

Scientists Seriously Worried about Exploitation of the Wadden Sea

Open Letter of 51 Dutch Scientists to the Members and Deputy Members of the Stationary Parliamentary Commission for Agriculture, Nature Management and Fisheries.

The Wadden Sea is the last large-scale area in The Netherlands where nature could be allowed to have its own way. The area is internationally acknowledged as a particularly valuable nature area and is, for this reason, protected in many ways. Many threats have been averted; embankments no longer lie in wait, serious poisonings, such as in the sixties, are now less likely, recreational activities have been put under restraint, the exploration of gas resources has, for the time being, been forbidden by law, and sand exploitation is being phased out. However, the bottom disturbing shell extraction and shellfish fishery are still being allowed, as a result of which the ecosystem of the Wadden Sea is still under great pressure. This is what we want to express our concern about.

Almost all littoral mussel beds in the Dutch Wadden Sea were fished away eight years ago. Contrary to the prognosis of that time, they did not return. This indicates that old bottom structures and their associated natural ecosystems do not simply recover. Moreover, mussel beds have the capacity to catch sand and silt and to produce silt. In this way, they could compensate for bottom subsidence and sea level rise.

The exploitation of shells and intensive mussel and cockle fishery cause recurrent disturbance of the bottom structure and the associated ecosystems. The churning up of the bottom causes a direct loss of fine sediments. Many in-depth studies indicate that such a change in bottom structure means a direct loss of biodiversity. The many types of organisms with complicated life cycles, a long life span and many mutual relationships disappear and make place for few types of organisms with a short life span and simple life cycles. Bottom erosion may lead to a loss of biodiversity in the Wadden Sea.

It surprises us that the apparent staying away of the recovery of mussel beds, oyster beds and

seagrass fields, and the increasing sandiness of the tidal divides between the mainland and the islands, still have not led to much greater caution in government policies regarding bottom disturbing activities. The more so, in light of the relatively limited macro-economic interests.

The problems regarding the shellfish fishery in the Wadden Sea seem to be reduced to the problem of oystercatchers and eider ducks ('the birds') and cockles ('the shellfish'). The big mortality amongst oystercatchers and eider ducks, as of 1990, as a result of food shortage, has led to a number of measures regarding the limitation of shellfish fisheries. In years with food shortage there will now be a set-aside of cockles for these birds (the 60% regulation) and 25% of the tidal flats are closed for exploitation. However, in this way the Dutch government completely disregards the complexity of the Wadden Sea ecosystem. The food web of the Wadden Sea consists namely of more than two bird species. Not only for the eider duck and the oystercatcher, but also for 48 other bird species, the Wadden Sea is of vital importance. Besides, the Wadden Sea is a nursery area, spawning area or habitat for some 50 fish species, 300 species of invertebrates (crabs, shellfish, worms etc.) and 1100-1200 micro- and meiobenthos species (the smallest organisms).

The problems can be made clear when one would picture the Wadden Sea as an old-growth forest that is being cut. The loss of a dense vegetation layer in the forest (mussel beds on the tidal flats) leads to a barren bottom, which is sensitive to wind erosion. The regular ploughing of the bottom leads to increased wind sensitivity (on the tidal flats an increased sensitivity to wind and currents) and further erosion and makes the return of a unique community with a unique biodiversity impossible. The felling of a natural forest in The Netherlands is almost unthinkable (and how the Dutch government points to

countries that fell tropical rain forests). What happens beneath the water surface is much less tangible. Secure from the shore we continue to say that nothing is the matter. For we cannot see, feel and smell the disappearance. The damage that is being done is, however, of comparable magnitude.

That an ever recurring disturbance of the tidal flat sediments may lead to a considerable impoverishment of the very rich and unique flora and fauna does not seem to have penetrated into the Dutch government. Without having at its disposal research results, which indicate that the activities do not damage the ecosystem, this year, again, licenses are being issued for the exploitation of shells. The cockle fishermen can go their own way almost unhindered and the intensive mussel fishery is being tolerated as a matter of course. The guiding principle regarding the Wadden Sea is a sustainable protection and development as a nature area. In case of doubt about eventual negative effects of certain activities, judgment

must go into the direction of the guiding principle (the 'precautionary principle'). The Dutch Government does not take serious the Precautionary Principle adopted by itself.

The Netherlands is highly respected where it concerns environment and nature protection. The research and protection policies regarding the bottom-disturbing exploitative activities in the internationally much praised and apparently well protected Wadden Sea area are, therefore, a disgrace. We ask attention for the vulnerability of the Netherlands' last wilderness. We request you to reconsider your policy regarding the licensing and exempting of the present intensive shellfish fishery in light of the, by you, endorsed precautionary principle. First, it will have to be proven that the range of bottom disturbing activities in the Wadden Sea does not do damage to this worldwide unique ecosystem.

The Hague, 24 September 1998

