



# Chequamegon-Nicolet National Forest

## *New Century Snapshot*

### ***Aeration breathes life into starved lakes***

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Rhineland and Park Falls, Wis. – The Chequamegon-Nicolet National Forest has an active winter aeration program and it's no wonder since Chequamegon means *Land of Shallow Water*. The program aims to restore fishing opportunities on lakes that have recreational fishing facilities and a proven capacity to support a fishery, but have been prone to winterkill.

Many lakes in northern Wisconsin suffer from a winterkill of fish. While commonly called “freeze-out” conditions, it's really the death of fish due to low oxygen levels during the ice-covered winter. Winterkill prone waters are shallow and weedy, with ice cover cutting off oxygen from the atmosphere and deep snow curtailing oxygen production within the lake.

In small lakes, the aeration system can do a pretty good job of raising lake-wide oxygen levels. In larger lakes, the higher oxygen level generated by aeration creates a refuge area for fish.

The Forest Service, in cooperation with the Wisconsin Department of Natural Resources and several lake associations and sportsman's groups, has installed and currently maintains 10 aerators on the Forest. Lakes include: Wilson Flowage, Sailor, Twin, Riley, Blockhouse (Price County), Little Clam and Lake Three (Ashland County), Kathryn and Mondeaux Flowage in Taylor County, and Plantation Lake in Oconto County.

The agencies have an active winter dissolved oxygen monitoring program to keep an eye on oxygen levels in the winter.



**Little Clam Lake electric aerator generated open hole.**

The most common system is powered by electricity and uses an electric air blower housed in a shore-based shelter building. The blower provides air through a length of galvanized pipe to a series of plastic diffuser lines laid onto the lake bottom. Air is bubbled through the lines to circulate the water and create a large open-water area during ice-cover. The open-water area then provides most of the oxygenation to the lake. The open-water area is also barricaded or fenced off to keep outdoor enthusiasts a safe distance away.

Winter 2007 is shaping up to be a good year for fish as low snow amounts translate into better winter conditions for fish. Beware that lakes and rivers around the Forest entered winter with very low water levels. When more snow arrives oxygen conditions could deteriorate quickly in many bodies of water!

Aeration programs have helped restore recreational fisheries on many waters within the Forest so get out and go fishing!!

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[www.fs.fed.us/r9/cnnf](http://www.fs.fed.us/r9/cnnf)

