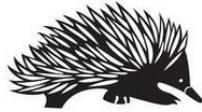


## NVA News



### New Records

Around 95,000 new species observation records have been added to the NVA since our last Newsletter (1<sup>st</sup> of March 2021). Of those, approximately 14,500 (research grade) records were submitted via the iNaturalist app, 14,000 records were submitted by environmental consultants and around 13,500 records were added by local councils (primarily the Kingborough, Glamorgan Spring Bay and Hobart City councils). Approximately 5,000 climate change monitoring records (flora) from the TWWHA have been loaded as have around 3,750 records from survey work at the Tasmanian Land Conservancy's Rubicon Sanctuary. There have been approximately 1,750 frog records from the Australian Museum added to the database and just over 10,000 records have been submitted by people working under various Fauna permits issued by NRE Tas.

### More ALA Data

Another batch of Tasmanian species records from the Atlas of Living Australia is being prepared for inclusion in the NVA. The initial ALA data load consisted of data dating from mid-2018 and prior. This currently pending batch consists of Tasmanian records which have been added to the ALA since mid-2018. The data are currently undergoing quality checking, re-formatting of the data to fit the NVA schema and removal of any duplicates with existing NVA data. Where multiple observations were recorded at the same location and date they are being 'stacked' such that, where the ALA has 10 records at the same location on the same date, these will be represented in the NVA as a single observation of 10 individuals rather than 10 separate observations. Inclusion of this dataset should significantly improve the NVA coverage of marine organisms in particular, but the dataset contains records from across all lifeforms.

### NVA Evolution Project

Regular NVA Newsletter readers will be aware that the NVA Team are currently working on a redevelopment of the Natural Values Atlas. This project is referred to as NVA Evolution. We are hoping to secure an injection of Australian Government funding to help support this project. The funding proposal is currently in the final stages of the approval process. If/when this funding is secured, it should allow us to direct greater resources toward the project and significantly accelerate progress.

## Giant and Tall Tree Records

Records of giant and tall trees collected by both Sustainable Timber Tasmania and/or the giant tree enthusiast community have recently been loaded into the NVA.

The NVA previously included some giant tree locations and some of the associated girth and height measurements but with the addition of these records the dataset is now much more complete.

'Giant' trees are defined in Tasmania as being either 85m or more in height or having a calculated stem volume of 280m<sup>3</sup> or more. 'Tall' trees, while not meeting those 'giant' thresholds, are nonetheless impressively large individuals.

The newly loaded data includes additional measurements of the individual trees along with any recent status updates. Sadly, a number of the trees were damaged or have died as a result of the 2019 bushfires.

Recently, LiDAR data has been used to identify a number of new 'tall' trees. LiDAR is a method used to accurately measure distances/ranges by targeting an object with a laser and measuring the time for the reflected light to return to the receiver.

The volume of some of these newly identified trees is yet to be accurately quantified and some of them may meet the  $\geq 280\text{m}^3$  criteria to become classified as giants. A few of these tall trees are also relatively young and so may, with time, continue to grow to become giants.



Tasmanian Azure Kingfisher (*Ceyx azureus* subsp. *diemenisis*). Photo: Adam Hardy

## NVA User Tips – Map Coordinates

The NVA map viewer provides the option to view your coordinates in either Easting and Northing (GDA 94) or Latitude and Longitude (WGS 84). You can select which of these two datums you wish to use by hovering your mouse over the ‘**Logged in as**’ area (at the top right of any NVA page) and then selecting the appropriate datum from the drop-down list. By default, the NVA uses Eastings and Northings (GDA 94) and will revert to this datum if/when you log out, but if you would prefer to always work with Latitude and Longitude you can specify that the NVA always use Lat/Long on your **My NVA** page. Hover your mouse over the ‘Logged in as’ area and select My NVA. Click ‘Modify’ and next to Spatial Reference System, choose WGS84 Latitude/ Longitude. Click ‘Save’. Now, whenever you open the NVA coordinates will be displayed on the map in Latitude and Longitude by default.

