

Sustainability | Individual communication

IC - (21189) - CHANGE IN BAT ATTITUDES: RESULTS BASED ON LONGITUDINAL CITIZEN SCIENCE PROJECT AMONG HIGH SCHOOL STUDENTS

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Background and objectives

Bats have significant functions in the ecosystem, and they provide humans with different types of ecosystem services. They make use of human-made buildings and infrastructure, for example, as their day roosts, which makes them our secretive neighbors. However, because of several misconceptions, bats are generally often negatively evaluated. Therefore, a more in depth understanding of human perceptions towards bats are needed to be able to reduce the negative perceptions towards this species group in the future.

Process and methods (for empirical research)

We invited Finnish upper secondary school students (16-18 yo) to participate in a citizen science project to collect acoustic data on bats during the summers 2019 and 2020. Before initiating project and after participating in the acoustic data collection, students responded to our online survey about their opinions towards bats and their knowledge of bats. A new "bat distance scale" based on Bogardus social distance scale was used to measure how close a respondent would physically allow bats and the general knowledge of bats was measured using a four-question scale. Our aim was to study whether the preferred physical distance of the participant to bats changes during participating in the project and whether participation increases their knowledge of bats.

Main results (or main arguments in the case of critical reviews)

A total of 114 students responded to both surveys. We used Wilcoxon signed-rank test to compare their bat distance scores and the bat knowledge scores before and after participation in the citizen science project. Wilcoxon signed-rank test revealed statistically significant increase in the bat knowledge scores after participating in a citizen science project, with moderate effect size. The bat distance scores decreased during participation in the project, with small effect size.

Implications for research and practice/policy | Importance and originality of the contribution

This was the first study to investigate people's perceived physical distance to animals. Our study suggests that participation in a citizen science project is associated with increased knowledge and more positive attitudes.

Palavras-chave : bats, citizen science, attitudes, distance to animals