

Participation in biodiversity research projects: What's in it for me? Maria Peter, Tim Diekötter, Tim Höffler, Kerstin Kremer

Numerous scientific projects ask members of the general public to help with their research. These are called citizen science projects, because they can involve all 'citizens', not just professional scientists.

In particular, citizen science projects that are connected to biodiversity have become very popular. Such projects investigate, for example, which species of butterflies exist in an area and how many individuals of each species live in that area. Scientists need the support of non-scientists to collect large amounts of data that they could not collect on their own. The benefit for the scientists is clear: they get data that they can use to answer their research questions. But what is the benefit for the participating citizens? In other words, what's in it for you?

We wanted to find out whether people benefit from their participation in the following ways. Do they...

- (1) ... gain knowledge about science and the environment?
- (2) ... gain or improve scientific skills?
- (3) ... increase their self-efficacy for science and the environment (self-efficacy is the confidence that a

person has that his or her actions will have an effect)?

- (4) ... increase their interest in science and the environment?
- (5) ... increase their motivation for science and the environment?
- (6) ... change their actions towards the environment?

The answer is yes to all of the above, according to the participants. We conducted a survey and asked more than 1000 project participants about their experiences. These participants came from more than 60 biodiversity citizen science projects in Europe, Australia, and New Zealand. The overall result of our study was positive. Participants reported benefits in all of the above six categories. Perceived benefits were greatest with respect to the environment and slightly less with respect to science.

Our conclusion is that not only scientists benefit from the public's involvement in research: the participating citizens seem to benefit also. However, we think that more research is needed, especially if we want to find out how to design citizen science projects in such a way that they offer the maximum benefits to both scientists and citizens.



Citizen scientists in action. Photo from Wikimedia Commons.

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