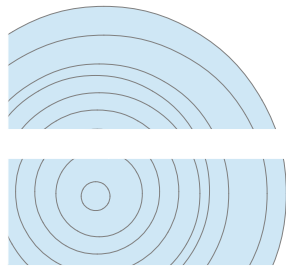


Wood Selection:

No long pores, Red Oak, Wenge have large long pores.
Long pores can cause air leaks that are hard to find.
Favorites: Walnut, Alder



At least two square sides.

Softwood, more mellow, woodsy sound.

Hardwood, more horn like, clear, precious.

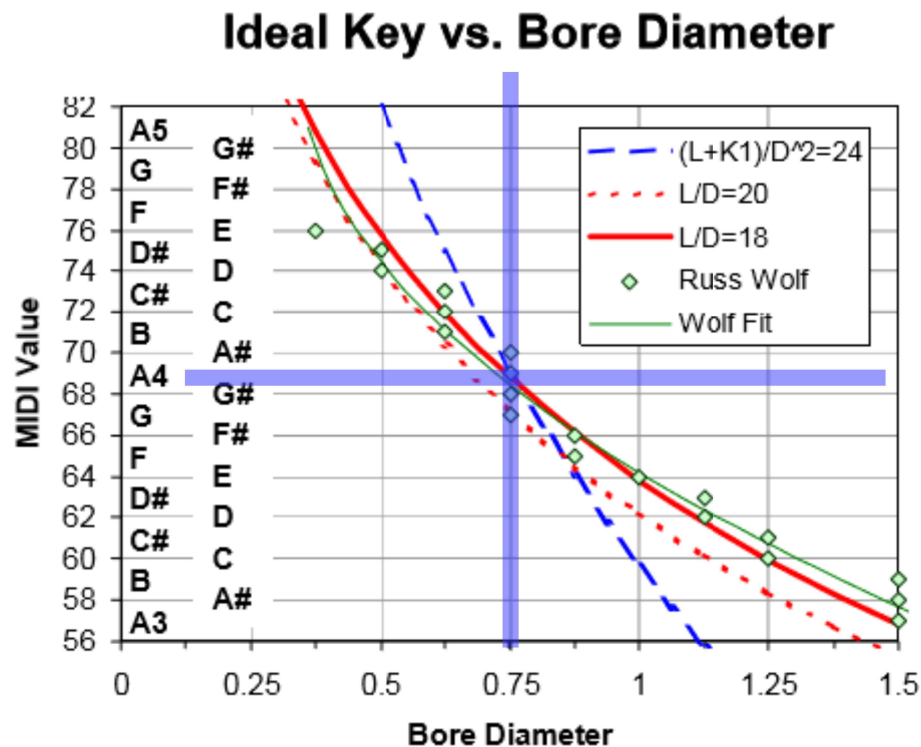
Wood Dimensions

Based on Key

$\frac{3}{4}$ inch bore G4 to C5, 1 inch bore E4 to G4, 1 $\frac{1}{4}$ in bore D.

Start with an A minor flute. Use a barrel size of $\frac{3}{4}$ inch. See chart below.
It will play well in the Key of G major.

A G4 flute in a 1" bore will have more bass
than a G4 flute in a $\frac{3}{4}$ inch bore.



Local Sources for wood:

Nevada County Hardwoods

California Hardwoods

Auburn Hardwoods

Home Depot. (about \$5 to buy enough black walnut for one or two flutes)

Neighbors tree?

I usually start with 24" long wood, 4 to 6 inches for the SAC and plug leaves 20 inches or so for the barrel. So I usually do not build the flute length to a specific key. In the tuning section the flute is cut to the proper length.

Chart for general bore lengths, it is recommended that you start with a longer bore than listed in this chart. Use the chart + 2 inches. See below for barrel length.

Example Flute Designs for mid-range Native American flutes						
Key	Bore diameter	Sound hole		Flue	NAflutomat output	
		length	width	depth	Bore Length	L:D
A ₄	3/4"	7/32"	3/8"	3/64"	13.114"	17.55
G# ₄ / A ^b ₄	3/4"	7/32"	3/8"	3/64"	14.033"	18.77
G ₄	3/4"	7/32"	3/8"	3/64"	15.006"	20.07
	7/8"	7/32"	7/16"	3/64"	14.536"	16.65
F# ₄ / G ^b ₄	7/8"	7/32"	7/16"	3/64"	15.568"	17.83
F ₄	7/8"	7/32"	7/16"	3/64"	16.660"	19.08
	1"	7/32"	1/2"	3/64"	16.162"	16.19
E ₄	1"	7/32"	1/2"	3/64"	17.319"	17.35

Raw wood width = Barrel + 1/2 inch.

Raw wood height = Barrel / 2 + 1/4 inch.

Next slide is an example.

