

**ECOLOGICAL QUALITY OF SMALL POST-PEAT WATER BODIES SITUATED
ON THE WETLANDS OF THE WYSKOĆ CATCHMENT**

Juszczak R., Leśny J.

One of the typical elements of an agricultural landscape are wetlands situated in the depressions of terrain. They are a result of using the peat bog for different purposes. Nowadays, the visible remnants of those activities are post-peat water bodies which have been formed by filling the peat pits with water. Many studies have shown that small ponds are under strong anthropogenic pressure. As a consequence, the ecological and aesthetical quality of ponds, their area as well as a number have been dramatically decreased. Thus, bearing in mind their significance for natural, hydrological and economical systems, they have to be protected.

The results of ecological quality assessment of small post-peat ponds situated on the Wyskoć catchment were presented in this paper. The Wyskoć watershed is located on the Leszczyńskie Lake District in the southern part of the Wielkopolska region. The catchment area is equal to 182.46 km². In this catchment, the total number of small ponds with area less than 2 ha comes to 640 reservoirs, yet post-peat ponds constitute about a third of them. The assessment of ecological quality of small ponds was made on the basis of: reservoirs surface area, hydrography, aquatic (submerged, floating-leaved, and emerged) plants, analyzes of drawdown zone/outer edge, surrounding lands and degradation of ponds. To assess the value of ponds, five classes of ecological quality were used. The value of ponds decreases from first to fifth class. A degradation of water bodies was assessed on the ground of 11 anthropogenic factors. They are as follows: surrounding landfill sites, urban areas, roads, arable fields, fishing and fish farming, trees' cutting back, cattle grazing, sewage off, waste storing and negative consequence of wrongly made land reclamation. There are four classes of pond degradation. The anthropogenic pressure decreases from first to fourth class. The non-degraded ponds were included to first class.

The post-peat ponds of the Wyskoć catchment are under strong anthropogenic pressure, because about 45% of them were rated among 3rd and 4th class of degradation. On the other hand, about 47% of reservoirs are non-degraded (1st class). Despite of the strong anthropogenic pressure put onto ponds they still have a high ecological quality. The 45% of ponds were rated among first class of ecological value (the highest quality) while only 14% of ponds were belonged to 4th and 5th classes (the lowest ecological quality).