When using the NVA map viewer you can switch between datums on the fly, as outlined above. This can be very useful if you want to convert a set of coordinates from East/North to Lat/Long or vice versa. In the NVA, open the map viewer (on any page which has the map embedded) and click on the **XY** button to display the Feature Coordinates pop-up. Type your coordinates into the two boxes at the top of the pop-up window, X coordinate (Longitude or Easting) in the left-hand box and Y coordinate (Latitude or Northing) in the right-hand box. Note: when entering **southern hemisphere latitudes**, the co-ordinate entered should be preceded with a minus sign e.g. -42.05843. Once you have entered your co-ordinates, click the Draw Features button. You should now see a point feature plotted on the map at the location you entered. If you now change the datum under the ‘Logged in as’ area then click on the XY button again to reopen the Feature Coordinates pop-up, the coordinates you entered previously will have been converted to the alternate coordinate system. If you want to do this for multiple points you can create a series of points on the map using the Draw Point tool, . Activate the tool by clicking on it, then click on the map (it doesn't matter where at this stage) to generate the number of points/co-ordinates you want to convert. Now open the XY pop-up and edit the point location coordinates to be where you want them. Click the Draw Features button to plot them on the map. Change the datum, as outlined above, and then re-open the XY pop-up to see the converted coordinates. This is very handy and quick way to quickly convert a few location co-ordinates between co-ordinate systems.

Currently, the Tasmanian tall tree records in the NVA comprise eucalyptus species only. There are some very large examples of non-eucalypt trees which have also been identified but, while these may be exceptionally large examples of their particular species, they are generally not nearly as tall as the true ‘giant’ trees.

Giant and tall tree data can be found in the NVA by running an Observation Search for the project Giant Trees (project code: gtree).



‘White Knight’ Almost 90m tall *Eucalyptus viminalis*, (white gum). Photo: giant-trees.com

## Geosites of the Year 2021

A geosite is a place of acknowledged significance for the conservation of geodiversity (i.e. rocks, landforms and soils). In Tasmania, a formal process exists for assessing potential geosites and listing them on the NVA ([nre.tas.gov.au/conservation/geoconservation](http://nre.tas.gov.au/conservation/geoconservation)).

Readers may recall that a previous edition of the NVA Newsletter introduced the concept of a Geosite of the Year, as an excuse to celebrate and publicise Tasmania's wonderful geodiversity. This year, the task of selecting just one geosite proved quite tricky, consequently we have selected three! In doing so, we were mindful that although geosites are listed for sometimes esoteric scientific reasons, many also engage us for aesthetic reasons. We tried to highlight this in our selection. These are all 'new' geosites, only recently included on the NVA.

**Sandrock Point Liesegang Banding.** Sandrock Point, on the Huon River between Abels Bay and Eggs and Bacon Bay, is listed on the NVA as an example of leisegang banding. Liesegang banding is a form of secondary mineralisation which produces bands or concentric rings of alternating lighter and darker colours in sedimentary rocks. At Sandrock Point the bands are exaggerated by differential weathering on the foreshore (see image below). While leisegang banding is common it is rarely as well displayed in three dimensions as it is at Sandrock Point.



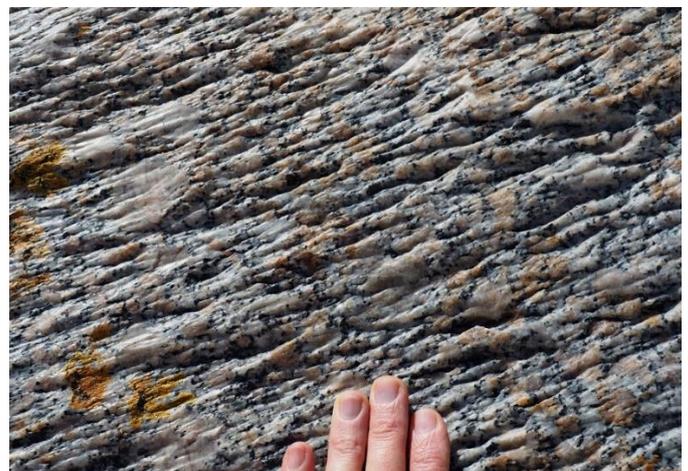
Sandrock Point Liesegang Bands. Photo: Jason Bradbury.

**Frenchmans Cap Recumbent Folds.** Frenchmans Cap is a long-standing geosite and in 2021 it received additional recognition for its massive and beautifully displayed recumbent folds. These folds are the product of plate tectonics acting on margins of an ancient continent where massive forces deformed and, in some cases, completely overturned thick layers of rock. The resultant giant folds are now on display thanks to later uplift and glacial erosion.



Frenchmans Cap Recumbent Folds. Photo: Mike Vicary

**Stumpys Bay Ventifacts.** This geosite, in north-east Tasmania, is an outcrop of granite on the coast. Ventifacts are rocks eroded by wind-blown sand, producing surfaces with characteristic faceting and polish. The Stumpys Bay example is a relatively small outcrop where sandblasting has dominated over other forms of weathering. The affected rocks are smooth, rounded or grooved on the upwind side and rough on the downwind side. Ventifacts are typically found in desert environments and few examples have previously been recorded in Tasmania.



Stumpys Bay Ventifacts. Photo: Kathryn Storey