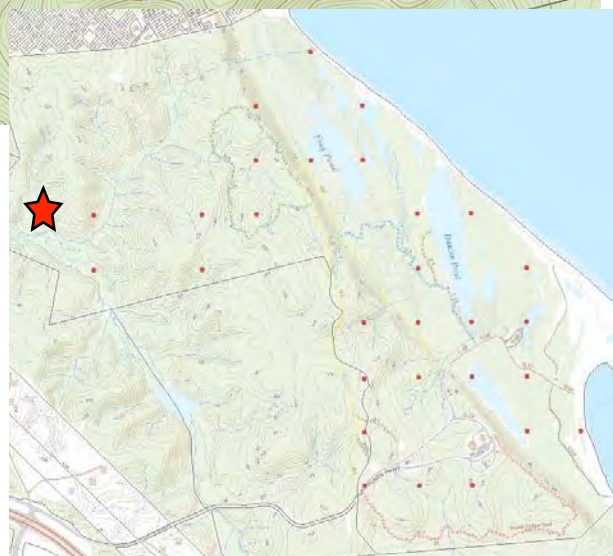


**Site Description (Date Located 3/24/2016):**

B5 is the most distant of any sites from trail access. It is located 4700 feet west of North Loop Trail. There are many intervening downed trees throughout the area, particularly along ridge crests which become difficult to cross. An easier, but longer, route was found by proceeding westward from North Loop Trail to the second ravine, which dips to the north. It then bends to the west and leads onto the floodplain. The stream is fordable at this point, and the floodplain provides access to B5, C5, and C6. Follow the west side of the stream southward around a bend heading west. From this point on rubber boots are necessary. B5 can be reached overland, but only by going through thick groves of *Kalmia latifolia*. Turning north at the next drainage valley to the west leads to the stake located on the lower slope of the shoulder, and surrounded by *Kalmia latifolia*. A general review of the near vicinity indicated a poor correlation with the plants found in the 1990 plant survey. The floodplain area to the west and south seem much more likely spots for the 1990 survey. It should be noted that 1993 base maps indicate an extensive beaver pond existed throughout that area, which would have affected the vegetation at that time.



<b>B5 Species (Herbaceous)</b>	<b>1990</b>	<b>2016</b>	<b>2016 alt.</b>
<i>Aster sp.</i>	X		
<i>Certophyllum demersum</i>	X		
<i>Equisetum sp.</i>	X		
<i>Galium sp.</i>	X		
<i>Impatiens carpensis</i>	X		
<i>Persicaria maculosa</i> (formerly <i>Polygonum persicaria</i> )	X		
<i>Persicaria virginiana</i> (formerly <i>Tovara virginiana</i> )	X		
<i>Podophyllum peltatum</i>	X		
<i>Ranunculus sp.</i>	X		
<i>Saururus cernuus</i>	X		
<i>Symplocarpus foetidus</i>	X	X	
<i>Viola sp.</i>	X		

<b>B5 Species (Trees, Shrubs, &amp; Vines)</b>	<b>1990</b>	<b>2016</b>	<b>2016 alt.</b>
<i>Acer rubrum</i>	X	X	
<i>Asimina triloba</i>	X	X	
<i>Carpinus caroliniana</i>	X	X	
<i>Cornus florida</i>	X		
<i>Fraxinus pennsylvanica</i>	X	X	
<i>Ilex opaca</i>	X	X	
<i>Kalmia latifolia</i>		X	
<i>Lindera benzoin</i>	X		
<i>Liquidambar styraciflua</i>	X		
<i>Liriodendron tulipifera</i>	X	?	
<i>Prunus virginiana</i>	X		
<i>Ulmus americana</i>	X		



B/B5  
Latitude: 38 27.165  
Longitude -76 28.343W



1990 - 2016 Grid Site  
Views from Grid Point (3/24/2016)



View North



View West

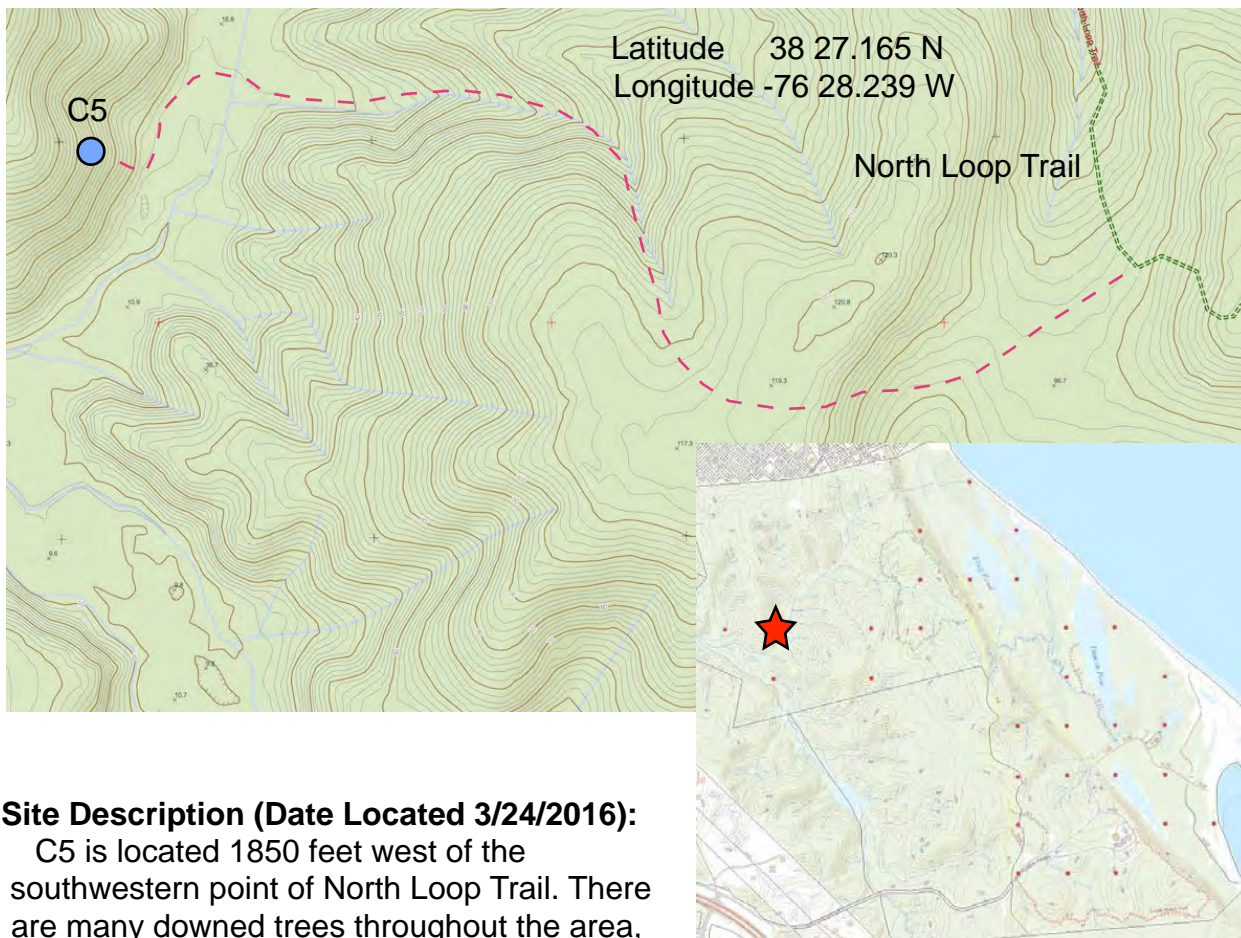


View East



View South





**Site Description (Date Located 3/24/2016):**

C5 is located 1850 feet west of the southwestern point of North Loop Trail. There are many downed trees throughout the area, particularly along ridge crests which become difficult to cross. An easier, but longer, route was found by proceeding westward from North Loop Trail to the second ravine, which dips to the north. It then bends to the west and leads onto the floodplain. The stream is fordable at this point, and the floodplain provides access to B5, C5, and C6. Follow the west side of the stream southward to a point just south of a small floodplain embayment on the west. The stake is located halfway up the slope. There are several downed trees in the immediate vicinity of the site. A general review of the near vicinity indicated a poor correlation with the plants found in the 1990 plant survey. Based on the plants reported, more probable areas for the 1990 survey are on the floodplain to the east or in the small embayment just north of the stake. Because survey was done in March herbaceous plants were not found.

