



**Arrival Sit. Rep.  
12 November 2007  
US AMLR Field Station  
Cape Shirreff, Livingston Island, Antarctica**



The Cape Shirreff AMLR crew met up in Punta Arenas, Chile during the first days of November 2007 to prepare for another field season on Livingston Island. We departed the city on November 4 aboard the National Science Foundation's Antarctic research and support vessel Laurence M. Gould. A relatively calm passage through the Straits of Magellan and the Drake Passage put us offshore of the field station on the morning of November 7. Conditions at the ship were adequate for launching the inflatable

boats in preparation for beach landings and operations commenced at about 0930.

Upon reaching the landing beach, it was clearly evident that this was a good year for snow. There was an ice berm about 2 meters high a few meters from the water, which we had to carve through to reach the smooth snowfield beyond. Conditions were excellent for sledging gear from the landing area to the huts. This was accomplished with a great deal of assistance from the crew of the R/V Laurence M. Gould and the personnel who would be continuing on to Palmer Station and Peterman Island.

The huts themselves had snowdrifts to the eaves, and took quite a lot of digging to gain access to the doors. Inside things appeared to have wintered over well, as did the bird blind (aka emergency shelter hut).

While additional gear and personnel were brought ashore and to the camp, the chief engineer and electronics technician from the Gould provided invaluable assistance in setting up communications and bringing our generators on line. Once we had established SSB radio communications and had the generator on line, we were able to complete our offload. As soon as all of our equipment was ashore, we bid adieu to the people who had provided so much assistance, and the Gould weighed anchor, bound for Palmer Station. The Cape Shirreff opening crew this year consists of Birgitte McDonald, Sarah Chisholm, Scott Freeman, Kevin Pietrzak, and Russell Haner (camp leader).

### **Seabirds:**

1. In the first days after arrival, we opened the penguin blind/emergency shelter, set up solar panels and the weather station.
2. All of the penguin sub-colonies are completely covered with snow.

3. The chinstrap penguins are attending their nests and no eggs have been seen yet. On November 10 we began establishing chinstrap penguin reproductive study sites.

4. The gentoo penguins are not yet attending their nests consistently and no eggs have been observed. Many sub-colonies are vacated during foraging periods early in the day. Gentoo penguin reproductive study sites will be established when consistent attendance is observed.



### **Pinnipeds:**

5. We conducted our first breeding elephant seal census on 9 November. There were six adult females with pups and nine already-weaned pups. We have tagged six of the weaned pups. Last year at this time there were three females with pups and eight weaned pups.

6. We saw our first tagged elephant seal of the season. One of the females with a pup was tagged at the same location two years ago.

7. We recorded the first pregnant female on one of the AMLR study beaches on 12 November. Another female was seen on Loberia (on the other side of the Cape) on the same day, but she did not appear to be pregnant. Males are continuing to arrive every day. Fur seal breeding colonies and beaches have more snow than in the last few years. There is a significant ice berm that may provide a challenge for females as they attempt to get above the high tide line.



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

8. We set up our weather station on 10 November to record wind speed, direction, temperature, humidity, and precipitation at 15-minute intervals throughout the summer season.

9. Last February before closing camp we installed a temperature data logger at Cape Shirreff to record temperature every 12 minutes all winter. We have not analyzed the data yet but the lowest temperature recorded was  $-20^{\circ}\text{C}$  on 15 July and again on 26 July.

10. Snow accumulation at the time of our arrival was nearly 2 meters, with drifts to the eaves of the huts. Some snow has continued to fall since our arrival, but there has been some clear weather too. More specific details of the weather will be available in next week's report.

### **Field Station Notes:**

11. The biggest news of the week is that we are here and making a good start on projects, as can be seen in the seabird and pinniped portions of this report.
12. Communications have been established with daily contact with Palmer Station at 0900 on the single side band radio. Iridium satellite voice and e-mail communications have been established as well.
13. Power generation for the camp consisting of a single fixed solar array, a wind generator, and back up gasoline powered generators are all on line and functioning well.
14. We all thank the officers and crew of the Laurence M. Gould for the safe and comfortable transit to Cape Shirreff. We extend our deep appreciation and gratitude to all of the people who pitched in to help offload our equipment, especially Melissa Rider, and Eric Hutt, the MPC for this cruise.
15. Thanks are also extended to the staff of the NOAA Southwest Fisheries Science Center, Antarctic Ecosystem Research Division in La Jolla, California for their support for this field season. In particular, thanks to Dr. Rennie Holt, Dr. Mike Goebel, Dr. Wayne Trivelpiece, Stephanie Sexton, and Jessica Lipsky.

---

Report submitted by AMLR researchers now 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).