

Engaging anglers as citizen scientists

[Cefas](#) are working with the Angling Trust and Environment Agency to engage anglers as citizen scientists to map the distribution and health of wild freshwater and marine fish. To achieve this we are developing a free electronic logbook (smartphone app) as a reporting platform, which we hope anglers will also find valuable for recording their fishing experiences.

What is the purpose of the survey?

The survey aims to inform an app design that will be both useful for science and for anglers by establishing: what data anglers currently collect for themselves, how much you value different types of information and how willing you would be to share this data. The questionnaire also provides an opportunity to volunteer to test and give feedback on a beta version of the app when it has been developed.

What are our long-term aims?

The overall goal is to map the distribution and health of wild freshwater and marine fish. The data collected will help to improve fishery and fish health management and potentially mitigate the impact of fish diseases. Over time this information will highlight changes in populations of endangered stocks and increase understanding of anthropogenic impacts and climate change on biodiversity. It will also establish the economic value of environmental assets and the natural capital provided by wild fish populations that is important for delivering coherent management of fish stocks that takes into account biological sustainability, social benefits, and economic value.

What is the role of anglers?

Anglers are experts in fish behaviour and identification, and as such constitute a valuable, but underutilised, resource for fish population and environmental monitoring. Angler observations will greatly improve the resolution of fish distribution data and, importantly, provide information from many remote locations not covered by existing surveys and sampling. This systematic biological recording will make a significant contribution to a broader understanding of the biodiversity of the natural UK aquatic environment. This data and allied observations of fish caught will provide important information on the density and health of fish populations.

What are the likely impacts of this project?

Over time the information collected by anglers will contribute to the achievement of a number of key scientific objectives and inform policy by:

- providing an unprecedented evidence base to study the effects of environmental change (including climate change and changing land use); the impact of natural disasters or accidental chemical release; the establishment and impact of invasive species or new and emerging pathogens on UK fish populations;
- informing the contribution of wild fish populations to economic [cultural] services;
- providing indicators for biodiversity loss (or gain);
- providing indicators for habitat monitoring;
- promoting awareness of disease threats and best practice for biosecurity;
- developing a passive disease surveillance system for UK wild fish populations.