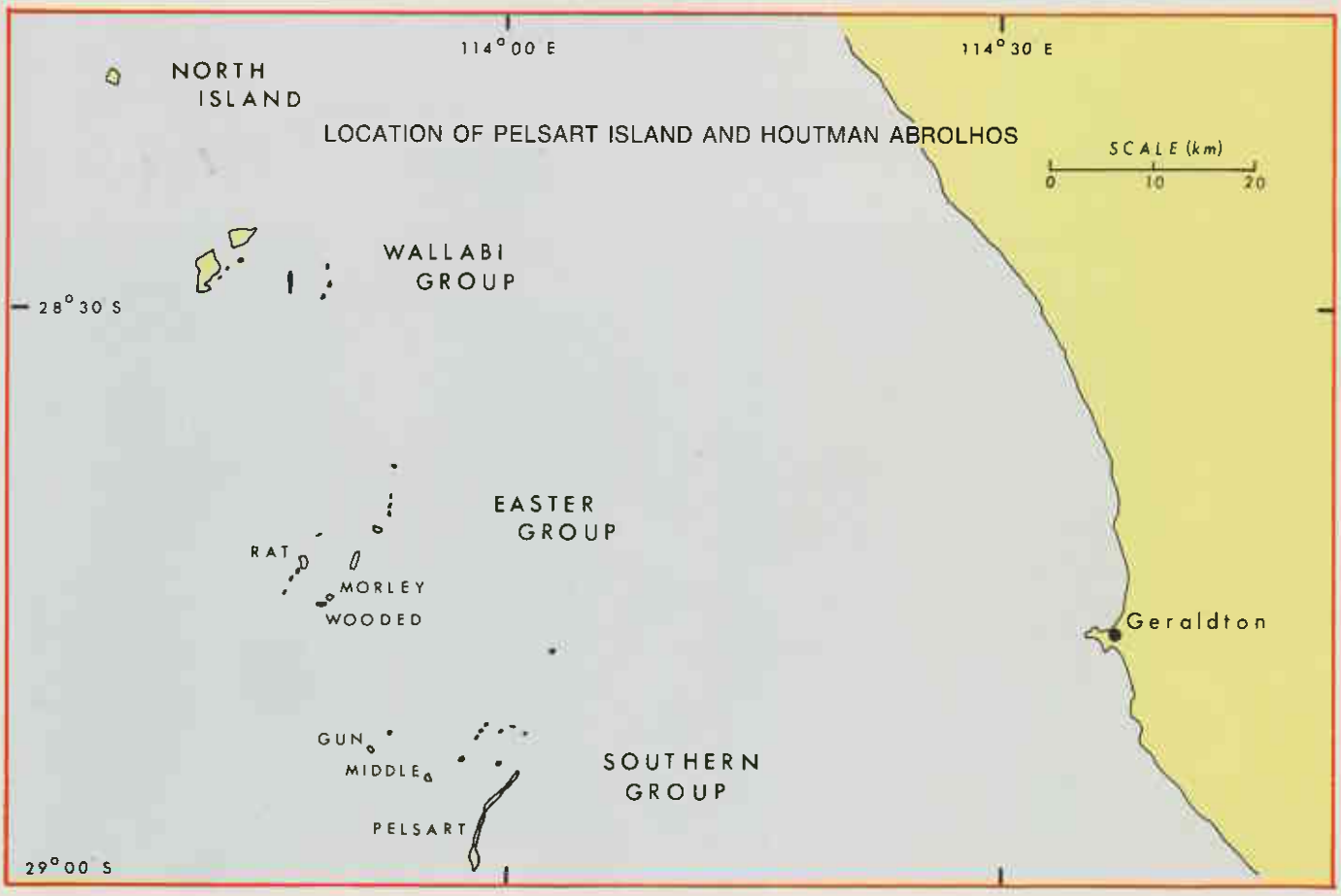
Pelsart Island—A Haven for Seabirds

A survey of the birds of Pelsart Island carried out by a team from the Western Australian Department of Fisheries and Wildlife has confirmed that Pelsart Island is one of the world's most important breeding areas for seabirds.

Pelsart Island is the largest island in the southern Abrolhos group and it lies 60 km from the port of Geraldton, Western Australia (see map). The island itself is 12 km long and varies in width from 0.5 km to only 50 metres. It is composed of coral boulders, shingle, limestone and sand rising only a few metres above high water mark.

Areas composed of coral shingle are virtually bare or have very low perennial and annual herbs and grasses. On deeper soils, especially near the southern end, is a dense low heath of shrubs, notably *Nitraria schoberi* and *Atriplex cinerea*. Samphire (*Halosarcia* spp.) is found in salt marsh areas, while the white mangrove (*Avicennia marina*) forms

▲ Sooty Tern. (Photo Copyright A. G. Wells).



