

Achieving Our Mission Slowing the Spread of Gypsy Moth 2012 Accomplishment Report

Executive Summary: States located along the leading edge of gypsy moth populations and highlighted in this document have cooperatively worked with the USDA Forest Service, to implement a project to slow the spread of the gypsy moth. This work has been ongoing since Congress funded the strategy in the year 2000. The primary goal of the program is to reduce spread by at least 60% from the unrestricted rate of 20 km per year. Accomplishments to date include:

- Reduction of the spread of this destructive pest by at least 60%, which has prevented infestation of more than 125 million acres since the program's inception in the year 2000.
- Yields a benefit to cost ratio of more than 3 to 1 by delaying the onset of impacts that occur as gypsy moth invades new areas. The 20-year net present value after subtracting costs is estimated at 184 to 348 million dollars.
- Protection of the extensive urban and wild land hardwood forests in the south and upper mid-west while also protecting the environment through use of gypsy moth specific strategies.
- Unification the partners and promotion of a coordinated, region-wide action based on biological need through the establishment of the STS Foundation, which provides a formal framework for cooperation among its member states.
- Standardization of actions across the multiple administrative and jurisdictional boundaries in the
 program are insured by utilizing a powerful decision algorithm to plot project boundaries, locate
 incipient infestations, prioritize and delineate infestations for treatment, evaluate the success of
 each treatment and measure spread rates each year.

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STS Project Area 2012

Action area
Monitoring area

2012 Gypsy Moth Slow the Spread Accomplishments

Funding: Partner contributions during 2012 included the following:

Forest Service \$8,307,000 State Partners \$2,242,000 TOTAL \$10,549,000

Project Area: The band where intensive monitoring and control measures are implemented (yellow band on map) remained at the biologically optimized 100-km width.

Trapping: Spacing between the traps in the action zone was increased due to reduced funding. Partners deployed traps at 96% of the 53,918 planned trap sites during 2012. Data from these traps was utilized to measure spread, evaluate treatment efficacy and to detect or delineate newly established infestations that will need to be treated during 2013.





















Illinois

Indiana

Minnesota

N.Carolina

Ohio

Virginia

W.Virginia

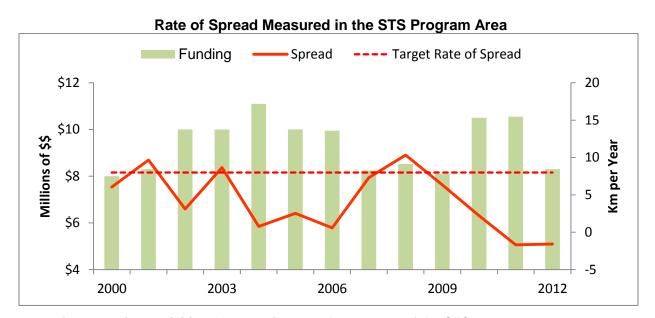
Wisconsin

Treatments: Partners delineated more than 140 distinct gypsy moth colonies within the program area in 2011. Treatments subsequently occurred on just over 544,000 acres during the spring and summer of 2012 to reduce spread associated with recently established infestations. Mating disruption continues to be the most widely used treatment because it is effective, inexpensive and target specific.

STATE	# OF COLONIES MANAGED	ACRES OF TO Larvicides (Btk, dfb or GypChek)	REATMENT Mating Disruption
IL	15	2,291	16,543
IN	12	227	7,575
MN	3	0	131,304
NC	1	0	1,600
ОН	35	8,743	63,204
VA	15	0	106,005
WI	64	22,833	145,034
WV	2	0	39,085
TOTAL	141	34,094	510,350

Treatments were successful on 48 of the 67 blocks (72%) treated with Btk, Dimilin or Gypchek in 2012. Previous year mating disruption treatments (2011) were successful on 106 of the 115 blocks (92%). Both Disrupt II and SPLAT-GM were used on the mating disruption projects.

Spread: Not surprisingly, reduced funding is correlated with an increase in spread (chart below). Spread rates are expected to increase in 2013 and beyond as funding is expected to remain at or below \$8 million per year. However, if funding remains stable at about \$8 million per year, the goal of reducing spread by at least 60% from historic levels (dashed line) can still be met.



Summary of 2012 project activities that contribute to the success of the STS program

Category	Accomplishment	Cost (thousands)
Monitoring	≈ 52,000 pheromone traps deployed in 10 states, spread measured and all treatments evaluated.	\$4,084 (≈\$79 per trap)
Treatments	>140 infestations totaling about 544,000 acres treated; 94% treated with gypsy moth specific products	\$5,240 (≈\$9.62 per acre)
Data management	Streamlined and standardized data collection, planning and evaluation of all implemented actions	\$995
Technology Development	Upper population thresholds for mating disruption investigated.	\$230