

# Tidewater Woodworkers Guild



## Notes from the Wood House

Greetings All! With cooler temperatures prevailing, there should be no excuses for getting out in your shop and making sawdust.

Last month, we "elected" our new President and Vice President.

Bret Lancaster has offered to step into the role as President of the Guild.

Jim Francis has volunteered to accept the role as Vice-President.

Both are talented candidates. The Guild and myself congratulate these gentlemen and look forward to their guidance over the next few years.

For those of you who have been asleep for the past 4 months, Marc Adams will be holding a 4 course weekend workshop. The workshop will take place the weekend of December 5-7, 2008 at the Norfolk Woodcraft store.

As a reminder, Marc Adams will be holding workshops for the following on the following topics: Joinery, Veneering, Getting the most from your Router and Furniture Design. The cost of each workshop is \$30.00.

As a bonus, Marc will be having a slide show on Friday evening, Dec. 5th, to provide an overview of his school and woodworking in general.

If you committed to one or more classes, please see me to pay for your commitment.

The Holiday Gathering is still in the works for the Grate Steak in December. I am still working out the logistics for December 8th.

**NOTE:** This date is not confirmed yet. I should have confirmation by Monday's meeting along with the price and the menu.

### Wood Chips

Heather at Woodcraft is still taking contributions for the Board and Bowl Collaboration. We have had some incredible creations. If you have any questions, please contact me, Andy Steinberg for more information.

We still plan on presenting the Marine Corp. with our toys at the November meeting. Please see me at the next meeting or call me if you have any questions.

At this time, I have not received confirmation that the USMC will be sending anyone to pick up our toys. Please bring your toys to Monday Night/s meeting anyway. We will coordinate delivery.

Lastly, there is no article on wood this month. We have had a few requests about information on saw dust so we are reprinting an article from April 2006.

## November 2008 Issue

### Next Meeting

**November 24, 2008  
7:00PM**

Woodcraft of Norfolk  
5802 E. Virginia Beach Blvd.  
Norfolk, VA 23502  
(757) 466-1166

### Monthly Meeting

4th Monday of Each Month

### Find Us On the Web [www.twwwg.com](http://www.twwwg.com)

Please note that parts of the site are password protected. The password is provided to those whose dues are current.

### Club Dues

Dues are \$15.00 per year and are payable by check or cash.

## Upcoming Meetings

Jim Francis will be coordinating presenters and demonstrators each month through 2009. If you know of someone that would be a good presenter or if you would like to demonstrate your talents, please contact Jim Francis.

### November

Guest Presenter

Bob Fred

Bret Lancaster

Table Saw Alignment

And Maintenance

### December

Holiday Gathering

## The Executive Board

<b>Andy Steinberg</b>	<b>President/Editor</b>	<b>624-9151</b>
<b>Bret Lancaster</b>	<b>Vice President</b>	<b>631-0634</b>
<b>Ken Craig</b>	<b>Secretary</b>	<b>498-7309</b>
<b>Fred Olds</b>	<b>Treasurer</b>	<b>486-3862</b>
<b>Pat Taylor</b>	<b>Past President</b>	<b>481-3167</b>

## Tips and Techniques - Hazards of Sawdust

It is intuitively obvious that if you work with wood by sawing or sanding, you will be exposed to wood dust. Possibly for the majority, this article may be "preaching to the choir". Yet safety in woodworking should always be brought to the forefront from time to time. Practically everything we do has an element of risk, however the more knowledgeable we are of the hazards involved, the better we are able to manage the evolutions.

Yet any examination of woodworking safety generally raises more questions than answers. As in any analysis, a few definitions are necessary to understand wood and its dust toxicity. The potency of hazardous substances inherent in both the handling and the cutting of wood can be divided into 3 categories: irritants, sensitizers, and poisons.

**Irritants** ... are substances that irritate exposed areas of the body. The effects of irritants are proportional to the concentration and exposed to the substance.

**Sensitizers** ... are substances that can cause a potentially serious allergic reaction, usually after repeated exposure to individuals that are susceptible in the first place.

**Poisons** ... are dangerous substances that have the capacity to kill. Poisons can be subdivided into ...

- Natural compounds that are produced by the tree itself
- Introduced substances like fungal spores, bacteria, as well as substances added by humans like arsenic in pressure treated wood of years past and ACQ, Alkaline Copper Quaternary compounds, a preservative.

**Irritants.** All species of wood dust are an irritant to the human tissue especially to the mucous membranes of our respiratory tract. This is because **all** wood dust has the tendency to desiccate or dehydrate the tissue of moisture and oils. And, the dust of certain woods can further amplify the reaction of physical irritation to a caustic one. Many woodworkers find working with oak especially irritating due to the high levels of tannic acid. Acids have an affinity for moisture. When cutting conifers, the terpene dust can also be an irritant to some woodworkers. The intensity of the irritation to wood cutting operations is usually a function of concentration and time. Irritant woods include black locust, cocobolo, ebony, oleander, satinwood, sequoia, and yew.

**Sensitizers.** Wood toxicity presents a myriad of challenges for both the woodworker and the doctor. Wood chemistry and its impact on the human body are complex. To complicate the situation, certain sensitizers do not affect every woodworker in the same way or intensity. Additionally, repeat exposures usually have an increased immune system response; thus, second and third exposures are not like the first, and usually worse.

