Soma cube

December 2010

Crosscut

Newsletter of the Witwatersrand Woodworkers' Association
PO Box 411346, Craighall, 2024

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Go to www.wwa.org.za for back issues of *Crosscut*.

Next General Club Meeting on **Wednesday, the 8th December 2010** from 18h00 at the WWA clubhouse at REEA. Bring and braai – details from Alistair. Bring old/redundant tools for sale or swop. 10% of proceeds to club funds.

Next Turner's monthly meeting is on **Monday, the 6th December 2010** at 18h00 at the WWA clubhouse at REEA. Demo on flower turning by Dries Blignaut. Free wors rolls and all club members are welcome. Members who can't be at the main club meeting are welcome to bring old/redundant tools for sale or swop.

News

Turners' Meeting.

Wood of the month: Chris van Heeswijk presented Tamboti – Spirostachys Africana. Tamboti has a very distinctive smell, which is unmistakeable once you have encountered it. Although it is not endangered, Tamboti is not available in large quantities and sizes, because the tree is slow growing and the trunks of larger trees tend to be hollow. The latex is poisonous so green wood must be treated with respect. The wood also contains poisonous extractives that can cause headaches and nausea. If you work with Tamboti, it must be treated it with **extreme** caution. Avoid creating dust, wear eye protection, use a dust mask, and clean up thoroughly with a vacuum cleaner to reduce exposure to a minimum. On the scale of the chart below, Tamboti is right at the top of the scale in terms of danger. (I've heard a couple of anecdotal stories about Tamboti that bear this out.)

Steven Barrett and John Speedy demonstrated the making of a Xmas trees and tree decorations on the lathe.

Main Club Meeting

Herman Potgieter spoke about dust in the workshop. Besides being unsightly and accumulating to make a fire hazard, wood dust can be a health hazard, particularly for occupational exposure. The article and the table given below provide some background to the hazards of wood dust.

Notices:

The committee raised the question as to whether the pensioner members would like to meet an extra morning for a "social", "working" or some other meeting at the club house, like the Monday morning toymakers sessions – please discuss this with a committee member if you would like to take part in additional meetings or workshops.

New premises. Although we are very comfortable in our present clubhouse, there is a long term concern about our landlord's long term financial position. They may be forced to sell the riverside property at some stage, so we need to be prepared with an alternative. Our requirements are a meeting area and a workshop area. The meeting area should have space to seat about 50 or more people. The workshop area should be able to house the machinery and store the benches – perhaps 10 m^2 would enough for storage, 20 m^2 for a small work area. If the storage area is next to the meeting area, then the benches and machines could be moved to the meeting area for the workshops and demonstrations. Some sawdust and noise will be made, but only a few times a month, and the meeting area can be cleaned after meetings. We can't afford to rent at commercial rates, so a special arrangement will be required.

Perhaps an arrangement at a community centre or social club in a retirement village could work. A school classroom, church hall, or even commercial premises to share may be options. We would rent a store-room next to the hall, to store our equipment. For meetings and demonstrations we would wheel our equipment and benches out, and then back afterwards. After cleaning up the saw dust, the hall would be back to normal. Presently there are two meetings

and four workshop sessions monthly, so the hall would be used six times a month. Obviously, parking for up to 50 cars would also be required close by.
If you are able to suggest premises, please approach a committee member.

From the Chairman:

Dear WWA members,

The Committee wishes all members as well as their friends and families, a fantastic holiday season. Come back refreshed and ready for the challenges of 2011. It certainly promises to be an interesting year!

Very best wishes from the Committee of the WWA.

Club Notices

Year-end Braai. The date has been set for the 27th November at Greenside High School – lunch will be at 12h00. Alistair will co-ordinate the organisation or the braai and the collection of donations. You should be finishing off your toys to bring for donation at the braai. Alastair reminded the members that this was the main purpose of the braai, and he would like to see a bigger display of toys than ever before.

Don't forget to bring plates, cutlery, cups and glasses, as well as your nominated salad or pudding. Also remember to bring items for the gallery and the toys.

If you know of anybody who might be interested in woodworking, please bring them to a meeting – this way we will be able grow the membership to ensure that the club is sustainable.

