

Threatened Plants Tasmania Newsletter

July 2019



Prasophyllum tunbridgense, image Oberon Carter

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From the Editor

Dear all,

I am proud to bring you the 2019 edition of the TPT Newsletter. It showcases the achievements of the field trip program and celebrates all of the hard work put in by TPT over the last 12 months. Highlights of the season include finding record numbers of *Caladenia saggicola* at Milford, recording new locations of *Pultenaea sericea*, *Prasophyllum apoxychilum*, and *Phyllangium distylis* at Granite Point Conservation Area, and undertaking the first targeted surveys for the recently described *Viola curtisiae* on Mount Wellington.

TPT revisited several important threatened flora sites in 2019, some of which had not been surveyed for more than a decade. This included Mt Arthur for *Boronia hemichiton*, Dans Hill for *Tetratheca gunnii* and Spinning Gum Conservation Area for (you guessed it) spinning gum. We also visited many of our usual sites including Tunbridge Lagoon, Amy Street Reserve, and Henry Somerset.

It has been a turbulent year for TPT with the retirement of Richard Schahinger from DPIPWE, and long standing committee members Viv Muller, Phil Collier and Robin Garnet also stepping down. Richard, Viv, Phil and Robin have been an integral part of TPT over the last 10 years, and have all played a pivotal role in the success of the group. I would like to acknowledge the massive contribution that they have all put into TPT and thank them for their dedication, knowledge, enthusiasm over the years.

I also want to take this opportunity to thank Inger Visby for doing such a great job as TPT President. Inger recently stepped down as President, after 3 years in the role. She has done an exceptional job and has put TPT in a strong position to continue its important work. As a reflection of the magnitude of her work load, the committee have had to divide up her tasks to make it manageable for the incoming President. Geoff Curry has recently agreed to take on the President role for the next 12 months. Well done Geoff!!

Looking forward, TPT is planning to deliver a slightly scaled back field trip program for the 2019/2020 season. We have the support of Oberon Carter from DPIPWE who will help to set field trip priorities and provide technical assistance throughout the season. We also have lots of expertise on the TPT committee as well as within our membership, and collectively we have the ability to continue with threatened plant conservation in Tasmania.

I trust that you will enjoy the stories in this edition and hope you can join us in the upcoming field season.

Kind regards,

Joe Quarmby

TPT in the Field

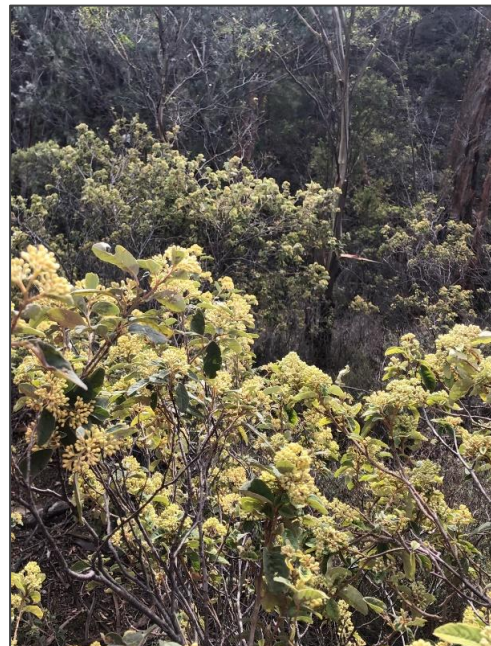
Boyer, 15th September 2018

By Oberon Carter and Richard Schahinger

A group of eight volunteers trundled out into the wind and rain at Boyer, near New Norfolk, for the first TPT trip of the season. We split up into teams; Oberon and Doug meandered the southern part of the property for threatened orchids, whilst the rest headed for the hills to search for spiny bossia (*Bossiaea tasmanica*) and moleskin dogwood (*Pomaderris pilifera* subsp. *talpicutica*).

Searches over eastern areas of the property did not turn up the spiny bossia or the moleskin dogwood. The gullies separating the target areas supported a more mesic tall shrub layer, and hence were less suitable for the dogwood. On the return trip, the group passed through a small area of *Eucalyptus amygdalina* on mudstone, with *Bossiaea riparia* the dominant low shrub (rather than *Bossiaea tasmanica*). Adrian, Inger and Richard W surveyed other target areas with *Eucalyptus tenuiramis* forest. The following new species were recorded for the Boyer property: *Acacia leprosa*, *Asterotrichion discolor*, *Olearia argophylla*, and *Stellaria flaccida*.

