

Seabirds:

1. In the fourth week since gentoo penguin peak clutch initiation 94% of the reproduction study plots are incubating partial or full clutches and 6% have failed. Chinstrap penguin chicks have started to hatch. In the fourth week since chinstrap penguin peak clutch initiation 11% have hatched at least one chick, 60% of the reproduction study nests are incubating partial or full clutches and 29% have failed.
2. We continue to monitor known-age penguins. Of the 26 known-age gentoo penguins that initiated clutches 73% continue to incubate and 27% have failed. Of 68 known-age chinstraps that have initiated clutches 1% have hatched at least one chick, 49% continue to incubate partial or full clutches, and 50% have failed.
3. We continue to monitor brown skua territories for nesting activity. Sixteen pairs of brown skuas are now incubating partial or full clutches and two pairs have lost their eggs.
4. We saw a king penguin here on 26 December. King penguins are rare visitors to Cape Shirreff and it is always exciting to see a new species of penguin.

Pinnipeds:

5. Our five GPS instrumented females have all completed at least one trip to sea and together they have completed 11 trips to sea. The mean trip duration is 2.5 days (range: 1.2-5.6d). Unfortunately one of these females is the first female in our attendance sample that has lost its pup to leopard seal predation.
6. All our CCAMLR attendance females (n=29) have completed at least one trip to sea. Mean trip duration for the first trip to sea was 3.4 days (s.d.: 1.5; range: 1.2-8.5). Last year the mean trip duration for the first trip to sea was 2.8 days. Four females have completed four trips to sea. The total number of trips logged as of yesterday is 71 with a mean duration of 3.4 days.
7. We continue to census pups, live and dead, every other day. Our maximum count, however, was on 23 Dec we recorded a total of 1,390 pups (1315 live and 75 dead). The first leopard seal predation was observed on 19 Dec. Our study site indicates a 12% reduction in fur seal pup production over last year.
8. We censused the entire Cape for fur seal pups on 27-28 Dec. We will report the results in next week's report.
9. Tag re-sight surveys indicate only 76.0% (146/192) of our tagged female population have returned to Cape Shirreff. We recorded no new arrivals since last week. The natality rate for returned females thus far is 82.2%.
10. We continue to see new arrivals of juvenile fur seals. To date we have seen 65 fur seals that were tagged as pups in previous years. No yearlings have been seen yet.
11. Leopard seals are increasing and we observe new animals tagged in previous years arriving almost daily. Fur seal pups have just begun entering the water and we observed our first leopard seal predation of a fur seal pup on 19 Dec. We have tagged four leopard seals that were not tagged and we have observed five others that were tagged in past years at Cape Shirreff.



12. We collected our second week of scats for studies of fur seal diet. We collect ten every week. All scats collected this week were composed primarily of krill.

13. We had three crabeater seals show up on Cape Shirreff beaches this week. Two were young of the year. We have also seen whales most days this week feeding very close to shore on the east-side of the Cape. The easterly storm Christmas day washed a lot of krill onto the east-side beaches.

Weather:

14. Christmas eve was a dry, sunny day without much wind but Christmas day we had storm out of the east-northeast with gusts up to 41 mph. Mean wind speed for the week was 13.8 mph with maximum wind gust of 41 mph. The mean temperature was 2.1° C with a high of 10.7° C and a low of -1.0° C. Total precipitation this week was 2.5 inches.

Camp:

15. In spite of the storm on Christmas day we had a warm and festive Christmas in our hut after finishing most of our research tasks mid-day. Everyone at the Cape sends their thanks to all those family and friends that sent Christmas presents and cards with the camp opening in October. Their thoughtfulness made Christmas at the Cape that much more special. Best wishes to all for a Happy New Year from the AMLR Cape Shirreff crew.

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

