



**Sit. Rep. #5**  
**10 December 2007**  
**US AMLR Field Station**  
**Cape Shirreff, Livingston Island, Antarctica**

### **Seabirds:**

1. In the four weeks since chinstrap clutch initiation was observed, 48% of the nests in our reproductive study have failed. In the two weeks since gentoo clutch initiation was observed, 34% of the nests in our reproductive study have failed. This unusually high failure rate can be attributed to snow cover inhibiting adequate nest construction, and snow drift burying eggs.

2. To date, 17 known aged chinstrap penguins that were banded here as chicks have nested. Of these, 12 nests have failed and five remain on eggs. Eleven known aged gentoo penguins that were banded here as chicks have nested. Of these, six have failed and five remain on eggs.

3. On 30 November we conducted the annual chinstrap nest census. We counted 3032 nests, which represents a 33% decline from the previous year census. This year, the number of chinstrap nests has decreased 51% from the previous 10 year mean and is 61% lower than the highest count of 7744 nests in the summer of 1999-2000.

4. Brown skuas have initiated clutches and three pairs are currently incubating complete two-egg clutches. Kelp gulls are constructing and attending nests, and approximately 10 pairs have initiated clutches.



### **Pinnipeds:**

5. We began tagging and instrumentation of fur seal mother/pup pairs for attendance studies on 3 December. We have completed 17 of 30 fur seal female/pup captures for attendance (visit/trip durations) studies. All females have been captured within two days postpartum. We will complete captures by 15 December and can then report mean mass of our sample. None of the females have yet departed on their first trip to sea.

6. Fur seal pup production thus far is 55.0% of total production last year and on average below 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 if this is a true decrease, or due to later arrival of females. Pup mortality thus far is 2.1% compared to 0.9% last year.



7. Thus far only 62.7% (138/220) of our tagged female population have returned to Cape Shirreff. Last year for the same date 64.17% (156/241) of our tagged female population had returned. The natality rate for returned females thus far is 92.0% (last year for the same date was 87.6%). We will update these figures in future

sit reps after no more new arrivals or births are recorded, usually around 10 January.

8. To date we have seen 35 fur seals that were tagged as pups in previous years (37.1% of these have been 8-year-olds from the 1999/00 cohort). Twenty-one of these have been females.

### **Cape Shirreff Weather for the Week:**

9. This week has seen a wide variety of weather, from clear and calm to blustery and gusting winds. The average wind for the week was 14.3 mph from the West, but on Friday it was gusting up to 52 mph.

10. Once again, the temperature averaged above freezing for the week, coming in at 0.5 degrees Celsius. The high did not approach last week's, as it only came up to 5.6 degrees. The low was a moderate -2.2 degrees Celsius.

11. There was a scant amount of measured precipitation this week, 0.07 inches, bringing the total measured for the season to 0.42 inches (since we began recording on November 10).

### Field Station Notes:

12. One highlight of life at Cape Shirreff was the opportunity to say hello to the *ARSV Laurence M. Gould*, which was transiting the area. They passed within sight of the Cape and we said hello to friends aboard by radio.

13. The snow pack continues to melt away, with many areas of the beaches completely accessible and the berms considerable reduced in most other areas.

14. Thoughts are of home and family as the holiday season rapidly approaches.

Everyone is doing well and as can be seen from the penguin and seal reports, there has been a lot of activity in the field with the studies.



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Report submitted by AMLR researchers currently residing at the Cape Shirreff field station on Livingston Island. These reports are posted at <http://swfsc.noaa.gov/aerd-field.aspx>. Photos by M. Goebel (NMFS/AERD).