

Duke Farms: A Living Lab of Land Stewardship

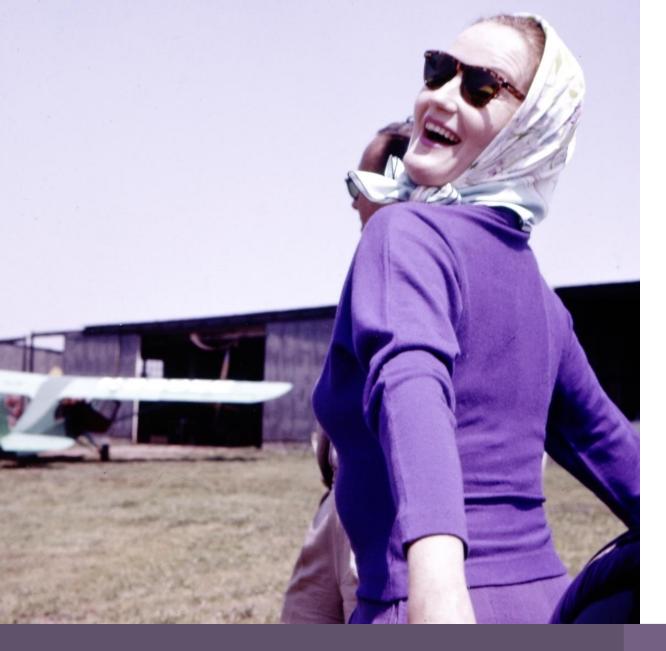
DORISDUKE.ORG

Agenda

- •Who we are
- •What We do at DDF
- Land Stewardship at Duke Farms
- Results







Who was Doris Duke?

- Born in 1912
- Only child of James Buchanon Duke
- Inherited her father's estate
- Lifelong Philanthropist
- Wanted Duke Farms to be a nature-focused place of conservation
- Passed Away 1993









Duke Farms Land Stewardship Plan

May 201

Prepared by Michael Van Clef, Ph.D. Ecological Solutions, LLC

&

Thomas Almendinger, Charles Barreca, Michael Bellaus, Michael Catania, James Hanson, Jon Wagar





The Duke Farms Land Stewardship Plan

A comprehensive guide to managing land and natural resources at Duke Farms over a ten-year timespan.

Goal #1:	Maintain a Balanced Deer Herd (includes 4 subgoals)
Goal #2:	Strategic Invasive Species Management (includes 173 subgoals)
Goal #3:	Grassland Habitat Management and Restoration (includes 5 subgoals)
Goal #4:	Forest Habitat Management and Restoration (includes 28 subgoals)
Goal #5:	Shrubland Habitat Management and Restoration (includes 8 subgoals)
Goal #6:	Meadow Habitat Management and Restoration (includes 7 subgoals)
Goal #7:	Lake and Riparian Habitat Management and Restoration (includes 11 subgoals)
Goal #8:	Rare Species Management (includes 5 subgoals)
Goal #9:	Develop Plant Propagation and Reintroduction Plan (includes 6 subgoals)
Goal #10:	Integrate Stewardship and Related Programmatic Goals (includes 4 subgoals)
Goal #11:	Foster Monitoring and Research (includes 12 subgoals)
Goal #12:	Foster Climate Change Mitigation (includes 3 subgoals)
Goal #13:	Implement Sustainable Agricultural Practices (includes 6 subgoals)











