Attention Guitar Lovers!

Today's topic: Humidity & Temperature!

Thank you for all of the great e-mails and questions on humidity. This is the perfect time to cover the subject, so here we go!

As many of you have already noticed, your guitar has probably started to change with the temperature. As we head deeper into winter, the air inside of our houses, studios and rehearsal halls has begun to dry out. This will start as a minor inconvenience that develops into an expensive and detrimental problem! If a guitar is left in an environment that is too hot or too cold (like the trunk of a car on a hot day), the result can be devastating. It only takes a few hours of heat to melt the glue that holds your guitar together. This is why it is critical to control the humidity and temperature around your guitar.

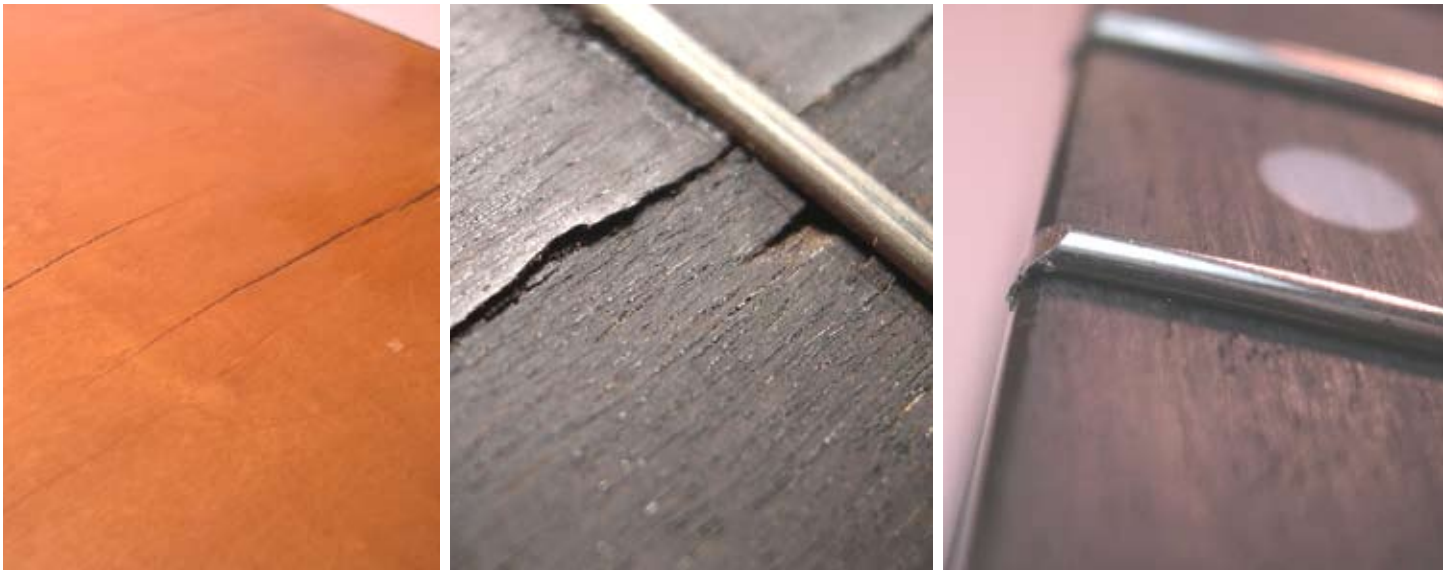
How can I tell if my guitar is too dry?

One of the first telltale, signs of a dry guitar is when it begins to play differently. The action may change causing the strings to fret out or be raised too high from fingerboard, or it just won't play in tune as well as before. Another symptom is when the fret ends feel sharp. This is evidence of the fretboard shrinking, causing the fret ends to extend over the fretboard. This can also cut your fingers up if you don't get it into a repair shop right away. When a guitar is extremely dry, it will begin to crack. You will notice this more with an acoustic than an electric, but it can happen to both. Here is a list of problems that occur as a result of extremely low humidity:

- Structural Cracks (bridge, neck, top, back, sides)
- Sharp Fret Ends (caused by the fretboard shrinking)
- Warped Neck
- Loose Braces
- Glue Failure
- Cracked Finish (finish checking)
- String Rattle
- Intonation and Tuning Problems

On an electric, the cracks appear in the finish and fretboard.
On an acoustic, the cracks can occur on the top, back, sides, bridge, fretboard, and finish.

