



KIMBERLEY MARINE

RESEARCH STATION • CYGNET BAY

MARCH 2015

Spawning season at KMRS

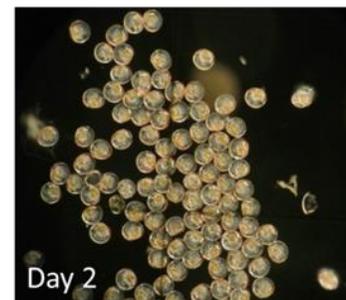
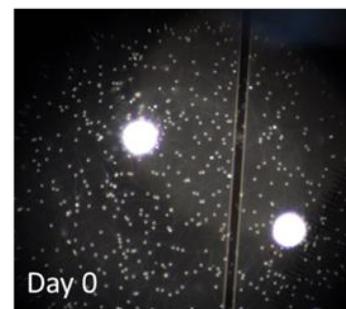
The wet season is often a quiet time at KMRS, as the weather restricts research activity. This year was no different, with the last group of researchers leaving in October, and the next group not arriving until April. Life in the hatchery remains busy however, with two new interns and spawning season in full swing.



Coming up to the March full moon the oysters in the waters of Cygnet Bay are developing sperm and eggs in their reproductive organs (gonads). Despite often stormy conditions, the pearlery and interns have selected broodstock and begun spawning. The best female and male oysters were cleaned and paired in separate compartments in order to induce a controlled spawning.



The photo above right shows a pair of oysters spawning, with millions of egg and sperm cells being released into the water of the compartment. To the right we can see the sequence of development from a zygote (fertilised egg cell) to little larvae in D state until the fully developed larvae on the third day under the microscope. The juvenile oysters are very vulnerable to disturbances in the first few weeks, so it is essential to maintain a clean and stable environment. By day 14 they should start to settle onto substrate and become a more resilient spat.



The latest KMRS Interns Vince and Natalie



Hi I'm Vince, the second intern at KMRS. I recently finished studying a BSc in Marine Science at Murdoch University, and I'm stoked to have this opportunity to learn about pearl farming and experience the Kimberley. Most of my day is spent in the hatchery and algae lab, learning about the pearl-oyster (*Pinctada maxima*) spawning process and growing the algae used to feed the juveniles.

I spend most afternoons out on the kayak, fishing around the rocks and mangroves for cod, trevally, coral trout, bluebone, spanish flag... and whatever else comes along. Then on the weekends it's usually a day out with the boys to do some spearfishing. The diversity up here is amazing, and needless to say it's a huge difference to the diving in Perth that I'm used to!

My name is Natalie and I am the new addition to the hatchery and lab crew at the KMRS for March. Coming from Germany, I finished a BSc in Marine Science at UWA in Perth. I came to Broome in order to get more field experience in and around the ocean. I am very enthusiastic about my work as an intern at KMRS in Cygnet Bay. Vince and I work together and I get to learn all procedures and techniques around the algae laboratory and the hatchery. This month I am here to help and support the controlled spawning in the hatchery to make new little oysters. The spawning is the most important event in the early days of March and hopefully leads to an increase in pearl oysters for the future years. This process is incredibly interesting and it is great to see how life develops almost literally in front of your eyes under the microscope every day.



Wet season in the Kimberley

There are a few things about the Kimberley that really stand out: the weather (including the heat!), the wildlife and the scenery. When out on the water it pays to keep a close eye on the horizon for brewing storms. The photo to the right shows a frontal system, which can develop very quickly, and usually brings strong winds and lots of rain. The other day while out selecting brood stock we got caught in a thunderstorm and had to sit it out on the cleaning boat with lightning all around us.



Life around Cygnet Bay

The lifestyle up here is pretty special, whether it's chilling out with a beer and having a swim out the front, having a barbecue while watching the sunset, or setting out for a day of fishing and diving. Getting up early means we are treated to a stunning sunrise almost every day, and when we have spare time we're right on the doorstep of the last great tropical marine wilderness on earth; a dream come true for anyone who loves the water! It's a very laid-back and friendly place, and you get to know everyone pretty quickly.

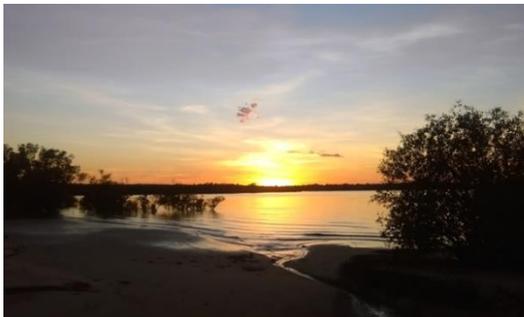


Photo of the month

March 2015



An Osprey chasing a White Bellied Sea Eagle (*Haliaeetus leucogaster*) that stole its prey.
By Natalie Prinz



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