

National Gypsy Moth Slow the Spread Program 2021 Accomplishment Report

Summary: The National Gypsy Moth Slow the Spread Program (STS) collected 267,288 moths, an increase of 22% from 2020. The STS Program treated low-density, isolated *Lymantria dispar* populations on 350,301 acres, slowing the average rate of spread of *L. dispar* to 14.6 km/yr, a 26% decrease than its historical rate of spread. Due to the increase in populations in the STS Program area and defoliation in quarantined counties (2.6 million acres of recorded), the rate of spread recorded was one of the highest since the program's inception.

In 2021, federal, state, and university funds supported the STS Program, totaling \$9.7 million. The STS Program annually focuses on trapping, treatment, technology development, and regulatory activities. For additional information about STS and *L. dispar*, visit the slowthespread.org and the [2021 USDA Story Map](#).

Trapping Program

- The program monitored and maintained data for **105,327 traps** in four project areas (STS action area, STS monitoring zones I and II, and state detection areas).
- The STS Program collected 217,906 moths in 2020 and **267,309 moths in 2021** using the fourth iteration of the STS Program's trapping software (G4). This is the first year G4 was implemented program-wide.
- Delimit-trapping grids monitored **536 areas** to either define the locations of new infestations or evaluate treatment efficacy.
- The trapping program placed **95%** of the planned traps and accounted for **61%** of the 2021 budget.
- Summary statistics for the trapping work can be viewed at the [2021 STS trapping report](#).

Treatment Program

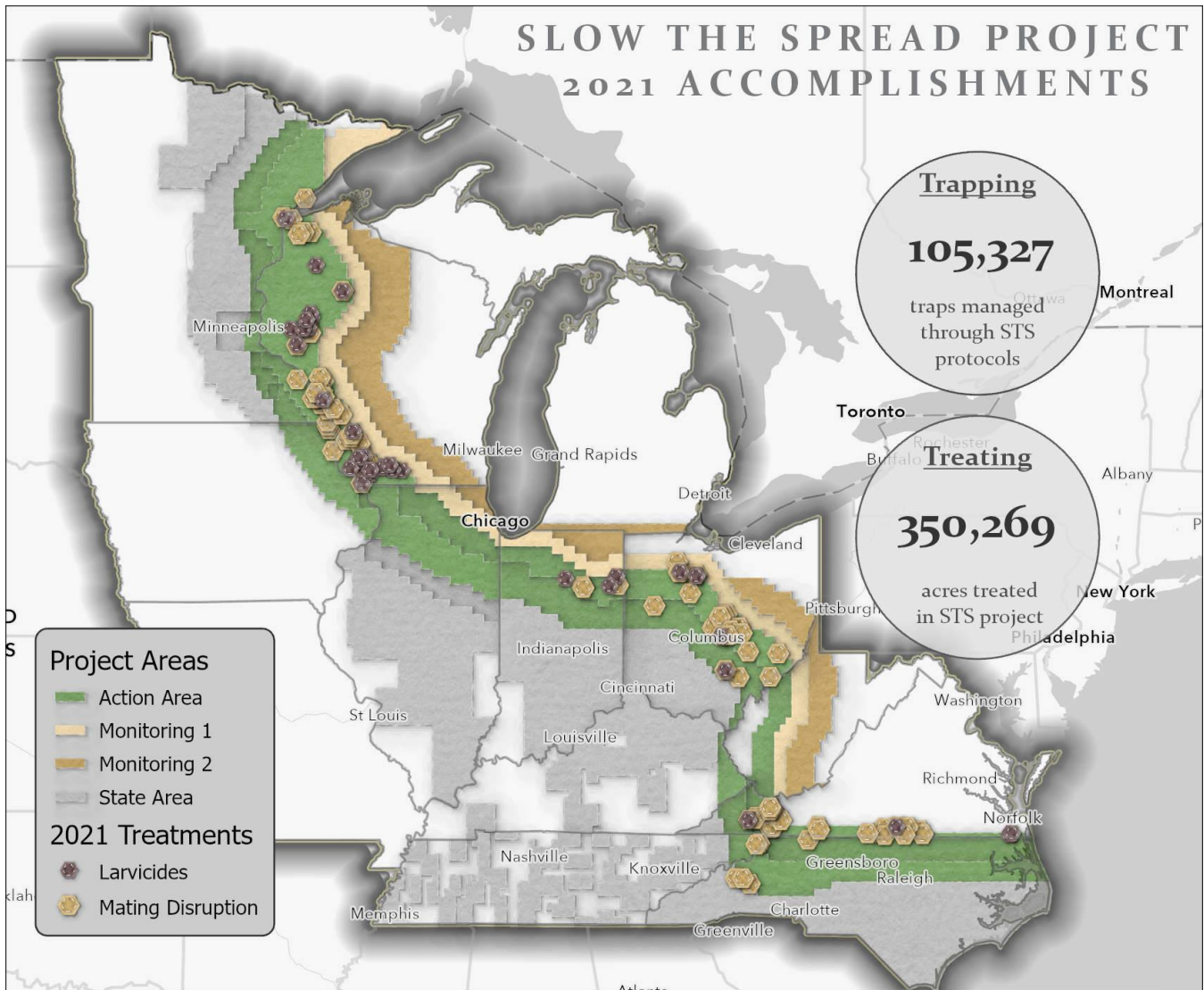
- A total of **120 low-density *L. dispar* infestations** were treated across eight states, totaling **350,301 acres**.
- Semiochemical control (mating disruption) was the primary treatment strategy used to suppress *L. dispar* populations (324,108 acres) followed by a biopesticide [*Bacillus thuringiensis kurstaki* (*Btk*), 25,628 acres] and a biological control treatment [nucleopolyhedrosis virus, 565 acres].
- Treatments were applied on **private, public, and federal lands** (three Army Corps of Engineer lands, two national forests, one national park, and one Fish and Wildlife Service land).
- **Treatment success declined** when compared to previous years [2020 *Btk* + MD applications (93%), 2020 MD (79%) applications, 2020 NPV + MD (100%) and 2021 *Btk* (75%)] and likely resulted from an increase in populations across the program.
- The rate of spread of *L. dispar* was highest in northern Minnesota and Wisconsin, Indiana, and along the southern Appalachian Mountains in North Carolina, West Virginia, and Virginia. The mean spread rate for *L. dispar* spread was **14.6 km/yr**, greater than the target spread rate for the program (7.8 km/yr). The 3-yr average rate of spread is 5.35 km/yr.
- The treatment program accounted for **36%** of the 2021 budget and additional treatment information can be found at the [STS treatments archive](#).

