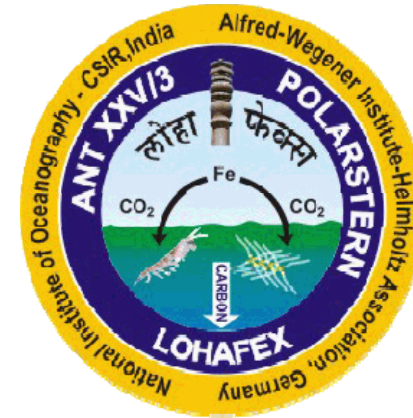


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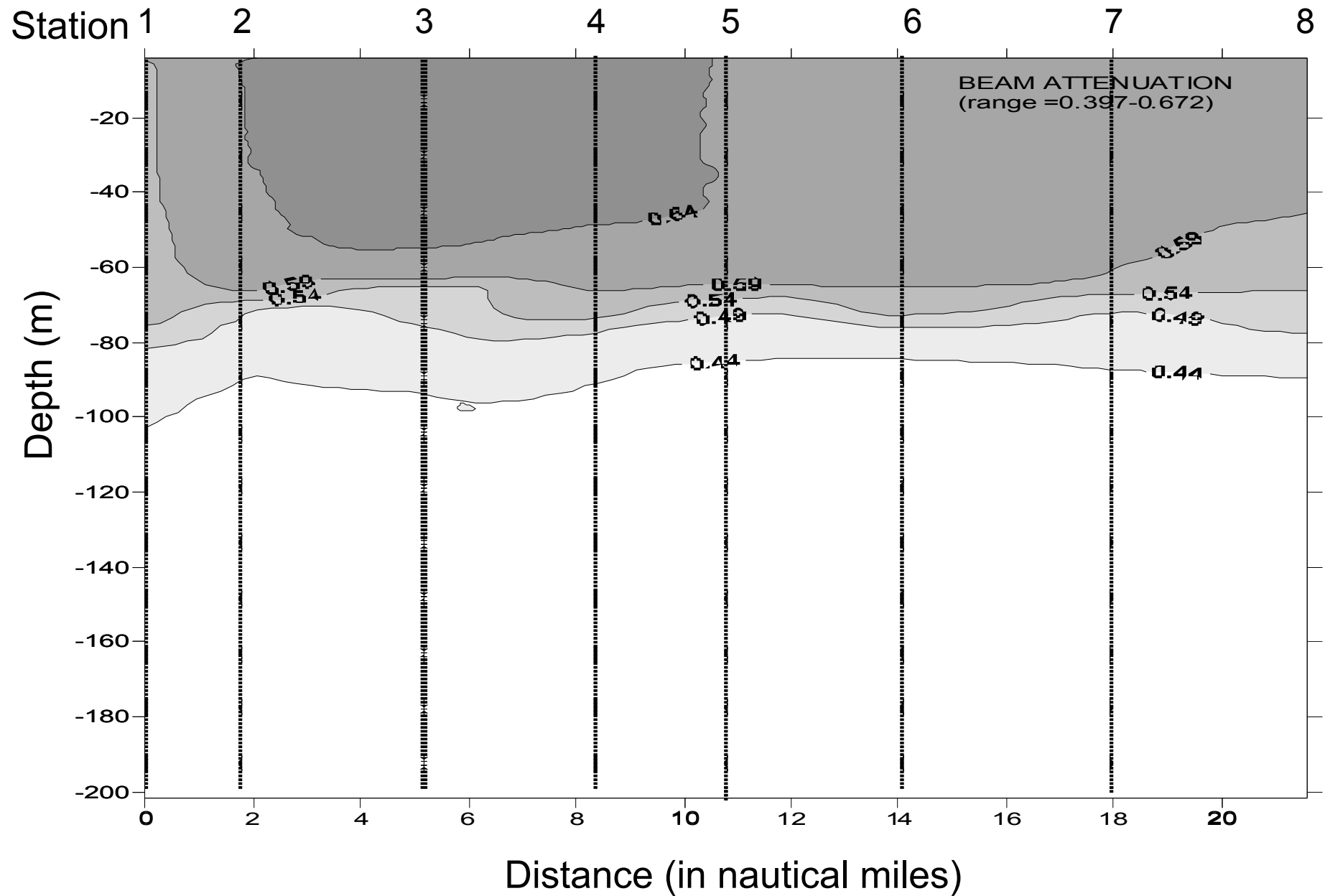
Figures 1 and 2 show results of a south-north transect through the patch four weeks after fertilization. The particle concentrations in the patch (beam attenuation) and chlorophyll concentrations are distinctly higher than in surrounding water. Note the sharp gradient between patch and unfertilized water to the south. Copepod vertical distribution (Fig. 3) along the same transect measured with a profiling camera system (VPN) shows diel vertical migration but also lower stocks in outside water to the north and south

Fig. 4 shows increasing abundances of the carnivorous amphipod *Themisto* inside the patch over 4 weeks probably due to attraction by the high copepod stocks. The biomass is in the same range as krill further to the south. Amphipods are a major food of fin whales and squid.

