LAKE CHARLES
WOODWORKERS CLUB, INC.
MARCH 1999

MEETING HIGHLIGHTS

The January meeting was held at the Calcasieu Central Library. **Dr. Robert Cooper** , a Professor of Languages at McNeese State University who spends much of his time professionally restoring fine art and frames discussed some of the techniques used by restorers that are applicable to any type of restoration project from old furniture to fine art. He told us of the materials used as paint surfaces, as structural supports, and many of the newer techniques to help recovery from rot, fungus, insect damage, etc..

PRESIDENT'S MESSAGE

I'm sure many of you have taken notice of the fact that member participation in our monthly meetings has been increasing. I have also noticed that more members are staying around after the meetings, trading information with one another. As I mentioned to all of you last year, I feel that this is important and something that we must all continue to work on.

The information we received back from the "surveys" that you filled out is helping the Board of Directors to plan informative and interesting future meetings. Some of the new ideas that we've had include covering several topics in the same meeting, as well as having a monthly safety tip.

I hope to see all of you at the next meeting.

Brent Evans, President

ABOUT OUR MEETING

Our meeting is being held in Burl Vincent's newly-expanded shop and, hopefully, it will be a hands-on session for many. You may wish to bring a plane or chisel and try your hand at sharpening .

MEMBERSHIP DUES

Please. If you plan to continue your membership and have not paid your dues, won't you please do so soon. It will soon be time to review the mailing list for the newsletter and we would not wish to prematurely remove your name.

If you do not plan to continue your membership, please let us know, also.

Send your $20 to **Bob Ferguson** or bring it to the next meeting.

Bob Ferguson
2326 22nd Street
Lake Charles, LA 70601

NEXT MEETING

Mar. 13 9:00 a.m. in the shop of
Burl Vincent
2629 Laura Lane
Lake Charles, LA

Subject: - The sharpening and use of planes & chisels.

FUTURE MEETINGS

April 10	**Lathe demonstrations by Steve LeGrue of The Cutting Edge (Houston).**
May 8	**Faux Painting by Gary Breaux of South City Paint.**

IN THE FUTURE

Discounts: We will shortly be reviewing the apparent discount arrangements which we have with several area merchants. There have been several reports that the current arrangements have not been of significant benefit to club members. Have you attempted to take advantage of these discounts? What has been your experience? Please let us know. Call Brent Evans or Bob Ferguson.

BBQ: We have begun the intial planning of this year's annual BBQ outing which should take place in June. Would you like to help? Let us know. At any rate, keep watching for details of the event.

Editor's Note: The following is a condensation of an article extracted from the internet web page of Popular Woodworking. Sometimes a good overview of a subject can be very helpful. I believe that this is one such case.

How to Choose the Best Finish for You

BESIDES wood, glue, sandpaper and stain, the next most often-purchased item for the shop by Popular Woodworking readers is polyurethane finish. That fact was really nailed home for me recently when I asked an acquaintance, who just started woodworking a couple years ago, about the finish materials he used.

Because there are so many polyurethane finishers out there, let's look at that finishing material first. Now I hate to burst your bubble, but the very first thing you need to know is that you're actually not a polyurethane finisher at all -- you're a varnish finisher. That's right, varnish. Urethane just happens to be one type of resin which when cooked with oil, as in linseed oil, combines to form varnish. The other common resin used in modern varnish is alkyd. Long ago, rosin and amber were used, among others. But today, largely because of the mystique of its hardness, polyurethane has become the varnish of choice among home woodworkers.

Like all finishes, polyurethane accomplishes two important goals: it brings out the beauty of the wood while protecting it at the same time. Poly gets good marks for enhancing wood's natural beauty (as do most all film-forming finishes). At the same time, the tough film protects against scratches, heat, water penetration and chemicals. The finish also gets good scores for ease of application because brushing on two coats will give as much protection as is usually needed. So all these factors make polyurethane the perfect choice, right?

Let's now look at the downside. It does have what some people call a "plastic look," but that's not so bad. And besides, because the resins used to form the dried film are a plastic (to be more precise, a somewhat cloudy urethane), that shouldn't be such a surprise. Other considerations might be more important to you. Because it is made by combining the resin in oil, and because all oil-based clear finishes yellow when exposed to light and air, the film develops a yellow cast over time.

You also should be aware that polyurethane doesn't stick well to other types of finishes or even to itself. Even when applying a second coat to the first, it's necessary to sand the first coat to promote good adhesion. That's because once dried, a new coat will not dissolve the previous one to reform a thicker, single coat. So the tiny sanding scratches provide a place for the new coat to bite into the previous coat. You also need to sand other finishes before applying polyurethane over them. And you need to sand polyurethane before covering it with other finishes. In outdoor use, polyurethane separates easily from the wood because the sun's ultraviolet rays destroy the bond.

