

Seabirds:

1. Gentoo penguins finished crèche formation this week. Of our gentoo penguin reproduction plots, 76% of the nests had chicks that crèched and 24% have failed. To date 17% of the chinstrap penguin reproduction study nests have crèched, 45% have at least one chick, and 38% have failed.
2. We continue to monitor known-age penguins. All of the 35 known-age gentoo penguins have finished crèche formation, 54% have crèched and 46% have failed. Of the known-age chinstraps that have initiated clutches, 35% have at least one chick, 14% have crèched, and 51% have failed.
3. To date, we have collected 30 diet samples from chinstrap penguins and 20 from gentoo penguins. Chinstrap penguin diet samples have consisted almost entirely of Antarctic krill (*Euphausia superba*) with trace amounts of fish. Gentoo penguin diet samples were a mix of Antarctic krill and fish with three octopuses found. To date, average krill length for chinstraps is 40.9 mm and average krill length for gentoos is 45.2 mm with the diet samples consisting of 29% females, 48% males, and 23% juveniles.
4. On 25 January we deployed one TDR and six PTTs on gentoo penguins that have chicks that have crèched. We will retrieve these instruments one week from their respective deployment dates.
5. On 29 January a chinstrap that was banded here as a chick last year was seen on King George Island at Frei Base.
6. Of the pairs of brown skuas that we are monitoring, six nests have failed and 13 pairs have one or two chicks.

Pinnipeds:

7. We have recovered eleven TDRs; six of those were GPS/time depth recorder (GPS-TDR) instruments that were monitoring foraging locations since mid-December. We currently have five GPS-TDR out on attendance females. This is the second GPS-TDR recovered. The first has been re-deployed.
8. We have retrieved five of our six Mark 9 time depth recorders deployed on female fur seals. They were removed from females that had lost their pups.
9. Daily tag re-sights continued this week. We have re-sighted 95 fur seals tagged as pups in previous years. This is 13% higher than for the same time last year. We have seen six yearlings, four two-year-olds and three three-year-old seals. The three most represented year classes in our tag returns continue to be 1999, 2001, and 2006.
10. Fur seal diet sampling continued this week with the collection of ten more scats, bringing our total to 70. All scats have been predominantly krill.
11. We have tagged 11 leopard seals this year so far. We have also re-sighted 25 from previous years bringing the total tagged leopards sighted this year to 36.
12. As of today we have captured and instrumented three adult female leopard seals with TDRs and radio transmitters. This will give important information on their dive behavior and movements around the Cape.



Weather:

13. Fog! It has been exceptionally foggy this week. We had a high of 5.4°C and a low of 0.2 °C this week. The average temperature was 1.8°C (based on measuring temperature every 15 minutes). Mean wind speed for the week was 11.7 mph and the max. gust was 39.0 mph. Westerlies dominated the winds most of the week.

Camp:

14. We have been doing some gross necropsies on recently dead Antarctic fur seal pups to collect samples for further investigation of the cause of pup mortality.
 15. So far we have captured three leopard seals and deployed a TDR (time depth recorder) and a radio transmitter on each. The new drug protocol for the anesthesia seems to work really well. We have been able to safely sedate the animals and maintain them sedated for all the instrument deploying, sampling and weighing. The monitoring during the anesthesia revealed that the animals are responding really well to the drugs, which keeps them in a status of sedation and maintains good respiration and heart rates. The ability to use an antidote to reverse the drugs allows a quick and safe recovery.
 16. We are now working on getting our new light sensor tags (Nano-LATs) ready to be deployed overwinter on adult female Antarctic fur seals.
 17. We are all really glad to hear that our support vessel, the R/V *Moana Wave*, is now back on track after some repairs that needed to be done on one of the rudders.
 18. This week the weather has been mainly rainy but spirits remain high in spite of the challenging weather.
 19. All is going well with our neighbor, the “quadcopter” team. It is a pleasure to have them here, and we are enjoying our big dinners together. They actually brought new delicious recipes to our table!
- They have been also really helpful, by looking at our electric system and improving it. It will be sad to see them leaving on 6 February, when they will be picked up by the vessel.
-

Submitted by AMLR staff currently residing at the Cape Shirreff field station, Livingston Island.

