# Reed Adjustment Guide

### Oboe Reeds

To increase the musical satisfaction as well as to limit the musical frustration, we recommend that the band director or the player purchase the best possible reed. All reeds have a temporary life span and change with time and use, but double reeds have a shorter life span than do single reeds. In addition, double reeds are fragile and fickle.

The beginning oboe player should be able to play our reeds easily. At the same time, our oboe reeds offer good tone, longevity and strength, so that the student's performance techniques will be well structured when the student advances and is ready to learn to make his/her own reeds.

Our reeds have been made to strict standards to encourage each oboist to advance as a player and musician at the fastest speed possible with the least frustration and effort. Each reed has been tested by an expert oboe player and is intended to offer good tone, encouraging expanded musical expression.

In the following comments, we have attempted to give some guidance for maintaining good oboe reeds, as well as improving reeds that are wearing out or have changed due to weather or temperature alterations. We hope you will find these suggestions helpful in keeping your oboe players performing at their very best.

We wish you and your students "Good Reeds" and "Good Music."

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# Some Thoughts About Oboe Reeds

**Protect The Reed** The oboe reed must be treated with care and respect. Keep the reed in a protective case while not in use, since the tip is fragile and can be easily damaged. A chipped or broken tip will cause the reed to stop vibrating well and may sound odd or uncontrolled.

**Soak The Reed** The oboe reed must be well soaked prior to playing, or it will likely leak air along its sides and may even crack while playing. Soak an oboe reed by briefly dipping it into water or holding it under running water. Then remove the wetted reed from the water and set it aside in its case to continue soaking. It should be fully soaked and ready to play in only 3-5 minutes. If left in its case after wetting, it will remain ready to play for some extended time. We do not recommend letting the reed sit in water, as this will shorten its life, make the tip too open for good embouchure, and cause the tone to lose quality.

**Reeds Must Not Leak Along The Sides** The two blades of an oboe reed must meet all along the sides and not leak air. If there is a leak, the reed will make unexpected sounds, or it may not play at all.

If the reed is soaked prior to playing (dipped into water, then taken out and set aside for about 3-5 minutes), it should not leak. However, if it does leak, or if after extended use or when experiencing quick temperature changes, the reed starts to leak air, the leak must be closed. If this occurs, try wrapping a strip of "fish-skin" (also known as goldbeater's skin) or Teflon tape (plumber's tape) around the reed. Teflon tape can be found at most hardware and home improvement stores.

Cut a short length of fish-skin or Teflon tape and wrap it around the reed, overlapping the thread and cane, and extending onto the cane approximately 1/4" (or just enough to cover the leak). The Teflon tape will last about as long as the reed will, but it also may be removed and/or replaced at any time. Just cut through the tape (being very careful not to cut the thread or the cane) to allow the old tape to fall off.

**Slipped or Overlapped Blades** Although many oboe reeds are designed and manufactured so that the sides of the two blades just sit on top of each other, our reeds usually have an overlap, allowing the blades to "slip" over or to "overlap" each other along the sides. These reeds may be overlapped to the right or left; either direction is fine.

Generally speaking, overlapped blades tend to help a reed play in tune, especially in the upper octaves, thus helping to avoid abnormal biting or pinching with the embouchure. They may also assist in making legato and in making ascending intervals. However, do not be concerned if the blades of our reeds do or do not have slipped blades, since each reed is scraped, tested and structurally corrected so that the player can easily make a lovely sound and play in tune with a comfortable embouchure.

Cork Grease and Synthetic Cork

Oboe reeds that have natural cork need cork grease for easy insertion into the oboe, just as the cork on the tenon joints needs cork grease. Our reeds use a synthetic cork.

Synthetic cork needs NO cork grease. However, using cork grease will not harm the synthetic cork, but it is not needed. Our special synthetic cork will last a very long time, often outlasting natural cork.

**After The Reed Wears Out** The staple (the metal and cork part of the oboe reed) can be used over and over after removing the thread and cane. If the player is not yet making reeds, we suggest that the old staples be saved for reuse later when he/she does learn to make reeds.

(Figures appear on page 4.)

## THE FUNCTION OF VARIOUS PARTS OF THE REED (Fig. 1):

**TIP**: The tip of the reed is the thinnest part of the reed, and is thus the most fragile. It vibrates easily and quickly, producing good attacks and a colorful tone.

**HEART**: The heart is the thickest part of the scraped area of the reed, and its function is to slow down the quick vibrations of the tip. The heart is the foundation of the tone, providing fullness, darkness, dynamic capacity and pitch stability.

**BACK**: The back is the scraped area behind the heart. Scraping in the back gives added darkness or depth to the tone and lessens a reedy or bright quality.

**BARK**: Bark is the unscraped area of the cane just above the thread. Bark may occasionally also extend up the sides of the reed, helping to keep the reed from leaking and giving the reed added strength.

**STAPLE**: Another name is tube, also sometimes called a cork. The word "staple" is used to indicate the entire metal/cork unit onto which the cane is secured, thus making the reed. The staple is like a small bocal for the cane part of the oboe reed, except that the reed (cane) part is applied directly onto the staple in a semi-permanent manner.

