

**Sit. Rep. #7**  
**US AMLR Field Station**  
**Cape Shirreff, Livingston Island, Antarctica**  
**18 December 2006**

**Seabirds:**

1. Gentoo penguins have almost completed hatching. Of our reproductive study nests 16% still have eggs to hatch, 70% have hatched, and 10% of the nests have failed. This failure rate is similar to last year. The chinstrap penguins will begin to hatch this week. We have yet to see our first chinstrap chick. The failure rate of chinstrap nests in our reproductive study is the same as last week at 9%.
2. Of the nests of known-aged gentoo penguins 26% still have eggs to hatch, 67% have hatched, and 13% have failed. The failure rate of known-aged chinstrap nests has increased since last week to 30%.
3. Of the 24 brown skua pairs attending territories 79% have laid eggs. Out of these, one pair has already lost a full clutch of eggs. One new territory was discovered this week. A new pair has been seen constructing nest bowls at the base of Cerro Toqui near the kelp gull colony. This pair includes one bird that was banded at Cape Shirreff as a chick 10 years ago.
4. We saw our first kelp nests with chicks on 14 December. On that date at least five nests had chicks. Two nests contained three chicks that were about one week old.

**Pinnipeds:**

5. We have completed 32 of the 37 fur seal females/pup captures planned for attendance (visit/trip duration) studies. So far, 14 females have completed their perinatal visit (the first visit to shore) and have begun their foraging cycles. Nine females have completed only 1 trip and five have completed 2 trips. There have been no mortalities of study pups. We increased our sample size this year from 28 to 37 to accommodate a study of age related reproductive success and maternal investment.
6. The first round of satellite-linked transmitter (PTT)/ time depth recorder (TDR) deployments was started today, 18 December. We will deploy five on tagged females that have completed more than two trips to sea to insure they have recovered from their perinatal fast. Today we deployed the first of the five.
7. So far, 82.6% of our tagged female population (224) have returned to Cape Shirreff. The natality rate, 87.6%, is slightly greater than last year for the same date (86.6%).
8. Fur seal pup production was 1894 on the 15th of December. The number of pups is 6.2% greater than for the same date last year. Cumulative pup mortality is 1.4%.
9. Fifty-three fur seals tagged as pups have been observed thus far. More arrive every day. Today

we recovered our second over winter PTT. This one was recovered from a yearling male. He is the first tagged yearling to be observed this year. He weighed 18.6 kilograms, was 96cm and had a girth of 68cm.

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

10. Yesterday we had one of the biggest storms of the season thus far. Our anemometer recorded gusts to 62 mph. This week we had 0.42 inches of recorded precipitation. The weekly mean temperature was 2.1 C and the coldest wind chill recorded was -18.3 C. The high was 10.8 C. The wind speed averaged 14.0 mph with maximum gusts to 62 mph. Winds were mostly easterlies.

### **Camp:**

11. Our Chilean neighbors put up their new wind generator/windmill on Saturday.

12. We heard the *R/V Yuzhmorgeologiya* on radio comms but have not been able to see it working off the Cape.

13. We put up our small Christmas tree on Friday.

14. We took a break from captures mid-week and spent the good part of the day on our ongoing war on mildew around camp.

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