

MONTEBELLO RENEWAL, A WESTERN SHIELD PROJECT



VOLUNTEER INFORMATION SHEET No. 1

Montebello Renewal is a project designed to rid the Montebello Islands Conservation Park of feral animals and re-introduce locally extinct species. *Montebello Renewal* is part of "Western Shield", a major initiative by the Department of Conservation and Land Management (CALM) to control feral animals and re-introduce threatened species to parts of their former ranges. "Montebello Renewal" is being carried out by CALM through its WA Threatened Species and Communities Unit and Pilbara Region.

The Montebello Islands have suffered considerable abuse by humans. Feral Cats and Black Rats were introduced about 100 years ago, probably from shipwrecks or careening pearling vessels. Their introduction caused the local extinction of at least four native animals — the Spectacled Hare-wallaby (*Lagorchestes conspicillatus*), Golden Bandicoot (*Isoodon auratus*), Black-and-white Fairy-wren (*Malurus leucopterus leucopterus*) and Spinifex-bird (*Eremiornis carter*).

Then, in the 1950s, the islands were used by the British as a site for testing atomic weapons. During Operation Hurricane, in 1952, a nuclear device was exploded below the waterline in a Royal Navy Frigate, HMS *Plym*, off Main Beach at Trimouille Island. Two further weapons were exploded on 30 m towers in 1956, one at Gladstone Point on Trimouille Island, and another near Burgundy Bay on Alpha Island; this series of tests was code-named Operation Mosaic. During these tests, the islands were occupied by military forces and many tonnes of equipment were left lying around to rust when the nuclear weapons testing program shifted to Maralinga.

Until July 1992, the islands were officially a Prohibited Area under Commonwealth legislation. This did not, however, stop numerous visits, including some biological survey work; it merely prevented anyone suing the Commonwealth for damages if they believed they had been injured or become sick as a result of the nuclear weapons program!

The islands were returned to Western Australian control and declared a Conservation Park in 1992. They are vested in the National Parks and Nature Conservation Authority and managed by CALM. A cultured pearl farm is located in sheltered waters within the archipelago and there is increasing use by tourists, especially for fishing expeditions.

Montebello Renewal is planned in three phases.

Phase 1 will involve rat eradication. Phase 2 will be the eradication of feral cats and Phase 3 will be the re-introduction of locally extinct mammals and birds. Trimouille Island may also be used for the introduction of species that are highly threatened on mainland Australia, eg, the Tanami Desert form of the Mala *Lagorchestes hirsutus*.

Volunteers are being sought to assist with Phase 1. CALM has considerable experience with the eradication of Black Rats on islands in the north-west. The pioneering island eradication was on the 24 ha Bedout Island, off the mouth of the De Grey River, in 1981. Since then rats have been eradicated from Double, Pasco, Boomerang, Boodie and Middle Islands, all near Barrow Island, the southern part of Barrow Island itself, the Lacepede Islands near Broome and Rat Island in the Houtman Abrolhos.

Rat eradication can be achieved with modern anti-coagulants such as Talon, manufactured by ICI and distributed by ICI Crop Care who have provided 3.5 tonnes of pelletised Talon G at reduced cost for this work. Bait stations must be laid in a 50 m or smaller grid over the entire island, re-baited over the following six to seven days and then left for several months before being cleaned up. The main precaution necessary is to prevent native species from taking the baits. On several of the islands where eradication has been achieved in the past, there were no native species that would eat grain or poison pellets. In these cases, the poison bait was laid in plastic bags, which the rats tore open to consume the bait. However, where native species occur that may eat the bait, bait stations must be devised to exclude them. This was done on Barrow Island and some other islands.

Biological surveys have been carried out on all the larger islands in the Montebellos. This work revealed only two species that would take grain or pellets — the Bar-shouldered Dove and the Stubble Quail. A bait station that allows the entry of rats but prevents these birds having access to the poison has been developed for *Montebello Renewal*. These stations were field tested with Talon on East Hermite Island in August 1995. Follow up surveys showed that rats were successfully eradicated with no known bird deaths. The bait stations consist of plastic bottles with holes cut in the sides. ACI Plastics have generously sponsored *Montebello Renewal* by providing 13,000 plastic bottles free of charge.

