CARE OF WOODEN INSTRUMENTS

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There are three common timbers traditionally used in the making of the highland bagpipe. These are Cuban Cocuswood, Ceylon or Gaboon Ebony and of course the most common and resilient timber being, Dalbergia melanoxylon (also known as Mpingo, African Blackwood or sometimes Granadilla). There are other varieties of these timbers and more timbers also used, but these are the most common.

Ebony needs special care and attention, especially in hotter/drier climates, Cocus is a little more resilient and Blackwood is the hardiest of all instrument timbers. As a natural product there are often flaws and defects in the timber.

Steps have to be taken to keep the wooden components of your instrument in good condition to keep your instrument sounding at its best and to prevent cracking.

African Blackwood
African blackwood end grain

A billet of African Blackwood ready for turning
**Instrument construction**

For the purpose of this article the main component is the ferrule, the band placed around the top of stocks or the bottom of drone tops. They are made of various plastic materials, ivory or metals such as nickel or silver.

Many of the materials used as imitation ivory are quite brittle and do not support the wood. Ivory is more suitable however metal mounts if tightly affixed are preferable. They are thin and the wood of the stock or drone top is therefore thicker. Because they are so strong, if tight, they give adequate support to the wood.

![Silver ferrules on a set of 1902 Hendersons.](image)

Do not set up joints so they are over hemped and too tight. Ensure that the mouthpiece is hemped with lots of wax on the hemp, or totally sealed with a product such as Teflon tape.

**Care of exterior surfaces**

If the exterior of the wooden surfaces is varnished ensure that it is maintained in good condition. If a waxed or oiled finish, ensure that it is re-waxed every few years. This will prevent moisture loss from the exterior surfaces. This can be done by hand with a good instrument wax or can be done by a maker on a lathe, which will give a good glossy finish. Some instrument makers have very good wax products that they can apply at a reasonable price. This is the way to get the best finish possible.
Care of internal bores

It is important to clear any moisture from the internal bores of a bagpipe after playing. Excess moisture is absorbed into the wood causing swelling. This can create an imbalance between the external and internal surfaces and cracks can appear. It can also cause warping and narrowing of bores. This can result in an unsteady instrument or a change of tonal quality.

Oiling can prevent some absorption of moisture. It can also replace moisture that has been lost. Drones can be oiled two or three times a year depending on the climate in which you live. Personally, I use oil just to clean the bores. I use a rifle cleaning rod and a cotton swab. The oil is applied to the bores and shortly after the bores cleaned with a dry cloth.

I would only leave a thin smear of oil in the bores for perhaps an hour or so if the wood appeared stressed. You can determine the extent of stress to the wood by the colour; it will look lighter and appear drier if stressed. Normal blackwood will appear shiny on the surface and will be almost black. A new instrument will be brownish in colour, but the wood soon darkens. If wood has been exposed to too much moisture the grain can appear raised.

There is a lot of disagreement even among makers of other instruments about whether to oil, what oils to use and how often to oil. Some clarinet and oboe makers recommend waxing the internal bores in preference to oiling, which is a cheaper option. I regularly wax the internal bore of my blow stick and its stock.

Many bagpipe-makers and other instrument makers recommend against oiling a new instrument for the first 12 months.

Appropriate oil would be a natural vegetable based oil, which has a preservative. Some oils can go rancid. Some mineral oils will not be readily absorbed and can clog pores and form a build up inside the bores. There are some good commercial products available like The Maker’s Choice range, but be cautious as many others are clear mineral oils.

Do not oil a pipe chanter

I cannot emphasise this enough. The bore on a pipe chanter (particularly the throat) is very temperamental and oiling may cause a significant change in the performance of a chanter. The wood is very thin and oil will have an effect on tone, and possibly even performance. I have used a light wax on the outside surface before, with success, but have never applied anything to the inside bore. I use a feather to clean it and a small brush to clean the reed seat and throat. Never with oil though.

You will hear pipers mention that they have oiled a chanter and improved its tone, or some other similar comment. I really want to stress this point. I own dozens of wooden chanters of various ages, some quite old. None have ever cracked. I live in the driest state in the world. The majority of chanters that I have seen oiled have been significantly changed by the process. I have seen many chanters undergo this process. I am yet to see one get better. Most pipers only see a small cross section of chanters. I deal with many hundreds each year.
Do not immerse pipes in oil

The aim of good maintenance of wood is to maintain a constant balance of moisture. Totally immersing an instrument can cause significant damage. I have often seen instruments crack shortly after immersion. This is because of the sudden changes in moisture content. The amount of oil needed for immersion also means a cheap product is used that can clog the grain and foul the bores or go rancid.

Storage

Your instrument should be dried and kept in a closed case after playing. It should not be left out for the wood to dry and lose moisture. Always keep your case closed. I wrap mine in a towel inside the case. Keep it in a cool place if in a hot climate or a place where it will not freeze if in a cold climate.

Do not keep it near artificial heating or air-conditioning. Some common sense must apply. Do not leave pipes to roast in the boot of a hot car. Fresh orange peelings can be placed in the case during extremely dry conditions to help maintain the moisture level of the wood.

Remember: One of the best ways to maintain an instrument is to play it regularly and treat it with respect. The aim is to maintain a constant moisture level in the wood and not subject it to extremes of temperature.

The Maker’s Choice Range of premium instrument oils and waxes are available from the School of Piping Shop: http://www.schoolofpiping.com/shop.html

More information can be found in “The Complete Pipers Handbook”, which funds the freely available school of piping site. The publication is available here: http://www.schoolofpiping.com/handbook.html