



## **DRAFT RESPONSE ON THE BELAIR NATIONAL PARK TRAILS MASTERPLAN: PRELIMINARY ISSUE**

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### **Introduction**

The Nature Conservation Society of South Australia (NCSSA) has serious apprehensions concerning the proposed Belair National Park Trails Masterplan prepared by Taylor, Cullity and Lethlean (RE01\_9). We feel that trail development as proposed in the plan has significant potential to result in deleterious and unmanageable ecological impacts on Belair National Park's biodiversity, native vegetation, threatened species populations, wildlife and natural features. We appreciate that there is public demand for recreation facilities and infrastructure however we feel that as an integral part of South Australia's Protected Area System, Belair NP needs to be just that, protected, from adverse human impacts.

Recreational planning for Belair NP needs to consider the park's significance to nature conservation in a landscape context, as well as in the region and State, and the reserve's irreplaceable natural assets. The Adelaide and Mount Lofty Ranges region contains just 13% remnant native vegetation. Belair NP, being one of the largest reserves of the region, is therefore a core conservation asset.

In this document we begin by explaining the conservation significance of Belair National Park, detailing the threatened species, ecological communities and habitats it protects and its significance for South Australian Government policy initiatives. In our opinion it is also salient to re-examine the objects of the South Australian *National Parks and Wildlife Act 1972*. Following this we provide:

- an outline of the likely impacts of the trails development proposed by the plan;
- comments on specific details of the plan (referenced by section);
- a discussion of reserve management planning issues;
- a discussion of legal issues arising from the Trails Masterplan
- an explanation of our concerns over the wider implications of the trails planning process
- Recommendations.

Belair is an internationally significant National Park, and not a Mountain Bike or Horse riding facility. It would appear that the plan effectively seeks to downgrade the status of Belair NP by transforming it into an unfettered recreation park with little safeguard for the park's high nature conservation values. This is implied through the use of terminology in the plan such as "maximising trail experience for riders" and planning 'principles' that aim to "exploit" the reserve's unique features, including the park's high conservation zones. Clearly such aims are inappropriate for a reserve so crucial to nature conservation in the region and to South Australia.

### **Conservation significance of Belair NP's biodiversity assets**

Belair National Park contains some of South Australia's most precious biodiversity assets. The park conserves over 800 hectares of high-rainfall, temperate natural ecosystems. The park includes remnant examples of 5 state threatened ecosystem or vegetation types and protects probably the best remnant examples of mesic grassy woodlands in the state, in addition to providing habitat critical to the survival of a large number of national and state threatened species (see Robertson 1993). Of prime importance are areas of Belair NP that contain: threatened species

habitat (existing and potential); threatened ecosystems and vegetation communities; intact native vegetation communities; and areas with a high richness of indigenous species. Although these are well known to DEH, the conservation values of particular significance for Belair NP are highlighted below.

#### Threatened ecosystems and plant communities

- The most intact remnants of the state threatened and EPBC nominated Grey Box (*Eucalyptus microcarpa*) woodland communities in South Australia (Davies 1982).
- Some of the most significant remnants of grassy Manna gum (*Eucalyptus viminalis* ssp. *viminalis*) woodlands in South Australia.
- Threatened riparian vegetation communities including Red gum and Manna gum Woodlands and Silky tea tree shrublands.

#### Nationally and state threatened species

- Known population and habitat for the EPBC Endangered Southern Brown Bandicoot (*Isodon obesulus*)
- South Australia's largest most important population of the EPBC Vulnerable Leafy Greenhood orchid (*Pterostylis cucullata*), and the largest outside southeastern Australia.
- Populations important to the recovery of the EPBC Endangered plants *Caladenia behrii* and *Caladenia rigida* and EPBC Vulnerable, *Prasophyllum pallidum* and *Glycine latrobeana*.
- The second largest remaining population of the SA Vulnerable *Prasophyllum pruinosum*
- Important populations of the state threatened *Diuris behrii* and *Prasophyllum fitzgeraldii*.
- South Australia's largest population of the State Rare *Pterostylis curta*.
- The largest reserved population of the SA Vulnerable *Juncus amabilis* in the region.

