



FAIRFAX COUNTY PARK AUTHORITY

M E M O R A N D U M

TO: Chairman and Members
Park Authority Board

Chairman and Members
Environmental Quality Advisory Council

FROM: Kirk W. Kincannon, Executive Director

DATE: July 3, 2019

Agenda
Joint Meeting
Fairfax County Park Authority Board
and
Environmental Quality Advisory Council
Wednesday, July 10, 2019 – 6 p.m.
Rooms 106/107 – Herrity Building
FCPA Chairman: William G. Bouie
EQAC Chairman: Stella Koch

1. Natural Resource Management Plan
2. Deer Management Plan



If accommodations and/or alternative formats are needed, please call (703) 324-8563. TTY (703) 803-3354

Fairfax County Park Authority
Natural Resource Management Plan



Adopted January 29, 2014
<http://www.fairfaxcounty.gov/parks>



**Natural Resource
Management Plan –
FY 2019
Accomplishments and
FY 2020 Implementation
Plan**

Park Authority Board/EQAC
Joint Meeting
July 10, 2019

FY2019 Activities
Accomplished

Continued to populate geodatabase model

Continued to implement ecological restoration projects

Completed Natural Resources Management Plan for Huntley Meadows and started West Area

Finalized invasive vegetation management contract renewal

Started development of agency-wide list of potential mitigation sites

Conducted 5-year NRMP review

Inventory and Planning

3,302 acres surveyed for
invasive species

14 parks assessed for deer
browse impacts and
estimate deer densities at 22
parks

322 invasive treatment plans
prepared and 118 completed



“Knowing what we have”

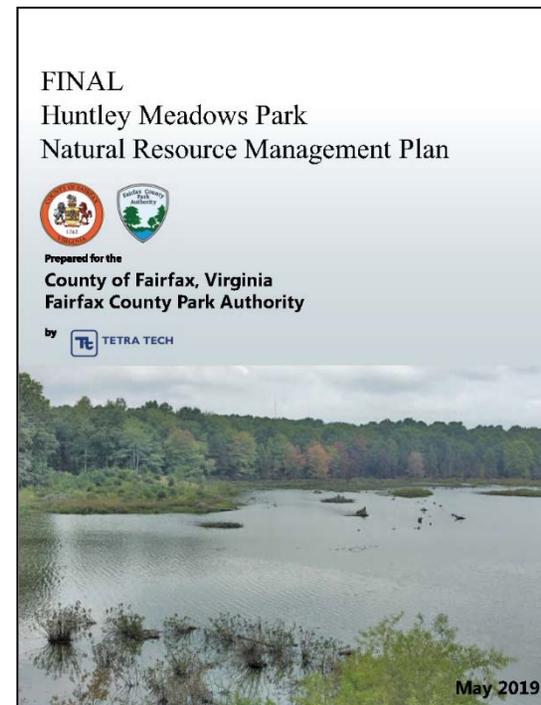
Inventory and Planning

1,777 acres of natural
vegetation communities
classified and mapped

9 Resource Protection
Zones designated

Continued surveying for
selected rare, threatened,
and endangered species

Huntley Meadows and West
Area NRMPs



“Knowing what we have”



Protecting Natural Capital

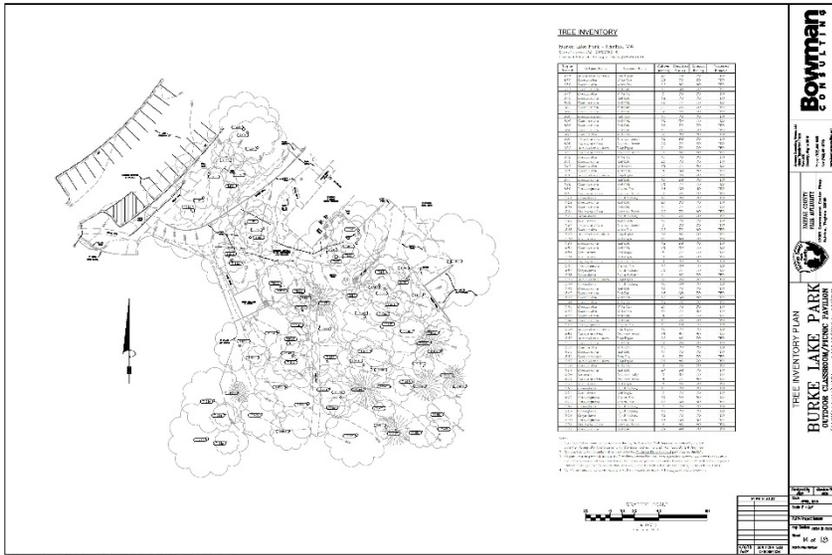
196 development plans reviewed

45 park project teams served

3 encroachments where technical assistance was provided

60 easement actions where technical assistance was provided

“Do no harm”



