

# Science for Environment Policy

## Bird monitoring methods have potential to be improved

**The first ever European-wide study** of bird monitoring practices reveals a wide range of monitoring protocols. The researchers provide recommendations for improving bird monitoring programmes, in particular, for those involving large numbers of volunteers.

**Biodiversity monitoring** plays an essential role in wildlife protection, as it allows us to evaluate the conservation status of species and assess changes in biodiversity. Thanks to the widespread distribution and popularity of birds, they are the focus of significant amounts of monitoring.

The study investigated bird monitoring programmes in Europe to identify common practices, their strengths and their weaknesses. The researchers, working as part of the EU EUMON project<sup>1</sup>, conducted a European wide survey on bird monitoring programmes to produce a database which provides the most extensive information about European bird monitoring practices to date. The database covers 600 programmes across 24 countries, including 144 bird monitoring programmes covering more than 400 bird species. Around 28,000 people were involved with these bird monitoring programmes in total. The data reveal a huge variety of monitoring practices.

From the data, the researchers could identify three main types of monitoring programmes:

- 1.) Small programmes involving 10-12 people, usually professionals, monitoring less than 35 species. This is the most common type of monitoring programme in the database, accounting for 56% of schemes.
- 2.) Medium-sized programmes involving 60-70 people, mostly volunteers, monitoring between 25-60 species. 19% of programmes were of this type.
- 3.) Large programmes involving hundreds of volunteers, monitoring more than 60 species. These accounted for 23% of programmes.

For all three types of programmes, bird population trends were the main focus of monitoring. Most of the small and medium programmes were conducted as part of scientific research. Many medium and large programmes were concerned with monitoring for wildlife management and a number of large programmes were also conducted for political purposes (e.g. the European Nature Directives).

Good practice guidelines, as recommended by scientists, for selecting monitoring sites were not followed in all programmes. Previous research strongly recommends that monitoring sites are randomly chosen to avoid bias in results, but only 14% of programmes in the database followed this guideline. The researchers suggest that the non-random approach can be useful for answering specific scientific questions, about birds in a particular context, for example, but provides a biased picture of bird populations overall. In addition, programmes often failed to monitor a site more than once within the same year, meaning they are less likely to spot certain species. Based on this evidence, the researchers say that European bird monitoring programmes have the potential to step up the implementation of good monitoring practice. The fact that 14% of programmes were able to implement good practice guidelines of site selection shows that it is possible to do so, they suggest.

The study highlights the important role of volunteer monitors, typically amateur bird watchers, especially for large monitoring programmes. It recommends using different recruitment strategies in order to attract and retain different types of volunteers and maintaining good communication with the volunteers to keep them informed. However, it also emphasises the need for volunteers to be supported by skilled biologists, which would incur costs, suggesting that biodiversity monitoring cannot be free.

The researchers suggest that combining results of different programmes – if well designed – could present a powerful approach to obtaining in-depth coverage of bird populations across Europe.



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1. [http://eumon.ckff.si/index\\_1.php](http://eumon.ckff.si/index_1.php)