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| NaturePrint |
| Overview and approach |

Evidence-based decision making is critical to improving outcomes for biodiversity. To help us protect and manage biodiversity, we need the best information possible, and decision-support tools which can deal with the complexity of nature, while also making sound decision making simpler.

# NaturePrint

Victoria has a diverse and unique range of species and ecosystems that we value and need to protect for future generations. But our biodiversity is in decline. This presents a significant management challenge that will be exacerbated by climate change. To meet this challenge, we need to revolutionise our thinking. Our management approach needs a stronger focus on providing the best opportunities for Victoria’s plants and animals to withstand or adapt to these changes. We need to put the best available science and biodiversity information in the hands of people making decisions.

The Victorian Government’s Biodiversity Plan, *Protecting Victoria’s Environment – Biodiversity 2037* (the Biodiversity Plan), recognises the value of using strategic decision-support tools to prioritise action and focus more on earlier intervention. Decision-support tools are typically computer-based information products that inform choices at the management, operations, planning or policy level of an organisation.

## What is NaturePrint?

NaturePrint is a suite of decision-support products and designed to help us make choices about what actions to take, and in which places, to protect Victoria’s environment and plan for the future. The tools are evidence-based, the inputs are transparent, and new ideas and data can be included over time as required. A summary of the current NaturePrint products and tools is shown in Table 1.

NaturePrint aims to provide a consistent basis to help us better understand the synergies and trade-offs involved in policy options and operational decisions. The NaturePrint tools are enablers, designed to inform decisions, not dictate the answer. More specific local or regional knowledge can easily be added to further inform questions and decisions.

Table 1: NaturePrint products and tools

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| Tool | What it is |
| Habitat Distribution Models | Models that indicate the likely locations of habitat for a species. |
| Habitat Importance Models | Models that indicate the relative importance of habitat in different locations for a species (including current habitat and areas that could be re-established). |
| Threat Models | Models that show where key landscape-scale threats are likely to occur in Victoria. |
| Benefit of Action Models\* | Models that indicate where and to what extent management actions could benefit species across Victoria. |
| Strategic Biodiversity Values | A map that identifies the priority areas for protection based on the importance of the natural values in that location. |
| Strategic Management Prospects\* | A decision-support tool which integrates spatial information on biodiversity values, threats, management actions and indicative benefits and costs across Victoria. |

\*currently focused on terrestrial environment

## Securing the greatest overall benefits

NaturePrint brings together whole-of-landscape, fine-grain spatial information relevant to biodiversity, and supports the Victorian Government’s Biodiversity Plan:

*'Conservation management is shifting away from planning for threatened species one at a time. While planning for threatened species will always be necessary to understand each species’ specific circumstances and needs, species are embedded in ecosystems and are collectively subject to threats and management responses. Biodiversity management is more effective and efficient if synergies and potential negative outcomes are considered.*

*Conservation management is also shifting away from focusing solely on the most endangered species. Focusing only on the ‘emergency end’ of biodiversity decline is unlikely to be the most effective way of preventing extinctions over the long term, because the necessary management actions are typically high risk and high cost. Instead, the focus of the Biodiversity Plan is more on how ecosystems and ecological processes can be managed for the benefit of all species, particularly given the impacts of climate change. This means re-balancing efforts and investment to increase the focus on prevention as well as the critical care of biodiversity.'* (Protecting Victoria’s Environment – Biodiversity 2037)

The Biodiversity Plan intends to *‘instigate biodiversity response planning at scales appropriate to how species operate, and to cost-effectively benefit the maximum number of species.’* NaturePrint tools are designed to support the intent and approach of the Biodiversity Plan.

NaturePrint tools can help to identify broader scale threat management actions that benefit multiple species and provide a preventative approach, reducing the risk of species becoming more threatened.

'Strategic management actions that focus on multiple species can prevent many vulnerable and common species from entering the endangered category, and provide co-benefits to endangered and near-threatened species. As a result, these actions can be highly cost effective.' NaturePrint tools can help us to identify and prioritise the cost-effective actions in different places across Victoria.

The Biodiversity Plan also recognises that some endangered and critically endangered species will not benefit from the wider landscape-scale approach, and will require specialised interventions. NaturePrint tools can help to identify those species where we need more information or specialised threat management or other interventions to help us meet the unique needs of individual species or situations.

The Biodiversity Plan approach is that relevant components of existing threatened species projects will be progressively integrated with landscape-scale partnership approaches, and that collaboration and community involvement in threatened species recovery will continue to be facilitated.

## How to access NaturePrint information

NaturePrint products can be viewed using NatureKit – the department's online biodiversity mapping and reporting tool available at: <https://naturekit.biodiversity.vic.gov.au>.

## Continuous Improvement

We are committed to a continuous improvement approach, which enables the NaturePrint products and tools to be updated and refined as further data, computational power, research and modelling methods become available. NaturePrint products have a version number to help identify the currency of each product.

Everyone can contribute to the improvement of the NaturePrint tools. For example, by submitting species records to the Victorian Biodiversity Atlas which is a key source of information for NaturePrint. Visit the [Victorian Biodiversity Atlas](https://www.environment.vic.gov.au/biodiversity/victorian-biodiversity-atlas) web page for more information.

Opportunities for feedback on other data layers will be developed.

## Further information

More detailed information is provided in other NaturePrint information sheets which are available on the [NaturePrint](http://www.environment.vic.gov.au/biodiversity/natureprint) web page [https://www.environment.vic.gov.au/biodiversity/‌natureprint](https://www.environment.vic.gov.au/biodiversity/natureprint).

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