

**DEER MANAGEMENT –  
The Cheesequake State Park Story**

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**Superintendent - David B. Donnelly**

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**[CSPsupt@optonline.net](mailto:CSPsupt@optonline.net)**

# Critical link between invasive plants and white-tailed deer.



# **Cheesequake's Long-term Goal**

to re-establish the ecological balance  
so native plants are able to overcome  
and outcompete invasive plants













# Park Naturalist with Spicebush shrub

**3<sup>rd</sup> year hunting  
60" of growth**

**2<sup>nd</sup> year hunting  
24" of growth**

**1<sup>st</sup> year hunting  
12" of growth**

**Prior to hunting  
3" of growth**



# **STATE PARK SERVICE**

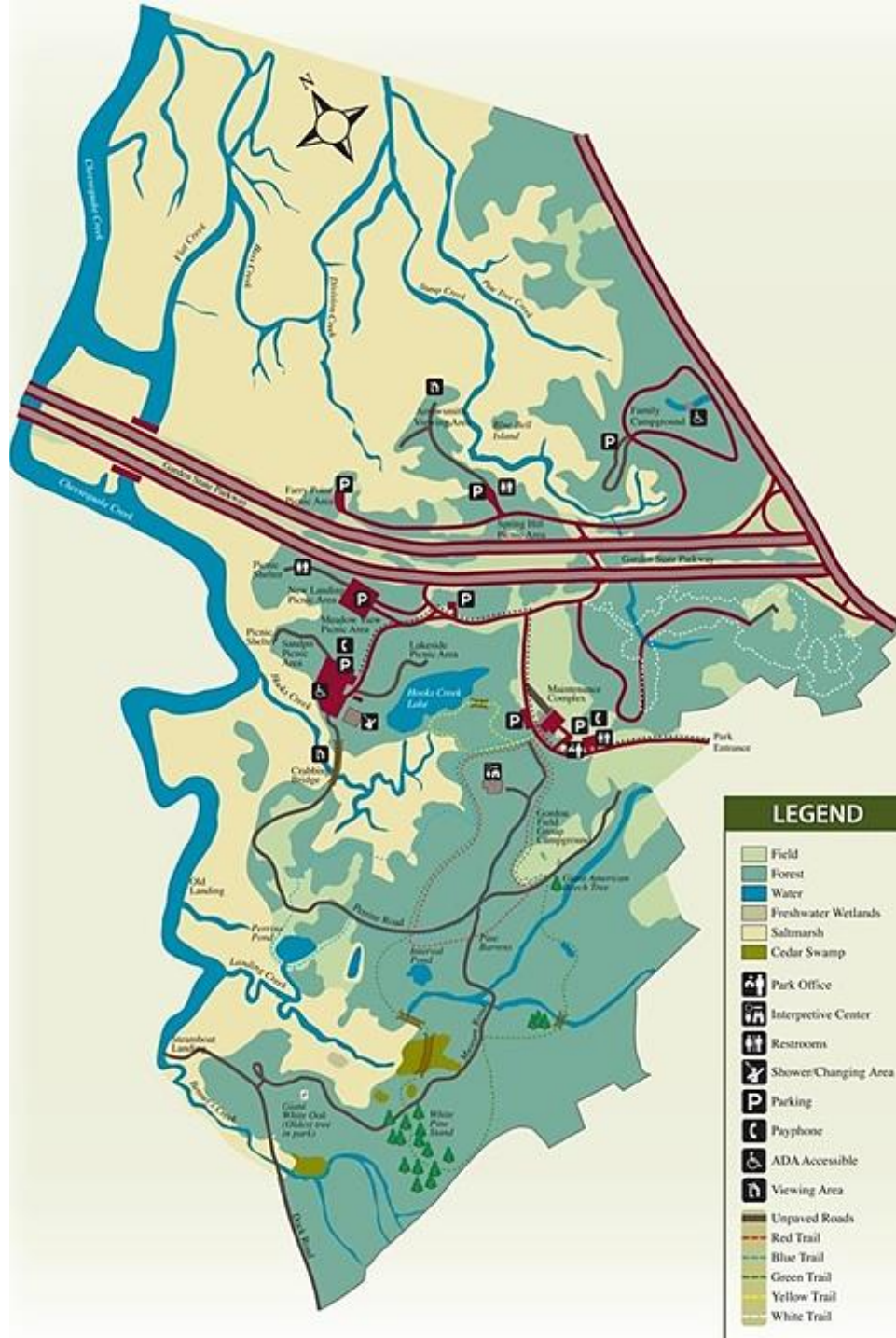
“dedicated to the stewardship of  
the State’s rich and diverse  
historic, cultural, recreational and natural  
resources for the benefit of  
present and future generations.”

