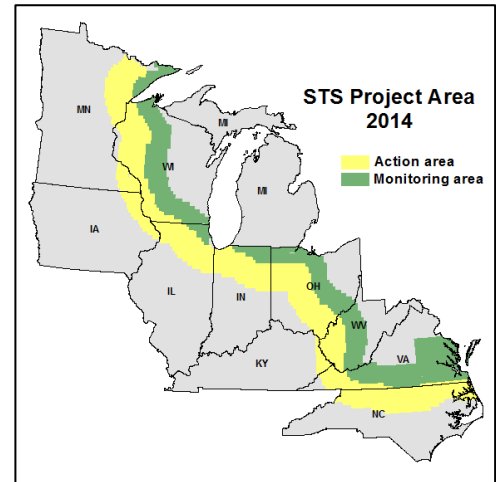


**Executive Summary:** States located along the leading edge of gypsy moth populations and highlighted in this document have cooperatively worked with the USDA Forest Service to implement a project to slow the spread of the gypsy moth since the year 2000 when Congress funded the strategy. The primary 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:

- **Reduced** 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.
- **Yielded** 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.
- **Protected** the extensive urban and wildland hardwood forests in the south and upper mid-west while also protecting the environment through use of gypsy moth specific strategies.
- **Unified** the partners and promoted 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.
- **Standardized** 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.



**2014 Gypsy Moth Slow the Spread Accomplishments**

**Funding:** Partner contributions during 2014 included the following:

Forest Service	\$8,875,000
State Partners	<u>\$2,437,445</u>
TOTAL	\$11,312,445

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

**Trapping:** The group consensus after 2 years was that trap spacing of 3k in the action area was not providing the resolution needed for decision making or evaluation of treatments. Further, the numbers of traps had fallen by almost half when compared to the optimized strategy for STS and the cost per



Illinois



Indiana



Iowa



Kentucky



Minnesota



N.Carolina



Ohio



Virginia



W.Virginia



Wisconsin

trap had increased significantly as the number of traps fell. Therefore in 2014, the action area was split in half with the proximal portion trapped at 2k and the distal portion trapped at 3k. This increased our number of traps from about 47,400 in 2013 to about 60,000 in 2014.

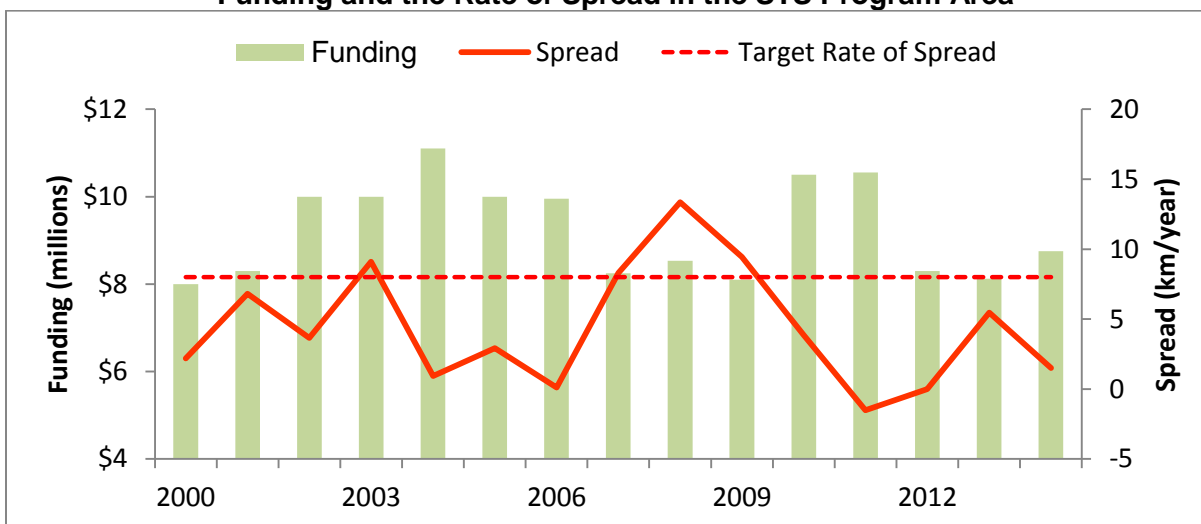
**Treatments:** Partners delineated 113 distinct gypsy moth colonies within the program area in 2013. Treatments subsequently occurred on just over 440,000 acres during the spring and summer of 2014 to reduce spread associated with those recently established infestations. Mating disruption continues to be the most widely used treatment because it is effective, inexpensive and target specific.

STATE	# OF COLONIES MANAGED	ACRES OF TREATMENT	
		Larvicides (Btk or Gypchek)	Mating Disruption
IL	9	0	29,452
IN	6	1,182	10,718
MN	3	1,050	53,607
NC	3	0	2,232
OH	29	4,767	120,073
VA	9	0	62,752
WI	54	18,887	135,573
<b>TOTAL</b>	<b>113</b>	<b>25,886</b>	<b>414,407</b>

Treatments were successful on 39 of the 44 blocks (89%) treated with *Btk* or *Gypchek* in 2014. Previous year mating disruption treatments (2013) were successful on 65 of the 69 blocks (94%).

**Spread:** Not surprisingly, trap captures decreased significantly across most of the project area because of the extreme cold winter temperatures combined with a cool wet spring that favored development of the fungus. Despite the fact annual spread rates for 10 of the 11 zones in STS were negative in 2014, the rolling 3-year average rate of spread for the entire program was still positive at 1.5 km in 2014.

**Funding and the Rate of Spread in the STS Program Area**



**Summary of 2014 project accomplishments and cost; cost figures include state match.**

Category	Accomplishment	Cost (thousands)
Monitoring	≈ 60,000 pheromone traps deployed in 10 states, spread measured and all treatments evaluated.	\$4,692 (≈\$70 per trap)
Treatments	113 infestations totaling about 440,000 acres treated; 94% treated with gypsy moth specific products	\$5,684 (≈\$12.92 per acre)
Data management	Streamlined and standardized data collection, planning and evaluation of all implemented actions	\$1,044
Technology Development	Upper population thresholds for mating disruption investigated.	\$195