

BIODIVERSITY An automatic sound check for bats

Identifying bats as they fly by in the darkness of the night – Batscope, the software developed by Ruedi Boesch and Martin Obrist at WSL, can do just that. It analyzes bat calls that have been recorded with special devices (Batloggers). The software breaks down the recordings into individual calls and classifies them to the most likely species, according to a reference database. “It’s based on complex statistical modeling that yields very precise results,” explains Martin Obrist. Obrist and his colleagues used the software to collect data on the bat population for Switzerland’s Red List Chiroptera (bats), published in 2014. It could also help those responsible for

monitoring bats to measure local populations, and building developers to evaluate possible threats to bats; for example, from new wind power stations. *(bki)*

www.wsl.ch/more/bats



The greater mouse-eared bat (*Myotis myotis*) is severely threatened by building renovations and attic conversions.

BIODIVERSITY Use of genetic techniques to help protect endangered plants and animals

The wood grouse and the northern crested newt. Two very different animals with one common feature: both are rare in Switzerland and both are threatened with extinction. Determining if and how many individuals are living in a particular area by conventional methods means observing or even capturing the animals. Nowadays, however, their trail can be picked up without disturbing them through analysis of their genetic traces, whether that’s wood grouse droppings or a water sample from a pond where a northern crested newt has been. Although genetic techniques open up new possibilities, they are often met with skepticism by conservationists.

Naturschutzgenetik, published this spring by Haupt Verlag, aims to break down these barriers. It provides background information and case studies that demonstrate the value of genetic techniques in conservation. “With this book, we’re hoping to link science together with practice,” says Rolf Holderegger, WSL researcher and co-author of the work. *(lbo)*