About 1 in 25 woodworkers have allergic reactions to the compounds in wood. There are many physical variables; wet or dry, with or without bark, fine or coarse particles, size of contact area, vapor, dust, dust extraction, air movement, temperature, humidity, contact frequency, sensitivity, and immunity. Allergic reactions take time. The immune system uses the first exposure to "gear-up" for fighting the allergen. Some allergic reactions do not present itself immediately. Symptoms can take months; working with a new wood, be cautious and limit your exposure. Sensitizer woods include cypress, balsam fir, beech, birch, elm, greenheart, mahogany, maple, myrtle, redwood, sassafras, spruce, walnut, willow, western red cedar, and teak.

**Poisonous substances.** There are a few naturally occurring poisons in dosages that the average woodworker might ingest while working with wood. Alkaloids, a possible toxin found in plants, have high concentrations in the bark, sap and fruit, and sometimes only in the leaves, thus affecting those that harvest the tree.

Toxic levels not considered a problem to the woodworker may present dangerous and even lethal levels of toxins when exposed to heat and/or moisture, over a period of time. When considering a wood for use in kitchen utensils or tools such as a spoon or skewers, heat or moisture can accelerate the release of toxins. To be safe, research your wood species in advance and choose an inert species when making toys for infants ... especially rattles and other wood items that infants tend to put in their mouth. Remember that the cutting process of wood, including a lathe, can create heat to expose the toxins.

Woodworkers never say "no" to a dust mask. Among woodworkers, the chances of developing nasal and sinus cancer run about 5-40 times greater than non-woodworkers. Although researchers haven't identified the exact cancer-causing compound (primarily due to the disease latency period of 30 to 50 years), some evidence points to dust from wood with high tannin content, such as chestnut, oak, redwood, western red cedar, and hemlock.

There are intentionally introduced chemicals for specific purposes such as improving insect and rot resistance. Other manufactured wood products like plywood and fiberboards may contain formaldehyde in their adhesives. Formaldehyde can be slowly released over time, but exposure can be accelerated by the heat created in sawing and sanding operations.

There are MSDS's (Material Safety Data Sheet) on wood dust, and they have been around since the early 1990's. All manufacturers and handler of wood products have their own MSDS's. The link below will take you to an MSDS Sheet for CCA-C pressure treated wood manufactured by "Hoover Treated Wood Products, Inc" for an introduction to an MSDS sheet. MSDS sheets list manufacturer's name, address, phone number, and goes on to identify the hazardous ingredients. The MSDS usually lists the chemical characteristics, fire and explosion hazard data, chemical reactivity data, health hazards, along with emergency and first aid procedures, and usually ends with recommended control measures and precautions for safe handling and use.

The best way to control wood dust is at the source. Capture the dust where it is being generated and control it as in a dust collection system. With dust collection, you dramatically decrease your exposure to the dust. Dust escaping the primary collection system can be controlled with secondary devices like electrostatic precipitators and wood shop air filtration systems. As well, personal respiratory devices can be worn to minimize the woodworker's respiratory exposure. Long sleeves and gloves can be used to reduce skin exposure.

### References:

- Albert Forest Products, "Toxicity of Wood." [www.city-net.com/albertfp/toxic.htm](http://www.city-net.com/albertfp/toxic.htm)
- Jon Arno, Eugene Dimitriadis, Jim Flynn, and Roy Tandy. (2001). Insights on Wood Toxicity. *A Guide to Useful Woods of the World*. (pp 571-577). Forest Products Society: Madison, WI

## Program Highlights From Our October 2008 Meeting



President-elect Bret Lancaster gave informative demonstration on utilizing the tablesaw. Bret explained the benefit of a custom made tapering jig and some of the safety features. (above right). Bret also discussed the key safety features of the tablesaw (below right) that many of us take for granted. Although comical with his stories with some students in his classes, Bret was emphatic about safety in the shop and using the tablesaw. (pictures by Don Hubbard and Adrian Marshall)

### Club Discounts Available

Over the years, certain businesses have offered a variety of discounts to our membership. Below is a current list of companies that offer some type of discount for products and services.

Woodcraft	10% off on meeting night
	Norfolk (757) 466-1166
Sure Set Saw	13% Discount
	Chesapeake (757) 420-7991
Cabinet Makers Hardware	Contractor's Price
	Virginia Beach (757) 490-1185
Plywood & Plastics	
	Norfolk (757) 858-3908
Scroll-it Service	
	Portsmouth (757) 237-6867
Sherwin Williams Paint	15% Discount
	All stores in Hampton Roads



## Show and Tell From Our October 2008 Meeting



Jim Dunne (above left) shows off his working kayak—an impressive piece of work. Jim quickly explained that the estimated time to build his kayak were correct, if you had nothing else to do. We have had some great contributions for the Bowl and Board Collaboration (top right). Fred Olds (right) presented a whimsical wine bottle holder in the shape of a dog. Fred had brought in an assortment of holders and plaques that he crafted for a recent reunion. Corey Larson, the proud Papa, brought in a box that he and his son had made. Good for Corey for starting off his “sapling” at a perfect age. (pictures by Don Hubbard )



### Woodworking on Television

There are a number of woodworking shows on cable and satellite these days for those of you who subscribe to these services. On PBS, Saturday at 7:30AM on WHRO, we can always find Norm and the New Yankee Workshop. At 3:30PM on Saturday, the New Yankee Workshop is broadcast on the North Carolina PBS. This is followed by the Woodwright Shop at 4:00PM.

WHRO (Channel 15) has started airing the Woodsmith Shop again. This program was on at 8AM after the New Yankee Workshop. Bob Waddell was able to find out that the show was recently taken off the air because they had shown all the older episodes. Recently, they have started airing the new episodes.

If you know of any other shows, please pass on the information.