



Sit. Rep. #4
3 December 2007
US AMLR Field Station
Cape Shirreff, Livingston Island, Antarctica



Seabirds:

1. In the week since the chinstrap penguin mean clutch initiation date, 29% of nests in the reproductive study have failed and no longer contain eggs. This high failure rate can largely be attributed to snow drift. Sixty one percent of chinstrap nests in the reproductive study are currently incubating partial or full two egg clutches and 10% have not yet initiated clutches.

2. Since clutch initiation began, 24% of gentoo penguins in the reproductive study have failed and no longer contain eggs. Another 24% are currently incubating partial or full two-egg clutches and 28% have not yet initiated clutches.

3. We continue to resight known age penguins. Of the 18 known age chinstrap penguins that are nesting, 12 have failed and 6 are currently incubating partial or full clutches. Of the eight known age gentoo

penguins that are nesting, four have failed and four are incubating partial or full clutches.

4. Between 25 and 28 November, we weighed a sample of adult chinstraps at peak clutch initiation and measured their first egg. Mean masses of males and females were both slightly lower than the 8-year mean however mean egg mass was approximately equal to the 8-year mean.

5. Brown skuas are attending their nesting territories but have not yet begun nest construction or clutch initiation.

Pinnipeds:

6. Counts of fur seal pups and females continue to be lower than last year for the same dates. During our last count we had 538 females and 278 pups compared to 713 females and 405 pups last year.

7. Adult tagged females are returning in increasing numbers. To date, 62 females (28.2%) have

returned, which is lower than last year at the same time. The natality rate for those returned thus far is 87.1% (54/62), which is higher than at the same time period last year. Tagged females returning for the first time this season should continue to arrive until the end of the first week of January.

8. Pup mortality for this date is the highest it has been in five years. We have counted 15 dead pups this season (5.1%), compared to five last season (1.2%). The first tagged female to pup this season lost her pup during the perinatal period (the period of time the female spends with her pup before departing on her first foraging trip).

9. To date we have seen three females and 11 adult/sub-adult males that were tagged as pups at Cape Shirreff. It is still early in the season and we expect individuals tagged as pups in previous years to arrive in the coming weeks. Thus far we have not seen any tagged yearlings, although an untagged yearling was seen this week.

10. The last female elephant seal with a pup departed earlier this week. We tagged her pup after her departure for a total of 13 tagged pups out of the 15 seen here this season. Young elephant seals, primarily males, are arriving in increasing numbers. We saw a young elephant seal that was tagged here as a weanling two years ago. So far this season we have seen two elephant seals that were tagged here in previous years.



Cape Shirreff Weather for the Week:

11. This has been a mixed week weather-wise. It started off with several days of poor conditions, with high and gusty winds. Tuesday had the most wind for the week; with

28 mph average and gusts to 51 mph. Overall throughout the week it has averaged 15 mph, mostly from the NE and East.



Saturday afternoon.

12. The average temperature for the week has come above freezing by a small margin at 0.5 degrees Celsius. This was aided by a very warm Thursday with a peak of 14.6 degrees. The low for the week was -3.3 C.

13. The snow pack is decreasing with the warmer temperatures and occasional rain showers. Almost one third of an inch (0.31") of precipitation was measured this week, with more than half falling on

Field Station Notes:

14. Camp life here at the Cape continues to be busy with lots of project activity as the seals and birds continue their reproductive routine.

15. With the snow melting rapidly, more and more seals are able to get off of the beaches and on to the flats above the surf line, a definite advantage to pupping success. The melting snow has made it a bit more difficult [for humans] to get around though, as the remaining snow surface is getting softer - not so nice for hiking or skiing.

16. This weekend, an elephant seal managed to dislodge some of the wiring for our solar panel array, but it turned out to be a straightforward repair and the system was back on line quickly. Hopefully as the snow melts, the panels will be out of the range of the seals to prevent a repeat occurrence.

Report submitted by AMLR researchers currently 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).