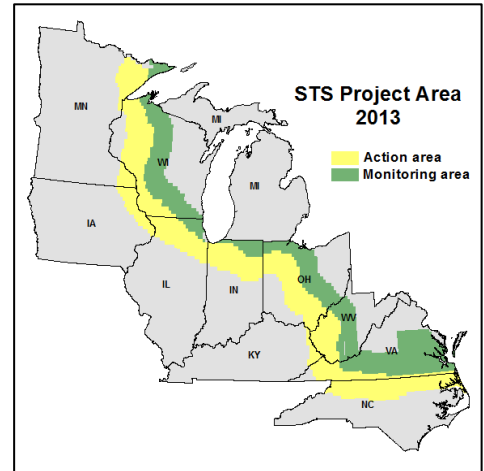


Executive Summary: States located along the leading edge of gypsy moth populations and highlighted in this document have cooperatively worked with the USDA Forest Service, to implement a project to slow the spread of the gypsy moth since the year 2000 when Congress funded the strategy. The primary goal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

- **Reduces** 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.
- **Protects** 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.
- **Unifies** the partners and promotes 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.
- **Standardizes** actions across the multiple administrative and jurisdictional boundaries in the program 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.



2013 Gypsy Moth Slow the Spread Accomplishments

Funding: Partner contributions during 2013 included the following:

Forest Service	\$8,125,000
State Partners	<u>\$2,196,483</u>
TOTAL	\$10,321,483

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 remained at 3 km due to reduced funding. Partners deployed traps at 97% of the 47,859 planned trap sites during 2013. 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 2014.



Illinois



Indiana



Iowa



Kentucky



Minnesota



N.Carolina



Ohio



Virginia



W.Virginia



Wisconsin

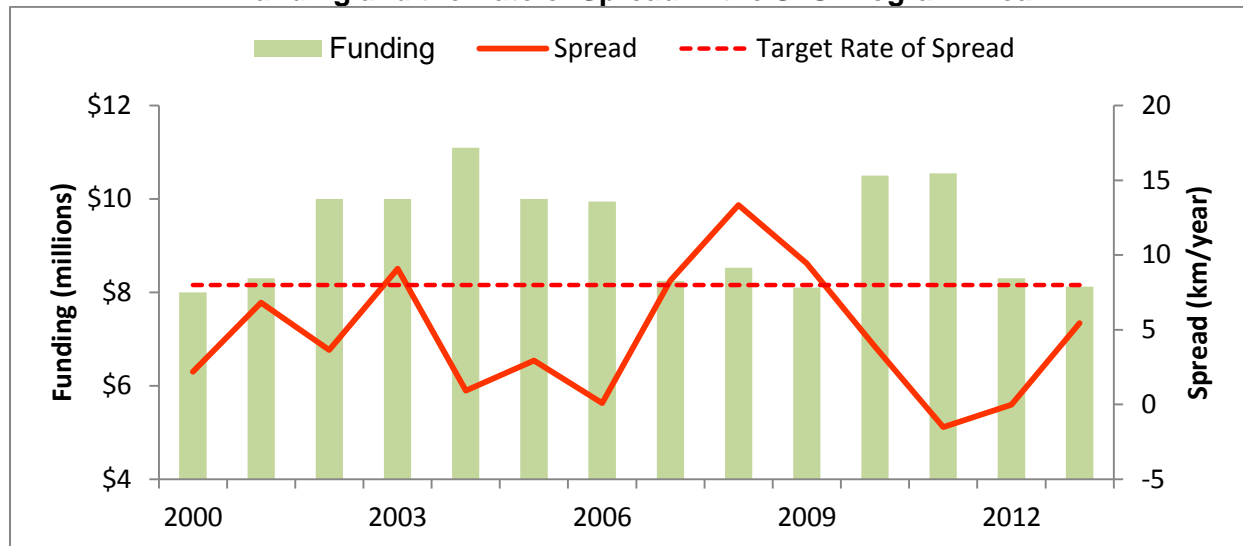
Treatments: Partners delineated 130 distinct gypsy moth colonies within the program area in 2012. Treatments subsequently occurred on just over 410,000 acres during the spring and summer of 2013 to reduce spread associated with those recently established infestations. Mating disruption continues to be the most widely used treatment because it is effective, inexpensive and target specific.

STATE	# OF COLONIES MANAGED	ACRES OF TREATMENT	
		Larvicides (Btk, dfb or GypChek)	Mating Disruption
IA	2	0	14,224
IL	7	1,078	50,446
MN	4	0	55,550
NC	5	1,391	2,741
OH	35	4,502	89,195
VA	11	0	45,980
WI	66	25,093	120,600
TOTAL	130	32,064	378,736

Treatments were successful on 49 of the 59 blocks (83%) treated with Btk, Dimilin or Gypchek in 2013. Previous year mating disruption treatments (2012) were successful on 125 of the 136 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 2014 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 probably still be met.

Funding and the Rate of Spread in the STS Program Area



Summary of 2013 project activities that contribute to the success of the STS program

Category	Accomplishment	Cost (thousands)
Monitoring	≈ 48,000 pheromone traps deployed in 10 states, spread measured and all treatments evaluated.	\$4,130 (≈\$79 per trap)
Treatments	130 infestations totaling about 410,000 acres treated; 94% treated with gypsy moth specific products	\$5,034 (≈\$12.25 per acre)
Data management	Streamlined and standardized data collection, planning and evaluation of all implemented actions	\$963
Technology Development	Upper population thresholds for mating disruption investigated.	\$194