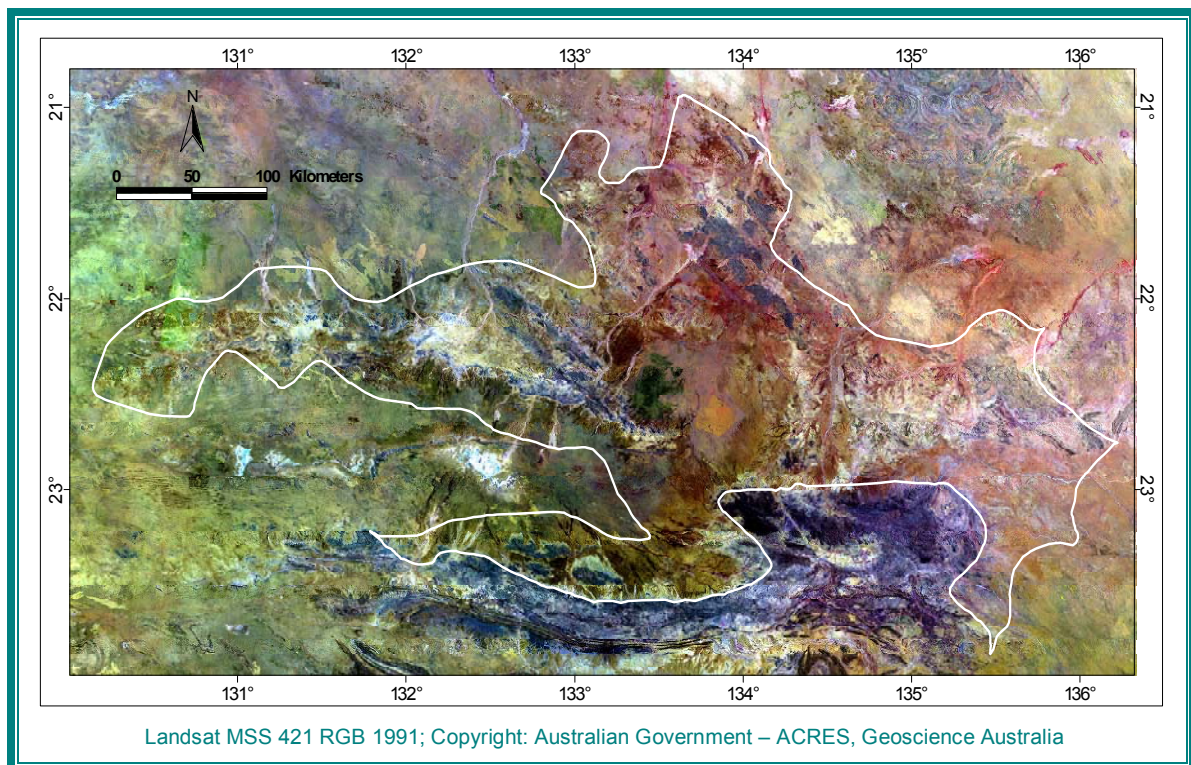


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# PRELIMINARY REPORT: TOWARDS A RESOURCE ASSESSMENT OF THE BURT PLAIN BIOREGION FOR CONSERVATION PLANNING

**Biodiversity Conservation  
Department of Natural Resources,  
Environment and the Arts**



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Report prepared by:  
**Helen Neave, Ben Sparrow and Bretan Clifford**

## EXECUTIVE SUMMARY

A Resource assessment for conservation planning in the Burt Plain Bioregion aims to ensure that the species, ecosystems and ecological processes present in the bioregion are adequately conserved. The principle land use in the bioregion is pastoralism. The priority for the resource assessment is to:

- broaden our understanding of the biodiversity and other values of the Burt Plain Bioregion;
- ensure that existing and new knowledge is made available to land managers in the bioregion; and
- ensure this information is integrated with sustainable land management practices across the bioregion and with any future development that may occur in the region.