Protecting Natural Capital

25 DPWES projects where technical assistance was provided

8 land acquisition reviews conducted

40 permit requests reviewed for restricted natural area activities

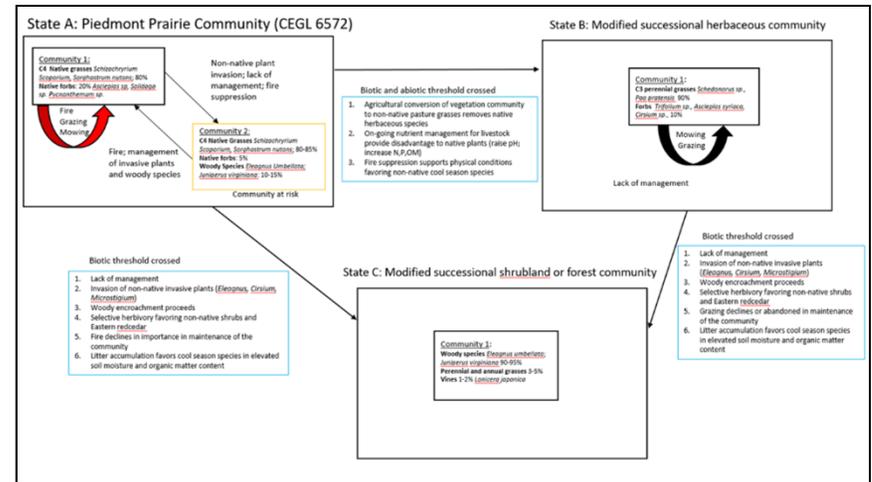
“Do no harm”

Managing Wild Populations and Restoring Ecosystems

782 acres treated for invasive, non-native vegetation

781 white-tailed deer harvested from 94 parks

106 Canada goose nests oiled at lake front parks, golf courses, and other parks



“Helping our land heal”

Managing Wild Populations and Restoring Ecosystems

82 acres of prescribed fire
implemented

9 ecosystem restoration
projects in progress:
Old Colchester Park
Riverbend Park
Fitzhugh Park
Elklick Preserve
Laurel Hill Park
Ellanor C. Lawrence Park
Huntley Meadows Park



“Helping our land heal”



Fostering Stewardship and Expanding Natural Capital

6,539 volunteer hours
removing non-native,
invasive vegetation



42,732 FCPD volunteer
hours harvesting white-tailed
deer

602 (estimated) customer
inquiries addressed

“Spreading the word”



Fostering Stewardship and Expanding Natural Capital

20 partnerships fostered with federal, state, regional, private, non-profit, and county organizations

Stakeholder Advisory Committee for state's Wildlife Viewing Plan

DCR-NH Memorandum of Understanding



“Spreading the word”

FY2020 Planned Activities

Continue to populate geodatabase model

Continue to implement ecological restoration projects

Continue Natural Resources Management Plan for West Area

Complete agency-wide list of potential mitigation sites

Start implementation of Huntley Meadows Natural Area Preserve

Start long-term bird banding study at Huntley Meadows

FY2020 Planned Funding Strategy

General Fund

Bond Fund

Vulcan Fund

Environmental Improvement
Program

Telecom Fund

Partnerships and Shared
Resources

Acknowledgements



- Park Authority Board
- Environmental Quality Advisory Council
- Fairfax County Police Department
- Virginia Departments of Forestry, Game and Inland Fisheries, and Conservation and Recreation
- Northern Virginia Soil and Water Conservation District
- Earth Sangha
- Fairfax Releaf
- Fairfax County Departments of Public Works and Environmental Services, Health, Planning and Zoning, and Fire and Rescue
- Fairfax County Park Foundation
- Friends Groups
- Volunteers and Citizen Stewards
- Northern Virginia Audubon Society
- Fairfax County Tree Commission
- Forts Belvoir and AP Hill
- Quantico Marine Corps Base
- Patrick Whitehouse

