

Die Amphibienfauna der Sachsenhäger Niederung im Landkreis Schaumburg, Niedersachsen, nach Anlage von Amphibienschutzgewässern

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The amphibian fauna of the Sachsenhagen lowland in the district of Schaumburg, Lower Saxony, after constructing ponds as a measure of amphibian conservation

Between 2007 and 2018, 16 ponds were constructed in a 70 ha study area near Sachsenhagen in the district of Schaumburg, Lower Saxony, Germany, as a measure of amphibian conservation. In 2021, the colonization of these ponds by amphibians as well as the colonization of three older ponds constructed in the 1980s and only suitable for amphibians to a limited extent was investigated. A total of eight amphibian species were detected, including large populations of crested newts (*Triturus cristatus*) and tree frogs (*Hyla arborea*). The tree frog occurrence can be retraced to a 2008 establishment project. Most widespread were smooth newts (*Lissotriton vulgaris*), which were found in 18 of 19 ponds. But also Alpine newts (*Ichthyosaura alpestris*), crested newts, common toads (*Bufo bufo*) and tree frogs were found in at least 15 ponds. The number of calling tree frogs is being monitored annually since the beginning of the introduction programme and amounted to over 1,500 calling males in 2021. Almost 70 % of the ponds were colonized by five or more amphibian species. In the 16 ponds for amphibian conservation, which were free of fish species, an average of 5.3 amphibian species were found (on average 3.8 species with reproductive evidence), in the older ponds 3.7 species (on average only one species with reproductive evidence). Detecting newts via bucket traps was successful in all ponds except one. Most of the crested and Alpine newts were caught in a pond measuring only 140 m². It was only after the creation of the conservation ponds that the area gained a very high importance for amphibian conservation; three old ponds created in 1986 as a compensation measure for a clay mining site that was converted into a landfill had initially failed to achieve this goal, but led to a large population of common toads. Especially the currently large populations of crested newt and tree frog are remarkable and of exceptionally high importance for nature conservation. Today the Sachsenhagen lowland is the most species-rich and probably also the most individual-rich area within the Schaumburger Börde with regard to the amphibian fauna. The high importance needs to be taken into account by ensuring a permanent maintenance of the water bodies. It can be assumed that the strong increase in the amphibian population was not only enabled by the construction of ponds, but also by a significant extensification of agricultural land (part of the area serves as a land pool for compensation measures). Further development of the area in terms of nature conservation would be sensible and desirable, e.g. through an extensification of further agricultural land.

Key words: amphibians, ponds, Lower Saxony, Germany, nature conservation, amphibian conservation, compensation measures.