



**Sit. Rep. #18 (Final Sit Rep)
10 March 2008
US AMLR Field Station
Cape Shirreff, Livingston Island, Antarctica**

Seabirds

1. We conducted the annual carcass count on March 4. We searched all of the beaches on the northern and eastern sides of Cape Shirreff and counted all the penguin carcasses we found. We counted 107 carcasses (38 adults, 21 chicks and 48 unidentified); only two of these carcasses were gentoos and the remainders were chinstraps. Leopard seal predation was identified as the main source of mortality.



2. We stopped collecting chinstrap radio transmitter data on March 3. Mean foraging trip duration of adults in the chick rearing phase was 12.4 hours ($n = 18$; S.D. = 2.1), comparable to the average trip durations of previous seasons.

Pinnipeds

3. This week we wrapped up our field season and closed camp. It was a successful season. We deployed GPS/time-depth recorders (MK9) on 10 females throughout the season. We deployed an additional 12 TDRs on CCAMLR attendance study females. Three females are currently instrumented with satellite tags to determine where they are going during the winter. All TDR and GPS instruments were recovered. The three over winter satellite tags will be recovered next season.



4. Of the original 28 CCAMLR attendance females 8 still had pups at the time of our departure. Nineteen of the twenty pups are thought to have died by leopard seal predation.

5. This was the final week of fur seal diet sampling. We collected 10 scat samples from areas where females were suckling pups. Nine of the ten scats contained evidence of krill and 7 of the 10 contained otoliths.

6. Together with the Chileans we tagged 496 pups this season. Eighty two of these pups were pups of tagged females. We collected a total of 140 DNA samples from pups of tagged females. Additionally we determined the sex of 89.6% of all tagged females pups.

7. We completed systematic tag resights on March 4th. Since 1997, 500 tags have been deployed on pups each year. In collaboration with the Chileans we resighted 142 of these seals. This year we saw the following percent return for the last ten age classes: (1997) 1.2%, (1998) 1.2%, (1999) 7.0%, (2000) 2.6%, (2001) 4.6%, (2002) 2.4%, (2003) 0.8%, (2004) 0%, (2005) 4.7%, and (2006) 3.6%. This has not been corrected for tag loss.

8. The fur seal lab was cleaned, inventoried and secured for the winter.

Cape Shirreff Weather for the Week

9. The weather this week was great for camp closing. On Tuesday we had the wettest day of the season with 0.42 inches of rain bringing the season total to 5.29 inches. This was followed by 3 days of calm dry weather. The mean temperature this week was 1.9 C which is the lowest since mid December. 10.

Field Station Notes

10. The *R/V Yuzhmorgeologiya* arrived to close our camp on 8 March. All field gear was offloaded by mid-day and camp was closed for the winter.



Report submitted by AMLR researchers formerly residing at the Cape Shirreff field station on Livingston Island, now safely aboard the *R/V Yuzhmorgeologiya*. These reports are posted at <http://swfsc.noaa.gov/aerd-field.aspx>. Photos by M. Goebel (NMFS/AERD).