<b>C5 Species (Herbaceous)</b>	<b>1990</b>	<b>2016</b>	<b>2016 alt.</b>
<i>Arisaema atrorubens</i> (2017 classified with <i>Arisaema triphyllum</i> )	X		
<i>Arisaema triphyllum</i>	X		
<i>Aster sp</i>	X		
<i>Desmodium nudiflorum</i>	X		
<i>Fragaria virginiana</i>	X		
<i>Galearis spectabilis</i> (formerly <i>Orchis spectabilis</i> )	X		
<i>Galium circaezans</i>	X		
<i>Podophyllum peltatum</i>	X		
<i>Ranunculus arbortivus</i>	X		
<i>Viola sp</i>	X		

<b>C5 Species (Trees, Shrubs, &amp; Vines)</b>	<b>1990</b>	<b>2016</b>	<b>2016 alt.</b>
<i>Acer rubum</i>	X		
<i>Asimina triloba</i>	X		
<i>Carpinus caroliniana</i>	X	X	
<i>Carya glabra</i>	X		
<i>Euonymus americanus</i>		X	
<i>Fagus grandifolia</i>	X	X	
<i>Ilex opaca</i>	X	X	
<i>Kalmia latifolia</i>		X	
<i>Linderea benzoin</i>	X		
<i>Liquidambar styraciflua</i>	X	X	
<i>Liriodendron tulipifera</i>	X	X	
<i>Nyssa sylvatica</i>	X	?	
<i>Quercus montana</i> (formerly <i>Quercus prinus</i> )	X	?	
<i>Viburnum acerfolium</i>	X		



B/C5  
Latitude: 38 27.165N  
Longitude -76 28.239W



1990 - 2016 Grid Site  
Views from Grid Point (3/24/2016)



View North



View West

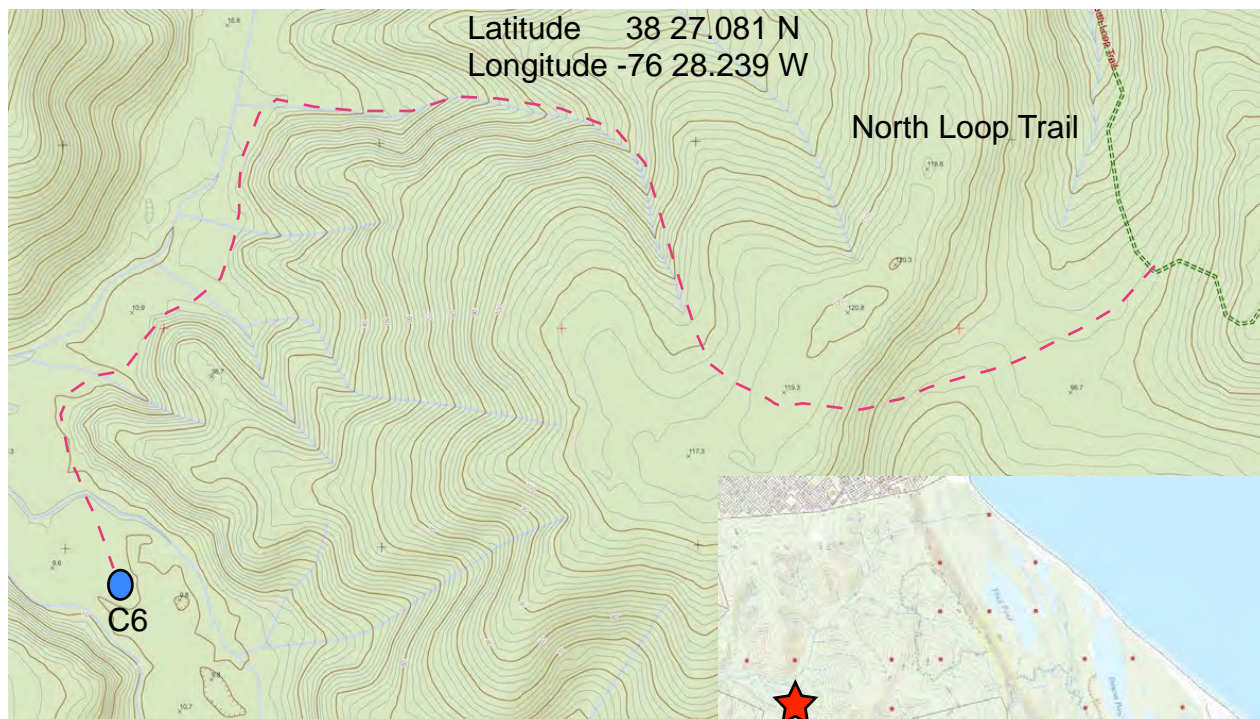


View East

View South







**Site Description (Date Located 3/24/2016):**

C6 is located in the middle of the stream floodplain about 1300 feet south-southwest of North Loop Trail. There are many downed trees throughout the area, particularly along ridge crests which become difficult to cross. An easier, but longer, route was found by proceeding westward from North Loop Trail to the second ravine, which dips to the north. It then bends to the west and leads onto the floodplain. The floodplain provides access to B5, C5, and C6. To reach C6, rubber boots are advisable, but the site can be reached by hugging the east side of the floodplain southward before crossing the stream on a downed tree. An alternative access can be made from North Loop Trail by, instead of following the ravine to the north, continuing southwesterly and descending the slope to the floodplain. A general review of the near vicinity indicated a reasonable correlation with the plants found in the 1990 plant survey, but not the immediate site. Because the survey was done in March herbaceous plants are limited.

<b>C6 Species (Herbaceous)</b>	<b>1990</b>	<b>2016</b>	<b>2016 alt.</b>
<i>Arisaema sp.</i>	X		
<i>Aster sp.</i>	X		
<i>Caltha palustris</i>	X		
<i>Cryptotaenia canadensis</i>	X		
<i>Impatiens capensis</i>	X		
<i>Ranunculus sp.</i>	X		
<i>Ranunculus arbortivus</i>	X		
<i>Ranunculus septentrionalis</i>	X		
<i>Saururus cernuus</i>	X		
<i>Symplocarpus foetidus</i>	X	X	
<i>Persicaria virginiana</i> (formerly <i>Tovara virginiana</i> )	X		
<i>Viola sp</i>	X	X	

<b>C6 Species (Trees, Shrubs, &amp; Vines)</b>	<b>1990</b>	<b>201</b>	<b>2016 alt.</b>
<i>Acer rubrum</i>	X	X	
<i>Asimina triloba</i>	X		
<i>Carpinus caroliniana</i>	X		
<i>Diospyros virginiana</i>		X	
<i>Fagus grandifolia</i>	X		
<i>Fraxinus pennsylvanica</i>	X	X	
<i>Lindera benzoin</i>	X		
<i>Liquidambar styraciflua</i>	X		
<i>Nyssa sylvatica</i>	X		
<i>Platanus occidentalis</i>		X	
<i>Toxicodendron radicans</i> (formerly <i>Rhus radicans</i> )	X	X	
<i>Smilax rotundifolia</i>	X		



B/C6  
Latitude: 38 27.081N  
Longitude -76 28.239W



1990 - 2016 Grid Site  
Views from Grid Point (3/24/2016)



View North



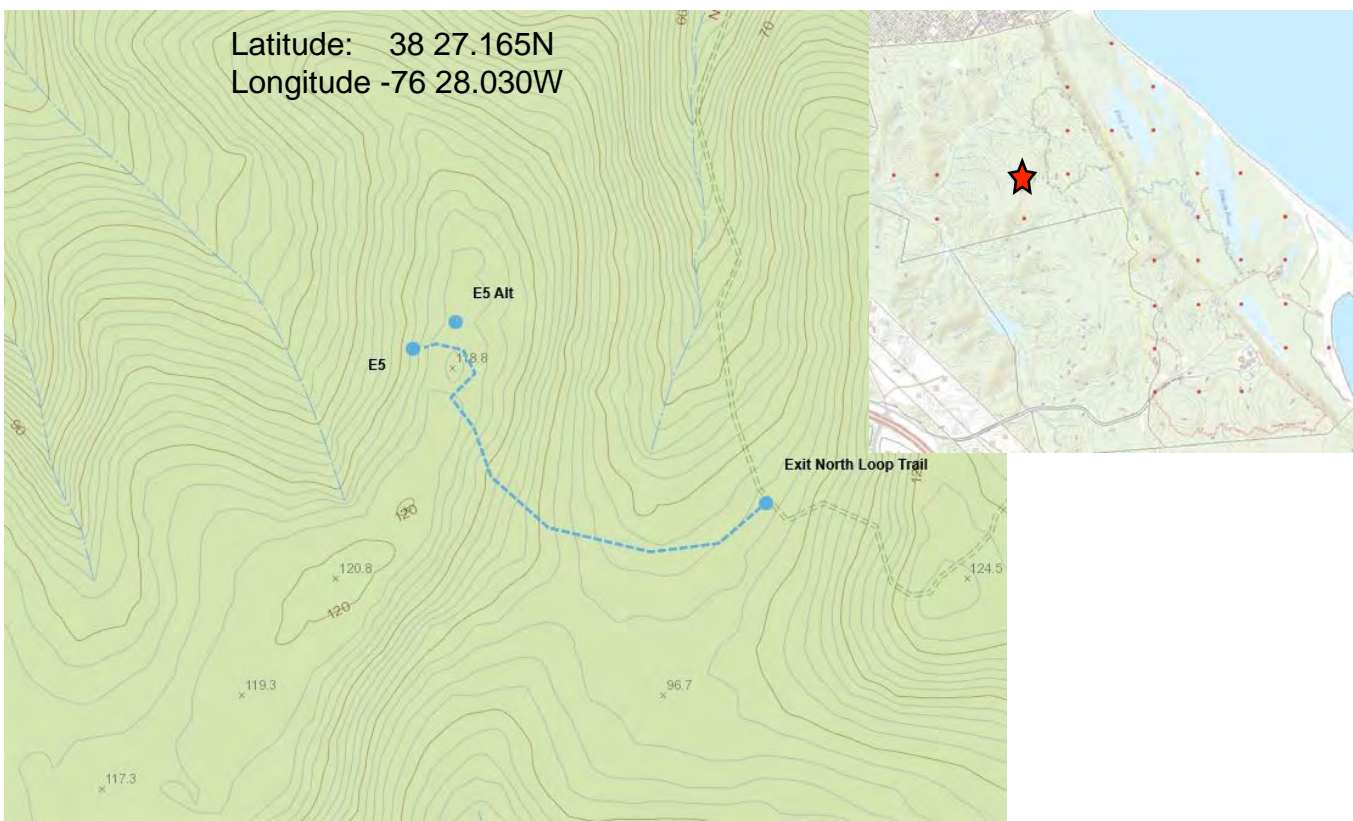
View West



View East



View South



**Site Description (Date Located 3/30/2016):**

Site is located approximately 250 feet west of North Loop Trail, just west of the ridge crest among large downed trees. Route requires climbing over some downed trees to get there and the adjoining ridge crest is characterized by many downed trees. A general review of the near vicinity indicated a poor correlation with the plants found in the 1990 survey. A nearby alternative location 53 feet to the north on the ridge crest at N38° 27.173' W76° 28.027' had many downed pine trees and appears more likely to be the site of the 1990 plant survey.

