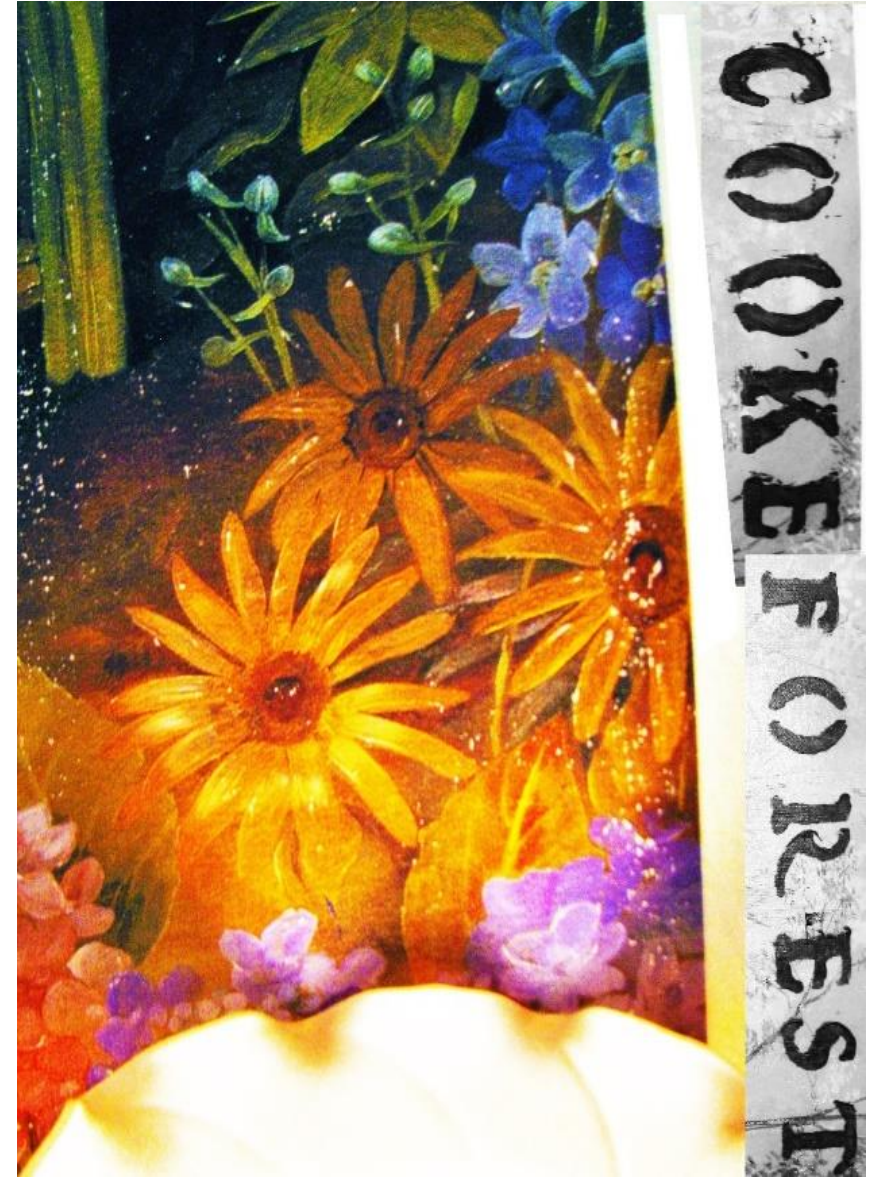


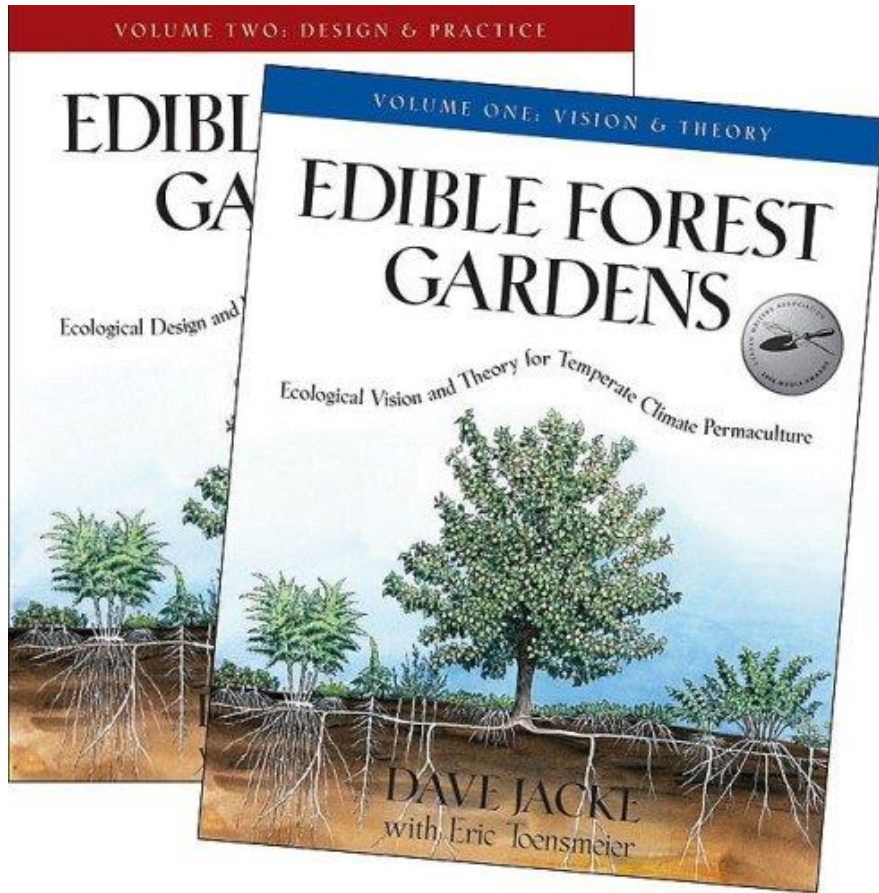
“Adaptive strategies: Suburban lawns into agroecosystems in the American Midwest”

Christopher Burney
Advisors
15th North American Agroforestry Conference
Dr. Shibu Jose
Blacksburg, VA
Dr. Michael Gold
Summer 2017