REEA celebrated their 75th anniversary this year on the 6th November 2010. The WWA had an open day at the clubhouse, with demonstrations of turning and toy-making, as well having toys and turnings on sale. We cut and assembled several Somer cubes, which then taxed some people's brains trying to figure out how to put them together. There are apparently 240 possible solutions. See http://www.instructables.com/id/Make-a-Wooden-Soma-Cube/ and http://www.fam-bundgaard.dk/SOMA/SOMA.HTM

As the secretary, Ken Mutch often receives queries from folk wanting basic carpentry courses. If you would like to provide training, send Ken an email with details such as your location; what sort of teaching you offer; and your contact details. Ken will pass the info on to the person making the enquiry. Ken's email address is ken.woodman AT gmail.com

Don't forget your toys!

For Sale:

Bandsaw Blades: Alistair Brande was unable to contact 4 members regarding the bandsaw blades they ordered:
Paul Moldovanos – e-mail bounced back; Peter Anscombe – e-mail bounced back; Hennie Bester – no e-mail address;
Roy Roberts – no e-mail address. - Please can they contact Alistair on +2779 895 8709 or Fax: +2786 633 4134 or Skype; alistair.brande

Wanted:

Dr Jay Khoosal (Dentist ?) is looking for someone to manufacture a few cupboards for the reception. If you are interested please contact: Beryl on 0117067700 or Dr Jay Khoosal on (drkhoosal AT gmail.com) (Location Room 15, Sandton Medpark, cnr Peter Place & Nursery Street, Bryanston).

Please Note:

Toymakers. The toymakers meet on the first and third Mondays of every month, at 09h00 till 12h00 at the clubhouse. Contact Eddie Marchio on 011-678-8062 or renato AT pixie.co.za for more information. **The last meeting for 2010 was in November and we will resume on the 7th February 2011.**

Wednesday Workshop. The Wednesday evening workshops are on the first and third Wednesdays of every month, from 18h00 till 20h00. Contact Winston Klein on 011-674-1513 for more information. **The last meeting for 2010 will be on the 01st December, we will resume on the 19th January 2011.**

Additional Information on the effects of Wood Dust from Herman's Talk:

