Progress Report CF 2011-106

Online GIS biodiversity mapping (NatureMap)

Ecoinformatics

Project Core Team

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Context

A major challenge in managing the conservation estate in Western Australia, 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 Western Australia over a long period of time, resulting in many datasets and reports that contain valuable and essential information for the ongoing management of this unique biota. Tools are required to enable conservation workers, industry and the public to more easily discover, assemble, analyse and report on biodiversity information that has been collected.

Aims

Digital delivery of authoritative scientific information on the distribution and identity of major elements of the Western Australian biota from a single, online portal.

Progress

- In 2015 Australian conservation agencies and the Atlas of Living Australia (ALA) agreed to make species occurrence data held by the ALA available to the State that species occurrences are located in, from all providers and at original spatial resolution. This means more fit-for-purpose data is available for conservation planning and environmental impact assessment. NatureMap now provides the most comprehensive and accurate repository available for Western Australian species occurrence data.
- A range of new datasets were added, including Bush Blitz and various community surveys, and new reference layers.
- Occurrence records now total 4.2 million, an increase of over 800,000 records (24%).
- The number of datasets warehoused has increased from 61 to 69 (13%).
- NatureMap recorded 200 new registrations over the last twelve months, bringing the total from 1953 to 2153, a 10% increase.

Management implications

- NatureMap provides a long-term repository for conserving and protecting the Department's digital biodiversity data assets, so that knowledge can continue to be informed and improved through staff succession.
- NatureMap significantly reduces the time spent searching for point-based biodiversity data as well as easing the process of generating species lists for any area in Western Australia.

Future directions

- Continue incorporation of new and historical survey data into NatureMap, including Pilbara Islands historical surveys, Pilbara region biological survey and Kimberley Islands biological survey.
- Integration with the new proof-of-concept BioSys (biological survey) database.
- Implementation of a new Rangelands theme.