

Woodwind Instruments – Oiling the bore

PURPOSE:

The Purpose of oiling wooden of Woodwind Instruments is to reduce the likelihood of cracking, and to preserve and condition the timber.

When we talk about oiling the wood this is the oiling of the bore only, mostly because the bore is the part most susceptible to the elements. Oiling the bore will also condition the Timber helping it last longer.

THE TIMBER:

Many different types of timbers are used in the construction of the oboe, all of which are dark, dense and resistant to cracking. The best and most popular timber used is Grenadilla or African Blackwood, part of the Rosewood family, This is one of the densest Timbers of all, placed in a bowl of water the timber will sink. Due to it's density, stress and natural oiliness, it is very stable (won't warp) and is almost impervious to water.

HOW THE WOOD CAN CRACK:

The largest concern is that without oils, the grain opens and the wood tends to soak up the water during playing time. In doing so, the wood goes through a process of expansion (when moisture is in the bore) and contraction (when the bore is drying out).

Changes in temperature have a similar effect causing expansion and contraction of the timber!

The timber movement mostly occurring in the bore of the instrument will cause the outside of the instrument to open slightly, particularly in the case of the oboe where the bore is so small in the top joint, and there are many 'weak spots' ie tone holes to help encourage the hairline cracks

WHY THE WOOD CAN CRACK:

We can only make informed decisions about what to do with our instruments based on the evidence around us. Many studies have been carried out on grenadilla wood in the last 10 years, ranging from general environmental effects to the biological make-up of the wood. They give us many good indications of which methods are better, best or (possibly) worse. But, again, there is nothing conclusive. Most studies include recommendations but there are no complete solutions to the problem.

Water (condensation) and Temperature changes are a great enemy to our wooden instruments!

Many of the recommendations given in studies hinge on the fact that wood *always* has a small amount of moisture in it. Depending on the type of wood, the moisture content can sit at around at about 15 –20% and will vary according to the weather or the climate of its surroundings. In more humid climates, the moisture content will be greater, and in dry climates, the moisture content will be less. Most researchers now believe that there *should* be some moisture in the wood and that the moisture content should remain fairly constant.

Oils made from petroleum products should not be used in the bore since this strips the wood of all its natural oils, and changes the natural moisture content.

AVOIDING CRACKS:

Some players, believe that oiling the bore changes the sound of the instrument, and they avoid doing it. Over years of seeing the results of not oiling an instrument, we firmly believe that oiling has no effect on the sound, but however it **will** help to protect an instrument from cracking.

Keeping an instrument dry will prevent the slow soaking that can happen in areas where the water sits. A good quality Chamois cloth will dry moisture better than any other cloth.

Temperature changes are also to be avoided. If, for example, you are in a extremely cold environment, and suddenly blow air down the clarinet at 37 degrees, then the timber is going to expand very quickly from the inside out. This can potentially crack the instrument. So the instrument should be allowed to sit and become accustomed to the environment before any hot air is blown into it. Likewise, leaving an instrument in a hot place (car boot) will also cause extreme expansion.

HOW TO OIL:

- Choose a good quality oil. We recommend either Ailsyn synthetic oil which, after much scientific research, is regarded as the best in the world, or sweet almond oil – second best.
- Protect all closed keys with a strip of card of thick paper under the pad. This stops the oil getting on to the pad.
- Put approximately ten drops of oil on a goose feather or an old cotton or chamois swab and then smear the oil in the bore only. You should be able to see a fine wet film. (Too much oil is better than not enough).
- Leave the instrument lying (not in the case) overnight
- Pull the instrument through with your regular chamois or cotton cleaning swab (not silk)

New instruments should be oiled on a monthly basis until they are 1 year old, then the oiling can be reduced to every 2 or 3 months. Then after another year bi-annually. Older instruments should be oiled bi-annually.