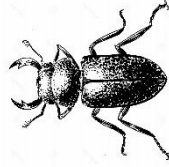


NVA News



New Records

Around 120,000 species observation records have been added to the NVA since the 1st of March 2022. The vast majority of those records (just over 63,000) were marine records sourced from the Australian Ocean Data Network (AODN). Some of these records were previously in the NVA but were found to contain significant errors. In such cases the existing data has been replaced with clean data from the AODN. Over 33,000 invertebrate records from the Tasmanian Museum were loaded, along with approximately 16,500 Tasmanian research grade observations from iNaturalist. Approximately 6,500 records were submitted by environmental consultants and around 4350 records were added by local councils. Approximately 4,200 Tasmanian frog records from the Australian Museum have also been loaded.

Pending ALA Data

The upload of another 400,000 Tasmanian species records derived from the Atlas of Living Australia is currently pending. These data have been quality checked, duplicate records have been excluded and the data have been reformatted to conform the NVA schema. The next task is to load the data via our bulk data load tool. This process requires significant time and effort from our technical team but is expected to be completed in the near future.

NVA User Tip – NVA Help

A lot of NVA users seem to be unaware of the user guides and help tips which are available in the NVA itself. On the blue banner at the top of the NVA web pages there is a heading entitled Help & Support. Hover your mouse over that heading to see the drop-down list; at the bottom is a 'Help' item. When you click on Help, a pop-up window will appear with a search dialogue box at the top. For help with a particular aspect of the NVA you can type a keyword/phrase into the search box and click the Search button to return any help items which contain that word/phrase. For example, you might be interested in making a TASVEG notification, to suggest a change to the TASVEG mapping, based on observations you have made out in the field. If you type 'tasveg' (without the quotes) into the dialogue box and click search, one of the help items returned will be 'How to Submit a TASVEG Notification'. If you click on that help item, you will be presented with a detailed set of step-by-step instructions describing how you can submit a TASVEG notification. A number of other commonly searched help items are listed on the NVA Home page.

Re-evaluation of Threatened Species Distributions

Threatened species research is not just about having fun out in the field gathering data. A lot of work also goes into ensuring the accuracy and currency of the existing data. This work is vital for conducting assessments of species distributions and understanding the area of occupancy and extent of occurrence of the species. Measures such as these are critical to our understanding of conservation status of threatened species, and this information also provides an invaluable resource to researchers, land managers as well as members of the wider community.

Recently, members of the Threatened Species & Conservation Programs Branch of NRE presented a series of talks for the Wild Island, Threatened Species Project. One of the primary aims of these talks was to present the most recent distributional data for the species, and to discuss the conclusions with the various species experts who were in attendance.



Miena jewel beetle, (*Castiarina insculpta*) Photo: Chris Spencer & Karen Richards

iNaturalist Data

A number of NVA users have embraced the iNaturalist app as a way of quickly recording species observations in the field, and they have done this with the expectation that the NVA team will then harvest the data from iNaturalist for upload onto the NVA. This is quite a reasonable expectation as we (the NVA team) have indicated previously that Tasmanian iNaturalist records will be harvested at regular intervals for inclusion on the NVA. And ...we have indeed been harvesting Tasmanian iNaturalist data, however, there are a number of issues/potential pitfalls users should be aware of.

The issues:

1. We are only harvesting records which are 'research grade', and to be classified as research grade, iNaturalist records must:
 - a. include either a photograph or a sound recording which can be used to help identify the species.
 - b. have the identity of the species corroborated by at least 2 out of 3 iNaturalist users.

Unfortunately, many potentially 'good' records are actually not achieving research grade, because no-one within the iNaturalist community has managed to corroborate/correct the identifications. Currently such records are being left behind by the NVA, as we are reliant on the iNaturalist community for this verification service.

2. iNaturalist automatically obscures the locations of many threatened species records. This means that, while you may have entered a precise location for your observation, the exact location is actually not available to other iNaturalist users (including the NVA team).

