

**CALLS FOR CONSERVATION:  
HOW ECHOLOCATION SERVED THE RED LIST COMPILATION OF SWISS BATS [O]**

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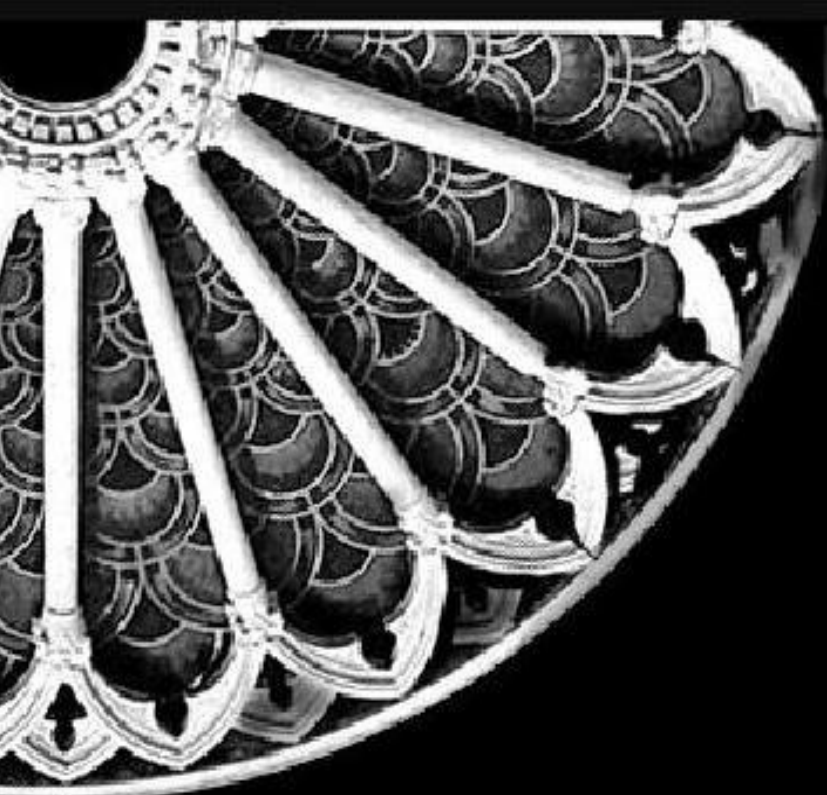
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Red Lists are indispensable tools in conservation planning, decision-making and monitoring trends of extinction risk. The Red List of threatened bats in Switzerland dates back to 1994, well before current IUCN guidelines. In tackling its revision, we made accessible information from national databases of the Swiss Coordination Centre for Bat Protection and the Swiss Biological Records Centre. We also included museum records, and heavily invested in a field survey extending over five years. The sampling design included 101 one km<sup>2</sup> squares, coinciding with cells of Biodiversity Monitoring Switzerland. Each contained 10 points for acoustic surveys and additional mist-netting locations. Acoustic surveys employed an observer method combined with independent automated recording. Ultrasound recordings were repeated four times over different years and seasons, while netting was repeated twice. The selected sampling scheme had been pre-evaluated based on available recordings and a dedicated pilot study, taking into account imperfect detectability of species, varying occupancy rates, and available funding.

Acoustic and netting records of species were combined for modelling area of occupancy (IUCN criteria B2,a-c). Areas of river catchments containing a record were counted as occupied and summed to preliminarily judge a status of threat (Area < 2,000 km<sup>2</sup>: VU, < 500 km<sup>2</sup>: EN, < 50 km<sup>2</sup>: CR, 0 km<sup>2</sup>: RE). The resulting status was evaluated by experts and adjusted according to known changes of distribution, area of occupancy, habitat scarcity, or fragmentation of population, and finalized in consideration of foreseeable direct threats e.g. to habitats (Ludwig et al. 1991, BfN-Skripten 191). In the resulting new Red List of threatened bats 26 of 30 species present in Switzerland could be categorised. Of those 15 are threatened (3 CR, 5 EN, 7 VU), corresponding to 58%. Several species changed status, but the change in methodology from the last Red List makes interpretation difficult. Overall, the status of threat of Swiss bats is still considerable.



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BOOK OF ABSTRACTS