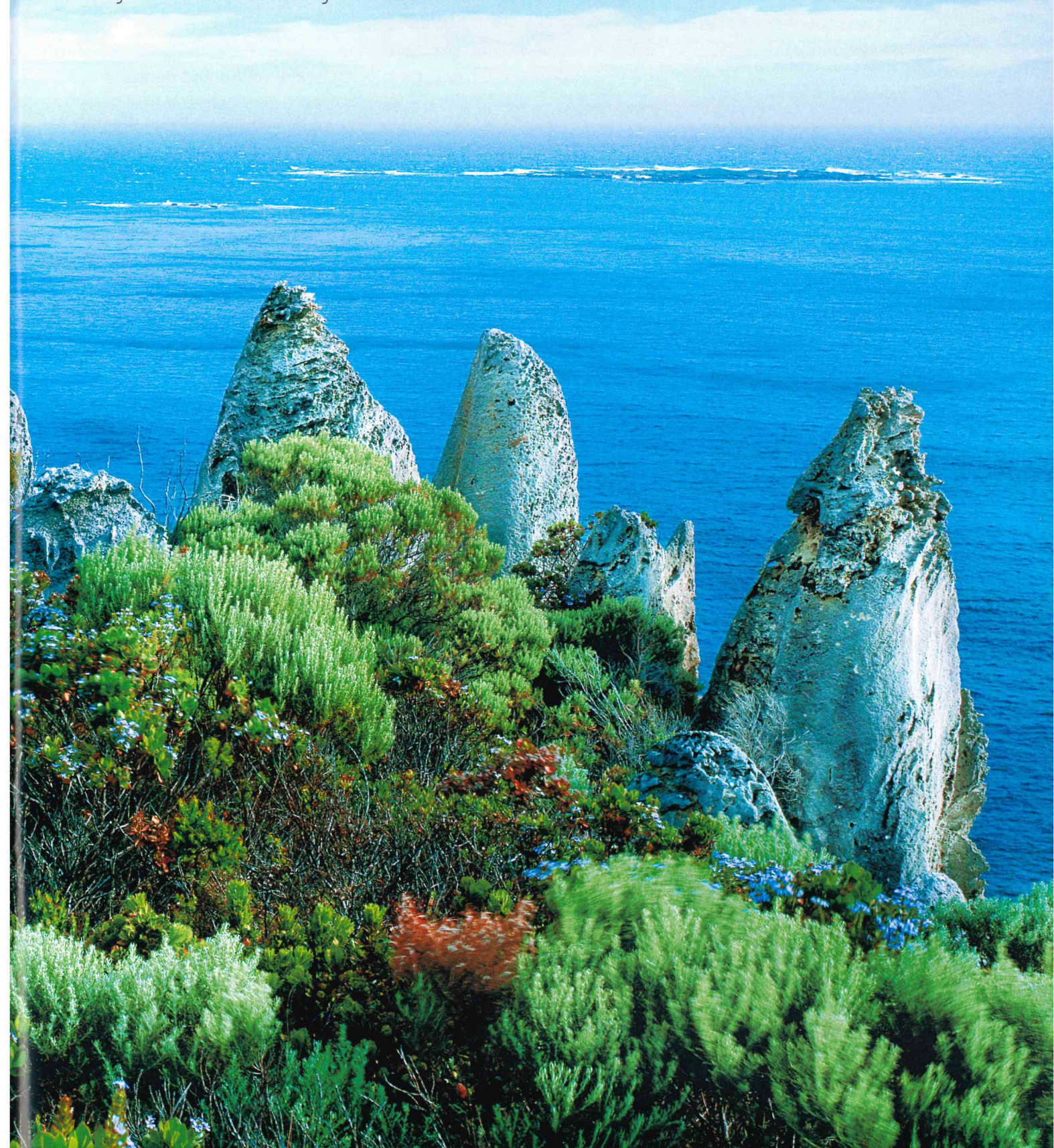


Shannon and D'Entrecasteaux
national parks: managing
southern neighbours



Deep in the forest south of Manjimup and Pemberton and west of Walpole lies a vast network of karri, grasslands, coastal woodlands, dunes, granite outcrops and wetlands. Spanning more than 170,000 hectares, D'Entrecasteaux National Park and its inland neighbour, Shannon National Park, are havens for flora and fauna. A new management plan has been released for the Shannon and D'Entrecasteaux national parks which will set the direction for management of the parks for at least the next 10 years.

