

PST30 - The characteristics and conservation of traditional fish ponds – Main water habitats of European pond turtle *Emys orbicularis* in Latvia

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Traditional fish ponds in Latvia are single, relatively small ponds or relatively small ponds connected to a system, which are specially excavated or formed by the creation of dams on streams and small rivers. Due to the abundance of water resources in Latvia, such ponds are widely spread throughout the territory. Fish farming in many of these traditional fish ponds, is either not cultivated for many years, or is carried out extensively, in most cases, limited to the periodic put into of fingerlings of *Cyprinus carpio*, *Carassius auratus*, and *Carassius carassius* etc. Most of these ponds are over 25-40 year old, their water and the shore are abundantly covered with macrophytes, and there are suitable habitats for many rare species of animals.

The European pond turtle *Emys orbicularis* is a rare and protected reptile species in Europe. It is spread in Latvia on the extreme northern border of its European range. Since 1984, we have registered 96 cases of finding of *E.orbicularis* in Latvia. To save *E.orbicularis* in Latvia, it is important to research their water habitats.

In the result of this study, we have found that in 68 cases *E.orbicularis* were found in water habitats or near them. Most often *E.orbicularis* was found in Latvia in traditional fish ponds - 21 findings (31%). Also, they were found in small lakes - 14 findings (21%), marshes - 10 findings (15%), small rivers or streams - 8 findings (12%), big lakes - 7 findings (10%), ameliorative channels - 6 findings (8%), home ponds - 2 findings (3%).

In these traditional fish ponds were measured: surface area; the length of coastal line; distance to nearest water body and connectivity; overgrowing of water surface, costal line, and costal zone; distance to the nearest house and road; level of urbanization, and intensity of using by humans.

On the basis of the results obtained, the management measures of the traditional fish ponds for the conservation of *E.orbicularis* in Latvia have been proposed. These measures will be included into the actualized Species Conservation Plan for *E.orbicularis* in Latvia.

The research was supported by the project "Mobile complex of pond aquaculture scientific laboratories of Daugavpils University".