

# These nearly invisible organisms help clean Lake Tahoe's water. Here's how they do it

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Plankton are not just a diabolical mastermind on a Nickelodeon show about a sponge who lives under the sea. Lake Tahoe is filled with them—the good kind.

Tahoe native zooplankton are making a comeback in the more than 21-mile long lake, helping it look the clearest it has in 40 years. A

comeback because until now, the microorganism's population significantly decreased after it's primary predator, the Mysis shrimp, was on the rise, according to previous Sacramento Bee reporting.

Here's how zooplankton help make Lake Tahoe sparkle, and why they are important to the ecosystem:

## —What are zooplankton?

The term "zooplankton" encompasses a large variety of microscopic animals that exist in almost all bodies of water, except rivers and streams, according to a report from Michael Paterson with the International Institute for Sustainable Development. The institute has a collection of more than 30,000 samples of zooplankton [species](#).

Most lakes will have 40 or more species of zooplankton common to them, Paterson said.

Scientists with the University of California, Davis' Tahoe Environmental Research Center released a 2023 Lake Tahoe Clarity report, which said when a large species of zooplankton in the [lake](#) collapsed because of a believed fungal infection, the Mysis shrimp (another species of zooplankton) may have starved and also collapsed.

This allowed two cladocerans species of zooplankton (Bosmina and Daphnia) and the rotifer species to establish. Cladocerans are known to be able to clear water of fine particles at a high rate, according to UC Davis researchers.

## —How zooplankton help make Lake Tahoe water clear

The almost invisible animals feed on bacteria and algae, affecting algal densities and [water quality](#), according to the International Institute for Sustainable Development. Zooplankton also eat other species of zooplankton.

Since zooplankton eat unsightly algae, the Experimental Lakes Area of the institute tested whether reducing the number of zooplankton predators in lakes would increase the number of zooplankton and improve [water](#) clarity.

The experiment caused a dramatic increase in the Daphnia species of zooplankton, according to researchers, and considerable decreased algal densities.

Zooplankton also increase fish production, since minnows feed on [zooplankton](#) and other fish feed on minnows.

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