

Darwin Harbour and Marine Safety Bulletin

Issue 10

Surveying Fish and Crabs in Darwin Harbour

A hard day's fishing is a good day's work every time for a team of Cardno research anglers surveying fish and crabs in Darwin Harbour.



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Led by environmental scientist Lachlan Barnes, the Cardno team has been fishing at multiple sites within four larger areas in and around Darwin Harbour since August.

With guidance on local fishing spots and techniques from NT Fisheries, researchers use a conventional rod and reel baited with squid to catch what any other angler hopes to catch in the harbour.

The team also put out 20 crab pots each research angling day to catch species such as mud and sand crabs as part of the research to gather good baseline data on the current health of fish and crabs.

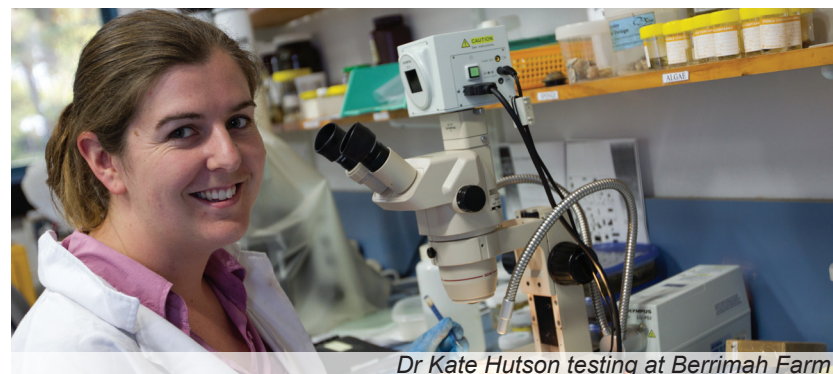
Data collected as part the survey will provide information on the health of fish and crab species in and around Darwin Harbour to measure against any potential effects from dredging in the harbour.

The research anglers have several targets to reach for specific fish species, including Golden Snapper, Stripey Snapper, Estuary Cod, Rock Cod, Grass Emperor and Blue Tuskfish.

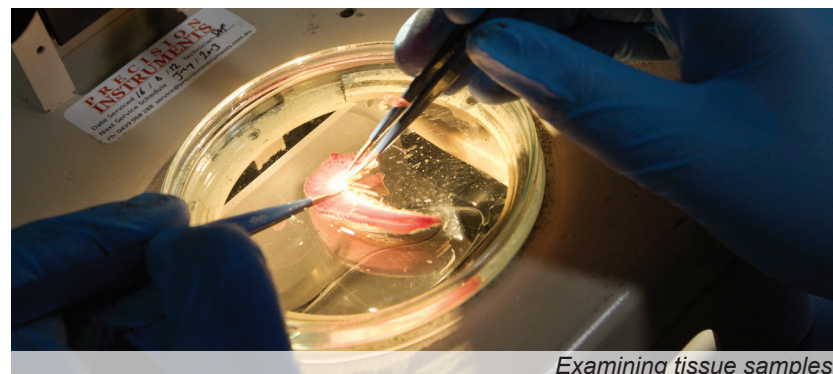
The researchers visually assess the health of their catch, take measurements and most are returned to the water quickly. They keep a certain number of samples for further testing at the NT Fisheries laboratory at Berrimah Farm.

At the laboratory, an internal and external examination of the catch records the presence of any parasites such as sea lice, worms and barnacles while tissue samples are taken of the spleen, kidney, gills, liver and muscle for histology and toxicology testing.

The research program also includes surveys of recreational fishermen at Darwin boat ramps and was designed in consultation with the Amateur Fishermen's Association of the Northern Territory (AFANT).



Dr Kate Hutson testing at Berrimah Farm



Examining tissue samples

Dredging Update

- The second backhoe dredger (*Baldur*) will start work soon off Blaydin Point.
- A third dredger (*Simson*) arrived from Singapore this week.
- Only two backhoe dredgers will work at any one time.
- There are now about 10 vessels in the dredging fleet, including the dredgers, dredge spoil barges, tugs and survey vessels.
- Plumes are continuously monitored. Depending on the tidal cycles it appears the plumes are behaving as expected for backhoe dredge operations, extending up to a kilometre on spring tides.
- All heritage diving work is scheduled to be finished by the end of October.