

COASTAL MEADOWS ARE WETLANDS



Coastal meadows are seminatural communities which means that their creation and future is deeply connected with human activities – grazing and mowing.



Amphibians – frogs, toads, newts – are more likely to use the shallow pools on higher parts of the meadow. The water is less salty there. The pool also has to dry up during the summer to ensure that fish will not eat up their offspring. The pools must have flat shores and low vegetation for the amphibians to use them for breeding.

WHAT IS A COSTAL MEADOW?

The coastal belt is created through the interaction of coastal and marine environments. It is a very dynamic area where one can find different types of landscapes – dunes, sand beaches, rock or limestone escarpments. With moderate human influence, the flat and muddy coasts develop into coastal meadows. Coastal meadows are shallow shores with low plant cover, that are often flooded by the sea. This type of landscape is characterised by a salt loving fauna, a richness of migrating birds and a diversity of nesting birds.

A VALUABLE ENVIRONMENT

The low terrain of coastal meadows create excellent conditions for the formation of small water-filled depressions (natural ditches, puddles, etc). Endangered bird species like ruffs, dunlins and black-tailed godwits depend on wet meadows with high water levels (level of groundwater up to 30 cm over ground in May and early June). Ruffs and dunlins alike need shallow pools that gradually dry up during the summer. Moist soils make good feeding grounds also for redshank, curlew, lapwing, avocet, ringed plover and common snipe. Higher numbers of different species of waders make the nesting conditions safer for endangered species like dunlins and ruffs. Many amphibians (toads, frogs, newts) need the shallow pools in higher parts of the coastal meadows that are less influenced by the sea for spawning.

A DRAINED ENVIRONMENT

Many coastal meadows have historically been wetter than today. The meadows have



Waders – ruffs, dunlins etc - need shallow pools near seawater and also mud and a reed-free shoreline for feeding. As waders feed on small invertebrates living in the mud, wetter and muddy areas suit them better.

been drained over time to get better yields of hay and to ensure better mowing conditions. Due to ditches the natural water systems in many of our meadows have been damaged. Especially the higher parts of coastal meadows are too dry for many threatened meadow birds and amphibians.

A ditch in the coastal meadow does not necessarily mean that the meadow is not in a favourable condition. But the drainage often indicates that the natural hydrology of the coastal meadow is interrupted and that the water is leaving the ground through ditches to the sea too fast. As one of the purposes of drainage in the past was better plant growth.

The drained meadows tend also today to be too productive and less grazed than the wetter areas leading to overgrowth. Therefore it is very important to improve water conditions on our coastal meadows, particularly on those with a great importance and potential as breeding sites for waders.



WHAT CAN BE DONE?

Firstly, new ditches and restoration of old ones should be avoided on coastal meadows. Old ditches on the meadows tend to be deep, narrow and steep, therefore not a good replacement for natural depressions as foraging grounds for waders and breeding sites for amphibians.

There are several ways water conditions can be improved on a coastal meadow: blocking ditches, flattening their banks and connecting them with natural depressions. In addition to improving the habitat conditions of threatened birds and amphibians, this kind of ditch management also helps to reduce the inflow of agricultural pollution into the Baltic Sea.

IMPORTANT

If you have old ditches on a coastal meadow, the first thing you need to do is to conduct a survey to map the hydrology of the meadow. It is important, because you have to make sure that the blocking of ditches would not damage nearby agricultural fields. The aim of the work should be to lead the water to natural depressions, so it stays longer on the meadow.



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