## **ESTONIA**

## Estonian Watermills are Threatened by Fish

Estonia has been a country of watermills since at least the 13th century when several watermills were mentioned in the early written documents on Estonia. The mills became primary economic units of Estonian manors and thus important strategical and economic landmarks that were marked on the historical maps of Estonia. Watermills have shaped the Estonian landscape to a significant extent – the dams with their bridges directed the course of the roads; the dammed-up lakes characterised the manorial landscapes and the rural landscape to this day.

In the 1930s there were around 800 operating watermills in Estonia. Even before World War II, many watermills were converted to produce electricity, with hydropower stations remaining important energy sources during the first decades after the war. Nowadays, there are 96 objects related with watermills protected as national monuments and many more are recognised by local people as important landmarks. However, most of them are

no longer in operation. There are a couple of watermills where the historical machinery has been preserved and only one of them – Hellenurme – operates daily as a mill-museum. There are a few that operate as hydropower stations producing electricity. The majority of the watermills and their dams are protected as elements of manor ensembles. A huge number of them are empty and unfortunately in bad condition, because without proper maintenance they are fragile due to the destructive power of water.

While so far maintenance was considered the biggest challenge in protecting this important type of heritage, since 2013 there has been an unusual conflict between the National Heritage Board and the Environmental Board of Estonia. The latter demands the unconditional demolition of the historic dams to restore the spawning grounds of fish. The Environmental Board substantiates its demands with the Water Act: "The passage of fish both up- as well as downstream shall be ensured by the owner or possessor of a dam on the dam built on a water body that has been approved as a spawning area or habitat of salmon, brown trout, salmon trout or grayling, or on a stretch thereof on



Fig. 1: Hellenurme watermill (photo Mae Juske)



Fig. 2: Linnamae hydrostation (photo National Heritage Board)

the basis of subsection 51(2) of the Nature Conservation Act." (§ 17(4)). The nature protection legislation is based substantiates on the principles of the Directive 2000/60/Ec of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy. The Directive states that Member States shall implement the necessary measures to prevent deterioration of the status of all bodies of surface water (art 4.1.1).

Despite years of negotiations between the Boards and the Ministries of Culture and Environment, the problem has still not been solved. The Chancellor of Justice gave his opinion as early as 2015 proposing amendments in the Water Act to enable the weighing of values.<sup>3</sup>

The enthusiasm of the Environmental Board is partly based on the European Union funds provided to improve surface waters. There are enormous subsidies to build passages for fish even in small rivers. The European Parliament resolution on the protection of the European natural, architectural and cultural heritage in rural and island regions<sup>4</sup> that calls on the Commission and Member States not to provide Community funding for projects which will demonstrably result in the destruction of valuable parts of our cultural heritage (art. 17) has been completely ignored.

By now several damns have been destroyed and in some rivers passages for fish have already been built. However, there is no substantiated data if the fish population in the rivers interrupted by dams for 100 to 200 years has increased or been restored. As mentioned before, the dams and dammed-up waterbeds have influenced the development of the cultural landscape, the landscape and nature in general. They have also influenced the way of life of local communities.

The National Heritage Board has agreed to a compromise for some watermills, but there are several highly valuable mills and dams where a compromise is not a solution and a choice has to be made between centuries of man-made landscape and traces of history on the one hand, and the hypothetical restoration of spawning grounds on the other. Historic mills threatened by strict environmental regulations are for example Hellenurme and Linnamäe.



Fig. 3: Peedu-Nuti watermill (photo Mae Juske)

Hellenurme dates from the 1880s and is still in operation with the machines and equipment dating from the 1930s. The complex also includes a sawmill and in the late 19th century there was even a distillery. Hellenurme is now the only watermill in Estonia operating daily. As a mill-museum it presents and continues the tradition of mill work.

The issues of the dam are multilayered and thus the ongoing conflict regarding the dam is even more confusing. First of all, it is the most valuable of all existing watermills in Estonia as it has preserved all its equipment and is still in operation as a traditional flour-mill. Any long-term interruption in the work of the machinery influences the historic tools. For example, the belts may lose their tension if they haven't been used for a longer period.

The dammed-up lake is an integral part of the historicist manor ensemble; the main building is reflected in the water. The lake itself is relatively shallow and with very slow inflow of water. Every reduction of the water level results in a long recovery period. The manor buildings house a local kindergarten and a nursery home for nearly 300 people with special needs. These institutions are heated by the ground heating system that takes the heat from the lake. The lowering of the water level severely influences this system. The river downstream the 2.9 m high dam is very narrow and indented between the saw mill and the high banks, which makes the potential construction of a passage extremely complicated.

Even if the changes are made, the operation of the mill will become an economic burden for the owner as she also has to maintain the very costly passage. Lastly, the proposed constructions will lengthen the spawning grounds of the fish only by eight kilometres. So far there has been no significant increase in the population of fish downstream the same river where dams were already destroyed several years ago.

Linnamäe hydropower station dates from the 1930s and is significant both for its architecture and its function. The daily operating green energy station was carefully restored a few years ago. The dammed lake is an important local recreation area. The potential demolition of the dam would destroy the national monument and also one of the very few sites where the production of green hydro energy on a larger scale in Estonia is possible.

The above-mentioned watermills like the majority of others are in private ownership. The conflicts have generated a situation where the owners are torn between different regulations. The Conservation Act prohibits the alteration and demolition of a protected monument while the Water Act imposes it. Unfortunately, the arguments of the National Heritage Board that cultural heritage should be handled as a primary value and the compromise that a few dams out of many should be handled as exemptions

has not been accepted by the Environmental Board. The disagreement has been so significant that the owners of both watermills turned to the court and the question of Linnamäe was discussed in the Government of the Republic of Estonia on Oct 10th, 2019. According to the statement of the Government, the environmental interests have not proved to be more significant than social and economic interests. All stakeholders are expected to further substantiate their positions.<sup>5</sup>

Riin Alatalu

## **Footnotes**

- <sup>1</sup> Water Act. RT I 1994, 40, 655 https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/526022019001/consolide.
- <sup>2</sup> Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy: https://www. envir.ee/sites/default/files/veepoliitika\_raamdir200060ecen. pdf
- <sup>3</sup> Õiguskantsler Ülle Madise: Riik ei tohi sundida inimest seadust rikkuma https://www.oiguskantsler.ee/et/õiguskantsler-eille-madise-riik-ei-tohi-sundida-inimest-seadust-rikkuma.
- The European Parliament Resolution on the Protection of the European Natural, Architectural and Cultural Heritage in Rural and Island Regions (2006/2050(INI)) http:// www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP// TEXT+TA+P6-TA-2006-0355+0+DOC+XML+V0//EN
- Valitsus leidis, et keskkonnahuvid pole Linnamäe paisul kõige olulisemad
  - https://www.err.ee/991864/valitsus-leidis-et-keskkonnahuvid-pole-linnamae-paisul-koige-olulisemad.