

Seabirds:

1. Gentoo penguins have started to hatch. In the fifth week since gentoo penguin peak clutch initiation 24% of the reproduction study plots have at least one chick, 66% are still incubating partial or full clutches and 10% have failed. We estimated peak chinstrap penguin hatch to have occurred on 30 December. To date, 56% of the chinstrap penguin reproduction plots have hatched at least one chick, 12% are still incubating eggs, and 32% have failed.

2. We continue to monitor known-age penguins. Of the 26 known-age gentoo penguins that initiated clutches 15% have hatched at least one chick, 58% continue to incubate and 27% have failed. Of 68 known-age chinstraps that have initiated clutches 35% have hatched at least one chick, 9% continue to incubate partial or full clutches, and 56% have failed.

3. We continue to monitor brown skua territories for nesting activity. Fourteen pairs of brown skuas are now incubating partial or full clutches and four pairs have lost their eggs.

4. We launched a multidisciplinary research expedition to Punta Oeste this past week. Punta Oeste is a nearby ice free area where two pairs of brown skuas have been known to nest. We found the two pairs and took measurements of their eggs. Tags were also searched for and read on Weddell, leopard, Southern elephant, and fur seals.

Pinnipeds:

5. All our GPS (N=5) instrumented females have completed at least three trips to sea. Four are on their fourth trip to sea and one has lost her pup. Mean trip duration for GPS females is 2.8 days (st.dev.: 1.2; N=15).

6. All 29 of our CCAMLR attendance females have completed at least two trips to sea. Mean trip duration for the first trip to sea was 3.4 days (s.d.: 1.5, range: 1.5-8.5) and mean trip duration for trip two was 3.5 days (s.d.: 1.5; range: 1.2-6.8). For comparison last year's mean trip duration for the first two trips to sea were 2.8 and 2.6 days. Only one female has completed six trips to sea.

7. We censused the entire Cape for fur seal pups on 26 Dec. We had four counters and all counts fell within 5% of the mean for each beach counted. Individual counts of total pup production for the Cape were within 1.1%. Total pup production was 4,200 (± 160). Our counts indicate an 11.1% reduction in pup production over last year.

8. The median date of pupping this year was 6 January and we will take our first sample of CCAMLR pup weights tomorrow.

9. We recorded only one new arrival this week of adult tagged females. She arrived not pregnant. Tag re-sight surveys indicate 81.6% (147/192) of our tagged female population have returned to Cape Shirreff. The natality rate for returned females is only 76.6%.

10. We continue to see new arrivals of juvenile fur seals. To date we have seen 71 fur seals that were tagged as pups in previous years. Last year by this same time we had seen 98 fur seals. No yearlings have been seen yet.



11. Elephant seals are returning to molt in increasing numbers especially adult females. However, as of yesterday no females instrumented in 2008/09 have returned.

12. Leopard seals do not appear to be as numerous as last year but we did have two tagged leopard seals return and sited for the first time this year. We have lost only one of our CCAMLR attendance females' pups to leopard seal predation; however, by this time last year we had lost four.

13. We collected our third week of scats for studies of fur seal diet. All scats collected this week were composed primarily of krill.

Weather:

14. This past week was colder but less windy than the previous week. Mean wind speed was only 7.9 mph with maximum wind gust of 33 mph. The mean temperature for the week was 1.5° C. The high temperature for the week was 10.6° C and the low was -1.5° C. Total precipitation this week was 1.2 inches bringing the total precipitation since arriving to 14.4 inches.

Camp:

15. The crew was pleased to hear that the R/V *Moana Wave* has been chartered and is on its way to Punta Arenas. We are now counting the days to the arrival of our re-supply and our many friends on board.

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

