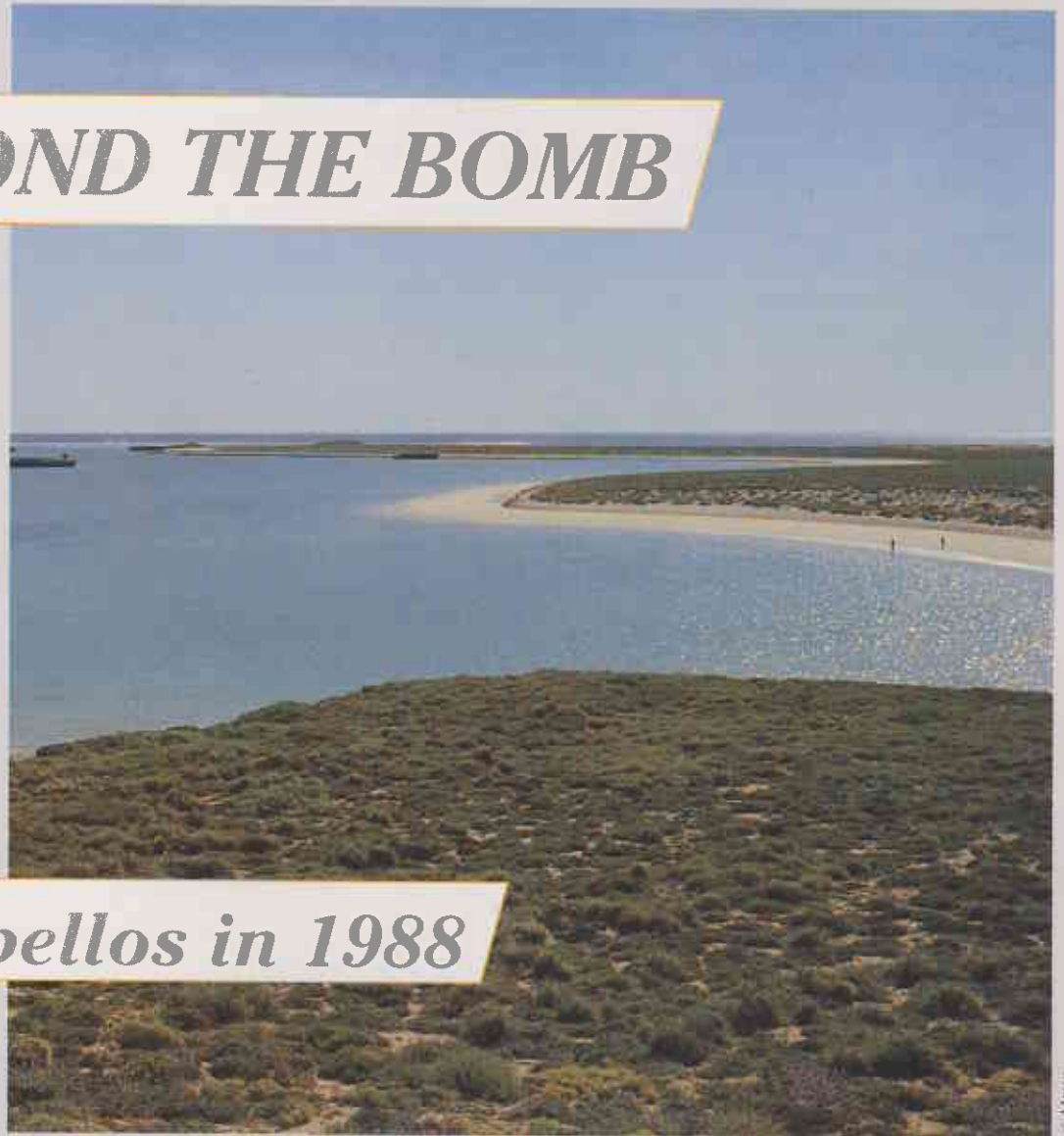


BEYOND THE BOMB

Montebellos in 1988



The Montebellos are a group of more than 100 islands off the north-west coast of W.A. They achieved international notoriety in 1952 when the British, in an operation code-named Hurricane, detonated an atomic weapon in a bay off one of the major islands. Two further atomic tests were carried out in May and June of 1956. The nuclear cloud tends to overshadow less dramatic aspects of the islands' history, but there are many colourful twists to the tale. Thirty-two years after the British departed, it's time to review the Montebellos: past, present, and future.



Ground zero, Trimouille Island (above).

