



# KIMBERLEY MARINE

RESEARCH STATION • CYGNET BAY

## January - February

## 2012

### What's been happening at KMRS in 2012?



#### New Year flooding at Cygnet Bay

It has been a wet start to the year at Cygnet Bay with 907mm of rain falling during January 2012, making it the wettest month on record since the weather station was launched in 1963. At nearby Cape Leveque, with 978mm of rain, it was the wettest January since records started there in 1917. A massive 750mm of rain fell from January 26-30 at Cygnet Bay, just short of the average total annual rainfall in only 5 days! With major flooding causing havoc throughout the farm, we are proud of our team on-the-ground who put in a champion effort working around the clock for a week to minimise the damage to infrastructure as water levels continued to rise. (Photos top L-R: boatshed access cut off by flood water; run-off through erosion gully onto front beach at high tide; flooding in camp x2; erosion gully at front beach. Inset: torrents of water flood the main driveway into camp).



#### February 17-19: JCU Researcher Dr Peter Wood visits KMRS

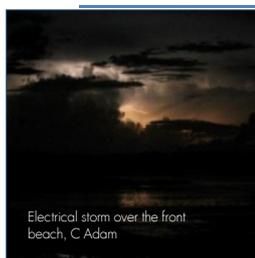
Dr Peter Wood from James Cook University in Cairns, QLD visited KMRS briefly whilst working in the area. Dr Wood specialises in marine research tourism, research commercialisation and Geographic Information Systems (GIS).

It was a great weekend with time spent on the water as well as productive discussions on many aspects of Cygnet Bay's research and tourism ventures. KMRS would like to extend our thanks to Peter for taking the time to visit us and share his wealth of knowledge and expertise with us!



Reef fish at Shenton Bluff

### What's been happening in the water lately?



Electrical storm over the front beach, C Adam

Wet season storms have been directly influencing underwater conditions over the past 2 months with sediment from mainland floods now being observed building up as far as 7km offshore. Water temperatures have recently been logged both in the water column and on the benthos at 30-31.5°C throughout the vicinity of KMRS. Significant fluctuations in local water temperature have been correlated with tropical low pressure weather systems during



Shenton Bluff reef



December and January. Water temperatures have been observed dropping by up to 2°C over 5 days (3°C during the 2<sup>nd</sup> half of Jan) in response to the onset of these weather systems. Closer to base, spawn was observed in the water in inshore areas at Cygnet Bay in early Feb. With corals due to spawn shortly, we are anticipating further peaks in all spawning activity during the next 2 months.



Brown booby at Cygnet Bay

Floats and buoys throughout the area have also become rest spots for increased numbers of brown boobies (*Sula leucogaster*) visiting the Bay. These large seabirds put on impressive diving displays plunging into bait balls and schools of tuna. Also of interest, both bottlenose and Indo-pacific humpback dolphin species have been observed together in a common pod in February, curiously observing divers in the water.



## Photo of the month

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Mudskipper trio  
(*Periophthalmus  
argentilineatus*)  
J Chaffey  
Cygnet Bay  
13.02.12

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### What's ahead at KMRS?

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March 2012 – PhD candidate Sana Dandan from the UWA Ocean's Institute will be returning to KMRS for the 4<sup>th</sup> time to continue her studies on coral growth and metabolism.

March 2012 – a coral spawning event is predicted to occur in mid-March throughout the region with a second event predicted to occur in mid April.

March 2012 – King tides are coming up during March with higher than average tidal amplitudes to be seen along the Kimberley coastline.

April 2012 – Murdoch University PhD candidate Alex Brown will be visiting KMRS for a month to begin studies on local near-shore dolphin species. This will be the first of 2 month-long trips to the station for Alex's team in 2012.

The Science Network WA has recently launched their new website including a brand new Kimberley Science Portal full of the latest info on science in the Kimberley. Check it out at [www.snwa.net.au](http://www.snwa.net.au).

For the latest news and happenings at KMRS and along the Kimberley coast, please follow our online news feed [www.kmrs.com.au](http://www.kmrs.com.au)



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☎ +61 8 9192 4999 ☎ +61 8 9192 4810

✉ [research@cygnetbaypearls.com.au](mailto:research@cygnetbaypearls.com.au)

[www.kmrs.com.au](http://www.kmrs.com.au)