▲ Breeding colony of Crested Terns. (Photo A. A. Burbidge).

▼ White-breasted Sea-eagle and chick. (Photo Copyright A. G. Wells).

dense low forests along sheltered parts of the northern shore, around salt lakes and in some moist low lying areas.

The bird survey was carried out by Mr P. J. Fuller a Technical Officer and Dr A. A. Burbidge, Chief Research Officer of the Western Australian Wildlife Research Centre, between 1977 and 1981.

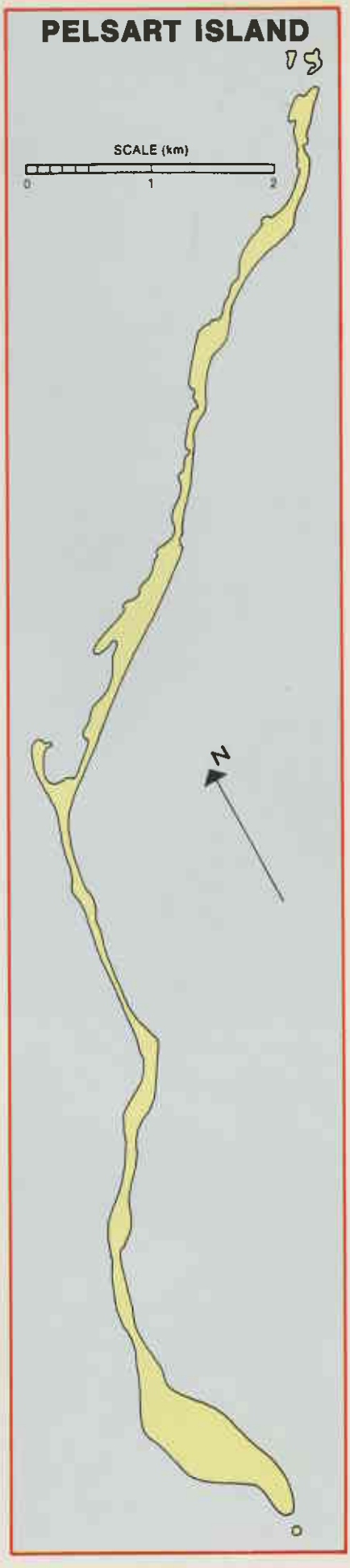
Survey Results

Fifty-eight species of birds were recorded during the survey. Of these, 21 were sea birds, 23 were shore birds, eight were water birds with a widespread distribution, and seven were land birds. Fifteen sea birds and one land bird were found to be breeding on the island.

These findings showed that more species of sea bird breed on Pelsart than on any other island off the Western Australian coast. The next most important Western Australian islands in terms of breeding species are Sandland and Buller, each with ten species, and both these islands are quite small.

Pelsart Island is the breeding place of some particularly important species of sea birds. The island's colony of Lesser Noddies, *Anous tenuirostris*, is one of only two in Australia—the other is 27 km to the north-west on Wooded Island and Morley Island, both in the Easter Group of the Abrolhos. Elsewhere the Lesser Noddy breeds only in the Seychelle Islands. Because of its extremely restricted breeding range the Lesser Noddy has been placed on the Australian Official List of Endangered Species and is specially protected under Western Australian legislation. These colonies have suffered marked fluctuations in numbers and the species did not breed on Pelsart for many years in the early part of this century. Fortunately, the mangroves on Pelsart were recolonised some time between 1913 and 1936, presumably from Wooded Island, which for some time would have held the only breeding colony of this rare species in Australia. The mangroves, on which breeding depends, are of limited extent and any disturbance leading to death of mangroves would have a disastrous effect on the Lesser Noddy.

Pelsart Island also provides a breeding site for the more widespread Common Noddy, *Anous stolidus*, which has few other breeding stations in Western Australia. The closest to Pelsart is Bedout Island, off the northern Pilbara, and the only other colony in this State is in the Lacepede Islands, near Broome.



▼ Near centre of island showing coral shingle. Note narrowness of island. (Photo A. A. Burbidge).

▲ Salt marsh area in Common Noddy colony. (Photo Copyright A. G. Wells).

▲ Lesser Noddy (Photo C. Young)

▼ Lesser Noddy surrounded by nests in Mangrove Forest (Photo C. Young).

Also to be seen on the island is the Red-tailed Tropic-bird *(Phaethon rubricauda)*. This species has been declared to be "rare or likely to become extinct or in need of special protection" under the Western Australian Wildlife Conservation Act. As far as is known it has only one breeding place in Western Australia, at Sugarloaf Rock, near Cape Naturaliste. Nests have not been found on Pelsart for several years. Tropic-birds are moderately common at Pelsart and there seems to be no reason why breeding cannot occur in the future. Red-tailed Tropic-birds have a widespread tropical distribution but there are few breeding colonies.