by Emma O'Leary and Aberline Attwood



In 1791, French Admiral Bruny D'Entrecasteaux set out on the 18th century's largest scientific expedition sent to explore Australia. D'Entrecasteaux's party consisted of two research ships, the *La Recherche* and *L'Esperance*, and 16 scientists from the French Society of Natural History. They began their survey of the southern coast between Silver Mount and the Donnelly River on 5 December 1792. It was during this voyage that the Admiral first sighted and named rugged limestone cliffs that tower above the southern ocean 'Point D'Entrecasteaux'. While Bruny D'Entrecasteaux and his party were largely unimpressed with the land they sighted from their ships, today those cliffs form a grand entrance to the spectacular D'Entrecasteaux National Park.

A wilderness experience

The cliffs and dunes first sighted by Bruny D'Entrecasteaux more than two centuries ago tower over the ocean as an imposing reception to passing boats. These dunes give way to coastal heathlands and a series of inland lakes and swamps, and beyond that is an array of wetland, woodland and



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Towards Point D'Entrecasteaux, named by French Admiral Bruny D'Entrecasteaux.
Photo - David Bettini

Left Granite outcrop in Shannon National Park.

Below Lake Yeagarup in D'Entrecasteaux National Park.
Photos - Alex Bond

forest ecosystems. When the national parks were created, the key aim was to maintain a large area free from human development, which provided wilderness and solitude for visitors, magnificent coastal scenery, varied natural features and diverse vegetation types.

Today, the parks' spectacular and natural beauty draws more than 150,000 visits by locals and tourists each year. Four-wheel driving, camping, fishing, boating and bushwalking, especially along the Bibbulmun Track, are popular pastimes. Many places of interest can be reached only by boat. Because the parks offer places that are difficult to reach, they provide visitors with a true wilderness experience.

Columns, cliffs and dunes

The basalt columns of Black Point are one of the park's most stunning landforms. This feature originated from a volcanic lava flow some 135 million years ago. In the process of lava cracking and shrinking, columns were formed perpendicular to the surface, creating a series of hexagonal columns that are now slowly being eroded by the sea. D'Entrecasteaux National Park is also famous for its dunes. The coastal belt consists of aeolian (wind blown) dunes which, in places, form large areas of drifting sand up to 4,000 hectares in size. The inland dunes are becoming more stable and vegetated and regular in form. In other places, the dunes have lithified, creating massive, consolidated ridges, such as





Right The spectacular columns of Black Point in D'Entrecasteaux National Park.
 Photo - Jiri Lochman

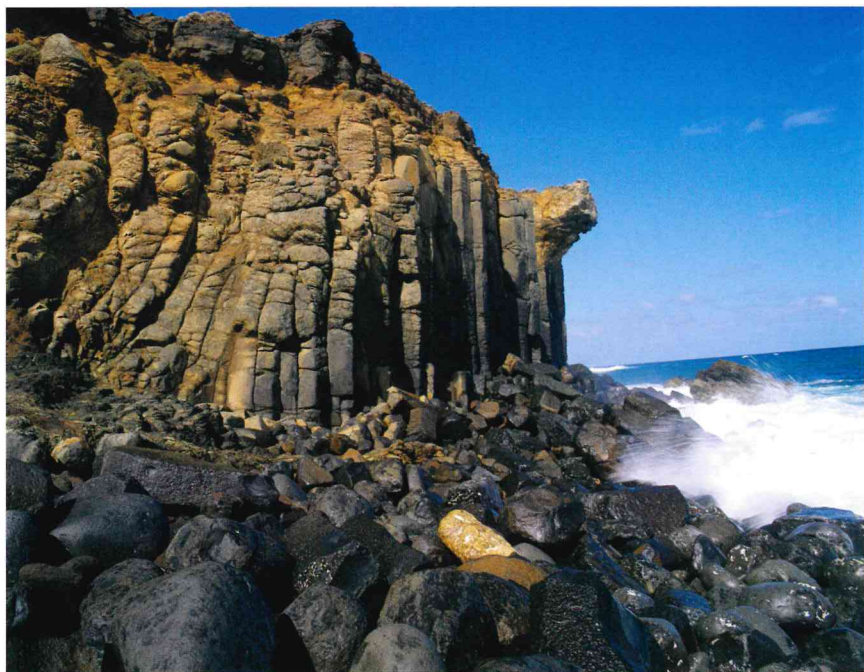
those south of Broke Inlet and within the Yeagarup and Callcup areas. The natural sand formations at Yeagarup form one of the largest dune systems in the world.