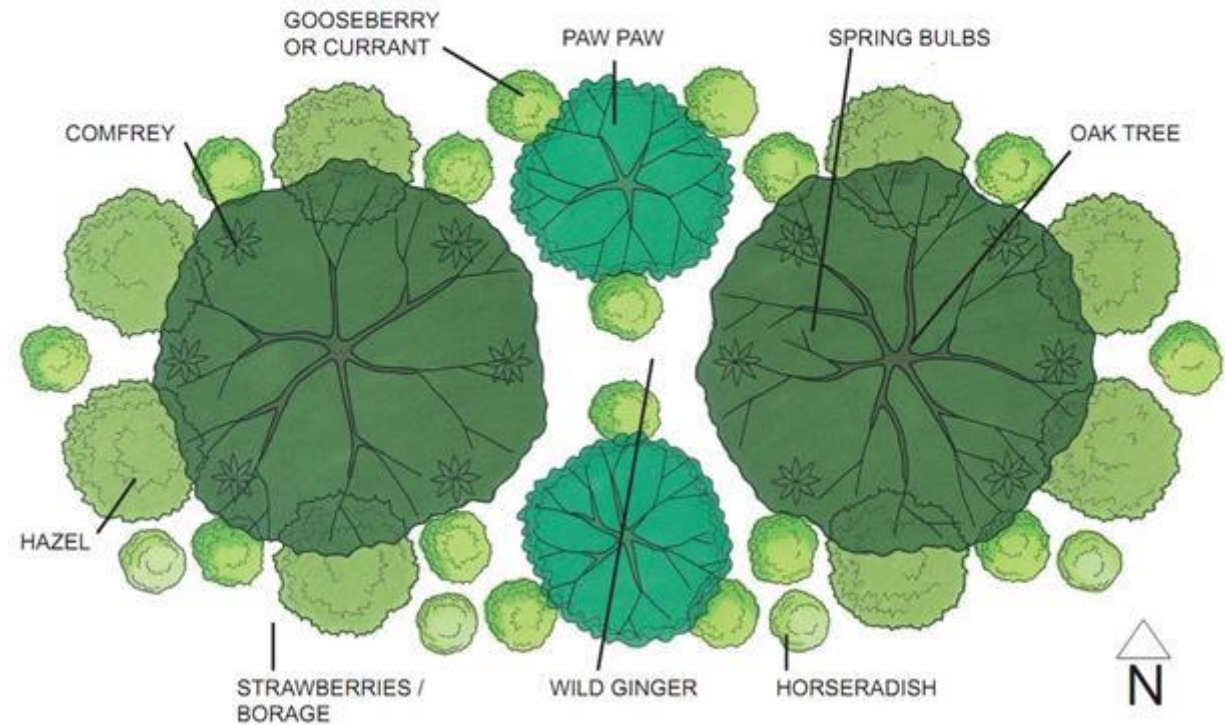


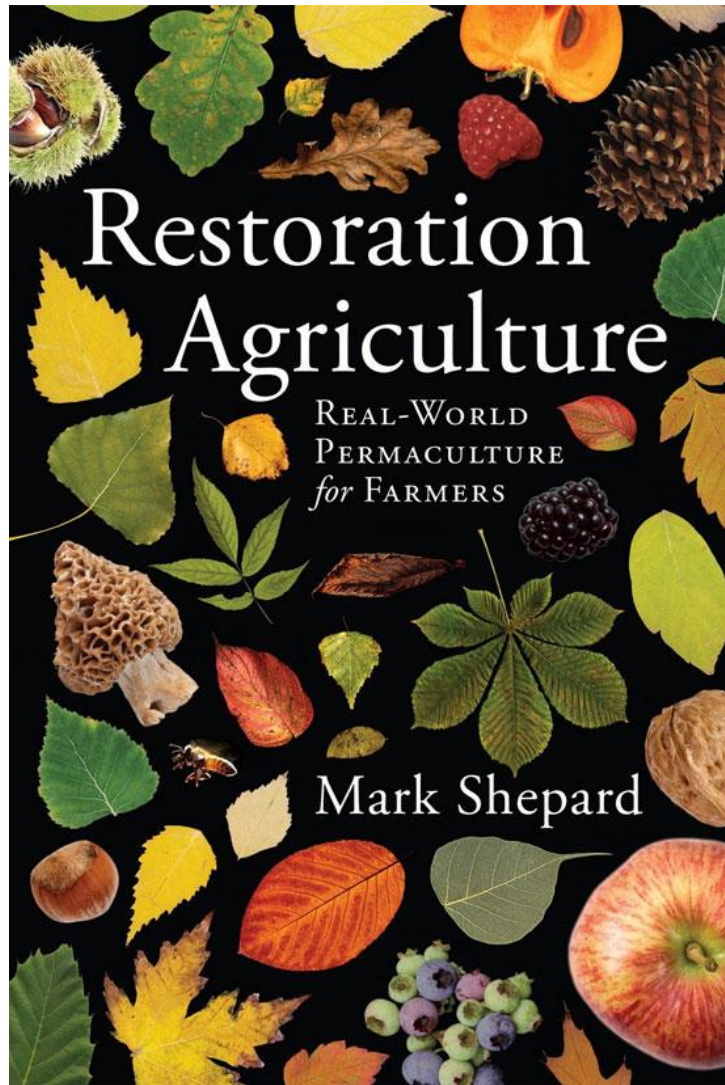
Permaculture and Agroforestry Frameworks



