

## PROJECT EXPERIENCE: SOUTH-EAST QUEENSLAND

South-east Queensland is the most regularly surveyed area by EcoSmart Ecology. Our team members have broad experience within the bioregion across many client industries, including infrastructure, housing and development, extraction, mining and town planning. We having first-hand experience with most of the region's threatened species and a broad overview of the bioregion. This ensures a balanced and accurate approach to ecological planning and assessment. Selected example projects are detailed below:

### *Baseline and Targeted Surveys, Boyne Island*

Boyne Island is located on the coast near Gladstone in South-east Queensland. Existing infrastructure on the island associated with aluminium production required expansion. Baseline vertebrate surveys were undertaken to determine the existing values within and adjacent to potential impact zones. These surveys, which incorporated all standard detection methods, identified a number of threatened species, two of which were protected by federal legislation.

To gain a better understanding of the potential impacts, and in order to develop suitable mitigation measures, detailed targeted work was undertaken. Survey methods were developed specifically with the targeted species in mind. This allowed the distribution of the species to be identified based on available habitat.

The surveys were also able to identify a number of existing threats to the local population, particularly weed infestation which was affecting habitat conditions. The studies were used to determine potential impacts, identify areas that required protection and allowed the development of mitigation measures that would ensure the long-term survival of local populations.

Reports from the baseline and targeted surveys were used to prepare a EPBC referral, resulting in the project being declared 'Not a Controlled Action'. The studies contributed to the scientific knowledge of Black-breasted Button-quail, which had not previously been recorded within the region since 1906.

### *Tarong State Forest, Nanango.*

Future infrastructure planning for the Tarong powerplant and associated mine required survey of the nearby Tarong State Forest (now Tarong National Park). The State Forest included a variety of vegetation types including areas of dry eucalypt forests of Forest Blue Gum, Gum-topped Box as well as dry vine thicket. Several of the vegetation types within the area are of conservation significance.

These areas provided habitat for a broad range of flora and fauna species, which were surveyed using standard baseline survey methods. A large number of threatened species were located during the study, including populations of Federally important species.

The proponent was supplied with a detailed report outlining the existing values including maps showing locations of threatened vegetation, as well as threatened species and their potential habitats.

### *Sunshine Coast Airport, Marcoola*

The Sunshine Coast Airport is situated in Marcoola on the Sunshine Coast. It is surrounded by coastal vegetation, much residing within National Park estate. EcoSmart Ecology was asked to undertake a preliminary review of potential ecological constraints for proposed airport expansion activities.



The studies focused on gathering background information through existing databases, planning documents, previous surveys, grey literature and expert liaison (e.g. National Parks). The EcoSmart Ecology database proved particularly useful in this area. A rapid habitat assessment and field investigation was undertaken in order to verify desktop results.

While the vegetation within the study area was not highly significant, a large number of threatened species were noted, including Endangered plants (e.g., *Allocasuarina emuina*), Vulnerable birds (e.g., Ground Parrot), Vulnerable mammals (e.g., Grey-headed Flying-fox) and protected wallum frogs. The team had to have a solid grasp of at least nine different threatened species in order to determine habitat preferences, potential threats and consequent project constraints.

At the request of the client, EcoSmart Ecology undertook further field investigations in order to estimate potential population size and distribution of the threatened species as well as their importance within the local area. The team was also required to assess areas that might potentially be utilised as habitat offsets, with comments on the likelihood of success.

The results were provided within a stand-alone report for the purpose of project planning. It included a large number of GIS based figures.

#### *Murdering Creek, Peregrine Beach*

In preparation for court proceedings, a detailed survey was required of coastal vegetation near Peregrine Beach on the Sunshine Coast. The area included large expanses of wallum wetlands, both *melaleuca* forests and wet heaths.

The surveys, which were specifically for fauna, identified a number of priority species including wallum frogs and habitat for Ground Parrots. In addition, a number of locally significant species were recorded, including the fifth recorded Common Blossom Bat for the Sunshine Coast Council region.

Habitats for threatened species were identified and mapped, thereby allowing potential development constraints to be identified. These maps would have formed the basis for expert witness negotiations.

#### *Other Assessments*

A long list of other flora and fauna assessments have been undertaken by EcoSmart Ecology staff over many years. A small selection is listed below.

- Dawn Road Reserve Fauna Survey and Management, Brisbane; 2009
- Koala Habitat Assessment, Armstrong Road, Petrie; 2009
- Review of Environmental Values, Luscombe; 2009
- Assessment of Environmental Values, various roadside reserves within Brisbane City Council; 2009
- Targeted Terrestrial Fauna Assessment (EPBC species), Ormeau Hills; 2007
- Environmental Management Plan, Noosa; 2006
- Flora and Fauna Assessment, New England Highway Upgrade Project; 2006
- Red Fox Pest Management Plan, Redlands Shire Council Region; 2005
- Preliminary Environmental Assessment and Environmental Management Plan, Pinkenba; 2005
- Ambassador Creek fauna assessment, Hyatt Regency, Coolumb; 2004
- Targeted survey and assessment of *Delma torquata*, Swanbank; 2003
- Harland Road Flora and Fauna Assessment, Mt Glorious; 2001