Poly also takes a relatively long time to dry, which means the chances are greater that airborne dust will contaminate the wet, sticky film. And this problem is compounded by the toughness of the dried film. It's very hard to sand in order to level out the dust, errant fingerprints, craters left from air bubbles or brush marks from applying it. Lastly, should you ever want to strip it, only the harshest strippers will soften the finish because it is impervious to common solvents such as acetone, lacquer thinner, alcohol, naphtha or paint thinner.

Just about all the attributes of polyurethane discussed above, the good and the bad. can also be applied to what we commonly call varnish. It forms a very tough film with just a couple brushed coats. And you need to sand between coats to promote adhesion. It too yellows, is scratch-resistant, provides a good barrier against water vapor, enhances the wood's beauty, etc. It also takes a long time to dry, making it prone to dust contamination.

Water-based finishes are not the same. Now let's let another cat out of the bag so that further confusion can be put to rest. Any water-based finish that has the same name as its traditional counterpart -- such as water-based polyurethane vs. polyurethane varnish, water-based lacquer vs. nitrocellulose lacquer -- is not the same finish at all. As such, you can disregard a lot of the attributes applied to lacquers and varnishes when using their water-based cousins.

The primary difference in the performance of these finishes is the way these finishes cure, or dry. The resins in the water-based finishes are treated so that they sort of "melt" together as the water evaporates from the wet, freshly applied coat. And soon thereafter, the solvent in water-based finishes, glycolether, evaporates as well. What's left behind is the dry, hardened resin.

Some of the characteristics are the same. For example, water-based polyurethane resists scratches and moisture. It also resists chemicals well, but exposing it to heat softens the finish and weakens many of its good characteristic. In practice, water-based polys are not a good choice on counter tops or dining table tops that will have hot casseroles or cups of coffee setting directly on or near the finish.

Water-based products do have the advantage of drying faster than oil-based finishes. And they certainly don't give off the flammable, harsh fumes of oil- or solvent-based lacquer. Furthermore, because they don't contain oil, the finish won't yellow over time, which is a real advantage when finishing light-colored woods such as maple. On darker woods or stained woods, the varnish's yellowing is hardly noticeable, and some would argue that it actually enhances the appearance of the finish over time, giving it a mellower look.

Water-based finishes don't require sanding between coats because the glycolether softens the previous coat to bond with the new coat. However, you must wait several hours between coats so that the previous coat has had time to dry. Otherwise, you risk trapping water in the lower coat that can't sufficiently dry, leaving a cloudy appearance in the finish, sometimes referred to as "blush."

Lacquer and shellac, a finisher's best friends If you will allow, I'm going to let my personal prejudices show for a moment. Over the years I have used all types of varnishes, including polyurethanes and water-based finishes, and appreciate their special benefits in particular circumstances. I could use them routinely and get good results. But my favorite finishes, without a doubt, are lacquer and shellac. It's not coincidental that both are in the same family of finishes in that they cure, or dry, by the simple process of evaporation.

Unfortunately, lacquer is highly flammable, gives off a lot of fumes and requires a spray booth to be used safely. It also is best applied with spray equipment, which can be pricey. Because of this, it doesn't fit the needs of the home woodworker. Shellac, on the other hand, can be a good substitute.

Both lacquer and shellac form a tough film and, like all film-forming finishes, enhance the wood's beauty by bringing out the color and giving it depth. The film is not as scratch- moisture- or chemical-resistant as either varnish or water-based products. But it is resistant to heat. Unlike lacquer, shellac uses alcohol as a thinner and solvent, which is much less harmful than the solvents in lacquer, lacquer thinner and acetone.

Because both finishes cure by evaporation and are redissolved by their solvents, one coat can be applied directly over the next and the previous coat need not be fully cured. Both finishes dry to the touch much faster than water-based products or varnish. This not only speeds up the finishing process, but it decreases the chance you'll get dust in the finish. Better yet, even if dust, fingerprints or craters left by bubbles remain after the finish has dried, they can be easily sanded out and the following application of finish will leave no trace of the repair.

Because they are not as scratch-resistant, the finishes can be rubbed out much easier. This means you can produce a beautiful, deep film finish with just the right luster without spending nearly the time or effort required to produce the same results using varnish or water-based finishes.

While lacquer will not yellow and is usually sold as "water white," meaning it won't color the wood, shellac is usually another story. Most shellac is sold as orange or amber. You see the color in it the minute you open the can or start mixing your own from