OAK GUILD

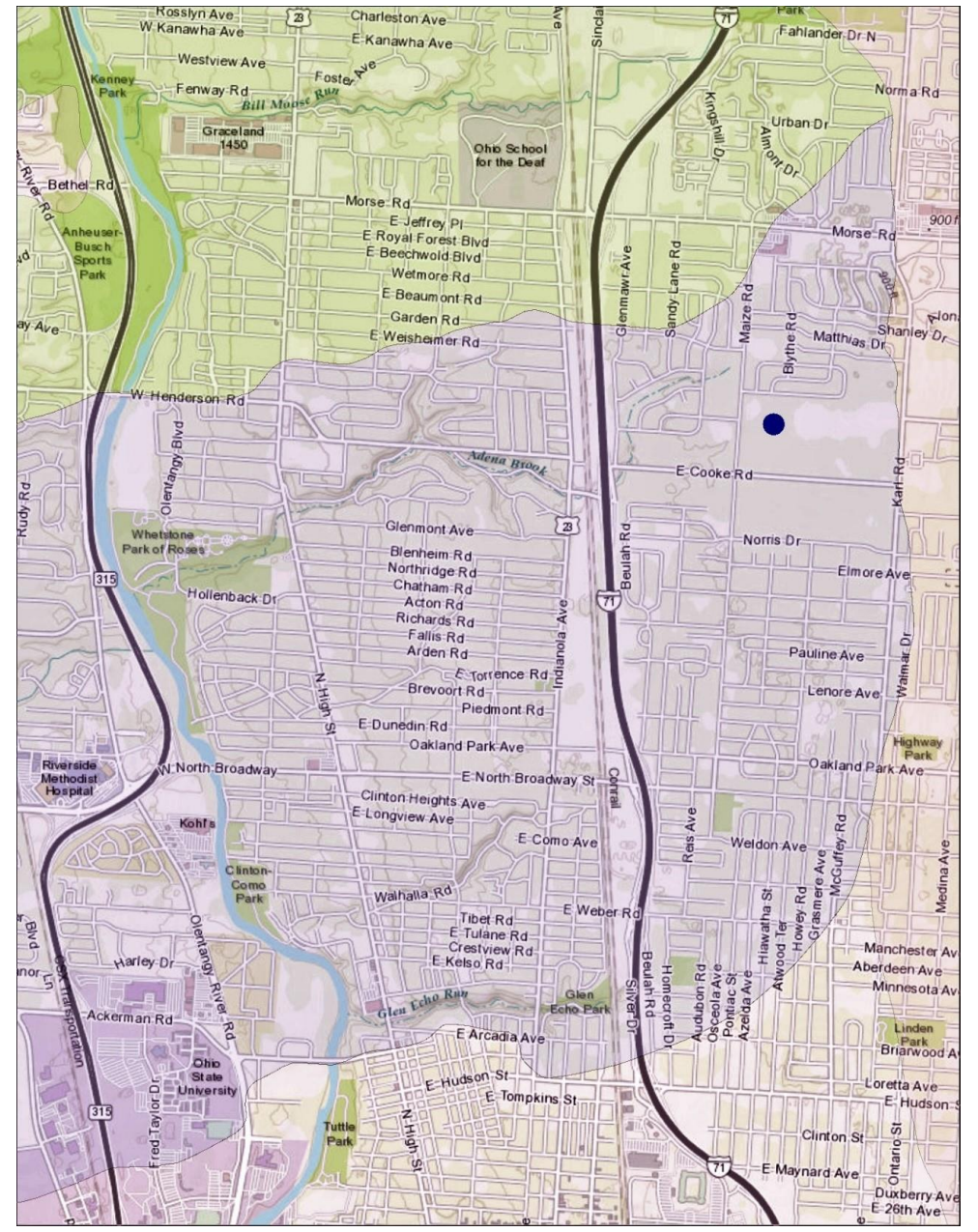
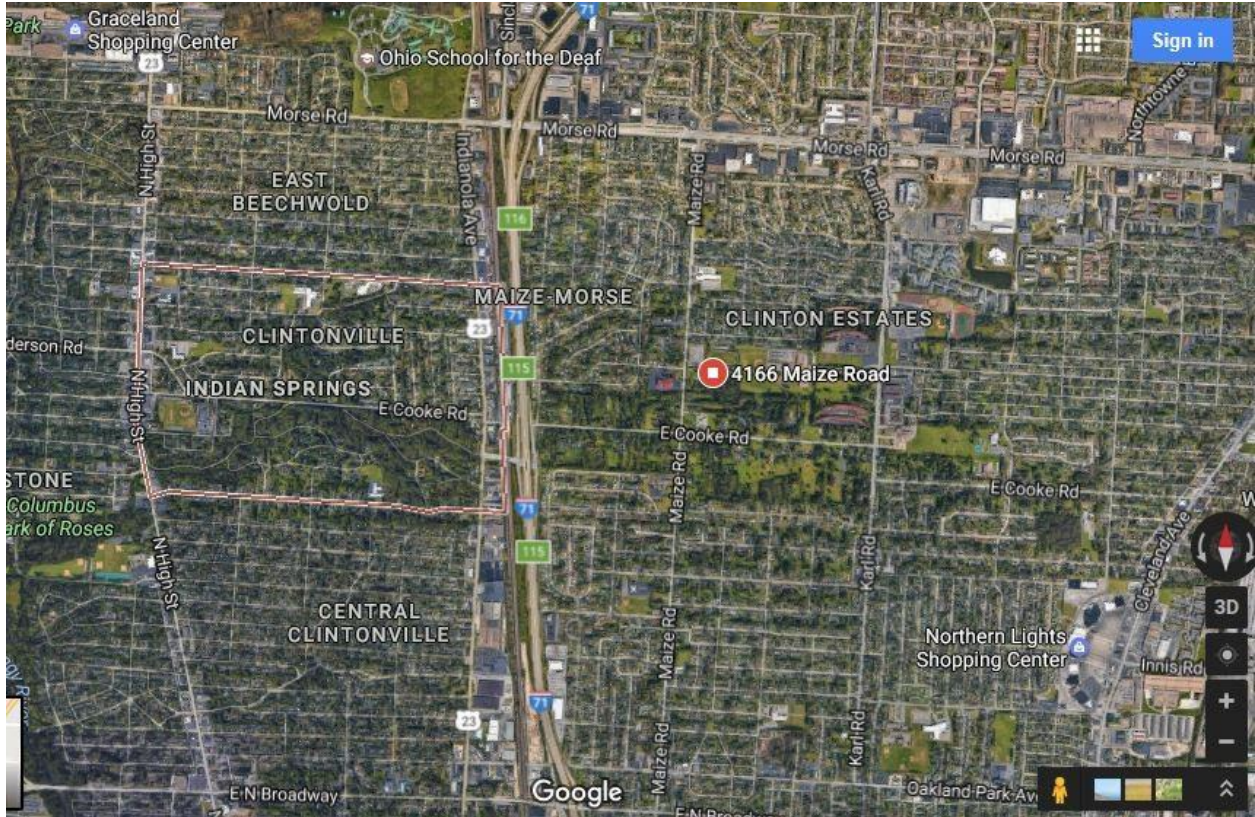
DIAMETER COULD BE FROM 50' - 400' DEPENDING UPON SPECIES AND AGE OF THE OAK TREES





