National Slow the Spread Program
2022 Accomplishment Report

Summary:
The National Slow the Spread Program (STS) monitored 116,603,586 acres from North Carolina to Minnesota and collected 65% more spongy moths in 2022 when compared to 2021. The population increases resulted in a higher mean rate of spread for the Northern Region (IA, MN, and WI) of the program. However, rates of spread in the Central (IL, IN, OH) and Southern (KY, NC, TN, VA, WV) Regions were lower than the program's goal of 7.8 km/yr. Treatments targeted 117 spongy moth populations on 339,839 acres in the transition zone of the program. Federal (USDA Forest Service and Animal and Plant Health Inspection Service), state, and university funding ($9.3 million) supported the STS Program. Approximately 205 people directly contributed to the trapping and treatment programs, technology development, and regulatory activities that comprise the annual activities for the program.

Trapping Program

- The STS Program monitored **61,804 traps** in three program areas (action area and monitoring zones I and II, Fig. 1), encompassing 116,603,586 acres. The trapping program accounted for **67%** of the 2022 budget.
- The trapping program placed **99%** of the planned traps and **99%** of the traps inspected passed quality check inspections.
- A total of **441,204 male moths** were collected in 2022. Changes to the trap data workflow improved data collection for trapping program. This is the second year the G4 trapping platform was used program-wide.
- Delimit-trapping grids (**501 grids**) monitored new infestations and evaluated treatment efficacy.

Treatment Program

- A total of **117 populations** were treated in seven states (Fig. 1), totaling **339,839 treatment acres.** The treatment program accounted for **30%** of the 2022 budget.
- **Non-federal lands received 92%** of the treatment applications. Two National Forests, Department of Interior lands, and U.S. Fish and Wildlife Service lands also received treatments.
- Mating disruption (MD) applications (**312,157 acres**) treated most of the populations, whereas larvicides [*Bacillus thuringiensis kurstaki* (*Btk*) and Gypchek] treated fewer populations (27,682 acres).
- Treatment applications had a **high rate of success**: 2021 *Btk* + MD applications (100% successful), 2021 MD applications (83%), 2021 Gypchek + MD (100%), insect growth regulator + MD (100%), 2022 Gypchek (100%), and 2022 *Btk* (83%). Furthermore, aerial applications were implemented without any accidents (461 application hours and 199 observation hours).
- The mean rate of spread for spongy moth was **12.1 km/yr**, representing a 38% decrease in spread from the average historical spread rate of 19.6 km/yr.
- The program successfully slowed the rate of spread for spongy moth in the Central (**-8.3 km/yr**) and Southern (**6.6 km/yr**) Regions of the Program. However, the rate of spread rate in the Northern Region (**38.1 km/yr**) exceeded the program's goal, and likely resulted from outbreaks in adjacent quarantined counties.

Technology Development and Regulatory Activities

- The STS Technology Committee tested the ability of mating disruption applications to suppress higher population densities; assessed the residual effect of mating disruption applications 1-yr post-treatment; evaluated remotely-monitored traps to assess spongy moth phenology; and provided technical expertise to the STS Program. Technology development and regulatory funding accounted for **3%** of the 2022 budget.
- USDA APHIS supported regulatory work in four states (IL, MN, WV, and WI). State partners monitored high-risk sites (e.g., wood product stakeholders, nurseries, shipping containers, etc.) for spongy moth and promoted awareness about invasive species with private industries.

Illinois Indiana Iowa Kentucky Minnesota N. Carolina Ohio Tennessee Virginia W. Virginia Wisconsin

