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## The experience of intensive perennial growing up of fingerlings of noble crayfish *Astacus astacus* (Linnaeus, 1758) in Belarus

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Noble crayfish *Astacus astacus* is the most valuable commercial species of freshwater crayfish in Europe. But now for many reasons its abundance in many European countries saw a significant decline. The main way to meet the demand for *A. astacus* is to increase its production through aquaculture. In Belarus *A. astacus* reaches of marketable size (8-9 cm) at the age of 4 years, whereas in Western Europe, with a warmer climate it attains such dimensions one year earlier. Therefore the open-air *A. astacus* aquaculture in Belarus will be less profitable than those in Western Europe; we conducted an experiment on the year-round rearing up of newly born *A. astacus*. Initially new-born *A. astacus* were reared at different densities in summer in open-air fishing trays for 3 months (early of July - early October) and after that in laboratory room in aquaria for 6 months (early October - early April). The water temperature in trays varied from 25°C in the summer to 12°C in the autumn, and at winter rearing – in the limits of 18-20°C. At summer and winter growing period, the survival of young in different trays and aquaria varied in the limits 29-38% and 50-80% respectively. The average body weight of specimen in both stages of rearing did not differ significantly with the density of rearing. At the end of winter rearing (the age approximately 10 months) the weight of specimen varied in the limits of 668-939 mg. The *A. astacus* juveniles in natural reservoirs in Belarus reached the similar weight by the end of the second year of their life. Thus, winter growing up of *A. astacus* yearlings allows reducing the age of achievement of marketable size of from 4 to 3 years. It allows to reduce significantly the financial cost for *A. astacus* aquaculture in Belarus.

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