





Tamar Valley Ragwort Raid 2022 Report "Community Volunteers in Action"



Figure 1: Volunteers showing the ragwort collected during the inaugural Nunamara Ragwort Raid 2022

Summary

Ragwort is a serious "declared" weed in Tasmania and is poisonous to stock, particularly cattle and horses. It has the potential to infest at least 64,600 ha in the George Town, West Tamar and Launceston municipalities. It is also present through a large portion of the remainder of Tasmania.

For the past 23 years the amount of ragwort in the three Tamar Valley municipalities has been significantly reduced during annual Ragwort Raids through the efforts of dedicated community volunteers in collaboration with the three Councils and a number of corporate organisations. The threat of widespread infestation and the financial burden that would impose has thus been avoided. There would be a significant cost if ragwort regained a widespread hold in the Tamar Valley and surrounds.

The Ragwort Raids have supplemented the actions of many landholders to control this weed on their property by using a number of integrated measures, including chemical, mechanical and biological control.

During January 2022, Tamar NRM coordinated four Ragwort Raids covering the majority of major roads and many minor roads in the three Council areas. The dedicated raiding days were: 22 January – East Tamar; 23 January – West Tamar; 25 January – Blessington area; and 29 January – Nunamara area. Ragwort Raid Coordinator Kay Bailey and Tamar NRM staff undertook the initial planning for the Raids which were located within each council area and based around previous and current known "hotspots" for ragwort. Basing the Blessington and Nunamara Raids in those areas allowed the travelling time during the Raids to be reduced and the three hours to be utilised searching the roadsides and pulling the ragwort plants located.

A total of 62 volunteers surveyed over 1,200 kms of rural roads (see the map at Figure 3) at their own expense, pulling and bagging the plants before they set seed. Roads included those managed by the Department of State Growth, Tamar councils, forestry and parks and wildlife. All plant material collected was securely disposed of courtesy of the municipal waste management facilities.



Volunteers conducted a random sample of collected ragwort to determine the presence of active biological control agents. In contrast to the previous two years, this year no agents were located during this survey.

The Ragwort Raid Coordinator also patrolled a number of roads to conduct follow up monitoring and removal from key infestation areas reported or known from previous raids.

Figure 2: The collected ragwort is bagged to prevent seed spread and disposed of by deep burial.

The volume of ragwort located and collected along the roadsides has been reduced during the two decades of the Raids in the East and West Tamar and the Blessington areas from truckloads to 13 bags this year. However, the more intense focus on the Nunamara area, as well as favourable seasonal conditions, resulted in 15 bags collected along the roadsides in that area alone. Table 1 shows that the total number of bags collected from the 2022 Raids was 28 – an increase of 50%. With increased volunteer numbers (and hours) and the length of roads patrolled, the density of the roadside ragwort has reduced in the majority of the Tamar area. Some areas remain an issue.

Both the 2020/2021 spring and summer and the 2021/2022 winter and spring weather was conducive to growth of ragwort along river and creek sides with increased density and extent noted on private land during the four Raids this year. This has the potential to impact on the amount and distribution of ragwort next year and should be considered during planning.

The annual Ragwort Raids are a key mechanism for preventing the widescale invasion of ragwort in the rural areas of the Tamar Valley. Collectively, compliance measures, public education, landholder action, biocontrol and the Raids form this region's integrated weed management approach for ragwort.

Community Effort and Results of the Raids

Tables 1 and 2 show the number of volunteers by Raid location; assembly points for each Raid; the numbers of large bags collected; the potential productive land under threat should ragwort become widely established; and the length of roads travelled. The hours donated is estimated at 5 hours per volunteer. We know that many more hours are spent on ragwort control and monitoring by some.

The additional contribution of a large number of residents from the Tamar Valley who regularly target weeds, including ragwort, on public lands through individual or group action is acknowledged. Many of these started as Ragwort Raid or other Tamar NRM community weed program participants. The actions of these are not included in the Raid statistics but contribute to success in containing the impact of ragwort.