From: http://www.gvwg.ca/docs/Articles/WoodToxicity.htm

Wood/Dust Toxicity

Edited by: Bruce Campbell

For centuries, it's been fairly common knowledge that some woods could hinder your health. As far back as 60 A.D., the Roman historian and naturalist Pliny the Elder described a case where four soldiers actually died after drinking wine from hip flasks made of yew. Of lesser gravity was the experience of a few German sawyers in the early 1700s. It seems they developed chronic irritation of the nose and eyes, as well as headaches, from sawing bald cypress.
What are your chances of a reaction to wood? Statistics say that only 2 to 5% of all people develop an allergic sensitivity to one or more compounds found in wood. But, if you handle a lot of potentially toxic species, and work with them long enough, you increase your chances of an allergic reaction. And, with sufficient exposure, some woods bother almost everyone.
Any dust, including wood dust, mildly irritates the sensitive mucous membranes of your nose and eyes, making you sneeze and tear. The dust of some woods such as western red cedar and rosewood can be especially bothersome. However, other woods, called irritants, can make you even more uncomfortable, with a rash that classifies as either irritant dermatitis or allergic dermatitis. The rash usually has a uniformly red, swollen area that may erupt in blisters, and typically first shows up on the webs of skin between your fingers. Irritant woods include black locust, cocobolo, ebony, oleander, satinwood, sequoia, and yew.
However, for you to get an allergic-type rash, you first must be allergy-prone to one of more of the chemicals found in certain woods called sensitizers. And, it may take repeated contact for your body to develop a great enough allergy for it to react (the so-called "latency period of as little as five days and up to 6-8months). If you do eventually get a reaction, the rash will look like poison ivy - red with small, individual, itchy bumps. Sensitizer woods include cypress, balsam fir, beech, birch, elm, greenheart, mahogany, maple, myrtle, redwood, sassafras, spruce, walnut, willow, western red cedar, and teak.
In addition to the actual wood dust, moulds frequently trigger reactions, too. One that actually grows in wood happens to be extremely potent: Cryptostroma corticale. This mould lives happily between the bark and sapwood of many hardwood trees, especially favouring maple and birch. It's responsible for the marbleized spalting that wood-turners prize, and for "maple bark stripper's disease," a condition with all the symptoms of a severe respiratory allergy.
If you have an aspirin allergy, be wary of willow and birch. Both of these species possess significant concentrations of salicylic acid (the predecessor of aspirin) and very sensitive individuals might only need casual exposure, such as a whiff of sawdust, to react.
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 because the disease has a latency period from 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.
If you are sensitive to wood dust, work in a well ventilated area (this also reduces the risk to mould), avoid unseasoned wood as much as possible, and wash or shower frequently. If you develop persistent rashes or respiratory problems, contact your physician or dermatologist. (source of above: http://www.city-net.com/albertfp/toxic.htm)
There is an interesting list of Internet sites at http://www.davidillig.com/awg/safety.html where you can find additional information. The chart below is a blend of information from two sources. The first is an article which appeared in American Woodturner in June 1990 (originally posted to rec.woodworking by Bruce Taylor (I took it from the Ohio Valley Woodturners Guild http://w3.one.net/~ovwg/Tips-Toxicty.html). The second is an article prepared by Roy Banner, a woodturner from Torrance, California who almost lost his life in 1989 to anaphylactic shock after turning pieces of exotic wood (see http://www.mimf.com/archives/toxic.htm). Roy has assembled his data over the years from various sources. I can't judge with any authority the validity of the information and it's up to the you to further research any wood yourself. Take this as a jumping off point. You might also want to check out The Botanical Dermatology Database at http://bodd.cf.ac.uk/BoDDHomePage.html although I found it pretty hard to follow, technically.
A final note; this data does not take into consideration the added effect of formaldehyde in plywood, treated woods, sodium compounds in white pine to prevent blue stain, etc. Also, I am not aware of any work to study the interactions of woods and chemicals such as oils, glues, stains, etc. Bottom line - ensure good ventilation and good respiratory protection when you work in the shop.

Wood	Reaction	Site	Source	Ptncy[3]	Incidence	Risk[4]
Afromosia	I	E,R	D	GREAT	RARE	M
Alder	I	E,S,R	D	GREAT	?	?
Angelico	I	E,S,R	D	GREAT	?	?
Arborvitae	I	R	?	?	?	?
Ash	I	R	?	?	?	?
Bald Cypress	S	R	D	SMALL	RARE	L
Balsam Fir	S	E,S	LB	SMALL	COMMON	L
Beech	S,C	E,S,R	LB,D	MEDIUM	COMMON	M
Birch	S	R	W,D	MEDIUM	COMMON	M
Black Locust	I,N	E,S	LB	GREAT	COMMON	H
Blackwood	S	E,S	W,D	MEDIUM	COMMON	M
Boxwood	S	E,S	W,D	MEDIUM	COMMON	M
Cashew	S	E,S	W,D	SMALL	RARE	L
Chechem	I	E,S,R	W,D	GREAT	RARE	M
Cocobolo	I,S	E,S,R	W,D	GREAT	COMMON	H
Dahoma	I	E,S	W,D	MEDIUM	COMMON	M
Ebony	I,S	E,S	W,D	MEDIUM	COMMON	M
Elm	I	E,S	D	SMALL	RARE	L
Fir	I	E,S	W,D	SMALL	RARE	L
Goncalo Alves	S	E,S	W,D	MEDIUM	RARE	L
Greenheart	S	E,S	W,D,S	EXTREME	COMMON	H
Guarea	S	E,S	D	EXTREME	RARE	H
Hemlock	C	R	D	?	UNCOMMON	?
Iroko	I,S,P	E,S,R	W,D	GREAT	COMMON	H
Katon	I	R	?	?	?	?
Kingwood	I	E,S		?	?	?
Mahogany,American	S,P	S,R	D	SMALL	UNCOMMON	L
Mahogany,African	S	S,R	D	GREAT	RARE	H
Mansonia	I,S N	E,S	W,D D	GREAT SMALL	COMMON	H
Manzinilla	I	R	D	?	RARE	?
Maple (Spalted)	S,P	R	D	GREAT	COMMON	H
Mimosa	N		LB	?	UNCOMMON	?
Myrtle	S	R	LB,D	MEDIUM	COMMON	M
Oak	S C	E,S	LB,D D	MEDIUM ?	RARE UNCOMMON	L
Obeche	I,S	E,S,R	W,D	GREAT	COMMON	H
Oleander	DT	N,C	D,W,LB	EXTREME	COMMON	H
Olivewood	I,S	E,S,R	W,D	GREAT	COMMON	H
Opepe	S	R	D	SMALL	RARE	L
Padauk	S	E,S,R	W,D	SMALL	RARE	L
Pau Ferro	S	E,S	W,D	SMALL	RARE	L
Peroba Rosa	I	R,N	W,D	GREAT	UNCOMMON	M
Purpleheart	I,S	N	W,D	MEDIUM	COMMON	M
Quebracho	I C	R,N ?	LB,D D	MEDIUM SMALL	COMMON UNCOMMON	M L
Redwood	S,P C	E,S,R	D D	MEDIUM ?	RARE UNCOMMON	L
Rosewoods	I,S	E,S,R	W,D	EXTREME	UNCOMMON	H
Satinwood	I	E,S,R	W,D	GREAT	COMMON	H
Sassafras	S DT C	R N	[D,W,LB D	SMALL SMALL ?	COMMON RARE UNCOMMON	L L ?
Sequoia	I	R	D	SMALL	RARE	L
Snakewood	I	R	W,D	MEDIUM	RARE	L
Spruce	S	R	W,D	SMALL	RARE	L
Stavewood	I	R	?	?	?	?
Verawood	I	E,R	W,D,S	MEDIUM	COMMON	M
Walnut, Black	S	E,S	W,D	MEDIUM	COMMON	M
Wenge	S	E,S,R	W,D	SMALL	COMMON	L
Willow	S	R,N	D,W,LB	SMALL	UNCOMMON	L
Western Red Cedar	S	R	D,LB	GREAT	COMMON	H
Teak	S,P	E,S,R	D	MEDIUM	COMMON	M
Yew	I DT	E,S N,C	D W,D	MEDIUM EXTREME	COMMON COMMON	M H
Zebrawood	S	E,S	W,D	MEDIUM	RARE	L

