

NATURE PROTECTION IN DENMARK

By A. M. V. BOYLE

Nature protection in the scientific sense began in Denmark in 1844 when a peat bog to the north of Copenhagen was protected by royal edict. Throughout the nineteenth century many other areas ranging from dune and heathland to single trees, were acquired by the government for protection. The Danish Association for Nature Protection was founded in 1911, followed in 1917 by the passing of the first nature protection act.

To-day this work is carried on mainly under two acts. The Reserve Act of 1936 provides for the establishment of scientific and game reserves administered by the Nature Conservancy and the Game Committee respectively. At present there are seven scientific and nearly fifty game reserves. Protection of particular species of mammals and birds is provided for under the Game Act; extra protection can also be afforded, such as that given this year to birds of prey and to wild geese in the spring.

Under the Nature Protection Act of 1937 there exists in each county a board of three members; the chairman is a judge appointed by the Prime Minister, the other two are elected by the county council and parish council. This board decides on local areas needing protection and on compensation to be paid to landowners. The decisions of the local board are laid before a superior national board. In addition, the Nature Conservancy, a committee of seven, including a botanist, a geologist, a zoologist, a forester and an architect advises the government and local boards on scientific protection, and administers scientific reserves.

Several admirable and timely provisions under this Act are especially interesting. Along the North Sea coast no building is allowed within 500 metres of the upper edge of the beach, and on all other parts of the coast within 100 metres. Houses may not be built without special permission within 300 metres of the edge of a wood. As a result of this there are miles of sand dunes and other coast scenery quite unspoiled by the bungalows which clutter up so much of the shore of Great Britain. All advertisements along the roadside outside towns are forbidden, with the exception of advertising on one's own house or shop.

Those of us who attended the Copenhagen conference of

the International Union for the Protection of Nature this autumn were able to take part in the excursions arranged by the Danish Organizing Committee, and thus to see the enlightened state of nature protection in Denmark. The first excursion was to the south of Zealand and the island of Møen, which is connected to Zealand by a bridge. Our first stop was at the peninsula of Ulvshale to see the protected deciduous woods growing on a flint ridge. Thence to the manor house of Klintholm where the owner, Mr. Scavenius, very kindly entertained the entire party in his beautiful house and grounds. Mr. Scavenius is the owner of the wonderful Klinteskov beech woods which we were to see next day, and which are protected by him under the Nature Protection Act. They are open to the public.

The next morning we visited Møens Klint, chalk cliffs of spectacular height with beech woods clinging to the edge of the precipice and the sides of the gullies. On the curiously eroded white pinnacles the jackdaws chatter, while at the foot, on the shore, lie fossils millions of years old. House-martins build against the cliff, peregrines have bred there and geese nest in hollow trees in the wood above. Later, as we walked across some juniper-clad downland, a splendid black stork circled slowly above us, giving a perfect view of Denmark's rarest breeding bird. We then drove back to Zealand passing many cottage gardens full of bright pink hydrangeas, purple clematis and huge clumps of red and white phlox.

To the north of Copenhagen is some lovely rolling country with many beech woods and small lakes. Much of this area is preserved under public control for the benefit of the inhabitants of the city. Close to Copenhagen is Utterslev Mose, a lake and marsh which has been partly turned into a municipal park, but so skilfully tamed that thick reed beds still fringe the pools. Grey lag geese breed regularly and even bittern have been seen. The Jaegersborg Dyrehave is a state forest which was originally a royal game park. The wide rolling park land and old oaks and beeches provide a fine setting for the herd of red and fallow deer. There are also a few sika.

The last and longest excursion began with a night trip by steamer from Copenhagen to Aarhus on the east coast of Jutland, the second city in Denmark. From here we drove north-east to the Mols peninsula where there are rounded hills and heaths and attractive bays and inlets. Since 1948 a considerable part of the peninsula has been protected. The laboratory, housed in part of an old farm, belongs to the Aarhus Natural History

Museum and is the centre of ecological research in the area. After a most interesting morning's walk we drove south through Aarhus and then westwards. The island of Vorskø has been a scientific reserve, closed to the public since 1930. We were ferried across the shallow water in picturesque horse-drawn carts, each one bristling with photographers eager to take pictures of their colleagues in the other cart. The island was formerly cultivated but is now allowed to revert to wood and scrub so that the changes in the fauna and flora may be studied. There is a heronry in the woods and a colony of cormorants.

Driving westwards across Jutland we were able to see extraordinarily clearly the limit of the ice during the last ice age. East of this line the country is more hilly and less fertile, so less intensively cultivated, and the farms are mostly old and thatched. To the west it is very flat and rather uninteresting, but the soil is rich and the farm buildings are more modern. Nowhere did we see hedgerows; wire fences seem to be the rule, but a certain number of conifers have been planted as shelter belts. We were shown some splendid areas of open heath, made the more attractive by the view of a red deer hind and two young trotting across the landscape. Here also are some big plantations of conifers.

Over on the west side of Jutland is the bird reserve of Tipperne, beside a huge shallow lagoon reached across wide flat grazing meadows. Several small flocks of grey lag geese were feeding on the grass and we had a distant view of waders and swans far out on the mud flats. Quantities of common frogs were to be found near the reeds fringing the lagoon.

Turning south we paid short visits to several beautiful protected areas. At Gammelgab there is a splendid extent of duneland with small pines in the hollows and a view over the lagoons to the North Sea, with hardly a sign of human habitation. At Løvklitten we saw a most interesting wood of scrub oak growing on sand dunes. Oak woods are few in Denmark.

The last morning was spent on the peninsula of Skallingen, which forms the north point at the entrance to Esbjerg haven. Geologically this peninsula is very young and has never been cultivated. Sheep are pastured on the land side: on the sea side of the dunes stretches a magnificent beach of fine firm sand. Much ecological investigation is going on and a careful watch is kept on the ever changing shore line.

And so we came to the end of the excursion, all of us with feelings of gratitude to our Danish hosts for their hospitality and excellent arrangements.