Weekly report no. 6./7. (ANT XXI/2) RV "Polarstern" 22.12.2003 - 04.01.2004

On the 29th/30th of December we steamed to the Drescher Inlet by brilliant weather as so often on our steaming distances. On the way we took some multibox corer and deep epibenthic sledge samples in which Katrin found some rarities. At last crabeater seals appeared in their expected frequency on the ice floats; of their predators, the killer whales, we have not seen any signs yet. On New Year's Eve a group of us flew to the Drescher Camp for the removal of a mast for meteorology while Jochen took the photographers and the cruise leader on an inspection tour onto the inlet. On the ice, above a crack, the blue acoustic experimental hut was set up, from where Mandana was following the sounds of the Weddell seals under water. In general the seals arrived far inside the inlet to rest on the sea ice and used the cracks as entrances and exits. The Emperor penguin colonies had shrunk to about half of their size; groups of moulting juveniles walked slowly towards the sea ice edge while the late developers showed the tendency to walk further into the inlet. In the present phase, mortality in the juveniles is low but some dark Southern Giant Petrels and Great Skuas were always waiting for their chance to get a weak juvenile.

On New Year's Eve the bow of "Polarstern" was pushed a bit into the sea ice edge while on the stern decks and in the hold preparations were made for a big barbecue. Only some could use the promise of combining the party with a walk on the sea ice because increasing wind and tides moved the vessel in the ice. When larger floats broke off and the gangway was hanging in the air for a moment the ice walk had to be cancelled. But the Drescher group still managed to get on board and to leave the vessel again later on. The failed ice walk did not stop the good appetite of everybody on board, but it was a pity. The New Year was celebrated on the bridge with a glass of champagne while the ship's horn was blowing – instead of fireworks.

After a short break scientific work started again on New Year's Day. While the different studies carried on, the interest concentrated on pelagic fisheries to investigate the relative amount and vertical occurrence of the Weddell seal food that mostly consists of fish. For this reason Rainer ran several bentho-pelagic trawls in the water column (mostly near the cline) and near the bottom over a 24-hour period. This went very well and confirmed that fish with the exception of juveniles stayed near the bottom during the day and came up into the water column at night. From the logger data of the seal scientists we knew that Weddell seals organise their dives after these patterns.

Yesterday we finally dismantled the Drescher station, brought it to the vessel by helicopter and stowed it away. The seal scientists were able to regain two further loggers from the animals and are satisfied with their data. We picked up the lander and the fish traps. This time the deep trap contained 4 fishes, of which two were eelpouts, and the shallow one brought enormous amounts of isopods. During the night we steamed through heavy pack

ice northeastwards, back to Kapp Norvegia and on our way to Atka. Before arriving there we have to cross some further thick ice fields and to pick up other traps and Dieter's mooring, but slowly, really slowly we start with our return journey.

Everybody at home, we wish a good start of the year. Until next week, Wolf Arntz