Reaction:	C[1] - nasopharyngeal cancer, DT - direct toxin, I[2]- irritant, S[2] - sensitizer, N - nausea/malaise, P - pheumonitis & alveolitis (hypersensitivity and/or pneumonia)
Site:	C – cardiac, E – eyes, R – respiratory, S – skin
Source:	D - dust, LB – leaves & bark, W - wood, S - smoke
Risk:	L – low, M – moderate, H - high

[1] Cancer of nose and sinus: Statistics show that woodworkers have a 40 per cent greater chance of nasal cancer than the general population. However, the majority of statistics on nasal cancer are based on data from 1920-1960 when the furniture industry became highly mechanized with little or no dust control methods.
[2] Irritant or Sensitizer: Woods are either an irritant which cause a reaction fairly rapidly after exposure and will cause a similar reaction repeatedly, or sensitizers which may have a latency period of hours or months and may require repeated handling before reaction occurs. Sensitizer's are the more severe, because once you're sensitized, you're sensitized for life and the reactions only get more dramatic.
[3] Potency: This is the potential of the wood or sawdust doing harm and would vary with the individual. i.e., those who are allergy prone might think twice about working with wood classed as extremely potent.
[4] Risk: This is a qualitative assessment of the risk of a given wood doing serious harm. It is derived by combining the Potency and Incidence measures as follows:

	SMALL	MEDIUM	GREAT	EXTREME
RARE	L	L	M	H
UNCOMMON	L	M	M	H
COMMON	L	M	H	H

Chart References:

1. _Woods Toxic to Man_, author unknown
2. Woods, B., Calnan, C.D., "Toxic Woods." _Br. Journal of Dermatology_ 1976
3. _ILO Encyclopedia of Occupational Health and Safety_ 1983
4. Lame, K., McAnn, MEDIUM., _AMA Handbook of Poisonous and Injurious Plants_, AMA 1985
5. _Poisondex_, Micromedix Inc. 1990
6. List of woods and toxicity characteristics, Roy Banner, 1989