

# CATHANCE DEER WINTERING AREA STUDY

**Problem:** Are there known, or possible, Deer Wintering Areas located on the Cathance Preserve?

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**Hypothesis:** If possible deer wintering areas are located on the Preserve, then they will have common and unique features.

**Procedure:**

1. Locate possible wintering areas on aerial map based upon the high softwood density.
2. Take GPS coordinates of possible wintering area.
3. Measure canopy coverage with a densiometer.
4. Find dominant tree type and species using an angle-gauge.
5. Use a clinometer to measure the dominant and co-dominant tree species.
6. Find slope aspect of the area.
7. Measure the diameter of soft-wood trees using a diameter tape.
8. Determine if measurements yield possible deer wintering area.

Deer Wintering Area Summary Data Table

Site and date observed	Location	Slope Aspect (Direction and Degrees)	Distance to Water (meters)	% Softwood	% Canopy Closure	Dominant/Co-dominant Tree Height (ft)	Average Tree Diameter	Observed Signs	Stand Type
1 (9/14)	Near 1st road	S (180°)	10m	95%	88%	30 ft	4 inches	3 droppings	Softwood
2 (10/7)	Near 1st road	N.W. (315°)	53m	92%	69%	43 ft	8 inches	4 droppings	Softwood
3 (10/16)	Near 1st road	S.E. (135°)	25m	90%	77%	35 ft	6 inches	10 droppings	Softwood
4 (10/24)	Near 1st road	N.E. (45°)	15m	87%	76%	84 ft	20 inches	None	Softwood



Jake observing a possible deer wintering area



Jake and Joe taking GPS coordinates of possible Deer Wintering Area



Aerial Map showing locations of the four sites examined.

Rating Summary Table  
(1=meets)  
(0.5=partially meets)  
(0=doesn't meet)

Wintering Area Features	Site 1	Site 2	Site 3	Site 4
Slope Aspect	0	1	1	1
% of Softwood	1	1	1	1
Canopy Closure	0	0	0.5	0
Dom. Tree Height	1	1	1	1
<b>Total Score</b>	<b>2</b>	<b>3</b>	<b>3.5</b>	<b>3</b>

Thanks:

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**Conclusions:**

The Preserve does contain good sources of food, water, and browse for deer. However, The Cathance Preserve currently has no known deer wintering areas. Although, there were four sites found that have great potential to become deer wintering areas. The cumulative data for three of the four possible wintering areas, came close to the the wintering area standards of the Maine Inland Fisheries and Wildlife. They were only off by one or two standards.