Limestone cliffs occur intermittently along the entire length of D'Entrecasteaux National Park, and range in height from 40 metres in the western section near Black Point to 150 metres in the eastern section between West Cliff Point and Clifty Head.

Wetlands

The Warren, Donnelly and Shannon rivers are among the many rivers and major streams that drain through D'Entrecasteaux National Park and empty into its coastal waters.

High sand dunes and limestone cliffs on the coast give way to coastal heathlands and a series of lakes and swamps further inland. These include lakes Yeagarup and Jasper—the largest freshwater lake in the southern half of Western Australia. Vast areas of wetlands behind the coastal dunes are known as The Blackwater.



The national parks of D'Entrecasteaux and Shannon surround Broke Inlet, one of WA's largest inlets. This large, shallow estuary is linked to the ocean by a narrow channel that passes through sand dunes. Sandy beaches along its shores are interspersed with low, rocky headlands of gneiss. The gneissic basement projects above water level in many places to form several small islands.

Wildlife wonders

There are 12 threatened fauna species known to live in the parks, including the quokka (*Setonix brachyurus*), woylie (*Bettongia penicillata*) and chuditch (*Dasyurus geoffroii*). Forest red-tailed cockatoos (*Calyptorhynchus banksii naso*), Baudin's cockatoos (*C. baudinii*), Carnaby's cockatoos (*C. latirostris*), Australasian bitterns (*Botaurus poiciloptilus*), fairy terns (*Sterna nereis*)



Above The Donnelly River, which runs through D'Entrecasteaux National Park.
Photo – Alex Bond



Left Lake Jasper, the largest freshwater lake in the southern half of WA.
Photo – Jiri Lochman

and malleefowl (*Leipoa ocellata*) also occur in the area. The malleefowl inhabit jarrah forests and the area between karri forests and coastal heath. Sightings have occurred at Yeagarup dunes in D'Entrecasteaux National Park and Curtin forest block in Shannon National Park. The occasional visit from an albatross has also been recorded, including the shy albatross (*Diomedea cauta*), and the specially protected New Zealand fur seal (*Arctocephalus forsteri*) is also known to haul out at Black Point in D'Entrecasteaux National Park. It is also likely that the threatened western ringtail possum (*Pseudocheirus*

occidentalis) occurs within the parks, as there have been sightings in adjacent forest areas.

The first inhabitants

From long before Bruny D'Entrecasteaux sighted the coastlines that mark the beginning of the national parks, Indigenous people lived in the area. Aboriginal people are thought to have occupied the south-west for almost 50,000 years, though the oldest archaeological evidence in D'Entrecasteaux National Park is dated at 6,000 years. Because D'Entrecasteaux National Park was

fertile, with plenty of food and water, it would have been an ideal place to live. Now, people can visit sites and landscapes that continue to hold spiritual, mythological, ceremonial and cultural significance to Nyoongar people.

Of particular archeological and cultural significance is Lake Jasper. In 1989 archaeologists and divers from the WA Museum identified a number of Aboriginal sites on the bed of the lake. The artefacts indicate the presence of a number of major camp sites, quarry and chipping sites estimated to be several thousand years old, when the lake bed was part of the forest. Some of these ancient sites occur close to the edge of the lake, where they are susceptible to disturbance and changing water levels. Under the new management plan, Lake Jasper is now better protected because new rules have been introduced to prevent powerboats from using the lake.

Right Mandalay Beach in D'Entrecasteaux National Park.
Photo – Damon Annison

Below right Australasian bitterns are known to occur in both parks.
Photo – Hans and Judy Beste/Lochman Transparencies

By working together with Aboriginal people to care for the land, there will be benefits for the preservation of heritage and environment as well as for cross-cultural awareness. A memorandum of understanding is in place between the Department of Environment and Conservation (DEC) and the South-West Aboriginal Land and Sea Council, which sets out guidelines under which access and cooperative management agreements may be established.

