The Shell-Bark Hickory
*Carya laciniosa*

The walnut family

- A shell-bark Hickory is a slow growing tree (but can grow faster than other hickories) and has a relative long lifespan compared to other trees. Seedlings are usually only 4 inches tall after a year. Sapling trees grow at rate .08 inches in diameter per year. They are tolerant of the shade but reproduce better in the half shade. It is a strong sprouter after a wildfire or grazing. It can hold its ground in competition with the other trees too.

**Geographic Range**

- The shell-bark Hickory grows majority in the Midwest states. Starting from the most southern parts of New York and Michigan. Then moving to Tennessee and the very tip of Pennsylvania in the east. Lastly to the eastern part of Kansas and in northern Oklahoma. Common majority of this species living in the lower Ohio river and southern Mississippi river region

**Size**

- Shell-bark Hickory can grow up to 80 feet or higher. Its max. Height at age 20 can be around 35 feet. It can spread out to be 80 feet wide. Its leaves can be between 24-15 inches and have 5-9 leaflets. Most common is 7. The male flowers spikes are around 20 cm. long. Its nut is to be between 1-2 inches long and 3/4-7/4 inches wide.

**What it likes**

- Deep, moist, rich, soil. Areas it likes are the bottomlands and river terraces. It can stand clay and sandy soil but it’s not its favorite. When it’s older it stretches out its canopy to get as much sunlight as it can.

**Roots**

- The roots of a Shell-bark Hickory have an enormous taproot system that goes deep in the soil. Making this tree difficult to transpose. The lateral roots make right angels that make their way through the soil horizontal.

**Stem, Trunk and Bark**

- At the younger age of the Shell-bark Hickory, its bark is pretty smooth, with interlacing ridges and is light gray. As the tree grows it can to develop a patchy, peeling plate type bark. Some trees don’t show this characteristic until well into their age. This characteristic is more common to their cousin the Shagbark Hickory. The Shell-bark Hickories' stems also have distinct characteristics, in that they are covered with small orange colored lenticels, they are stout, and are an orange-ish brown colored.

**Leaf characteristics**

- Leaves of the Shell-bark are 15-24 inches long, with 5-9 leaflets, the normal amount being 7. They are alternate arranged and are pinnately compound. They have pinnate venation. With finely sharpened toothed margins. It is obovate with a broadly wedged base and narrowly pointed apex. The colors of the leaves are a dark green on the top side and yellowish to brownish green on the underside. The shell-bark has rather large elongated terminal buds with scales and stout petioles. In the fall the leaves turn to a chartreuse or golden yellow color.

**Flowers**

- The Shell-bark is monoecious and its flowers bloom between April to June. In the spring bronzed leaves sprout. The male flower (staminate) is 3 branched yellowish green catkins that droops to 20 cm long and appears at last year’s twig growth. The female flower (pistillate) occurs at the end of a season’s growth and appears in clusters of 2 to 5 at the tips of branches. The pollen is spread by the wind.

**Nuts**

- The Shell-Bark Hickory has the largest nut of all Hickories. A common name associated with the tree is King Nut Hickory. The nut is made up of a thick outside husk, and then a cream colored 4-6 ripped honey shell that’s 4mm in depth, and then finally a sweet kernel. A kernel that is eaten by a large amounts of wildlife like squirrels, deer and mice. They also disperse the seeds too, along with gravity. Its nut is to be between 1-2 inches long and 3/4 - 7/4 inches wide. The nut ripens between September through November. The kernel needs 90-120 cold stratification days to germinate. Most Shell-Bark Hickories don’t produce seeds until after their 40’s. Most produce in their 75-200’s.

**Problems**

- Leaflets can be mangled in the late summer months by pest feeding. Other pests are the Hickory bark beetle which can weaken the tree or kill it. Another is the Hickory Spiral borer, which its larva feed beneath the bark and can harm seedlings. Among them there countless other pest that can affect the tree a great deal of damage. Also many fungi affect it too. All Hickories suffer from ring shake. This is when there’s separation between the rings of the wood. The last problem this tree has is that it’s messy. Always showering with leaves, fruits and dead twigs

**Use**

- The wood of a Shellbark Hickory is very strong, heavy, hard, and flexible like all hickories. For its strength it is used to make tools and sporting equipment like bats and hammers. For its hardness and grain it is used to make all kinds of furniture like cabinets, tables, chairs, and etc. It is also used for construction, to be fire wood and cooking when smoking things.

**Exam Question:** When do Shell-Bark Hickories produce seeds?  
A) 40 years or later  
B) 20 years  
C) 1 year  
D) 2 years

**Works Cited**