Applied Agroforestry





City Density and Watershed Boundary

Farm Site



Ground Cover Establishment

- Comfrey (*Symphytum officinale*)
- Feverfew (*Tanacetum parthenium*)
- Sage (*Salvia officinalis*)
- Mugwort (*Artemisia vulgaris*)
- Hops
- Valerian (*Valeriana officinalis*)
- *Mentha spp.*
- Balms



Prunella vulgaris

Production Bed Layout



USDA Funding





Seedlings

High Tunnel

G
o
a
t
s

Nursery
Stock

Elderberry

Black
Currant

Honey
Berry

Wetland

Permaculture

Spicebush

Young Forest

Wetland

Spicebush

Agroforestry Cropping Returns

| Name | Average Production | Price | Expected Yearly Return After Establishment |
|-------------------------|---|--------------------------------|--|
| Medicinal and Tea Herbs | 100 lbs. fresh plant material = 20 lbs. dried | \$8-10/oz. Dried | \$2560 – \$3200 |
| Elder Berry | 3-5 lbs. per plant | \$21/lb Fresh | \$1890 – \$3150 |
| Elder Flower | n/a | \$60/lb Dried \$36/lb Fresh | n/a |
| Honeyberry | 5-8 lbs. per plant | \$10/lb. Fresh | \$2000 – \$3200 |
| Black Currants | 10 lbs. per plant | \$8/lb. Fresh | \$5440 |

Low Cost/High Labor Urban Farming

- \$5000 initial investment
 - Hand Labor
 - LLC
 - Diverse Cropping
- Cottage Industry Laws
- Value Added Products
- Farmer's Markets, CSA, and Wholesale
 - Drying Capacity

Measuring Returns

- Self-Sufficiency
- Trade with neighbors
- Two \$10,000/year jobs
- Impossible to price externalities
- Farming is a fundamental human right

Thank
You



@cookeforest