

### Project Synopsis

Project commencement:	2002
Project completion:	2007 (in field) 2009 (published)
Rangelands NRM WA total project investment:	\$1,500,000

‘Greater understanding  
of the Pilbara’s  
natural environment’

### Project Aim

To describe patterns in the Pilbara's biodiversity

Home to some of the world's oldest rocks, the Pilbara boasts a diverse range of flora and fauna. As part of an ongoing biological diversity surveying program across the State, the Pilbara Biological Survey described patterns in the region's biodiversity between 2002 and 2007.

“This project will provide the local community with a wealth of information about the area they live in and the significance of the Pilbara. From it we can determine where our funds can be best spent, what flora and fauna needs to be focused on and the influence of pastoral, residential and industrial activities on biodiversity in the area,” said Rangelands NRM Coordinating Group Program Manager, John Silver.

Rangelands NRM WA, the West Australian Government and Pilbara Industries contracted the Department of Environment and Conservation and Western Australian Museum to undertake the Pilbara Bioregion Biological Survey.

### Key Outcomes:

- Greater understanding of Pilbara flora and fauna and how that biodiversity is distributed across the region.
- Discovery of new flora and fauna species.

### The Challenge

“The Pilbara is a key area for mining and petroleum industries. We needed the survey to provide information on patterns in the distribution of flora and fauna to help the community make decisions about conservation requirements and the sustainable use of natural resources,” said Department of Environment and Conservation Researcher Adrian Pinder.

Surveying almost 100 wetlands, over 300 sites for terrestrial fauna, and more than 400 sites for terrestrial flora, the Pilbara Biological Survey used consistent surveying methods.

“The survey is arguably the largest undertaken in Australian covering 178,500 km<sup>2</sup>. The survey design and methods ensured we sampled a consistent set of land forms and had an even representation of habitat and community types across the area,” Pinder said.



## Our Successes

Since the commencement of the project the following outcomes have been achieved:

- Discovery of several new gecko species, two prevalent pebble mimicking dragons and several species of sand-swimming skinks.
- Identification of 250 non-oceanic species of birds.
- Recording of over 350 stygofauna species (groundwater fauna) of which over 300 are newly discovered.
- The collection of over 1000 species in aquatic areas.
- Recording of 600+ ground dwelling beetles, 250 ants and 400 spiders.
- Identification of 11 frogs and more than 140 reptiles.
- Recording of 19 small ground-dwelling mammals, including and 17 species of bats.
- The collection of over 70,000 plant samples representing approximately 1,100 species of which at least 10 are new to science and 30 new to the Pilbara.

"The Pilbara region is where 95% of Western Australia's iron ore is mined. This makes it even more important to conduct surveys like the Pilbara Bioregion Biological Survey to ensure we identify, manage and protect the priority natural habitats," said Program Manager, John Silver.

## Benefits to the Pilbara Community

By conducting the Pilbara Bioregion Biological Survey:

- The community has developed a greater understanding of the Pilbara's ecology.
- Environmental assessment costs will be reduced as independent parties can put their development site surveys into a regional context, reducing the need for repeated extensive surveys.
- Conservation efforts and management actions can be directed towards priority areas for biodiversity within the Pilbara.

This project was made possible through assistance from:

- Rangelands NRM WA
- Australian Government
- Western Australian Department of Environment and Conservation
- Museum of Western Australia
- Straits Resources
- Rio Tinto Iron Ore
- Rio Tinto Minerals (Dampier Salt Operations)
- BHP Billiton Iron Ore
- Kitchener Mining's Bamboo Creek
- Numerous Pilbara Pastoralists

For further information see the Rangelands NRM WA website [www.rangelandswa.com.au](http://www.rangelandswa.com.au), email us at [info@rangelandswa.com.au](mailto:info@rangelandswa.com.au) or call on 08 9941 9743

