



Monitoring the Montebello and Barrow Islands marine life

By Claire Ross, Research Scientist, Marine Science Program, DBCA

Researchers from the DBCA Marine Science Program and regional staff conducted a trip to the Montebello/Barrow Islands marine conservation reserves in May 2019 as part of a long-term monitoring program to assess the condition of key marine values in the reserve.

They visited 12 sites to survey fish, seagrass, coral and macro-invertebrates using photographic, video and underwater visual survey techniques while scuba diving. Tiles used to measure the number of new 'juvenile' corals were also collected after being in the water for almost four months.

Seawater temperature loggers were successfully retrieved after being deployed at the sites for two years. The long-term measurements of seawater temperature are important for understanding changes in the condition of the coral reefs.



In previous years, repeated exposure to high water temperatures in the region has caused 'bleaching' of corals which can lead to coral death. As a result, coral cover has declined by as much as 95% in some localised areas, which has flow-on effects for many of the animals that live on the reef.

The Montebello/Barrow Islands Marine Conservation Reserves incorporate a large range of habitats, which together support a high diversity of marine life. The reserves are home to an estimated 457 species of fish, 150 species of coral, 11 species of seagrass and 850 species of invertebrates.

Surveys for fish, coral, seagrass and invertebrates will be conducted again in 1 to 2 years as part of the long-term



and understand drivers of change.

This knowledge will inform future management and conservation. Regional staff returned to the monitoring sites to redeploy coral tiles for the fifth consecutive year this February, which will provide important information about the potential for coral reef recovery.

Photos - Claire Ross/DBCA

Decommissioning of the Hermite Island Field Station

By Parks and Wildlife Service, Karratha

The Montebello Islands were under Commonwealth control until 1992, when they were returned to the State of Western Australia and were declared a conservation park. In 1993 the 'Montebello Renewal' project was established under the department's *Western Shield* wildlife recovery program, with the aim to rid the Montebello Islands Conservation Park of exotic mammals (black rats and feral cats) and reintroduce and introduce native mammal species.

'Montebello Renewal' was a joint project between the then Department of Conservation and Land Management's (CALM) Threatened Species and Communities Unit and the Pilbara Region. To facilitate this project, the Hermite Island Field Station was established, which included a transportable donga, two sea containers, water tanks, toilet/shower and desalination, and became a home away from home for teams involved in the project.

In the early days of the project, the station became known as 'HHH' or 'Hurricane Hill Hut'. 'Hurricane' referenced the name of the first nuclear weapons test in 1952, and being located on top of a dune meant it got every wind that blew.

In 1996 Cyclone Olivia bore down on Barrow Island, recording wind gusts of up to 408 km/h (235 mph), which are to this this day still the highest recorded anywhere in the world. The camp on Barrow was apparently destroyed, neighbouring Varanus Island was evacuated, and the HHH had both end walls ripped off, part of the roof ripped off, and furniture scattered all around the place. The HHH essentially had to be rebuilt before the major part of the cat and rat eradication program got underway in 1996.



Above: HHH (aka the Hermite Island Field Station) in 1995. Photo - Andrew Burbidge/DBCA