**THREAD**: Silk or nylon thread is wound around the cane to hold it onto the staple.

### WHAT IF THE REED NEEDS HELP?

### TOOLS NEEDED TO MAKE ALTERATIONS TO A REED:

- **Reed Knife**: Use a knife that is specifically made for working on oboe reeds. The cane must be scraped carefully with an ultra sharp reed knife having a straight edge.
- Plaque: A flat thin oval slip of blued spring steel used to insert between the two blades of the reed, thus allowing scraping of areas of one blade without damaging the other blade
- Mandrel: A tapered steel rod which is round at the bottom and oval the top, secured in a wooden or plastic handle. The staple is placed onto the mandrel to securely hold the reed while scraping.
- Chopping block: Also called a billot or cutting block. Used when clipping the tip of the reed. To clip the reed tip, place the end of the reed onto the chopping block, then place the knife onto the extreme end of the tip. Press downward with great firmness to securely remove a tiny sliver of cane from the end of the tip (Fig. 2).

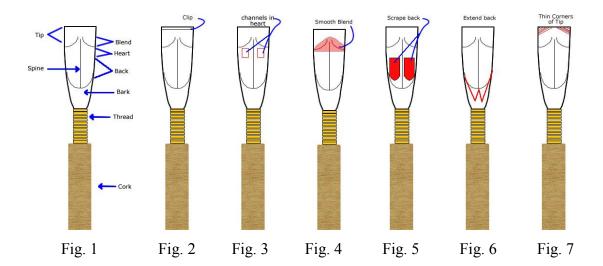
#### WHAT IF THE REED NEEDS IMPROVEMENT FROM AGE OR DAMAGE?

- ◆ TIP TOO OPEN: If the reed is too open, it will be hard to play and produce a loud and raucous tone. Soak the reed first, then carefully insert the plaque between the blades (no more than one-third the distance from the tip to the thread). Place the thumb and first finger over the scraped area, avoiding the bark area, then firmly press (or squash) the blades against the plaque.
- ♦ TIP TOO CLOSED: If the reed is tired or not fully soaked, the tip may be too closed, causing the pitch to be sharp and the tone to be shallow. It will also be hard to blow and may not even produce a tone. Try using Teflon tape in the same manner as stopping a leak, but use more "grip" when applying the tape. This will pinch the sides of the blades together and may cause the tip to open slightly.
- ◆ REED IS TOO HARD TO BLOW: After checking the above two items, notice if the tip has been chipped or broken. Remember that cane cannot be put back on the reed. If the reed is too far gone, it may not be salvageable. However, one can try the following suggestions:
  - The blend and tip can be rescraped to make the reed vibrate easier (Fig. 4). Carefully insert the plaque between the blades. Use the reed knife to thin the blend; scraping lightly and removing only a minute amount of cane. (Remember, in the tip and blend area, a little bit of scraping goes a long way!) Make sure that the center of the tip remains slightly thicker than its outer edges by scraping toward the corners of the tip (Fig. 7) and tapering the thickness at all times. Test the reed by playing.
  - ❖ If the heart is too thick, the vibrations will be blocked, causing the reed to vibrate reluctantly. Insert the plaque and scrape cane from the heart area, carefully scraping in the channels of the heart (Fig. 3).
  - Does the reed leak air? Block the bottom end of the reed by placing a finger at the lower end of the cork; place the reed in the mouth (without oboe) and draw a vacuum. While trying to hold the vacuum and with the lips still closed around the reed, quickly pull the reed out of the mouth. If you do not hear a "pop," then the reed may leak. Apply Teflon tape around the reed to seal any leaks.
  - Observe if the tip opening looks normal. To reduce the tip opening, squash the blades against the plaque; to make the tip more open, use Teflon tape to "grip" the blades together more tightly.

- ♠ REED IS TOO EASY TO BLOW: If the blades are weak from overuse, the tip may need to be clipped. Place the end of the reed onto the block and remove a very small area from the end of the tip by pressing downward with the reed knife. Take care to remove an extremely small amount of tip with each clip. Additional clips may be used if desired (Fig. 2).
- ♦ REED IS SHARP: The reed may be too closed. Wrap Teflon tape around the lower part of the cane and onto the thread to make the blades stand apart more. Or scrape the back of the reed deeper (Fig. 5) and/or longer (Fig. 6); this may lower the pitch.
- ♦ REED IS FLAT: The reed may be too old and weak. Clip the tip (Fig. 2) to give added resistance and shorter vibrations and thus sharper pitch. Make sure the reed is pushed all the way into the reed receiver of the oboe. If the reed is cracked or split, it must be discarded. If there are any air leaks along the sides that cannot be stopped, the reed must be discarded.
- **REED IS BRIGHT OR THIN SOUNDING:** Clip the tip; lightly scrape the blend area (Fig. 4); scrape the back deeper (Fig. 5), or longer (Fig. 6).
- **REED IS TOO DARK OR DULL:** Thin the heart in the channels (Fig. 3), blending more into the tip (Fig. 4); thin the tip (Fig. 7). Clip the tip if the reed then needs more strength (Fig. 2).

When adjusting oboe reeds, be very careful to scrape lightly and to remove very small amounts of cane. Test by playing the reed. Our finished reeds are meant to play their best when they are new. Additional playing will, of course, weaken the reed, although some improvements can be made throughout the life of the reed. However, at some point, the reed must be discarded and a new reed taken. No two reeds will sound exactly alike; no two reeds will last the same length of time.

Keep a good supply of new reeds stored away for a rainy day! When playing the oboe, these rainy days arrive unexpectedly, always at the last minute, and just when there is no time to order more reeds. I repeat: always have a number of new reeds stored away and you will be rewarded with a fine concert or excellent contest performance.



Nobel Instruments \* PO Box 822 \* Wayne, PA 19087 800-323-3216 \* miller445@aol.com \* www.nobelinstruments.com