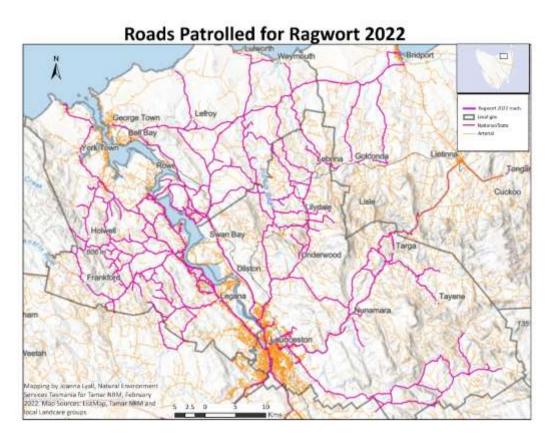


Figure 3: Map showing roads patrolled for ragwort during the 2022 Raids.

The Ragwort Raid Coordinator for 2022 was Kay Bailey who has contributed as a Raid participant over many years since 2005. Each of the Raids required additional local organisation by long time Raiders who assisted with setting up, handing out the safety equipment and other information,

cooking the sausages and cleaning up. A big thank you to all of these people. A special mention to Raiders who participated in more than one Raid. A major contribution from them!





Figures 4 and 5: (Left) Members of the East Tamar Landcare Group at Pipers River 2022 Raid and (right) members of the West Tamar Landcare Group, Friends of Riverside group and individual volunteers at Winkleigh.

A total of 62 volunteers participated in the four Raids across the three municipalities this year. Twenty attended the East Tamar Raid, twenty-six at the West Tamar Raid and a total of sixteen participated in the Raids within the Launceston municipality (see Table 1). The numbers were a 41% increase over last year enabling additional roads to be patrolled. The length of roads patrolled increased from 908.61 in 2021 to 1214.41 in 2022 (a 34% increase). Volunteers continue to travel the roads in their own vehicles at their own expense, some travelling considerable distances to deal with infestations.

The Raid based at the Pipers River also mapped other roadside weeds in conjunction with the ragwort. This widens the scope of the effort as the amount of ragwort present on roadsides in that area continues to reduce.

The City of Launceston municipality yielded the greatest amount of ragwort material collected with 19 bags compared to 4 bags in the East Tamar and 5 bags in West Tamar. There are a number of roads within the Launceston municipality that were patrolled this year that were not covered in 2021 due to limitations of the number of volunteers and the location of the base at Waverley Lake necessitating travel to the Blessington and Nunamara areas during the 3-hour Raid time. Holding two Raids and basing them at Blessington and Nunamara was successful in 2022 and should be considered again for 2023.



Figure 6: Tamar NRM Program Coordinator, Alison Hugo, happily tackling a large ragwort plant during the Blessington Raid.

Table 1: Ragwort Raid 2022 Statistics

| Municipal area | Patrol base location | Number of volunteers* | Hours donated* | Length of roads | Bags collected | Land under invasion |
|------------------------------|----------------------|-----------------------|-------------------|-----------------|----------------|---------------------|
| | | | | patrolled* | | threat (ha) |
| George Town | Pipers River | 20 (12) | 100 (60) | 249.15 | 4 (5) | 17,000 |
| (22 January) | Fire Station | | | (184.74) | | |
| West Tamar | Winkleigh | 26 (20) | 130 (100) | 303.60 | 5 (4) | 15,600 |
| (23 January) | Hall | | | (235.22) | | |
| Launceston | Waverley | 16 (12) | 80 (60) | 579.24 | 19 (10) | 32,000 |
| (25 & 29 January) | Lake | | | (488.65) | | |
| Adjacent Councils | | | | 82.42 | | |
| | | | | (87.59) | | |
| Total for all municipalities | | 62 (44) | 310 (221) | 1214.41 | 28 (19) | 64,600 |
| | | | | (908.61) | | |

^{*2021} figures in brackets

Table 2: Distances travelled per municipality

| Authority | George Town | Launceston | West Tamar | Adjacent Councils | Grand Total (km) |
|------------------|-------------|------------|------------|-------------------|------------------|
| Council | 148.54 | 319.94 | 224.18 | 58.94 | 751.60 |
| DPIPWE | 0.00 | 0.00 | 1.93 | 0.00 | 1.93 |
| Forestry | 13.65 | 15.69 | 4.21 | 0.02 | 33.57 |
| Not Applicable | 0.01 | 1.19 | 0.00 | 0.00 | 1.20 |
| Private | 2.78 | 15.21 | 6.40 | 0.15 | 24.54 |
| PWS | 0.00 | 0.98 | 0.00 | 0.00 | 0.98 |
| State Growth | 84.17 | 226.25 | 66.87 | 23.31 | 400.60 |
| | | | | | |
| Grand Total (km) | 249.15 | 579.24 | 303.60 | 82.42 | 1214.41 |