#### **SA Government conservation policy and planning**

The Trails Masterplan disregards the presence of threatened species and communities in Belair NP whose recovery and management is essential for achieving state and national conservation obligations. Belair NP forms a critical component of the SA Government's *Borda to Barossa Nature Links Biodiversity Corridor* and its protection and management for biodiversity conservation is crucial to achieving the SA Government's "No-Species loss": Nature Conservation Strategy. Both Nature Links and No-Species-Loss are components of the South Australian Government's State Strategic Plan (Government of SA 2007).

Many threatened flora species of Belair NP are the focus of the DEH Southern Lofty Block Threatened orchid recovery program, and program activities of the Friends of Belair, Native Orchid Society of South Australia, and Threatened Plant Action Group. Most of the threatened species mentioned above are included in the priority list of the recent DEH Regional Recovery Plan for the Adelaide and Mount Lofty Ranges region, and there is substantial public support for, and continuing involvement in the recovery of these species.

A Recovery Plan prepared for three of the EPBC threatened orchid species (*Caladenia behrii*; *C. rigida*; and *Pterostylis cucullata*) that occur in Belair NP has been adopted by the SA Government. This plan specifically states that mountain bike and horse riding are either direct or potential threats to extant sub-populations of these three species as well as vectors of weeds and *Phytophthora*, which are also either high or moderate threats (Quarmby 2006). A National Recovery Plan has also been prepared for *Pterostylis cucullata* (Duncan 2007). This plan also indicates the importance of the Belair NP population, and lists as threats: site and soil disturbance caused by tracks, as well as weed invasion and *Phytophthora*.

#### **Purposes of Park Proclamation under the SANPW Act 1972**

The aims of the Trails Masterplan also appear inconsistent with the actual purpose of Belair National Park. Section 28 of the South Australian National Parks and Wildlife Act 1972 states "The

*Governor may, by proclamation constitute as a national park any specified Crown land, Aboriginal-owned land, the Governor considers to by reason of the wildlife or natural features of that land'.*

The meaning of this is unequivocal. The primary reason for proclaiming Parks under this Act is for their wildlife or natural features, not for other purposes. Any human use of parks is therefore secondary to the protection and conservation management of their wildlife and natural features. This point is emphasised further by the Act's Objectives of Management which state:

*"The encouragement of public use and enjoyment of reserves and education in and a proper understanding and recognition of their purpose and significance"*

Park management and public use must therefore be contingent on the actual purpose of proclamation and proper understanding and recognition of their purpose and significance, not erroneous interpretation by recreational user lobbyists. It is important for the agency with stewardship responsibilities for Belair NP to make decisions on the basis of the Act's constitutions and Objects, rather than on the basis of coercive high-impact users who attempt to shift the goalposts and who will undoubtedly degrade and detract from the natural values of the park.

We feel that far greater consideration needs to be given to the views of the hard-working and dedicated conservation volunteers such as the Friends of Belair, Native Orchid Society of South Australia and the Threatened Plant Action Group Park who play a crucial and under-appreciated role in maintaining and restoring the biodiversity assets of the park.

### **Likely impacts of the Trails Masterplan**

We understand that the trails plan for Belair will authorise mountain bike and potentially horse riding use along trails currently used by walkers and management vehicles only. These trails have not been specifically constructed for bikes or horses. The proposal intends their 'upgrade' through resurfacing and widening and in some sections conversion of narrow walking trails (single track foot pads) to a wider "multiple-use" trails. This will involve earthworks, vegetation clearance and bringing in exogenous material for resurfacing as well as wider long-term, direct and indirect impacts to adjoining natural areas.

Foreseeable impacts of the trails proposal include:

- Increasing trail usage and compaction (through authorising new, large user groups);
- increasing the level of recurrent disturbance to soils and substrates;
- increasing surface runoff;
- accelerated erosion of hillslopes (through the much greater weight and surface area of bikes and horses compared with walking);
- increasing *Phytophthora* and weed spread by bikes and horses, resulting in degradation of native vegetation habitats;
- incursion of riders into and out of native vegetation and creation of illicit routes, jumps etc. (there is evidence of this already occurring); and
- creating high risk of collision, safety hazards, and conflict between mountain bikers and horse riders and more environmentally benign, traditional users including family groups, walkers, picnickers, photographers, artists, bird watchers and naturalists.

