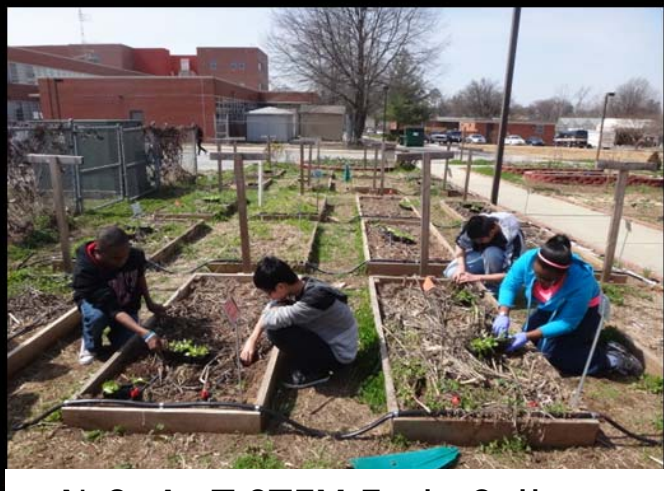


# Natuculture: For Community Food, Health, and Education

APPENDIX J

N.C. A&T's Department of Natural Resources and Environmental Design in  
Partnership with Guilford and Durham County Schools  
[www. natuculture.org](http://www.natuculture.org)



N.C. A&T STEM Early College  
High School Students



by  
Shannon Creason and  
the Natuculture team

**North Carolina Agricultural and Technical State University**



# Funding for Study





## Natuculture: *'An A&T Aggie Pride original'*

- Natuculture (pronounced 'nā- choo-culture') is any human made system that mimics nature in human disturbed landscapes. Specifically, natuculture involves designing biologically engineered systems in urban landscapes while promoting health, food security, and environmental sustainability.



# Natuculture Outcomes

1. Increases Food Security
2. Promotes Community Health
3. Advances Sustainability
4. Hands-on Science for High Schools
5. Can Provide Jobs to Youth



## Applications of Natuculture: Oasissofa



6' by 3' vegetable bed  
(size of a sofa)

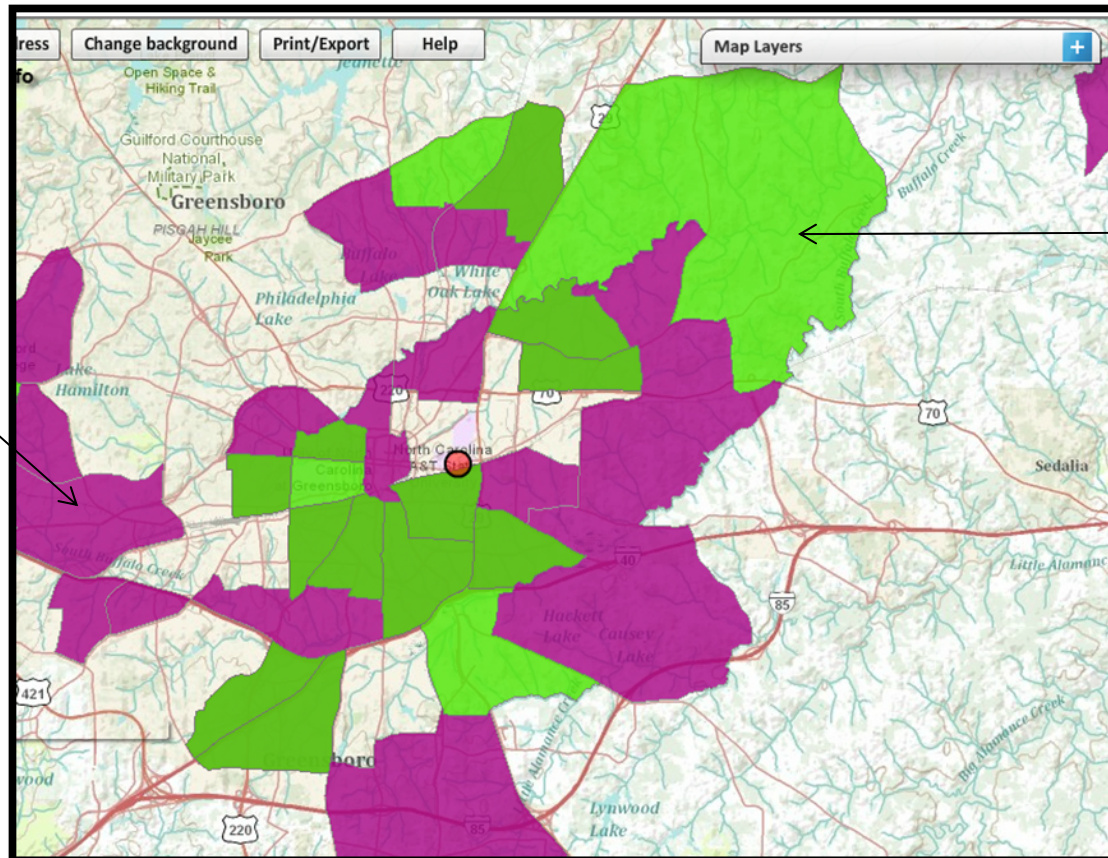




# 1. Food Security

Food Deserts are a problem in urban communities

Areas where more than 100 households have no access to a vehicle and live more than ½ mile from a supermarket



Low Income areas where significant number of residents live more than 1 mile from a supermarket



# Food Security!

2 Metric Tons of Produce In 2 Months





In A Desert You Need an Oasis

Oasissofa

“Bringing Nutritious food to home  
deserts”

Target is homeowner backyards





## 2. Community Health





## 3. Sustainability

- Oasissofa practices the science of growing food while mimicking the forest
- Practices McD
  - » Minimal soil disturbance/no tillage
  - » Continuous mulch
  - » Diverse species





## 4. Hands-On Science for High Schools



N.C. A&T STEM Early College High School Students

- October 2011, at the N.C. A&T Natuculture headquarters, we began a 32 vegetable bed study comparing traditional with oasissofa vegetable production systems





## 4. Hands-On Science for High Schools

### Oasissofa Studies in High School Campuses





# High school students measure vegetable yield and soil health in traditional and oasissofa systems



- pH
- Infiltration
- Soil Moisture
- Bulk Density
- Soil Respiration
- Nitrates
- Earthworms
- Slake Testing
- Aggregate Stability







We are showing to the youth that:

**Agriculture is the  
Science, Technology,  
Engineering and Math  
(STEM) of Human  
Survival**



## 5. Jobs for Youth

### “Oasissofa in a box”



Southern High School of Energy and Sustainability, Durham, North Carolina

Students in vocational carpentry course built and installed oasissofas in their campus





# Natuculture Outcomes

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# QUESTIONS



*Natuculture: An A&T Aggie Pride original*

*Logo designed by N.C. A&T undergraduate art alumnus, Nunu Lo, supervised by Dr. Roy Mieco Carter*

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