CUTTING vs. SCRAPING

By Art Fitzpatrick

When many begin woodturning, scraping is the first thing they do to create a form. Indeed, many lovely pieces are created in this way even by professional artists throughout their entire careers. Using only scraping however, can cause damage to the grain of the wood and result in excess time devoted to sanding – which for most is no fun. In the case of many woods, particularly the softer varieties as we have in most of the U.S., the damage is often so great that sanding will not recover the desired surface for a number of reasons. This said however, scraping has its place. Sometimes it is impossible to get the access needed for a good cut. When scraping is used, keeping in mind "shearing angle" grain direction, etc. will often result in a very good surface quality.

The GEOMETRY of a CUT:

Shearing Angle - ("Shear" fibers.)

Control of Depth - (Bevel used as a "Fulcrum" and "Ride the Bevel".)

Grain Direction - (Cut with fibers below as support.)

Scraping:

Use "shearing" angle when possible

Scrape at centerline with tool at a slight "down" angle.

To THINK About:

1. Use sharp tools. (Sharpen BEFORE it is necessary.)

2. "Let the wood come to the tool".

3. Apply pressure to tool rest not the wood.

4. Direction of grain. (Try to cut with fibers below as support.)

5. Visualize "shearing" angle.

6. Check cut while turning work by hand helps in visualization

7. Look for SHAVINGS not dust.

8. Minimize VIBRATION.

    a. Lathe Construction (Castings, Weldments, Tubes/Rods, Steel Angle)

    b. Mounting Method (btw Centers, Faceplate, Jam Chuck, Mechanical Chuck)

    c. Distance from Bearings (Adapters)

    d. Concentricity

9. “Finesse” Cuts (Hold tool “like a bunch of flowers”.)

10. Try other cuts, speeds, etc. to improve surface.