

REED MYTHS

by Robert DiLutis

For years the difficulties of finding and sustaining high quality reeds has frustrated many clarinetists. Because of this, we have created an array of myths and misnomers to help explain many fundamental and basic problems with reeds. It is my hope that this article will help clarify the mystery surrounding making, storing and adjusting reeds.

Reed myths perpetuate in many ways, but are mainly the result of a lack of understanding about reed making. Myths in general try to explain the way things work when science cannot. As students, we develop these explanations based on hearsay and rumors to relieve our frustrations and help us get through the next concert or lesson. As professionals, our busy schedules cause us to look for short cuts and quick fixes. During the past 30 years, I have spent hundreds of hours making and studying reeds and reed making machines. The greatest benefit from this has been my development of a clear concept on how reeds function and react under many different conditions. I have read myths in books, articles and on the web and they are firmly planted in the minds of clarinetists and students. Eliminating them will be difficult, but hopefully this information will put some of them to rest or at least raise questions as to their validity.

Reed Myths

Myth 1. Reeds with short vamps play sharp.

I have heard this comment from many students but the reality is that these reeds can play very well and in tune. The short vamp seemingly allows for less vibration. However, we must remember that pitch is affected by the thickness of the heart of the reed and the pressure placed on the vibrating surface. As we dampen or press the reed with our embouchure, we increase the vibrations the reed is making and raise the pitch. Reeds that have shorter vamps are usually the result of a very thin blank being used to copy a thicker reed template. The accidental result is a reed with a short-vamp. In general, a reed's vamp should be equal to the length of your mouthpiece's window opening. I have produced and

found many high quality reeds with short vamps.

Myth 2. You can easily flatten a warped reed.

I have found this an almost impossible task. A reed that rocks from side to side is warped. The process of trying to flatten a reed usually involves some kind of file or sandpaper. By placing the reed on the flat filing surface, we move the reed back and forth trying to avoid thinning the tip. By keeping the reed pressed evenly on the file we are hoping to keep the reed parallel to the surface without the reed becoming too thin or distorted. While sanding the warped reed, it becomes apparent that the reason this is so difficult is because the reed needs to be floated perfectly on the pinnacle of the warp. During sanding, the reed will fall to one side of the warp creating an uneven surface, many times sanding more warp into the reed. Removing material from the bottom of the reed can be dangerous as well because it changes the tip thickness. I have found that by soaking a reed for 10 minutes in a glass of water it will occasionally return to its original shape. There are however a few things you can do to minimize warping. First, properly humidify reeds at all times. I store my reeds at 60%-70% humidity. I also never leave the reed case open for more than a few seconds. This keeps moisture in the case and a consistent humidity level. When wetting a reed always wet the entire reed. The bark area is forgotten by many students and is a great storage area for moisture while playing the reed. When only the front half of the reed is wet, warping is almost guaranteed.

Myth 3. Reeds from thick blanks always play softer.

Clarinet reed strength is controlled by the density of the cane and the thickness of the heart. Very dense reeds measuring .115" in thickness can easily be softer than those thicker reeds measuring .125". Depending on the shape of the vamp and the density of the cane your reed is made from, it could be either soft or hard. Remember, cane near the outer bark is denser than cane near the center of the tube. When making reeds by hand, the reed shape is customized to fit the cane. Adjustments for density are made during the entire making process as we play and test the nearly fin-

ished reed. With commercial reeds it is a one size fits all approach and will only allow for random quality and consistency. Each shape and style a reed company makes can only fit to a percentage of cane. Many companies test batches of cane for density before production. The reed style is then fit to the batch. This process would be impossible for each reed when millions are made. All commercial reeds are usually cut to one size then measured after production for strength. This helps to insure reeds are somewhat similar in each box. The variety in each box is limited by the number of sizes available to each music store. Most stores do not want to carry more than 4 or 5 strengths of each brand or their inventory would be enormous. After production, reeds are measured and divided, then placed into boxes according to strength guidelines. Every box will have a large variety depending on the number of sizes.

Myth 4. The color of the bark affects the way a reed plays.

The marks left on the bark of the cane are simply from condensation formed during growing. Stains form as the water dries. These marks do not penetrate into the cane or affect the reed's vibrating qualities. If these reeds play better or last longer it is purely coincidental.

Myth 5. Always adjust reeds starting from the back or shoulders of the vamp.

Reeds start vibrating at the tip. When making a reed from tube cane the first step in getting it to play is to make the tip area vibrate. This same process should be applied to commercial reeds. Adjust and balance the tip then work up the vamp towards the bark. Remember, the tip is the first area to begin vibrating during playing. Working on the back first without a balanced tip can lead to over sanding and inaccurate testing.

Myth 6. Store your reed on your mouthpiece, it will make it last longer.

I guess we have all tried this. Besides causing the reed to develop a huge bump on its flat bottom, this generally softens

the reed and causes a permanent disfiguration of the reed that cannot be fixed. Younger students that receive this advice usually grow mold or fungus on the reed and mouthpiece. Diseases can be spread easily if the mouthpiece and reed area are not kept clean. Keep your reeds in a simple reed holder and you will have better consistency.

Myth 7. Drying reeds by laying them upside down on a table will keep them from warping and make a warped reed flatten out.

