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Department of Biodiversity,  
Conservation and Attractions

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## Biogeography Program

For more information contact:

Program Leader, Biogeography Program, on (08) 9405 5169, email [stephen.vanleeuwen@dec.wa.gov.au](mailto:stephen.vanleeuwen@dec.wa.gov.au)

or visit DEC's website [www.dec.wa.gov.au](http://www.dec.wa.gov.au).

### Scope

The Biogeography Program undertakes biological surveys to provide information on the biodiversity and nature conservation priorities within Western Australia. Surveys provide data on the distribution of plants and animals and enable an understanding of regional patterns in their composition and distribution. Targeted surveys of specific regions, broad habitat types or selected plant and animal groups are also undertaken. Knowledge obtained from surveys complements the site-specific studies commissioned by other land managers, such as resource companies, and is used to provide the foundation for biodiversity planning and natural resource management across Western Australia.

These activities are aligned with the information needs of the Department of Environment and Conservation (DEC). Collaborative associations are strong with the Western Australian Museum, Australian Museum, herbaria throughout Australia and with universities, cooperative research centres, CSIRO and other research institutions. Partnerships also exist with mining companies.



### *What we do*

- Select and sample habitats that represent the variety of plant and animal assemblages present across bioregions and selected natural areas within Western Australia.
- Collect, identify and lodge plant and animal specimens typical of bioregions and selected natural areas throughout Western Australia for long-term storage in herbaria or museums.
- Maintain expertise and foster collaboration to facilitate the identification of terrestrial and aquatic flora, macrophytes, diatoms, algae, stygofauna, troglofauna, aquatic macroinvertebrates, ground invertebrates, reptiles, amphibians, frogs, birds, ground mammals and bats.
- Manage collections, particularly of selected stygofaunal, aquatic and ground invertebrate groups and bats.
- Sample and compile datasets of environmental variables that influence biodiversity across the State.
- Analyse and interrogate species by site datasets using sophisticated statistical procedures to provide a better understanding of the relationship between species and environmental variables and to define the communities in which species occur.
- Develop models that predict the distribution of species and communities across the State.
- Investigate the notions of biological surrogacy as a tool for biodiversity planning and the setting of priorities for nature conservation management.

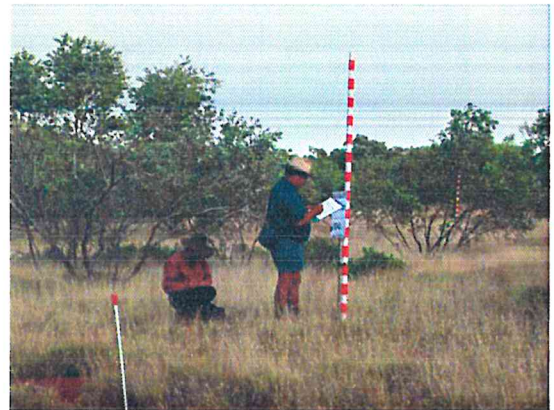


- Provide advice on the comprehensiveness, adequacy, representativeness and resilience of the conservation reserve network in Western Australia.
- Provide advice on land management and resource development activities within the context of sustainable natural resource management and biodiversity conservation.
- Work collaboratively and in partnership with other institutions, land managers and resource developers.



### *Current key activities and projects*

- Pilbara Regional Biological Survey.
- Kimberley Islands Biological Survey.
- Floristic survey of the Goldfields-Yilgarn Banded Ironstone Formation (BIF).
- Floristic survey of the Ravensthorpe Ranges.
- Floristic survey of the remnant heaths and woodlands of the Swan Coastal Plain.



Biogeography Program staff are principally based at the Woodvale research centre with a small contingent in the Kimberley regional office in Kununurra.