Exclusionary Fencing



TRAP AND TRANSFER





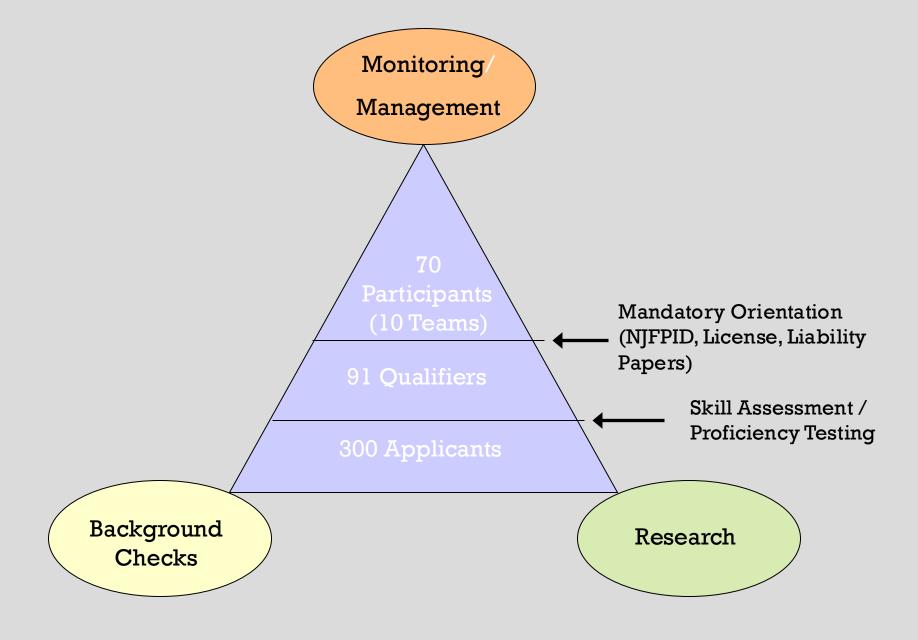
- From 2000-2003, 259 deer were trapped and transferred
- This management technique was disallowed due to fear of CWD
- Very expensive: approximately \$1,400 /deer removed
- Ineffective: Unable to keep up with fecundity rates = no decrease in overabundant deer populations/densities