The table shows woody plants of the uplands found in 1990 and 2016. The only herbaceous plant listed for 1990 was *Mitchella repens* which is abundant in the uplands of Flag Ponds; other herbaceous plants found in 2016 include *Carex* sp., *Polystichum acrostichoides* and *Taraxacum officinale*. The presence of *Quercus falcata* was only confirmed by leaves on the ground. *Pinus virginiana* was only seen as dead logs in the alternate location. Perhaps the most significant change was the presence of the invasive *Rubus phoenicolasius*.

E5 Species (Herbaceous)	1990	2016	2016 alt.
<i>Carex sp.</i>		X	
<i>Mitchella repens</i>	X	X	
<i>Polystichum acrostichoides</i>		X	
<i>Taraxacum officinale</i>		X	

E5 Species (Trees, Shrubs, & Vines)	1990	2016	2016 alt.
<i>Acer rubrum</i>	X	X	
<i>Amelanchier sp.</i>	X	?	
<i>Asimina triloba</i>		X	
<i>Carpinus caroliniana</i>	X	X	
<i>Cornus florida</i>	X		
<i>Fagus grandifolia</i>	X	X	
<i>Ilex opaca</i>	X	X	
<i>Kalmia latifolia</i> (dead)		X	
<i>Liquidambar styraciflua</i>	X	X	
<i>Liriodendron tulipifera</i>	X	X	
<i>Nyssa sylvatica</i>	X		
<i>Pinus taeda</i> (sapling)		X	X
<i>Pinus virginiana</i>	X	dead	logs
<i>Prunus virginiana</i>	X		
<i>Quercus falcata</i>	X	?	
<i>Rubus phoenicolasius</i>		X	
<i>Viburnum acerfolium</i>	X		



B/E5  
Latitude: 38 27.165N  
Longitude -76 28.030W



1990 - 2016 Grid Site  
Views from Grid Point (3/30/2016)



View North



View West

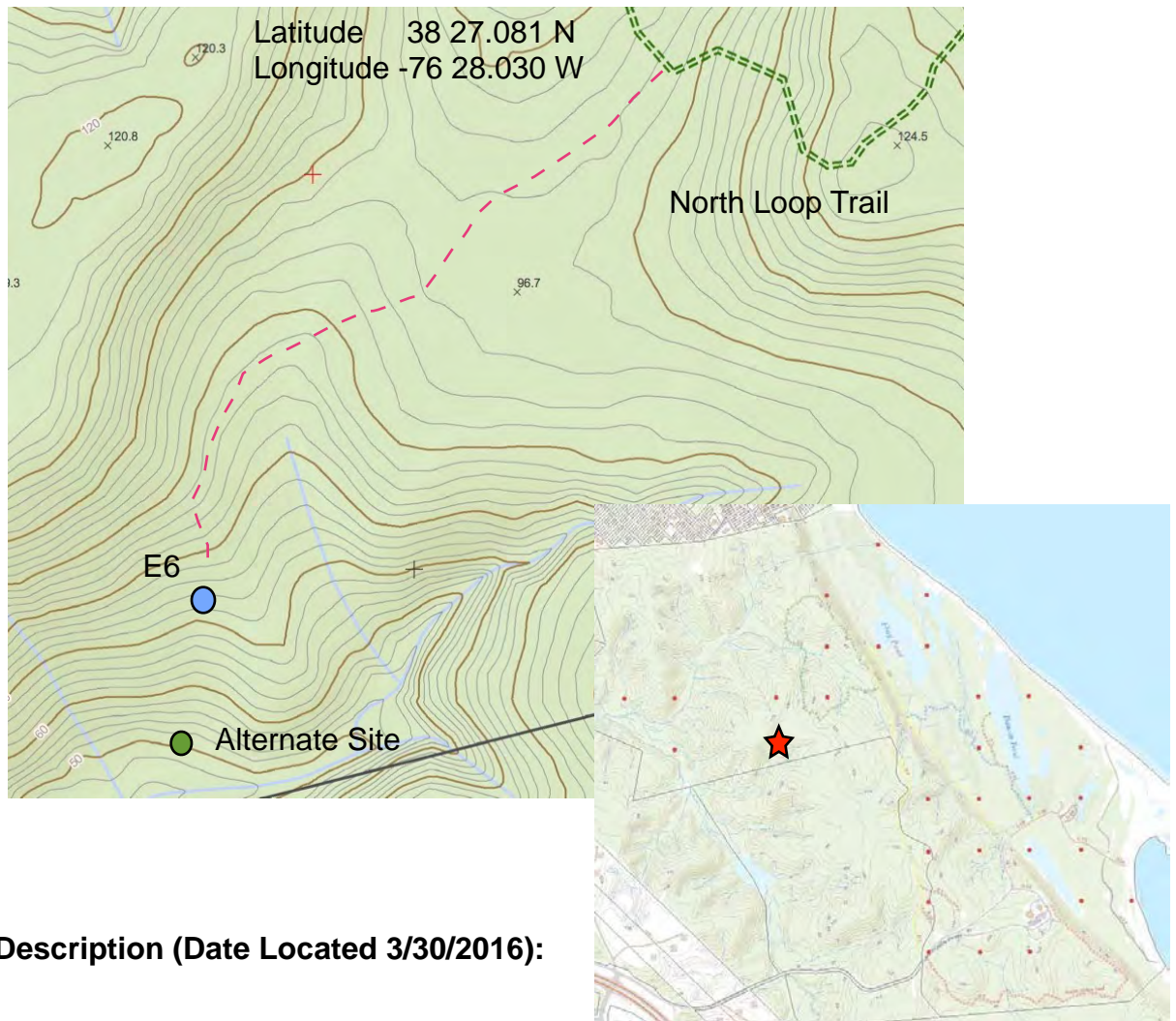


View East



View South

B/E6 (1990-2016 Site)



**Site Description (Date Located 3/30/2016):**

Site is located 480 feet southwest of North Loop Trail. Route requires climbing over or going around some downed trees to get there. The stake is found in a small gently dipping drainage hollow on the lower slope. A general review of the near vicinity indicated a poor correlation with the 1990 plant survey. However, a nearby alternative location 90 feet to the south at N38° 27.066' W76° 28.030' appears more likely to be the site of the 1990 plant survey. This site needs to be reviewed as there is uncertainty as to which plants in the 2016 survey were in the original and/or the alternate site.

<b>E6 Species (Herbaceous)</b>	<b>1990</b>	<b>2016</b>	<b>2016 alt.</b>
<i>Allium sp.</i>	X		X
<i>Arisaema sp.</i>	X		
<i>Aster sp.</i>	X		
<i>Desmodium nudiflorum</i>	X		
<i>Podophyllum peltatum</i>	X		
<i>Polystichum acrostichoides</i>	X		X
<i>Viola conspersa</i>	X		X
<i>Mitchella repens</i>			X
<i>Oxalis sp.</i>			X
<i>Obolaria virginica</i>			X

<b>E6 Species (Trees, Shrubs, &amp; Vines)</b>	<b>1990</b>	<b>2016</b>	<b>2016 alt.</b>
<i>Acer rubrum</i>	X		X
<i>Asimina triloba</i>	X		X
<i>Carpinus caroliniana</i>	X		X
<i>Cornus florida</i>	X		X
<i>Euonymus americanus</i>			X
<i>Fagus grandifolia</i>	X		X
<i>Ilex opaca</i>	X	X	X
<i>Liquidambar styraciflua</i>	X		
<i>Liriodendron tulipifera</i>	X		X
<i>Prunus virginiana</i>	X		X
<i>Quercus rubra</i>	X		X
<i>Ulmus rubra</i>			X
<i>Viburnum acerfolium</i>	X		



B/E6  
Latitude: 38 27.081N  
Longitude -76 28.030W



1990 - 2016 Grid Site  
Views from Grid Point (3/30/2016)