Fire in the bush

Before European settlement, Aboriginal people applied fire to the landscape for many purposes. It was used to make access through thick and prickly vegetation easier, to encourage new vegetation growth, to attract game for hunting, to stimulate the development of useful food plants, for cooking, warmth and signalling, and for spiritual reasons. This constant use of fire resulted in a fine-grained, fire-induced mosaic of vegetation and fuel ages across the landscape. This meant large intense wildfires were uncommon. Today, DEC's objective is to provide a spatial and temporal diversity of burnt and unburnt areas. This is achieved by varying the season of burn, and frequency and intensity of fire, based on vital attributes and life histories of fire-sensitive species and vegetation communities.

There have been several large bushfires in D'Entrecasteaux National Park in the past few years. Each year, one or two per cent of DEC-managed bushfires are the result of escapes from prescribed burns, including in November 2011, when nearly 30,000 hectares were burnt in the northern part of the park. In February 2012, lightning caused a bushfire that burnt through more than 30,000 hectares in the south-western part of the park.



Both these fires ran into areas that had been prescribed burnt in previous years. Without this prescribed burning, these bushfires could have been much worse and may have reached towns and communities. The management plan aims to maintain conservation values while protecting people, property, heritage and recreation assets in and near the parks.

A pastoral and timber heritage

In the 1850s, farmers began settling in and around Pemberton and Manjimup. Settlers in the area found that the land on the coast provided much-needed summer grazing for their stock and many families began droving their cattle to the coast each

summer. These farmers took out leases and purchased land along the coast from the 1880s in what is now D'Entrecasteaux National Park, with grazing continuing in some areas until the 1980s. One grazing lease still remains in the area (Quannup) although this is not currently stocked. Other grazing leases have progressively been bought and incorporated into the parks.

Timber milling also plays an important role in the area's history. This was well underway in the south-west by the 1920s, but the Shannon area was largely untouched until the 1940s, when a shortage of timber after World War Two prompted the state government to establish a timber

mill there. Timber cutting began in the Shannon basin in the mid-1940s and the town and timber mill were established in the late 1940s. Most of the timber went to the Shannon Mill, which operated until 1970. A town was built around the mill. When the mill closed the houses from the old town site were sold and taken away.

Only traces of the mill town and former forestry settlement can now be seen, such as the fruit trees still growing in cleared areas of the Shannon camping ground and the grassed areas of the former golf course and oval. There are also the remains of old buildings and railway lines along the Shannon Dam walk trail. Some of the old logging tramways and roads are now used for walk trails and scenic drives.

Holiday huts

From the days of the early cattlemen in the 1880s, the parks were used for recreation, particularly fishing on the coast and in the inlets. Huts were built as a base for recreation in the surrounding areas from the 1920s, and continued to be built in the parks until the early 1980s, mostly as weekenders

and fishing shacks. There are 63 huts located in the parks, including 43 along the lower reaches of the Donnelly River, 18 scattered throughout D'Entrecasteaux National Park and two huts within Quannup Pastoral Lease. Some of these huts have high heritage value and are being retained and managed by DEC for cultural heritage purposes. Others have been moved, removed or replaced for safety and environmental reasons. Most of the huts are privately occupied and, under the new management plan, DEC is working with the Lower Donnelly River Conservation Association and other hut occupiers to retain huts for use by the public and members of the association, on the condition that the huts meet environmental, safety, health and building standards.

