



## Lord Howe Island

### World Heritage Area

by Chris Murray

In December 1982 Lord Howe Island was listed as a world heritage area joining the Great Barrier Reef, Kakadu National Park and Willandra Lakes for this honour. The following article goes back some seven million years giving an overview of the natural and human history of this jewel in the Pacific.

Some seven million years ago a large shield volcano erupted from the floor of the Tasman floor, creating Lord Howe Island, an island originally forty times larger than it is today.

Whilst marine erosion has greatly reduced the size of the main island, it has also left a spectacular landscape of mountains, cliffs, hills and offshore islets. Subsequent variation in sea level caused by successive ice ages, led to deposits of wind blown sand, cemented into sedimentary rock called calcarenite. Some of these deposits have been dated to over 130,000 years old, and contain fascinating fossils like the extinct horned turtle *Mciolania platyceps*.



Lord Howe Island was colonised by plants from the surrounding lands of New Zealand, Australia, New Caledonia and other Pacific islands - which is not surprising considering its location in the central Tasman Sea. The island's varied landscape of mountains, valleys, hills and lowlands has provided an amazing diversity of habitat for various associations of plants. Micro habitats range in altitude from the sea grass meadows on the lagoon floor to dense entangled mist forests of orchids, ferns and mosses on the summits of Mount Gower & Mount Lidgebird. Over 100 of Lord Howe's 241 native species are considered to be endemic. These include four species of palm, the best known being *Howea forsteriana*, which forms dense lowland forests in some areas. *Howea* seeds have been exported from the 1870s to the present day for the indoor plant trade, and the palm is still considered to be one of the world's best decorative indoor palms.

When the Island was discovered in 1788, the first visitors marvelled at its bird life, including 15 species of land birds and multitudes of seabirds. The predations of visiting ships and early settlement unfortunately caused some extinctions, but further colonisation has taken place. Today 18 land bird species breed on the Island. One species, the Lord Howe Woodhen, *Tricholimnas sylvestris*, was saved from near extinction by a captive breeding program in the late 1970s and early 80s and is now reestablished across the whole Island.

However, it is the thronging colonies of seabirds - some 14 species - most of which are summer breeders that are the most spectacular form of bird life. Huge colonies of Flesh-footed Shearwaters, Sooty Terns, and Providence Petrels, numbering tens of thousands of individuals, can be seen from Island walking tracks, some quite close to the settlement area. Smaller colonies of Masked Boobies, Red-tailed Tropic Birds, Grey Teralets, Wedge-tailed Shearwaters, Little Shearwaters, Kermadec Petrels, Black-winged Petrels, White-bellied Storm Petrels, Common Noddies and Black Noddies are also present, though many nest on the offshore islets and are best seen by boat.

Lord Howe Island has only one native mammal - a small nocturnal bat - and two native reptiles, a gecko and a skink. However, there is rich invertebrate fauna of insects, spiders and snails, with much research still to be done on these numerous species. One giant endemic phasmid or stick insect was known locally as the land lobster being up to 7 cm in length, but it disappeared after the accidental introduction of rats onto the Island in 1918, a tragedy that also led to the disappearance of five endemic species of land bird. xxx

The Island's marine life includes over 500 fish species and many hundreds of invertebrates - starfish, snails, slugs urchins and worms. Whilst Lord Howe is located in cooler waters at latitude 31 south, it has a remarkable mix of tropical as well as temperate marine life. The larvae of tropical species, including corals, are swept south by the warm East Australia Current which flows past the Great Barrier Reef in Queensland before swirling out into the north Tasman sea. Rock and coral reefs around the Island provided shelter for many other organisms, so that complex marine communities can develop. Coral outcrops, with their multi-coloured populations of fish, anemonies and seaweeds, occur within metres of the low tide line at many Island beaches, and the extended reef which shelters the lagoon is the most southerly barrier reef in the world.