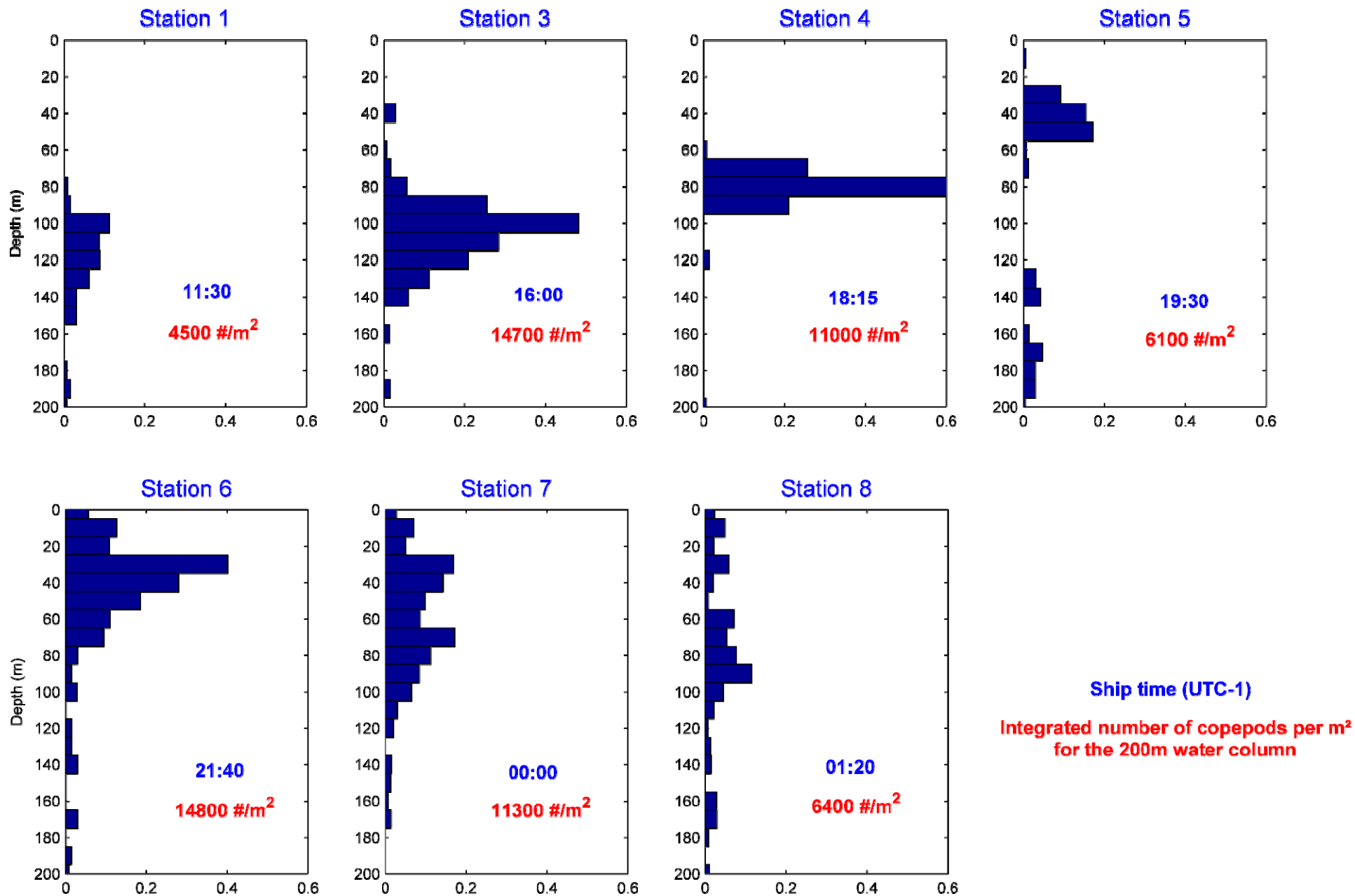
Figs. 5 and 6 present stocks of phytoplankton and protozooplankton larger than 10 μm estimated from cell counts under the microscope from a single depth over 27 days. Diatom biomass is limited by silicon availability and that of other groups by grazing. The latter also applies to stocks of protozooplankton that are in the same range as the larger phytoplankton. Evidently, most of the chlorophyll accumulating in the patch is in the size fraction smaller than 10 μm , represented by autotrophic nanoflagellates.