Hotspot Locations

During the 2022 Raids there was only one report of a roadside site in need of further follow up due to being too large to be hand weeded. This was along Hunting Ground Rd near Nunamara where a dense infestation of rosettes proved beyond the capacity of the Raid resources to pull out. A request has been forwarded to the City of Launceston for this site to be sprayed in autumn or spring 2022.

During and subsequent to the Raids there were a large number of private and public properties observed to have ragwort present. The improved conditions for the growth of ragwort over two years and the increase in roads patrolled both contributed to this observation. These sites were documented and sent on to the relevant councils and agency compliance authorities for action. On some river flats the density of ragwort in private properties appears to be increasing. Public education is of ongoing importance to the success of the Ragwort Raid program as some landholders may be unaware that they have a declared weed on their property or do not understand the necessity for continued follow-up.

Biological Controls

During the 2020 Ragwort Raids a community monitoring survey was instigated to record the presence / absence of indicators of the three ragwort biological control agents available in Tasmania (the ragwort flea beetle, the stem and crown boring moth and the ragwort plume moth). This followed the previous informal recording of any reports of signs of biocontrol agents found by the Raiders.

The community monitoring survey was continued as part of the 2021 and 2022 Raids with participants requested to randomly split ragwort stems and observe any larvae. Although a small number of larvae were observed in stems during the 2021 Raids, none were recorded during 2022.

This survey is an indicator only and should be continued next year. Other more rigorous means may be needed to determine more accurate presence and distribution throughout the Tamar Valley.

Communication

One of the key purposes of the Raid is to demonstrate the value of persistent, community driven regional weed control and management.

In order to promote the Raids, a media release was issued in mid-January approximately one week prior to the commencement of the Raids. An email and flyer promoting all four Raids was distributed in mid-November 2021 to all previous Raiders, local Landcare groups and community organisations. A reminder email was sent in mid-January together with posters of each individual Raid. The release and flyer were picked up by various print media (article and photo in the Examiner of 7 January 2022) and electronic media as well as group networks such as the Landcare Tasmania newsletter and the Pipers River Neighbourhood Watch newsletter. Facebook notices provided readers with invitations to attend and websites such as the West Tamar Council site, listed the Raids in their events sections.

A thank you email with preliminary results was sent on 7 February 2022 to all the volunteers, local groups, Council contacts and other organisations on the original contact list. This provided feedback in a timely manner to all those who had contributed their time.

This Ragwort Raid 2022 final report will be distributed to State Growth, Tasmanian Fire Service, DPIPWE, Parks and Wildlife Service, TFGA, NRM North, Sustainable Timbers Tasmania, our three partner councils, the Tamar NRM stakeholder list and all the participants of the Raids via email.

To aid future coordination of the Ragwort Raids, a Coordinators package was produced during the 2022 Raids. This contains:

- Copy of the Coordinators notes for the Safety induction for Working near Roadsides
- Copies of the Participant Agreement for Working near Roadsides and the Participants field notes
- A briefing list for each Raid
- The Ragwort Raids Running Sheet (covering from October prior to the Raids to production of the final report)
- A list of items provided by Tamar NRM for each Raid
- A copy of the Registration Form for the Raids.

Work Health and Safety

Tamar NRM has continued to work hard to keep everyone safe whilst undertaking the Ragwort Raids. Requirements to allow volunteers to work on roadsides have continued to tighten. Since 2017 Tamar NRM has ensured that procedures for working on roadsides fit within the Australian Standards acceptable to Work Safe Tasmania.

A Permit to carry out works within a state road reservation was applied for and obtained from the Department of State Growth. Approval to undertake the Raids on Council roads was provided by the three Councils.