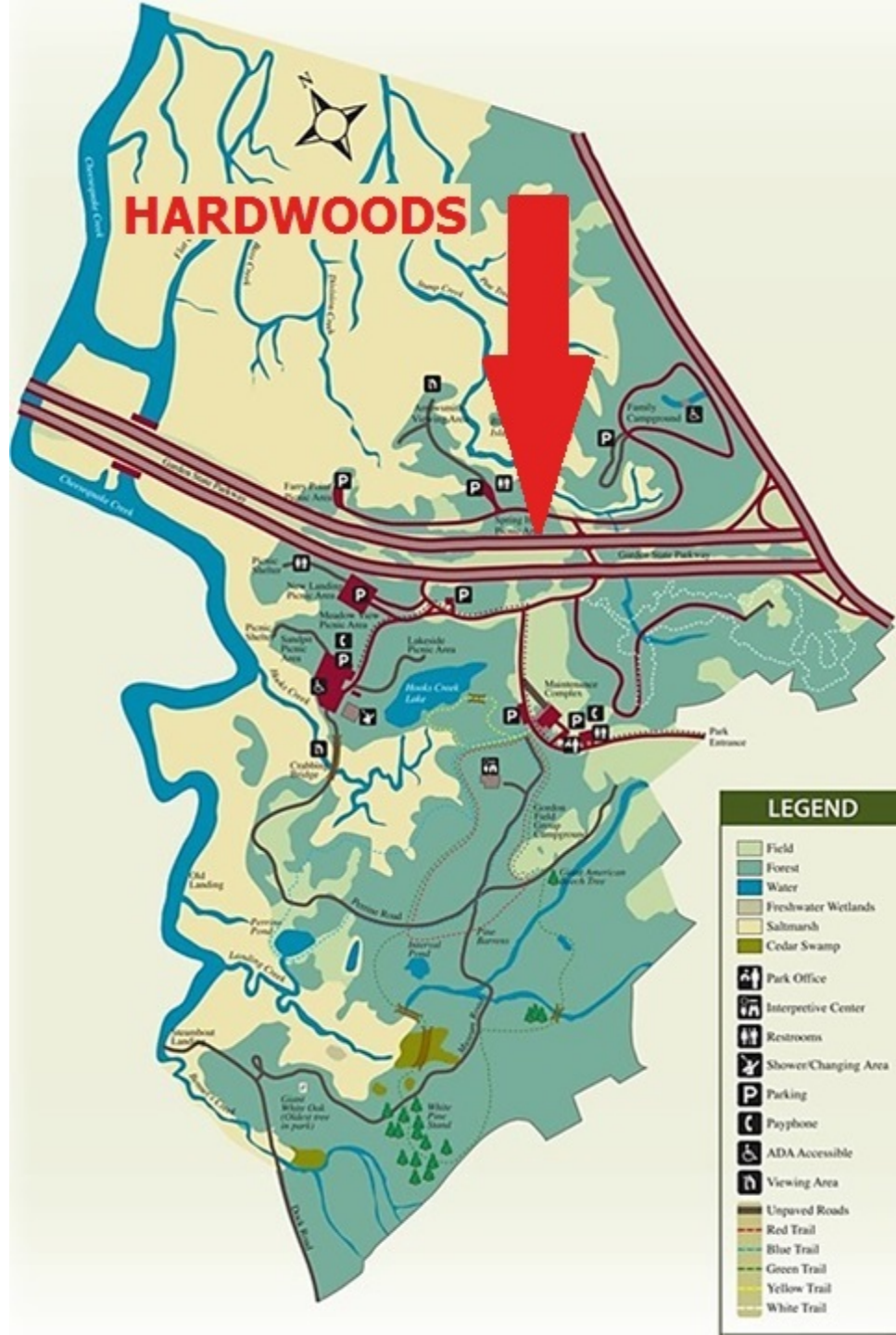
# Recreational Opportunities



# Resource Protection

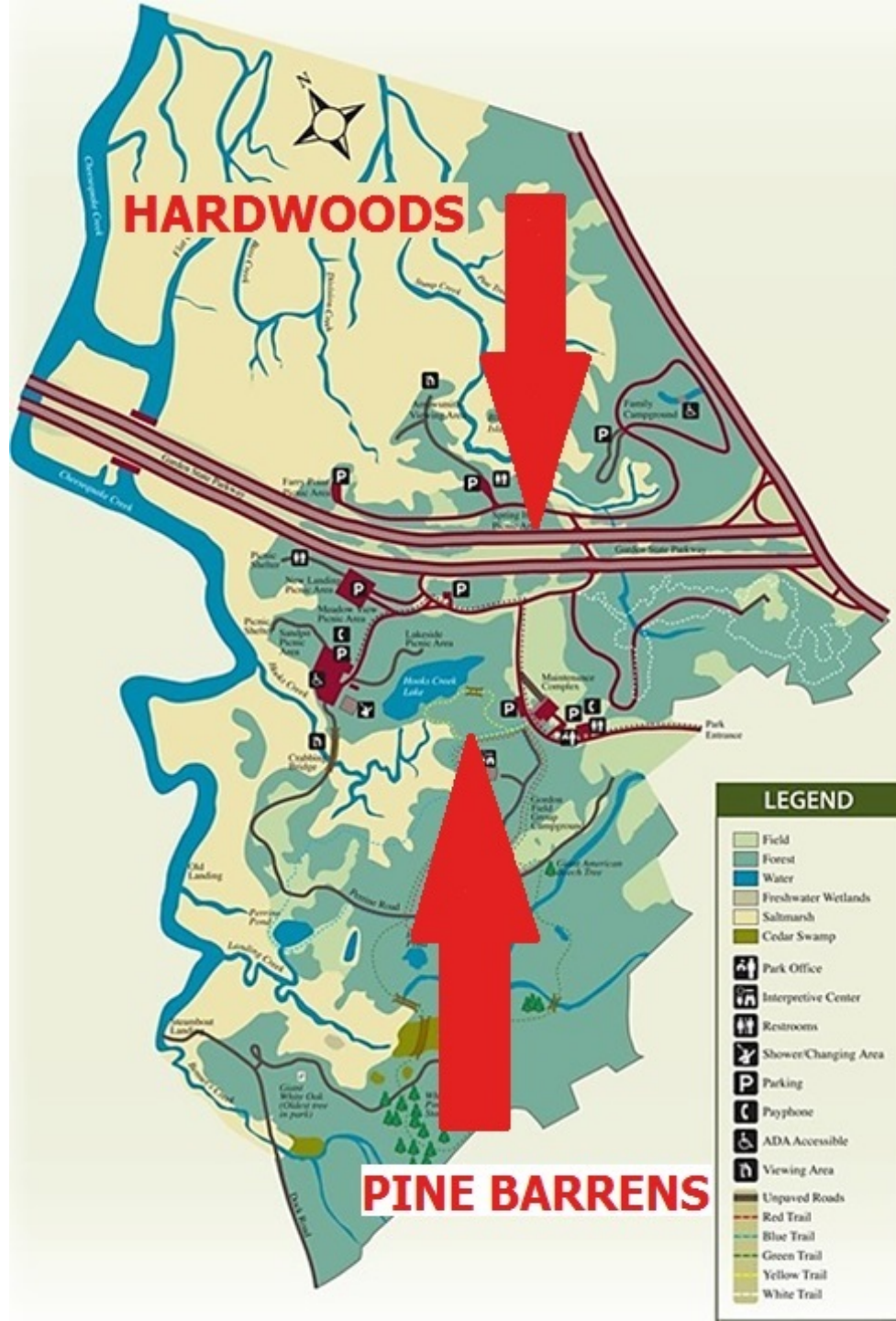


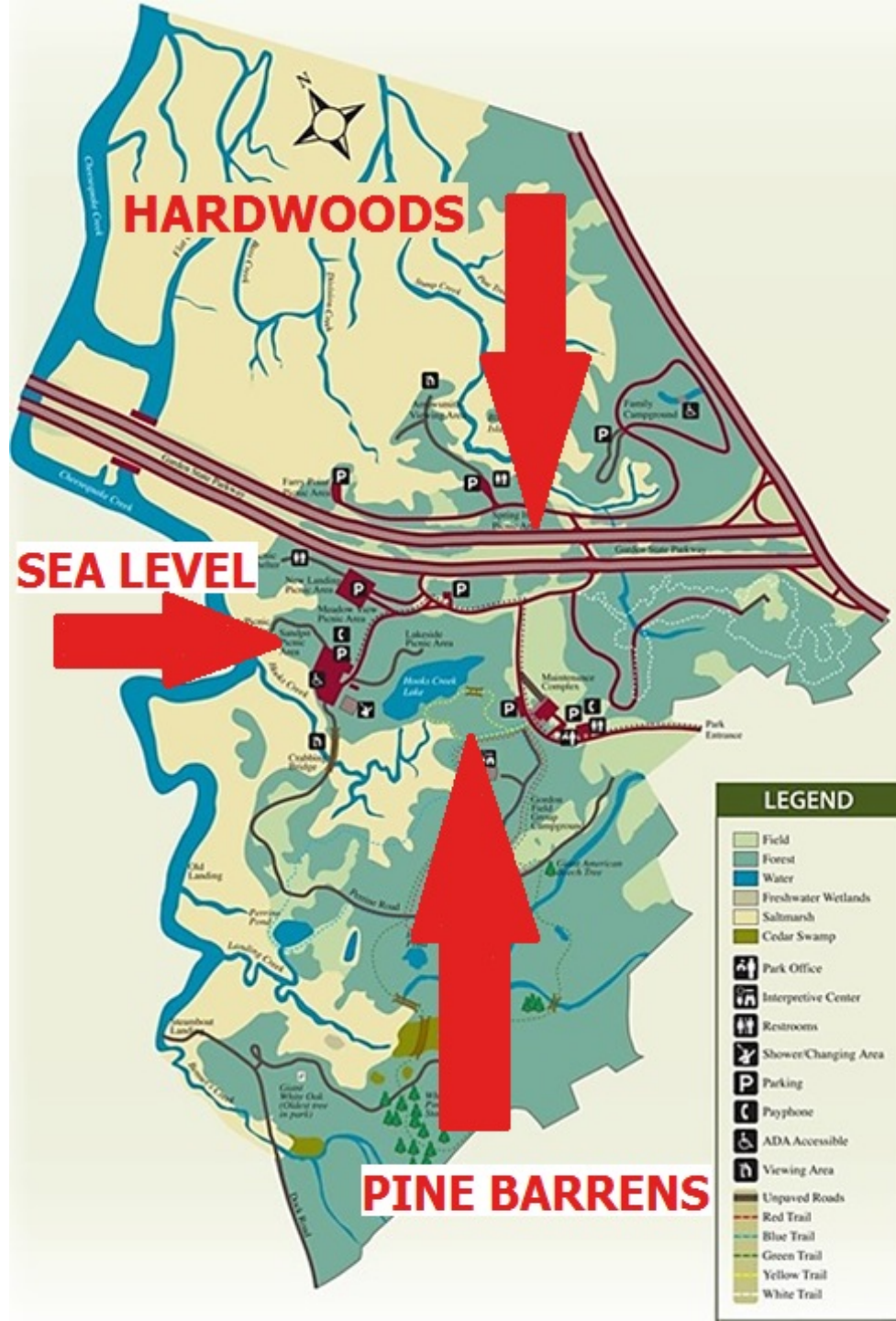




LEGEND	
	Field
	Forest
	Water
	Freshwater Wetlands
	Saltmarsh
	Cedar Swamp
	Park Office
	Interpretive Center
	Restrooms
	Shower/Changing Area
	Parking
	Payphone
	ADA Accessible
	Viewing Area
	Unpaved Roads
	Red Trail
	Blue Trail
	Green Trail
	Yellow Trail
	White Trail







# Angry Birds



# White-tailed Deer



# **Invasive Plant Control Plan**

# **Invasive Plant Control Plan**

**(4) We manage 'Common' Invasive Plants**

# Invasive Plant Control Plan

- (3) We protect Pristine (or Near Pristine) Areas
- (4) We manage 'Common' Invasive Plants

# **Invasive Plant Control Plan**

(2) We perform ED/RR of 'Emerging' Invasives

(3) We protect Pristine (or Near Pristine) Areas

(4) We manage 'Common' Invasive Plants



# **Invasive Plant Control Plan**

- (1) We control the Deer Population
- (2) We perform ED/RR of 'Emerging' Invasives
- (3) We protect Pristine (or Near Pristine) Areas
- (4) We manage 'Common' Invasive Plants





