

## ATTACHMENT 2

### Greater Blue Mountains Area World Heritage Values

The Greater Blue Mountains Area was inscribed on the World Heritage List in 2000. The World Heritage criteria against which The Greater Blue Mountains Area was listed remain the formal criteria for this property. These criteria have been included in the Values Table below. The World Heritage criteria are periodically revised and the criteria against which the property was listed in 2000 may not necessarily be identical with future criteria.

Examples of the World Heritage values for which The Greater Blue Mountains Area was listed are included in the Values Table for each criterion. These examples are illustrative of the World Heritage values of the property, and they do not necessarily constitute a comprehensive list of these values. Other sources including the nomination document and references listed below the Values Table are available and could be consulted for a more detailed understanding of The Greater Blue Mountains Area.

Values Table	
<b>Natural criteria against which The Greater Blue Mountains Area was inscribed on the World Heritage List in 2000</b>	<b>Examples of World Heritage values of The Greater Blue Mountains Area for which the property was inscribed on the World Heritage List in 2000</b>
<b>Criterion (ii) outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals.</b>	<p>The Greater Blue Mountains Area provides outstanding examples representing on-going ecological and biological processes significant in the evolution of Australia's highly diverse ecosystems and communities of plants and animals, particularly eucalypt-dominated ecosystems. The World Heritage values include:</p> <ul style="list-style-type: none"> <li>• primitive species with Gondwanan affinities that are of outstanding significance in terms of the evolution of plant life, including the Wollemi Pine (<i>Wollemia nobilis</i>) and the primitive gymnosperm <i>Microstrobis fitzgeraldii</i>;</li> <li>• a centre of diversification of the eucalypts which provides an outstanding record of the products of evolutionary processes associated with the global climatic changes of the late Tertiary and the Quaternary;</li> <li>• the highly unusual juxtaposition of diverse scleromorphic species with Gondwanan taxa;</li> <li>• an exceptional representation of the major eucalypt groups and aspects of their evolution and radiation, including species in the following</li> </ul>

	<p>groups:</p> <ul style="list-style-type: none"> <li>- genera: Eucalyptus (including Corymbia) and Angophora;</li> <li>- subgenera: Eucalyptus, Corymbia and Symphyomyrtus;</li> </ul> <ul style="list-style-type: none"> <li>• examples of species divergence occurring in a relatively small area, including: <ul style="list-style-type: none"> <li>- differentiation of eucalypt taxa in isolation in response to persistent habitat islands (e.g. those associated with sandstone plateaux isolated by deep valleys)</li> <li>- mutually exclusive distributions of taxa in the series <i>Strictae</i> (the mallee ashes) and <i>Haemostomae</i> (the scribbly ashes) resulting from long-term isolation of breeding populations (allopatric speciation);</li> </ul> </li> <li>• eucalypt taxa demonstrating very high levels of hybridisation;</li> <li>• representative examples of dynamic processes in eucalypt-dominated ecosystems, including the full range of interactions between eucalypts, understorey, environment and fire, extending from forests with rainforest boundaries to mallee communities with heath boundaries, demonstrating the exceptional ecological amplitude of the eucalypts.</li> </ul>
<p><b>Criterion (iv) contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.</b></p>	<p>The Greater Blue Mountains Area includes significant habitats for in situ conservation of biological diversity, including the eucalypts and eucalypt-dominated communities, taxa with Gondwanan affinities, and taxa of conservation significance. The World Heritage values include:</p> <ul style="list-style-type: none"> <li>• outstanding levels of plant diversity expressed at different taxonomic levels (152 families, 484 genera, ca 1500 species) and for all three measures of species diversity (local species richness or "alpha" diversity, species turnover across environmental gradients or "beta" diversity, and regional species richness or "gamma" diversity);</li> <li>• plant taxa with very high levels of species diversity, including the families - Fabaceae (149 species), Myrtaceae (150 species), Orchideae (77 species), Poaceae (57 species), Asteraceae (69 species), Proteaceae (77 species), Cyperaceae</li> </ul>

**Criterion (iv) contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.**

- (43 species), and the genera - Eucalyptus (91 species), Acacia (64 species);
- exceptional diversity of habitats that contribute to the property being one of the three most diverse areas on earth for scleromorphic species and the only one of these areas that is dominated by trees and without a Mediterranean climate, including plateau tops, ridges, exposed rocks, cliffs, rocky slopes and sheltered gorges and valleys;
  - exceptional diversity of habitats providing outstanding representation of the Australian fauna within a single place, including 400 vertebrate taxa - 52 native mammals, 265 birds or 33% of the Australian total, 63 reptiles, more than 30 frogs, and examples of species of global significance such as the platypus (*Ornithorhynchus anatinus*) and the echidna (*Tachyglossus aculeatus aculeatus*), and invertebrate taxa - butterflies (120 species) and moths (estimated 4000 species);
  - very high diversity of scleromorphic taxa represented within 20 plant families including Myrtaceae, Proteaceae, Epacridaceae, Fabaceae (Faboideae and Mimosoideae), Dilleniaceae, Rutaceae, and Euphorbiaceae (Tribe Stenolobeae);
  - ancient, relict species with Gondwanan affinities that have survived past changes of climate within refugia, for example in recessed canyons and perpetually moist areas, including:
    - the Wollemi Pine (*Wollemia nobilis*); and
    - the primitive gymnosperm *Microstrobos fitzgeraldii*;
  - other primitive species with Gondwanan affinities, including:
    - *Lomatia*, *Dracophyllum*, and *Podocarpus*;
    - taxa in the family Lauraceae;
    - *Atkinsonia*, the most primitive extant root parasitic genus; and
    - taxa in the family Winteraceae, such as *Tasmania*.
  - taxa contributing to an exceptional diversity of eucalypts and eucalypt-dominated ecosystems, including:
    - 2 eucalypt genera (*Eucalyptus* including *Corymbia*, *Angophora*);
    - 3 eucalypt subgeneric groups (*Eucalyptus*, *Corymbia*, *Symphomyrtus*);

**Criterion (iv) contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.**

- 91 eucalypt species (13% of the global total); and
- highly diverse understoreys of flora and fauna species;
- structural forms contributing to an exceptional diversity of eucalypts and eucalypt-dominated ecosystems, including:
  - tall open forest (towering, single-stemmed trees);
  - open forest;
  - woodland;
  - low open woodland; and
  - mallee shrubland (small, multi-stemmed shrubs);
- more than 70 plant communities, including 56 open forest and woodland communities contributing to an exceptional diversity of eucalypt-dominated ecosystems associated with:
  - wet environments (including the margins of rainforests);
  - dry environments (rapidly-draining, drought-prone sandstone plateaux);
  - low-nutrient environments (including sandstone-derived substrates);
  - fire-prone environments (including the sandstone plateaux); and
  - fertile environments (remnants of formerly widespread Tertiary basalts).
- high levels of diversity of invertebrate fauna, including Lepidoptera (4000 moth species, 120 butterfly species), and cave invertebrates (67 taxa recorded at Jenolan Caves);
- plant taxa of conservation significance and their habitats, including:
  - endemic species (114 plant species);
  - relict species;
  - species with a restricted range; and
  - rare or threatened species (127 species).
- animal taxa of conservation significance and their habitats, including:
  - endemic species;
  - relict species;
  - species with a restricted range; and
  - rare or threatened species (40 vertebrate taxa - including 12 mammal species and 15 bird species - and 12 invertebrate taxa).