

Madison College
Students Build Desk
from Historic Timbers.

Wood Recycled.

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What follows is an extremely interesting tale of reclamation and reuse of wood, one of nature's most adaptive renewable resources. The "technical" aspects of salvaging old lumber and assemblies are unique in the woodwork manufacturing industry.

Searching for and eliminating hidden metal is critical to the longevity of your cutting and shaping tools. Re-sawing and then selecting for grain and color from what you have to work with is another challenge.

The successful design professional creates an atmosphere of open communication, exploration and amazement when specifying reclaimed wood for use within a project. The owner or client of the architect or designer needs to be well educated in the vagaries of the resultant product.

THE MADISON COLLEGE STORY

Students from Madison College now have their work on permanent display at the Washington, D.C. headquarters of the United States Forest Service. Quite a feat!

The college, located in Madison, Wisconsin, was asked to provide a reception/guard desk for the Service as part of the Sydney Yates building renovation. The front of the desk features four-inch-thick by eight-inch-



The Forest Products Laboratory, also located in Madison, provided the historic timbers for the project, including old growth Southern Yellow Pine, White Oak from northern Wisconsin, and live Oak from the USS Constitution.

Growing demand for research and information on the use of glued structural timber in the mid-1930s led to the construction of a service building at the USDA Forest Products Lab (FPL). Designed and tested by FPL, this building was one of the earliest laminated timber buildings in North America, and showcased the latest developments in the use of wood in engineered structures.

Several types of glued members were used as arches in this historic building. The laminated arches were exposed to a variety of conditions during their service life, from severe snow load events to a fire in the 1990s. Seventy-five years after its construction, in October 2010, this historic building was taken down as part of FPL's construction and renovation efforts.

All of the original arches were retained, presenting a rare opportunity to evaluate how in-service conditions affect the long-term performance of wood structures.



We all must celebrate the infinite variety of wood combined with the sound environmental practice of giving old wood a second life.

wide by 12 and a half feet long laminated reclaimed timbers, each with a unique story.





glue-laminated White Oak members represented critical structural elements used in the hulls of wooden minesweepers that were built for the United States Navy by Peterson Builders, Inc., of Sturgeon Bay, Wisconsin.

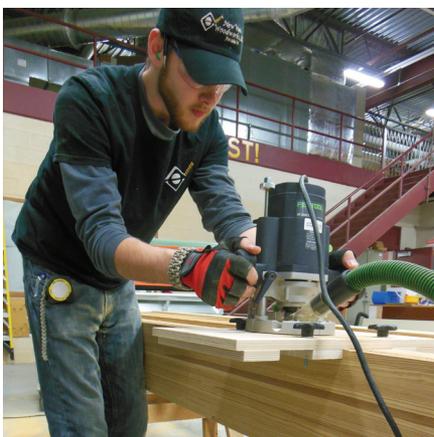
Most of the White Oak used in the minesweepers was harvested from forests in the upper Midwest, the majority from Wisconsin and upper Michigan. Inlaid into the counter's surface is the iconic, forest service tree that is part of their emblem. It is made from live Oak, a species that grows in the southeastern region of the United States.



THE TASK

Transported in pieces to Madison College, the first task was for the students to re-saw the timbers using a Woodmizer sawmill before leaving for winter break. The photos showing the work in progress give you an idea of the size and scope of this undertaking.

The transaction counter and work surface of the desk are made from laminated White Oak. The Forest Products Lab conducted a series of tests in the early 1990s to determine the performance of connections used in wooden minesweepers during Operation Desert Storm. The





Known for its incredible strength and durability, the live Oak was used in the construction of the USS Constitution, “Old Ironsides”. Constructed in 1794 under orders from George Washington, she proudly stands as the oldest commissioned ship in the U.S. Navy and serves as an excellent example of the durability of wood.

Under the guidance of Madison College Cabinetmaking and Millwork instructors Patrick and Jeff Molzahn, students designed and built the desk over the past few months. It was recently transported to Washington D.C., where it stands as a focal point as one enters the Yates building lobby.

The lesson learned not only by these students, but by our readers as well, is that apprenticing to work with wood on a daily basis and exhibiting sound environmental stewardship are not mutually exclusive.



Madison College is an accredited, Woodwork Career Alliance (WCA) Evaluation Center. Graduates of the

program are employed throughout the midwest and across the country. For more information, contact Patrick Molzahn, pmolzahn@madisoncollege.edu, (608) 246-6842.