View North



View West



View East

View South

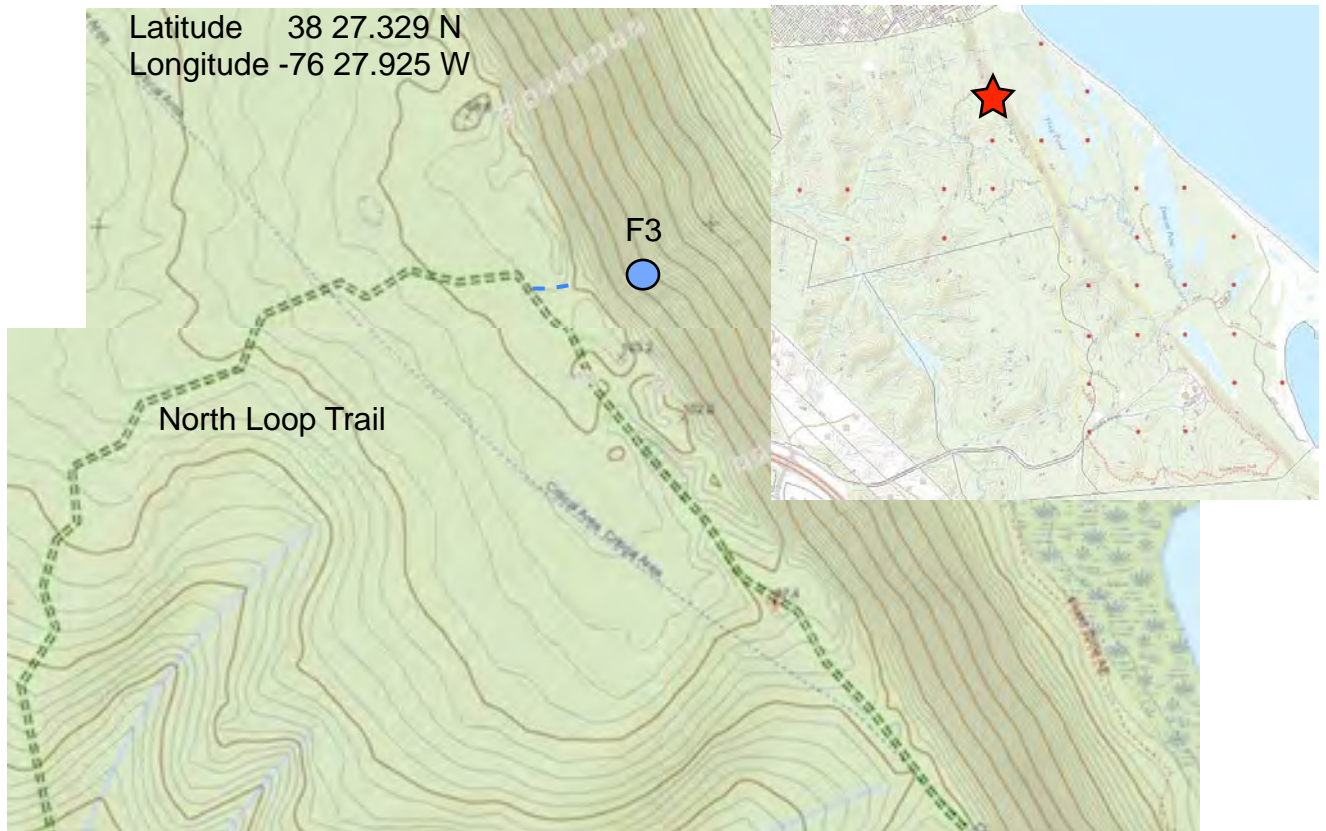


View of alternate site S of E6





## B/F3 (1990-2016 Site)



### Site Description (Date Located 3/01/2016):

Site is located at northeastern corner of North Loop Trail, and is not accessible except by a steep climb partway down the cliff. It is located in a steep, rather narrow drainage ravine going downhill to the bottomland. A stake is located at the edge of the cliff 30 feet west of the site. A general review of the near vicinity using binoculars indicated a reasonable correlation with the 1990 plant survey. Because the survey was done in early March the herbaceous plants may not be accounted for in the 2016 survey.



<b>F3 Species (Herbaceous)</b>	<b>1990</b>	<b>2016</b>	<b>2016 alt.</b>
<i>Arisaema sp.</i>	X		
<i>Aster sp.</i>	X		
<i>Cardamine diphylla</i> or <i>Cardamine concatenata</i> (formerly <i>Dentaria diphylla</i> ) See plant list	X		
<i>Gallium sp.</i>	X		
<i>Podophyllum peltatum</i>	X		
<i>Polystichum acrostichoides</i>	X	X	
<i>Ranunculus abortivus</i>	X		
<i>Viola rotundifolia</i>	X		

<b>F3 Species (Trees, Shrubs, &amp; Vines)</b>	<b>1990</b>	<b>2016</b>	<b>2016 alt.</b>
<i>Asimina triloba</i>	X		
<i>Carpinus caroliniana</i>	X		
<i>Cornus florida</i>	X	X	
<i>Fagus grandifolia</i>	X	X	
<i>Fraxinus pennsylvanica</i>	X		
<i>Ilex opaca</i>			
<i>Liquidambar styraciflua</i>	X	X	
<i>Liriodendron tulipifera</i>	X		
<i>Prunus virginiana</i>	X		
<i>Quercus rubra</i>	X	X	

B/F3  
Latitude: 38 27.329N  
Longitude -76 27.925W



1990 - 2016 Grid Site  
Views from cliff edge 30 feet west  
of site (3/1/2016)



View North



View West



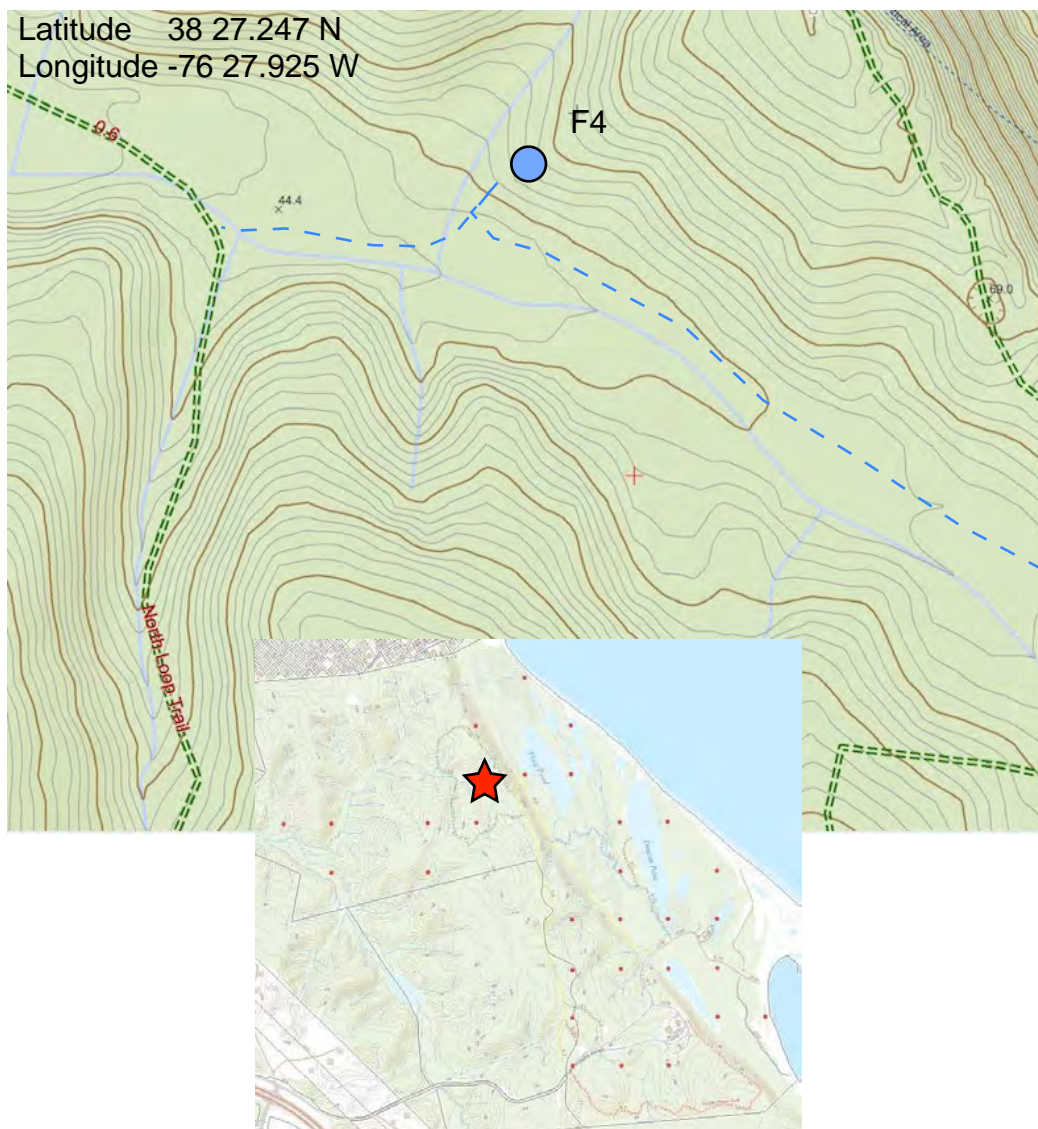
View East



View South



## B/F4 (1990-2016 Site)



### Site Description (Date Located 3/01/2016):

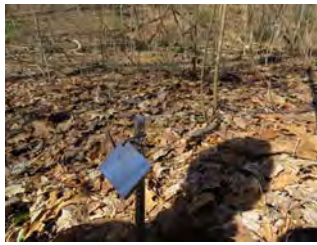
Site is located in the central area of North Loop Trail, with access either from the southeast or from the west. From the southeastern start of North Loop Trail, follow the drainage pattern downhill to the bottomland where it joins with a drainage coming down from the northeast. The stake is located on the lower slope of the northeastern shoulder between these drainages. If coming from the west, follow the drainage to the same area. This route, however, is heavy with sapling paw-paws. There are many downed trees in the vicinity of the site. A general review of the near vicinity indicated a reasonable correlation with the 1990 plant survey, but a more probable alternative location lies to the north. There may be an absence of herbaceous plants due to the fact that the 2016 survey was conducted in early March. The 1990 survey lists *Athyrium platyneuron*. They may have meant *Asplenium platyneuron* (Ebony spleenwort). Similarly, Hench refers to *Dentaria diphylla*, which is now *Cardamine diphylla*, and to which he gives the common name, Broad leaved Toothwort. However, this is a more northern plant. Hench may have meant *Dentaria laciniata*, which is now *Cardamine concatenata*, the Cutleaf Toothwort, a common spring plant at Flag Ponds.