## Comments on specific parts of the plan

Part	Comment
1.0	<p>Agree with upper sections of the park being more suitable for passive, low-impact recreation.</p> <p>The park also includes indigenous plant and animal species of high conservation value (as well as vegetation types).</p> <p>The trail networks may also work as a conduit for weeds, foxes and <i>Phytophthora</i>. For what or whom is the “optimum” rationalisation being achieved?</p> <p>How will new infrastructure for and increasing trail use by high-impact users result in a maintainable trail network compared with the current network if this not maintainable?</p>
2.0	<p>New trail developments could ruin the degree of seclusion and “exposure” to indigenous vegetation so close to a capital city.</p> <p>Not all walkers prefer highly groomed walking trails with manicured surfaces, gaudy signs and “furniture” as they can detract from their enjoyment of nature ~ in order to get away from such human contrived environments.</p> <p>The plan concedes that <u>contrary to the Belair NP Management Plan</u> many trails cross areas of high conservation significance, yet aims to redevelop and open up trails in this same zone for mountain bike and horse use.</p> <p>This section acknowledges evidence of misuse by mountain bikers of trails causing erosion and degradation. Also acknowledged is the difficulty of adequate trail surveillance, maintenance and management. These are the very points we are making and this will only be exacerbated by authorisation of trails sections for mountain bikers and the resulting increased usage.</p>
3.4	<p>The ‘Vegetation influences’ section contains only very basic information and really only refers to aesthetics rather than description of conservation values for the parks native vegetation communities. There is also no mention of <i>Eucalyptus viminalis</i> ssp. <i>viminalis</i>, a threatened plant community containing threatened species that occurs mostly in the upper section of the park.</p>
4.1	<p>“Stay away from conservation zones” doesn’t appear to be backed up in later sections which aim to “exploit” high conservation zones and “move trails away from roads”, presumably into bushland.</p>
4.2	<p>Why is there <u>no Belair NP response to Trail Strategy Goal 2: A Healthy Environment?</u> “Healthy parks, healthy people” will mean that the ecological health of a park needs to actually come first.</p> <p>Typo for 2.3 “<u>hight</u> level of environmental protection”</p> <p>Environmental risk assessment for trails planning needs to occur <u>prior to</u> any trail upgrading or approval for mountain bikes and horses and would need to be rigorous in assessing the efficacy of proposed management measures for preventing mountain bike and horse riders from using prohibited trails.</p> <p>What are these “environmental sustainability conditions” that will minimise impacts of trail construction? How will longer-term trail use impacts be managed or mitigated?</p>
4.4	<p>Future shared use of trails only includes horses and bikes, what about existing rights of more appropriate passive, low-impact use by walkers? The fact that bikes and horses will compromise the trails ‘experience’ for walkers hasn’t been considered.</p> <p>“Linkages” with other trails and roads are obviously undesirable as they will create illicit routes through and degradation of out-of-bounds areas.</p> <p>Priority needs to be given to the most appropriate low-impact users - walkers.</p> <p>Moving trails away from roads will put them in native vegetation involving further clearance and degradation. Quite unjustifiable in conservation zones of a national park.</p>

