Abstract

Like a large part of western Europe also from the Czech landscape is dramatically disappearing amphibians. This negative trend occurred due to several factors, some of which is undoubtedly the most significant loss of suitable breeding areas.

During the years 2009 and 2010 I monitored a total of 31 tanks in a part of the former districts of Liberec, Jablonec nad Nisou and Semily, in which were multiplied frog (Rana temporaria) and toad (Bufo bufo). On these localities I've watched a few environment variables, which I assume that may affect the successful development of amphibians from egg stage to metamorphosis. The success of development, I determined by counting congeries in the spring and then finding the number of tadpoles in the tank survived the conversion.

The results of multiple linear regression shows that the developmental stages of brown frog react negatively to the increasing altitude and increasing the number of eggs per unit area of the tank. On the contrary, they thrive better in larger, at least partially shaded tanks, which are subject to fluctuations in water level. For toad are suitable not very deep, partially shaded tanks, with a stable water level, vegetation and aquatic vegetation free shores. Also managed to find the eggs and tadpoles of toads react negatively to the presence of newts and the increasing number of eggs on the tank surface area and shallow.

It turned out that various species of amphibians are appropriate to different tanks. Building a sufficiently dense network of reproductive tract can provide such sensitive creatures return to the countryside. Only the creation and restoration of sites suitable for life and reproduction of amphibians can help to save many endangered species today.