The Burt Plain Bioregion resource assessment and subsequent report/s form part of a series that have, or will, contribute to the development of conservation strategies or plans for bioregions of the Northern Territory. Recommendations stemming from the resource assessment of the Burt Plain Bioregion may also be considered in the development of projects under the Northern Territory Integrated Natural Resource Management Plan (INRMP), and the comprehensive Parks and Conservation Masterplan for the Northern Territory being developed by the Northern Territory Government in conjunction with key stakeholders. The intent of the Masterplan is to establish a 15 to 20 year vision for parks and conservation (including off-reserve conservation) in the Northern Territory, arrived at through consultation with Aboriginal traditional owners, the pastoral, tourism and mining industries, conservationists, other landholders, and the community at large.

This preliminary report provides a detailed account of existing information for the Burt Plain Bioregion for use in the design and implementation of wildlife surveys across the bioregion, and in the subsequent development of conservation recommendations.

The Burt Plain Bioregion covers an area of 73,605 square kilometres entirely within the Northern Territory. The bioregion is broadly characterised by plains of *Acacia* shrubland, tussock grassland and hummock grassland, *Acacia* and Eucalypt woodlands, and mountain ranges in the east, north and west of the bioregion. Sandy plains border the bioregion to the west, north and south-east (Tanami, Great Sandy Desert and Simpson-Strzelecki Dunefields bioregions respectively), prominent mountain ranges occur to the south (MacDonnell Ranges Bioregion), while the Channel Country Bioregion comprising low hills, forbfields and Mitchell Grass downs, and intervening braided river systems, borders the bioregion to the east.

Systematic and targeted surveys of the wildlife of the Burt Plain Bioregion will be progressively undertaken by Biodiversity Conservation staff of NRETA (surveys have already begun in the bioregion). This will facilitate the documentation of the plants and animals of the Burt Plain Bioregion and the assemblages they form, and provide a better understanding of the environmental variables that influence patterns in their distribution across the bioregion. Existing spatial coverages, biodiversity data and other information has been collated and presented in this preliminary report. The new and pre-existing data will be analysed to identify species and communities and other values with specific conservation requirements, in order to develop recommendations on how best to conserve these values in a practical and sustainable manner in consultation with landholders.

Spatial data sets available for the Burt Plain Bioregion include point, line, polygon and raster coverages at a range of scales / spatial resolutions. Of these data sets, perhaps the most useful and informative spatial layers for use in the design of a systematic, stratified wildlife survey across the Burt Plain Bioregion include:

- 1:1,000,000 Land System mapping (Perry *et al.*, 1962);
- 1:250,000 Geological mapping;

- Aerial Radiometrics coverage;
- Digital Terrain Model (DTM); and
- 1:1,000,000 Northern Territory Vegetation Map (Wilson *et al.*, 1990).

Pre-existing flora data presented in this preliminary report includes 8,264 records for 1,141 plant taxa for the Burt Plain Bioregion. Of these plant taxa, 3 are listed as vulnerable in the Northern Territory under the *Territory Parks and Wildlife Conservation Amendment Act 2000*, 64 are listed as data deficient, and 41 are listed as near threatened in the Northern Territory. The status of a further 27 taxa has not been evaluated, most of which are either subspecies or varieties. In terms of pre-existing fauna data, there are 19,500 records for 366 vertebrate species for the Burt Plain Bioregion. The majority of these are birds (16,341 records and 185 species), followed by mammals (1,643 records and 64 species), reptiles (1,436 records and 107 species), and frogs (80 records and 10 species). Twenty-five vertebrate animals are listed as threatened under the *Territory Parks and Wildlife Conservation Amendment Act 2000* (many of which are extinct, extinct in the wild or regionally extinct mammals), 12 vertebrate animals are listed as data deficient, while another 18 are listed as near threatened in the Northern Territory.

Threatening processes are already operating in the landscape while others may have the potential to impact on conservation values now and in the future if land management practices change. This preliminary report considers several existing and potential threats to wildlife and other conservation values, along with the effects of land uses such as pastoralism, mining and proposed military exercises on the wildlife and ecosystems of the Burt Plain Bioregion.