



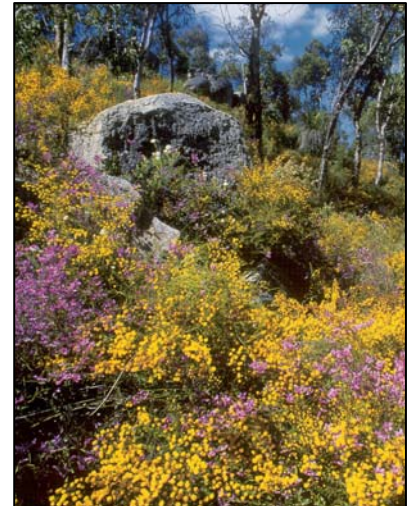
## NatureMap: Mapping Western Australia's Biodiversity

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### Background

Western Australia, home to one of thirty-four global biodiversity hotspots designated by Mittermeier *et al.* (2004), represents about a third of the Australian landmass. A major challenge in managing the conservation estate in such a large region, with its enormous biodiversity, is providing access to current and reliable information on species and their populations.

Countless surveys and research projects have been undertaken within WA over a long period of time, resulting in many datasets and reports containing valuable and essential information for the ongoing management of its unique biota. However, this information is invariably scattered across many environments with varying degrees of maintenance and accessibility. Tools are required to enable conservation workers to more easily discover, assemble, analyse and report on biodiversity information that has been collected.



### *A new online window into Western Australia's biodiversity*

The Department of Environment and Conservation (DEC), in partnership with the Western Australian Museum (WAM), can now provide species distributional information through the free online web portal **NatureMap** (<http://naturemap.dec.wa.gov.au>). NatureMap has been designed to help a wide range of users, including conservation planners, researchers, industry, consultants and community groups, and provides tools for querying and mapping species distributions, downloading data, reporting on conservation status, collector effort, weeds and ferals, endemism, and more.

NatureMap is part of DEC's NatureBank strategy (Science Division, 2002), which aims to consolidate access to biodiversity information through a single portal. Funded primarily by DEC through the Biodiversity Conservation Initiative and Avon NRM Baselineing project funds, NatureMap applies the 80/20 rule by providing just the basic querying and reporting requirements of planners, researchers and other user groups. In many cases this comes down to just dots on maps.

NatureMap works by warehousing data from several sources into a single, spatially enabled database. Whilst this may sound straightforward, behind the scenes a vast amount of infrastructure, database analysis and software code is required. In fact, most of NatureMap's project effort has been spent on data integration issues, compounded largely by lack of uniformity in how survey and collections data is compiled and managed.

**NatureMap**  
Mapping Western Australia's biodiversity

Home Themes Maps Tools Help Username: Password:

Welcome to NatureMap  
Where is What? and What is Where?  
Produce maps, lists and reports of WA's flora and fauna diversity.

Search for species by [name](#) or by [area](#)  
What do you think of NatureMap? [Tell us to know](#)

**Latest News** NatureMap wins WA spatial excellence award!  
20 / 07 / 2009  
NatureMap has just won the 2009 WA Spatial Excellence Award (WASEA) in the Environment and Sustainability category. Thanks to everyone for your continued support.

Register Forgot Password

Department of Environment and Conservation **MUSEUM**

By using this site you indicate acceptance of NatureMap's [copyright and disclaimer provisions](#).  
Minimum Requirements: NatureMap requires Internet Explorer(v5 or better).  
Javascript and cookies must be enabled.

## Search Results

Method=By Circle; Centre=122°13' 40" E,17°30' 55" S; Buffer=30km; Group By=Conservation Status;

Consv Status	Species	Records
Rare or likely to become extinct	3	4
Other specially protected fauna	1	1
Priority 1	3	13
Priority 2	4	6
Priority 3	3	7
Priority 4	4	9
Non-conservation taxon	416	1072
TOTAL	434	1112