These are preliminary data.

Fig. 2. Beam attenuation section across the patch



Copepods vertical distribution (in #/L) during a South-North transect of the fertilized patch (25-26 February 2009) Underwater Video Profiler 5



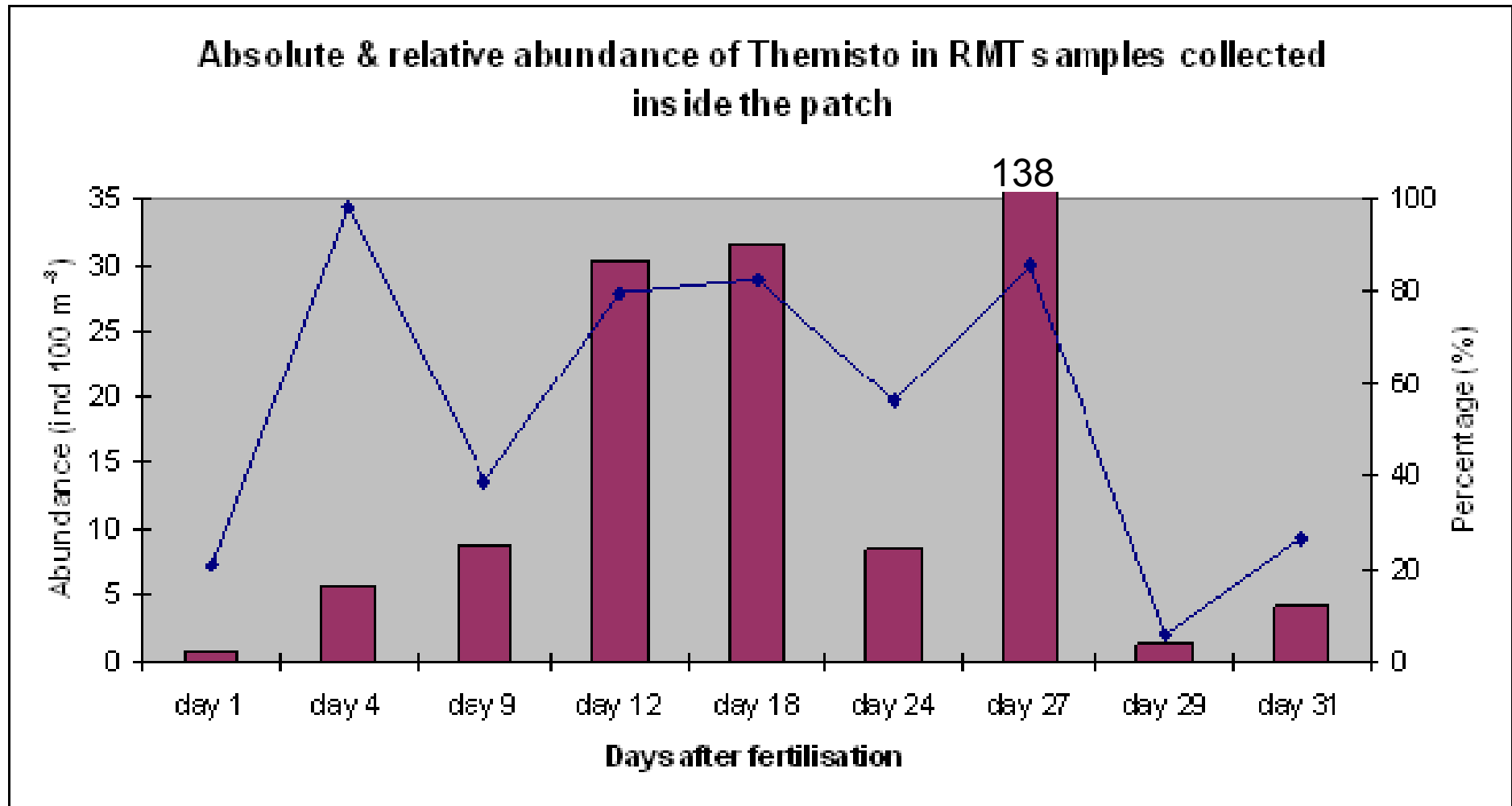
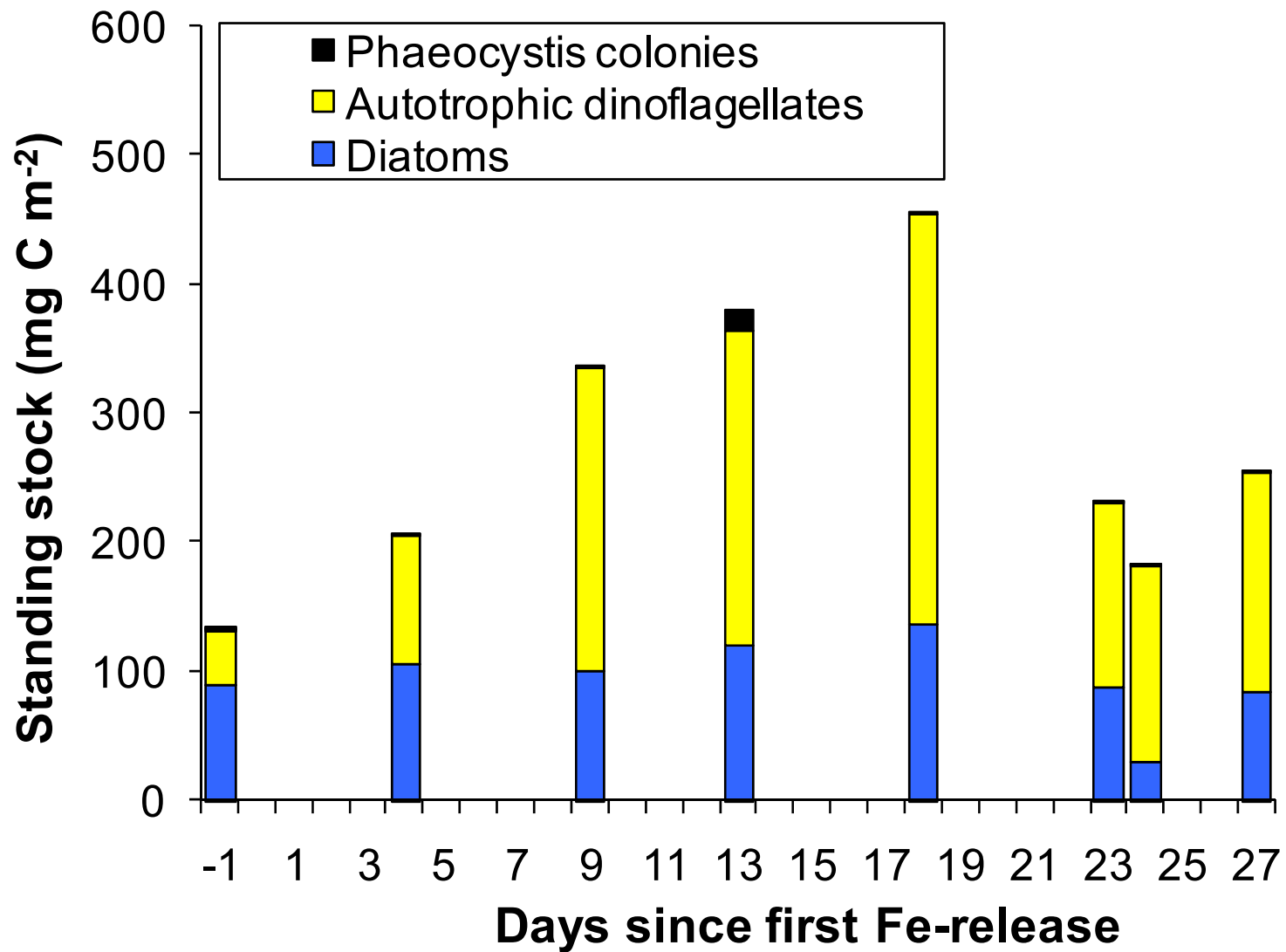


Figure 4: The amphipod genus *Themisto* is carnivorous and feeds on copepods but also salps and other zooplankton. The high biomass concentrated in swarms is remarkable and indicative of congregation inside the patch.

Microphytoplankton inside the patch



Protozooplankton inside the patch

