

# NATURAL VALUES ATLAS NEWSLETTER

Issue 4. Summer 2021

## ATLAS OF LIVING AUSTRALIA DATA

As many of you may know, the Atlas of Living Australia (ALA) is a national aggregator of Australian biological records and as such, sources data from museums, universities, state-based data repositories (like the NVA) as well as various science organisations across the country. Many of these records were previously not widely available and many Tasmanian records have never been submitted to our own natural values database, the NVA. Consequently, the NVA team have been working since 2018 to bring relevant Tasmanian ALA records into the NVA, so that they can be included in natural values reports etc. After a lot of work examining data quality, developing new NVA fields to hold extra ALA data, writing programs to import the data etc. we have now successfully imported 1.5 million Tasmanian ALA records into the NVA. This batch of records contains Tasmanian ALA records up to the middle of 2018. We are currently in the process on looking at the more recent ALA data (mid 2018 to the present) in order to bring the NVA completely up to date in terms of records collated by the ALA. Once we have completed this next import of data, we will endeavor to regularly update the NVA with Tasmanian ALA records.

## NVA EVOLUTION

In the last six months progress on the NVA redevelopment (NVA Evolution) project has been quite slow, mainly due to competing demands from other work. We hope to improve the rate of progress in the coming months as other competing projects are finalised.

## RECENT NVA RECORDS

In the period from July 2020 to mid-February 2021 almost **85,000** new records have been added to the NVA (in addition to the ALA data load mentioned above).

Significant recent contributions include **36,000** records resulting from the Tasmanian Land Conservancy's remote camera monitoring, and around **12,000** records from the City of Hobart wildlife monitoring program. Approximately **3500** records were added via the iNaturalist app., and around **10,000** records have been submitted by environmental consultancies.



Grey goshawks, (*Accipiter novaehollandiae*) on the nest  
Photo by Elizabeth Latham

## NVA USER TIP

On the Observation/Species Search pages there is a 'Species' dialogue box into which names are entered to return information/observations for a particular species. However, you can also use the species dialogue box to search for information or observations relating to higher taxonomic groups such as class, order or family etc.

For example, if you wanted to just search for bird records, you can type the birds class name, *Aves* into the 'Species' box. Note that in this case, because the letters 'aves' could also form part of a number of non-bird species names, (e.g. *Austrostipa flavescens*) you need to tell the NVA to only return records for which the entire entry equals 'Aves'. To do that you should change the drop down immediately to the left of the 'Species' dialogue box from, 'Contains' to '**Equals**'. Now the NVA will return all entries where the NVA taxonomy has an entire entry which equals 'Aves'. If you now click 'Search', only bird species/observation results should be returned. Be sure to get the spelling correct when entering taxonomic names or you may not return the results you were seeking.

Department of Primary Industries, Parks, Water and Environment



## TVNC 2020

### TVNC 2020 now available

The Tasmanian Vegetation Monitoring and Mapping Program (TVMMP) has now released the Tasmanian Threatened Native Vegetation Communities 2020 (TNVC 2020) dataset.

### What is TNVC 2020?

TNVC 2020 is the latest release of a map depicting the indicative spatial distribution of threatened native vegetation communities in Tasmania.

### What are threatened native vegetation communities?

These are the thirty-nine native vegetation communities listed on Schedule 3A of the *Nature Conservation Act 2002*. [Descriptions of listed communities](#) are provided on the DPIPWE website to assist with on-ground identification.

### What information was used to create TNVC 2020?

TNVC 2020 is largely derived from the latest release of the TASVEG map (TASVEG 4.0) and the previous TNVC 2014. A comprehensive metadata statement for TNVC 2020 is available on the DPIPWE website.

### Are TNVC 2020 communities the same as TASVEG mapping units?

Although many of the communities on Schedule 3A share the same name as TASVEG mapping units, direct equivalence between the two should not be assumed. This, and the scale

and currency of TASVEG mapping in some areas, means that TNVC 2020 should not be used in isolation to identify listed communities. Confirming the presence or otherwise of listed communities requires appropriate field validation by a qualified practitioner.

