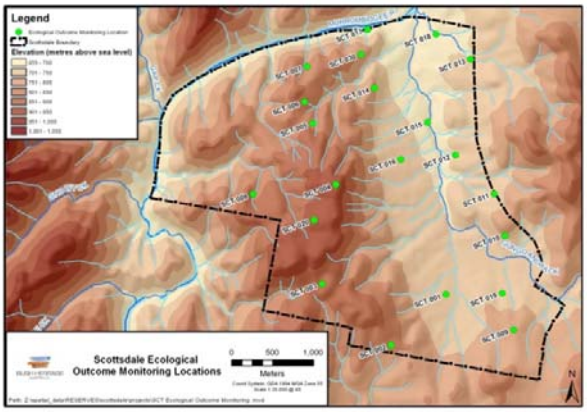
Scottsdale Reserve Scorecard

May 2012



Key Facts

Date acquired: December 2006 **Size**: 1328 ha

Location: Grassy Box woodlands; IUCN category lV; South-eastern Highlands

Traditional Owners: Ngunawal people

Key Staff: Reserve Manager Peter Saunders; Ecologist Sandy Gilmore

Key Partners: DECCW, National Herbarium, Friends of Grasslands

Ecosystem Diversity: Communities and Species. The reserve contains over 217 plant species, 113 bird species, 10 native mammal species, 16 reptile species and 3 frog species. The communities are primarily native grasslands and grassy woodlands on the lower slopes and valleys, and dry sclerophyll forests on the upland and plateau area.

Goals & Objectives: By 2030, Yellow Box and associated woodland species are re-established on all previously cleared grassy box woodland sites and support resident populations of woodland birds. By 2030, increase the current (2011) extent of the valley floor native grassland by 20% and maintain the health of current native grasslands. By 2020, the Murrumbidgee in-stream and riparian zone on Scottsdale provides habitat for a variety of characteristic fauna species including aquatic birds, platypus and vulnerable fish. By 2030, the Gungoandra Creek and its tributary gullies on Scottsdale are stabilised and support characteristic fauna and flora species. By 2030, the dry sclerophyll forest supports abundant and diverse populations of characteristic and priority flora and fauna.

Management strategies: Manage fire risk & preparedness, control feral carnivores and herbivores, control weeds, control sheet and gully erosion, manage native macropod populations.

Condition Assessment

Key Conservation Targets	Status & Trend	Confidence Level
Forests	↗	
Grassy Woodland	↗	
Grasslands	↗	
Murrumbidgee riparian zone	–	
Gungoandra chain of ponds	↗	

Key Ecological Processes	Status & Trend	Confidence Level
Ecological function	↗	
Viability of key species	↗	
Functional communities	–	
Natural disturbance regimes	↗	
Ecosystem resilience	↗	

Key Threats	Status & Trend	Persistence
Fire	–	~
Feral and native herbivores	↗	~
Feral predators	↑	$
Weeds	–	$
Erosion	↗	
Livestock	–	✓

Commentary

These ratings are a result of an ecological outcomes review of the first 5 years of Bush Heritage's ownership and conservation management of Scottsdale. Overall there has been a consistent trend of improvement in the condition functioning and viability of the ecosystems, communities and species that they support, particularly exemplified by the birds. An exception is the weed covered banks and sediment clogged channel of the Murrumbidgee River. These latter threats Bush Heritage has minimal or no control over. Initial threat reduction and value improvement is very encouraging and more ambitious revegetation projects in the future will help address ongoing issues of weed and erosion control.

Scorecard Description

Key Conservation Targets are The ecological entities: communities, species or species assemblages, within the landscape which Bush Heritage has chosen to value more highly than other ecological entities; they are the basis for setting goals, carrying out conservation actions, and measuring conservation effectiveness. Each property has around 4-6 Targets. The Targets allow prioritisation of effort and resources. The scorecard shows the latest Status and recent Trend in the Viability of each Target. The ratings are derived from measures against a number of Indicators which define the key ecological attributes of the Target. Further details of the key ecological attributes, Indicators and measures can be found in the Target Viability Table within Miradi. The Status and Trend symbols are defined below. The Confidence rating gives an indication of the extent of data available form which the ratings are derived.

Status Rating	Trend indicator	Confidence Level
Very Good	Strong increase / improvement	Very high
Good	Mild increase / improvement	High
Fair	Flat	Moderate
Poor	Mild decrease / degrading	Low
Uncertain	Strong decrease / rapidly degrading	Very low
	? Unknown / uncertain	

Key Ecological Processes measures progress against the goals defined by the Ecological Outcomes Monitoring program.

- Maintain or restore **ecological function**. This goal refers to the biophysical processes that regulate the stocks and flows of water, nutrients and energy that sustain ecosystem productivity. Indicators for this process monitor ecological resource conservation, maintenance of refugia and source areas, and change in hydrological health.
- Maintain or restore the **viability (and evolutionary potential) of key species**. This goal recognizes that the long-term persistence of native species without human intervention in demographic processes (e.g., translocation, ex-situ conservation) is a key conservation objective but places greater emphasis on threatened, keystone or locally endemic species. Indicators for this process monitor population demographics such as densities and structure
- Maintain or restore **functionally integrated communities**. This goal relates to managing the biophysical habitat to support community assemblages and trophic interactions that enable species to fulfil their functional roles. Indicators for this process monitor factors such as carrying capacity and changes in vegetation structure.
- Maintain or restore **natural disturbance regimes**. This goal refers to the frequency, intensity, duration, spatial heterogeneity and magnitude of natural disturbance events. Indicators for this process monitor factors such as fire regimes and hydrological cycles.
- Increase **ecosystem resilience and resistance**. Resilience refers to the ability of an ecosystem to recover without human assistance following disturbances or shocks (natural or anthropogenic). Resistance refers to the ability of an ecosystem to withstand disturbances or shocks (natural or anthropogenic). Indicators for this process monitor factors such as primary productivity.

The Scorecard shows the latest Status and recent Trend for each process, using the same symbols as above. The ratings are derived from analysis of measures taken during on-site surveys at pre-defined EOM sites against a range of indicators. The raw data is recorded against each site in the Properties Database. The Status & Trend ratings represent a judgement made of relevant measures across all EOM sites on the property, irrespective of which Key Conservation Target they might be located in. It therefore gives a whole-of-property assessment, and is also comparable across properties.

Key Threats are identified for each target, and are the focus of management actions. A rating system is used to assess each threat in terms of its scope, severity and permanence to derive an overall Status rating. The Trend rating is a judgement on the degree of change since the last status rating. Three threats (Fire, feral animals, and weeds) occur on almost all properties and the ratings are therefore comparable across properties. In addition, a few other key threats are listed for each property, along with any major threats that have been removed or controlled through Bush Heritage's actions. The Persistence rating gives an indication of the on-going effort required to manage the threat.

Status Rating	Trend indicator	Persistence Level
Low	Strong increase / improvement	✓ Permanently removed
Medium	Mild increase / improvement	~ Ongoing vigilance required
High	Flat	$ Ongoing investment required
Very High	Mild decrease / degrading	
Uncertain	Strong decrease / rapidly degrading	
	? Unknown / uncertain	