

Sit. Rep. #6
U.S. - AMLR Field Station
Cape Shirreff, Livingston I., Antarctica
11 December 2006

Seabirds:

1. The first gentoo chick was seen on 6 December, 2 days earlier than last year. Currently 52% of nests in the gentoo reproductive study have begun to hatch, 38% still have eggs, and the other 10% have failed. This failure rate is slightly higher than last year at this time. The failure rate of the chinstrap study nests has increased from last week to 9%. This failure rate is similar to last year at this time.
2. The nests of known-aged gentoo penguins are also hatching. 37% have begun to hatch, 50% still have eggs, and 13% have failed. The failure rate of known-aged chinstrap penguins is much higher than the reproductive study nests at 26%.
3. Of the 23 brown skua pairs attending territories 74% have laid eggs. Out of these, one pair has already lost a full clutch of eggs. There are 4 brown skuas that were banded as chicks at Cape Shirreff holding territories. Three of these are 10 years old and the other bird is 8 years old.
4. Since fur seal pupping began, large numbers of brown skuas have arrived at Cape Shirreff. Currently we have resighted 27 brown skuas that were banded here as chicks. These birds range from 4 to 10 years in age. Three birds banded on King George Island have also been seen. This includes a 5 year old banded as a chick at the Copacabana field station.
5. We have observed another increase in active kelp gull nests this season; 53 nests had eggs, compared to 46 nests observed last year. The contents of these nests are only checked once during incubation. Of these 53 nests, 85% have a full clutch of 3 eggs, 9% have 2 eggs, 2% have 1 egg, and 4% have failed.
6. The blue-eyed shags that breed in a small colony on the west side of Cape Shirreff are currently brooding chicks. An Antarctic tern nest containing two eggs was seen on 4 December.

Pinnipeds:

7. We have completed 16 of 35 fur seal female/pup captures for attendance (visit/trip durations) studies. All females have been captured within 0-1 day postpartum. Once captures are completed we will report mean mass of our sample.
8. Two of the 16 attendance females we have done thus far have begun their foraging trips to sea and one has already completed her first trip. It was 4.2 days long. Once all females have completed their first trip to sea we will report mean trip duration for comparison to previous years data.

9. Fur seal pup production thus far is 61% of total production last year and on average above pup production for the same dates last year. There are still approximately three weeks of births expected and the rate of pupping in the coming weeks will determine how much of the decrease is due to an early arrival of females or an actual increase in total pup production. Pup mortality thus far is 0.9%.

10. Thus far only 64.17% (156/241) of our tagged female population have returned to Cape Shirreff. Last year for the same date 71.9% (141/224) of our tagged female population had returned. The natality rate for returned females thus far is 87.6% (last year for the same date was 87.8%). We will update these figures in future sit reps after no more new arrivals or births are recorded, usually around 10 Jan.

11. Thus far we have seen 35 fur seals that were tagged as pups in previous years (45.7% of these have been 7-year-olds from the 1999/00 cohort).

12. We recorded our first observation of a tagged elephant seal that was tagged as a pup two years ago at Cape Shirreff.

13. Two of our three females carrying PTTs overwinter have returned. They were part of a pilot study of post-weaning dispersal and winter foraging habitat. Both appeared very fat and healthy and both gave birth to large pups. One of the females still has her PTT. We will capture her soon and remove it so it can be re-batteried and used again in future studies. It is very encouraging to know that we can deploy satellite-linked instruments over winter and recover a portion of the instruments.

Cape Shirreff Weather for the Week:

14. Yesterday we had a storm from the east which has blanketed the Cape with a fresh two inches of snow. The mean temperature for the week was 2.2C; the high was 11.2C and the low, -2.2C. Winds averaged 13.7mph and were primarily westerlies with a maximum wind speed for the week of only 38mph. Total precipitation for the week has been 0.52 inches.

Camp:

15. Our Chilean neighbors have nearly completed an addition to their main hut. Their new wind generator has not been put up yet.

16. We put up some of our first Christmas decorations but because of attendance captures we haven't had much time to put up our small Christmas tree.

Report submitted by AMLR researchers currently residing at Cape Shirreff. These reports are also posted at <http://swfsc.noaa.gov/aerd-field.aspx>