

**Sit. Rep. #4**  
**AMLR Field Station**  
**Cape Shirreff, Livingston Island, Antarctica**  
**27 November 2006**

**Seabirds:**

1. In the three weeks since the mean clutch initiation of gentoo penguins our reproductive study nests have had a 6% failure rate. Of the chinstrap penguins in the reproductive study 85% have completed clutches, 3% have only laid one egg, and 3% have not laid. 8% of chinstrap penguin nests in the study have lost eggs.
2. We have continued to resight known-aged penguins. 15 known-aged Gentoo penguins initiated clutches and 2 of these nests have failed so far. There are 21 known-aged chinstraps currently breeding.
3. On 25 November we conducted the annual nest census of chinstrap penguins. There were 4544 chinstrap nests, representing a 6.3% decrease from the previous year and the eighth continuous year of decline. The number of chinstrap nests has decreased 30% from the previous 9 year mean and is 41% lower than the highest count of 7744 nests in the summer of 1999-2000.
4. Many brown skuas have begun building nest bowls and the first egg was seen on 24 November.

**Pinnipeds:**

5. We have completed range tests for both our VHF monitoring stations for our annual fur seal female attendance study measuring visit and trip durations.
6. On 25 Nov we completed our seventh census for adult female, males and pups (live & dead). As of that census 94 pups had been born on the U.S. AMLR study site which comprises about one third of total pup production on Cape Shirreff.
7. Pup mortality thus far is less than last year for the same time period. As of 26 Nov we had recorded only dead pup (~1.0%) compared to 2.0% on the same date last year.
8. Our adult tagged females returning from previous years are arriving daily. So far we have had 21 (9.4%) tagged females arrive. The natality rate for tagged arrivals is 71.4%.
9. Since arriving we have recorded eight known-aged tag resights (i.e. an animal tagged as a pup at Cape Shirreff). All have been males. Three of them were nine-year-olds (the 1997/98 cohort; the first tagged cohort) and have been observed being territorial though none have been observed with females yet.
10. We observed the first twins to be born on our study beaches. Twinning occurs in Cape Shirreff fur seals at high rate for pinnipeds, approximately 1 in 1000 births in some years.

11. Only one elephant seal female with a pup remains on shore. We expect her to depart to sea any time now. Our maximum pup count was only 12 compared to 60 last year. We tagged all 12 pups this year.

### **Weather for the Week:**

14. We have had unusually calm weather all week with only 0.05 inches of precipitation. Yesterday we had our first precipitation as rain. The maximum wind speed measured was 40 mph. The average for the week, however, was only 6.9 mph. The mean temperature for the week was 1.8C. The high and low were at 13.3C and -1.8C. Snow cover continues to be below average and many of the flats are already clear of snow.

### **Camp:**

15. Thanksgiving on the Cape was in keeping with past tradition. We smoked a turkey and had all the trimmings including homemade challah bread, dressing, cranberries, and a pumpkin pie. Everyone on the team is very grateful for having the chance to be on the Cape and to be in the field this year and wish to thank all those that made this season possible.

16. The *R/V LAURENCE M. GOULD* arrived late yesterday (9pm) to drop off Birgitte McDonald. Seas were calm but there was thick fog so the Antarctic Base Inspection Team on board the *GOULD* did not make it ashore. Three crew traveled with Gitte to shore, gear was transferred and two of the crew came up to the camp to photograph the fur seal lab which will be used for preparation of doubly-labeled water experiments on adult females using tritium. The team was here only for about 30 minutes and returned to the ship. Gitte's arrival brings the Cape population to 11 people (six Chileans and five persons on the AMLR team--four Americans and one Canadian).

17. We would like to thank the Captain, the MPC, the crew and all aboard the *GOULD* for all their patience and perseverance in getting Gitte McDonald to the Cape and wish them the best for the rest of their cruise.

18. Gitte brought several Time magazines, Newsweeks, and National Geographics for all the news starved members of the team and we enjoyed a long breakfast getting caught up on news around the world (as of 6 Nov when she left the States.)

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*Submitted by AMLR researchers currently residing at Cape Shirreff.*