
     See: *https://inaturalist.ala.org.au/observations/194183108*

  This observation increases the number of *Vicia* (Vetch) species recorded for the island to three. The other two species are:
  - The very common *Vicia sativa* ssp. *nigra* *https://inaturalist.ala.org.au/observations/193866055*
  - and more inconspicuous, but commonly found *Vicia hirsuta* *https://inaturalist.ala.org.au/observations/148963152*

  All three species would have been introduced when the island maintained pasture for their livestock.

d) Bryophytes

- Three bryophytes were collected. Two of which are new species records for Tasman Island. All three species have been accessioned by the Tasmanian herbarium:
  Leafy liverwort (reproductive sporophytes are required for ID to species)
  - family Geocalycaceae: *Heteroscyphus* sp. *or Chiloscypus* sp. NEW.
    See: iNaturalist *https://inaturalist.ala.org.au/observations/194559377*

Mosses

- *Triquetrella papillata* (no common name) NEW
  see: iNaturalist *https://inaturalist.ala.org.au/observations/195616612*
- *Campylopus introflexus* (heath-star moss) First found on Tasman Is in Jan 2023.
  See: iNaturalist *https://inaturalist.ala.org.au/observations/194559438*

e) **Lichens** Three species of lichens were collected and subsequently identified and accessioned by the Tasmanian herbarium. Two are new species records for Tasman Island.

- *Cladia aggregata* (no common name) NEW
  See: iNaturalist *https://inaturalist.ala.org.au/observations/194559261*
- *Pseudocyphellaria neglecta* (a specklebelly lichen) NEW
  See: iNaturalist https://inaturalist.ala.org.au/observations/195356275
- *Teloschistes chrysopthalmus* (golden-eye lichen) First found Jan 2023

See: iNaturalist *https://inaturalist.ala.org.au/observations/194560949*

Future botanists to Tasman Islands should continue to look for new bryophyte and lichen species

f) **Fungi.** One species of fungi *Omphalotus nidiformis* - Ghost fungus was located at the top of the haulage growing on Banksia marginata. This is the second sighting of this fungus on the island, but on this trip, it was located at a new location. See: iNaturalist *https://inaturalist.ala.org.au/observations/194559341*

10. Continue to collect, press and submit any Tasman Island plants which are not currently listed on the Natural Values Atlas Tasmania (NVA) to the Tasmanian Herbarium for their subsequent identification and inclusion on the NVA.

- The common introduced pasture grass *Lolium perenne* was collected, submitted and accessioned for the first time by the Tasmanian Herbarium
- In addition, all species photographed during the November 2023 working bee were entered in the FoTI iNaturalist project at:
  https://inaturalist.ala.org.au/projects/friends-of-tasman-island-foti
  Those that reach research grade will appear on the NVA as will any plant specimen accessioned by the Tasmanian Herbarium.

11. An updated simplified Tasman Island plant species list is attached,

Click to open file

Tasman Island species list at 30 Jan

An additional column was added to this spreadsheet called **FoTI weed status.** (With thanks to Brett Hall's Nov 2023 weeding report.) This column makes it easy for future FoTI botanists to see the ALL the listed FoTI active and non-active weeds and those which appear to have been eliminated from the island. Until now some were and some were not listed, which was confusing.

This list will be used to update the comprehensive list currently on the on the FoTI website at:
https://www.tasmanisland.org.au/flora.htm

12. **Other questions for botanists on Tasman Island to follow up:**
    I. Collect specimens of Barley-grass for positive identification by the Tasmanian Herbarium. The FoTI weeding team list *Hordeum murinum* as growing on Tasman Island, but the specimen held by the Tasmanian herbarium has been identified as *Hordeum leporinum.*
    II. Refer: 9b) above for details, but collect specimens of *Olearia* aff. *ramulosa* for the Tasmanian Herbarium.
    III. The attached Tasman Island plant species list contains a number of plant species which have **ONLY** ever been found during the Hamish Saunders Memorial Survey report (HSMSR) in 2005 almost 20 years ago. These observations also come without any supporting data. It is suggested here that some of these plants may have been misidentified at that time.
    Future botanists should aim to find and collect specimens of any of these 2005 plant species for the Tasmanian Herbarium as confirmation that it grows on Tasman Island and if not they should be deleted from the plant list.
    IV. **Future Botanists …if only we can get down there!**
    It will be interesting for fit and agile botanists to get down to the lower vegetated areas of the island – are some of the 'missing' HSMSR species to be found down there?

Photos A Carle: Tasman Island - East of the Lighthouse.

Acknowledgements:

With thanks to Fiona Walsh for the Tasman Island 'interesting species to follow up' map, to Brett Hall for his input and to Matthew Baker (TMAG) for his continuing assistance.

This field work would simply have not been possible without the huge support and assistance provided by Amanda Thomson – she has my very grateful thanks

Reference:

Carle & McEldowney 2023 https://www.tasmanisland.org.au/flora.htm