## State Park Service Areas Open To Hunting



Areas	Total Acres	Acres Open to Hunting	Percent Open to Hunting	Deer	Small game	Water Fowl	Turkey
Abram S. Hewitt State Forest	2,059	1,941	94%	●	●		●
Allaire State Park	3,205	1,276	40%	●			
Allamuchy Mountain State Park	9,340	6,122	66%	●	●	●	●
Bass River State Forest	29,334	27,411	93%	●	●	●	●
Belleplaine State Forest	21,822	20,800	95%	●	●	●	
Brendan T. Byrne State Forest	38,315	34,647	90%	●	●	●	●
Cheesequake State Park	1,610	500	31%				
Special Deer Hunt Area		900	56%	SP			
Double Trouble State Park	8,495	7,903	93%	●	●	●	●
D&R Canal State Park	6,922	457	7%	●			
Farmy State Park	4,866	743	15%	●	●		●
Hacklebarney State Park	1,186	835	70%	●	●		●
High Point State Park	16,167	3,497	22%	●	●	●	●
Special Deer Hunt Area		8,000	49%	SP			
Island Beach State Park	3,003	400	13%			■	
Jenny Jump State Forest	4,519	2,885	64%	●	●	●	●
Kittatinny Valley State Park	6,129	2,140	35%	●	●	●	●
Long Pond Ironworks State Park	6,911	1,675	24%	●	●	●	●
Green Turtle Pond	4,068	4,068	100%	●	●	●	●
Monmouth Battlefield State Park	3,026	1,586	52%	SP			
North Brigantine Natural Area	685	685	100%		●	●	
Norvin Green State Forest	5,622	2,455	44%	●	●	●	●
Parvin State Park	2,092	330	16%	●	●		●
Penn State Forest	3,366	3,360	100%	●	●	●	●
Pigeon Swamp State Park	1,120	945	84%	●	●		●
Ramapo Mountain State Forest	4,270	442	10%	●	●	●	●
Rancocas State Park	1,255	626	50%	Bow			
Raritan Confluence	613	332	54%	●	●	●	●
Ringwood State Park	4,441	3,647	82%	●	●	●	●
Round Valley Recreation Area	3,684	1,905	52%	●		■	
Six Mile Run Reservoir Site	2,998	800	27%	Bow			Bow
Spruce Run Recreation Area	2,030	1,300	64%	Bow		■	
Stephens State Park	805	473	59%	●	●		●
Stokes State Forest	16,447	15,077	92%	●	●	●	●
Stow Creek State Park	1,100	1,000	91%	●	●	●	●
Swartswood State Park	3,471	1,558	45%	●	●	●	●
Voorhees State Park	1,342	774	58%	●	●		●
Warren Grove Recreation Area	617	617	100%	●	●		●
Washington Crossing State Park	3,746	200	5%	Bow			
Wawayanda State Park	35,556	33,376	94%	●	●	●	●
Wharton State Forest	123,148	108,895	88%	●	●	●	●
Worthington State Forest	6,701	5,689	85%	●	●	●	●
<b>Total Acreage Open to Hunting</b>	<b>445,409</b>	<b>312,272</b>	<b>70%</b>				

Note: The 312,202 acres open to hunting represents 70% of the total 445,409 acres administered by the State Park Service

- Permitted in accordance with NJ Div. of Fish and Wildlife regulations
- Hunting permitted below high water line
- SP Special Hunting by permit only
- Bow Bow Hunting Only



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How did Cheesequake  
start a Deer Management Plan?



# Distance Sampling



## **Distance sampling**

-is a method of estimating population abundance and density of white-tailed deer by counting them at night over a pre-determined area before birthing.

# New Jersey Hunting & Trapping Digest

August 2015



Highlights of  
Regulation  
Changes

page 6



A Summary of Regulations  
and Wildlife Management Information  
[NJFishandWildlife.com](http://NJFishandWildlife.com)



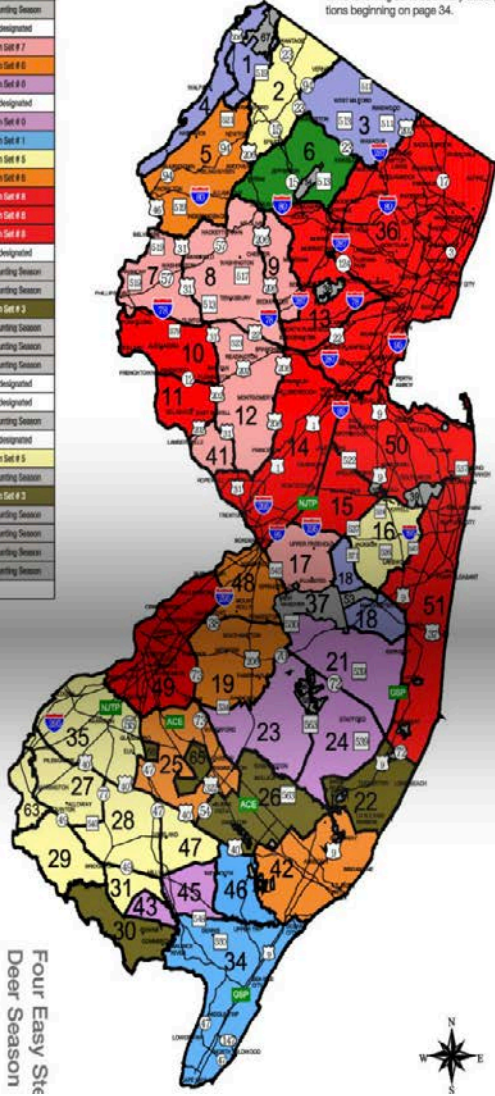
# New Jersey Deer Management Zones\*

\* Map is for reference only. Use a county map or see NJFishandWildlife.com/hrs while following zone boundary descriptions beginning on page 34.