Oberon and Doug recorded a high richness of orchids, including: *Acianthus caudatus*, *Chiloglottis ?triceratops* (budding), *Chiloglottis* sp? (leaves only), *Corybas incurvus*, *Cyrtostylis reniformis*, *Microtis* sp. (leaves only), *Pterostylis nutans*, *Pterostylis melagramma*, *Pterostylis stenochila*, *Pterostylis williamsonii*, *Thelymitra* sp? (multiple species in bud). This survey greatly expands on the orchid list derived from the 2017 surveys, but no threatened orchids were detected.



Left: Trudging down a powerline easement at Boyer; **Right:** Moleskin dogwood in full bloom (Images: Richard Schahinger)

Milford, 22nd September 2018

By Doug Clarke

A group of seven TPT volunteers together with Oberon Carter from DPIPWE surveyed an area near Hobart Airport for the endangered orchid *Caladenia saggicola*, continuing a long-term monitoring program that has been happening for the last 10 years.

The survey of *Caladenia saggicola* recorded 492 individuals (457 flowers; and 35 leaves). The number of plants recorded was an increase on the 375 plants recorded last year. The 492 plants spotted this year denotes the highest number of plants recorded since monitoring commenced in 2009; the next highest were the 490 plants seen in 2016. 10 individuals of *Caladenia caudata* (tailed spider-orchid), which is listed as vulnerable under the TPS Act and EPBC Act, were also recorded.

A second visit was made to Milford on the 10th of November to monitor *Prasophyllum milfordense*. We recorded a total of 29 individuals of the milford leek-orchid, which was marginally more than the 20 plants recorded in 2017, but still far fewer than the 347 plants recorded in 2016. Volunteers also assisted with cleaning up a few bits of litter scattered in the forest (presumably blown in from nearby traffic).



TPT volunteers after the successful survey for *Caladenia saggicola* (Image Doug Clarke).

East Risdon State Reserve, 6th October 2018

By Richard White and Oberon Carter

Our eager group of eight was blessed with a warm and sunny October day for our monitoring trip to East Risdon State Reserve. Among us were Oberon Carter (DPIPWE) and Richard Schahinger who recently retired as the Senior Botanist for the Threatened Species Section.

East Risdon supports a key population of *Olearia hookeri* (crimson-tip daisy), a species that occurs in dry sclerophyll communities adapted to a relatively frequent fire frequency (intervals of ~ 8 to 25 years). However, little solid information is known of the species post-fire response, and our aim was to gather data to help fill this knowledge gap.

Armed with tape measures and clipboards, we set about the task of quantifying the impact. Broadly, we found that about half of the surveyed plants of *Olearia hookeri* showed signs of resprouting after the fire. The other half showed no signs of recovery. We also counted 16 small seedlings, but it was not clear whether we were looking at new individuals or suckers from pre-fire adults. It is assumed that most were suckering from existing plants. It will be interesting to follow the recovery of this population over the coming years.

We also enjoyed a short side trip to enjoy *Pomaderris pilifera* subsp. *talpicutica* (moleskin dogwood) and *Spyridium eriocephalum* (heath dusty miller), two other range-restricted species for which East Risdon is a key reserve. A fun day was had by all, and we look forward to a follow up trip to further assess the ability for the *Olearia* to regenerate.

Dans Hill Reserve, 23rd October 2018

Report by Roy Skabo and Oberon Carter

Four volunteer members of TPT along with Oberon Carter of DPIPWE and Kate Thorn of NRM North met in Beaconsfield, and then travelled the short distance to the survey site at Barnes Hill in the Dans Hill Reserve.

Our first visit was to the fenced enclosure sites TG5 and TG5.2 built a few years ago to protect a known population of *Tetratheca gunnii*. The lack of grazing within the enclosure meant that a dense ground cover of shrubs and sedges had grown, making the search for the tiny target species somewhat difficult. Fortunately there were no other species present to confuse us and we quickly found the first of these delightful little plants, known by the common name of shy susan. It took over an hour to survey the whole enclosure and use our GPS devices to mark the position of each plant.



