

2014-2015 Weekly Field Reports

Cape Shirreff, Livingston Island

Report 1
November 3, 2014

Arrival Report

The 2014 Cape Shirreff opening crew arrived in Punta Arenas, Chile on 22-23 October to begin the 2014/15 field season at the U.S.-AMLR base camp on Livingston Island. The crew this year consists of Kevin Pietrzak, McKenzie Mudge, Wiley Archibald, Tony Kroeger, Renato Borrás Chavez (Chile) and the Expedition Leader, Dr. Mike Goebel. We departed Punta Arenas for the Antarctic on the R/V *Laurence Gould* on 27 October at 16:00. We had an exceptionally good crossing and arrived at Cape Shirreff at 07:30 31 October. We had excellent conditions and arrived with only a mild southwest wind. Seas were calm with little swell. The sun was shining and everyone was excited to get ops underway.

Zodiacs were launched by 08:30. We spent the next five hours transferring cargo from ship to shore with the help of ~18 volunteers from the ship. Shortly after mid-day all cargo was on-shore and volunteers were called back to the ship. By 14:30 the ship was underway to Palmer Station. VHF were established shortly after the first zodiac trip. There were some initial troubles with establishing SSB communications because the battery used to power the SSB was depleted and needed recharging. SSB coms were established once the battery was charged and first communications with Palmer Station were made at 09:00 on 3 November 2014.

Snow cover for the Cape at arrival was average for this time of year and there is little evidence for the start of the spring thaw. This has allowed for easing sledding of cargo over the snow.

We had no overwinter damage to the main camp. Opening of the emergency hut/bird blind on the north end of the cape will take place later today and a full report on Seabirds will be sent at for the next situation report on 10 November.



Pinnipeds:

1. We conducted our first breeding elephant seal census on 1 November. There were only 11 pups, a substantial decrease over the 35 pups counted on 1 November last year at Cape Shirreff. We have yet to conduct a census at a secondary breeding site on the west side of the Cape that occasionally has breeding elephant seals.

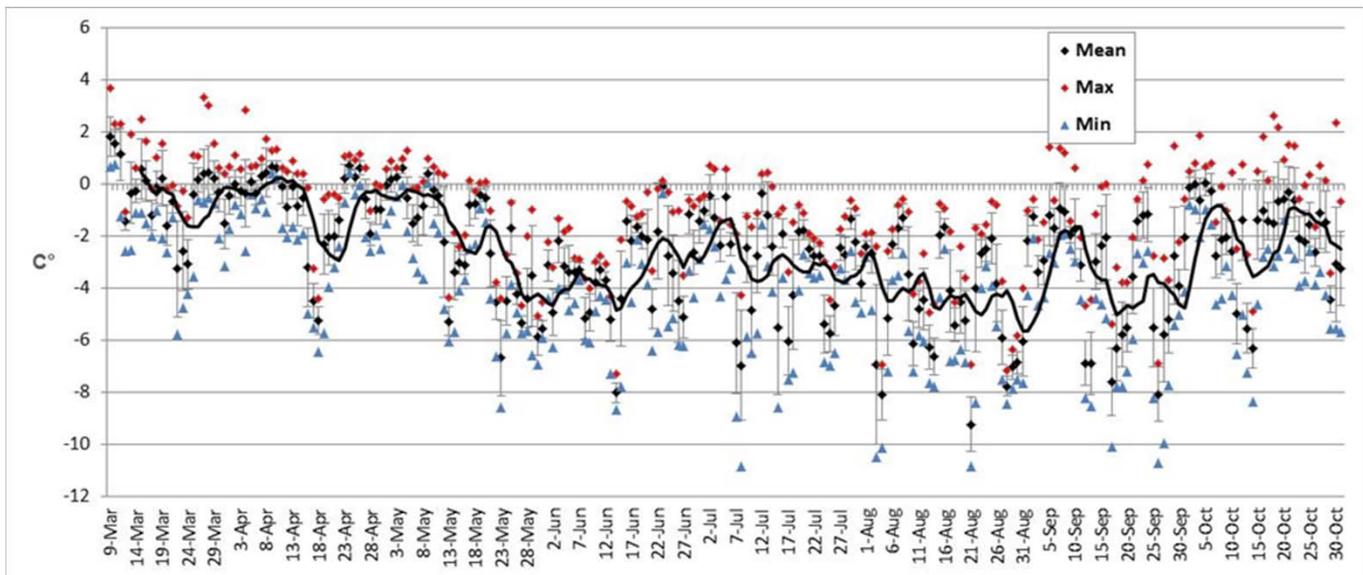


2. We have not yet conducted a formal first census of the U.S.-AMLR fur seal study site. However, thus far we have not seen any female fur seals and have only observed adult males on territory. We have, however, recorded the first known-aged tagged adult male fur seal.
3. We have not seen many Weddell seals thus far but have not yet conducted a full census. We will conduct the first weekly Phocid census of the entire Cape on 8 November.
4. The first adult male elephant seal tagged as a pup at Cape Shirreff was observed on territory with a female. He is a nine year old tagged in 2005.
5. Last year we deployed 54 overwinter geolocating light sensors on chinstrap penguins and fur seals. As part of that project we deployed three stationary controls, two high latitude controls at the Cape and one lower latitude control in Punta Arenas. We deployed two mobile controls on the Laurence M. Gould. Unfortunately the mobile controls on the ship were painted over. Those controls were cleaned of paint and redeployed in a place that would be safe from painting crews. They will be recovered on after the Cape camp closing. The other controls have not yet been downloaded.



Weather:

6. We set up our weather station on 2 November to record wind speed, direction, temperature, humidity, precipitation and solar radiation at 15-minute intervals. In the next situation report on 10 November, we will report a full week's summary of weather. Since opening three days ago we have steady west and southwest winds. Currently we are experiencing 30-45 mph winds. Sunrise and sunset are at 04:28 and 20:57.
7. Our overwinter temperature logger successfully recorded temperature once every 30 minutes all winter. Mean daily temperature (with standard deviation) is plotted below with minimum and maximum temperatures. The black solid line is a moving weekly mean. The coldest day of the year was -9.25°C on 21 August 2014. The minimum temperature was -10.9°C recorded on 8 July.



Camp:

8. The camp opening has gone exceptionally well. All methods of communication have now been established (i.e. e-mail, VHF, SSB, and Iridium).
9. Our Iridium system for phone communications has been up and operating since 2 November. Communications have been established with Palmer Station and a daily morning schedule for 09:00 on the single side band radio began today.
10. As of 1 November our fixed solar array, wind generator and gasoline powered generators are now all operational. All appear to be functioning well so far. Both propane freezers have been hooked up and are now operating.
11. We are very grateful to the captain, officers, crew, and the many volunteers of the *R/V Laurence M. Gould* 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 Cara Ferrier, the MPC, Andy Nunn, Jack Greenberg, Diane Hutt, and Mike Coons. Andy and his crew did an exceptional job, and with the help of favorable weather and seas, made this a quick and safe opening.
12. 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 in getting the 2013/14 field season off to a good start. In particular, thanks to Dr. George Watters, Jeremy Rusin, Douglas Krause, David Vejar, Stephanie Sexton, Jen Walsh and Anthony Cossio.

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