### How can I access TNVC?

TNVC 2020 mapping can be viewed as a layer on LISTmap and on the NVA maps. Digital copies of the layer for use in a GIS can be obtained by contacting DPIPWE's Geodata Client Services Section. Please refer to the information on the TASVEG home page for further guidance on the various ways to access TVMMP mapping data.

### What about TNVC 2014?

TNVC 2020 is now the official version of the TNVC dataset and its release signals the retirement of TNVC 2014. Users who have applications or services pointing to TNVC 2014 on web mapping services should redirect all links to the new TNVC 2020 WMS to ensure continued functionality.

### For more information, contact:

TVMMP Coordinator  
GPO Box 44  
Hobart TAS 7001  
[TVMMPsupport@dpiipwe.tas.gov.au](mailto:TVMMPsupport@dpiipwe.tas.gov.au)



An example of pencil pine (*Athrotaxis cupressoides*) open woodland community at Cradle Valley. Photo: Sib Corbett.



### Contact:

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Natural and Cultural Heritage Division  
Department of Primary Industries, Parks, Water and Environment

## USING SPECIES RECORDS TO MANAGE THREATENED FLORA IN TASMANIA'S PRODUCTION FORESTS

*Angela Gardner, Ecologist, Forest Practices Authority*

Tasmania has over 490 threatened flora species with approximately two thirds occurring in areas that could be subject to forest practices (i.e. Permanent Timber Production Zone land, Future Potential Production Forest and private land).

These threatened flora species are often characterised by their small population sizes, restricted ranges and/or cryptic nature. These characteristics mean that there is limited information on the distribution of many of these threatened species, and in turn a lack of information on where suitable habitat for these species can be found.

The Forest Practices Authority (FPA) is Tasmania's independent statutory body responsible for regulating forestry activities and administering the forest practices system. This includes the development of policies and tools to aid management of threatened species. Under the Tasmanian forest practices system, forest planners are required to consider both the known sites of threatened species (i.e. sites recorded on available databases such as the NVA), and potential habitat for threatened species. Under the forest practices system, potential habitat is defined as all habitat types within the potential range of a species that are likely to support that species in the short and/or long term.

With limited information on the distribution of many threatened flora species, and by extension limited information on their suitable habitat, it can often be difficult to prioritise and manage potential habitat for all threatened flora species. Not knowing where suitable habitat is located may result in both over and underestimation of the extent of potential habitat, and therefore inadvertent loss of important habitat or ineffective conservation management.

To fill this knowledge gap, the FPA developed Threatened Flora Habitat Suitability Models (TFHSM) for 46 of Tasmania's most vulnerable and at risk threatened plant species. The TFHSM are heat maps that indicate the approximate relative likelihood that a given location will contain suitable habitat for a species.

The heat maps were developed using MaxEnt, a software program which uses an algorithm to model the relationship between species presence records and environmental variables. The species presence records for all 46 species were extracted from the NVA. Without the NVA species records tools like the TFHSM are not possible and this tool highlights the importance of threatened species records in managing these rare and cryptic species.

The environmental variables used in the model are the variables most likely to influence the distribution of flora in Tasmania, for which spatial data was available. These include vegetation type (TasVeg), geology, elevation and a range of climatic variables.