FAIRFAX COUNTY DEER MANAGEMENT

FY 2020 Program Update

Park Authority Board/EQAC Joint Meeting
July 10, 2019

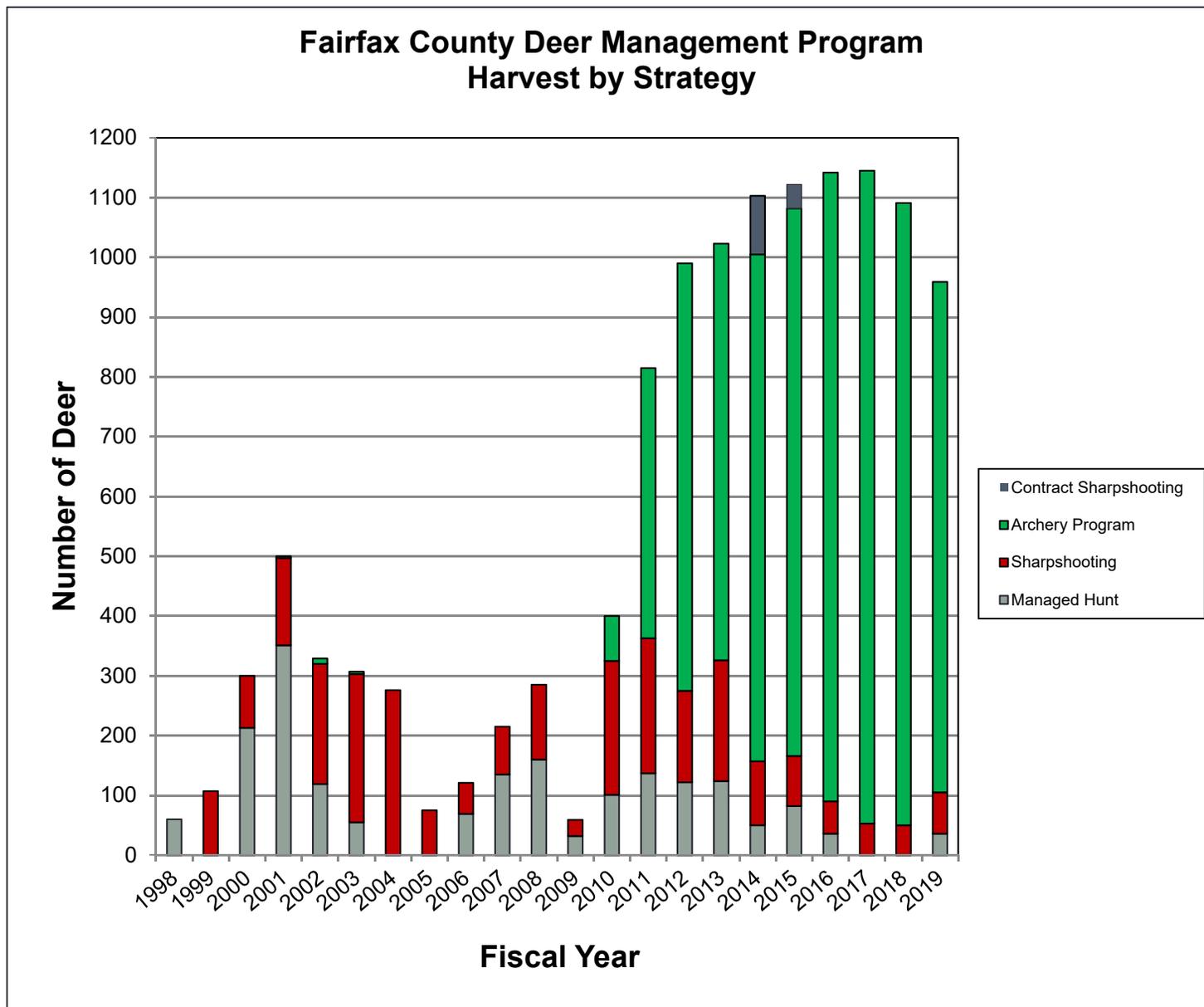
Kristen Sinclair, Ecologist III
Resource Management Division
Fairfax County Park Authority



DEER MANAGEMENT PROGRAM

- Approved by the Fairfax County Board of Supervisors in 1998
- Implemented by the Fairfax County Police Department in collaboration with the Fairfax County Park Authority and Northern Virginia Regional Park Authority
- Safety Concerns
- Health Concerns
- Ecological Damage





Archery Program Comparison (2015-2019)