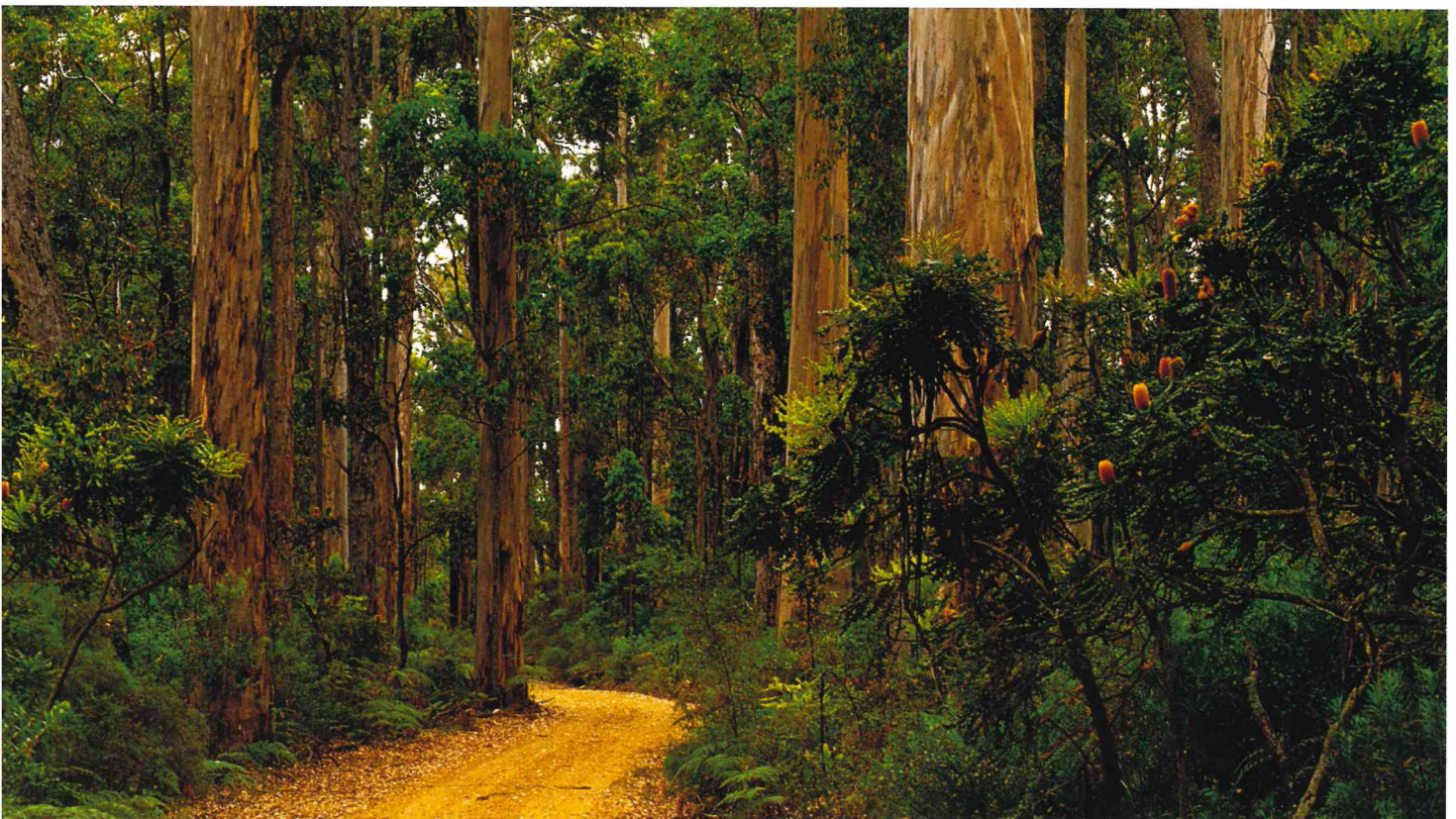
Demand has risen for new types of accommodation other than the huts, with opportunities to further develop built accommodation at Shannon town site. The new management plan has also identified that existing camping areas are in need of an upgrade to meet demand for the growing number of people wanting to stay in the park overnight.

Below Great Forest Trees Drive guides visitors for 48 kilometres through Shannon National Park and is supported by information stops and its own radio broadcasts.

Photo - Marie Lochman

Driving the parks

The past decade has seen a big increase in visitation to the parks, putting more pressure on conservation values. What once was irregular and mainly seasonal four-wheel-drive access by locals has increased to year-round use by many sectors of the community, with hundreds of four-wheel-drive vehicles in the park during peak periods. Much of the coastline in D'Entrecasteaux National Park is sensitive to erosion, and many of the vehicle tracks in the park traverse sensitive landforms that can be easily eroded. Vehicle use on beaches can damage hooded plover (*Thinornis rubricollis*) and fairy tern nests during the breeding season. Additionally,



Right Sand dunes of Yeagarup.
Photo – Damon Annison

Below right Fairy terns nest on beaches in D'Entrecasteaux National Park.
Photo – Bill Belson/Lochman
Transparencies

