

**FROM BAT CALLS IN THE FIELD TO VALIDATED SPECIES RECORDS –
THE APPROACH OF THE SWISS BAT BIOACOUSTICS GROUP (SBBG) [O]**

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Acoustic recording of bat calls has proven to be a powerful technique for assessing distribution, behaviour and threat status of these inconspicuous and widely threatened species. With its commercial potential being increasingly recognized, systems for semi-automated ultrasound recording have conquered the market, followed by automated bat species identification software. As a consequence, nowadays, many people with different backgrounds work on bat bioacoustics in Switzerland. However, the accuracy as well as the comparability of results of such systems still need further improvement to strengthen bat bioacoustics as tool for ecological assessments. To close the gap the Swiss Bat Bioacoustics Group (SBBG) was formed with the aim to develop an independent alternative for validation of species identifications. This procedure holds criteria elaborated in conjunction with the Swiss center of faunistic cartography CSCF and Swiss Bat Conservation (KOF/CCO). To confirm records and make them valid for the national fauna database and further use, the SBBG relies on 1) national distribution data of bat species from CSCF and regional experts, 2) the level of species specific difficulty of identification, agreed on in literature and among experts alike, and 3) region specific quantity of recordings of the species. These factors are combined to a response matrix, which is supposed to guide executive authorities in their requests for proof of species occurrences. The matrix assigns each species by region to one of three categories, ranging from plausible records for species that are common and easy to identify, to records that need verification by an independent expert for species that are uncommon to a region and/or hard to identify. The presentation introduces the SBBG and its hands-on approach to alleviate the challenge of acoustic species verification.

14th European Bat Research Symposium
Donostia, The Basque Country
1-5 August 2017

A stylized illustration of a bat in flight, composed of colorful geometric shapes (blue, yellow, orange, red, teal) for the wings and body, and a white outline for the head and tail. The bat is positioned above the main title.

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BOOK OF ABSTRACTS



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