



**Sit. Rep. #14
11 February 2008
US AMLR Field Station
Cape Shirreff, Livingston Island, Antarctica**

Seabirds:

1. Chinstrap penguin chicks in our reproductive study reached peak crèche on 5 February. To date, 15% of nests have crèched at least one chick, 4% contain chicks that are being brooded and 81% have failed since clutch initiation.

2. Gentoo penguin chicks have continued to crèche this week. To date, 28% of gentoo nests have crèched, 14% contain chicks that are being brooded and 58% have failed.



3. Of the 18 known-aged chinstrap penguins that initiated clutches this year, one has crèched one chick and 17 have failed. Of the 14 known-aged gentoo penguins that initiated clutches this year, four have crèched at least one chick, one is brooding a chick and nine have failed. A known-aged gentoo penguin nest hatched one chick on February 7th, almost one month after peak gentoo hatch.

4. We collected our final diet samples this week, five from gentoo penguins and ten from chinstrap penguins. Gentoo samples were composed mainly of Antarctic krill (*Euphausia superba*) and all samples contained traces of fish. Otoliths found were identified as *Gymnoscopelus nicholsi*, *Electrona antarctica*, *Trematomus newnesi* and *Lepidonotothen kempii*. Amphipods *Hyperietta dilatata* and *Themisto gaudichaudii* were also found. Chinstrap samples were composed entirely of krill with no traces of fish and one sample contained the amphipod *T. gaudichaudii*.

Pinnipeds:

5. We have 16 female/pup pairs remaining in our attendance study. Eleven of the twelve females (of the original 28 pairs) have likely lost their pups to leopard seal predation.

6. Fur seal diet sampling continued this week with the collection of 10 scat samples from areas of suckling females. Krill was present in all of the scats.

7. This week we started tagging pups of tagged females. These tags are part of the cooperative Chilean - US deployment of 500 tags on pups. Thus far we have flipper and PIT tagged 20 pups. While tagging we have collected five more DNA samples bringing the total of DNA samples from pups of tagged females to 128. We have also determined the sex of 89.4% of tagged females' pups.



8. Systematic tag re-sights continued this week. Seven more fur seals tagged as pups arrived. A total of 118 different known-age individuals have been seen this season, with the following percent return for the last ten age classes: (1997) 1.2%; (1998) 1.2%; (1999) 6.2%; (2000) 2.4%; (2001) 4.4%; (2002) 2.2%; (2003) 0.8%; (2004) 0.0%; (2005) 3.4%; and (2006) 1.8%.

Cape Shirreff Weather for the Week:

9. Weather conditions were favorable for much of the week. Precipitation, primarily snow, was measured on two days for a total accumulation of 0.18 inches for the week. Other days were generally sunny. Winds were low averaging 10.2 mph, generally from the west.

10. Temperatures are slowly falling. Mean temperature for the week was 1.7 degrees Celsius. The maximum temperature was 4.6 degrees; the minimum temperature was -1.1 degrees.

Field Station Notes:

11. Good weather conditions allowed us to complete painting all buildings at the main camp. We will paint the door covers once the rain, which we are currently seeing, ends.



12. Now that our crew is down to 5 people, we dissembled the Weather Haven tent that was used over the past few weeks for extra camp residents. Fur seal pups quickly reclaimed the area.

Report submitted by AMLR researchers currently consuming ice cream 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) and Dan Costa (UCSC).