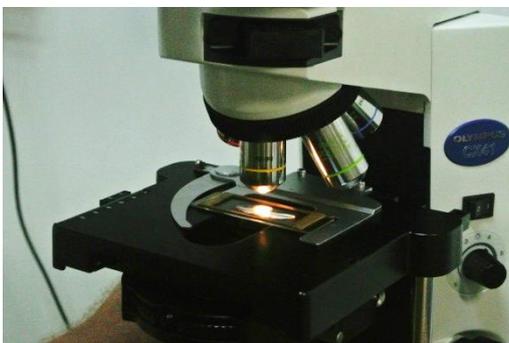
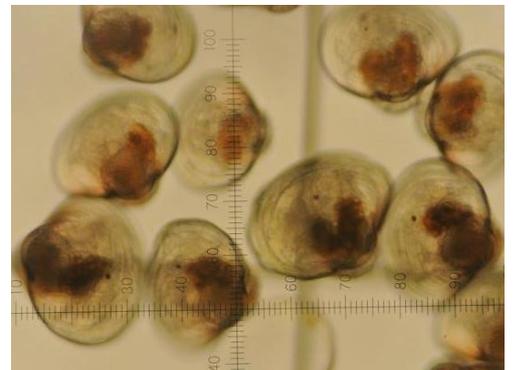




Spat Development

April is a very busy month at KMRS. It is the beginning of the dry season, meaning an increase in research activity and tourism around the pearl farm. KMRS is busy looking after the larvae that have developed and grown in good condition over the past month. The images on the right show the spat on day 16, where they develop a 'red spot' in the centre of the body. Approximately 3 days after, a fully functional 'foot' is visible under the microscope. The larvae move and attach on to a suitable substrate, in this case the rope grids in the tanks using their 'foot'. This usually occurs between 15 and 20 days after fertilisation and is called the pediveliger stage. The last image shows the spat with the foot and a change in their shape becomes visible. Once they reach the correct size they will be deployed on the pearling lines out in the Cygnet Bay waters. It is estimated this will happen at the beginning of May and we will report the deployment in the newsletter next month.



Spat under the microscope

What's new with the Interns

We would like to thank Vincent for his effort and help throughout the past 3 months where he has been a great addition to the KMRS lab and hatchery. We appreciate his work and hope to see him again soon. While Natalie is still here, we welcome a new Intern Kate.



Hi everyone, I am really excited to be here and am not only looking forward to learning about working in a hatchery and lab environment but also in the overall processes of a pearl farm. I am really grateful for the opportunity to be part of the team at Cygnet Bay and have already learnt so much in the short amount of time I have been here. Everyone around camp is really friendly and the food is delicious.

I graduated from UWA in 2011 with a Honours degree in Marine Science. Since graduating, I worked for a year doing a range of jobs, from Environmental Consulting to working as a tour guide at Ocean Park Aquarium in Shark Bay WA. After saving for a year I travelled around Europe and Asia, stopping to work in

England whenever my bank account needed replenishing. I returned to Australia 6 weeks ago and am now eager to re-immers myself in science and research. I have also started gaining some boating qualifications since returning home and am really keen to get as much experience on the water as I can.



Getting to know all areas of the pearling process makes the internship very interesting. We are lucky to learn about the entire life cycle, from spawning, to growing the algae on which the oysters feed, through to treatment in the panels and the seeding method which is necessary in the production of a pearls.

We were able to jump onto the boat earlier this week and were lucky enough to have a dolphin circling around the lines of the pearl farm (picture on the left). Seeing wildlife such as turtles, seabirds, sharks and big fish is not a rarity in the waters of Cygnet Bay.



Research at KMRS

On the 23rd of March we welcomed our first research group at the KMRS. The team of researchers were from the Australian Institute of Marine Science, the Western Australian Museum, the Department of Parks and Wildlife as well as Fisheries. The team was looking at fish recruitment, in other words, the abundance and diversity of young fish. The project runs under a WAMSI project with the aim of assessing different methods of field work for developing the best methodology to investigate fish recruitment in the Kimberley. One day we were allowed to get an insight in their work and we joined the very friendly and humorous team to the intertidal rock pools on Sunday Island. We were accompanied by a Bardi Ranger and the good weather conditions made the day very special. The photo below shows the researchers doing an optical observation of an intertidal rock pool. These pools remain full of water during tidal intervals and offer an ideal habitat for fish recruits.



We had another group of scientists arrive on site on Monday the 13th April. The research campaign was led by the Bardi Jawi Rangers and Dr Mat Vanderklift from CSIRO, with help from Dr Tony Tucker from the Department of Parks and Wildlife. The main focus over the first few days was tagging turtles to understand their movements and to help quantify populations in this part of the Kimberley. In addition, Dr Adriana Verges from UNSW, is working on characterising the fish community associated with seagrass meadows. The Bardi Jawi rangers also organised outreach School holiday activities for kids this week. A different group of school children joined the rangers and scientists every day, and they helped to tag and release the turtles.



Green sea turtle with tag in place (left) and Bardi Jawi Rangers at work tagging (right)

Photo's of the Month

We have recently encountered a few snakes around the farm. One particular morning, all attention was focused on an Olive Python (*Liasis olivaceus*). The snake had worked hard and caught a bat and we were spectators of the struggle for the snake to swallow its prey.



Olive Python beginning to swallow a bat.

Photo: Kate Hickey



Olive python after consuming its breakfast.

Photo: Jiyeon Son



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