The solutions:

If you are a member of the iNaturalist community who has some level of expertise in the identification of Tasmanian species, please consider devoting a little time to helping review the identifications of your fellow iNaturalist members. If everyone helps to review a few iNaturalist records the number of records being included in the NVA will be greatly enhanced.

The only solution to the obscuring of threatened species records on iNaturalist, is for us (the NVA Team) to acquire the accurate data from the iNaturalist (Australia) administrators who are affiliated with the Atlas of Living Australia (ALA). The iNaturalist administrators can run a six-monthly extract of Tasmanian iNaturalist data for us will include the accurate locations for threatened species records. However, under the data licence terms, we will also have to obscure the record locations in the NVA. The accurate locations can potentially be made available to selected decision makers in state and local government, but in general NVA users will either not see those records at all, or be presented with generalised location information only. So, if you want to have accurate locations for your threatened species records available on the NVA, you will need to submit the records directly to the NVA. Currently we are only restricting data for 4-5 sensitive species on the NVA. You are welcome to email records to us directly.

Email: support@naturalvaluesatlas.tas.gov.au

Natural Values Atlas data was central to the process of drawing together the most current ecological information and distributional records for these presentations, along with range maps, images, and an array of base maps and overlays.

The talks were open to the public and were well attended and well received. Some of the presentations offered by NRE Tas staff included Threatened Beetles (Karen Richards), Threatened Butterflies (Jo Potter-Craven) and Orange-bellied & Swift Parrots (Shannon Troy).



Chaostola skipper (*Antipodia chaostola* subsp. *leucophaea*) Photo: Jo Potter-Craven



Orange-bellied Parrot (*Neophema chrysogaster*) Photo: Simon de Salis

Wombat Mange

By Elise Dewar, Conservation Science Section, NRE Tas.

NVA records for wombats impacted by mange have been helping the Conservation Science Section (CSS) staff understand the distribution and potential impacts of the disease in Tasmania.

Sarcoptic mange (an infectious disease caused by the parasitic mite *Sarcoptes scabiei*) has affected wombats across Tasmania since its introduction by Europeans and their domestic animals over 200 years ago. The mite burrows into the skin of wombats resulting in thick, crusty skin often with infected lesions and hair loss, causing significant health and welfare impacts for individual wombats. If left untreated, mange can result in death.

Monitoring by CSS shows that in most areas of Tasmania the number of wombats impacted by the disease is less than 5% [1] however, localised outbreaks can cause large numbers of wombats to be impacted, sometimes resulting in local population collapse as was seen at Narawntapu National Park and nearby areas. [2]

