

## ANT-XXVIII/4, Weekly Report No. 1

13 March - 20 March 2012

Each expedition writes its own stories and anecdotes, but the start of our cruise should remain exceptional within the long history of *Polarstern*. The area of Punta Arenas, Chile, was inundated by heavy rain during the second week of March, which finally caused a huge flood of mud, trees and rubbish, running through the streets of Punta Arenas in the night from March 11 to 12. The changing crew and part of the scientists became captured in their hotels, where they had to stay for almost two days without heating and limited food and water supply. A real ordeal written into the faces of all after their rescue. The people taken part on the group flight fortunately reached the city one day later, but could find another (dry) hotel. The challenge was at that time to find all participants of the cruise under conditions of limited communication. Finally, all participants could embark *Polarstern* together with Captain Thomas Wunderlich and his crew at the bunker station Cabo Negro in the night of March 13. Beside the enormous stress during the past days, the changing crew took over the ship within two hours. 49 scientists from ten nations and five continents went aboard together with 45 crew members and the helicopter team.

The fourth leg of the 28<sup>th</sup> Antarctic cruise started on March 14, 2012 at 12:00 o'clock local time with only 18 hours delay. A special thanks has to be given to Captain Wunderlich and his well-rehearsed Crew, which made us forget the incident at Punta Arenas within a short time.

After departure of the Magellan Strait in easterly direction we proceeded southward to the tip of Fireland (Tierra del Fuego). Because of beneficial wind and currents we could forge ahead even through the challenging Drake Passage until we finally reached our first working area at Elephant Island. After about 10 days in this area we aim to proceed northerly along the South Shetland Islands. After passing Snow Island we are going to turn and pass the Bransfield Strait to reach Joinville Island at the tip of the Antarctic Peninsula. But this is still a long way to go!

A focus of this cruise will be the comprehensive analyses of the fish stocks and benthic communities on the shelf of all three working areas. These works are mainly done under the auspices of the Commission of Antarctic Marine Living Resources (CCAMLR). Within this sampling effort population genetic, physiological and toxicological studies are involved, but these projects will be introduced in a later report.

The group of the microbiologist Meinhard Simon from Oldenburg aims to characterize an important key group of the marine bacterioplankton of cold and temperate waters, the Roseobacter clade. Alongside the way through the Drake Passage several samples from the water column could be taken before, during and after passing the Antarctic convergence zone. More stations



Punta Arenas under water. (© S. Richter)



The crew is leaving the "sunken" hotel. (© O. Ziemann)



Post card from Elephant Island (© S. Richter)



Fishery by 140 feet bottom trawls (© E. Riginella)

will be done along the cruise plot in the near future.

On Saturday, March 17, we reached our first trawling position northward of Elephant Island at moderate breeze. Certainly, all crew and scientists were excited, when the first haul of the 140-foot bottom trawl came aboard. 1.1 tons of fish, mainly the marbled rock cod *Notothenia rossii*, but also icefish and *Gobionotothen gibberifrons* of reasonable size and quantities! A very good start not only according to Karl-Hermann Kock, carrying out the fishery as German representative of CCAMLR, but also for the crew taking care of the catch.

Unfortunately, the wind blew up at that time and we had to move on the lee side of Elephant Island for Sunday. There, we could proceed successfully and stayed on our time schedule.

We have a pleasant atmosphere on board and all people are on good cheer.

Best wishes from all participants!

Magnus Lucassen