

# NH 2022 Forest Pest Survey Final Report Summary

The CAPS program monitors for and detects insect and plant pests that are threats to agricultural and natural ecosystems. This program helps protect the nation's food supply and is integral to the US Department of Homeland Security. New Hampshire's close proximity to the major international ports of Boston, Halifax and Montreal makes it extremely vulnerable to introductions of exotic (non-indigenous) insects and pathogens. The CAPS program facilitates early detection, rapid response and appropriate actions needed to address introduced pests. Current target pests include exotic wood boring beetles that could have serious impacts to our native forests if they were introduced, and several pests that could invade the state through the horticultural plant industry.

## FOREST PEST SURVEY

New Hampshire Department of Agriculture, Markets & Food (NHDAMF) personnel conducted a trapping survey for ten species of moths and one species of sawfly of national concern: *Dendrolimus pini* (Pine-Tree Lappet: PTL), *Dendrolimus sibiricus* (Siberian Silk Moth: SSM), *Lymantria albescens* (Okinawa Gypsy Moth: OGM), *Lymantria dispar asiatica* (Asian Gypsy Moth: AGM), *Lymantria dispar japonica* (Japanese Gypsy Moth: JGM), *Lymantria mathura* (Rosy moth), *Lymantria monacha* (Nun moth), *Lymantria postalba* (White-winged Gypsy Moth: WGM), *Lymantria umbrosa* (Hokkaido Gypsy Moth: HGM), and *Thaumetopoea processionea* (Oak Processionary Moth: OPM), and *Diprion pini* (common pine sawfly: CPS).

Approved methods, pheromones, and traps were used in the survey. Traps were deployed at ten sites located in Carroll, Rockingham, and Strafford Counties. Each site received a combination of traps and lures in order to survey for all 11 target species: each site received one two milk carton traps, two red plastic delta traps, and two wing traps, for a total of six traps per site.

Sites included in the survey included forested areas, campgrounds, interstate rest areas, NH Park & Rides, and other locations identified as high risk. Traps were deployed from May through September and serviced every 2 weeks. Samples were screened in the lab for targets and new state records. The traps were negative for all target pests.

### 1. Survey methodology (trapping protocol):

**Table 3: Survey Targets**

	<b>Common Name</b>	<b>Scientific Name</b>	<b>Survey Type</b>
<b>Pest:</b>	Pine-Tree Lappet	<i>Dendrolimus pini</i>	Trapping
	Siberian Silk Moth	<i>Dendrolimus sibiricus</i>	Trapping
	Okinawa Gypsy Moth	<i>Lymantria albescens</i>	Trapping
	Asian Gypsy Moth	<i>Lymantria dispar asiatica</i>	Trapping
	Japanese Gypsy Moth	<i>Lymantria dispar japonica</i>	Trapping

	White-Winged Gypsy Moth	<i>Lymantria postalba</i>	Trapping
	Hokkaido Gypsy Moth	<i>Lymantria umbrosa</i>	Trapping
	Nun Moth	<i>Lymantria monacha</i>	Trapping
	Rosy moth	<i>Lymantria mathura</i>	Trapping
	Oak Processionary Moth	<i>Thaumetopoea processionea</i>	Trapping
	Common Pine Sawfly	<i>Diprion pini</i>	Trapping

**Table 4: Proposed and Actual Sites and Traps**

	Proposed	Actual
Sites (Locations):	10	10
Traps:	60	60

**Table 5: Counties Surveyed**

Number of Counties:	3
Counties:	Carroll, Rockingham, Strafford

**2. Survey dates:**

**Table 6: Proposed and Actual Survey Dates**

	Proposed	Actual
Survey Dates:	Mid-May through mid-September, 2022	Mid-May through mid-September, 2022

**3. Benefits and results of survey:**

**Table 7. Trap survey results**

	Confirmed Positive	Negative	Total Number
Targets	-	-	60

**Table 8. AGM trap DNA results**

	AGM Traps with samples sent for DNA analysis	Confirmed Positive	Negative	Total Number
AGM Traps	30	-	-	30