National Science Foundation & U.S. AMLR Program

2008-2009 Weekly Field Reports
Copacabana, King George Island

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This week brings us to the beginning of February, our last full month at Copacabana. The nights are starting to grow longer, and it is actually getting so dark at night that it is possible to see stars for the first time in months. Wayne Trivelpiece was forced to depart Copa early because the ship scheduled to pick him up had an unexpected schedule change. Fortunately, the AMLR ship, the Yuzhmorgeologiya (aka Yuzhmo), was able to stop by & pick him up on 1/30/09, before their return to Punta Arenas. Field projects continue to come to an end, and this week it was the daily beach sweep, where we re-sight banded known-age penguins.

Penguins

The remainder of the Adélie penguin fledglings left the colonies by the end of the week, and therefore was the end of the Adélie fledge weights study. This breeding season was slightly more successful than previous ones, with an overall mean of 1.0 chicks crèched per nest, and 62% of our monitored nests crèching at least one chick. We had 71 breeding known-age Adélie penguins at Copa this season, the greatest ever recorded here, plus a few more sighted at the Pt. Thomas rookery, as well. The breeding success for these known-age birds was not as high; however, a large percentage of them were three-year-old birds that had no previous breeding experience. 52% of these nests successfully raised at least one chick, with a mean of 0.87 chicks crèched per nest.

Gentoos: Our work with gentoo penguins is basically finished, other than trying to recover one last PTT from a bird that has only been returning to the area in the darkest hours of the night. Gentoo breeding success, as in most years, was much higher than the Adélies, with a mean of 1.58 chicks/nest in our study sites. We also had a record high 108 breeding known-age gentoos in the Copa colonies this year, which averaged 1.22 chicks crèched per nest. Many of the breeding known-age gentoos were 2-year-old birds breeding for the first time, or 3-year-olds with little to no breeding experience. The higher failure rate of these younger birds is the main reason for the lower breeding success of this group compared to the reproductive study birds.

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Chinstraps: Our first chinstrap penguin diet was completed this week on 1/26/09. The sample sizes were very large, with high proportions of fresh krill, indicating the penguins were not traveling far to forage. The krill varied in size from 33 mm to 56mm, but most were in the 40 mm – 50 mm range. This size range was very similar to what was found in earlier diets from Adélies and gentoos. 47% of the krill found were female, 44% male, and 9% juvenile. We also deployed five PTT satellite transmitters on chinstrap penguins with 2 chicks on 1/26/09. These transmitters help to determine the foraging locations of the chinstraps and will be recovered in seven to ten days. The tracks of these penguins confirmed that they are not foraging far from the colony, hence the reason for the freshness of the krill samples in the diet study.

Skuas

The nest success of the skua territories we monitor continues to decline as the season continues. Although nearly half of all pairs with failed nests re-laid, nearly all of the re-lay attempts have also failed. The south polar skuas are doing particularly poorly, with less than 10 percent having chicks at this point in the season. A more complete breeding activity and reproductive success will be included in the following sitrep, once the last of the incubating eggs has hatched. The counts at the skua club at Point Thomas, where many birds congregate in a large fresh water pond there, have remained below average all season; with a decline of more than 50% compared to last year at this time.

Seals and Whales

One humpback was seen on 1/30/09, the first whale sighting in the bay in over 2 weeks. Fur seal numbers continue to increase in our weekly census. Leopard seals have moved back into the area and several kills have been observed daily. The l eopard seals have primarily been observed taking fledgling gentoos close to shore, as most of the Adélies have gone by this point in the season.

Weekly Weather

No major weather to report this week. Several days of scattered rain and snow showers with little total precipitation. Winds gusting to 30 knots and rain showers on 1/30/09 were the worst we saw all week. Unfortunately we also saw nearly no sunshine.

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