

Seabirds:

1. Chinstrap penguins have finished crèche formation this week. Of our chinstrap penguin reproduction plots 53% of the nests had chicks that crèched and 47% have failed. The average date of crèche formation was 1 Feb. The average age of chicks when first crèched was 34 days and on average 0.8 chicks crèched per nest.
2. In addition to the reproductive study, we also follow the fate of 50 chinstrap nests in a manner that minimizes disturbance to the birds, 74% of nests in the non-disturbance sites crèched at least one chick and 26% have failed, 1.14 chicks crèched per nest.
3. We have finished monitoring known-age penguins. Of the 27 known-aged gentoo penguins that initiated clutches 48% have chicks that have crèched, and 52% failed. Of the 68 known-aged chinstraps penguin that have initiated clutches 31% have chicks that have crèched and 69% failed.
4. On 8 February we conducted our annual gentoo penguin chick census. We counted a total of 916 chicks. This is 95% of the previous 13 year mean of 960 and 91% of last year's count of 1010. Then, on 10 February we conducted our annual chinstrap penguin chick census. We counted a total of 3762 chicks. This is 59% of the previous 13 year average of 6328 and 87% of last year's count of 4332.
5. On 13 February we banded 500 chinstrap penguin chicks. In the future, resights of these bands will help us determine cohort survival and with luck some of these penguins will become part of our known age reproduction study.
6. We continue to search for and retrieve instruments from chinstrap penguins and gentoo penguins that we deployed last week
- 7.. We have completed collecting diet samples from penguins. In total we collected 40 diet samples from chinstrap penguins and 20 from gentoo penguins. Chinstrap penguin diet samples have consisted almost entirely of Antarctic krill (*Euphausia superba*) with trace amounts of fish. Gentoo penguin diet samples were a mix of Antarctic krill and fish. We found otoliths from the species *Gymnoscopelus nicholsi*, *Lepidonotothen kempii*, *Pleurogramma antarcticum*, and an unknown species.
8. Of the eighteen pairs of brown skuas that we are monitoring, five nests are still active, 13 nests have failed, of the two failures that have re-layed both have failed again.

Pinnipeds:

9. Only nine mother/pup pairs remain in our attendance/trip duration study of the original 29. Almost all of the pups lost have been through leopard seal predation. Trip duration for the past week



averaged slightly less than four days.

10. We still have two Argos satellite-linked PTTs (platform terminal transmitters) and two GPS-time depth recorders deployed on female fur seals collecting at-sea foraging location data. We also have five time-depth-recorders deployed. Unfortunately, a sixth TDR was lost this week from a female that shed the instrument prematurely.

11. Fur seal diet sampling continued this week with the collection of 10 scat samples from areas of suckling females. Nine of the scats were dominated by krill prey and one was entirely fish.

12. Systematic surveys of defined areas of the Cape for the 500 per annum fur seals tagged as pups continued this week. This will give us a measure of tags sighted per unit of effort for different cohorts and for different areas of the Cape. As in previous weeks the 1999, 2001, and 2006 cohorts dominate our tag resights. We still have not seen any yearlings and have only seen one two year old.

13. We have tagged 230 pups of the 500 we will tag this season. Approximately 20% of the tags deployed thus far have been on pups of tagged females.

14. We continue to see new leopard seals arriving that have been tagged in previous years at the cape. We have seen 25 tagged leopard seals this year, along with several untagged individuals.

Weather:

15. This week has been dry and relatively calm. The temperature peaked at 9.6 ° C with a low of -0.6 °C. The mean was 1.7 °C. We are unable to report on wind speed this week because of a problem with our anemometer. However, the problem is fixed now and next we will resume reporting wind speed data. The problem was limited to measurement of wind speed only and not direction. Easterlies, once again, dominated this week

Camp:

16. Our support vessel, the R/V MOANA WAVE, returned to Punta Arenas this week. They have been out of range for daily communications since 10 February. We continue to have a daily radio schedule with Palmer Station.

17. We sighted a fishing vessel off the Cape on 14 February. It was in the area, however, only briefly and it appeared to just be passing by. It was last seen moving in a north-easterly direction.



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