The Montebello Islands are located 20 km north of Barrow Island and 120 km north, north-west of Dampier, and were named by the French navigator Nicolas Baudin in 1801. According to P.D. Montague, writing in the *Geographical Journal* in 1913, Baudin was 'discouraged by the seeming barrenness of the country, the scarcity of fresh water, and the hostility of the blacks, he kept to the sea, and did little else than survey the coast-line and islands'. Before he left, however, he named the islands after the battle of Montebello, where the victorious French general Lannes (later the Duke of Montebello) defeated the Austrians in 1800.

The flat, limestone islands range in size from Hermite, the largest, at about 1 000 ha, to several small islets and rocks of less than one hectare. They are the remnants of an old coastal landform, and have been separated from the mainland for more than 8 000 years.

No evidence has been found of Aboriginal occupation of the islands since that separation, although they probably lived there before.

The earliest known European use of the islands was in 1622, when one of Australia's first recorded shipwrecks, that of the *Tryal*, took place just west of the Montebellos. The survivors of the wreck spent seven days on the northern islands before setting forth for the East Indies. What a godforsaken place it must have seemed to them. There was nothing like the macabre massacres that took place at the more southerly Abrolhos Islands after the shipwreck of the *Batavia*, nonetheless, only 30 people could set sail with the Captain in the lifeboat, the rest were left to their fate on the wrecked ship. Other early navigators, Baudin in 1801, King in 1818, and Stokes in 1840, had less eventful voyages.

The development of the pearling industry along the north-west coast in the late 19th Century formed the next exciting chapter in the history of the Montebellos. The pearlers who fished the waters and camped on the islands are probably responsible for the introduction of the cat (*Felis catus*) and the black rat (*Rattus rattus*) which persist on the islands today. Possibly the cats were deliberately introduced to catch the rats. After all, plaguing rats have an ability to make camping an unpleasant experience.

Montague noted 'the cats which have been introduced into Hermite Island appear to be breeding rapidly; wherever introduced they soon become exceedingly shy and wary and grow to a very large size. They will, no doubt, in a few years time have accounted for the wallabies, as they have for the bandicoots. If they cannot kill a full-grown wallaby - though I'm inclined to believe they do - they make short

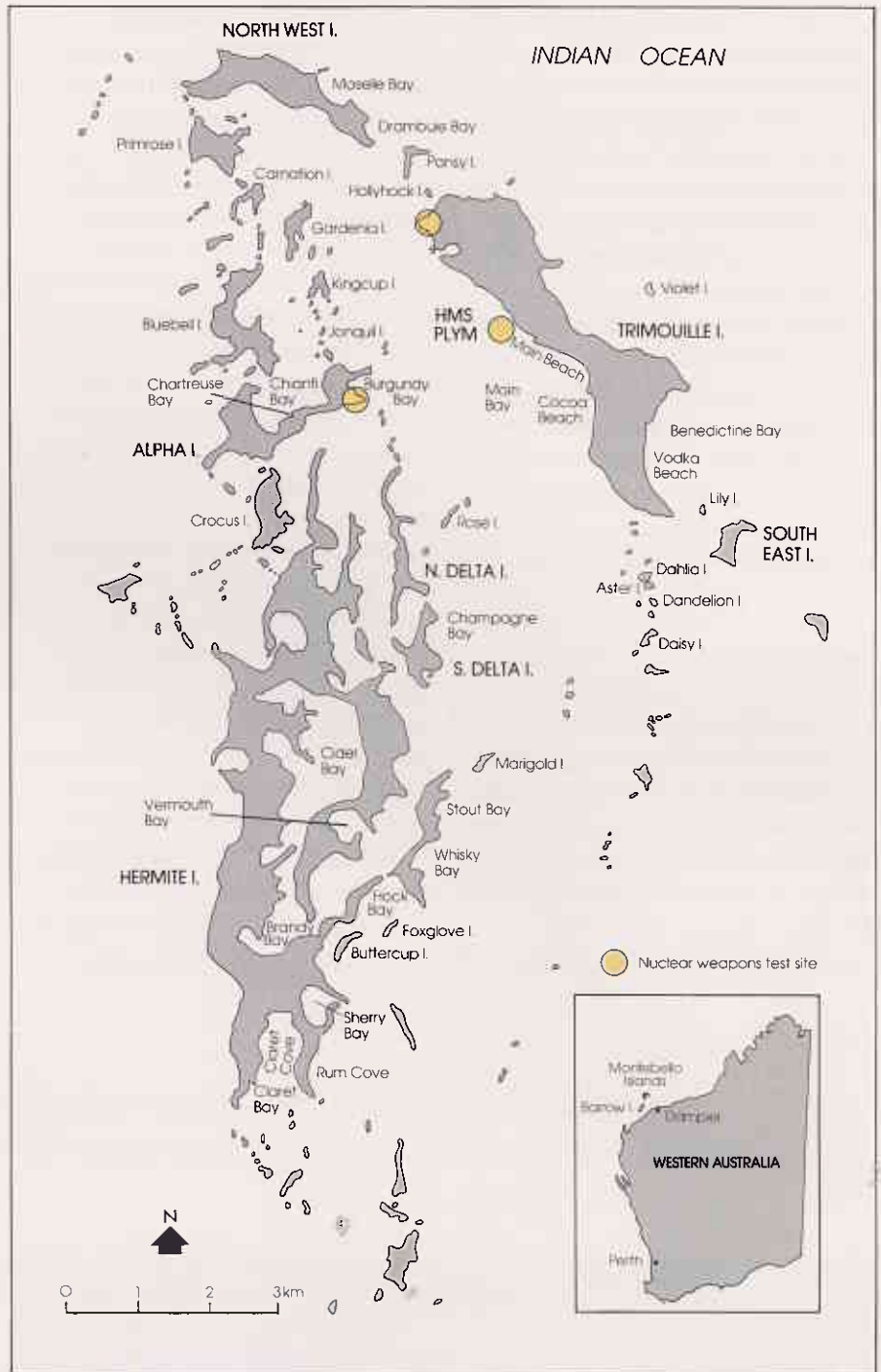
The survivors of the Tryal spent seven days on the islands before setting forth for the West Indies. What a godforsaken place it must have seemed to them.



