

Arrival - Sit. Rep. #1
US AMLR Field Station
Cape Shirreff, Livingston I., Antarctica
6 November 2006

The *R/V LAURENCE M. GOULD* left Punta Arenas, Chile on 28 October at 14:00 and arrived at Cape Shirreff at approximately 15:30 on 31 October. Conditions, however, did not permit launching zodiacs and the offload was postponed until morning which was predicted to be more favorable. Zodiac ops began at 6:00am 1 November. The first zodiac away was 6:45 and the offload was complete by 13:30 after approximately 15 zodiac trips. While offload operations were underway VHF and HF communications at the station were set-up. Once communications with HF and Iridium were established and the offload completed the ship left the AMLR field team, Cory Champagne (UCSC), Rachael Orben, Sarah Chisholm, and Mike Goebel on shore.

Weather for the offload was sunny and warm. In spite of being almost two weeks earlier than usual the snow pack was light and already melting. Winds for the offload were a moderate 15mph from the west.

The field station and the emergency shelter/bird blind on the north end of the Cape, overwintered well with no apparent damage. We did discover that two of four mounting bolts within the tracker for our solar array had been sheared last season and the tracker was removed and the array mounted in a fixed position.

Snow cover on the Cape was much less than last year and many of the fur seal beaches are already free of snow. The top of our fuel depot is visible above the snow and the decks had comparatively little snow on them. We have gotten some accumulation since arriving however.

Seabirds:

1. In the first days after our arrival, we opened the bird blind/emergency shelter. We are still waiting for more pleasant weather to set up the solar panel and weather station.
2. Almost all of the penguin sub-colonies were completely free of snow when we arrived.
3. The chinstrap penguins are attending their nests and no eggs have been seen yet.
4. On November 3, we established gentoo penguin reproductive study sites. As of November 5, 46% of our reproductive nests had two eggs, 38% had one egg, and 16% are still empty. We have also begun our daily resights of banded gentoo penguins.

Pinnipeds:

5. We conducted our first breeding elephant seal census on 2 November. There were only 6 adult females with pups and four already weaned pups. Last year we counted over 51 pups. On November 12 of last year here were 22 adult females with pups and 29 already weaned pups.

6. We have not recorded any female fur seals but males are arriving every day. Fur seal breeding colonies and beaches have less snow than in the previous years.

7. Our over-winter DCC which collects data on presence/absence of female and pups that still had transmitters at the close of the field station was retrieved yesterday.

8. We have already recorded our first tagged fur seal, a seven-year-old male.

Weather:

9. We set up our weather station on 4 November to record wind speed, direction, temperature, humidity, and precipitation at 15-minute intervals. Our first storm of the season occurred through Saturday & most of Sunday morning recording winds gusting to 58 mph. We now have more snow than when we arrived and the drifting around the station has been considerable.

10. Last March before closing the station we installed a temperature data logger at Cape Shirreff to record temperature every 15 minutes all winter. We have not analyzed the data yet but the lowest temperature recorded was in -15.0 C on 23 August.

Camp:

11. All communications systems are up and running. This year we have a morning schedule with Palmer Station 09:00 via single side band. Copacabana comes up via SSB only on Monday mornings. We communicate daily with La Jolla via Iridium e-mail and download between 19:00 and 20:00. Our solar array, wind generator and power system for the station is also fully operational.

12. Our Chilean colleagues the station appears to have over wintered well. They have not arrived yet and we do not expect them to arrive until sometime mid-November.

13. We are all very grateful to the captain and crew of the *R/V LAURENCE M. GOULD*, especially Melissa Rider, the MPC, Eric Hutt, the Raytheon crew, Ron Naveen, Langdon Quentin, and the rest of the science personnel on board the for all their hard work and help in safely and successfully opening the Cape Shirreff field station.

14. To all our NOAA and UCSC colleagues back home (especially Russell Haner, Stephanie Sexton, Rennie Holt, Dan Costa, and Jessica Lipsky) we wish to express our gratitude for getting the 2006/07 Cape Shirreff field season off to a good start.

Submitted by US AMLR researchers currently residing at Cape Shirreff.