

2011-2012 Weekly Field Reports

Copacabana, King George Island

Volume 13
January 9, 2012

Science Report:

1. **Penguins:** We censused the Copa Adélie penguin chicks on Wednesday (1/6). This season, 1.03 chicks fledged per nest, very similar to the 20-year mean.

The Copa gentoo penguin chick census was also completed this week. Overall, 1.3 chicks fledged per nest. This estimate of chick production is slightly higher than the 20-year average.

We conducted our fourth Adélie penguin diet sample on Monday (1/9). The krill (*Euphausia superba*) portion of the sample continued to consist of unusually large proportions of juveniles, with 64% of the krill measured being juveniles. One sample had 100% juvenile krill and one had 96%. The adult krill sizes ranged from 36-51 mm and 74% were males.

We conducted our second gentoo penguin diet sample on Thursday (1/12). Unlike the Adélie penguin diets, we saw almost no juvenile krill in the gentoo penguin samples. The adult krill sizes ranged from 36-58 mm, with a nearly equal ratio of male to female. Two fish otoliths were also found in one sample.

We deployed our first five satellite transmitters (PTTs) on gentoo penguins on Tuesday (1/10). We have also been retrieving the PTTs that had been attached to Adélie penguins last week; we successfully recovered four of the five units so far.

2. **Skuas:** This week witnessed another high rate of failure among active territories. Currently, only 18 territories remain active; 13 have at least one chick, and 7 are incubating eggs. Thus far this year, 89% of the initial 161 active skua territories have failed. At present, we are unsure of what is causing these large losses. We are assuming it is food-related and not weather-related. The first brown skua chicks were banded this week.
3. **Giant Petrels:** On Tuesday (1/10) the first giant petrel chicks were seen at Copa.
4. **Snowy Sheathbills:** Two eggs were found in a snowy sheathbill nest on Tuesday (1/10). These are the only resident sheathbills left at Copa and this is the first time sheathbills have bred in the area since 2007-08.
5. **Seals and Whales:** Elephant seals continued to constitute the majority of the seals seen on the Copa to Patelnia seal census on Friday (1/13), with a total of 654 elephant seals (four males, 650 juvenile/unknowns). Also seen were two Weddell seals and three fur seals. The Copa to



2011-2012 Weekly Field Reports

Copacabana, King George Island

Volume 13
January 9, 2012

Ecology Glacier census on Saturday (1/14) resulted in five juvenile/unknown elephant seals; the Ecology Glacier to Arctowski census on Sunday (1/15) resulted in 48 juvenile/unknown elephant seals and one fur seal.

Whale activity decreased a bit this week with only two sightings, one on Friday (1/13) of two whales, too far away to ID, exiting the bay and one on Saturday (1/13) of two humpback whales diving and feeding in the middle of the bay.

Weekly Weather

The weather was rainy and calm on Monday (1/9), but on Tuesday (1/10), the weather started to change, with winds increasing to 10-15 mph, and by Wednesday (1/11), the wind peaked at 25-30 mph all day, with heavy snow in the morning that melted off by mid-afternoon. Thursday (1/12) the wind decreased and for the rest of the week the it varied from calm to periodic 15- 20 mph blows with light rain or snow every day. The week's temperatures were between 36-40° F.

The 2011-12 Copa Field Team
Penny Chilton, Field Team Leader
Brette Soucie
Matt Henschen

