

**New Jersey Invasive Species Strike Team  
Essex County Department of Parks, Recreation and Cultural Affairs  
Activity Report  
September 20, 2017**

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## **Background & Scope**

The New Jersey Invasive Species Strike Team was engaged by Essex County in June 2017 to perform eradication of selected invasive species in the Hilltop Reservation. The scope of this effort were the high-priority species and populations identified in the August 2016 Hilltop Invasive Plant Management Plan (e.g., Chinese silvergrass, glossy buckthorn, jetbead, Japanese angelica tree, Linden viburnum). These species were targeted for control efforts because they are newly emerging and highly threatening to the Hilltop's native forest and meadow habitats.

## **Accomplishments**

The Strike Team's experienced seasonals visited Hilltop Reservation in July (23<sup>rd</sup>, 30<sup>th</sup>), August (13<sup>th</sup>, 19<sup>th</sup>, 20<sup>th</sup>, 26<sup>th</sup>) and September 2<sup>nd</sup> for a total of 160 hours of effort (only 140 hours will be billed as per quote supplied in May 2017). At each visit, they were assisted by Theresa Trapp of the Hilltop Conservancy, who provided a significant amount of volunteer time. Her guidance and knowledge of the Reservation significantly increased the accomplishments. An additional 6 hours of Strike Team staff time was utilized for office-related preparations (GIS mapping, etc.) and report preparation.

The Strike Team covered the entire western slope of the Hilltop, as well as the 20+ acres "inside" the Reservation's loop road (the site of the former sanatorium and of the Hilltop Conservancy's meadow restorations). The Team also eradicated invasives in a number of locations on the Hilltop's eastern slope, where smaller-sized infestations could be addressed manually.

A total of 123 eradications of newly emerging invasive species were completed and treatment of 36 additional populations was initiated. A summary of the activities performed is provided below and a detailed summary is attached as a Microsoft Excel file (also provided as attached map).

## **Next Steps**

There remain large / dense infestations of Japanese wisteria and Japanese angelica tree on the Hilltop's eastern slope. The Strike Team and Conservancy volunteers have made some inroads, but a contractor with specialized equipment and experienced staff will be required to completely eradicate these two species. We recommend that a contractor be engaged as soon as possible. We also recommend that the Strike Team be engaged to revisit the Reservation and "mop up" any items missed by the contractor and / or any existing or newly discovered high-priority populations elsewhere on the Hilltop in the near future.

New Jersey Invasive Species Strike Team  
 Essex County Parks Contract 2017  
 Summary Treatment Record

Population Size	Chinese Silver Grass-Eradicated	English Ivy-Eradicated	Glossy Buckthorn-Eradicated	Japanese Angelica Tree-Eradicated	Japanese Hop-Eradicated	Japanese Wisteria-Eradicated	Jetbead-Eradicated	Linden Viburnum-Eradicated	Mile-a-Minute-Eradicated	Siebold Arrowwood-Eradicated	Torigo Crab-Eradicated	Winged Euonymus-Eradicated	Five leaf Aralia-Eradicated	Total - Eradicated
1	10	1	6	8	2	0	1	3	1	5	0	0	0	37
2-10	4	1	2	53	2	1	0	3	1	3	1	0	0	71
11-100	0	0	0	10	1	0	0	0	0	0	0	1	3	15
101-1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Totals</b>	<b>14</b>	<b>2</b>	<b>8</b>	<b>71</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>2</b>	<b>8</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>123</b>

Population Size	Chinese Silver Grass-Initiated	English Ivy-Initiated	Glossy Buckthorn-Initiated	Japanese Angelica Tree-Initiated	Japanese Hop-Initiated	Japanese Wisteria-Initiated	Jetbead-Initiated	Linden Viburnum-Initiated	Mile-a-Minute-Initiated	Siebold Arrowwood-Initiated	Torigo Crab-Initiated	Winged Euonymus-Initiated	Five leaf Aralia-Initiated	Total - Initiated
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-10	0	0	0	0	0	1	3	1	0	0	0	0	0	5
11-100	0	0	1	13	4	1	2	1	2	0	0	0	0	24
101-1000	0	0	0	4	0	1	1	0	0	0	0	0	0	6
>1000	0	0	0	0	0	0	1	0	0	0	0	0	0	1
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>17</b>	<b>4</b>	<b>3</b>	<b>7</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>36</b>