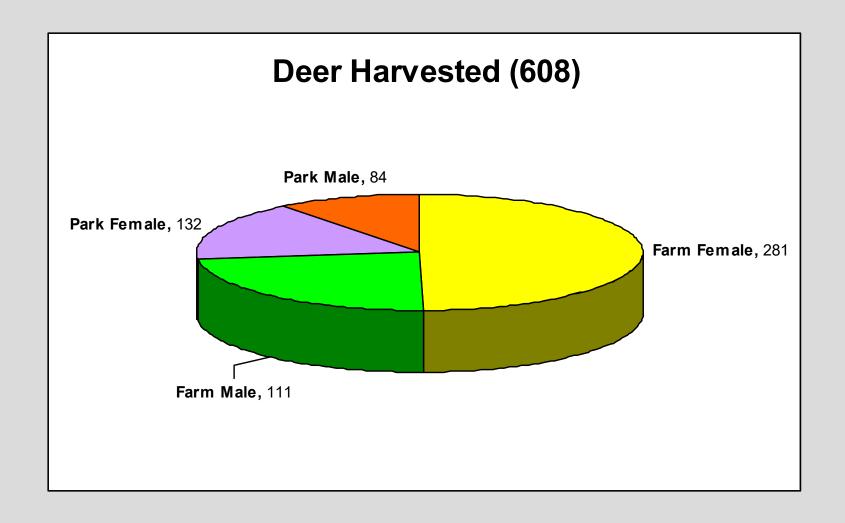
Deer Strategy Committee Support

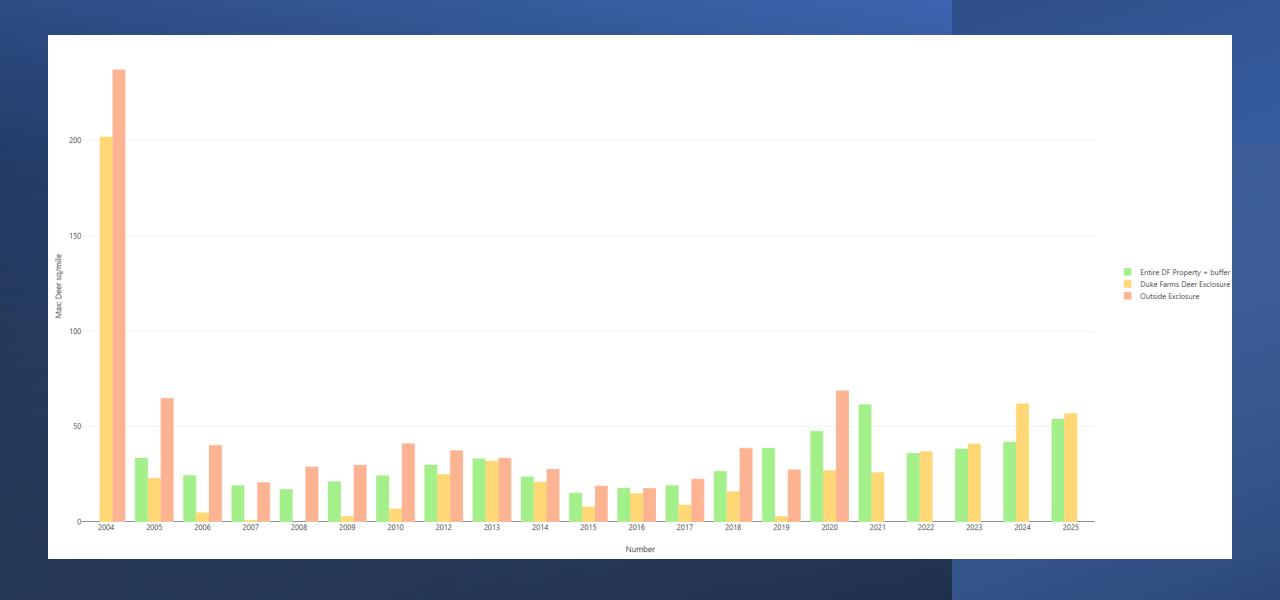


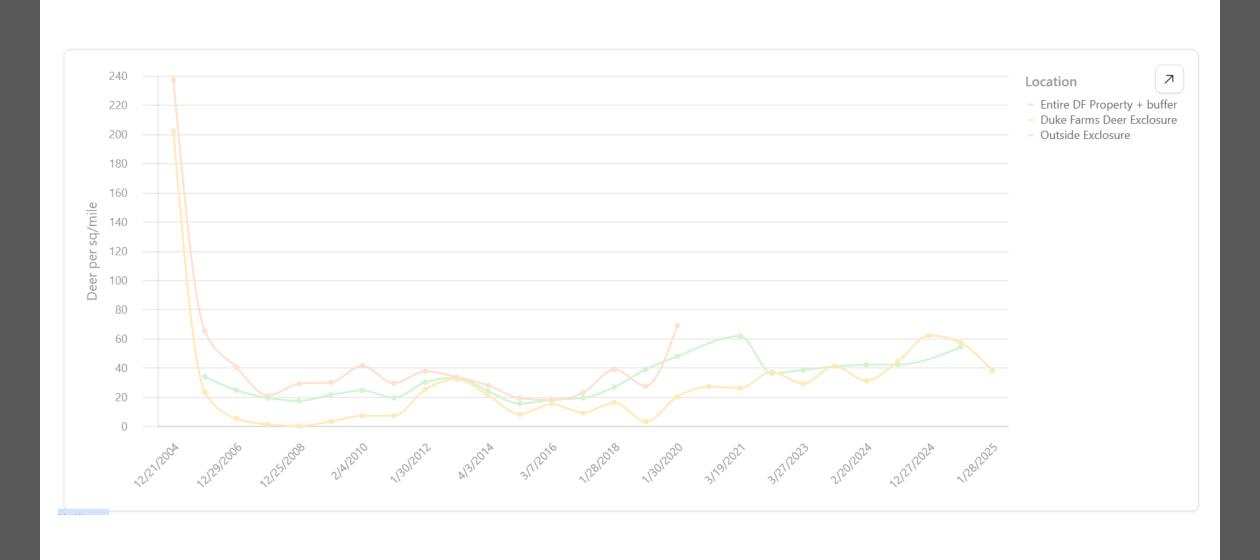
Participant Selection Process



First season











Invasive Vegetation Control Methods

Mechanical, some examples:

