

# 2010-2011 Weekly Field Reports

## Copacabana, King George Island

Volume 1  
October 17, 2010

### Camp Activities:

We arrived in Admiralty Bay, King George Island, on Saturday afternoon, 9 October 2010, on board the R/V *Laurence M Gould*. Strong 30-40+ knot winds were blowing from the north-northwest, with significant surf on the beach, so it was decided to hold off on the opening until conditions calmed down. The winds didn't decrease until the following afternoon, at which time we began landing operations. There was moderate surf at the beach in front of Copacabana and minimal snow around the hut and penguin colonies, so not much shoveling out was needed to access the hut and we were able to put supplies ashore close by. Three of our Copacabana team went ashore in one of the first zodiacs to start opening the hut up and preparing things for the coming loads of supplies and food. The two R/V *Gould* electronic technicians (Kevin and Chris) and the incoming Palmer communications technician also came ashore to begin turning on the power system, getting the wind generator running, setting up the radios and Iridium phone, and getting the computers hooked up and running. We had many hands helping with the shuttle of supplies from the ship to the hut and completed the offload and camp opening chores in 4-5 hours. We were able to unpack and put much of the food away in the storeroom and freezers, and sent most of the empty cardboard boxes and shipping containers back to the ship for disposal. We are immensely grateful to all who helped make this year's Copacabana opening a huge success: John Evans (our POC – here in spirit), Stian Alesandrini (LMG MPC), LMG ET's (Kevin and Chris), the MT's (Jack, Kelly, and Dan), Captain Joe and the crew of the LMG, and all the Palmer scientists and staff (too numerous to mention by name) – we couldn't have done it without you all!

### Science report:

1. Penguins: Adélie and gentoo penguins were in pairs, occupying colonies and building nests when we arrived, but no eggs were found when we did our first check on 11 October. However, the lack of snow in the colonies and the mild weather conditions usually mean the penguins will begin laying early, and indeed, the first gentoo egg was seen on 12 October, two weeks earlier than last year. Unlike the mild, snow-free conditions we found this year, breeding was unusually late last year due to heavy snow covering the nesting sites in October. Everyone has selected their gentoo penguin reproductive data collection sites throughout the colony and started to map their separate nest sites. Each person is responsible for five to eight areas of five nests each of both species (Adélies and gentoos) and will follow all nests daily to collect reproductive success and nest attendance data. The reproductive studies involve banding both members of Adélie penguin pairs, but only one member of gentoo pairs, for a total of 200 Adélies and 100 gentoos banded at 100 nest sites per species. These pairs will be followed to provide data on daily nest attendance of these species during the incubation and chick brooding periods. Banded Adélie and gentoo penguins from the past three years will also be relocated to determine over-winter survival of the breeding population. In addition, all bands seen in the colonies from past years are recorded, both the returning known-age birds (banded as chicks) and the old “repro” birds (banded in previous years' reproductive studies). The former will be used to determine age-specific survival rates of known aged penguins for each species.



As of this writing, gentoo penguins continue to lay in many areas of the colony, with the first egg in a study site appearing on Saturday, 16 October. No Adélie penguin eggs have yet been seen.

2. Skuas: No skuas have been seen at Copacabana. However, the “front door” pair at Arctowski was present when we went for our weekly Saturday night visit. As the skuas begin to arrive, we will record the arrival dates of each member of a pair at each skua breeding territory, and any other birds they associate with. All of the territories in the ASPA are monitored regularly, at least once a week, with the ones around Copacabana checked daily.

3. Seals: Two leopard seal kills of penguins were seen and recorded during the week. Whenever a leopard seal is observed in the area, the date, time, location and behavior of the seal are recorded. The data will give an indication of predation pressure on the penguins during their breeding season.

### **Weekly Weather:**

Moderate to strong NNW winds on most days, often with rain or snow. Temperatures have mostly been near freezing, with the past two days a bit warmer, resulting in substantial melting of snow around the area. Our anemometer is broken, so we cannot record wind speeds. We hope to get a replacement in December or January.

### **Hut Improvements and Maintenance:**

We wiped down food shelves and walls in storeroom and pantry with bleach and water solution to control mold and then reorganized the storeroom and pantry food items. We began the week melting water in large pots in the hut and on the stove, but water is now running in the kitchen sink from the large collection barrels outside due to the warm temperatures recently. Unfortunately our wind generator was damaged when put up on the tower at the opening and the blades all broke off in a high wind storm a few days ago. We have found some replacement blades and hope to make repairs as soon as the winds abate and we can get the unit down off the tower and into the workshop for servicing.

The 2010-11 Copa Field Team:  
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