

## Seabirds

1. In the six weeks since peak chinstrap hatch our reproduction study nests have completed crèche formation. In total, 71% of the nests have crèched and 29% have failed.
2. We continue to monitor known age penguins that were banded here as chicks. Chicks of the known aged chinstrap penguins have also completed crèche formation. In total, 59% have crèched and 41% nests have failed. There was an error last week where an extra nest was reported as failed, it has in fact crèched.
3. Of the 21 brown skua pairs that have initiated clutches, eight are brooding chicks and 13 have failed.
4. We have started to retrieve satellite transmitters (PTTs) and Time Depth Recorders (TDRs) from chinstrap penguins with crèched chicks. To date, we have recovered 6 PTTs and 6 TDRs.
5. We continue to sample the diets of the penguins using the wet offloading technique. To date, we have collected 35 diet samples from chinstraps and 20 from gentoo penguins. Chinstrap diet samples have consisted almost entirely of Antarctic krill (*Euphausia superba*) with trace amounts of fish. Gentoo diet samples were a mix of Antarctic krill and fish. To date, we have found otoliths from the species *Pleurogramma antarcticum*, *Lepidonntothon kempii*, and *Electrona carlsbergii*.

## Pinnipeds

6. Currently we have 20 female/pup pairs of the original 30 remaining in our attendance study. No more of our attendance females have lost their pups to leopard seal predation this week, though the leopard seals do continue to prey on puppies throughout our study site. Trip length averaged 3.25 (n = 9) for the week.
7. Fur seal diet sampling continued this week with the collection of 10 scat samples from areas of suckling females. The scats were processed and otoliths, squid beaks, and krill carapaces were found, identified, and measured. A substantial number of otoliths were found.



8. 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. To date, with the combine effort of opportunistic and systematic re-sight surveys, we have seen the following percent return for the last ten year classes: (1997) 1.2%; (1998) 0.6%; (1999) 6.2%; (2000) 1.8%; (2001) 4.2%; (2002) 2.0%; (2003) 1.2%; (2004) 0.0%; (2005) 2.4%;(2006) 4.8%; (2007) 1.0% (5 individuals). A total of 127 different known-age individuals have been seen so far. Quite a few yearlings have been arriving and we hope to see more tagged ones in the remaining weeks.
9. We have flipper-tagged 49 pups of tagged adult females this season. This week we also completed our 3<sup>rd</sup> CCAMLR pup weigh in, weighing and tagging 100 pups on our study beaches. Average weight for males was 13.2kg, and for females 11.7kg. Our remaining 351 tags for the year will be put out during the next three weeks.

## Weather

10. Winter seems to have arrived. This week was the coldest we've had since early January. We had a high of 6.9 degrees Celsius and a low of -0.9. The mean was 2.0 C degrees. Mean wind speed for the week was 10.1 and the max. gust was 39.0mph. More than 50% of the recorded wind directions were from the west. Precipitation for this week was 0.21 inches.

## Camp

11. Our camp is running smoothly and all power and communication system are in operation. The R/V *Yubz̄morgeologiya* departed Punta Arenas, Chile on 6 Feb 2009 at 0900 hours en route to the South Orkney Islands, Antarctica on its second and final leg. We will maintain a daily email schedule with the R/V *Yubz̄morgeologiya* while it completes its second leg operations.
12. The wet windy weather slowed outdoor projects. However, persistence allowed for opportunistic continuation of painting projects. To date, the main camp has been completely painted, along with all of the door covers.



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