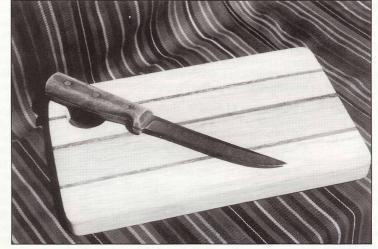
## Kitchenware from Wood: Safe through the Ages

by Dick Workman



This cutting board was made from scrap wood salvaged from a "horticultural waste" pile. Wood is red mangrove, black mangrove, and live oak. Black mangrove should be used with caution. The sap from the wood burns like creosote when sawing or sanding. Pecan, magnolia, holly, and many other Florida woods often found in wood waste piles make great cutting boards. Photo by the auhor.

he wood of Florida's trees has been fashioned into utensils and vessels for preparing, serving, and eating food probably since people and trees first coexisted here. The uses of wood vessels and surfaces for food preparation is traditional. We have always done it.

If we define *utensils* used to prepare food very broadly, the

earliest wood artifact used by Florida people to secure sustenance is a red mulberry (Morus rubra) spear that was found run through an extinct tortoise species at Little Salt Spring. The spear was radiocarbon dated to be about 12,000 years old. Wood artifacts recovered from Windover in Brevard County are about 8,000 years old but most were too fragile for preservation or interpretation. The best preserved early food serving and preparation artifacts - plates, bowls, mortars, and pestles carved from native Florida woods are from the Pepper-Hearst archeological investigation of Key Marco led by Frank Cushing in 1895 and 1896. Dated from 1,200 to 1,500 years old, these utensils fashioned with shell and sharks-tooth tools at Key Marco represent a high degree of craftsmanship and artistic skill by even today's

Europeans arriving in Florida in the 1500s continued the use of native woods to make plates, salad bowls, and other kitchen ware. The old English word *treen* refers to such items and means literally "of trees." During the early settlement of Florida, when trees were felled with hand tools, the main section of the trunk would be used for construction lumber or for furniture. The remaining parts of the tree were not wasted.

Large-diameter trunk sections at branching points might be used to fashion large bowls or tubs. Smaller pieces of figured wood — the burls and grain with twists and turns — would become drinking cups, spoons, ladles, or other utensils.

When Florida was being colonized by Europeans and Africans, most treen was made not by craftsmen who specialized in this work but generally by individuals, as a gesture of love or friendship for one another. Many people, when asked, can describe a wooden kitchen item that has been in the family for generations and can usually relate a story about the person who made it and the occasion for which it was made.

A greaty variety of trees were used by the Calusa for their treen. Objects made from pine, cypress, mahogany, and even gumbo limbo were excavated from the Key Marco mangrove muck. No preferences for particular species appear to be indicated from the available evidence. Europeans adapting to the New World environment favored woods like tulip poplar (*Liriodendron tulipifera*) for table tops on which bread was kneaded and pastry dough was rolled out because it imparted no taste to the food. The rolling pin used might have been made from lignum vitae (*Guaiacum sanctum*), the heavy hardwood from the lower

Keys. Lignum vitae imported from Caribbean islands gained popularity for kitchen tool use during the 17th century due to reputed medicinal qualities.

Even though people had been preparing and eating food using wood vessels and utensils for centuries, about twenty years ago the U.S. Department of Agriculture (USDA) began warning restaurants to stop using

wood surfaces to prepare food and to use non-porous surfaces, such as acrylic, instead. The thought behind these recommendations was that the plastic surface would be easier to decontaminate or sanitize. Reporters who talked to the USDA at the time said they couldn't cite any scientific evidence supporting their preference for nonabsorbent surfaces, but that it was just "common sense."

The warnings from health department inspectors and kitchenware suppliers about the spread of food-borne pathogens from wood frightened many. Heirloom wood cutting boards passed down through several generations suddenly were relegated to only decorative duties.

About five years ago, two research microbiologists at the University of Wisconsin set out to find ways that they could make the traditional wood cutting boards as safe as the USDA recommended plastic ones. In their early tests, they inoculated both wood and plastic cutting boards with food poisoning agents Salmonella, Listeria, and Escherichia coli. Three minutes after applying the bacteria, they tested the boards and could find less than .1 percent of the pathogens on the porous wood. From the plastic they recovered all of the bacteria — alive and well.

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When the University of Wisconsin cutting board test results were published in the January 1994 JOURNAL OF FOOD PROTEC-TION, the investigators had not yet determined what accounted for the antibacterial properties of wood. Studies at Cornell University determined that bacteria applied to a wood cutting board are drawn into its pores by capillary action as the board dries. Held a millimeter or so below the surface of the wood, the germs can't contaminate other foods that come in contact with the board. If a contaminated board is wet, bacteria is easily lifted off. So, right after dismembering a chicken on a cutting board, slicing and dicing vegetables on the same board and then consuming them raw is asking for trouble.

Much ado about nothing? The Food and Drug Administration estimates that there are more than 80 million food-borne illnesses and nine thousand deaths a year in this country. The cost of treating infected people is in the range of \$22 billion annually, according to the U.S. General Accounting Office.

If you are ready to bring the ancestral treen down off the wall to use, there are some guidelines for care and maintenance. After using wood plates, bowls, or cutting boards for food preparation or serving, wash them with soap and water to get food particles off the surface, but don't submerse them in the dishwater. Soaking up too much water can cause considerable movement of the wood and result in warp, cracks, or delamination in glued pieces. Some recommend heating wood cutting boards in microwave ovens to kill bacteria. Don't do it. It tortures the wood and is not recommended by the makers of the ovens. Don't use wax or oils or other finishes that make wood less absorbent. The porous quality of wood keeps the spread of germs in check.

The use of plants in Florida was certainly more important in the daily lives of people who were preparing meals of giant tortoises 10,000 years ago, and to the Calusa who were eating palmetto berries and fish stew from bowls burned from cypress wood. These

people were much more directly connected to the processes of nature. Had wooden utensils spread harmful bacteria, their use would have stopped before now. Evolutionary processes imply that if food has been eaten from wood containers continuously for hundreds — if not thousands — of years, it can be assumed to be safe. Just in case, don't forget to follow your mother's precautions for cleanliness — wash your hands.

ABOUT THE AUTHOR: Dick Workman is an environmental consultant in Fort Myers and a founding member and past president of the FNPS. He writes about native plants and has inspired a great many others to do so.

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