Sampling programme intertidal juvenile brown shrimp (*Crangon crangon*) and juvenile shore crab (*Carcinus maenas*).

Description of the programme

Aim: to study the dynamics of juvenile epibenthic crustaceans (*Crangon crangon* and *Carcinus maenas*), species that heavily prey upon newly settled bivalve postlarvae and juveniles in the intertidal of the Wadden Sea.

Study area:
At Balgzand, a tidal flat area east of Den Helder, permanent sampled intertidal stations were selected to study densities and size distribution of the two crustacean species. Names and locations of the permanent stations are listed in Table STAT.

Sampling period and frequency:
The stations 1-3 were sampled in the years 1983-2019, the stations 4 and 5 in the years 1998-2019. The focuss of the sampling period each year was in the period May-June, the period of settlement of juveniles of most common bivalve species on the intertidal flats. In a number of years sampling continued in the months July and August, in other years started already in April. The frequency of sampling was at least once per 14 days, often even more frequent.

Sampling set-up:
Each sampling was preferably carried out shortly after the emersion of the sampling station during outgoing tide. At each station at each sampling day 4 samples were taken. Each sample consisted of 10 round cores taken close together (± 1 m) with a surface of 0.009 m^2 each, sampling depth ± 4 cm. Thus each sample covered 0.09 m^2, the total surface of the 4 samples per sampling station was 0.36 m^2. Samples were sieved in the field over a 1-mm square-mesh sieve. Up to and including 2010, the contents of the sieve were stored unpreserved in labelled plastic bags, and after return directly sorted alive in the laboratory. From 2011 onwards the samples were directly preserved in plastic jars in 4% formaldehyde. In the laboratory the preserved samples were stained with Rose-Bengal before sorting.
In the laboratory the samples were sorted with the naked eye in plastic trays. All shrips and crabs were taken out, identified and measured up to the nearest mm. From the shore crabs the carapace width was measured, from the shimps, for practical reasons, the length from the tips of the scaphocerites to the tip of the telson was taken. This in contrast to the normal standardized measurement of a shrimp: from the tip of the rostrum to the tip of the telson.

Description of the database:
The database consists of 5 tables:
Tabel STAT, with the names and positions of the 5 sampling stations;
Tabel Dates, with dates of the sampling events. Under rem (remarks) is entered additional information on preservation (alles geconserveerd = preserved in formaline, no

information on preservation = not preserved and thus sorted alive), and location at Balgzand (S = region Sluisje, stations 1-3, A = region Amsteldiep, stations 4 and 5);
Tabel Meth, specifies sampling surface;
Table CRANGON, providing sampling number (links with Dates), station number (links with STAT), sample number (1-4), n = number of shrimps of given length class, L = length class;
Table CARCINUS, providing sampling number (links with Dates), station number (links with STAT), sample number (1-4), n = number of crabs of given carapace width class, L = carapace width class, ycl = year class.