Cumberland County Carbon Tree Bank

A Tree Planting initiative to increase public health that adds economic value - one tree at a time!
The Carbon Tree Bank was the vision of the Fayetteville Metropolitan Area Air Quality Stakeholders (Formerly the Cumberland County Air Quality Stakeholders).

The vision was to complete projects that would have a similar impact on air quality as removing 5000 vehicles from the road.

The Carbon Tree Bank was The first of these projects.
Air Quality Stakeholders of Fayetteville Planning Area

- Formerly the AQ Stakeholders of Cumberland County
- Tasked with examining and implementing initiatives to reach Ozone Attainment.
- The region achieved attainment in 2008
- In 2012 the region joined Ozone Advanced
What is a Carbon Bank?

Loblolly and Longleaf Pine

The value is determined based on the species and age of each tree

Urban Offsets Market

Large industry, universities, land owners, and others all invest in carbon offsets and create a thriving carbon market.

Planted on Cumberland County Schools Property

The trees have an associated carbon emissions value or credit

3 - 5 metrics tons of Carbon per Tree
Why a Carbon Tree Bank?

- Fayetteville Cumberland County is considered NOx limited
- Vehicle emissions are the largest contributor of NOx.
- Fayetteville and Fort Bragg has an influx of commuters each day.
- Offsetting the impact of those emissions made the most sense.
Project Development

- **2014**: Stakeholders began exploring new projects.
- **2015**: Groundwork for partnerships and funding were laid.
- **2016**: Urban Offsets and Cumberland County Schools become official partners!
- **2017**: Tree Bank Carbon was planted.
Planting Day!
Cumberland County Schools Carbon Bank

4,753
Number of loblolly and longleaf pines planted at three Cumberland County school sites in 2017!

23K Metric Tons
Amount of CO$_2$ sequestered over the life of the trees – 40 years.

Decrease
Urban heat island effect, CO$_2$ and particulate matter!

Incentives
Living-learning lab and revenue stream for schools!
Additional Benefits

Public Health
- Carbon dioxide removal
- Particulate matter removal
- Shade and heat wave mitigation

Economic
- Carbon credit sale revenue
- Reduced electric consumption
- Less maintenance costs, compared to other gray mitigation strategies

Environmental
- Erosion prevention
- Mitigating flood risk
- Storm water mitigation
Partner with us

Reforest the Sandhills, make a smart investment, and leave a legacy of responsibility and stewardship for future generations!

1. **Become a Project Owner:** Dedicate sidewalks, parking lot corners or fields of vacant land to plant more trees.

2. **Purchase Carbon Credits:** Reduce the carbon footprint of your house, your business, your lifestyle by investing in carbon credits.

3. **Become a Sponsor:** Tap your inner philanthropist and help others without the means to invest.
Ashley Denise Bruce
Environmental Outreach Manager
Sustainable Sandhills

Sustainablesandhills.org
greenaction@sustainablesandhills.org