	Annual mountain bike events would be a clear contravention of the Belair NP Management Plan (2003) which states “Organised cycling races or cross-country events shall not be permitted”.
4.5	Is it really the role of Belair NP to “provide training opportunities” for trail construction projects when clearly the park is so important for nature conservation. Also is DEH actually placed with sufficient resources to provide maintenance of trails as suggested.
5.0	<p>Belair NP is mentioned as forming an integral part to surrounding trail networks but the plan ignores the more critical importance of Belair NP as a nature reserve and in the remnant vegetation and wildlife habitat network.</p> <p>Mentions Eagle Mountain Bike Park as a “recognised trails that link through the park”, however this park is several kilometres to the north and doesn’t adjoin Belair at all.</p> <p>The terminology “exceptional visitor experience” is used but what does this actually mean? Increased park use by mountain bikes and horses will diminish visitor experience for those seeking peaceful natural settings and wild country experience such as bushwalkers and naturalists. This trade-off is not been recognised in the plan. Also walking and naturalist activities are much more likely to lead to an increased appreciation and involvement in the conservation activities the park needs. Riding through on bike or horse is much less likely to increase appreciation or recognition of the true purpose of the park.</p> <p>Future trail development can be implemented to achieve the following outcomes: Ensuring protection of natural assets, but how will it do this. Also it is not just trail construction but consequent longer trail that will damage natural assets</p> <p>What is the difference between “minimal-impact activities” and “low-impact activities”? Operational definitions are required here.</p>
5.6	Buffer areas should be considered around conservation zones, as actions taken outside the zone may still have a negative impact within the zone. (Section 5.6)
5.7	Are vegetation management zones (referred to in section 5.7) taken from the vegetation management plan? If so, we understand that they have been identified to assist park managers to plan and implement management actions, not to reflect conservation significance. For example, the boundaries of these management zones are not consistent with the distribution of threatened plants. This information is therefore of very limited value in assessing the potential impact of proposed trail development. Current conservation zones need to be expanded in any case (see Recommendations).
6.1	<p>The term 'endemic plants' is used to describe the type of plants to be used in trail rehabilitation. How is endemic defined by the authors of the plan?</p> <p>We would suggest it can be confusing and misleading and in this case the correct scientific definition has not been used. Perhaps indigenous plants, or native plants of local provenance would be better terms to use.</p>
6.2	The steep eastern section of the park is far too steep for horses to be permitted, due to erosion and safety issues. Also the section indicated to link the proposed Mountain Bike Cross Country loop is a steep single walking track with sharp corners, very short lines of sight, and significant adjoining vegetation. Widening would necessitate clearance of native vegetation ~ this really cannot be justified in a National Park within a region containing just 13% remnant vegetation.
6.3	<p>How exactly does “higher impact” mean “lower maintenance”?</p> <p>IMBA standards may be important to Mountain Bikers but what do they mean for environmental protection?</p>
6.4	<p>As Long Gully Volunteer centre already has an important purpose, further demand on the finite space and facilities here will mean there isn’t really room for horse floats.</p> <p>Why is long term bus parking required when overnight visits are not permitted in the park?</p>
6.5	<p>The eastern part of Belair NP contains steep, erodible slopes and the majority of the parks high conservation value vegetation ~ therefore horse riding should not be encouraged here.</p> <p>Why encourage horse float parking within Belair NP when it is not a purpose designed bridle park? There is also the increased risk of road safety hazards between horse floats, other vehicles, walkers, etc (This point is recognised in the map legend for section 5.2).</p> <p>How will the impacts of locating a trail head at the volunteer centre be mitigated? Eg clearance</p>