Also present is the Sooty Tern *(Sterna fuscata)*. This species also has a wide tropical distribution but it has few Western Australian breeding places. It has bred on Wooded Island in Easter Group but the closest major colony to the Abrolhos is Bedout Island.

Pelsart Island was found to be a stronghold of the Osprey *(Pandion haliaetus)*, with seven breeding pairs and a number of unoccupied nests recorded in 1977, making it the biggest concentration of these birds south of Shark Bay.

The White-breasted Sea Eagle *(Haliaeetus leugoster)*, is common on the island and at least two pairs breed there most years. Outside the Abrolhos sea eagles are scarce south of Shark Bay.

Island Management

The Houtman Abrolhos islands are classified as a multi-purpose reserve for flora and fauna, tourism and activities associated with the fishing industry.

Wildlife experts, supported by the survey results, say Pelsart Island is so important to nature conservation that it should be given the greatest protection from interference.

In particular the seabird colonies may suffer from increased human activity on the island.

Unfortunately, there are many examples of seabird colonies being adversely affected by man's activities, both direct and indirect. The best known local example of this is the extinction of the enormous colonies of Wedge-tailed Shearwater, Common Noddy and Sooty tern which formerly occurred on Rat Island in Easter Group. In 1907 it was reported that Sooty Terns "were breeding in countless numbers" and Common Noddies "were laying in hundreds of thousands". In 1889 the Common Noddy colony occupied 300 acres and averaged at least one bird per square yard or 1 452 000 birds. The last time the colonies were seen and reported by an ornitholigist was 1913 but there is evidence they lingered on until the 1930s. Their disappearance has been attributed to human depredation, particularly the taking of eggs. However, there must be considerable doubt that this was the main cause since there were very few fishermen in the Abrolhos until the 1950s.

Rat Island suffered major disturbance from guano mining, which ended in 1915, and was left as a barren rocky area almost devoid of the vegetation required by the Common Noddy and Sooty Tern as nesting sites and the soil required by Wedge-tailed Shearwaters.

Added to this disturbance was the presence of rats *(Rattus rattus)*, first noted in 1840, and cats *(Felis catus)* which were present during 1913.

Pelsart Island has also been subjected to guano mining and in this context it is notable that the disappearance of the Lesser Noddy from Pelsart Island also coincided with the peak of guano mining there. Although the guano mining would not have affected many mangrove areas directly, it is likely that there were indirect effects. A report of a visit in 1843 stated: "As an article of food it [the Lesser Noddy] was the favourite, several hundred being killed almost daily during our stay on the island."

Guano mining commenced in the Abrolhos in 1847. However, it did not reach any magnitude until 1885 and ended in 1915 after 56 900

▲ Wedge-tailed Shearwater at entrance of breeding burrow. (Photo Copyright A. G. Wells).

▲ King Skink *(Egernia Kingii)*, a predator of bird eggs and chicks. (Photo Copyright A. G. Wells).

▼ Pied Oystercatcher. (Photo Copyright A. G. Wells).

▲ Red-necked Avocet. (Photo Copyright A. G. Wells).

▼ Pacific Gull. (Photo Copyright A. G. Wells).

tonnes had been shipped. Mining recommenced in 1943 and ceased again in 1946 after a further 10 900 tonnes had been extracted. Guano mining has had a major impact on several islands in the Abrolhos, including Rat, Gun, West Wallaby and several islets. On Pelsart, although the soil of some areas has been removed, there still remain extensive sand deposits which support the major colonies of Wedge-tailed Shearwater, Common Noddy and Sooty Tern.

Further human activities took place on Pelsart Island in the form of a small tourist camp which operated near the southern end of Pelsart Island between about 1946 and 1953. It used the buildings left by the guano diggers which were located just behind the beach on the western side of the island 1.0 km north of Wreck Point. The buildings were located among burrows of the Wedge-tailed Shearwater and nests of the Sooty Tern. Tourists walking near the camp could not avoid collapsing the breeding burrows of the Shearwaters.

Conservation Needs

The most important areas of Pelsart for sea bird conservation are the mangroves and the sandy southern four kilometres or so. The mangroves provide nesting sites for the Lesser Noddy. The large colonies of Common Noddy, Sooty Tern and wedge-tailed Shearwater overlap in the Southern area. No area could be said to be not used by sea birds for breeding because many species, e.g. Roseate Tern, Crested Tern, Fairy Tern, Osprey, Pacific Gull, do not have fixed breeding sites and may move their breeding place each year.

Because of its high nature conservation values Pelsart Island should be afforded the greatest protection from interference.

EDITOR'S NOTE:

This summary has been adapted by M. L. Taylor from Report No. 44 entitled, "The Birds of Pelsart Island, Western Australia" by P. J. Fuller and A. A. Burbidge which is available on request from the

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