LIBRARY

Department of Biodiversity,
Conservation and Attractions

This PDF has been created for digital preservation. It may be used for research but is not suitable for other purposes. It may be superseded by a more current version or just be out-of-date and have no relevance to current situations.

Chevron

BARROW ISLAND

NATURE RESERVE

BARROW ISLAND



For Further Information Contact: **Environmental Coordinator** Level 24, QV1 220 St Georges Terrace Perth WA 6000 Tel: 9216 4000 Fax: 9216 4444 Web: www.chevron.com



Department of Conservation and Land Management Mardie Rd, Karratha Industrial Estate, PO Box 835, Karratha 6714, Phone: (08) 9143 1488

Barrow Island is a Class A Nature Reserve of outstanding nature conservation significance. Class A status is allocated under the Land Administration Act and means that the reserve cannot be cancelled, reduced in size or allocated



Babs & Bert Wells, CALM

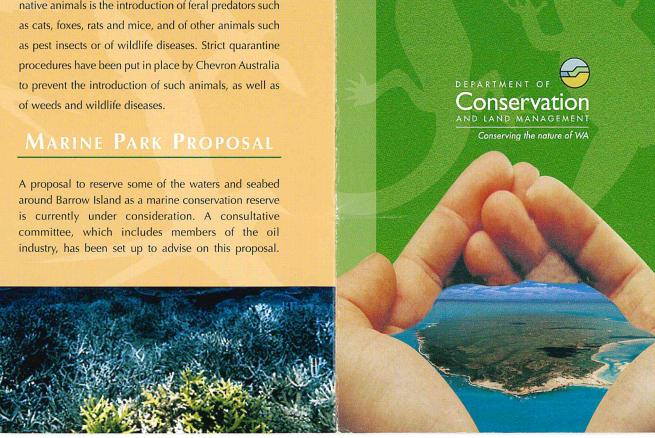
to another purpose without Parliamentary approval. The small islands near Barrow (including Middle, Boodie and Double Islands) are nature reserves that can be cancelled or changed by the Minister reponsible for the Land Administration Act. Laws in the Conservation and Land Management Act relating to nature reserves and in the Wildlife Conservation Act relating to biodiversity conservation are the same, independant of whether reserves are Class A or not.

Barrow Island has one of the most valuable mammal assemblages in Australia. It also has significant marine turtle nesting beaches and provides habitat for migratory birds protected under international treaties. It represents an example of vegetation and animal assemblages not affected by sheep and cattle grazing and feral animals. Its underground fauna includes many species not known from anywhere else.

Barrow Island and other nature reserves are vested in the Conservation Commission of WA and managed by the Department of Conservation and Land Management (CALM). Because Barrow is an oil and gas field operated by Chevron Australia Pty Ltd, the company carries out

most conservation management. Interim Management Guidelines for Barrow and adjacent islands prepared by CALM, with Chevron assistance and consultation, guide nature conservation and land management. CALM and Chevron Australia are working together to ensure that Barrow Island Nature Reserve remains a valuable nature conservation area. Research has shown that the company's activities have had no significant effect on the native flora and fauna, and we want to keep it that way.

Barrow Island is the largest landmass in Australia, and possibly in the world, with no introduced rats or mice. The greatest threat to Barrow Island's surface-dwelling native animals is the introduction of feral predators such



Barrow Island, of 235 km², was declared a nature reserve in 1910 because of the wealth of animals, particularly mammals, that occur

there. Several small islands near Barrow are also nature reserves: these are Middle, Boodie, Pasco, North and South Double, Boomerang, Mushroom, Prince and Pelican Islands.

GEOMORPHOLOGY

Barrow Island's current landform represents the surface expression of a deep regional structural high known as the Barrow Anticline. This first developed in the Jurassic (about 190 million years ago) as a result of the breakup of Gondwana. One of the main features visible at ground level is the Barrow Fault, which forms a scarp that trends north-east, south-west across the southern part of the island. North of the Barrow Fault undulating limestone terrain extends to the northern tip of the island, while to the south, the topography flattens due to a change in the rock type across the fault. Prior to about 7000 to 8000 years ago, the island was joined to the Pilbara mainland, but was isolated by rising sea levels at the end of the last 'ice age'.



Eight major vegetation types have been identified and mapped. Over 250 species of native plants have been recorded. Spinifex (Triodia) grasslands dominate the landscape. The three species of Triodia live on different soils, with Limestone Spinifex being the most widespread. Beach Spinifex (Spinifex longifolius) occurs on white sand just behind beaches. Low clumps of native figs, often associated with the native willow, provide a contrast to the spinifex.

Fourteen species of native mammals are resident on the island. Six resident species are listed under Western Australian and Commonwealth legislation as threatened with extinction. These are Barrow Island Golden Bandicoot, Barrow Island Boodie, Barrow

Island Spectacled Harewallaby, Black-flanked Rock-wallaby, Barrow Island Euro and Barrow Island Mouse. Having not been hunted for thousands of years, Barrow Island's mammals have little fearof humans and are easy to observe after dark.



Over 100 species have been recorded of which 32 are known to breed on the island. The Barrow Island Black-and-white Fairy-Wren occurs nowhere else and is listed as a threatened species. Ospreys and Whitebellied Sea-Eagles nest on Barrow, the ospreys often taking advantage of nest poles erected by oil workers.

Fifty-four species of reptile have been recorded of which one, a subspecies of skink, occurs nowhere else. Barrow is home to the second largest lizard in the world, the Perentie, which can grow to more than 2 m in length. One species of large poisonous snake, the King Brown (or Mulga) Snake, is found on the island, as well as smaller

less poisonous species. Stimson's Python, a harmless snake that grows only to about 0.6 m, is often seen around the main camp and on roads at night. Snakes are protected on Barrow Island Nature Reserve. Do not interfere with them and avoid running them over with vehicles if possible. Three species of marine turtle-green, flatback and hawksbill-nest on the island's beaches, as well as on adjacent smaller islands.

Surprisingly for such an arid island, one species of frog lives on Barrow. This is Main's Frog, one of the water-holding frogs, sonamed because they store water in their bladder



while sleeping in a burrow between heavy rains. It breeds in claypans near the southern end of Barrow.

Many species of troglobitic (cave-dwelling) & stygobitic (groundwater-dwelling) species live in the caves and shallow groundwater of Barrow Island. Douglas Elford - WA Museum



Some, including the Blind Gudgeon, occur also on North West Cape peninsula, while others have been recorded only on Barrow Island. Oil spills or other pollution can harm these animals and their environment.