	<p>for parking, horse float turn around etc. How will horse manure be managed at the site and throughout the park? Manure will vector weeds and be source of nutrient and watercourse pollution.</p>
	<p>Where will the trail along Long Gully Road, west of the Volunteer Centre be located? Will a new trail need to be constructed parallel to the road? If so where?</p>
6.6	<p>How will Mountain Bike trails be regularly monitored in High conservation zones when park management staff and resources are already insufficient. Mountain Bike use shouldn't be authorised in High Conservation Zones due their significance, value and contribution toward regional biodiversity conservation.</p> <p>Agree that annual reviews (at least) will be necessary although it will very difficult perhaps impossible to limit trail use once trails have been developed and authorised in the first place.</p>
6.7	<p>Where are the "accepted entry points" from Upper Sturt Road to be located? Mountain Bike riders are already accessing the park along trails that pass through habitat for EPBC Endangered orchid species in the High Conservation Zone which is unacceptable.</p> <p>Establishing a direction of travel will impinge on existing walking use of concerned trails.</p> <p>Again we question the suitability of the Long Gully Visitor Centre as trail head location.</p>
6.9	Simply citing manuals provides no information on materials.
6.10	Providing an example of how infrastructure will be used to discourage unlawful/inappropriate use is required to demonstrate the reliability of this assertion.
6.11	<p>Maintenance of trails cannot really compliment the Vegetation Management Plan as this plan has entirely different aims objectives from the Trails Masterplan.</p> <p>Again DEH burdened with trail maintenance.</p>
6.12	"Trail experience" is secondary to protection of the park's native vegetation and biodiversity.
6.15	<p>Terminology used here is quite revealing of the Masterplan's likely environmental impacts. "Exploit" the experience of BNP's unique features and qualities ... and high conservation zones! High conservation zones must not be exploited.</p> <p>How will providing trails with exceptional experience protect and enhance the most significant vegetation communities? In fact, planning around "trails experience" is more likely to degrade vegetation communities due to focussing narrowly on rider enjoyment and anthropocentric factors rather than nature conservation priorities. "Maximising trail experience for riders" will come at high cost to the parks biodiversity. Also there is an issues of maximising trail and nature experience for low-impact walker uses by protecting the natural vegetation and features of the park. Planning that aims to "exploit" the reserves unique features, including Belair NP's high conservation zones cannot be described as 'principled'.</p>
7.10	We agree that the topography for the southern Priority 3 "Problem area" is inappropriate for cycling trail development due to extremely steep slopes/gradients and poor visibility and lines of sight that cannot be addressed by vegetation clearance and widening the existing trail.
DEH Cycling standards	<p>The stated DEH cycling 'standards' where minimum width of the trail is 1.5 metres, tread width being 1.5m (class 1) 70cm (class 2) and 30cm (class 3, advanced), turning radii being 4m, 3m, and 2m respectively.</p> <p>We feel the two tracks on northeast section, south of Waverly Lodge gate, and over the tunnel, are unsuitable for cycling or horse riding. As both these tracks are in a Conservation Zone removal of native vegetation to widen these tracks to 1.5m wide cannot be justified. Furthermore, we are opposed to any new trail development in areas of threatened species habitat, threatened communities or more intact native vegetation.</p>

## Reserve management planning

The Trails Masterplan appears inconsistent with the Belair NP Management Plan and Belair NP Vegetation Management Plan.

The Belair National Park Management Plan states that there are three forms of cycling currently taking place within the park both legally and illegally. Trail cycling is currently an unauthorised use on fire tracks and walking trails. Downhill cycling is currently an unauthorised and undesirable use in the park. The plan also states that cycle trails shall not be designated in high conservation areas as identified in the Vegetation Management Plan and reflected in the zones prescribed in this plan (eg trail cycling is not permitted in Conservation 1 Zone) and that cycle trails shall be of:

- a width to minimise conflicts between other cyclists and walkers and also to allow a clear line of vision to upcoming obstacles and other trail users;
- a gradient which will not restrict access to the recreational cyclist and will not lead to significant erosion problems.

Despite these conditions for cycling trails the Masterplan proposes an alignment that includes problem areas which are too steep and limited with respect to lines of sight to be appropriate or even safe (see comment for 7.10).

We believe that sections of proposed mountain bike and horse trails are incompatible with such areas and their high conservation values and will destroy native plant species during construction. What effective measures will be undertaken to preclude mountain bikers and horse riders from using out-of-bounds trails? As walking is more compatible with nature conservation this should be the primary recreation use and hence the focus for trail planning. How will bike and horse riders be prevented from using other trails? We oppose any new trail development in areas of threatened species habitat (*Pterostylis cucullata* populations along Queens Jubilee Drive and Tilty Track, *Caladenia rigida* population near junction of Mulara Track and Melville Gully Drive etc.) or more intact tracts of native vegetation.

We also feel that the park conservation zones urgently need to be expanded in several areas to reflect Belair's biodiversity conservation values, namely national and state threatened species, their existing and potential habitat, as well as state threatened ecosystems and vegetation communities that occur in the park. We feel that no trail redevelopments should be approved until this important measure has been undertaken.

