Sadowski & Esther

AmphiMove: Moving patterns and microhabitat selection of European anurans in agricultural landscapes

Jan Sadowski and Alexandra Esther

Julius Kühn-Institut, Institute for Plant Protection in Horticulture and Forests, Vertebrate Research, Münster

E-mail of corresponding author: jan.sadowski@julius-kuehn.de

Researchers worldwide are concerned about the current amphibian decline on global and local scales. Application of plant protection products (PPP) are suspected to be a major reason for decreasing amphibian populations. More and more studies underline the severe effect of PPP for aquatic life-stages of amphibians. Data on risk by PPPs for terrestrial life-stages are rare but required to develop protection strategies towards amphibian entire life-stages.

A guidance document on risk assessment for birds and mammals published by EFSA (European Food Safety Authority) already exists, but is lacking for amphibians. Contemporary EFSA released the first version of a "scientific opinion" on the risk assessment of PPP for amphibians. It is emphasized that detailed ecological data of especially terrestrial amphibians is still under-represented.

The aim of AmphiMove is to fill the gap of data on terrestrial amphibians with focus on movement behavior and microhabitat selection of European anurans in agricultural landscapes. At two study sites individuals of common toads (*Bufo bufo*) and common frogs (*Rana temporaria*) were caught at and around their breeding ponds and tracked via radio-telemetry. Locations, biotic and abiotic parameters of the selected microhabitats were recorded daily. Here, we show preliminary results of the first data collecting period from March to September 2017.