

Management guidelines for dune use

Pedestrian access tracks

Introduction

This leaflet continues on from Leaflet No.V-02.5 that outlines the role of fencing and pedestrian access tracks in protecting the vital dune vegetation, and gives details of suitable types of fencing for this application. At infrequently used beaches, the vegetation may cope with the low intensity of pedestrian traffic without the need for a formal track through the dunes. At beaches with uninviting hind-dune vegetation, people tend to follow a clear track without fencing being needed. However, on many beaches, a fenced access track is required. The function of the access track is to provide a route through hind-dune areas and over the foredune to the beach in a manner that protects the surrounding vegetation and keeps wind erosion to a minimum.

Number and location of tracks

The number and location of access tracks to a beach should reflect the needs of the public. Access tracks

that are too close together waste resources and cause unnecessary disruption to the dune vegetation. Too few tracks or lack of adequate signage directing people to them will encourage people to take short cuts. Typical distances between access tracks vary from about 40 metres in heavily used areas to 200 metres or more in low-use areas. Where new access tracks are to be provided, they should cross the foredune where it is at a naturally low elevation so that the slopes will be at their most gradual. Trees adjacent to the track will provide welcome shade and protection from strong winds.

Track surface and specifications

In hind-dune areas, access tracks can generally be left as bare sand, but if the track is subject to frequent use or wind erosion, it may be necessary to provide some type of surfacing. A common and inexpensive surfacing can be provided by placing a layer of pinebark or woodchip over the sand. Areas subject to



Fenced concrete pathway providing access through a heavily used hind-dune area.



Timber boardwalk providing pedestrian and wheelchair access to a beach viewing platform.




Board and chain is the preferred pedestrian access track surface over the fore-dune crest and down onto the beach.

heavy use or waterlogging may require a raised path of fine gravel or decomposed granite, or in stable areas and where the expenditure is warranted, pavers or a timber boardwalk could be considered. Gravelled or paved path surfaces should be raised and cambered to shed heavy rainfall quickly. Concrete pathways are acceptable in landward parts of the dune system.

The crest and seaward slope of the foredune is the area of greatest susceptibility to wind erosion for an access track. To keep this to a minimum, particular care should be taken to keep the pioneer zone vegetation adjacent to access tracks in good condition. Access tracks are usually aligned perpendicular to the shoreline, but this should be amended if necessary to avoid alignment with the prevailing wind which could cause erosion of the track surface. Board and chain is usually the recommended track surface because it can be

adapted to the frequent changes in sand surface levels that are typical of this area. The width of the track can be varied to suit the anticipated level of use, but should generally lie between 1.2 and 2.4 metres. This should allow a comfortable flow of pedestrian traffic in each direction. Increasing the width of the track makes it more susceptible to wind erosion and to illicit use by vehicles.

Where the seaward slope of the foredune is between 17 and 31 degrees, it is recommended that a board and chain walkway be installed. This will prevent the gradual lowering of the dune crest which would leave the dune more vulnerable to wave overtopping and erosion. On slopes greater than 26° and where boulder or retaining walls have been constructed, it is recommended that stairs be used for final access to the beach. Information on board and chain walkways and stairs can be found in Leaflet No. V-02.2.



RECOMMENDED SURFACING			
Hind Dune <i>Woodland/Forest Zone</i>	Secondary Dune <i>(She-oak Zone)</i>	Foredune <i>(Sand Spinifex Zone)</i>	Pedestrian Use Level
nil ¹	nil	board & chain walkway	low
organic mulch ² or fine aggregate ³	organic mulch, on-ground timber pallets	board & chain walkway	medium
concrete, pavers, organic mulch, fine aggregate, on-ground timber pallets	organic mulch, fine aggregate, on-ground timber pallets	board & chain walkway, on-ground timber pallets	high

1 Subject to considering the need to protect against wind erosion and the lowering of dune crest levels

2 Includes pine bark, woodchip or similar durable organic products

3 Includes decomposed granite, crusher dust, shellgrit, or any free draining material compatible with natural beach sediments