

## ACOUSTIC GUITAR CORNER SPECIAL REPORT

### **Your Acoustic Guitar, and the Effects of Humidity.**

Have you ever considered how much effect humidity, or the lack thereof, has on your acoustic guitar? It probably has a lot more effect than you might think.

Climate control, especially with regards to relative humidity, is of the utmost importance throughout the building process of an acoustic guitar. I've seen acoustic guitar backs braced up with a 15-foot radius dome in them flatten out completely with humidity changes.

First the braces were made with a 15-foot radius cut into the bottom of them. Then they were glued on to the backs and clamped into a wooden dish, hollowed out with a 15-foot radius. Prior to this procedure the backs were kept, in what I call, a dry box for about 2 weeks. The box is maintained at about 45% humidity. The backs were then taken out of the box and left on a bench for 3 or 4 hours to acclimate to the room that was at 48-50% humidity before they were glued up.

Over a period of about 2 weeks the weather changed outside and it got a lot colder and dryer. The humidity in the shop dropped to a low of about 36%. During that time I watched 3 of the backs I had braced up flatten completely out and actually bow in the opposite direction. I would say that's a pretty profound effect for a 9% drop in humidity. Not to mention that it was a real drag to chisel off all the bracing and start all over again!

Keeping your acoustic guitar humidified in the winter is very important. There are several types of guitar humidifiers available on the market from about \$10.00 and up. They usually just hang down inside the guitar body in between the strings. You can also get a nice German made hygrometer that can be manually calibrated, so that you can accurately monitor your house or guitar case. It's also a good idea to have a cool mist humidifier in the room of you house where you store your guitars in the winter. The severity of the problem is of course relative to where you're living. In the hot and humid dog days of summer, keep your guitars in the air conditioning where the humidity is kept down.

Guitar tops also have a radius and when they get too dry they can flatten out, leaving your strings lying on the fingerboard.

The more attention paid to relative humidity in the work environment and the moisture content of your materials during the building process, the less likely those things will have a lot of effect years on down the road. But because there is no way for you, the consumer, to know this, you should always monitor the situation yourself and keep your acoustic guitar in an environment you know is safe. Between 45 and 55% is ideal.