Successfully Crafting Wood Bows

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Archery is fun
Why we’re here
Best Bow Woods

Yew
Osage Orange (Hedge Apple, Bois d’Arc)
Oak
Black Locust
Elm
Hickory

Wear safety gear to avoid wood toxicity
Osage Orange
Bitternut Hickory
Bow Woods

Yew

Osage

Hickory
Wood Variation

Elm Hybrids (Ulmus spp.)

Hickory Varieties
  - Bitternut or swamp (Carya cordiformis)
  - Shagbark (Carya ovata)
  - Shellbark (Carya laciniosa)
Bow Types

Longbow

Flatbow
Bow Types

Steam bent recurve
Bow Types - Longbow

Self bow

Laminated bow
Parts of a Bow

- Top Nock
- String-Nock
- Back
- Belly
- Grip
- Arrow Plate
- Bow Limb
- Bottom String-Nock
- Draw-Height
- Bracing Height
- Arrow Nocking Point
- Standard is 28 Inches
Bow Designs

Longbow
Flat bow
Recurve
Horse bow
Native American bows
  Woodland
  Plains
  Western
Woodland Bow
Plains Bow
Western Bow – Ishi’s Bow
Holmegaard Bow
Otzi’s Bow
Bow Stave Selection

Split staves

Tree size: 4" to 12" diameter

Splitting: wedges or saw
Bow Stave Selection
Flawed staves make good firewood
Board bow stave selection

Size: 1” x 2” (4” to 6”)

Straight grain on all sides (no runout)

Effects of kiln drying
Moisture Content and Drying

+ Seal ends (and surface if bark is removed) with shellac or Anchorseal
+ Dry in a cool place at first
+ Reduce dimensions to accelerate drying
+ Use a drying box
+ Reduce moisture to 10% or less
+ 1 to 2 years without artificial drying
+ A moisture meter is handy
Design and layout of your first bow
Tools for harvesting and splitting staves
Tools for roughing out
Tools for shaping and smoothing
Tools for shaping and smoothing
Tillering
The heart of bowmaking
Tillering tools

Tillering stick

Tillering Gizmo

Bend Meter
Tillering
Bow Finishes

Shellac
Organic linseed oil (flaxseed oil)
Tung oil
Beeswax
Animal fat

Avoid petroleum products and most synthetic finishes.
Bow Care and Storage

Unstring your bow between uses
Avoid extremes of heat and humidity
Hang vertically or horizontally on pegs
Car doors and trunks are hazardous
Bowstring Choices

For your first bow
  - Paracord for tillering
  - Commercial endless loop or Flemish twist

Make your own
  - Hand made endless loop or Flemish twist
  - Hemp or flax
Bowstrings
Learning to Build a Bow

The best way: find a teacher or mentor

Tim Baker: “Your first wooden bow” pp 307 – 309
Traditional Bowyer’s Bible, V4

“Read, work, shoot, discuss, rework, repeat endlessly”
References

Traditional Bowyer’s Bible, V 1-4, Bois d’Arc Press ISBN 9645741

Hunting the Osage Bow, Dean Torges, The Apprehensive Dinosaur Press

Bow and Arrows of Native Americans, Jim Hamm, Lyons Press

American Indian Archery, Reginald and Gladys Laubin
University of Oklahoma Press

Encyclopedia of Native American Bows Arrows and Quivers, Volumes 1 and 2
References

The Archer’s Craft, Adrian Eliot Hodgkin, 1951, 1996

Cherokee Bows and, Al Herrin, 1986

The Flatbow, Hunt and Metz, 1936

Hunting with the bow and arrow, Saxton Pope, 1923

The Witchery of Archery, Maurice Thompson, 1878
Web Resources

Three Rivers Archery build along.

http://paleoplanet69529.yuku.com/forums/18/Archery-Primitive-Bows

Web searches:

- Primitive bows
- Ancient European bows
- Native American bows
- osage orange.com
- ATARN
- SPTA
- Society of Archer Antiquaries
Exhibits

Staves, tools, and bows for your examination