There is no record of habitation or visitation to Lord Howe Island prior to February 17 1788. On that date, Commander Lidgbird Ball, aboard H.M.S. Supply, sighted Lord Howe Island whilst carrying the first contingent of convicts from First Fleet headquarters at Sydney Cove to Norfolk Island. Although no settlement took place for a further 45 years, passing whalers sometimes called for fresh water and any food they could find. The first settlers arrived from New Zealand late in 1833, a contingent of three Englishmen with their Maori wives and children, probably displaced by unstable conditions during internal Maori wars in the north Island. They cultivated small gardens in the Old Settlement area, and traded supplies and shearwater feathers with passing whaling ships.

Other settlers took over about 1844, and continued to supply the whalers. The earliest houses were built with battens split from the indigenous Kentia palm, with walls and roofs made from laced palm leaves. The first timber house was constructed in the 1860s by whaler, Nathan Thompson. The Island's population increased slowly from 9 persons listed in White's Report of 1935 to nearly 90 souls recorded in 1911. Whaling flourished in the Pacific until the 1870s, with over forty ships per year visiting the island for food and fresh water. However, in the early 1870s, the use of mineral oil led to a rapid decline in whaling, and the Islanders were forced to seek another source of income.



Seeds from the indigenous Howea Palm (or Kentia Palm as it was then known) had been sent to nurserymen in England, possibly as early as 1868. The robust adaptability of the palm,

with its ability to grow in conditions of lower temperature and light than many other tropical palms, led to its rapid popularity as an indoor plant. These palms were soon the feature of Victorian palm courts, ballrooms and hotel foyers and created a new industry for the Island, with a cooperative marketing Board formed by the State government for the benefit of the Islanders in 1913. Except for interruptions caused by World Wars I and II, these palms have retained their popularity to the present day, with current exports numbering millions of seedlings annually produced by the Island's own ISO standard nursery.



Lord Howe Island's marine life is celebrated in the Marine Park Issue of stamps by the LHI Courier Post in November 1999.

Reflecting the increased prosperity of the Island, Burns Philp commenced a regular steamship service in 1897, which lasted until 1954. By the early 1920s, B.P. was systematically promoting tourism in the Pacific. A tourist industry commenced at Lord Howe with guesthouses "Pinetrees", "Oceanview" and a number of smaller establishments being well established by the 1930s.



However, tourism really flourished after 1947, when a post war civil flying boat service linked the Island with Sydney, and was boosted still further by the construction of an all-weather airstrip in 1974. An estimated 11,000 travellers per year now visit the Island, which has a capped bed limit of 394 tourist beds to prevent overdevelopment.



The Island is administered by the State Government of New South Wales, under the Lord Howe Island Act of 1951, subsequently amended in 1982. All land is leasehold, with owners being required to reside on the Island. The local government authority, the Lord Howe Island Board, is chaired by a nominee of the Minister for the Environment. It has an additional State Government appointee, and three elected Island members. Under amendments to the Lord Howe Island Act in 1982, a Regional Environmental Plan and uniform Building Code have been prepared for the Island, and the natural areas protected in a Permanent Park Preserve, having its own Plan of Management.

Although Lord Howe Island has an interesting history, it is the Island's many outstanding natural attributes that led to its acceptance onto the World Heritage List in 1982. A property can only be World Heritage Listed if it satisfies one or more of four natural criteria used to judge the suitability of an area. Lord Howe Island was considered to meet two of these criteria being:

- An example of superlative natural phenomena.
- It contains important and significant habitats for in situ conservation of biological diversity.

The Lord Howe Island Group World Heritage Property now includes the main island, offshore islets and Balls Pyramid totaling about 1455 hectares of land. A further 145,000 hectares of marine environment are included in the World Heritage area, with conservation values reinforced in 1998 when the State Government declared a Marine Park in these waters.

Lord Howe Island is considered to be an outstanding example of an Island ecosystem developed from submarine volcanic activity, having a rare diversity of landscapes and biota. The high proportion of endemic species provide a superb illustration of independent evolutionary processes at work.