

Habitat Value

Habitat Value helps identify the relative value of biodiversity across Victoria to assist in conservation and land-use planning.

The **Habitat Value** map combines information on thousands of species habitats to show the relative biodiversity value of landscapes in Victoria. This can help to identify priority areas for protection and harm avoidance.

Habitat Value

Biodiversity is all components of the living world: the number and variety of native plants, animals and other living things across our land and waters. Victoria's natural environment is richly diverse, unique, and precious.

To help identify areas of relative biodiversity importance and inform land-use planning decisions, DEECA has developed a new map, called Habitat Value. The map combines information about where species are likely to live with maps of where native vegetation occurs across Victoria. Areas that can support either more species or a rare species have higher Habitat Value.

Understanding where areas of relative high value are across the state is important because decision-makers need access to an objective, comprehensive and spatially explicit view to help make decisions that achieve the greatest overall benefit to biodiversity.

Habitat Value can help inform conservation decision-making processes, such as:

- strategically avoiding biodiversity values when considering development footprints
- prioritising areas for protection
- raising awareness of the distribution of biodiversity values across Victoria.

Habitat Value is not a Go / No-Go map. It can, however, help developers understand where higher biodiversity values occur to support planning for the siting of infrastructure that may help streamline approvals.

Habitat Value does not help identify which actions to undertake for biodiversity. DEECA has another tool, [Strategic Management Prospects](#), to help with this.

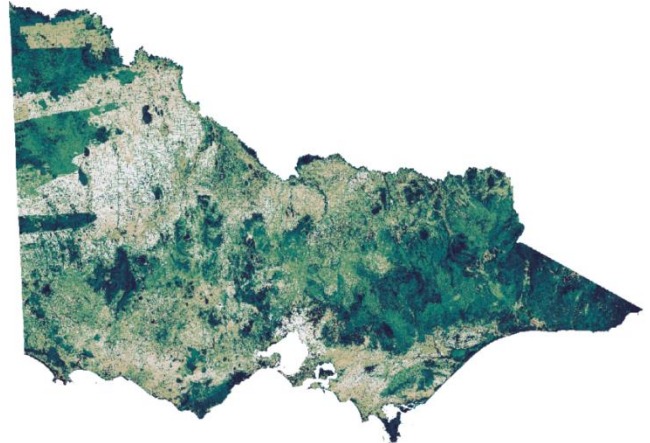


Figure 1: Habitat Value showing areas of biodiversity value ranked from highest (dark blue) to lowest (beige)

Making the Habitat Value map

Data Inputs

Habitat Value includes information from the following spatial datasets:

- **Habitat Distribution Models (HDMs)** predict where suitable habitat occurs for a species. This includes the current potential distribution of likely habitat for ~4,200 species, including all terrestrial fauna and vascular flora, as well as some rare and threatened invertebrates. The [Habitat Distribution Models information sheet](#) describes the development of these models
- **Species observations**- for species without HDMs, records from the Victorian Biodiversity Atlas were used to identify valuable habitat
- **Land Cover Time Series** – satellite imagery was used to generate a view of land cover, which identifies where native vegetation occurs. This was utilised to remove lost habitat from HDMs prior to their use in creating the Habitat Value map.

Identifying high value areas

The Habitat Value map was created using Zonation conservation planning software. The analysis ranks all locations across Victoria for their ability to represent high value habitat for Victoria's plants and animals (vertebrate fauna and vascular flora). The ranking is based on maximising the representation of each species.

The analysis starts by identifying locations with the lowest biodiversity value and then finds the location with the next lowest value. This process continues until all locations statewide are ranked from 0 (lowest value) to 100 (highest value).

This iterative, bottom-up approach ensures that high value areas in the landscape are appropriately represented and connected to other high value areas.

Some locations with lower condition vegetation can still be highly ranked because they are the only remaining habitat for certain species (e.g. endemic species) or provide important connectivity between other important habitat.

Habitat Value rankings use Core-area Zonation to ensure rare species are carefully accounted for. Some areas with high Habitat Value may therefore be due to the occurrence of a single rare species despite supporting relatively few species overall.

Continuous improvement

We are committed to a continuous improvement approach, which enables products and tools to be updated as further data, computational power, research, and modelling methods become available.

Everyone can contribute to the improvement of these datasets, maps, and tools. For example, by submitting species records to the Victorian Biodiversity Atlas, which is a key source of information for Habitat Value and other datasets and decision-support tools. Visit the [Victorian Biodiversity Atlas](#) web page for more information.

Building on existing tools

Habitat Value builds upon previous decision support tools, including the Strategic Biodiversity Values (SBV) v4 dataset from 2016, by:

- Improving the spatial resolution from 225m pixels to 75m pixels
- Including all species where habitat models are available, rather than just threatened species
- Including the latest Land Cover Time Series epoch to define native vs non-native land cover types.

How do I access Habitat Value?

You can view DEECA's biodiversity spatial datasets, including Habitat Value, using [NatureKit](#) – the department's online biodiversity mapping and reporting tool.

The Habitat Value spatial dataset can be downloaded from DEECA's [DataShare](#) platform.

Habitat Value was produced utilising the technical expertise of the Arthur Rylah Institute for Environmental Research (ARI). Visit the [ARI website](#) to learn more about the Institute.

We acknowledge Victorian Traditional Owners and their Elders past and present as the original custodians of Victoria's land and waters and commit to genuinely partnering with them and Victoria's Aboriginal community to progress their aspirations.



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Habitat Value information is also available at the [Habitat Value website](https://environment.vic.gov.au/biodiversity/habitat-value)
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