Each volunteer is required to register and complete an induction on "Working On or Near Roadsides" prior to taking part in the Raid road patrols. A checklist is provided to all volunteers before commencing work removing ragwort. Issues covered include safe parking; limits on distances from roadsides and timeframes for roadside work; the role of the spotter; working on slopes in wet weather conditions; the use of high visibility clothing and flashing lights. Volunteers are also required to sign on and off. Snake bite first aid kits and vehicle warning devices were provided to each vehicle and hi vis vests issued to all volunteers. COVID requirements before and after the patrols were outlined to all participants and adhered to with proof of vaccination shown at Pipers River. All the hi vis vests were washed between each Raid.



Figure 7: Ragwort Raid Coordinator, Kay Bailey, bagging ragwort pulled during the Blessington Raid.

Summary and Recommendations: Maintaining the Momentum

TNRM Actions:

- Continue the Ragwort Raid activity on an annual basis, coordinating volunteers, negotiating access to various land tenures and obtaining permits / approvals and sourcing funding.
- In conjunction with the council, continue the control of ragwort during the Ragwort Raid in the Nunamara, Targa and Blessington areas of the Launceston municipality.
- Prepare mapping, hot spot table and report on control of ragwort in the Tamar Valley.
- Consider facilitation of establishment of biological control agents if a source can be located
 in dense infestations in inaccessible areas where mechanical and chemical control methods
 are impractical.
- Continue to facilitate the Tamar Valley Weeds Working Group.

Tamar Council Actions:

- Approve roadside collection of ragwort during the Raids.
- Continue to assist the Raids with in-kind support through deep burial of ragwort material.
- Follow up on hot spot property infestations as appropriate under the Weed Management Act 1999.

- Spray severe roadside infestations of ragwort with clopyralid (Lontrel) in December when
 plants are easily seen or during autumn and spring when the rosettes can successfully be
 sprayed.
- For any road making and maintenance activities specify use of soil which does not introduce new species to an area, with the liability on the supplier to eradicate introduced species.
- Within tender and contractor specifications, require the use of clean machines and vehicles at the commencement of every job.

Department of State Growth Actions:

- Issue permits for roadside collection during the Ragwort Raid.
- Provide roadside mowing schedule to contractors.
- Provide advice and support for ragwort control and follow up.
- Spray severe roadside infestations of ragwort with clopyralid (Lontrel) in December when
 plants are easily seen or during autumn and spring when the rosettes can successfully be
 sprayed.
- For any road making and maintenance activities specify use of soil which does not introduce new species to an area, with the liability on the supplier to eradicate introduced species.
- Within tender and contractor specifications, require the use of clean machines and vehicles at the commencement of every job.

Conclusion

For 23 years, the level of volunteer participation, length of roads travelled and amount of ragwort removed during the Ragwort Raids has demonstrated the benefit of community driven weed control programs. The 2022 Ragwort Raids continued this with increased numbers of volunteers, increased length of roads patrolled and increased amounts of ragwort removed.

The overall abundance of ragwort has been reducing in the region over the past two decades as well as the amount of ragwort per km patrolled. The long-term trend remains downward with less pressure on volunteer effort needed to complete the annual raids. It is important, however, that the effort is continued to ensure that the gain of the last two decades is not lost.

Due to good seasonal factors in 2020/21 and in 2021/22, the prevalence of ragwort observed on offroad private and public properties has increased over that observed during the past few years. Additional compliance and landholder management action will be required to ensure that the infestations are controlled prior to the 2022/23 season.

The Tamar Valley Weed Strategy approach to ragwort control includes compliance measures, working with agencies, public education, use of biocontrol agents as well as the Ragwort Raids. This approach is an effective model. It relies on timely follow up and attention by agencies /councils of landholder compliance on private land. This has been an issue and requires better coordination and policing. Contacting and reminding land managers of their responsibilities under the Weed Management Act (1999) in November / December would assist in the control of ragwort before seed set in January / February.

It remains important that events such as the annual Ragwort Raids continue. Awareness and action provide a means for collaborative, integrated action across multiple land tenures. The Raids are a community partnership that build capacity, awareness and confidence that weeds can be managed at a regional level.

Acknowledgements

Contributors not mentioned above to the Ragwort Raids were the Pipers River Fire Brigade, and the Winkleigh, Blessington and Nunamara Hall Committees. Thank you!

Appreciation also goes to:

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- Joanna Lyall, Nest Natural Environment Services Tasmania for the mapping
- Kay Bailey as Ragwort Raid 2022 Coordinator
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