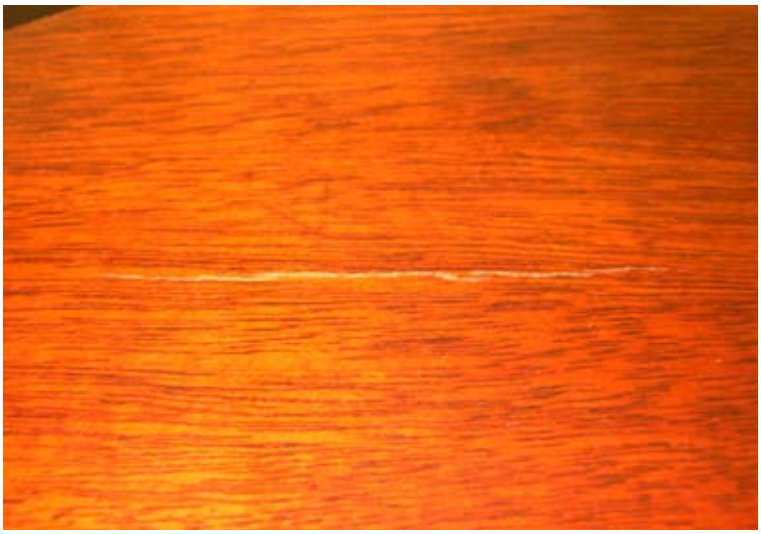
FIGURE 1.1 This guitar is badly damaged by low humidity



How do I repair these problems?

Take your guitar to a qualified Luthier. Most of these repairs can be costly! I know this firsthand because most of my income in the winter comes from these types of repairs. They are time-consuming, which in my industry equals expensive. Keep in mind that if you don't take care of these problems now, they can cost you even more later. The best remedy is prevention. These problems can be repaired, but it's likely that you will always see the scars, so take care to prevent them from occurring in the first place.

FIGURE 1.2 This guitar has been repaired, but the scars still remain.



What is Humidity?

Humidity is the amount of moisture (water) in the air. Too much or too little humidity can make your guitar sound, play and look bad. Forty to fifty percent is the ideal amount of humidity for a guitar. I usually shoot for 45%. That's a perfect humidity level for any guitar or stringed instrument. Acoustic instruments are affected more often than electric guitars because they are made from thinner pieces of wood and are under more stress and tension. Changes in humidity will always show up in an acoustic first. However all instruments need a consistent environment.

How to Gauge Humidity

There are several products on the market to help you identify the humidity level in your environment. I recommend a digital one that measures both temperature and humidity. The Planet Waves Humidity Control Sensor is the best I've used. It has been a part of my shop ever since it hit the market. It is fully programmable. It not only measures the temperature and humidity, it also tells you when it has reached its highs and lows. This way, you know when to use your humidifier. It has a time & date feature, and an indicator that the humidity is too low. Consider it to be an inexpensive insurance policy for your guitar.

FIGURE 1.3 The Planet Waves Humidity Control Sensor shows both the temperature and humidity.

How to Control Humidity

There are two types of humidifiers that I recommend depending upon where and how your guitar is kept. If your guitar is outside of the case in a rehearsal hall, studio or bedroom, I recommend a warm-mist room humidifier. Used with your Humidity Control Sensor (humidity gauge), this method will be quite sufficient. For those times when you are on the road, or transporting your guitar, I recommend a brand new product that I have been working with called the Humidipak™ Automatic Humidity Conrol System by Planet Waves. This humidification system can be found in most music stores. It is so easy to use. It keeps the humidity at exactly 45%. If the humidity drops, it adds moisture. If it is too high, the Humidipak removes moisture. It takes all of the guesswork out of controlling humidity. You only have to replace the Humidipak refill packets about every 4 months (duration varies on seasonal and climate conditions). You just slide the soundhole pouch in between your strings and place the other pouch into the headstock cavity of your guitar case and go. It's that easy! No drips, no worries. I still recommend that you use a humidity sensor with it, but I can't stress how much money and aggravation this product will save you! Or, if you want to keep spending lots of money on guys like me, then please don't control the humidity of your guitar. I could use a new Porsche!

FIGURE 1.4 Here is the Planet Waves Humidipak Humidifier.

Summary

To prolong the life of your guitar, here is what you need to remember:
1. Humidity (monitor it & control it with your Planet Waves Humidipak Automatic Humidity Control System)
2. Temperature (keep you guitar in a consistent environment)

The products mentioned in this article are specifically designed to help prevent premature humidity-related damage on your guitar and reduce costly visits to the repair shop. For more information on these products, please visit www.planetwaves.com.

I have a five book series and several DVDs that take you step by step through guitar care, setup & repair. It is a collection of tips and procedures that I have learned, and developed over my 21 years in the guitar repair & building industry. Check them out on the web at www.guitarservices.com.

Thank you again for all of the e-mails and great questions! Keep playing and take care of those guitars!

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