Yes, it could happen, but this is not very reliable. Reeds should not dry out but be humidified at a constant humidity level. If a reed dries out it will probably warp. Humidity in the reed case should be constant and between 60-70% humidity.

Myth 8. Never sand the tip of a reed.

When making reeds you must sand and adjust the tip of the reed. A balanced reed tip is very thin, approximately .003" in thickness. It needs to be balanced to allow for good response and evenness of sound. The tip is the cause of many students' response issues and when balanced can improve clarity of tone. Most reeds produced by commercial manufacturers are heavy in this area. Making the tip is the most difficult part of reed making for commercial companies. During production it can tear easily and cause greater amounts of waste. Reed tips are safely made by commercial machines between .005-.007".

Myth 9. Never touch the heart of a reed.

Again, we must adjust all parts of the reed. Reeds have basically 2 parts. These are the heart of the reed and the vibrating area around the heart. The heart controls the hardness or lip strength of the reed. It must be thinned to allow the reed to have the correct level of lip pressure needed for producing proper pitch level and clarity. A heavy heart will minimize endurance and leave many clarinetists working very hard to produce a sound. If left hard it will also create an airy sound and require over biting of the reed.

Myth 10. Reeds that make a buzzing sound are thin.

Reeds that make a buzzing tone are usually not thin. Buzzing happens when the reed vibrates in a metallic banging or slapping manner against the mouthpiece. The reed instead must roll gently onto the mouthpiece as it vibrates to produce a mellow tone quality. To fix this, balance the tip and thin the top 1/8" of the reed tip to approximately .003" thickness. Work to create a vamp that truly tapers to the end of the reed with out a flat area.

Myth 11. Good reeds only come from good cane.

When making reeds the idea of good cane should really be eliminated. Good cane is not based on age or color. Cane quality should rather be thought of as the result of the reed maker's skill to adapt his method to the cane's properties. Unfortunately, commercial manufacturing of reeds eliminates this part of the process. Reeds are all made in a standardized manner to allow the largest number of reeds to work. When I make reeds from tubes I buy approximately five pounds of the same tube vintage and adjust my technique to the cane depending on how it responds. If the reed or tubes appear to have worm holes, mold or any type of strange discoloration, the cane has probably turned bad. The look of the cane is a general measure of its quality but only by making a few reeds from it can you tell its full potential.

Myth 12. Never clip a reed.

Clipping is a must when a reed becomes thin or seems to be light in the lip pressure area. However, many times it is after clipping that frustration arises. A reed that is only clipped will be unresponsive or hard. Remember, clipping is just the first step. After trimming the smallest amount of the reed possible, we must readjust the tip of the reed, checking for balance and flexibility. Use 600 grit sandpaper or a reed knife on a glass plaque.

Myth 13. Only soak reeds in tap water.

Having a consistent approach to reeds is the most important piece of advice I can give. I have seen many clarinetists soak

reeds in tap water as well as in saliva. Both work well. I prefer saliva because it helps break down the fibers of the reed and harden the cane during the breaking in process. In making reed from tubes this is essential. I want to create the same environment for the reed during the breaking in period that it will experience during a performance or audition. This will help prevent changes in the reed. When soaking in tap water, avoid forgetting about the reeds and over soaking.

Myth 14. The more reeds you carry with you the better chance you have of finding a good one.

It is difficult to predict when a reed will be ready for a performance. For years I tried to plan my reed breaking in process down to the day, around concerts and even auditions. I would open 10 boxes of reeds, pick the best 20 and start a fifteen-day process of breaking them in. To my dismay, some seemed ready after a day or two and others took months. Because I could not predict the outcome I would carry hundreds of reeds with me with the hope that one of them would be good. It really just made me more confused and I never knew which reed was which. I did this for years until I decided to stop the madness. I made a promise to myself then that I would always try to have eight reeds in performance condition. Eight seemed like a number I could handle easily and that fit in my reed case. As each reed started to near its end I would select a new reed to replace it. This has taken the stress away from reeds for me and allowed me to focus on music. I keep each reed dated and clearly labeled to help this process.

Myth 15. Hand made reeds last longer than commercial reeds.

It is possible for a hand made reed to last for a very long time, however a bad reed is a bad reed. I have found commercial reeds that have outlasted my own handmade reeds and the reverse. The quality of a reed relies more on how it is made and cared for rather than who made it. By rotating eight reeds each day you will first find your reeds lasting much longer. Avoid playing a reed for an extremely long period of time. The moisture a reed receives

during playing is essential to its life, however too much moisture will swell the fibers out of proportion. The basic amount of moisture a reed receives prevents the reed from drying out completely and becoming brittle. The natural vibrations that occur during playing also keep your reed in better working condition. By playing each reed every day your embouchure also stays acclimated to the variety of reeds in your case. Store reeds in a humidified case at 60%-70% humidity.

Hopefully some of these ideas will help you to begin to understand reeds a little better. A reed is a very simple object that needs to be treated in a fundamental and consistent way. In my next article I will discuss some of my reed adjusting techniques and my breaking in process for commercial reeds and hand made reeds. Please feel free to email with questions and comments. I am always open to new myths and corrections. rdilutis@lsu.edu

About the writer...

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