

## **Fishery and Tourism = Fishing Tourism at Lake Võrtsjärv, Estonia**

*By Jaanika Kaljuvee, Lake Võrtsjärv Fisheries Development Agency (FLAG), Estonia*

### **Introduction to the region:**

**Lake Võrtsjärv** is the second largest lake in Baltic countries and the largest lake within the boundaries of Estonia. It is a shallow and turbid eutrophic lake with a mean depth of 2.8 m and maximum depth of 6 m. The water level changes with annual mean amplitude 1.4 m, and this, together with winds, is the main factor influencing the biota in the lake.

L. Võrtsjärv is covered with ice on average 130 days a year (from the end of November till April 20<sup>th</sup>). The few islands are mostly located in the southern part of the lake. The reeds and *Myriophyllum spicatum* are expanding everywhere in the lake as a result of anthropogenic eutrophication.

Lake Võrtsjärv as a whole is proposed as **Natura 2000** Special Protection Area (SPA) and Special Area for Conservation (SAC). A total of 213 bird species have been recorded at Lake Võrtsjärv, among them 138 breeders (including 56 occurring only in habitats: reed, meadows, sandy/gravelly shores), 14 summer foragers/feeders and 61 migratory passengers. In addition to *Botaurus stellaris*, several bird species of Natura Bird Directive live at L. Võrtsjärv. The lake and the large surrounding wetlands are also important migration staging grounds for waterfowl and shorebirds. In L. Võrtsjärv **live also three fish species included in the Estonian Red Data Book** – *Silurus glanis* as endangered species, *Coregonus albula* as care demanding species, and *Aspius aspius* as indetermined species. In addition to these, in the inflowing rivers live Natura 2000 fish species *Misgurnus fossilis*, *Cobitis taenia* and *Barbatula barbatula*.

### **Fishery**

In the field of fisheries, different directions are represented in Estonia: deep sea and coastal fishing, inland water fishing and fish farming.

Estonian Fisheries Strategy for 2014-2020 stresses the need of sustainable use of fish stock: to pay more attention for restoration of spawning areas, to eliminate migration barriers as well as knowledge-based use of fish stock, including the optimization of catch load.

According to the Estonian fisheries strategy 2007-2013, the diversity of the fisheries sector must be preserved. The more concrete goals of the strategy are: increasing the income of fishermen; balancing fishing possibilities and capacities; placing the highest possible value on fish in Estonia, so that the fisherman could get the biggest possible profits for the caught fish; developing fish farming as an unused potential.

Fisheries Groups network's (FLAG`s) main task is to promote the exchange of knowledge and experience at the level of Estonia, to support the initiation of cooperation, arrange cooperation-promoting thematic meetings and to arrange trainings for the active groups. The activities of the network promotes the exchange of information on local, Estonia and the European Union level.

The profitability of fishery in Lake Võrtsjärv depends mainly on the condition of the stocks of pikeperch, pike and eel.

Võrtsjärv total catch has fallen in recent years, due to small bream catch loss. The reason is the lack of markets and that the small fish is thrown back into the water. Eel catch is less than a third of the long-term average. The main reason is the rise in water level in the lake.

Furthermore, eel catch is significantly affected by the volume of restocking. Based on the above, it can be predicted the decrease in catch by the year 2015.

The eel production of L. Võrtsjärv is entirely based on stocking with wild caught elvers or farmed eels (4-20 g). During the half hundred years (1956-2013) over 50 million eels were stocked into the lake.

Since 2011 Lake Võrtsjärv FLAG is responsible for restocking glass eels. Within 3 last years ca 3 million elvers were stocked into the lake. Annual investments for restocking is ca 130 000 euros (comes from taxes fishermen pay to national fund).

It is especially important to popularize recreational fishing among young people, because it would create a new generation of young anglers aware of the environment and the behavior of fish stocks sustainably. The result is the growth of environmental awareness and improved management culture, thus reducing the number of violations and thereby the costs will reduce in supervision process.

Over the 10 years there has been a tendency that most of the professional fishermen have their “main” job and fishing is just an extra income. Reasons are mainly like short catch season, catch restrictions, low market prices, too many professional fishermen per lake (which makes low fish catch per one fisherman) etc.

That is why diversification of business activities is important for fishermen and tourism is one of possibilities to increase the income of fishermen families.

## **Tourism**

Lake Võrtsjärv region, having good preconditions for recreation industry, has attracted relatively little attention as a tourist destination. During the first Estonian Republic and at the beginning of the Soviet times, summer holidays were largely spent on farms. The main trend in the 1960s was the building of summer cottages and holiday complexes by various institutions.

As if awakening from an apparent demise, it is namely now today that the re-discovery of Võrtsjärv is taking place. Local municipalities around the largest inland lake of Estonia have decided to change Võrtsjärv from an unfamiliar place to a real magnet. Recreational opportunities are being developed, hiking tracks labelled and new views are being opened to the lake. However, nature education campaigns and introduction of the cultural heritage of the region are being extended hand-to-hand.

As the weather conditions of Estonian summers are inconsistent, there is a need to be flexible, inventive and efficient, and to seek supplementary services and activities when developing the recreation industry.

An ancient fishing method peculiar to the Võrtsjärv area involves using the **kaleboat** (kale - a large-meshed trawl net). **Kale** is a traditional clinker-planked wooden fishing trawler-sailer used in Võrtsjärve region up to 60-s. Because of its slender appearance it was often used for regattas and leisure cruises as well. After trawling has been prohibited, all kaleboats disappeared from lake.

Traditional boat building (like sailing boat „kale“) is now runned by local fishermen. Kaleship “Paula”, built according to the instructions of the last surviving shipwright and fisherman Väino

Leiaru in 2005, is the only one of its kind and now offers study and pleasure cruises to people interested in historic wooden vessels and traditional fishing on Lake Vörtsjärv and its islands. Now locals build boats already inside in a small workshop - factory. **This is not just an ordinary fishing boat and tourist attraction but holds an important socio-cultural and historical meaning for the locals around the lake.**

Beside the boatbuilding it became important for fishermen to place the highest possible value on fish, so that despite of low fish catch they could get the biggest possible profits for the caught fish.

Traditional fish food offers as well as fish catch demonstrations on the lake makes it difference for tourism entrepreneurs to diversify their tourism products and to cooperate with fishermen in order to display the variety of the region`s cultural and historical heritage.