<b>F4 Species (Herbaceous)</b>	<b>1990</b>	<b>2016</b>	<b>2016 alt.</b>
<i>Arisaema sp</i>	X		
<i>Aster sp.</i>	X		
<i>Athyrium platyneuron</i> * <i>Asplenium platyneuron</i>	X		
<i>Cardamine diphylla</i> or <i>Cardamine concatenata</i> (formerly <i>Dentaria diphylla</i> ) See plant list	X		
<i>Gallium sp.</i>	X		
<i>Mitchella repens</i>	X		
<i>Oxalis sp.</i>	X		
<i>Polystichum acrostichoides</i>		X	

<b>F4 Species (Trees, Shrubs, &amp; Vines)</b>	<b>1990</b>	<b>2016</b>	<b>2016 alt.</b>
<i>Acer rubrum</i>	X	X	
<i>Asimina triloba</i>	X	X	
<i>Carpinus caroliniana</i>	X	X	
<i>Carya glabra</i>	X	X	
<i>Fagus grandifolia</i>	X	X	
<i>Ilex opaca</i>		X	
<i>Liquidambar styraciflua</i>	X		
<i>Liriodendron tulipifera</i>	X	X	
<i>Lonicera japonica</i>		X	
<i>Prunus virginiana</i>	X		
<i>Quercus falcata</i>	X	X	
<i>Quercus rubra</i>	X	X	
<i>Viburnum acerfolium</i>	X		



B/F4  
Latitude: 38 27.247N  
Longitude -76 27.925W



1990 - 2016 Grid Site  
Views from Grid Point (3/1/2016)



View North



View West

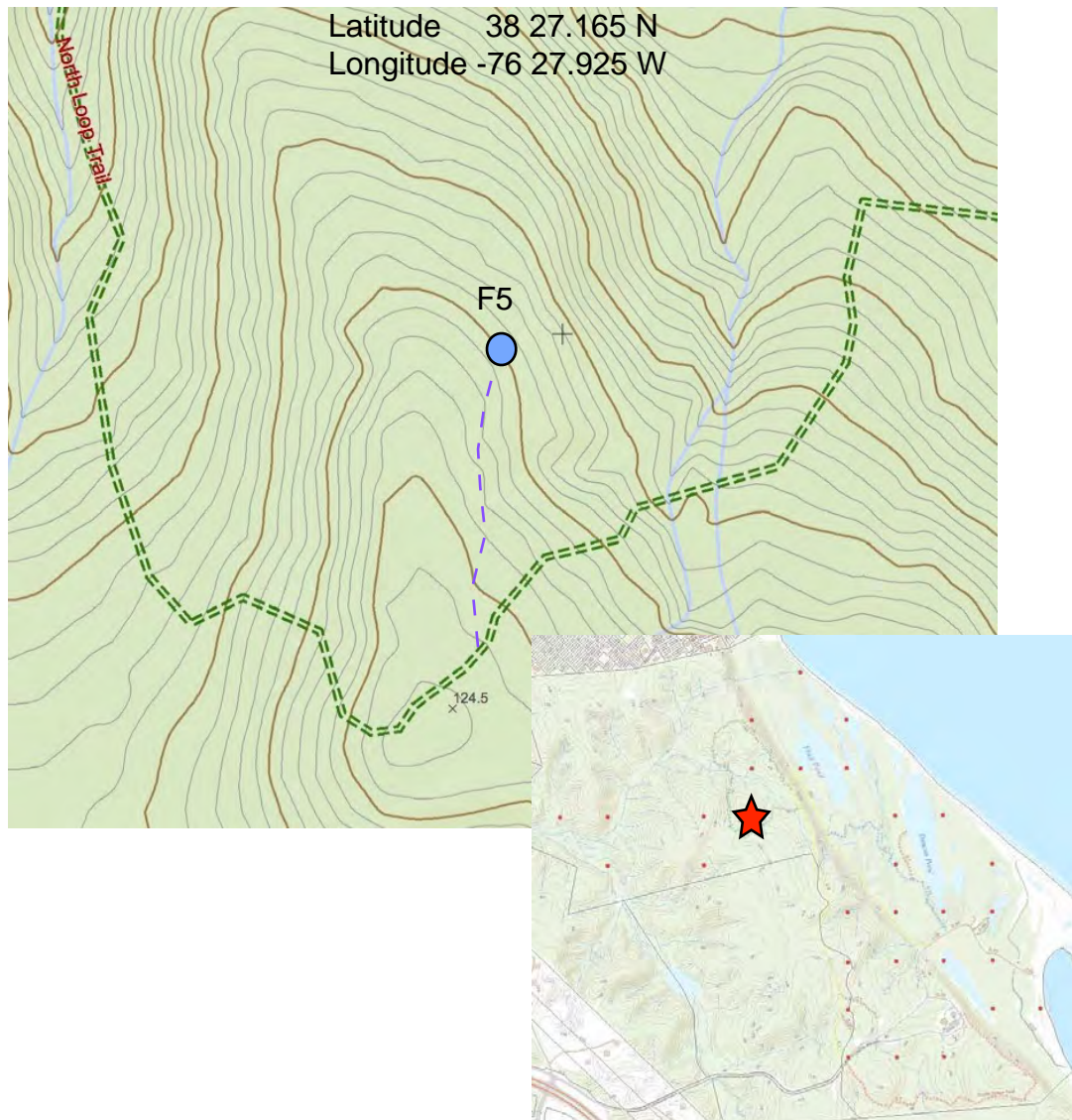


View East



View South

## B/F5 (1990-2016 Site)



### **Site Description (Date Located 3/01/2016):**

Site is located in the southern part of North Loop Trail, with easiest access from the south. From east of the southern bend of North Loop Trail, follow a northerly path to the site. The stake is located on the upper slope surrounded by downed trees. There are many downed trees in the vicinity of the site. A general review of the near vicinity indicated a reasonable correlation with the 1990 plant survey.

F5 Species (Herbaceous)	1990	2016	2016 alt.
<i>Michella repens</i>	X	X near	
<i>Polystichum acrostichoides</i>		X	
<i>Tipularia discolor</i>		X	

F5 Species (Trees, Shrubs, & Vines)	1990	2016	2016 alt.
<i>Acer rubrum</i>	X	X	
<i>Asimina triloba</i>	X	X	
<i>Carya glabra</i>	X	?	
<i>Cornus florida</i>	X		
<i>Fagus grandifolia</i>	X	X	
<i>Ilex opaca</i>	X	X	
<i>Liquidambar styraciflua</i>	X		
<i>Liriodendron tulipifera</i>	X	near	
<i>Pinus virginiana</i>	X	near	
<i>Prunus virginiana</i>	X		
<i>Quercus alba</i>	X	X	
<i>Quercus falcata</i>	X	?	
<i>Quercus montana</i> (formerly <i>Quercus prinus</i> )	X	?	
<i>Quercus rubra</i>	X	X	
<i>Sassafras albidum</i>	X		
<i>Smilax rotundifolia</i>	X	X	



B/F5  
Latitude: 38 27.165N  
Longitude -76 27.925W



1990 - 2016 Grid Site  
Views from Grid Point (3/1/2016)



View North



View West

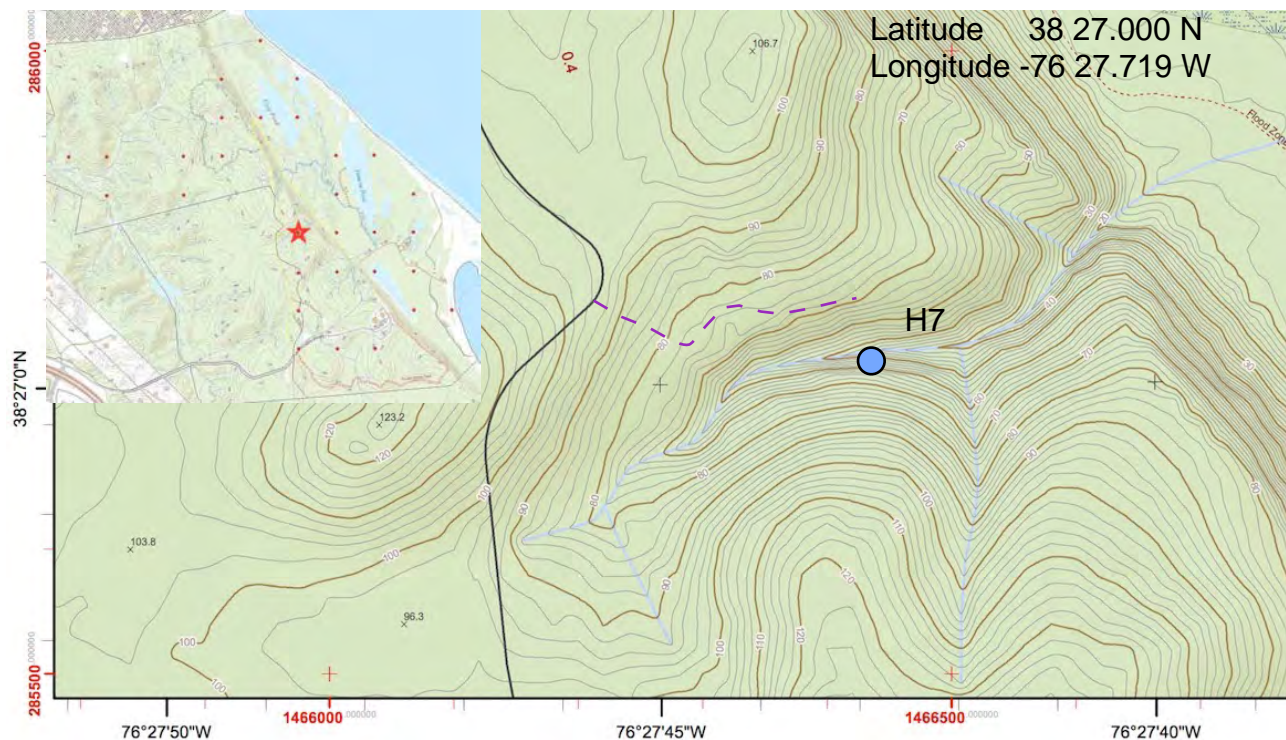


View East



View South

## B/H7 (1990-2016 Site)



### Site Description (Dates Located 3/21/2015, 2/20/2016):

Site is located near the bottom of a steep ravine draining to the east, and is extremely difficult to access from North Loop Trail. Easiest access is along the upper north slope of the ravine to where a stake has been placed at the upper slope break. The site lies to the south at the bottom of the ravine. Access from the south is along a deer trail that follows the upper slope of the ravine eastward. By keeping to the lower branch of the deer trail, the nearest approach to the site lies in a mountain laurel thicket just past a large rock on the trail. A general review of the near vicinity indicated a reasonable correlation with the 1990 plant survey. Lack of herbaceous plants may be because the 2016 survey was conducted in March. A 10 Meter Plot Survey was done by Karyn Molines and volunteers on 7-22-2015 and at an alternative site. That data are not included here.