Below Shannon Dam in Shannon National Park.
Photo – Marie Lochman

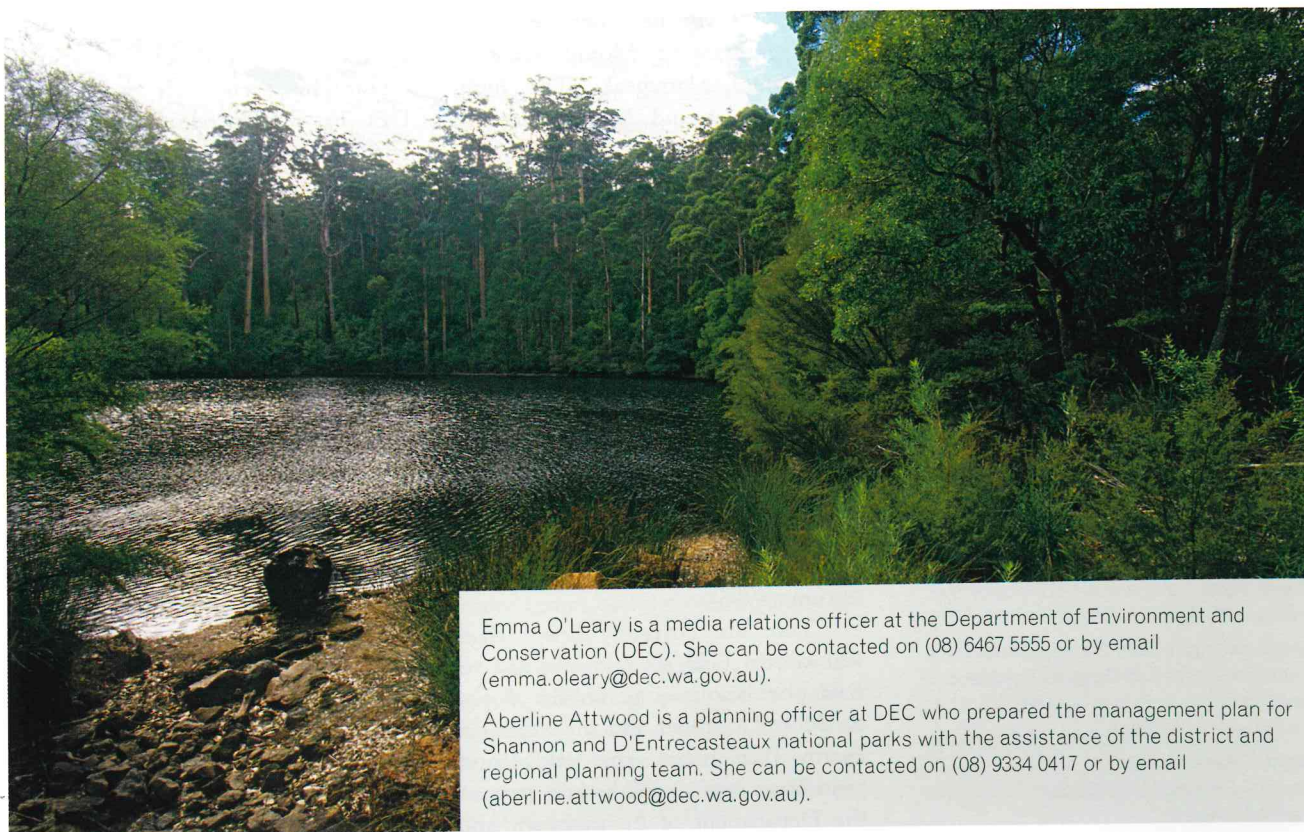
dieback, caused by the plant pathogen *Phytophthora cinnamomi*, is present in the park, with vehicles being a major factor in its spread. Continuing to educate users on the appropriate techniques for four-wheel driving in the parks, such as reducing tyre pressure when driving on sandy tracks, could aid in reducing impacts of the activity. However, in some cases access may need to be managed by track reinforcement, realignment, closure or use of a permit system.

In contrast, Shannon National Park has few four-wheel-drive tracks open for public use. Managing four-wheel-drive access within Shannon National Park is much easier as the density of the



surrounding forest generally prevents vehicles from leaving public roads and tracks.

There are many ways to explore D'Entrecasteaux and Shannon national parks. Whether it be by driving, walking the Bibbulmun Track, or boating along the tranquil and meandering Donnelly River, the parks provide the perfect place to step back and take in WA's stunning south coast region in all its different forms.



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