	2015	2016	2017	2018	2019
Total Volunteers	568	594	627	588	578
Total Volunteer Hours	31,329	37,071	44,881	43,688	42,735
Average Hours Per Volunteer	55	62	71	74	74
Deer Harvested	916	1,052	1,092	1,041	854
% Female Deer Harvested	75.2%	70.5%	65.3%	65.2%	68%
Average Hours Per Deer	34	29	41	38	45
Total Archery Clusters	24	22	18	18	18
Total Parks	56	81	97	98	99
Total Acres	13,680	16,084	19,125	19,359	19,385
Deer per sq. mile harvest	43	42	37	34	28

FY19 Program Summary

Harvest Method	Harvest	Percent Total Harvest
Archery	854	89.05%
Managed Hunt	36	3.75%
Sharpshooting	69	7.19%
<i>FY19 Total Program Harvest</i>	959	100.00%

Sex Ratio Percentage	Doe	BB ^a	Antlered Buck	Antlerless Buck
Archery	68.03%	8.90%	21.90%	1.17%
Managed Hunt	41.67%	19.44%	38.89%	0.00%
Sharpshooting	47.83%	28.99%	14.49%	8.70%
<i>Sex Ratio Percentage (Total Harvests)</i>	65.59%	10.74%	22.00%	1.67%

ARCHERY PROGRAM

- Operated on public lands: Approximately 100 parks and county properties in the program (>80% of county parkland)
- Upcoming FY 2020 Program Dates:
September 7, 2019 – February 22, 2020
- Hunting is allowed Monday through Saturday (no Sunday hunting)
- Legal hunting hours: 30 minutes prior to sunrise and extending until 30 minutes past sunset
- Parks remain fully open to the public
- Zero safety incidents since program's inception

Deer Management Program Map

The screenshot shows a web browser window with the URL <https://fairfaxcountygis.maps.arcgis.com/apps/webappviewer/index.html?id=409cc24c643d453387f752ce6e06bcad>. The browser tabs include 'Deer Management Prog' and 'Microsoft Office Home'. The browser address bar shows the URL. The browser toolbar includes various icons for navigation and search.

The map interface features a search bar with the text 'Deer Management Program Fairfax County' and a search icon. The map displays various parks and management areas, including South Riding Golf Club, Chantilly, Centreville, Manassas National Battlefield Park, Bull Run Regional Park, and Manassas Park. A pop-up window titled 'Deer Management Areas:' provides details for a specific area named 'Patriot'.

Deer Management Areas:	
Park Name	PATRIOT
Cluster Name	Fairfax Station
Unique Identifier	Patriot 1
Acreage	122
Management Method	Archery
Ownership	Fairfax County Park Authority
Zoom to	...

The map interface includes a scale bar showing 0, 1, and 2 miles, and a coordinate display showing -77.353 38.824 Degrees. The map is powered by Esri, FAO, NOAA | Fairfax County, Virginia; Park Authority.

FY20 Deer Management Program Public Information Meetings

1. Date: August 8, 2019
Time: 7:00 p.m. to 8:00 p.m.
Fairfax County Government Center
12000 Government Center Pkwy. Fairfax, VA 22035
2. Date: August 13, 2019
Time: 7:00 p.m. to 8:00 p.m.
North County Government Center
1801 Cameron Glen Dr., Reston VA 20190
3. Date: August 22, 2019
Time: 7:00 p.m. to 8:00 p.m.
Mount Vernon Governmental Center
2511 Parkers Lane Alexandria, VA 22306

ECOLOGICAL IMPACTS

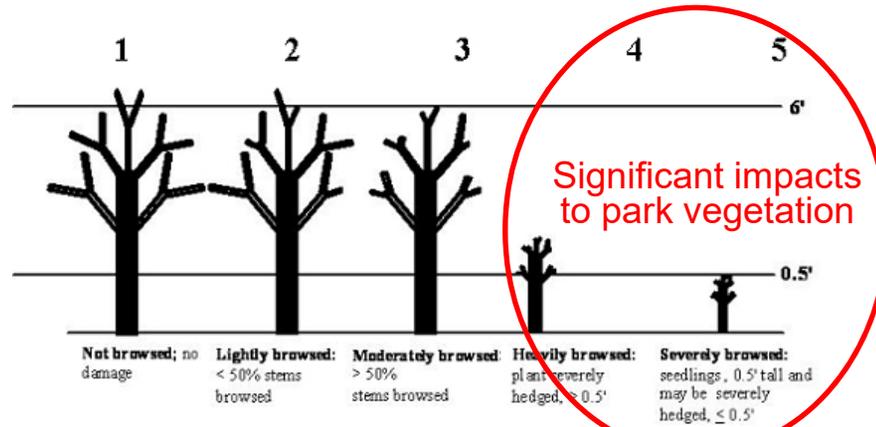
1. Consumption of seedlings and saplings hinders forest regeneration
2. Forest structure impaired, understory layers removed and overstory simplified
3. Forest composition changed for decades
4. Loss of Ecosystem Services (clean water, clean air)
5. Loss of biodiversity