H7 Species (Herbaceous)	1990	2016	2016 alt.
<i>Carex sp</i>	X		
<i>Galium circaezans</i>	X		
<i>Polystichum acrostichoides</i>	X	X	

H7 Species (Trees, Shrubs, & Vines)	1990	2016	2016 alt.
<i>Acer rubrum</i>	X	X	
<i>Asimina tribloba</i>	X		
<i>Carpinus caroliniana</i>	X	X	
<i>Carya glabra</i>	X		
<i>Cornus florida</i>	X	X	
<i>Fagus grandifolia</i>	X	X	
<i>Ilex opaca</i>	X		
<i>Kalmia latifolia</i>	X		
<i>Liquidambar styraciflua</i>	X		
<i>Liriodendron tulipifera</i>	X	X	
<i>Pinus taeda</i>	X	X	
<i>Prunus virginiana</i>	X		
<i>Quercus alba</i>	X	?	
<i>Quercus montana</i> (formerly <i>Quercus prinus</i> )	X	?	
<i>Sassafrass albidum</i>	X		
<i>Viburnum prunifolium</i>	X		



B/H7  
Latitude: 38 27.000N  
Longitude -76 27.719W



1990 - 2016 Grid Site  
Views from Grid Point (2/20/2016)



View North



View West



View East



View South

## B/H8 (1990-2016 Site)



### Site Description (Date Located 2/20/2016):

Site is located about 172 feet east of North Ridge Trail. Due to large downed trees in the area, access is best obtained by leaving the trail at the crest and then angling back to the SE. A general review of the near vicinity indicated a poor correlation with the 1990 plant survey. However a nearby alternative location about 100 feet to the northeast on the ridge crest appears more likely to be the actual site of the 1990 plant survey. On July 22, 2015 Karyn Molines conducted a 10-meter square habitat plot survey at this location and at the alternative site (38 26.924/ -76 27.7030)\*. Data from both surveys are not included in this account.

\*38.44873042N/ 76.46171713W originally surveyed

H8 Species (Herbaceous)	1990	2016	2016 alt.
<i>Viola sp.</i>	X		

H8 Species (Trees, Shrubs, & Vines)	1990	2016	2016 alt.
<i>Acer rubrum</i>	X		
<i>Amelanchier sp.</i>	X		
<i>Carya glabra</i>	X		
<i>Cornus florida</i>	X		
<i>Ilex opaca</i>	X	X	
<i>Liquidambar styraciflua</i>	X		
<i>Liriodendron tulipifera</i>	X		
<i>Parthenocissus quinquefolia</i>	X		
<i>Pinus taeda</i>		X	
<i>Pinus virginiana</i>		X down	
<i>Prunus virginiana</i>	X		
<i>Quercus falcata</i>	X		
<i>Toxicodendron radicans (formerly Rhus radicans)</i>	X		
<i>Sassafrass albidum</i>	X		
<i>Smilax rotundifolia</i>	X		
<i>Viburnum acerfolia</i>	X		



B/H8  
Latitude: 38 26.916N  
Longitude -76 27.719W



1990 - 2016 Grid Site  
Views from Grid Point (2/20/2016)



View North



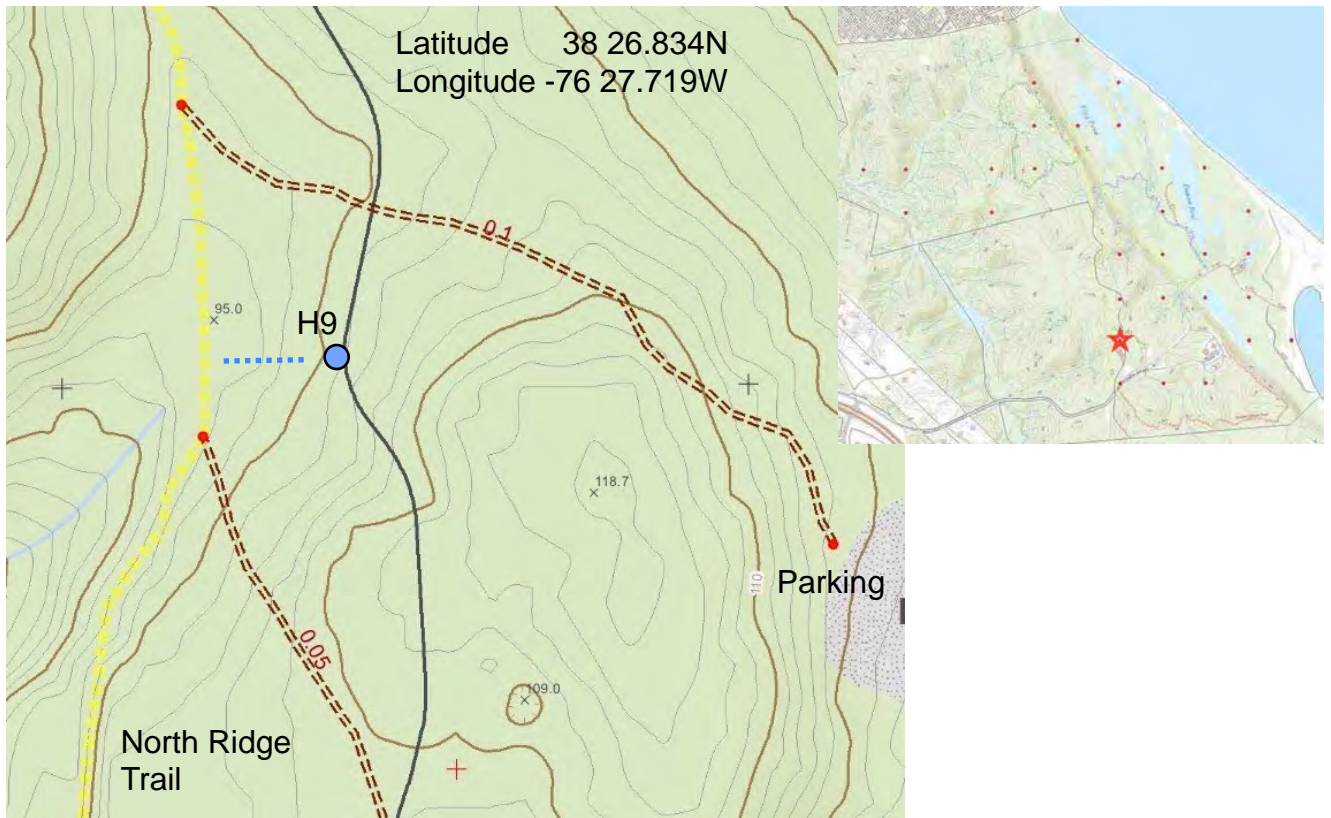
View West



View East

View South





**Site Description (Date Located 2/20/2016):**

Site is located about 50 feet east of North Ridge Trail in a holly grove, measured from a spot about 120 feet south of the junction with trail to parking lot. A general review of the near vicinity indicated a poor correlation with the 1990 plant survey. Additional study of maps and coordinates by Karyn Molines led to the conclusion that the site is probably at Latitude 38.4472N Longitude 76.4620W (38 26.832N/ 76 27.720W). This new site has yet to be surveyed.

H9 Species (Herbaceous)	1990	2016	2016 alt.
<i>Lycopodium obscurum</i>	X		
<i>Ranunculus sp.</i>	X		

H9 Species (Trees, Shrubs, & Vines)	1990	2016	2016 alt.
<i>Acer rubrum</i>	X	X	
<i>Carpinus caroliniana</i>	X		
<i>Carya sp.</i>	X		
<i>Cornus florida</i>	X		
<i>Euonymus americana</i>	X	X	
<i>Ilex opaca</i>	X	X	
<i>Liquidambar styraciflua</i>	X		
<i>Liriodendron tulipifera</i>	X		
<i>Ostrya virginiana</i>	X		
<i>Pinus taeda</i>	X		
<i>Pinus virginiana</i>	X		
<i>Prunus virginiana</i>	X		
<i>Quercus sp.</i>	X		
<i>Robinia pseudo-acacia</i>	X		
<i>Sassafras albidum</i>	X		
<i>Smilax rotundifolia</i>	X		
<i>Vaccinium corumbosum</i>	X		



B/H9  
Latitude: 38 26.834N  
Longitude -76 27.719W



1990 - 2016 Grid Site  
Views from Grid Point (2/20/2016)



