

Ecologist luring citizen scientists into fish research

Bev Betkowski

University of Alberta researcher Mark Poesch is hoping Albertans will help him further his research by sharing their fish stories with him.

Poesch, an assistant professor in the Department of Renewable Resources, wants to include “citizen scientists” in his lab’s work, which focuses on aquatic conservation and fisheries management. Including everyday folk in the research process can make it more robust and focused, Poesch believes.

“As scientists, we can’t be everywhere at once, and citizens have a strong local knowledge that we as researchers can tap into. There are a lot of wide open spaces and we can’t cover them all. Hearing from citizens who are out in the field helps us understand the issues occurring in the waterways, long before they become urgent.”

As the July long weekend kicks off, Poesch hopes that all urban and rural anglers, canoeists, swimmers, hikers and river hobbyists in Alberta—and the rest of North America—log their fish sightings and photos on the Poesch Lab website. The site has three interactive tools that allow people to report a fish, take an angler survey and provide their traditional knowledge.

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“We were getting a lot of inquiries from fishermen,” said Donnette Thayer, one of Poesch’s master’s students and the web developer. “They would find something unusual, but they didn’t know who to tell. Many people want to help researchers; they just don’t know where to go.”

Sharp-eyed hobbyists can help describe whether fish numbers seem low or high and report sightings

such as endangered species or unusual fish, which could indicate the presence of invasive species like Prussian carp, not normally found here. “Anglers can be an amazing resource. Many of them keep blogs, and we as researchers are starting to tap into that knowledge,” Poesch added.



Mark Poesch and his research team go to work at a wetland in south Edmonton.

Such knowledge, even on an informal basis, can give Poesch and his team early signals that help direct research efforts—studying a certain geographic area, for instance. “It’s a good reporting tool. The first people who notice the trends of decline are the people on the ground.”

Alberta’s water resources are a popular source of recreation, he noted. “We have the highest ratio in Canada of anglers to waterways, more than 350,000 fishermen for 800 lakes in the province.”

Bringing the community—citizen scientists—into research efforts is a vital component for success, he believes.

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People who log their finds and fill out the surveys on the website will receive a certificate of appreciation from Poesch’s lab. They can also submit their fishing photos for posting on the website’s gallery. ■