

## **Annual 2025 HWA Biological Control Report for LFSWS:**

### **Project Title: Biological releases to protect eastern hemlocks from Hemlock Woolly Adelgid invasions in the Lower Farmington River Watershed.**

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#### **Progress in 2025:**

The Lower Farmington River and Salmon Brook Wild & Scenic Committee (LFSWS) funded the purchase of 6,000 *S. tsugae* in 2025 for the third year to manage populations of HWA in the Lower Farmington River and Salmon Brook watershed. Partnering with Dr. Cheah in 2025 were McLean Game Refuge, CT DEEP Forestry, State Parks and Wildlife Division; Farmington Land Trust (LT), Simsbury LT, Traprock Ridge Land Conservancy and the Towns of Bloomfield and Simsbury. Seven towns received releases of ladybeetles to mitigate HWA spread and damage in May and June 2025: Bloomfield, Burlington, Farmington, Granby, Hartland, Simsbury and Windsor. A late January polar vortex brought significant sub-zero Arctic cold to Connecticut in 2025 but with greater variability in HWA population mortality. Adelgids survived better at higher altitudes as the cold air pooled at lower elevations so intense pre-release scouting was required to locate suitable populations of HWA for predator introductions. High winter mortality of HWA also occurred in Pennsylvania, which resulted in challenges and delays in mass rearing at Tree Savers. However, by staggering deliveries, all shipments of HWA predators were delivered by car to Dr. Cheah's laboratory in Windsor and Dr. Cheah fed and maintained the shipments in an incubator until optimal times of scheduled releases. Dr. Cheah applied for and obtained permission and permits for sites on state lands and land trust properties. All the beetles were released from late May into mid-June at 3 state forests, including the Burlington Fish Hatchery, 3 state parks in Simsbury and Bloomfield, and a State of Connecticut Wildlife Management Area in Windsor. Releases were also made at 3 town parks in Simsbury along Stratton Brook and at Farmington River Park in Bloomfield. Other releases were implemented at 5 land trust and game refuge preserves in Granby, East Granby, Farmington and Simsbury (Table 1, Figure 1). Dr. Cheah coordinated releases with volunteers and staff from participating land trusts and towns (Figure 2a-f). Infested hemlocks along several major and minor tributaries of the Farmington River and Salmon Brook were protected, including new areas to the north of the West Branch of Salmon Brook in Tunxis State Forest, upper watershed areas of Mountain Brook in Granby and Farmington Land Trust properties with unnamed brooks that drain into the Lower Farmington (Figure 1).

Table 1: 2025 LFSWS Wild and Scenic funded releases of *Sasajiscymnus tsugae* (n = 6,000)

<b>Releases on Connecticut State lands and Land Trust properties</b>				
Species *	No.	Date Released	Location	Town
<i>Sasajiscymnus tsugae</i>	600	May 20	<b>Tanager Hill, Simsbury LT:</b> upper areas by pond and field; by Lucy Brook	Simsbury
	400	May 21	<b>Ethel Walker Woods,</b> Town of Simsbury: blue trail along Stratton Brook marsh and along upper orange and white trails	Simsbury
	100	“	<b>Town Forest Park</b> by Stratton Brk	
	100	May 21	<b>Stratton Brook State Park,</b> On Stratton Brook: by covered bridge	Simsbury
	900	June 2	<b>Penwood State Park</b> Upper Lucy Brook/Lake Louise	Bloomfield
	300	June 3	<b>Talcott Mountain State Park</b> Wetland near King Phillip Brook	Simsbury
	100	June 3	<b>Aqueduct Canal Preserve, Farmington LT</b>	Farmington
	500		<b>Clatter Valley Rd, Farmington LT</b>	
	600	June 5	<b>Enders SF</b> Upper Mountain Brook marsh	Granby
“	500	June 6	<b>Tunxis SF,</b> Belden Brook upper, North Lost Acres Rd	Granby
	200		<b>Tunxis SF;</b> tributary of Belden Brook and marsh off Fuller Rd	Hartland
“	100	June 8	<b>Nassahegon State Forest/ Fish Hatchery</b> Bradley Brook	Burlington
	200	June 9	<b>Riverbend, Traprock Ridge Land Conservancy</b>	East Granby
	100	“	<b>Ian Clark Preserve, on Muddy Brook, Traprock Ridge Land Conservancy</b>	“
	300	June 16	<b>Farmington River Park (FR)</b> by pond + river	Bloomfield
	100	June 16	<b>Windsor WMA (FR)</b>	Windsor
	900	June 23 +24	<b>McLean Game Refuge</b> Sandy Brook Trail Bissell Brk x2 Case Falls + Firetown Rd Tr x4 Spring Pond	Granby
<b>TOTAL</b>	<b>6,000</b>		<b>17 sites</b>	<b>7 towns</b>

