ABOUT "CLEAN" BEACHES AND BEACH CLEANING IN BELGIUM

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Clean beaches are a priority for all coastal municipalities. In Belgium, the beach cleaning happens mostly by using a beach cleaning machine. However, a mechanical beach cleaner not only removes most of the man-produced waste but unfortunately also takes away most of the organic material. The organic material in the high tide line has numerous natural functions in the coastal ecosystem, in terms of coastal defence, as feeding ground, as a biotope for pioneer plants, etc. On the other hand, manual cleaning undoubtedly has several positive effects: less waste is produced, less cost for the treatment of the waste, less fuel cost, bigger chance for the beach visitor to explore the natural material.

In close collaboration with the 10 coastal municipalities, a spring-cleaning action was scheduled in March 2004. General aim was to promote sustainable beach cleaning. All material on 10 beach zones was gathered. The information thus assembled is of capital importance if we want to convince municipalities to deploy their beach-cleaning machine in a more carefully thought-out and efficient way. More than half of the mechanically removed material from the beaches consisted of material with a biological origin. The beach clean action showed (1) that half of the waste is represented by two fractions: plastic and textile (incl. nets and ropes); (2) the fraction "plastic" is certainly number one, in terms of volume as well as weight (29%). This is in agreement with results obtained in other beach cleaning programmes such as Beach Watch in the UK; (3) Paper and glass each contributed 3% of the total fraction and were found least on the beach; (4) As in several other beach cleaning programmes, it was clear that a great part of the litter washed ashore originated from the sea: fishing nets, gloves, lightsticks, etc. This proves a lot of waste is still disposed at sea.

Tests with a beach cleaner clearly indicated a significant predominance of material from biological origin (31%) followed by stones (24%) and textile (12%). Therefore these preliminary results are in accordance with other studies likewise demonstrating a dominance of biological items in mechanically removed 'waste' from beaches. Removing organic matter from the beach has already proved to cause a significant reduction of diversity on microbiological as well as on endofaunal level. Consequently, it is likely that also higher feeding levels (e.g. shore birds) are affected by decreasing organic content in the high tide mark as this is one of their principal feeding grounds.