



Propagation and
Transplanting of
Rivercane
*(Arundinaria
gigantea)*

Catawba Nation
Rock Hill, SC

*Marvin Bouknight,
EPA/Natural Res. Prg Mgr.*



Rivercane Propagation Project – What and Why?

WHAT:

- A multi-year project to map current locations of native rivercane on Catawba Properties
- Research and develop propagation techniques for rivercane for cultural, environmental, and ecological use
- Document and facilitate removal of exotic/non-native species that compete with rivercane for the purpose of re-establishing rivercane growth in areas suppressed by heavy exotic growth

WHY:

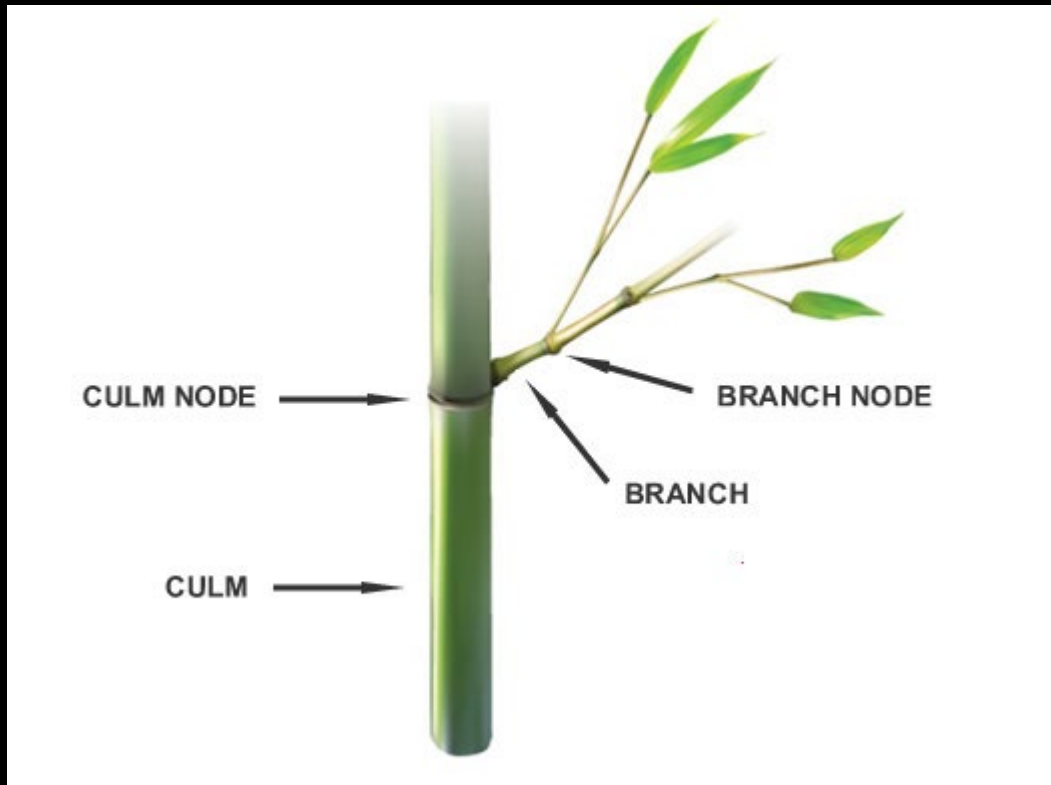
- Cultural:
 - Rivercane is a culturally significant plant for Catawba and many other nations and is used for weaving baskets, making musical instruments and jewelry, making structures or fences, weapons, tools, and even food.
 - Over 98% of the historic coverage and range of rivercane is gone
 - Basketry is a cultural craft that has suffered due to lack of rivercane and there continues to be a serious risk of losing the oral history and techniques for using rivercane for future generations due to not only lack of rivercane populations suitable for harvest but also lack of access to rivercane sources.



Rivercane is also an important and imperiled ecosystem

- Rivercane has a vigorous rhizome and root system that can be utilized to stabilize river and stream banks, areas of high erosion, etc.
- Rivercane patches are a vital habitat for endangered and threatened species (Swainson's warbler, swamp rabbit, etc.) and were habitats for now extinct species such as passenger pigeon, Bachman's Warbler (currently under consideration), eastern cougar, etc.
- Creates opportunity for shared goals of rivercane restoration from cultural, ecological, and environmental perspectives





Identify and Remove Non-native/Invasive Species and Other Competing Vegetation

- Invasive species out-compete native vegetation
- Native species can also compete for resources with native rivercane in certain situations
- Nuisance species vary from location to location
- Invasive plant removal combined with canopy-thinning where possible are our goals for encouraging growth of existing rivercane populations



Chinese Privet (*Ligustrum sinense*)





Japanese Honeysuckle (*Lonicera japonica*)



Multiflora Rose (*Rosa multiflora*)











Transplanting Rhizomes to Raised Beds













Keys to Success

- **Research** – Read and Reach Out
- **Soil Testing**
- **Collaboration** – MOST IMPORTANT – Don't re-invent the wheel. Folks are so supportive and willing to help:
 - Shout out to: Roger Cain, Tim Oakes, Adam Griffith, Brian Baldwin, South Carolina Native Plant Society, etc. etc.
 - Collaboration with individuals, tribal members, universities, Master Gardeners, Master Naturalists, NRCS, USET, Private landowners, County parks, Electric co-ops, (large land holders, access to rhizomes, etc.)
- **Documentation** – Document your success and failure, take pictures, videos, etc.
- **Patience!** – You're in it for the present and the future