

4.5 Flora & Fauna

Fauna

Several fauna surveys were completed by Wildlife Preservation Society of Queensland members in 2011. When compared to the original fauna assessments made prior to the construction of the University, these surveys provide ample evidence of the success of previous iterations of the Campus Master Plan in developing and maintaining a campus that affords significant habitat for fauna in the region, especially bird species.

The Sippy Downs campus has a number of areas that serve as important habitats for the Eastern Grey Kangaroo (*Macropus giganteus*). The existing grassed areas on campus are important grazing areas for Eastern Grey Kangaroos, though a habitat mix (for shade and refuge) is essential. Of most importance is the maintenance of grassland areas adjacent to significant stands of denser tree plantings to ensure both grazing areas and refuge/shade can be easily accessed without the need for moving to other habitats across roads or other conflicting spaces. As such, these areas are integrated within the overall landscape to minimise areas of conflict with traffic and pedestrians, and to avoid areas likely to be frequented by domesticated animals from nearby residential developments.

The open campus green is also important for fauna movement. Avoiding built infrastructure within this zone will be important in ensuring connectivity between habitats is maintained.

With significant green spaces and suitable habitats at a number of locations within and around the University, it is expected that conflicts between pedestrian, vehicle and fauna movements will arise. Wherever possible, consideration needs to be given to minimising these conflicts through dedicated fauna movement corridors and barrier plantings, especially around the edge of the campus, serving to link the otherwise separated habitat areas. Fauna underpasses have already been constructed across Claymore Road to facilitate safe fauna movement between the University campus and the Mooloolah River National Park, and there will be a continuing need for dedicated fauna crossings at relevant locations elsewhere on the campus, for example where the proposed Green Link passes west of the lake after entering the University campus from the south. Fencing of the campus may be an appropriate technique for some smaller species, however larger animals, especially the kangaroo population, are unlikely to be significantly constrained and in such cases barrier planting with dense understorey plants may be far more effective.

Habitat Corridors

Of critical importance for fauna within the University is the ease of access to suitable habitat areas by the resident species. The vegetation around the entry area adjacent to Sippy Downs Drive is likely to become an important refuge habitat when the Town Centre commences, so fauna movement into this area is likely to increase. In advance of this occurring, dedicated fauna movement corridors need to be established throughout and around the campus. Fauna corridors need to have sufficient width in order to function effectively. An absolute minimum width of 30m will be required, though a 50m width will be more desirable and opportunities to maximise the habitat corridor widths wherever possible should be considered.

Habitat connectivity should be maintained and enhanced the around edge of the University. Additionally, there are a number of linear integrated water management features such as swales around the campus that could be enhanced by developing them as multiple use corridors for drainage, water quality and habitat to enhance ecological connectivity.

Fauna Habitat Values

The minor copses of disjunct remnant vegetation have moderate value for fauna, offering a variety of habitats such as fallen logs and tree hollows, and an abundance of food sources. The dense ground and shrub strata have some value as

wildlife corridors at a local landscape level. Elsewhere, irrigated lawns and grassland habitats have local value for the Eastern Grey Kangaroos while the two lakes in the southern half of the campus provide a locally important fauna habitat, particularly for waterbirds.

Flora

The campus has been extensively cleared in the past for agricultural pursuits such as cane farming. Vegetation communities are currently dominated by whisky grass (*Andropogon virginicus*) in disturbed sites. Other communities include regenerating wetland habitat, minor copses of disjunct remnant vegetation and landscaped grounds. Native rehabilitation is currently confined to the southern banks of the eastern lake and the extensive translocation programme which has occurred across a large area in the south-east of the campus.

It is recommended that native vegetation outside the proposed development precincts be retained wherever possible and enhanced with native plantings. In particular, it is recommended that lowland areas be planted with native heath, wetland and woodland plantings. For example, 'green fingers' of endemic tree species are intended to bring the National Park plant types into the campus, and provide an extended habitat for kangaroos and birds. A maintenance program involving regular weeding, mulching and pruning (for safety purposes) will need to be implemented in the rehabilitation areas. Existing drainage paths should be left in their natural locations and natural regrowth encouraged.

Domestic animals should be prohibited from entering the campus to ensure the safety of the indigenous fauna.

In the Central Campus Zone, native landscaping species are to be supplemented with exotic species, especially those which have some cultural relevance to the district. Exotic species are to be limited to this zone, and to car parking areas, wherever possible.