We found 9 plants at site TG5.2 compared to 7 plants spotted in 2017. At site TG5 we found 42 plants; substantially more than the 12 plants recorded in 2017 (but still far fewer than the hundreds of plants recorded in the late-90s/early 2000s). It was still very satisfying to find so many of them and in particular to be able to demonstrate that their number had increased since the previous survey.

We walked back to the vehicles for lunch and then decided to check on another enclosure (TG9.1) only a few hundred metres away. Using our GPS's to guide us, we did quite a bit of heavy scrub-bashing before finding the enclosure, which was even more heavily vegetated than the first one. Within a short time we had located the three plants recorded in the earlier survey, but no additional plants. All in all it was a successful day.

Spinning Gum Conservation Area, 27th October 2018

By Kerri Spicer

The Spinning Gum Conservation Area near Tunnack proved to be an interesting reserve for our next TPT trip. Whilst the day didn't reveal any new threatened plant locations, better quality data on two known threatened species was obtained.

Bossiaea tasmanica (spiny bossia) is found in the eastern section of the reserve and *Acacia pataczekii* (wallys wattle) has been found at the nearby Gravelly Ridge Conservation Area in similar habitat. Two groups searched different parts of the western section of the reserve but no new locations for these two threatened species were found. A known site for *Pomaderris phyllicifolia* subsp. *phyllicifolia* was relocated and was found to cover an extensive area containing 1000s of plants.

The third group focused on the *Eucalyptus perriniana* (spinning gum) population, mapping the extent of this population and obtaining a better population estimate (between 500-750 plants). The population is doing well and the large lignotuber of this species is testament to how resilient this species can be with no deaths of trees recorded despite recent drought conditions.



Left: *Pomaderris phyllicifolia* subsp. *phyllicifolia*.

Right: *Eucalyptus perriniana*. (Images Kerri Spicer).

Granite Point Conservation Area, 3rd November 2018

By Kerri Spicer

We were honored to have Phil Collier and Robin Garnett join us on this trip, back on a visit from the UK, to benefit from their expertise and knowledge of the Granite Point Conservation Area near Bridport. Windy condition buffeted our small team of four but a successful day was had.

Our main aim was to assess the response of *Pultenaea sericea* (chaffy bushpea) to recent planned fires undertaken by Parks. TPTs last trip to this reserve occurred in 2011. The survey area was broken into three sections:

Area 1: This area lies east of the sewage ponds and was burnt 7 years ago. We found good quantities of *Pultenaea sericea* throughout this area. *Pultenaea sericea* had not been previously recorded in this section of the reserve and this area contained the highest densities of the areas surveyed. Another highlight was finding a new location of *Prasophyllum apoxychilum* (tapered leak orchid).

Area 2: This area, north of the sewage ponds, was burnt 3 years ago. *Pultenaea sericea* had previously been recorded in this area and is still present following the fire but is only in small numbers. A new location of *Gratiola pubescens* (hairy brooklime) was found in this area.

Area 3: This area is south of the sewerage ponds and was burnt 2 years ago. It was extensively surveyed by TPT in 2011 providing a good baseline. *Pultenaea sericea* was found scattered through the area but densities were much lower than in 2011. We also recorded good numbers of *Stylidium beaugleholei* (small triggerplant) and *Stylidium perpusillum* (tiny triggerplant) in this area, including new locations up to 50 m from those recorded in 2011. We were amazed by the quantities of *Stylidium perpusillum* flowering in some of the depressions (numbers were in the 1000s). We also recorded the rare annual herb *Phyllangium distylis* (tiny miterwort) which was a new find for the area.

The survey data indicates that *Pultenaea sericea* needs more than 3 years to fully recover after fire, and may peak after 7-10 years.



Left: TPT volunteers at Granite Point Conservation Area.
Right: *Pultenaea sericea*. (Images Kerri Spicer and Robin Garnett).