Billy Goat Brush Cutter



Loppers and Pruners



Line Trimmer & Hedge Trimmer



Invasive Vegetation Control Methods

Chemical, some examples:

Basal bark



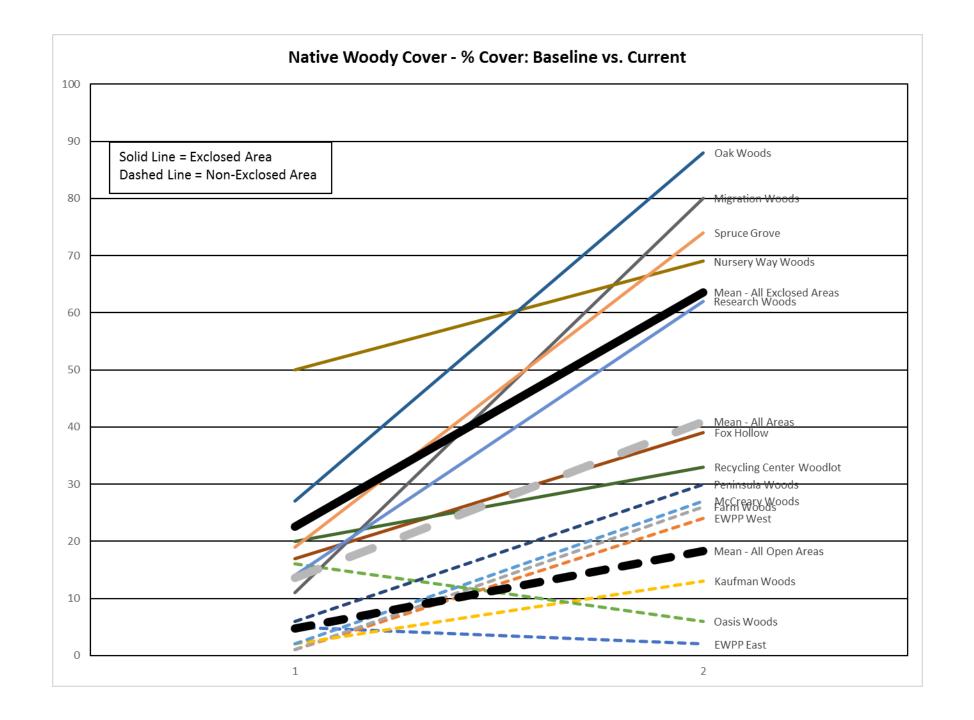
Auxiliary power Tank sprayer on UTV

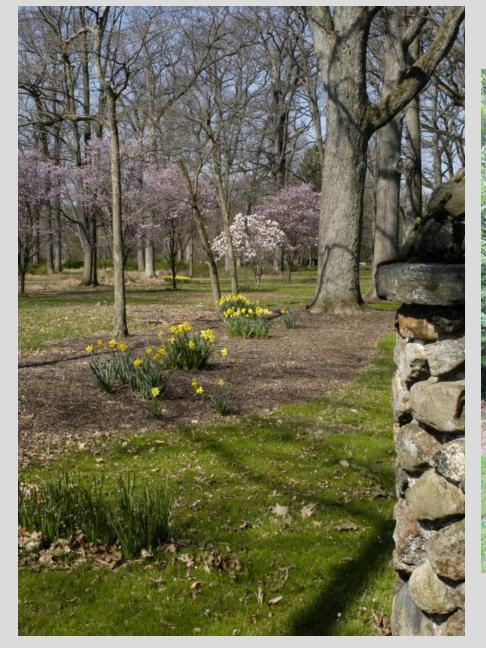


Kill Stick on cut stump





















Thank You

Mike Bellaus

Manager of Habitat Restoration

Duke Farms, A Center of the Doris Duke Foundation

mbellaus@dorisduke.org