

Underwater forests provide new sources of eco-friendly wood

by Bend Weekly News Sources

You may have seen this sight on a walk around your local lake: The withered tips of flooded trees poking up like toothpicks in the water.

In towns across the country, forests both large and small are sometimes left behind in reservoirs created by hydroelectric dams. According to timber industry experts, millions of acres of forests are hidden right beneath our noses or, rather, right beneath our oars.

"The potential is huge when you consider the fact that there are hundreds of dams in the U.S. and thousands more all around the world where these forests remain underwater and undeveloped," said Sheridan Westgarde, president and chief executive officer of the Valor Corp., formerly Aquatic Cellulose, a company that designs and builds technologies for underwater work and construction.

According to Valor officials, there are a number of public misconceptions about underwater wood, namely the notion that the quality of the wood has been degraded. Many do not realize that water can actually preserve wood, protecting it from exposure to wind, sun and insects. In fact, in cold, deep waters, wood can remain in pristine condition indefinitely.

What this means, Westgarde says, is that these acres of nonliving forests can provide a new, eco-friendly source of quality wood to help reduce dependence on living forests.

In the past, accessing flooded timber was a time-consuming and potentially dangerous task, often involving human divers and other manual methods. But now there is a way for technology to do all the work.

Valor has developed Tiger-Lynk, a robotic manipulator system featuring an enormous hydraulic arm that can cut and recover trees at depths up to 136 feet. The arm can lift more than 5,100 pounds, meaning that it can easily lift logs or even entire timbers out of the water without a crane or diver assistance.

The arm is just one of several components that can be mounted on a vessel, barge or nearly any other type of platform, depending on the job. With its unique capabilities and a new level of mobility, Valor's technology could provide the timber industry with a cost-effective way to recover underwater forest resources on a large scale - something that has eluded the industry for decades, Westgarde says.

The Aquatic Robot-120, Valor's newest machine, is scheduled for production this year and will be available for sale or lease to a variety of industries, including energy and civil engineering, in addition to timber.

Underwater forests provide new sources of eco-friendly wood by Bend Weekly News Sources