

Logbook 11 (04/12/12)

Waste is not a waste of time

Anthropologists tell us that human males were hunters and gatherers in the old days when their wives still dressed in furs without having a bad eco-conscience. But hunters are no longer automatically well respected clan members, since protein is no longer running around in sufficient quantities just waiting to be shot or trapped. And Antarctica definitely is no go area for them. But gatherers came in flocks to the floe, ISPOL 2004/2005, choosing it as their base. They collect small prey such as copepods, amphipods, shallow and deep water, ice algae, and helium that comes up in homoeopathic quantities from the bottom of the Weddell Sea. But more than all this it is the waste collector job, that fascinates me. Before someone raises his voice in protest: No waste leaves Polarstern as is written in the Antarctic Treaty. We are talking about natural, organic waste known to biologists as "detritus". What are the "crumbs" falling from the white tables (floes) into the water? The ingredients are basically known: pieces of algae, dead members of the plankton zoo and faeces from the creatures living in the icy world in and under the floes.

Gerhard Dieckmann, one of the four scientists who planned and coordinated ISPOL for the last four years, has a special interest in sediment trapping. His traps consist of long cylinders hanging vertically in the water column through a hole in the ice, on a steel rope and end up in bottles, filled up with brine that is treated with mercuric chloride to preserve the samples. An ingenious mechanism rotates a new bottle under the cylinder every week (the intervals are free of choice).

But sometimes things occur, that are completely unforeseeable. A young Weddell Seal took possession of *Gerhard's* sediment trap hole and thus maybe ruining the "detritus-rain" by supplementing the normal fall out to an extent that is far from normal. But photographer *Ingo Arndt* is delighted. A cute face in a rectangular ice frame is good enough for a double page.