View North



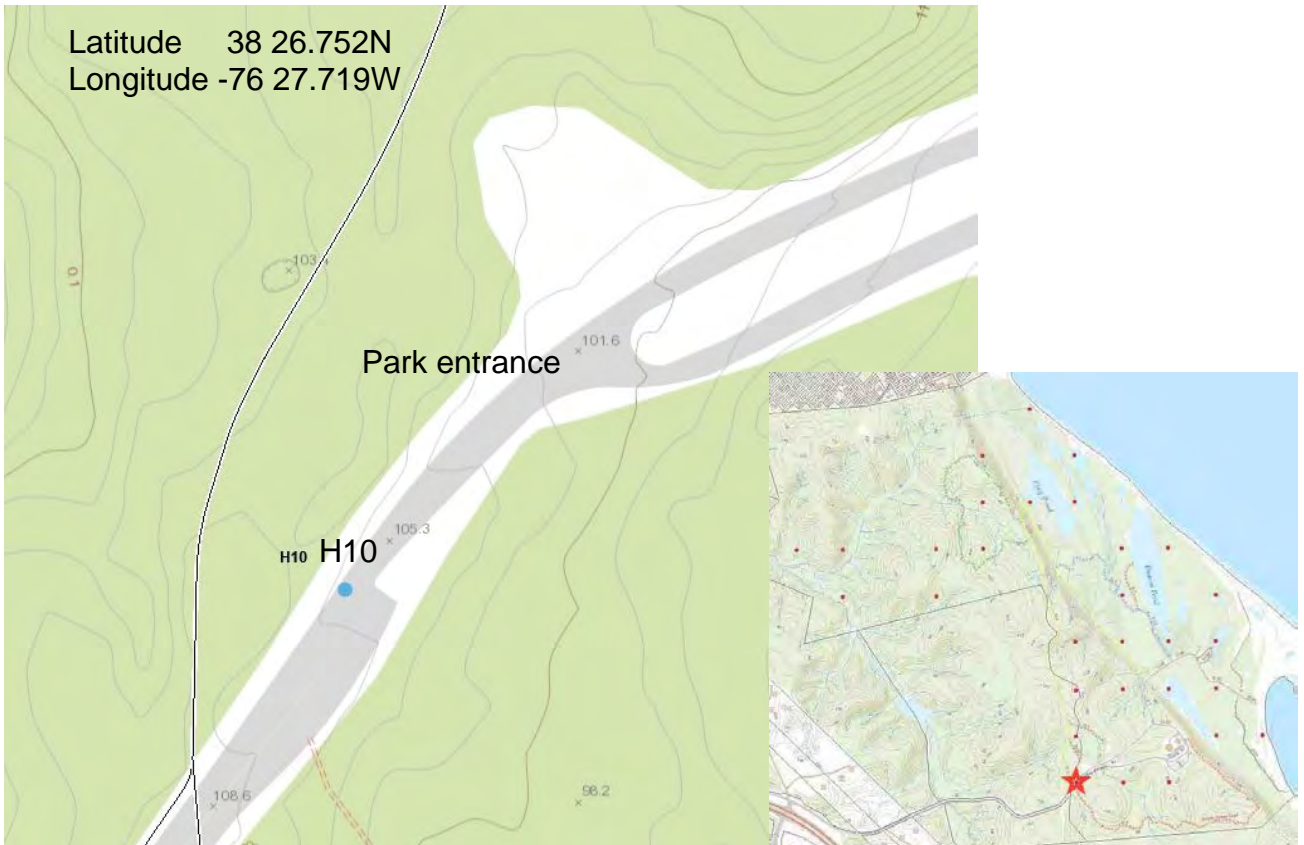
View West



View East



View South



**Site Description (Date Located 2/20/2016):**

Site is located on entrance road to Park, just west of entrance. Though the computed site is located in the roadway, a stake was placed on the north side of the road at the No Parking sign. This seems an unlikely location for a habitat survey, but corresponds with the 1990 500-foot grid. A general plant review of the near vicinity indicated no correlation with the 1990 survey. A cursory study was done by volunteers in the area south east of the computed site March 9, 2017. That habitat content is listed in the alternate site column. A 10 meter square survey was done March 26, 2015 by Karyn Molines in an area southeast of the computed site. Additional study of maps and coordinates by Karyn led to the conclusion that the site is probably at Latitude 38.4459N/ Longitude 76.4620W (38.26.754N/ 76.27.720W).

H10 Species (Herbaceous)	1990	2016	2017 alt.
<i>Caltha palustris</i>	X		
<i>Euonymus americana</i>			X
<i>Eupatorium sp.</i>	X		

H10 Species (Trees, Shrubs, & Vines)	1990	2016	2017 alt.
<i>Acer rubrum</i>	X		
<i>Asimina triloba</i>	X		?
<i>Cornus florida</i>	X		
<i>Diospyros virginiana</i>	X		X
<i>Ilex opaca</i>	X		X
<i>Juniperus virginiana</i>		X	X
<i>Liquidambar styraciflua</i>	X		X
<i>Liriodendron tulipifera</i>	X		
<i>Lonicera japonica</i>			X
<i>Pinus taeda</i>	X		X
<i>Pinus virginiana</i>	X	X	X
<i>Prunus virginiana</i>	X		
<i>Quercus montana</i> (formerly <i>Quercus prinus</i> )			X
<i>Rosa multiflora</i>			X
<i>Rubus phoenicolasius</i>			X
<i>Smilax rotundifolia</i>	X		X
<i>Toxicodendron radicans</i> (formerly <i>Rhus radicans</i> )			X
<i>Vitis sp.</i>			X



B/H10  
Latitude: 38 26.752N  
Longitude -76 27.719W



1990 - 2016 Grid Site  
Views from Grid Point (2/20/2016)



View North



View West

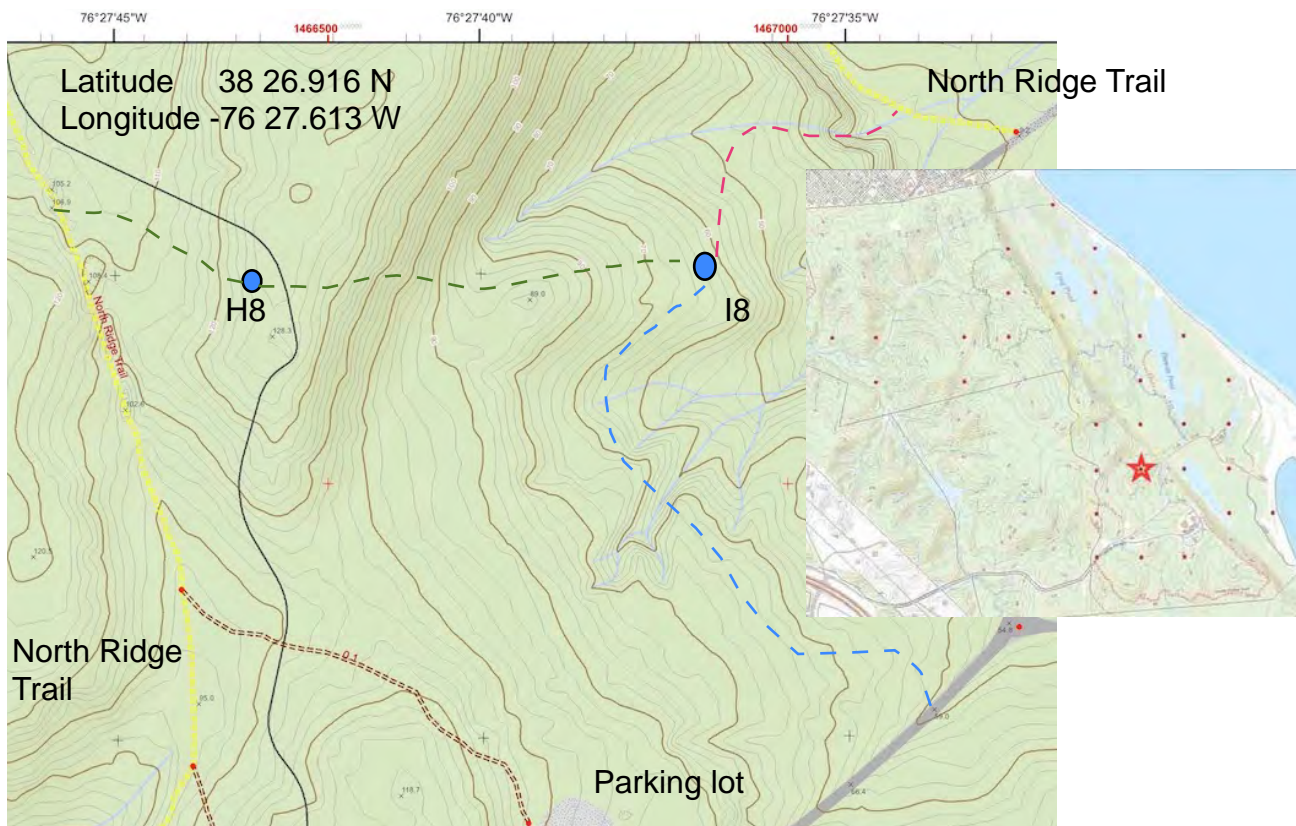


View East

View South



## B/I8 (1990-2016 Site)



### Site Description (Dates Located 8/21/2015 - 2/20/2016):

The shortest route to the site (red) starts on lower North Ridge Trail, but requires climbing up the cliff through a steep ravine. Easier, but longer, access (green) is obtained by hiking eastward from upper North Ridge Trail. Entry from Flag Ponds Parkway (blue) is also possible, but requires maneuvering around or crossing ravines and areas abundant with Japanese wineberry. Large downed trees are encountered in the area. Poor match on plants as found on the two surveys from 1990 and 2015/16.

I 8 Species (Herbaceous)	1990	2016	2016 alt.
<i>Arisaema sp.</i>	X		
<i>Cardamine dyphylla</i> or <i>Cardamine concatenata</i> (formerly <i>Dentaria diphylla</i> ) See Plant list	X		
<i>Gallium sp.</i>	X		
<i>Gallium circaezans</i>	X		
<i>Podophyllum peltatum</i>	X		
Unknown fern		X	

I 8 Species (Trees, Shrubs, & Vines)	1990	2016	2016 alt.
<i>Asimina triloba</i>	X	X	
<i>Cornus florida</i>	X		
<i>Fagus grandifolia</i>		X	
<i>Ilex opaca</i>	X	X	
<i>Lindera benzoin</i>	X		
<i>Liquidambar styraciflua</i>	X		
<i>Liriodendron tulipifera</i>	X		
<i>Nyssa sylvatica</i>		X	
<i>Parthenocissus quinquefolia</i>	X		
<i>Pinus taeda</i>	X	X	
<i>Prunus virginiana</i>	X		
<i>Rubus phoenicolasius</i>		X	
<i>Smilax rotundifolia</i>	X	X	



B/18  
Latitude: 38 26.916N  
Longitude -76 27.613W



1990 - 2016 Grid Site  
Views from Grid Point (2/20/2016)



