

## Stillman Nature Center

33 W. Penny Road  
South Barrington, IL 60010-9578  
847-428-OWLS (6957)  
stillnc@wildblue.net  
www.stillmanncc.org

### Osage Orange: History in its Roots

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They are called hedge apples, hedge balls, mock oranges, and, my favorite, green brain (see picture). The citrus-smelling fruit of the osage orange tree does bear a striking resemblance to hardened, green brains.

Hedge apple is also an appropriate name because this native of Texas, Arkansas and Oklahoma was spread to Illinois and beyond by farmers who valued the tree as an important component of a living fence. So when you see one around here, it's a reminder of our bygone farming heritage.

However, this small tree has played a much larger role in history. With that in mind, let's leave the irresistible fruit behind and take a look at the osage orange's roots, so to speak.

#### Lewis and Clark

Not quite two hundred years ago, one of the most amazing explorations in human history took place, Lewis and Clark's Corps of Discovery. The first tree they sent back east from St. Louis was the osage orange.

Osage refers to the Indian tribe that lived near the home range of the tree. Native Americans prized the tree's limber branches for the construction of bows. Because of this, the French termed it bois d'arc (wood of the bow). Southerners have transformed the French term to bodark. Can you guess which tree gave the Ozarks their name? That's right.

Speaking of French, take a look at the tree's scientific name, *Maclura pomifera*. The species name, *pomifera*, should remind you of the French word for apple, *pomme*. The genus name, *maclura*, honors William Maclure (1763-1840), the father of American geology and one of the founding members of the Academy of Natural Sciences in Philadelphia.

As a scientist, I'm sure he would appreciate that the osage orange is a close relative of the mulberries. If you like, just think of hedge apples as hard, soft-ball sized mulberries.

Now what behemoth could swallow hedge apples like a raccoon eats mulberries? How about a mastodon? In fact, 100,000 years ago osage oranges grew as far north as Minnesota and probably served as food for super-sized (now extinct) North American mammals such as mastodons.

#### Ortho orange?

O.K., so we're back to the hedge balls. It has long been believed having this fruit in your basement or cupboards will discourage unwanted bugs, such as cockroaches, from moving in. One pair of authors



dismissed this folklore by writing that osage oranges would only kill a roach "if they happen to fall directly on one."

Not so fast, boys. According to research conducted at Iowa State University and presented at a National Meeting of the American Chemical Society, surfaces treated with chemicals produced by osage orange did, indeed, repel cockroaches. Graduate research assistant Chris Peterson observed that "the roaches will venture onto the treated surface, stop, turn around and walk off onto the untreated surface." This research into natural roach repellents seems quite promising.

### **Back to the Future**

So, what does the future hold for this historic tree? Perhaps, it will be grown as a source of insect repellent. I hope so because old osage oranges are getting harder to find. As land becomes more valuable, historic hedgerows, with their osage oranges, are getting bulldozed to make room for a couple more rows of corn or another subdivision.

If you want to grow your own osage orange, one source is American Forests. These folks sale seedlings grown from the national champion, a tree that is over 50 feet tall and 90 feet wide. The champion stands outside the Virginia home of Revolutionary War orator Patrick Henry. It was grown from hedge apples sent back by Lewis and Clark.†

Not all hedge apples can trace their roots back to the Corps of Discovery but all serve as reminders of our country's and continent's past. So the next time you drive by an osage orange, think of it as a living historical marker.

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