**Reference Chart**

Area and bag limits, see  
1 in Regulator Sets  
only on page 44.

quadrant Set # 6
Area Hunting Season
Area Hunting Season
Area Hunting Season
Area Hunting Season
is not designated
quadrant Set # 7
quadrant Set # 8
is not designated
quadrant Set # 9
quadrant Set # 10
quadrant Set # 11
quadrant Set # 12
quadrant Set # 13
quadrant Set # 14
quadrant Set # 15
is not designated
Area Hunting Season
Area Hunting Season
quadrant Set # 16
Area Hunting Season
Area Hunting Season
Area Hunting Season
Area Hunting Season
Area Hunting Season
is not designated
is not designated
Area Hunting Season
is not designated
is not designated
quadrant Set # 17
Area Hunting Season
quadrant Set # 18
Area Hunting Season
Area Hunting Season
Area Hunting Season
Area Hunting Season



**Four Easy Steps  
Deer Season**  
Start with this map on

SEP 12 - OCT 3

Autumn Bow (7 wks)

SEP 12 - OCT 3

Autumn Bow (7 wks)

OCT 31 - DEC 31

Permit Bow (9 wks)

SEP 12 - OCT 3

Autumn Bow (7 wks)

OCT 31 - DEC 31

Permit Bow (9 wks)

JAN 1 - FEB 20

Winter Bow (7 wks)

SEP 1-8

7-day name drop off

SEP 12 - OCT 3

Autumn Bow (7 wks)

OCT 31 - DEC 31

Permit Bow (9 wks)

JAN 1 - FEB 20

Winter Bow (7 wks)



SEP 1-8

7-day name drop off

SEP 9 (2 days after Labor Day)

Lottery names are pulled

SEP 12 - OCT 3

Autumn Bow (7 wks)

OCT 31 - DEC 31

Permit Bow (9 wks)

JAN 1 - FEB 20

Winter Bow (7 wks)

NJ Department of Environmental Protection  
 Cheesequake State Park  
 2015 Deer Management Program  
**Hunter Agreement Sheet**

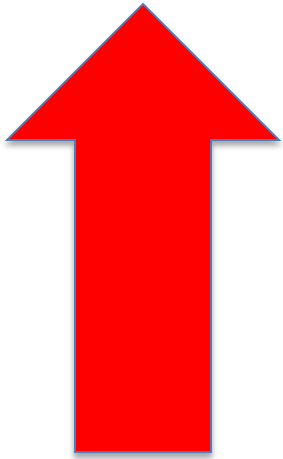
Name		Special Bow Permit #
Daytime Phone #	E-Mail Address	
Vehicle year / make / model	license plate #	
<b><i>In receipt of a Special Bow Permit to hunt deer at Cheesequake State Park, I have read, understand and I agree to:</i></b>		
- abide by all safety standards and realize that any violations could cause forfeiture of permit.		
- hunt only with bow and arrow and/or crossbow for deer.		
- be responsible to know all Park boundaries, safety zones and restricted areas.		
- follow all current NJ Hunting rules & regulations.		
- follow all Cheesequake State Park rules & regulations.		
- park my vehicle in designated areas marked on the special Park map with my Dashboard Permit visible at all times; while not blocking access to roads or gates.		
- carry the Wallet Permit with me at all times while hunting.		
- <del>not</del> hunt within 150' from occupied buildings and structures as outlined on the hunting map.		
- <del>not</del> hunt within 120' of any road or hiking/biking trail.		
- be aware of and show respect for all other Park users; hikers, dog walkers, bicyclists, etc.		
- <del>not</del> hunt in Farry Pt., Spring Hill, Family Camp or Group Camp area until Sunday, Nov 1.		
- understand that baiting is legal, but not encouraged.		
- use only clips, twist ties, or tape to mark access routes and remove all items from the Park within ten (10) days of the end of the hunt. (Reflective tacks and permanent paint or markers are not permitted and stands using them will be confiscated.)		
- use only commercially-manufactured stands and or access devices, that attach to <del>the</del> tree by cable or strap, and not by screw, and are a minimum of 6' off of the ground.		
- <del>use</del> a maximum of two (2) stands, mark my stand(s) with my Special Permit # in an obvious location, in characters that are visible from the ground. (Unidentified stands will be <del>confiscated</del> , stands can stay up until ten (10) days after the hunt is over.)		
- <del>not</del> walk while hunting while in the Park.		
- <del>not</del> bring anyone along with me that does not also have a Special Bow Permit.		
- use only carts that are non-motorized to move my stand or retrieve my deer.		
- close and lock all gates behind myself every time when entering and exiting.		
- cover all entrails with leaves, etc. and not bury them or disturb the soil in any way.		
- report all harvests through the F&W Automated Harvest Report System (DMZ 50, Middlesex County, Old Bridge TWP, DMU 245) and then contact the Park Office within 24 hours stating doe or buck (pts?) and date harvested to assist with our monitoring program.		
- return my permit to the Park Office, if I decide I no longer wish to hunt. The Park office will <del>choose</del> another applicant to use it for the remainder of the season.		
- <del>end</del> all hunting when informed that 25 total deer are harvested or if the Park Superintendent <del>decides</del> to end the hunt at any other time.		
name		date



