Thoughts on Reed Sealing and Reed Warping By Edward Palanker

What happens when a reed warps and does not seal on the mouthpiece? We've all experienced the delayed responses, harsh tones, and squeaks and squawks. The reed can be great one moment and be warped the next.

The best test for determining if your reed seals is to place it on the mouthpieces in playing position, hold your hand on the opening that fits into the barrel, and suck the air out of the mouthpiece. If the reed seals it will create a vacuum in the chamber. When a vacuum is created, the tip of the reed will flatten against the tip of the mouthpiece and will "pop" open when you stop sucking the air. If you can't get a vacuum, it's because air is leaking through the sides because it is warped.

When your reed does not seal, you could move your ligature high on the reed and tighten the screw, pressing the sides down flat on the facing of the mouthpiece. This will work in the reed is not too badly warped, but you may loose some tone quality or response and it is only a temporary solution. A more permanent solution is to sand the flat portion of the reed on #400 or #600 wet-dry sandpaper until it is flat again. This will likely make the reed too soft though if you need to do more then just a slight adjustment. Try to avoid taking too much off the tip and you may have to clip it afterwards.

Here are some ideas on preventing your reeds from warping in the first place.

Too much water breaks down the fibers and weakens the cane. If you soak a reed too long there is a better chance it will warp when it dries. This uneven drying causes stress on the cane, possibly resulting in the reed warping. I believe that excessive soaking creates more problems then it solves. Because all wood warps when going from a wet to a dry state, the less you soak a reed the less chance there is of it warping when it dries. A reed will warp to the wettest spot so dry them vamp down not flat side down so they dry evenly.

Never wet the bark half of the reed. Because this is the thickest and strongest part of the reed it helps prevent the vamp portion from warping by not being subjected to the stress of going from wet to dry. Also, because you cannot keep this part of the reed wet was you play; it will not be subjected to drying out while you're playing. A film canister, remember those, or something similar, is the perfect size for wetting your reeds and usually a few seconds is enough. You will soon learn to adjust your reeds to your liking this way and will find that they remain more consistent. You could gently press the tip of the reed against the flat portion of the mouthpiece to get the "waves" out instead of soaking it longer. This is disputed by many players who believe in soaking their reeds for long periods of time, however my reeds just do not warp, most of them can not make that claim.

Other things to do to prevent warping and have your reeds last longer and play more consistently are as follows: Seal the pores of your reeds. Gently sand the flat side of the reed on #600 sandpaper and than on the other side of the paper to "seal" the pores. (Many clarinetists do this to prevent the reed from absorbing too much water and then they soak their reeds for a long time anyway, strange.) Do this on a flat surface such as a plate of glass and make sure the pressure is even on the reed. Licking your fingers helps to get a grip on the reed. Be very careful not to apply pressure on the "tip" of the reed, you don't want to make the reed softer. This makes the reed more water resistant and flattens out the reed to make a better seal. If the reed is not too hard when you start just use the back of the sand paper so it does not get softer. If the reed is much too hard you might want to begin with #400 sandpaper to make it softer first. Do a little at a time, you can't put it back.

Humidity control is another step to consider. This means keeping the reed as close to the same humidity as possible all the time. The theory is that if the reed does not go from one extreme to another, it will stay more consistent from one playing to another. Try to peep your reeds as close to 50% humidity as possible. You should have a "Hygrometer" in order to monitor the humidity in your room. I suggest using the Rico Vitalizer #58 to keep your reeds at a steady humidity. Keep them in the plastic bag all the times you are not playing them and keep the bag sealed always. The Rico Reed Vitalizer case is a good way to store your playable reeds too. A reed will become the same humidity as the air in a very short time so don't let it sit out unless your room is humidity controlled, especially in the dry winter heated air.