

Seabirds:

1. Chick hatching is nearly complete for both our chinstrap and gentoo reproductive study nests. The failure rate of the gentoo reproductive study nests has gone up since last week to 22%. In the chinstrap penguin reproductive study, 75% of nests have chicks, 4% still have eggs, and 21% have failed.
2. Among the known-age chinstrap penguins, 63% have one or two chicks, 5% are still incubating eggs and 32% have failed. This week the failure rate of known-age gentoo penguin nests increased from 27% to 35%.
3. We began weighing gentoo chicks in all reproductive study and known-aged breeder nests on 2 January. The mass, taken when chicks are 21 days old, is used as a measure of chick condition before they crèche.
4. On 28 December we deployed radio transmitters on 19 breeding gentoos to measure foraging trip durations during the chick-provisioning period. We also deployed radio transmitters on 20 breeding chinstraps on 2 January.
5. We deployed six satellite transmitters and three Time Depth Recorders (TDRs) on gentoo penguins that were brooding chicks on 29 December. The satellite transmitters will be used to determine where the penguins forage and the time-depth recorders give profiles of diving behavior. We will recover these instruments after one week of deployment.
6. The first brown skua chick was seen on 30 December. Currently, three pairs have failed, four pairs have chicks and twelve pairs are still incubating eggs. None of the pairs that failed late in the incubation period have relayed.
7. The rockhopper penguin that was first observed on 23 December is still being seen daily on our chinstrap penguin colonies. We also sighted a king penguin in the colony between 28 and 31 December.

Pinnipeds:

8. Our six GPS/Time depth recorder females for monitoring foraging range and behavior continue to collect data. So far we have collected data on 17 foraging trips.
9. Only 12 of our 29 CCAMLR attendance females have completed six trips to sea. However, so far none of our attendance females lost their pups. Trip durations are as follows: first trip: 2.3 d (s.d.=0.9, n=30); second trip: 2.2 d (s.d.=1.0, n=30); third trip: 2.0 d (s.d.=0.8, n=29); fourth trip: 2.3 d (s.d.=1.0, n=24); fifth trip 2.0 d (s.d.=0.7, n=18); and sixth trip 2.0 d (s.d. 0.8, n=12).
10. We are also getting ready for the first sample of CCAMLR pup weights. CCAMLR pup weights protocol requires collecting the first sample of pup weights 30 days after the median date of pupping, and continues to collect weights on a sample of 100 pups every two weeks until March.
11. On the last Phocid census on December 30th we observed 221 southern elephant seals, 39 Weddell seals, seven leopard seals and two crabeater seals.
12. We have seen 80.6% of tagged females return. Nataly for adult tagged Females, at 80.5%, was higher than last year (77.6%). We have collected 31 DNA samples from pups of tagged females.



13. Fur seal diet protocol requires collecting 10 scats each week for analysis of fish bones, squid beaks, and krill carapaces. This was our third week of sample collection. To date 30 scats have been collected. All samples collected have been predominantly krill.

14. We have re-sighted only 85 fur seals tagged as pups in previous years. We have seen one tagged yearling and we have seen only one two-year-old.

15. On 1 January we observed a recently weaned southern elephant seal with a tag different from the one we use, and with a brand mark on the right flank. This animal appears to be from an Argentine study on King George Island.

16. Leopard seals continue to arrive, although to date we have only seen 11 tagged seals from previous years and we tagged three others for a total of 14. We have had as many as six leopard seals at one time hauling out at one of the common haul out beaches within our fur seal study area.

17. We continue to see Crabeater seals occasionally hauling out on the Cape.

Weather:

18. The remaining snow on the Cape is rapidly disappearing. Mean wind speed was 11.4 mph with maximum wind gust of 51 mph. The mean temperature for the week was 2.1C. The high temperature for the week was 8.3C and the low was -0.1C. Camp: The solar radiation was 11722 W/m².

Camp:

19. Happy 2011! We had a great New Year's Eve. The "New Year's Eve Celebration" task force spent some time and brainstormed some ideas for the night. Once done with work, we had a really good dinner (...even though we didn't eat the lentils), then we played some games invented by us (Ray). Then the countdown began and some dancing in the hut compliments of DJs Allyson and Kevin! It was all good and fun, and another good "team moment" for us.

20. On 30 December we hiked all together to the west side of the Cape. It was incredible as you can imagine. On our way we encountered all five species of seals that populate the island: Antarctic fur seal, Southern elephant seal, Weddell seal, crabeater seal, and leopard seal. Moreover, so far we have also seen seven species of penguins: gentoo, chinstrap, Adelie, emperor, macaroni, rockhopper and king penguins.

21. The R/V MOANA WAVE is scheduled to arrive soon. We are excited to see the ship and all our friends again, at the same time it is weird to realize how fast time has gone by. It has been a busy season so far and there is much more to come.

22. Happy 2011 everyone, from the AMLR Crew, and all the species of penguins and seals of Cape Shirreff!



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