

The Cape Shirreff AMLR crew arrived in Punta Arenas, Chile on 27 October to begin the 2010/11 field season at the U.S. AMLR base camp on Livingston Island. The opening crew this year consists of Allyson Larned, Kevin Pietrzak, McKenzie Mudge, Ray Buchheit and Nicola Pussini. We departed Punta Arenas for the Antarctic on the R/V *Laurence M Gould* on 31 October. We arrived at Cape Shirreff late morning on Wednesday 3 November. Fortunately the sea conditions were good enough to launch the first zodiac with two people of the crew and the MPC from the ship for a preliminary survey of the landing zone and the camp site. At 13:30 it was decided to start the operation and put in the camp. Even though the wind was slowly increasing, a large number of volunteers and Raytheon crew went ashore and helped a great deal with the offload at the beach, digging out the camp, and bringing supplies from the beach up to the camp. The landing beach was ice-free resulting in a secure and easy landing for the zodiacs. Thanks to the great help of the R/V *L. M. Gould* crew and the volunteers, the entire offload was completed and at the camp by 18:00. The last zodiac went back to the ship and the Cape Shirreff crew was left to complete the transfer of cargo and opening the camp.

The IT-electronics technician from the R/V *L. M. Gould* accompanied our team on the second zodiac and provided invaluable assistance in setting up communications and bringing a generator on line. SSB and VHF radio communications were soon up and running as well as a generator before departure of the R/V *Gould* at 19:00.

There is less snow than the previous year, but we also arrived twenty days later than last year. The camp and bird blind/emergency shelter on the north end of the Cape had no damage overwinter.

Seabirds:

1. In our first days after arrival, we opened the bird blind/emergency shelter. We are awaiting better weather to set up the solar panel and weather station.
2. Almost all of the penguin colonies are completely free of snow. Most gentoo penguins have well-built nests and have laid eggs prior to our arrival. A few of the nests have full clutches.
3. Most chinstrap penguins have established their nests; no eggs have been seen yet.
4. We continue to monitor known-age penguins that were banded here as chicks and have now returned to breed. We continue to read bands to locate these known-aged birds and their nests. To date four known-age penguins have initiated clutches, two of which have lost their egg.
5. We have established all the gentoo penguin reproductive study sites and most of the chinstrap reproductive study sites. We have begun banding sample breeding pairs of gentoos. As of 7 November, 22% of gentoo nests have one egg, 0% have two eggs.
6. Brown skuas are reestablishing pair bonds and have been observed in pairs around Cape Shirreff and at the penguin colonies.



Pinnipeds:

1. We conducted our first breeding elephant seal census on 5 November. There were 16 adult females with pups, two without pups and one weaned pup.
2. There are only few adult male fur seals on the U.S. AMLR fur seal study site, but there are more arriving every day.
3. Soon after opening camp, we retrieved our first of the overwinter instruments that we placed last season on Weddell seals. Retrieval of the instruments allows us to collect much more data than can be sent via satellite.
4. There are eight Weddell seals with pups. We will conduct the first weekly phocid census of the entire Cape on 8 November, but for now the most abundant phocid appears to be the southern elephant seal followed by the Weddell seal. We have seen four leopard seals and four crabeater seals since opening camp.

Weather:

1. We set up our weather station on 6 November to record wind speed, direction, temperature, humidity, precipitation and solar radiation at 12-minute intervals. The mean temperature since 6 November has been -31° F. We have had a storm the day we set up the station. The mean wind speed since 6 November has been 19 mph and the maximum wind speed was 33 mph.

Camp:

1. The camp opening has gone well. We had some trouble with the Inmarsat email system and for the first few days we were not able to use and communicate via email, but we solved the issue with the help of the NOAA crew in San Diego.
2. Our Iridium system for phone communications has been up and operating since 3 November. Daily communications have been established with Palmer Station at 0900 on the single side band radio.
3. Our single fixed solar array, wind generator, and gasoline powered generators have all been operational since 3 November. All are functioning well.
4. We cannot thank the captain, officers and crew of the R/V *Laurence M. Gould* enough for their support in opening the Cape Shirreff field camp. We extend our deepest appreciation and gratitude to all of the people who helped offload our cargo, especially Stian Alessandri, the MPC, the zodiac team, and Andy and Kriss the IT specialists on the R/V *Gould*.
5. Thanks are also extended to the staff of the NOAA Antarctic Ecosystem Research Division in La Jolla, California for their support in getting the AMLR 2010/11 field season off to a good start.

In particular, thanks to Dr. George Watters, Raul Vasquez del Mercado, Douglas Krause, Stephanie Sexton, Amy Van Cise, and Drs. Mike Goebel and Wayne Trivelpiece.

Submitted by AMLR staff currently residing at the Cape Shirreff field station, Livingston Island.

