



## World's Largest Research Wood Collection



The Center for Wood Anatomy Research houses the largest research wood collection in the world. There are actually two separate wood collections—the Forest Products Laboratory (FPL) wood collection (MADw), with more than 48,000 specimens, and the Samuel J. Record Memorial wood collection (SJRw), with approximately 55,000 specimens. These wood specimens are used every day for anatomical research and to provide comparison specimens for wood identification.

The Center adds new specimens, updates name changes, and loans sectioning blocks to other wood anatomists throughout the world. To assist in the management of the collections, the Center is entering all the collection information into a database to provide more organized record keeping. To date, all the information for the specimens in MADw has been added, and information for new specimens is entered as they are received. The SJRW database is a work in progress. Most specimens are backed by herbarium vouchers (collection of dried plants; usually twigs with leaves, flowers, and/or fruits attached). Approximately 25,000 of these vouchers have been moved from the FPL to the Botany Department of the University of Wisconsin–Madison; the rest are stored in herbaria worldwide.

### Background

The wood collections started when the FPL opened its doors in 1910. Initially, the collection contained species from North America, but soon there was a need to identify woods, especially tropical species, from around the world.

The staff in the Center contacted other institutes and wood collections for specimens and also asked botanists to collect herbarium material and wood specimens. In this manner, the collection grew from a few hundred specimens to several thousand. In the early years, information about each specimen was typed on index cards, much as libraries used to catalog books.

In 1969, the Center obtained the S.J. Record wood and herbarium collection from Yale University, the largest collection at the time. Soon after, the Center obtained the wood collection from the Field Museum in Chicago and added approximately 12,000 specimens to MADw. (Typically, 200 to 500 specimens are added to MADw each year.)

In addition to the wood collection, the Center also maintains a microscope slide collection mostly based on the specimens from MADw and SJRW. This collection has approximately 60,000 slides from 25,000 specimens. In general, each slide contains a stained thin slice of the transverse, radial, and tangential sections of specimens.

### Objective

The objective is to manage the wood and slide collections so that researchers can easily access the information. The collections are not directly accessible to the public, but the Center staff provides a limited wood identification service to extend the usefulness of the collections to those who otherwise would not be able to access them.

### Approach

The Center uses database software to record and edit collection information for the wood specimens. An interface between the web and the database will allow customers around the world to search selected database fields and directly link to herbarium images, when available.

### Outcome

The wood collection information for MADw is available at [www2.fpl.fs.fed.us/Wood Coll/collection.html](http://www2.fpl.fs.fed.us/Wood Coll/collection.html).

The SJRW is being entered into the database over time but is only approximately 20% complete. Full recording and editing will require years of labor.