### Rare or likely to become extinct

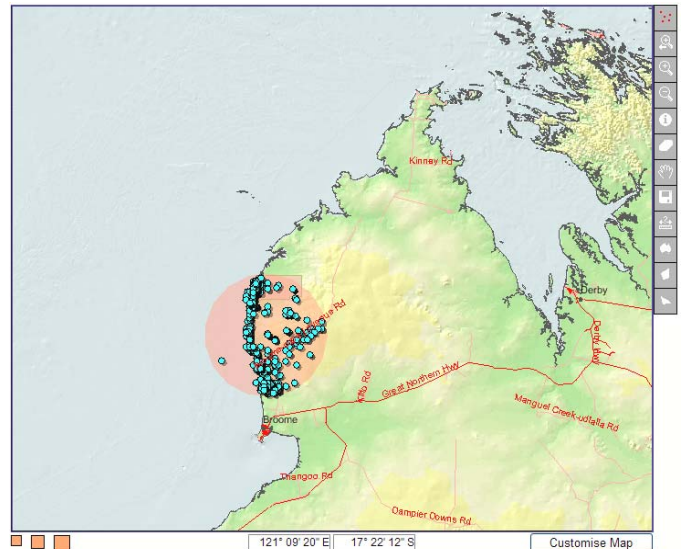
[Isodon auratus subsp. auratus](#) Golden Bandicoot (name not current) T  
[Macrotis lagotis](#) Bilby, Dalgite T  
[Natator depressus](#) Flatback Turtle T  
 3 species, 4 records

### Other specially protected fauna

[Falco peregrinus subsp. macropus](#) S  
 1 species, 1 records

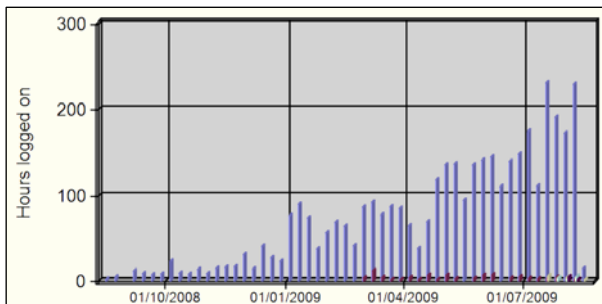
### Priority 1

[Aphyllodium parvifolium](#) P1  
[Conybia paractia](#) P1  
[Glycine pindanica](#) P1  
 3 species, 13 records



Species located near a proposed major development north of Broome

## Findings



Hours logged in per month during the period Sept 2008 – Sept 2009

NatureMap was soft-launched in December, 2007 and, largely through word of mouth, currently averages about 60 logins a day. It provides access to nearly a million records of

information for over 18,000 taxa, from both vouchered and unvouchered sources, including the main collections of the Western Australian Herbarium and Museum, as well as major DEC species databases. This list is expanding rapidly. WAM now uses NatureMap as its primary access point for information about its specimen collection and other databases. In the future, more themes and layers will be added to NatureMap, along with increased functionality, and a widening of focus from just species to geo-referenced bibliographic information, from just dots to vegetation communities.

## Management Implications

There are many tangible benefits to DEC and the wider community through creating this portal. While information on WA's biodiversity is still inadequate, users can now obtain greater access to authoritative biodiversity information than ever before, ensuring better informed land use decisions and policy-making. There have also been substantial productivity improvements, with the public now able to perform queries previously only able to be done by DEC or WAM staff.

However, the less-obvious benefits are, in many ways, just as great. Through their support of NatureMap, project partners DEC and WAM have demonstrated their commitment to improving public access to biodiversity, thereby improving conservation outcomes. This in turn has encouraged a cultural shift within both organisations to manage biodiversity data as a corporate public resource, together with an increased focus on best practice data standards and information management.

## References

- Mittermeier, R.A., Gil, P.R., Hoffmann, M., Pilgrim, J., Brooks, T., Mittermeier, C.G., Lamoreux, J. & da Fonseca, G.A.B. (2004) *Hotspots Revisited: Earth's Biologically Richest and Most Endangered Terrestrial Ecoregions*. Cemex, Mexico City.
- Science Division (2002) Naturebank: Western Australia's biodiversity conservation information system: concept plan, 10pp. Department of Conservation and Land Management, Perth.