

Linking lakes with an eye on the future

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Credit: European Cooperation in Science and Technology (COST)

The fragile nature of Europe's lakes and reservoirs has seen an increase in the level of monitoring of their current state. COST's role in linking up scientists across the continent has been crucial, with one researcher being inspired to raise awareness on a local level.

A COST Action has helped link experts using cutting-edge technology to monitor and protect Europe's lakes and reservoirs. And for one scientist, COST's help played a major part in her winning more funding for an important project that could have long-term benefits in her home country.

Dr Beklioglu is a shallow [lake](#) ecologist at Middle East Technical University (METU) in Turkey. She joined COST Action NETLAKE - Networking Lake Observatories in Europe - which links up stakeholders with an interest in Europe's natural and man-made bodies of water.

Increasing the frequency that lakes are monitored helps scientists to understand and protect these precious resources. Sensors placed in the water provide data on water quality issues, and NETLAKE has helped build a network where this data can be shared more easily than before.

Dr Beklioglu had been assessing how climate change and other environmental issues were affecting lakes, so NETLAKE'S network helped with her work. "I had been leading research for about 20 years by doing long-term monitoring research on lakes. But I was aware of the benefits of high-frequency monitoring in terms of data-intense research," she says.

"NETLAKE gave me a chance to apply to a Turkish funding agency called TÜBİTAK to help start a nationally-funded project with the same goals of high-frequency monitoring. NETLAKE's funding allowed me to attend meetings for this national project, learn from them and benefit from the experience."

That led to Dr Beklioglu establishing more high-frequency monitoring of a lake at METU campus that she had been studying many years. A new sensor, attached to a buoy, was placed in the lake thanks to funding she received from TÜBİTAK. This kind of move is, she says, "the future of

lake monitoring", and with an eye on the future she has also engaged with students from schools and colleges.

"We have developed a programme for sixth and seventh grade students called 'Science Applications'. It's an eight-week long programme of inquiry, with problem-based theoretical and practical aspects using an approach similar to citizen science activities in NETLAKE."

"We're also filming our class activities as well as practical works to reach out to more schools in a programme we've called Lake Ambassadors".

Dr Beklioglu declares that COST has helped connect technology for better [monitoring](#) with the concept of 'citizen science'. It's helping to increase awareness in younger generations of the fragile state of Europe's water supply to protect it.

"In the long term this can only help to better preserve our ecosystems. I now know the people who can help in different fields so that we can work together on future projects. COST can help you meet those that are leading state-of-the-art science, and directly lead you onto even bigger projects."

More information: For more information, see www.dkit.ie/netlake

Provided by European Cooperation in Science and Technology (COST)

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