work among the young ones.' His prophecy was depressingly accurate.

One of the most notable characters among the pearlers was Thomas Haynes, who held a pearling licence for the Montebellos from 1902-1913. Evidence of his pioneering experiments in raising pearl oysters can still be found on Hermite Island. There is an inscription in cement 'The Montebello Experimental Shell Pool, Constructed 1906. Continued 20 Sept. 1981 by R.P. Morgan and Crew.' Haynes also left other evidence of his presence, which the W.A. Museum picked up on a recent survey. These include bottles of tonic (apparently a necessity because of the poor diet imposed by the remoteness) and a bottle bearing the proud legend *Swan Brewing Co.* Some things don't change much with time! Haynes left Hermite in 1909, after a willie-willie completely destroyed his house and damaged his oyster enclosure.

An even less successful enterprise was described by Montague: 'When Hawksbill Turtles were abundant on the islands in the north of the group, Malays were stationed on the various islands to watch the sandy shores during breeding season, and an attempt was made by a storekeeper at Onslow to ship green turtle, alive or canned, and a small canning factory was established. This, however, came to nothing, and the project proved a financial failure.' Turtles continued to be taken commercially until 1973, when concern at the decline of the green turtle led to the licences being cancelled.



The Montebello Islands, showing the nuclear test sites (top right).

North-west Island (left).

The wall of Thomas Haynes' shell pool (right).

A dramatic attempt at feral animal control was made in 1952, when the British joined the exclusive nuclear club by detonating the first atomic weapon on H.M.S. Plym, moored in Main Bay, close to Trimouille Island. Further atomic bombs were exploded on Trimouille and Alpha Islands. Many relics remain. No doubt the British were satisfied that they achieved the real objectives of their experiments. As a means of controlling feral animals, however, it proved a dismal failure, demonstrating merely the resilience of the cat and the black rat. And, for that matter, most of the other flora and fauna.

Regular monitoring of radiation levels shows that, with the exception of ground zero sites (the exact places the bombs were detonated), radiation has dropped below levels considered dangerous to public health. A good thing, seeing the increasing population of the Pilbara has taken the place to heart as a recreation site. Recently, cruising

yachts and commercial charter vessels have begun to visit the islands. Public access is controlled by the Navy, and approval must be gained prior to visiting the islands. Public access is still prohibited to some areas near the atomic test sites.

The Montebellos are among the State's most distant continental islands, and, despite the introduction of exotic mammals and disturbance from atomic weapons testing, the islands and their surrounding waters still support a diverse and interesting array of terrestrial and marine fauna. Fortunately, there were biological surveys of land fauna made prior to the introduction of the cat and the black rat, and both before and after the atomic explosions. The Golden Bandicoot disappeared from Hermite Island prior to 1912, and the Spectacled Hare-wallaby disappeared between 1912 and 1950. Both of these marsupials are still common on nearby Barrow Island, and their extinction

on Hermite is probably due to the feral cat. Some bird species, such as the Crimson Chat and Rufous Whistler also disappeared prior to the atomic explosions, and again the cat and rat are likely culprits. These species are nomadic, however, and their sighting in 1912, and subsequent disappearance, may only reflect their natural patterns. The Spinifex Bird and the Black and White Wren were last recorded on the Montebellos in 1950, and it is likely that the extensive fire that followed the atomic explosions, together with predators, rendered the area unsuitable for these predominantly grassland birds. Burrowing fauna, such as the reptiles (and rats!) that were underground at the time of the testing were able to avoid its effects, and these species persist on the islands today. Many of the bird species would have been able to recolonise from undisturbed areas of the Montebellos and Barrow Island. When Serventy and Marshall visited Trimouille Island in 1958, two years