2022 National Slow the Spread Program Boundaries, Delimiting Grids, and Treatments

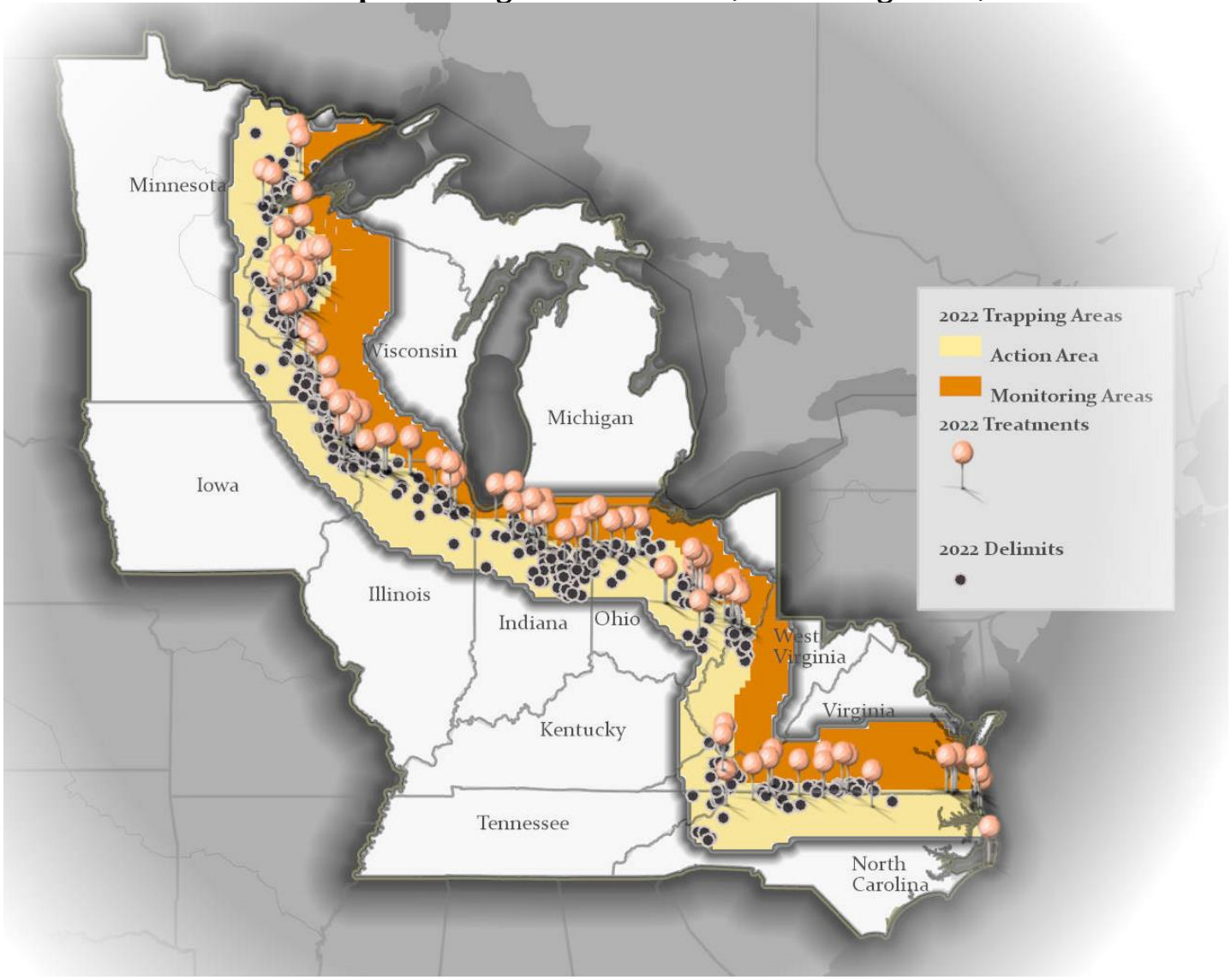

Figure 1. The National Slow the Spread Program (STS) monitored traps in two trapping areas (action area and monitoring zone) that span the 11-state area and implemented treatments (larvicides and mating disruption) in seven states. Eleven state agencies (IL, IN, IA, KY, MN, NC, OH, VA, TN, WV, and WI), two universities (VT and MSU), the Slow the Spread Foundation, and USDA Forest Service and Animal and Plant Health Inspection Service (APHIS) comprise the national program.

For additional information about STS and spongy moth, visit the slowthespread.org.

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