Bow only

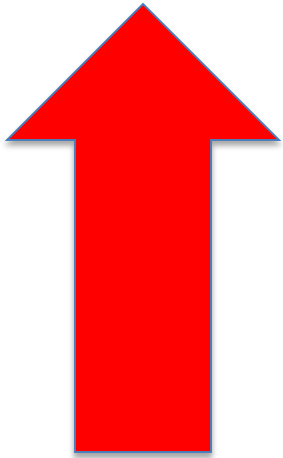


Bow only



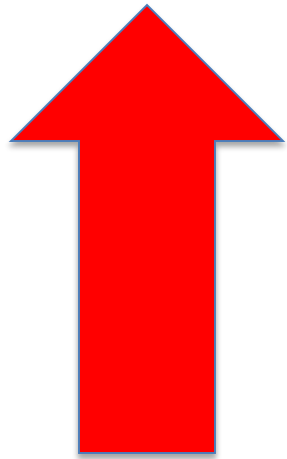
Bow only

Minimum  
6' off the  
ground

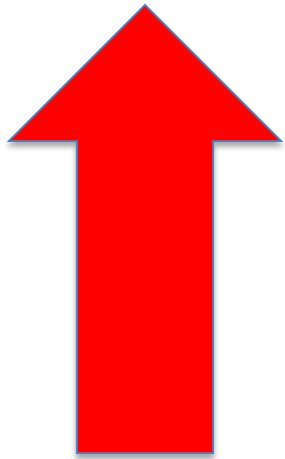


Bow only

Minimum  
6' off the  
ground



Minimum  
6' off the  
ground



Bow only

If the shot misses,  
it goes into the ground

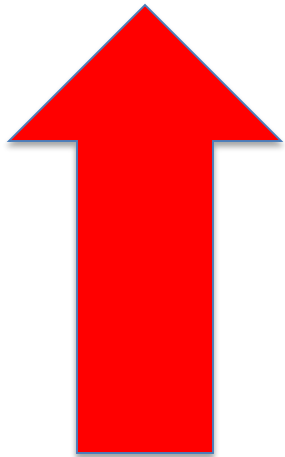




Bow only



Minimum  
6' off the  
ground



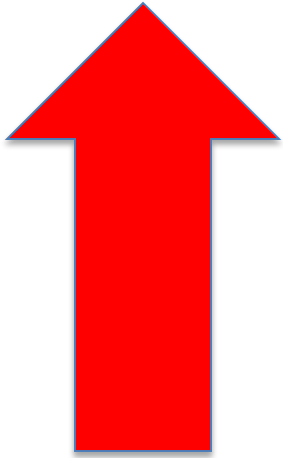
If the shot misses,  
it goes into the ground