Township Lagoon Nature Reserve, 8th November 2018

By Oberon Carter

Township Lagoon Nature Reserve at Tunbridge is visited regularly by TPT. Volunteers have helped to reduce the weed infestations on the site and contributed to the ongoing monitoring data for the threatened species. Township Lagoon supports a significant native grassland remnant, numerous threatened flora species including *Pterostylis commutata* (midland greenhood), *Leucochrysum albicans* var. *tricolor* (grassland paperdaisy), *Vittadinia gracilis* (woolly new-holland-daisy), and *Brachyscome rigidula* (cutleaf daisy). At the centre of the reserve sits a rare inland saline lagoon.

After a great show of the *Prasophyllum tunbridgense* in November 2016, this trip was set to determine the abundance of this species, and do follow-up weeding to help conserve the native grassland. The trip needed to be rescheduled at the last moment due to very strong winds predicted in the area, and a smaller band of volunteers set out on 8th November to undertake this work. We located 29 individual plants (27 were in flower and 2 in fruit). This figure is close to prior estimates, suggesting that the species is doing well. Numerous patches of briar rose and some gorse plants were cut and painted, to keep the weeds at bay for a little longer!

Amy Street Reserve, 1st December 2018

By Sabine Borgis and Richard White

Six volunteers met in perfect weather at Amy Street Reserve, Moonah, to resurvey the population of *Velleia paradoxa*. We did this by walking through the reserve 'police-line' style in several adjoining transects, covering the roughly one-third of the reserve with known sites. We did walk through to the other end of the reserve but did not find any new sites. This year's count yielded over 600 individuals, some of which were still leaves only. This number is about three-quarters of the population counted two years ago, continuing the downward trend from previous years.

Overall, the reserve appears in very good shape. People commented on the great diversity of other grassy woodland species, including *Leptorhynchus squamatus*, *Bulbine glauca*, *Linum marginale*, *Hypericum gramineum*, *Clematis gentianoides*, and *Goodenia lanata*. We also recorded just under 350 of the threatened *Vittadinia muelleri*, and an isolated specimen of *Urospermum dalechampii*, a highly invasive daisy species (collected for Herbarium lodgement).

The weed situation has much improved thanks to Glenorchy City Council's great efforts over the past couple of years. However, a number of *Cotoneaster* sp. were noted (and pulled!), as were any boneseed seedlings. We also noticed re-emerging blackberries towards the lower reserve boundary that will need continuing attention, although these are not close to any *Velleia paradoxa* sites.



Volunteers Richard, John, Valerie and Inger monitoring *Velleia paradoxa*. (Image: Sabine Borgis)

Mount Arthur, 4th December 2018

Report by Roy Skabo and Oberon Carter

Boronia hemichiton is only known from two small areas south of Mt Arthur. Previous surveys in 2003 and 2005 suggest that there are between 2,000 and 3,000 plants in total. In the time since these surveys, the vegetation in some areas has become almost impenetrable. On our trip on the 4th December, we searched accessible areas along an old vehicular track which skirts the densely

vegetated area where high densities of the *Boronia* had been recorded. We reached this track via a private property, with kind permission from the land owners.

A walk of a few hundred metres brought us very close to the nearest of the grid references from the earlier surveys and within a few minutes our first *Boronia hemichiton* plant was spotted. Having checked that it was indeed the mt arthur boronia (hairs on the lower part of the leaf and very short sepals), we continued walking and were soon finding considerable numbers on both sides of the track. Eventually the track became a rivulet so that further surveying necessitated some wading. By the time we were halted by deeper water and heavy sedge and shrub cover, we had counted well over 50 individual plants, most of them looking very healthy and several over 1 m tall. The range of sizes suggested that recruitment was occurring. On the return walk we made a side foray on another track and found more of the plants growing in dryer ground.

Despite the impossibility of surveying what is hopefully still the major part of the population it was very satisfying to find so many of these attractive plants. For two of the volunteers it was their first TPT excursion, so it was very gratifying that we achieved a successful result.



Left: *Boronia hemichiton* at Mt Arthur, **Right:** Wading along the track. (Images Oberon Carter).

Mount Brown, 8th December 2018

By Doug Clarke

Four TPT volunteers and Oberon Carter of DPIPWE travelled to Mt Brown (near the Remarkable Caves) to survey for the threatened orchid *Prasophyllum castaneum* (chestnut leek-orchid) and *Euphrasia semipicta* (peninsula eyebright). The last recorded sighting of the leek orchid was about 18 years ago in this area.