The only other problem with poisoning rats is that a few birds that eat the dying or dead rats may be affected by secondary poisoning. Experience with similar projects in north-west Australia suggests that the rat eradication may result in the death of a few birds such as Brahminny Kites, and perhaps, Ospreys and White-bellied Sea-Eagles. This secondary poisoning is impossible to prevent. It should be emphasised that past experience suggests that there will be few such deaths and that *Montebello Renewal* will benefit these species in the long run, since eggs and nestlings are predated by both rats and cats.

Black Rats occur on almost every one of the 100 or so islands in the Montebellos. They swim readily between islands, so eradication must take place on all islands in the one operation; otherwise re-invasion will occur. A 50 m grid over all the islands in the Montebellos adds up to between 12 000 and 14 000 bait stations! CALM is unable to carry out this massive job without the assistance of volunteers.

Volunteers are expected to be fit. They will be required to walk up to 12 or 15 km per day, for six days per week, sometimes over fairly rugged terrain, carrying up to 5 to 6 kg of materials. Prospective volunteers who are over 60 years of age must provide a letter from their doctor stating that they are fit enough to withstand the rigours of the trip. We are asking volunteers to sign up for a 15 day period. At any one time, we plan to have five volunteers at the islands, four to walk the gridlines and one to cook and look after logistics at the camp. Over the 12 week operation, we need a total of about 30 volunteers.

Phase 1 of *Montebello Renewal* is programmed to run from early June to late August, 1996. During the first four weeks or so, the more remote islands will be baited and transport to and from the CALM Hurricane Hill base camp on Hermite Island will be by helicopter. Then, islands closer to base will be baited and transport will be by CALM's catamaran *Pseudorca II*.

Perth-based volunteers will travel from Perth to Barrow Island by aircraft, courtesy of sponsorship by WA Petroleum. Transport on to Hermite Island will be by helicopter (sponsored by Apache Energy) or boat. At Hurricane Hill, volunteers will sleep in tents erected near the transportable hut. The hut has 240 v AC power, limited fresh water (cold showers only!), a refrigerator and freezer, and a gas stove and barbecue. Food will be provided and everyone will be expected to help with washing up and other camp jobs. VHF radio allows communication with CALM's Karratha office and there will also be a mobile telephone.

Weather will be warm (maxima around 20 to 28°, minima around 16°). Strong winds are fairly frequent. Rain is unlikely. Sandflies can be a nuisance, especially on still days.

EACH VOLUNTEER NEEDS TO BRING: sleeping bag and pillowslip; strong, comfortable walking boots (not elastic sided since the spinifex penetrates them); strong sneakers for walking on reefs (or thick-soled wet-suit boots); a broad-brimmed hat; personal clothing (need long trousers, long sleeved shirts); a small rucksack; sunglasses; insect repellent, bathers; and a torch and enough batteries to last the trip. **Please note that a luggage weight limit of 10 kg applies.**

CALM WILL PROVIDE: food, accommodation (including tents, mattresses, pillows), salt-water soap and shampoo, sunscreen, water bottle, work gloves, spray jackets, safety gear, gaiters.

MAJOR SPONSORS OF MONTEBELLO RENEWAL:

West Australian Petroleum (WAPET): barge for heavy equipment transport, air transport of staff and volunteers Perth to Barrow Island and Karratha to Barrow Island.

Apache Energy: Fresh food purchasing and transport, helicopter support

ACI Plastics Packaging: plastic bottle bait stations, shrink wrap

ICI Crop Care: discount on Talon G rodenticide.

People wishing to register as a volunteer for Montebello Renewal are asked to fill in the attached slip and return it to: WA Threatened Species and Communities Unit, Department of Conservation and Land Management, PO Box 51, Wanneroo, WA 6065, fax (09) 306 1066.

✂

'MONTEBELLO RENEWAL' VOLUNTEER - EXPRESSION OF INTEREST

Name Date of birth

Address

.....

Telephone Weight, clothes and boots on Kg

Preferred dates at Montebellos to

[note: 15 day periods start and finish on a Monday; period of operation is 10 June to 26 August]

Preferred job (circle one or both) walking islands laying baits cook/camp logistics

Special dietary requirements

Signature date

Mail to: Jill Pryde, WA Threatened Species and Communities Unit, Department of Conservation and Land Management, PO Box 51, Wanneroo, WA 6065 or fax to (09) 306 1066. Enquiries (09) 405 5128, Internet Email jillp@wood.calm.wa.gov.au, CALM Email jillp@wood.sid.