Browse Impact Surveys

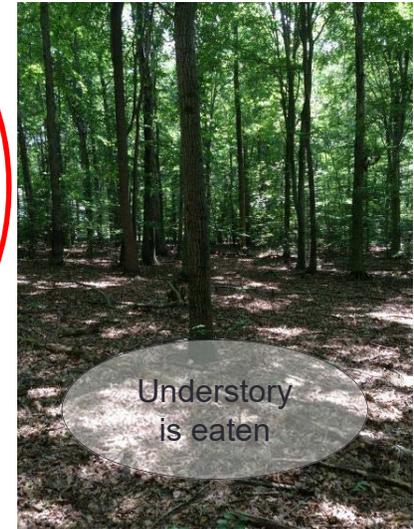


Healthy shrub layer



Seedlings > 0.5' provide best evidence of browsing damage. Under severe deer browsing, seedlings may never exceed 0.5' tall and will be severely hedged*: deer browsing keeps them suppressed below 0.5'. Small, current year seedlings may never grow above 0.5' under severe deer browsing.

* Severely hedged = seedling browsed repeatedly over years; all stems short, thick, with "bonsai" appearance.



Understory is eaten



Healthy shrub layer



Browsed and hedged maple



Understory is eaten, invasive species

Deer Density Camera Surveys

- Standardized approach based on Jacobson et al. (1997) using infrared-triggered cameras to estimate deer at a bait station.
- Restrictions on time of year that baited camera surveys can be conducted.
 - Should be conducted post-fawning season but prior to antler drop (May to January)
 - State regulations prohibit feeding deer after Sept 1. and through the end of the hunting season (April in Fairfax County).
- Allows consistency in sampling and comparison among parks over time to establish trends.
 - Does not represent a complete census or exact number of deer.
 - Not used to set harvest limits in individual parks.

Deer Density Camera Surveys



Jacobson, H.A., J.C. Kroll, R.W. Browning, B.H. Koerth, and M.H. Conway. 1997. Infrared-triggered cameras for censusing white-tailed deer. *Wildlife Society Bulletin* 1997, 25(2):547-556.

Active Survey Period: August 17-30, 2016	
Total # Photographs	325
Individual Branch-Antlered Bucks	10
Branch-Antlered Buck Occurrences	226
Spike Occurrences	58
Total Antlered Buck Occurrences	284
Doe Occurrences	146
Fawn Occurrences	47
Doe to Buck Ratio	0.514
Spike to Buck Ratio	0.257
Fawn to Buck Ratio	0.165
Fawn to Doe Ratio	0.322
Buck Population Estimate	12.566
Doe Population Estimate	6.460
Fawn Population Estimate	2.080
Total Population Estimate	21.106
Estimated Deer per Square Mile	153.50

Deer Management Data Collection

1. Browse Impact Surveys: 523 permanent plots established

2016: 148 plots in 14 parks

2017: 186 plots in 24 parks

2018: 140 plots in 14 parks (majority were repeats)

2019: 114 plots in 14 parks (all repeats)

2. Deer Density Estimates:

2016: 25 parks surveyed

2017: 21 parks surveyed

2018: 17 parks surveyed

2019: 21 parks are planned to be surveyed

CWD Update

- During the past hunting season, the VDGIF received 1,600 samples submitted by participating taxidermists and also tested over 1,550 deer harvested from Frederick, Clarke, Warren and Shenandoah counties.
- As of April 2019, a total of 68 deer have tested positive in Virginia since 2009.
- In April 2019, VDGIF confirmed CWD in a male deer legally harvested in Culpeper County in November 2018.
- This deer was harvested more than 40 miles from the nearest CWD-positive deer in Frederick or Shenandoah counties.
- VDGIF is determining next steps
- A new Disease Management Area (DMA) will include Culpeper, Madison and Orange Counties.
- New hunting regulations:
<https://www.dgif.virginia.gov/hunting/regulations/new/>