The group found several *Prasophyllum* in flower and others had already progressed to seed. Some of the leek orchids were found in locations where *Prasophyllum castaneum* was previously recorded. They were provisionally identified as *Prasophyllum castaneum* and photos were sent to experts for

verification. The experts were not convinced that they were *Prasophyllum castaneum* and were possibly *Prasophyllum concinnum*. No records of *Euphrasia semipicta* (peninsula eyebright) were found.



TPT volunteers and Oberon Carter of DPIWPE searching for *Prasophyllum castaneum* at Mt Brown.

Kunyan/Mount Wellington, 15th December 2018

By Richard White

Our small group set off on a chilly and rainy morning from Big Bend car park in search of *Viola curtisiae*. This is a recent species upgrade from *V. hederacea*, and differs from that species primarily in the lack of hairy inner lateral sepals in *V. hederacea*. Unlike the more widespread *V. hederacea*, with which this species co-occurs, it is only known from three locations: Mt Field and Mt Wellington in Tasmania, and Mt Baw Baw in Victoria. Our technical expert for the day was Miguel de Salas, the Senior Curator (Botany) at the Tasmanian Herbarium, and we were fortunate to have Richard Schahinger along for the ride.

We split into two groups to check two different areas on the mountain. Our results were positive, with both groups encountering good numbers. Based on these findings, and those on previous explorations by Richard and Miguel, it is likely that the species is likely present through much of the Wellington Range at the 'right' altitude, albeit in low numbers and typically with few flowers (except for areas that have been burnt in recent years, as per the Collins Cap site) (Richard Schahinger pers. comm). There are no obvious threats to the species and it is expected that additional targeted fieldwork will yield healthy numbers of this species (Richard Schahinger pers. comm).

Despite the grey and wet skies this was a very successful day that shed more light on a poorly understood taxon.

Queens Domain, 15th December 2018

By Joe Quarmby

A small group of TPT volunteers ventured out to Queen Domains to monitor the endangered *Hydrocotyle laxiflora* (stinking pennywort) in December 2018. The purpose of the trip was to revisit all of the known locations of *H. laxiflora*, and search for new populations in recently burnt areas. We started out by revisiting all the previously recorded locations and recording the size and condition of populations as per the method established by Richard Schahinger in 2010.

We managed to find all of previously recorded populations, except for a few older records. The size of populations varied considerably compared to previous data. Some populations had increased in size dramatically compared to 2010 data, whereas others were much smaller. Most populations had no or very few flowers, but some were flowering profusely. The variation between populations did not correspond to fire history, indicating that other factors trigger population dynamics of this species. Some populations were dying back due to the dry conditions, making it much harder to detect leaves. One population which was visited by Joe in September had gone from an extensive and vigorous patch of leaves to being very difficult to detect a few months later.

No new populations were found, but it is possible that plants may have been overlooked due to dormancy. The populations in the recently burnt area (which are usually easier to detect) were only apparent in unburnt patches presumably due to the extra shade and moisture. One population near the edge of the road had been impacted by recent track upgrades but may recolonise the disturbed ground.

Queens Domain continues to be the only known location of *Hydrocotyle laxiflora* in Tasmania. The population appears to be stable, but clearly fluctuates from year to year. There have been a few new records in Queens Domain in recent years (including one by TPT during a Bush Blitz in 2016) but it is inconclusive whether the population is expanding or the increase reflects more survey effort.

Other trips

TPT had to cancel several trips in 2019 due to the bushfires that swept through Tasmania in January. Hopefully we can revisit some of these areas over the coming years to assess the recovery of threatened species and critical habitats. Severe weather was also a factor in the cancellation of some trips in the latter part of the season.

TPT Field Trips 2019/2020

Threatened Plants Tasmania will be undertaking a scaled back field trip program in 2019/2020. The Committee is currently working with Oberon Carter to determine the destinations and dates for the upcoming season. A field trip calendar will be released in August and posted on the TPT website. Details for each trip will also be sent to the TPT email list and will be available about 2 weeks in advance on www.wildcaretas.org.au and www.tpt.org.au. Please check the TPT website for latest updates.

2019/2020 TPT Committee

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TPT is a Wildcare group.

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