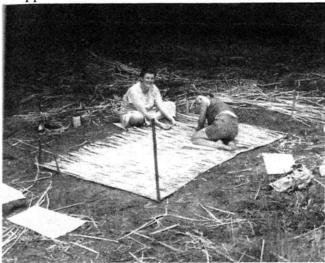
Chippewa Nature Center



Cattail mats are sturdy enough to kneel on.

- 4. wonderful smell when dried.
- 5. slow, quiet, rhythmic work.
- 6. incredible cut and come again resource.

#### Reasons for Matting/ Gathering

You will also discover:

- · Other plants- swamp milkweed, mints, and, willows.
- Other animals- tracking- muskrats, deer, raccoons, and opossum.
- Food- gather in spring water/fresh water area. Rinse the core leaf bases and eat raw - Taste is like cucumber.
- Pollen with corn or wheat flour 50/50 makes great tasting Johnny Cake!



Cattail Pollen Muffins.

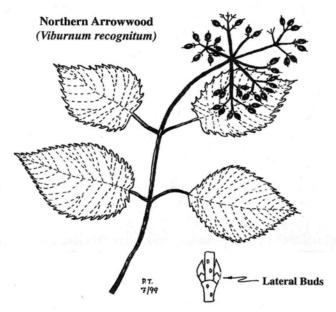
# Northern Arrowwood The Creators Gift to Primitive Archers By Paul Trotta

Northern arrowwood (*Viburnum recognitum* Fern.) is a hardy shrub which can be found throughout much of the eastern United States and southeastern Canada. Viburnums in general, are distributed worldwide, mostly in areas having a north temperate climate. Actual descriptions of the growing range of this plant in North America, differ slightly depending on what field guide you are using. It is probably safe to say, however, that northern arrowwood can be found from New Brunswick to southern Ontario, south to southern New England, and out onto Long Island. One field guide gives South Carolina as the southern end of the range of this plant. Most authorities place the western edge of arrowwoods' range in Michigan. This large geographic region of the eastern United States, is often referred to as the "eastern woodland region" by archaeologists.

There is no doubt, that to Native Americans in the eastern woodlands, northern arrowwood was the premier shrub from which to manufacture arrow shafts. As a matter of fact, no matter where viburnums were found in the world, their stems were used to make arrow shafts. One of the more recent archaeological finds bears this out. In September 1991 when Otzi, the 5,000 year old alpine iceman from the Austrian-Italian border was found, he had with him arrows whose shafts were made from viburnum. In describing one of these arrows in his book The Man in The Ice, Konrad Spindler writes: "It consists of a wooden shaft, a flint arrowhead and the fletching. A long shoot of the wayfaring tree (Viburnum lantana) was chosen for the shaft. The long, straight and very tough shoots of hard sapwood which are characteristic of this shrub made it, along with the corner tree (Corpus sp.), which has similar growth characteristics, the favorite source of arrowshafts in prehistory." Surveys of arrow collections in North American museums would, no doubt, reveal that viburnums, shrub dogwoods, river cane and many species of willow were the preferred source of arrowshafts on this continent.

Having made a large number of eastern woodland style arrows from northern arrowwood, I have become very familiar with this shrub, as well as with the physical properties of its' wood. A brief description of the shrub and where it grows, is probably in order. Arrowwood is usually found growing on moist but well drained sites. It can sometimes be found growing in the shade of forest trees, however, it seems to prefer more open, at least partially sunny places, such as woods edges, old pastures, hedge rows and roadsides. In my mind's eye I can picture this shrub growing adjacent to prehistoric garden plots, and throughout areas of forest whose canopies had been removed by ancient forest fires or wind storms. In the northeastern U.S. arrowwood produces white ill scented flowers in May-June, and in August-September it produces deep purple to black colored 1/4 inch long berries. The seed,

(more)



or pit, found inside the berry has a shallow broad groove in it. Probably the most diagnostic feature of this shrub is its leaves and growth habit. The leaves, which are usually two to three inches long, can be round to egg shaped and can have as many as 20 coarse teeth around their margins. The bases of the leaves are generally rounded, but can sometimes be slightly heart shaped as well. These shrubs usually get started from seed that has been sown by birds or small mammals, and can grow as high as 10 feet. Once established, they can spread out by root suckering. Because of this, clumps of northern arrowwood, when viewed in a field from a roadside, often have the shape of an inverted bowl. This is because the older (taller) stems are in the middle of the clump, while younger (shorter) stems occupy the outer edges of the clump. The twigs are generally slender and smooth, and can sometimes be ridged or angular in nature, their bark is light gray to brown in color, and the buds are usually reddish brown. The main stems (the business end of things for the arrow maker!) Grow ramrod straight and have an obvious soft white pith. These larger stems can be anywhere from 1/4 inch to 1&1/4 inches in diameter. The bark is brown to purplish gray in color, and on large stems is usually covered with small scattered corky

When "green," the slender stems of this shrub are extremely soft and flexible. They are so flexible in fact, they can be bent into a complete circle (if done slowly) without breaking them. They can then be bent back to their original position with no apparent harm done. Reflecting on this flexible characteristic, one field guide suggests that the Latin name for Viburnum derives from the Latin word "viere," which means to weave together, in reference to the pliable twigs of some species of viburnum that may have been used to weave baskets. When green, the bark can be easily scraped or peeled from the stems. Stems for arrow making can be collected year round, however, I find they are best cut in the fall. At this time of year it is easier to locate the straightest ones, once the leaves have fallen offthe bushes. The stems also tend to be drier in the fall, requiring less drying, or seasoning time.

Once a number of stems have been cut and the bark peeled off, they can be tied together in a bundle so they will stay straight as they dry. The bundle can be placed in a relatively dry shady place and should be allowed to dry slowly. Six to eight weeks seems about right for drying time, since I prefer to work the shafts when they are not completely dried out. While the shafts still retain some of their suppleness, they can be straightened by bending them in the hands. The beauty of arrowwood shafts is that they rarely require heat to straighten them out. Once the shaft is bent to the desired position, it will usually remain in that position permanently. Interestingly, the longer the shaft seasons, the more stiff and ridged it becomes. I have some three year old shafts that are very well seasoned. They have held their shape well, and are nice and straight and stiff. Just for fun I bent one to see how far it would go before breaking. It bent to approximately 110 degrees before it started to break, but it didn't snap and splinter into two sharply pointed pieces. Instead, the broken shaft remained together, held by numerous fibrous strands of wood. After my little "experiment," I marveled at yet another outstanding feature of this wonderful material. The fact that arrowwood shafts do not splinter when broken, provides an added safety feature when shooting these arrows. Should one break while being shot, the chances of the archer being injured by a splintered arrow are greatly reduced.

If you happen to be in an area where northern arrowwood grows, you should try your hand at fashioning a few arrows from this premier arrow wood. You won't be disappointed. Before closing, I would like to add that you should always get permission from the landowner before gathering arrowwood shafts from land that you don't own. Also, while you are at it, give thanks to our creator for giving his creatures yet another outstanding resource from which to fashion useful tools. Happy shooting!

## The History of Flintknapping By Ray Harwood

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