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after the last test, they commented that many plants had recolonised the burnt area, lizards were near the test sites, and turtles were on nearby beaches: 'Apart from the damaged blockhouses or pillboxes on the site, it would be difficult to imagine that an atomic explosion had taken place in the vicinity'. The islands now support over 100 species of plants, including one of the State's most distant mangrove stands. Several species of seabird, and at least two species of marine turtle nest on the islands, and one species of legless lizard, *Aprasia rostrata*, is known only from Hermite Island.

The marine environment also appears to have fully recovered from any damage it may have sustained. One of the major attractions of the Montebellos is their diverse marine life. At least 200 species of inshore mollusc are known and the waters provide habitat for relatively protected breeding populations, which act as reservoirs for the

Pilbara coast. A range of undisturbed coral groups, and a vast array of reef fish and crustaceans also call the Montebellos home.

Since the atomic testing, the Montebellos have been controlled by the Commonwealth Government, and public access has been restricted. Because of the increasing appeal of marine recreation, and the decrease in radiation levels, the State is seeking to regain control of the islands.

The Department of Conservation and Land Management has prepared guidelines for managing the islands and surrounding waters as a marine park. These highlight the islands' conservation, recreation and historical values. Once the State has resumed control, a detailed management plan will be prepared identifying zonings based on a detailed knowledge of both the marine and terrestrial environments, and an understanding of the land-use capability.

Day trips and camping on some beaches for short periods will probably be allowed. Obviously, there would be no public access to ground zero sites, where the radiation is still relatively high. Seabird and turtle nesting sites will also have to be protected. There may be some zones for recreational fishing, but commercial fishing will be controlled in any marine park. Shelling would probably also be prohibited because the islands are an important haven for mollusc breeding populations.

Other potential actions include the eradication of the feral cat and black rat, and the re-introduction of the Golden Bandicoot and the Spectacled Hare-wallaby to Hermite Island from Barrow Island. There may also be some work on the historic pearling sites. Relics from the atomic testing period will be left as they are: there are some parts of the past which cannot be undone.

Keith Morris/Liana Christensen/Tony Start

Relics from the atomic testing period will be left as they are: there are some parts of the past which cannot be undone.

Green Turtle (far left).
Olive sea snake (left).
Osprey (below left).
Spectacled Hare-wallaby on Barrow Island. This species may be re-introduced to the Montebellos (below).
Concrete bunker on Trimouille Island (right).



R. Logsdon/WAPEC



A. Start

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EDITORIAL

Anybody who reads tourist brochures in this State will appreciate that the tourist industry is, to a large extent, dependent on natural features and wildlife for its 'product'. Many people who are concerned with the natural environment are antagonistic to tourism, and it is certainly true that in the past there have been some insensitive tourist developments in the State. But, just as the farming community over the past ten years has become one of the greatest allies of conservation, so, increasingly, is the tourist industry. For example, in a recently published tourist industry report on tourism in the Kimberley, the need to preserve this environment was given top priority.

This report is indicative of the growing awareness in that industry of the symbiotic relationship between tourism and the protection and maintenance of our unique flora, fauna and landscapes. Rather than being despoilers, the tourist industry has the potential to become one of the strongest advocates for conservation in the broadest sense.

There is a great potential for synergism between those interested in the science of conservation and the tourist industry. One of the ways by which the tourist potential of any natural area can be enhanced without any cost to the environment is by providing information to the visitors on the natural science that makes that area special.

Landscape is one avenue by which we are attempting to provide an added dimension to the 'look it's lovely' tourist experience. Interestingly, while *Landscape* receives almost universal acclaim from the general public, there is ongoing, often vigorous, internal debate about how technical we should make the magazine. We would appreciate your views.



Shark Bay, p.8



Carving the Future, p.33



Garden Escapes, p.44

Cover Photo

'Now, just how do I find my way out of this Renoir landscape?'
Photographer **Richard Woldendorp** captured this lizard taking a sighting.