

## ASK THE REED DOCTOR.....Cane Selection

### Stephen Moschner...

*The following is a guide for the selection process of Cane and some discussion points for both oboists and Bassoon players on the quality of the cane being used for making reeds.*

I find that there are often questions around about the difference between cane flexibility and then density and the effects on cane selection and the final outcome of the finished reed.

### Arundo donax (Giant reed)



The material (Cane) that makes our instrument reeds – Oboe, Clarinet, Saxophone, Bassoon) is a Robust, bamboo-like, perennial, grass-like, 2-6 m high plant. It grows on River banks, wetlands, roadsides and wastelands or produced and farm grown.

Native to Southern Europe and Asia, there are small patches of this around Australia, it is listed by the West Australian government as an introduced species and has been declared a noxious weed in New South Wales!

I often describe cane and the vascular lines in the cane being similar to the vegetable **Celery**.

Imagine the lines, which take moisture and nutrients throughout the plant, as the veins of this living material.

Just like with the Celery the lower part of the plant is rather more robust and has strength versus the upper part of the plant. Yes the upper part is sweeter to eat, but you can quickly see the variation in strength and flex even within a single stork.



Ummm... .. Celery.....

## **Cane Flexibility**

There are a few ways to check the flexibility of cane, including some new machinery. The real easy way is after splitting the cane, just to undertake a simple FLEX TEST. This is a twist of the cane to check how firm or loose it is.



1. Very Light Flex – Garbage ! this cane often has a more white appearance in the flesh of the cane, and is easily bent.
2. Medium Flex – There is some flex but it is more stable. Process the Cane (checking for any imperfections or issues)
3. Hard Flex – The cane is very hard to bend or move, high tensile strength, Process that Cane now !!

## **Cane Density**

Cane density is another factor to consider with the selection of Cane. Assuming that you take the flexibility into consideration already, then the process of checking density will be much easier.

Density is how compact the fibres of the cane are “packed” within a piece of cane.

(Further reading -Veselack.M ARUNDO DONAX: THE SOURCE OF NATURAL WOODWIND REED  
[www.idrs.org/publications/controlled/DR/DR2.1/arundo.html](http://www.idrs.org/publications/controlled/DR/DR2.1/arundo.html) )

### **Imagine two dry kitchen sponges side by side**

One if very squishy and easily pushed in.. this is something with LOW density. Another Sponge of the same Thickness is harder and you can only squash this one down a bit.. this would be HARD density

### **Imagine you have 2 pieces of cane**

Both with the same diameter, both with hard flexibility, both pre gouged and then gouged to the same specifications. **These are the SAME Cane.. right ??** .. Well the simple answer is **NO**

One could be quite dense and the other not, just as the sponges are.

Therefore they are not necessarily the same when we get to the end product. Using a density tester, (or again looking at the flex test at worst), you then can find what one could be better or if both pass the test.

### **Density Tester**

The Reeds N Stuff Density Tester is a good example of what is now available on the market. They are expensive, but these are the best to give an accurate reading of cane. Your reed supplier and/or University Class should own one....



**Hard Cane** – Reading from approx. 8-12. This cane is very hard and not a lot of this comes off the machines in a patch. Often the Gouge needs to be a little bit lighter to let this cane vibrate well.

**Medium Cane** – Reading from 12-16. This is very normal cane, and cane takes a standard gouge

**Soft Cane** – Reading 16-18. This Cane is usable and with a good solid Gouge can make light or student reeds that are good.

**Garbage Cane - 18+** You may get some good reeds out of this, but don't try. It takes a lot of work and also looking at thicker gouges. The best bet is the Bin for this stuff. Some suppliers will offer Student or practice cane from light density material at a discounted price.

## **But I buy Gouged or Gouged and Shaped Cane....??**

What do you do if you do not process your own cane but rather purchase Gouged or Gouged and Shaped Cane ?

I have in the past year at classes across Australia, taken what was quality and expensive cane from various suppliers and undertaken Density checking. Perhaps to no surprise the outcomes were not always great.

**As an example** in QLD at a class in 2016, I undertook a demonstration of a Density Tester, we checked through a random selection of 10 pieces of Oboe Cane from 100 just sent to a Student from a well-known French Dealer (No Names here !). Only 2 out of the 10 passed the test for good Density and Flexibility and were in the range for a good reed. The issue here is not only the cost but also the wasted time and energy in making poor reeds with poor cane.

The quick answer is BUYER BEWARE ! A reliable and trusted Cane source is the best to prevent you from wasting time on poor quality cane creating more usable and playable product.

ASK your cane supplier, ask for Density testing on your cane and ask HOW they process their cane.

Nothing will ever be 100%, but ask if you can return any Cane (say within 5 days) that does not come up to the standards, Good suppliers will offer these services.

**Good Luck and Good Scraping !!**

*Stephen Moschner is the Executive Officer of the ADRS. He was the manager of the IDRS 2004 conference in Melbourne and presented at the IDRS 2014 at New York University. The owner of Oboe Central Cane & Oboe supplies ([www.oboecentral.com.au](http://www.oboecentral.com.au)) and teaches reed making across Australia, at the University of Melbourne and at ADRS events.*