

# KIMBERLEY MARINE

RESEARCH STATION ● CYGNET BAY

# SEPTEMBER- OCTOBER 2017



# News from the Research Station

James McLaughlin and Jim Greenwood from CSIRO visited Cygnet Bay in early September, to share their findings after many years of researching the Kimberley marine environment around the Sunday Island group (at the tip of the Dampier Peninsula). It was a great initiative to give back to the local community; people who can use and directly benefit from their research. The presentation highlighted the importance of the 'small stuff' - the seagrass, algae and bacterial communities that underpin the whole marine environment.



James from CSIRO presenting



Our diver, Uli, dropping the oyster panels after seeding

#### **First Operations and Pearl Harvest**

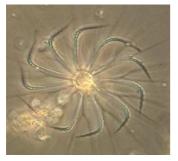
It's been a busy couple of months in the hatchery, wrapping up the 2017 pearl harvest in early September, and continuing with first operations in October. Currently our pearl technicians are performing first operations on Cygnet Bay's own hatchery shell. This is extremely delicate work where young shell (2/3 years old) are seeded for the first time. The interns have been taking shell height measurements from the different family groups. We now play the waiting game for the next 2 years to see how they fair!

## Other research from the interns

**Coral Recruitment Project:** KMRS interns have collected multi-tile recruitment frames used previously by WAMSI. The frames provide an opportunity to broaden ongoing coral transect monitoring to assess the recruitment of juvenile coral polyps. This will help increase the scope of reef health evaluations here at KMRS. KMRS will use the frames to target different subtidal and intertidal coral populations at Cygnet Bay over the peak spawning period (March/April) next year.



Coral recruitment frames collected from Sunday Island.



Phytoplankton: As part of the monthly water sampling, interns collect water samples from three sites in Cygnet Bay. Back in the lab the samples are fixed, syphoned, and inspected under a microscope to identify phytoplankton diversity and abundance. With the help of James McLaughlin from CSIRO, interns were able to improve the syphoning procedure and learn some useful tips in phytoplankton ID.

Bacteriastrum spp.

Rock Oyster Projects: KMRS is all about oysters these days, with three different rock oyster projects on the go. The interns have been busy collecting monthly data for the KMRS monitoring project (now 2 years in); and for UWA Masters students Ash and Andy. Some spat (juvenile oysters) have been recorded in Ash's quadrats, and Andy's oyster spat recruitment tiles have been holding up well in the elements. It will be really interesting to see what results they find over the next few months as the onset of the wet season typically marks the start of the rock oyster spawning period.



A beautiful morning counting rock oysters

#### Around the Farm

**Shell Delivery in testing conditions:** Fresh shell from 80-mile beach arrived at the start of the month. Delivery day was a rough and windy one, but the pearling crew and interns toughed it out. The interns were responsible for sampling, taking measurements, and making general health assessments of the incoming oysters.

Harvest Party! The Harvest Party in late September celebrated the end of another successful pearl harvest. The party brought together locals, tourists and staff for a good night of food, prizes and live music. In the days leading up, the interns helped out in the hatchery with a huge pearl meat harvest which everyone thoroughly enjoyed eating on the night.



All smiles as the final load of harvested shell heads back out.

**The Wet is coming...** The days are warming up, the crowds are winding down and the first rain bets have been placed. The wet season usually runs from November through to March. The days have been just beautiful lately and the shoulder-season travellers have been in for a real treat.

### **Staff News**

In September KMRS hosted two work experience students, Dylon and Andy. It was great to see their enthusiasm for marine science and everyone enjoyed having them on board.

#### Welcome our newest intern Cherie

Cherie will be joining the KMRS team in early November. She graduated with first class Honours in Environmental Science and Management at the University of Newcastle. After finishing a six month New Colombo Plan internship researching coral reef ecology and small-scale mariculture projects in Indonesia, Cherie has realised that she wishes to specialize in aquaculture. She is really looking forward to learning the foundations of aquaculture with KMRS, and embracing the Kimberley lifestyle.

#### **Farwell Maddie**

Goodbye and good luck to our previous intern Maddie. Maddie really enjoyed her time in Cygnet Bay and we wish her all the best with her next endeavors.

If being an intern at KMRS sounds like something you would love to do, email your resume and cover letter to <a href="mailto:research@cygnetbaypearls.com.au">research@cygnetbaypearls.com.au</a>. Next internship positions will start in January.