## Legal compliance and enforcement issues

The prevailing lack of park enforcement staff and resources will mean that mountain bike and/or horse users are likely to be self-regulating with very little other than 'goodwill' or non-binding codes of conduct to prevent riders to keep to authorised trails.

While the need for compliance and enforcement of trail use conditions is identified in the plan, no action is documented or resource allocation made. Without a genuine and transparent commitment to compliance, identified in the plan there is a serious risk of adverse impacts on threatened species and communities. This is a critically important consideration given that the proposed trail alignments bisect existing critical habitat for EPBC listed species and in sections come within 1 metre of known threatened species populations.

Of the EPBC Acts Significant impact criteria, the trails plan proposal has the potential to:

- adversely affect habitat critical to the survival of an EPBC listed threatened species;
- modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline;
- result in invasive species that are harmful to a listed species becoming established in the listed species' habitat;
- introduce disease that may cause the species to decline; or

- interfere with the recovery of the species.

On the basis of information in the plan it is impossible to determine that the proposed trail developments will not have an adverse impact on threatened species in Belair NP. It is necessary to at least provide a map which overlays proposed trail developments with the location of threatened species populations, critical habitat areas, and threatened communities. DEH already have such information for many of the threatened species inhabiting the park, such as *Caladenia behrii* and *Pterostylis cucullata*. Maps would need to be presented at an appropriate scale.

As the plan doesn't demonstrate that there will be no significant impact on matters of national significance, EPBC threatened species populations and habitat in the park, nor how potential adverse impacts will be mitigated, a referral to the EPBC needs to be made as part of the planning process.

### **Wider implications of the trails planning process**

While the Nature Conservation Society of South Australia are happy to provide the trails reference group with advice about the threatened flora and other natural assets in the park and how the negative impact of trails development can be avoided, it is not our responsibility to undertake a comprehensive environmental assessment on behalf of the reference group, DEH or the consultant.

It is surprising to see the large amounts of government funding being channelled into new trail upgrades in national and conservation parks around Adelaide when there remains huge funding shortfalls in the active management of weed and feral animal threats to native vegetation and biodiversity in the reserve system with most of the burden falling on volunteer groups who already prop up the entire management effort and save the State Government millions of dollars per year in doing so.

Mountain Bike and horse riding proponents have used the degraded condition of some native vegetation in Belair NP as a reason for allowing mountain bike use despite having done nothing themselves to shoulder any responsibility in addressing the situation. Being party to the degradation of native vegetation through a 'do nothing' acquiescence towards biological invasions does not justify using the degraded state of some of Belair NP's vegetation communities as a reason for authorising bike and horse trails. Invaded native vegetation is still of ecological value and can be restored using the appropriate methods (Robertson 2005, Jury & Croft 2008). As their ratings suggest threatened ecosystem types are declining due to such threats as weed invasion and ongoing human disturbances. As current vegetation condition reflects a past of inadequate management effort and funding allocation, vegetation condition cannot therefore be used as an excuse for increasing recreation impacts.

There is also some thought that the Belair Trails Masterplan may represent the thin end of the wedge with respect to future recreational developments in parks around Adelaide. Given the thousands of community volunteer hours spent each year restoring and maintaining the native vegetation and biodiversity of these reserves moves to exacerbate human impacts are unjustifiable and would send an unfavourable message to the public on the legitimacy of the State Government's conservation credentials and policy commitments.

### **Recommendations**

Based on the aforementioned issues and shortcomings of the plan we recommend the following:

- Referral of the proposed action to the Australian Government due to likely significant impacts on matters of national environmental significance (listed threatened species);
- Revise the conservation zones of Belair NP to reflect the distributions of threatened species and communities;

- Review and update the Native Vegetation Management Plan to incorporate current information on threatened species and communities;
- Develop a formal process for recreation planning in the state reserve system with due consideration of the biodiversity conservation assets and management objectives;
- Plan further recreational infrastructure around proper conservation planning for and protection of Belair NP's natural biodiversity assets, rather than the other way around.

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