View North



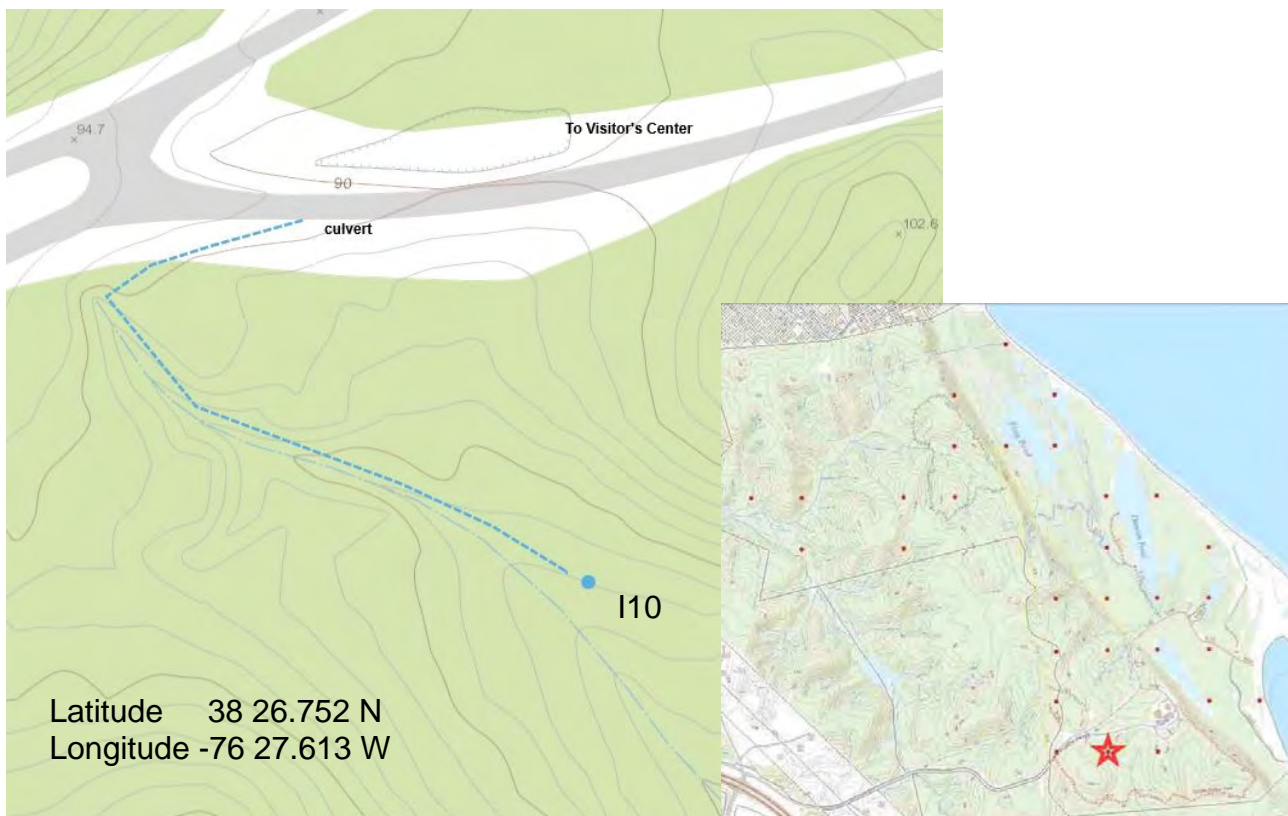
View West



View East



View South



**Site Description (Date Located 2/20/2016):**

Site is located south of entrance road to Visitor's Center. From south end of culvert under road, follow drainage west to stream and follow stream to site on lower slope east of stream. A general plant review of the near vicinity indicated a poor correlation with the 1990 survey, but good correlation with the 1990 Drainage Map. On March 26, 2015 Karyn Molines and volunteers conducted a 10-meter square habitat plot in the vicinity of this site. Data from that survey are not reported here. Herbaceous plants may not be included in 2016 survey as it was conducted in February.

I 10 Species (Herbaceous)	1990	2016	2016 alt.
<i>Allium sp.</i>	X		
<i>Aster sp.</i>	X		
<i>Fragaria virginiana</i>	X		
<i>Gallium circaeans</i>	X		
<i>Viola sp.</i>	X		
<i>Viola labridorica</i> (formerly <i>V.conspersa</i> )	X		

I 10 Species (Trees, Shrubs, & Vines)	1990	2016	2016 alt.
<i>Carpinus caroliniana</i>	X		
<i>Cornus florida</i>	X		
<i>Ilex opaca</i>	X	X	
<i>Lindera benzoin</i>	X		
<i>Liquidambar styraciflua</i>	X		
<i>Liriodendron tulipifera</i>	X	X	
<i>Prunus virginiana</i>	X		



B/110  
Latitude: 38 26.752N  
Longitude -76 27.613W



1990 - 2016 Grid Site  
Views from Grid Point (2/20/2016)



View North



View West



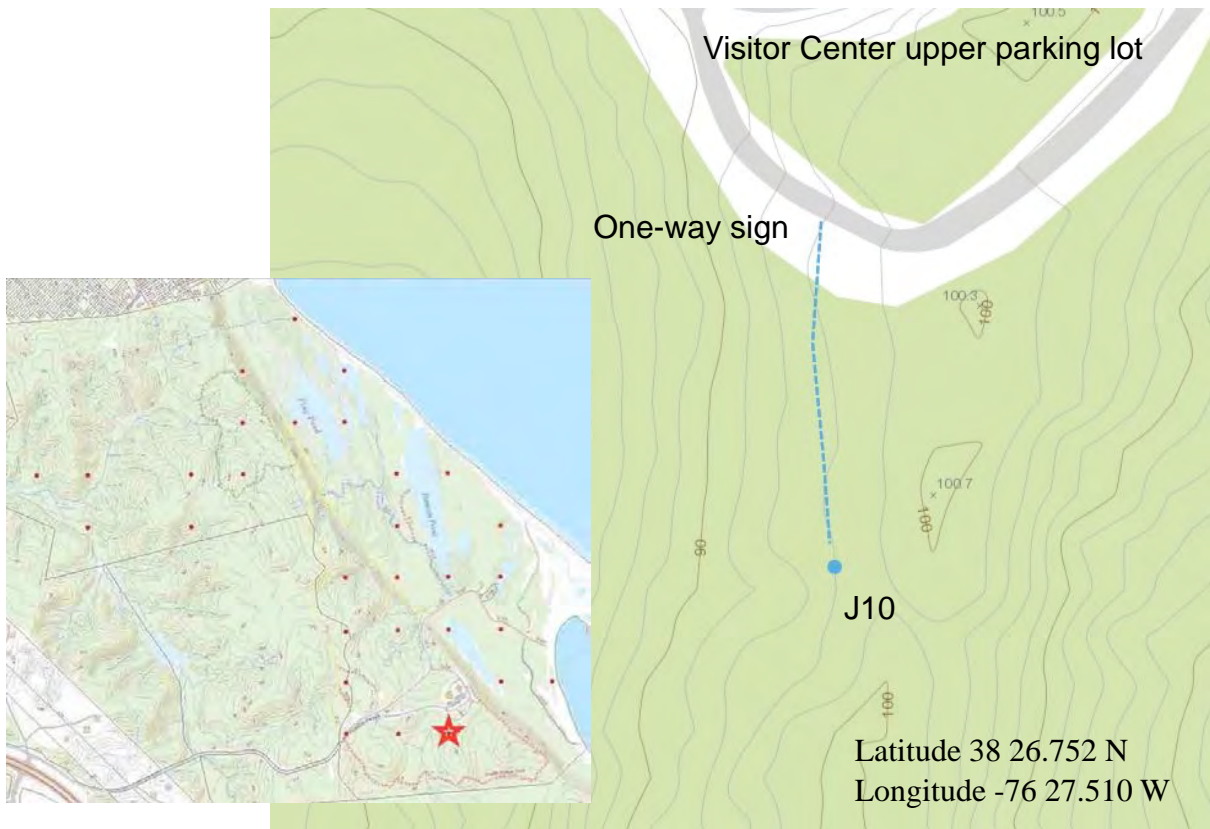
View East



View South



B/J10 (1990-2016 Site)



**Site Description (Date Located 3/6/2016):**

Site is located 134 feet south of SW corner of upper parking lot at Visitor's Center, at upper end of small drainage going west. Several downed trees are in the vicinity. A general plant review of the near vicinity indicated a reasonable, but not conclusive, correlation with the 1990 survey, but good correlation with the 1990 Drainage Map. In 2015 Karyn Molines conducted a 10-meter square habitat plot in the vicinity of this site. The data are not included in this report.

J10 Species (Herbaceous)	1990	2016	2016 alt.
<i>Aster sp.</i>	X		
<i>Symphyotrichum urophyllum</i> (formerly <i>Aster sagittifolius</i> )	X		
<i>Mitchella repens</i>	X	X	
<i>Polystichum acrostichoides</i>	X	X	
<i>Tipularia discolor</i>		X	
<i>Viola sp.</i>	X		
<i>Viola labradorica</i> (formerly <i>V. conspera</i> )	X		

<b>J10 Species (Trees, Shrubs, &amp; Vines)</b>	<b>1990</b>	<b>2016</b>	<b>2016 alt.</b>
<i>Acer rubrum</i>	X	X	
<i>Carpinus caroliniana</i>	X		
<i>Carya glabra</i>	X		
<i>Cornus florida</i>	X		
<i>Ilex opaca</i>	X	X	
<i>Juniperus virginiana</i>		X	
<i>Liquidambar styraciflua</i>	X		
<i>Liriodendron tulipifera</i>	X	X	
<i>Prunus virginiana</i>	X		
<i>Quercus rubra</i>	X	X	
<i>Rubus phoenicolasius</i>		X	
<i>Smilax sp.</i>		X	

B/J10  
Latitude: 38 26.752N  
Longitude -76 27.510W



1990 - 2016 Grid Site  
Views from Grid Point (3/6/2016)



View North



View West



View East



View South