120'  
from trail



Minimum  
6' off the  
ground



Bow only



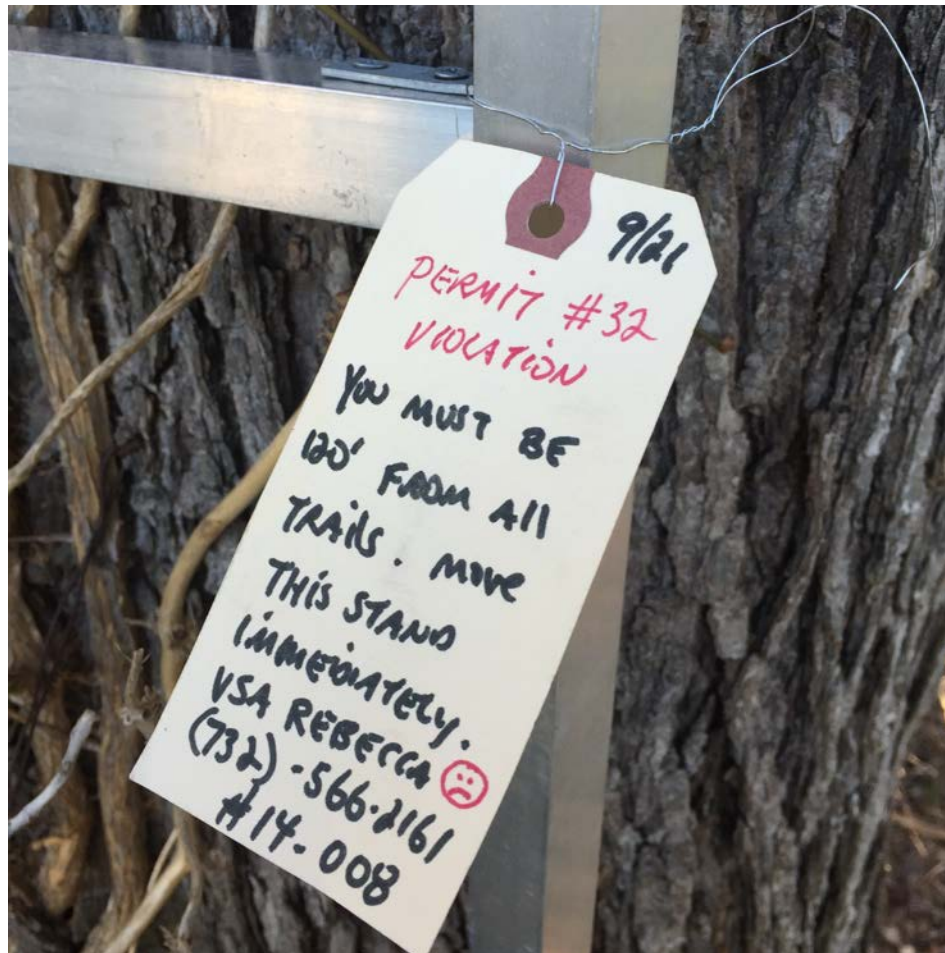
If the shot misses,  
it goes into the ground



# Lock with Combination



# Violation Notices





**BOW  
HUNTING  
IN PROGRESS**

**EXCEPT  
SUNDAYS**

# White-tailed Deer Management Fence Project #5

Deer are Cheesapeake's largest mammal. It is always a delight when you happen upon a herd in the Park, however a lack of natural predators have let the deer population increase above their normal levels.

Some of the negative effects of too many deer include: increased cases of Lyme disease, automobile accidents, landscape property damage as well as the destruction of the capacity of our forests to produce the next generation of wildflowers, shrubs and trees.

Degraded forests are also impaired in their ability to sequester carbon, absorb rainfall, and offset global warming.

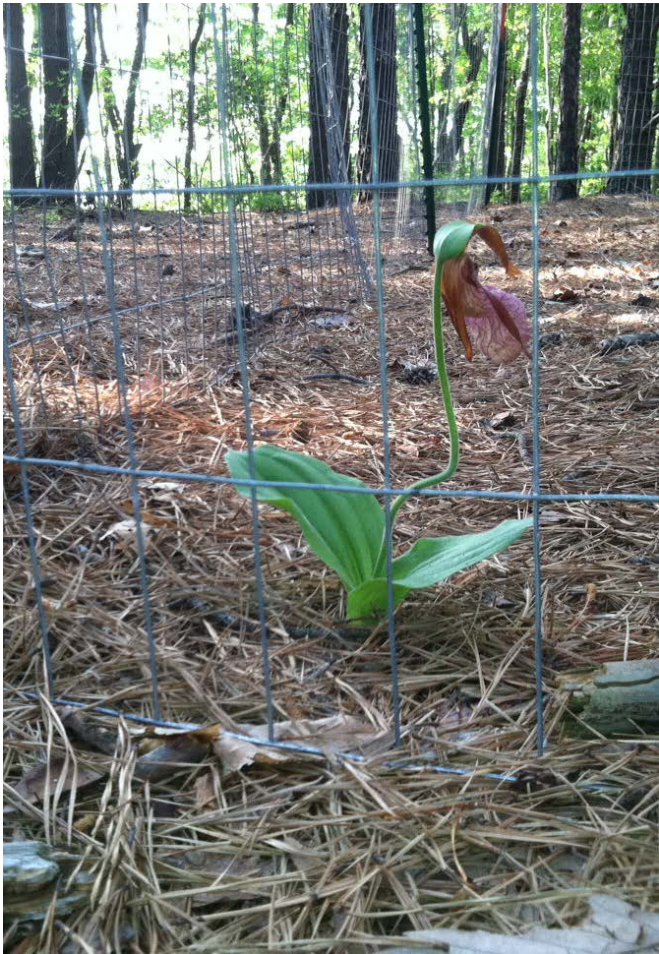
The purpose of this simple fence is to help research deer feeding patterns. This will allow us to decide what impact the deer are having on the Park and what type of population control measures are needed.

For more info, contact the office (732) 566-2161.





2 Pink Lady Slipper



2 Pink Lady Slipper

310 Pink Lady Slipper





Homework assignment!

Homework assignment!

CSPsupt@optonline.net