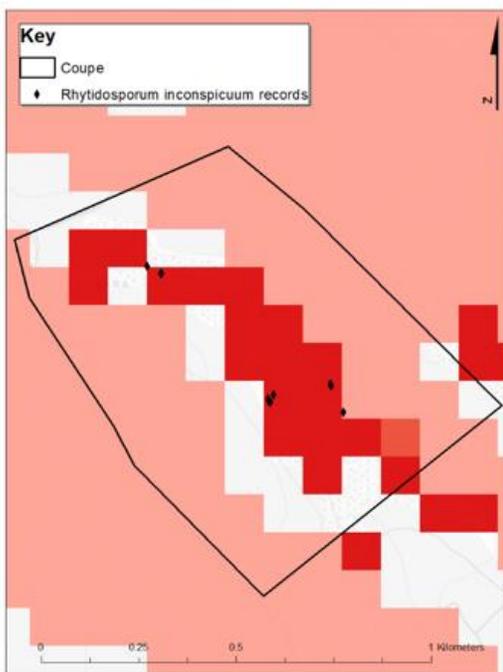
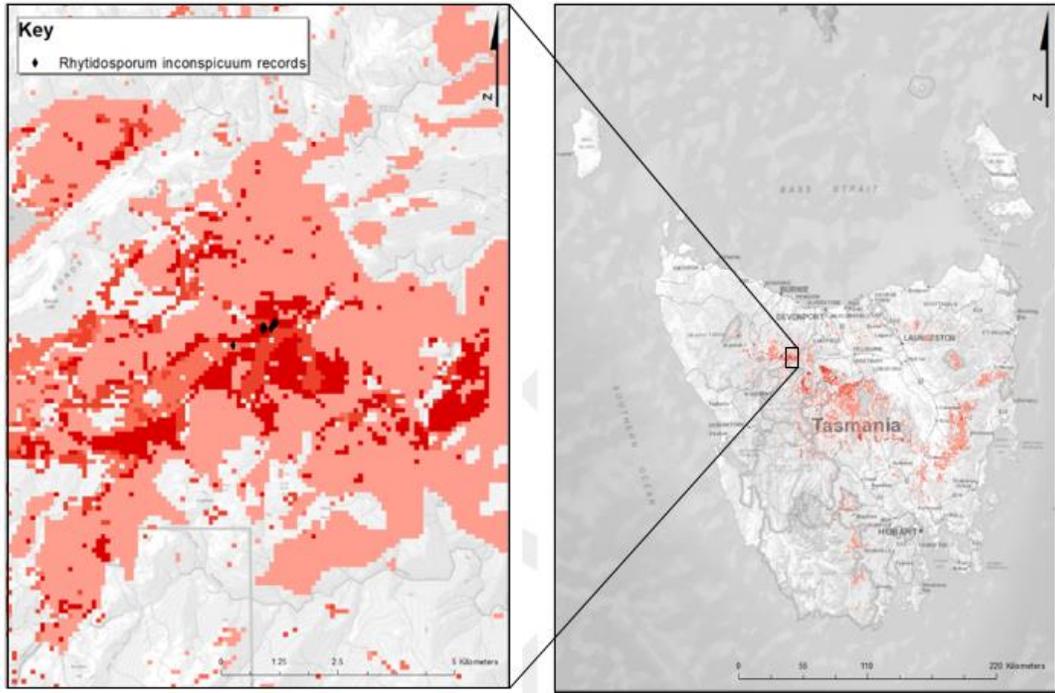
These state-wide models form the basis of the TFHSM: a new spatial planning tool that will be used to prioritise management decisions for threatened flora in timber production areas. These high-resolution tools allow forest planners to determine where to target flora surveys, with the state broken into a series of 100m<sup>2</sup> grid cells indicating a level of habitat suitability for each species.

Tools such as these models are important in the Tasmanian forestry context as they allow evaluation of both biodiversity conservation and timber production goals, and therefore aid in the sustainable management of natural resources and conservation of threatened flora. The TFHSM will be publicly available on the FPA's website in autumn 2021.



Tailed spider orchid (*Caledonia caudata*). Photo supplied by FPA

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Suitability Rating	Suitability Range (%)
Very High Suitability	80-100
High Suitability	60-80
Moderate Suitability	40-60
Low Suitability	20-40
Very Low Suitability	0-20

Habitat suitability model for *Rhytidosporum inconspicuum* in the Bonds Range