Additional activities

- The STS Technology Committee assessed the efficacy of new mating disruption formulations and the residual effect of applications 1-yr post treatment; evaluated remotely-monitored traps to track *L. dispar* phenology and the efficiency of milk carton traps; and provided technical expertise to the STS Program.
- Four states (IL, MN, WV, and WI) continued to monitor high-risk sites (e.g., wood product stakeholders, nurseries, shipping containers, etc.) for *L. dispar* and work with private industry to prevent the spread of this exotic pest. USDA APHIS supported these activities.
- Technology development and regulatory funding accounted for **3%** of the 2021 budget.



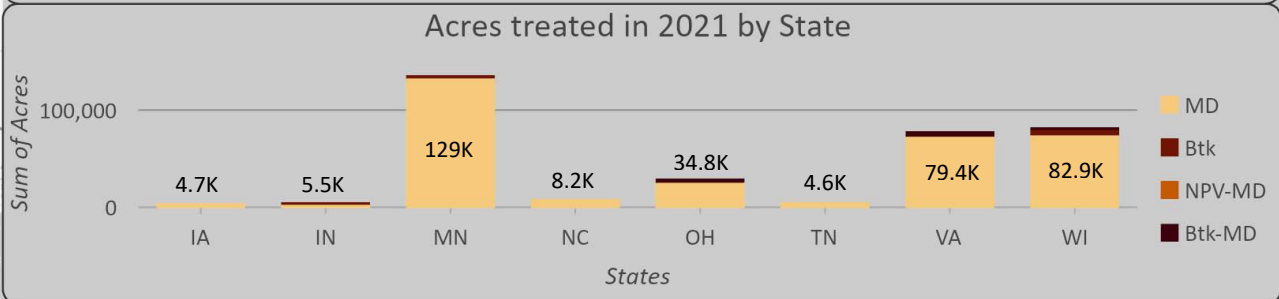
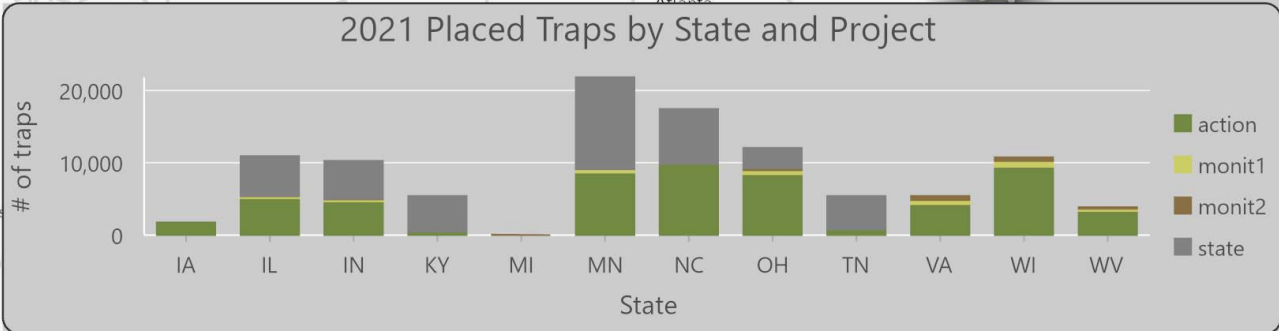
SLOW THE SPREAD PROJECT 2021 ACCOMPLISHMENTS



Trapping
105,327
traps managed through STS protocols

Treating
350,269
acres treated in STS project

- Project Areas**
- Action Area
 - Monitoring 1
 - Monitoring 2
 - State Area
- 2021 Treatments**
- Larvicides
 - Mating Disruption



The National Gypsy Moth Slow the Spread Program (STS), which comprises 11 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), monitors and manages *Lymantria dispar* in an approximately 63 million acre area. Federal (\$7.35 million), state (\$1.9 million), and university (\$485K) funds supported the annual activities of the program.

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