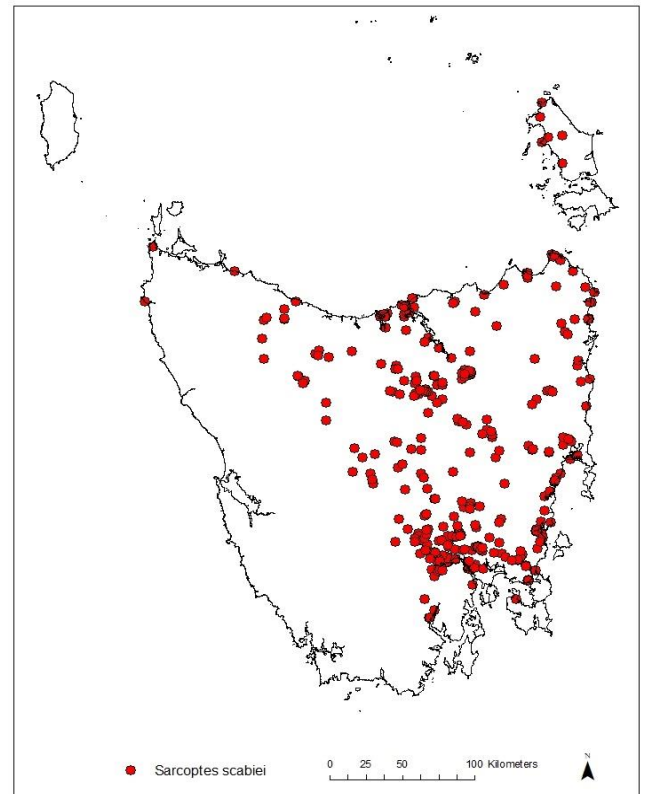


A wombat with sarcoptic mange. Photo: Jane Miller

Public reports of mange affected wombats in Tasmania make a significant contribution to our understanding of the spread and impacts to wombat populations. Staff in Conservation Assessments and Wildlife Management (CAWM) receive and log public reports from across the state on a regular basis, these reports are then reviewed by experienced scientific and veterinarian staff and entered into the NVA by the CSS. Olivia Murray, cadet with CSS, recently reviewed and entered records spanning across the north-east, north, central and southern regions of Tasmania. Around 250 public wombat mange sightings have been

Division of Environment Heritage and Land
Department of Natural Resources and Environment Tasmania
Contact: support@naturalvaluesatlas.tas.gov.au

reported to the CAWM team and entered into the NVA over the past 5 years.



A map of recorded locations for sarcoptic mange in wombats across Tasmania

The CSS also undertake annual monitoring to assess wombat population trends and the prevalence of mange at key sites across Tasmania, including Narawntapu National Park, Musselroe Bay, Dunalley, Maria Island and Flinders Island. Wombat records are also submitted to the NVA by other groups who undertake wombat surveys, such as Parks and Wildlife staff and Wildcare volunteers at Cradle Mountain, the Tasmanian Land Conservancy and The University of Tasmania who are trialling mange treatment options and investigating what causes outbreaks. The breadth of wildlife camera surveys undertaken across the state by different researchers has resulted in a large number of wombat images indicating healthy or potentially mange affected individuals.

Targeted citizen science initiatives have also played a role in better understanding threats to wombats. The department's Roadkill TAS App resulted in 709 wombat records submitted to the NVA during 2018-2021. Road maintenance contractors and other incidental roadkill reports have contributed a further 1108 wombat reports to the NVA since 2009. These records show that wombat roadkills are widespread, occurring along most major roads in the state [3].

Whilst roadkills do not appear to have had a significant effect on wombat populations at regional scales, it is concerning and may be an issue in areas where localised populations are confronted with other threatening processes, such as mange.

These varied sources of information and the resulting NVA records provide valuable data on distribution, habitat, population trends and incidence of threats for a variety of wildlife species. For more information about wombat mange and how to report a sighting, visit the [NRE Tas website](#).



A healthier, happier looking individual, Freycinet National Park. Photo: David Storey.

References:

- [1] M. M. Driessen, E. Dewar, S. Carver, and R. Gales, "Conservation status of common wombats in Tasmania I: incidence of mange and its significance," *Pacific Conserv. Biol.*, vol. 28, no. 2, pp. 103–114, 2022, [Online]. Available: <https://doi.org/10.1071/PC21007>
- [2] A. M. Martin, C. P. Burridge, J. Ingram, T. A. Fraser, and S. Carver, "Invasive pathogen drives host population collapse: Effects of a travelling wave of sarcoptic mange on bare-nosed wombats," *J. Appl. Ecol.*, vol. 55, no. 1, pp. 331–341, Jan. 2018, doi: 10.1111/1365-2664.12968.
- [3] M. M. Driessen, E. Dewar, S. Carver, C. Lawrence, and R. Gales, "Conservation status of common wombats in Tasmania II: population distribution and trends, and the incidence and significance of roadkill," *Pacific Conserv. Biol.*, vol. 28, no. 2, pp. 115–123, 2022, [Online]. Available: <https://doi.org/10.1071/PC21031>.



Eucalyptus Globulus.
Publ. by Labillardiere, Novadily, 12th April, 1800.

A drawing of *Eucalyptus globulus* (Tasmanian blue gum) that accompanied the first scientific description of the species by Jaques Labillardière (circa 1800)