

EPHEMERAL NEUSTONIC MACROFAUNAL COMMUNITIES ON FLOATING SEaweEDS

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Floating seaweed forms the most important natural component of all floating material found on the surface of oceans and seas. Notwithstanding the absence of natural rocky shores, short-lived seaweed clumps (composed of different seaweed species: *Fucus vesiculosus*, *Ascophyllum nodosum*, *Himanthalia elongata*, *Sargassum muticum*,...) are frequently encountered along the Belgian coast. There are, however, very few data on the ecological value and dynamics of these floating seaweeds.

Analysis of 87 seaweed and surface water samples (dipnet samples taken with RV Zeeleeuw between 03/10/2002 and 14/04/2003) proves that the fauna associated with floating seaweeds off the Belgian coast shows a higher diversity (x2), density (x15) and biomass (x40) compared to the surrounding water column. A distinction can be made between background neustonic fauna (Calanoida, Larvacea and planktonic invertebrate larvae) and specialized seaweed fauna of different origin (rocky shore fauna, subtidal, benthic and epibenthic fauna).

Future research will address the following aspects: (1) Temporal and spatial variation in density, biomass and diversity of associated macrofauna, (2) Importance of floating seaweeds and their fauna for birds and fish, (3) Nursery function of floating seaweeds, (4) Influence of seaweed species as structuring variable, (5) Abundance, lifespan, origin and route of clumps and (6) dispersal of associated fauna to the Belgian coast.