



Eastern Suburbs Banksia Scrub in the Sydney Basin Bioregion

The following information is provided to assist authors of Species Impact Statements, development and activity proponents, and determining and consent authorities, who are required to prepare or review assessments of likely impacts on threatened species pursuant to the provisions of the *Environmental Planning and Assessment Act 1979*. These guidelines should be read in conjunction with the NPWS *Information Circular No. 2: Threatened Species Assessment under the EP&A Act: The '8 Part Test' of Significance* (November 1996) and with the accompanying species profile.

Proponents, consent and determining authorities should note that a recovery plan for the Eastern Suburbs Banksia Scrub has been prepared and a critical habitat recommendation is in preparation. The recovery plan requires that any developments or activities be assessed in accordance with the recovery plan and these environmental impact assessment guidelines. Development proposals must assess direct and indirect impacts on the community.

Survey

Surveys of Eastern Suburbs Banksia Scrub (ESBS) can be conducted at any time of year. If surveys are undertaken in spring, when more species are in flower, they are likely to provide a more accurate representation of the diversity of species at a site and so may provide a better indication of the quality and relative significance of a remnant (depending on recent disturbance history). Survey should also include assessment of the soil seed bank. Some species may only be represented as seeds and not as above ground vegetation.

Threatening processes

The following key threatening processes listed on Schedule 3 of the TSC Act are potentially relevant to ESBS:

- *Clearing of native vegetation;*
- *Invasion of native plant communities by Chrysanthemoides monilifera;*
- *High frequency fire resulting in the disruption of life cycle processes in plants and animals and loss of vegetation structure and composition;*
- *Infection of native plants by Phytophthora cinnamomi;*
- *Competition and grazing by the feral European Rabbit Oryctolagus cuniculus(L.);*
- *Invasion of native plant communities by exotic perennial grasses; and*
- *Anthropogenic climate change.*

Clearing of native vegetation is listed as a key threatening process and is a major threat to ESBS. Past and present clearing of ESBS is the primary cause of its endangered status. The clearing of native vegetation adjacent to ESBS stands may also impact upon the community indirectly.

Invasion of native plant communities by *Chrysanthemoides monilifera* is listed as a key threatening process. *C. monilifera* is a South African species of which two subspecies occur in Australia; ssp. *monilifera* (Boneseed), and ssp. *rotundata* (Bitou Bush). Both subspecies can invade and displace native plant communities due to their vigorous growth, prolific seed production and effective seed dispersal (NSW Scientific Committee 1999). Several ESBS remnants suffer from high levels of Bitou Bush infestation

High frequency fire has the potential to disrupt life cycle processes in native vegetation. Some ESBS remnants have been subject to frequent burning in the past, mostly from illegally lit fires. The re-instatement of appropriate fire regimes (where possible) should be a priority when developing management strategies for sites that contain ESBS.

ESBS is likely to be susceptible to infection by *Phytophthora cinnamomi* either through the direct infection and death of plants, or through habitat degradation and a resultant loss of habitat complexity. Grazing by feral rabbits and competition by exotic perennial grasses (particularly *Eragrostis curvula*) are also recorded as threats at a number of ESBS remnants.

A significant area of habitat

It should be noted that all ESBS remnants are small (typically 0.06 to 1 ha), isolated and degraded to some extent. Given that less than 3% of the original distribution of ESBS remains (146 ha), all remnants should be considered to be significant.

Isolation/fragmentation

Isolation and fragmentation are significant issues for ESBS, as a majority of the remnants are small (≤ 1.0 ha) and isolated. Some ESBS remnants occur as retained vegetation in golf courses, and in median strips.

For Further Information contact

Threatened Species Unit, Metropolitan Region, Environment Protection and Regulation Division, Department of Environment and Conservation, PO Box 1967, Hurstville NSW 2220 Phone 02 9585 6678 www.nationalparks.nsw.gov.au

References

NSW Scientific Committee (1999). Final determination to list Bitou Bush a KTP. NSW Scientific Committee, Hurstville.

NSW Scientific Committee (2002). Final determination for Eastern Suburbs Banksia Scrub as an endangered ecological community. NSW Scientific Committee, Hurstville.

Regional distribution of the habitat

The distribution of ESBS is confined to the Sydney Basin Bioregion and surviving remnants are restricted to the Eastern Suburbs of Sydney and North Head.

Limit of known distribution

The known northern, southern, eastern and western limits of the endangered community are at Manly, La Perouse, Malabar and Botany Bay respectively.

Adequacy of representation in conservation reserves or other similar protected areas

Approximately 33 hectares of ESBS occurs in Botany Bay National Park and Sydney Harbour National Park. Some sites also occur in council reserves. However, it is considered that this in itself does not ensure the survival of the community (NSW Scientific Committee 2002).

Critical habitat

To date critical habitat has not been declared for this community under the TSC Act. The DEC will prepare a Recommendation for the Identification of Critical Habitat for ESBS.

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