Taking Care of That Amazing Wood

by Michael A. Lomax

My lifetime love affair with the clarinet started when I was 9 years old. I had a metal clarinet that had belonged to my cousin. I remember the day my first teacher opened up his case and I saw—lying in regal splendor inside their velvet covered compartments—these pieces of amazing dark brown wood, the color of coffee, decked out in silver keywork. I knew at that moment that someday I had to have a set of clarinets like those! I had no idea at the time that this wood was called African Blackwood or Mpingo by the African people who harvest it, which when translated means "the tree of music."

My goal in this article is to do two things: first, to try to dispel some of the myths and incorrect information that have been around for a long time concerning the care of our instruments; and secondly, to lay out a clear plan of action that anyone can take to keep their instruments in great shape for a lifetime. I say a lifetime because I truly believe that this is possible. Over the past forty-plus-years, I have carefully observed the results of this course of action, and I am convinced that your instrument can last you a lifetime if you take care of it properly. I reject the view held by many that our instruments get "blown out." Rather, I am convinced that the reason instruments play differently over time is due to the effects of three major enemies of this wonderful wood: *humidity* abuse, *temperature* abuse, and *chemical* abuse.

From the time we first bring our new instrument home, these enemies start their relentless attack. Observing this over many years and seeing its effect on our instruments was the motivation that led me to seek to find ways to prevent this damage from happening, or to reverse the damage that had taken place. And the good news is that much, if not all, of the damage can be reversed because *wood has a memory*. It can and will return to its original shape if certain actions are taken. So, let's take a closer look at these enemies and see what the means are to defeat them.

1. Humidity abuse. This is created by the act of playing and having the instrument in a non-safe environment, such as humidity levels either below 45% or above 65%. Blowing moisture-laden air through the bore of the instrument creates stress. Moisture swells the bore, and the density of the wood prevents the moisture from evenly distributing throughout the body of the instrument. The environment adds to the problem if the humidity is below 45% or above 65%. The result is that critical bore dimensions change, tone holes change, and the size and fit of the tenons and sockets change. If this is allowed to continue, eventually even with a good piece of wood—and sooner if the wood has weak areas or flaws—the wood can crack, or at least the instrument will not play like it did when it was new.

Solution: Provide an environment that will allow the moisture content of the wood to be as equal as possible throughout. A humidity controlled ecosystem is the solution. This can be achieved in several ways. There is one product on the market that can add or subtract humidity from your instruments. It is made by Boveda, and is a pack containing a substance that adds or subtracts moisture from the environment. Several packs can be kept in your case to achieve this ideal humidity level. If your case is airtight, the packs can last for nine to

twelve months at a time. If you don't have an airtight case, they will need to be replaced every three to four months. The accurate way to check when they need to be replaced is to keep a hygrometer in your case, and when the reading drops below 45% or gets above 60%, it is time to replace the packs. Note: be sure to use the packs that say 49% on them.

2. Temperature abuse. This enemy rears its ugly head whenever the temperature differential within the body of the instrument is greater than approximately 20 degrees (for example, playing your instrument when the wood is at a temperature near or below 70°F/20°C). This creates stress on the wood because the outside of the instrument is not able to expand at the same rate as the bore is expanding. This creates a situation similar to pouring hot tea into a glass filled with ice cubes, which can crack the glass for the same reason.

Solution: The outside of the instrument must be warmed to a temperature that is within the safe zone of less than 20 degrees below the temperature of the air moving through the instrument. The outside of the instrument must be warmed before playing to prevent the danger of cracking. This can be done by putting your hands around the barrel and upper joint, or putting it under your arm, and or blowing on the outside of the wood for several minutes. You can also check out a modern alternative—a heated case cover—that slowly and safely warms the case and the instruments to the ideal playing temperature of 78°F/26°C.

3. Chemical abuse. This occurs from the harmful effect of our breath within the bore of our clarinets. God created our saliva to digest food. Unfortunately, it also tries to digest any organic material, including African Blackwood, Rosewood, Cocobolo, or any other exotic wood.

Solution: The solution is to create a barrier within the bore of the clarinet that can prevent or lessen the harmful effects of our saliva on the wood. Larry Naylor deserves most of the credit for the research on this subject. He found that if organic oil—similar to the oil that was in the wood when the tree was growing—is applied to the bore of the instrument, it provides protection against many, if not most, of the harmful chemicals found in our saliva. It also allows the "good moisture" to enter into the wood to help keep it hydrated. However, the oil must be organic, such as sweet almond oil, olive oil, or African blackwood oil. Oiling the bore of the instrument once every two months, and a complete oil bath when the instrument is being overhauled, will protect and keep the fibers of the wood healthy and stable. Note: this schedule is for those musicians who are using their instruments on a regular daily basis such as professionals and students. Those who only play their instrument a few times a month can oil their instrument's bore with organic oil at least twice a year.

Conclusion: if you will provide your clarinet with the care I have outlined, it can provide you with a lifetime of service. This amazing wood is truly a wonderful gift from our Creator and really asks very little from us in return. I truly believe if your instruments could talk, they would say, "Please just give us the care we deserve!"

Musically Yours,
Michael A. Lomax

Michael A. Lomax is the owner of Lomax Classic and the inventor of HumidiPro cases, which provide an ecosystem to keep woodwind instruments at recommended humidity levels. He also designed the HumidiPro "Ultra" case cover to keep instruments at temperatures conducive to safe playing. He and his daughter Kathryn are committed to providing products that meet the needs of woodwind musicians. Visit their website at www.lomaxclassic.com.