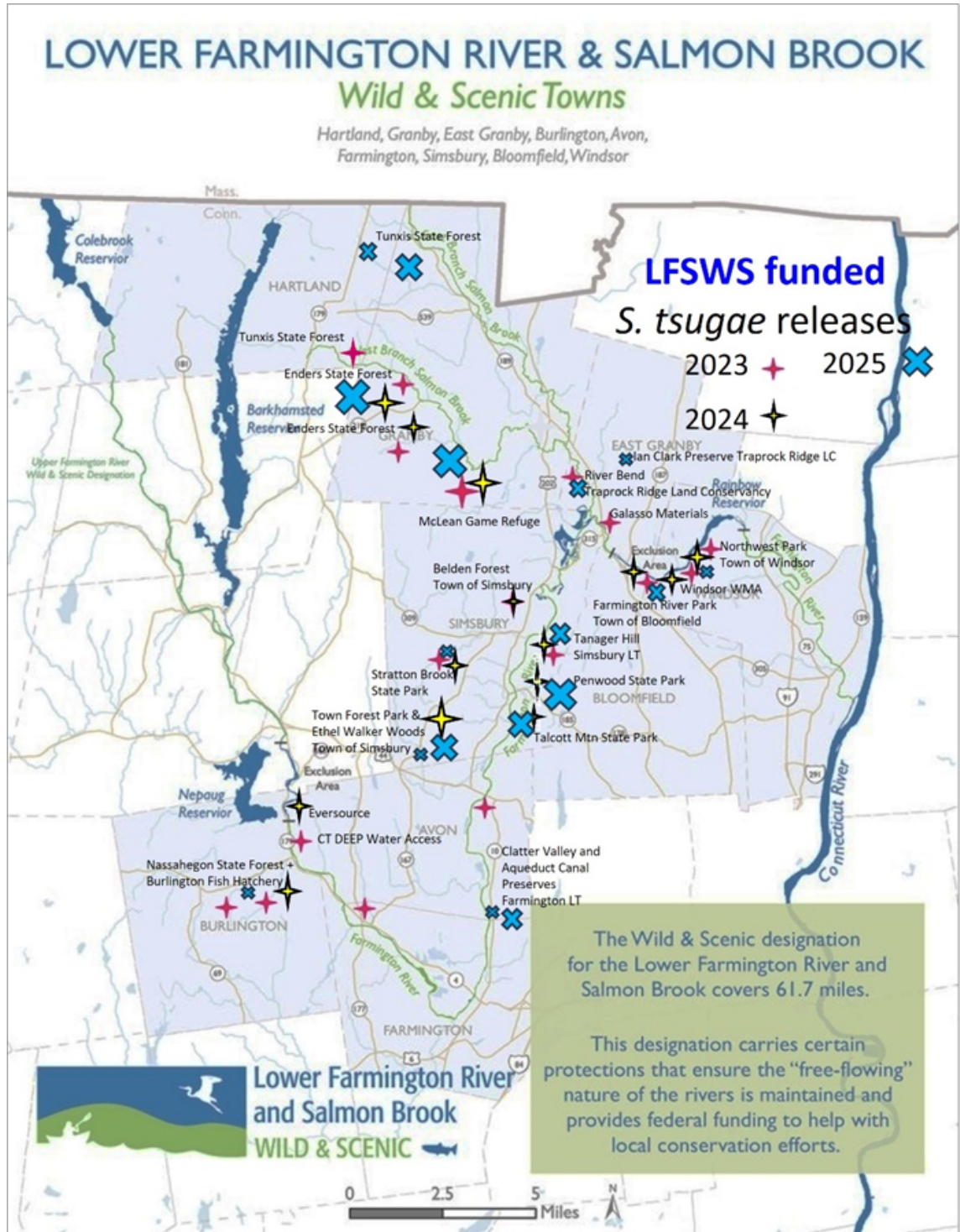


Figure 1. Releases of *S. tsugae* by year along the Lower Farmington River and Salmon Brook funded by the Lower Farmington Salmon Brook Wild and Scenic Committee. Original map from: <https://lowerfarmingtonriver.org/our-watercourses/map>

Figure 2 a-f. Releases in the Lower Farmington River and Salmon Brook watershed in 2025.



(a) Releases along Stratton Brook in Ethel Walker Woods and Town Forest Park, Town of Simsbury



(b) Releasing along Lucy Brook, Tanager Hill Preserve, Simsbury Land Trust



(c) Releases at Aqueduct Canal and Clatter Valley Preserves, Farmington Land Trust



(d) Releases at Ian Clarke Preserve on Muddy Brook and at River Bend, Traprock Ridge Land Conservancy, East Branch of Salmon Brook



(e) Releases at McLean Game Refuge, Granby, along Bissell and Steven A. Paine Brooks, tributaries of the West Branch of Salmon Brook



(f) Releases along Belden Brook, tributary of the West Branch of Salmon Brook

In 3 years, the LFSWS has funded the release of 22,000 *S. tsugae* in 8 towns in the Lower Farmington and Salmon Brook watersheds at 3 state forests, 3 state parks, 1 state WMA, 1 state fish hatchery, state owned water access, 1 extensive private game refuge, 3 town parks, 3 land trusts, commercially-owned open space and on utility-owned open space (Fig. 2). The Connecticut HWA biological release program for the Lower Farmington and Salmon Brook, with federal Wild and Scenic funding support, has successfully brought together many diverse stakeholders and partners to collaboratively protect and manage HWA on extensive riparian hemlock forests on a landscape scale, without the use of neonicotinoid chemicals.

