Ponto-kaspian relict *Paramysis lacustris* is available food for the variety of fish species. Due to the acclimatization activities, the natural range of *P. lacustris* is now significantly expanded and cover the territory from the Baltic waters to Central Asia. In the present study have been analyzed the quantitative parameters of the growth and the reproduction of mysids from the different zones of the areal, in the basins distinguished by the different abiotic factors. Comparison of the absolute parameters and their various correlations made possible to determine the parameters, affected by the action of external agents. These include: the duration of the period of juvenile growth, calendar dates of the reproduction's start, the duration of the generative and embryonic cycles, the number of generations, the values of the size and mass of the eggs, juveniles and mature individuals, the absolute fecundity and the shape of its relationship to the size of the animals. At the same time, certain indicators and functions are often stable and remain constant in the different water bodies. It is primarily the connection of the start of reproduction of the different populations to the similar temperatures, the absence of somatic growth in reproduction period, polycyclicity, energy distribution between somatic and generative growth, the dynamics of the main energy indicators in embryo development, the dynamic of energy in ontogeny. Integrated studies of the growth and reproduction of mysids within the area made possible to get an idea of the state of the population under the different conditions. Revealed changes of the duration of the individual stages in the ontogeny, the number of generations, the absolute fecundity, specific growth rate, efficiency of food on growth, have been shown the decrease of the reproductive capacity of the populations of mysids in Baltic waters, compared with southern zone of the introduction and the center of the area. Higher tension of the physiological functions, probably prevent the further settling of this species to the north. This fact is important during the development of practical recommendations for the acclimatization of animals.