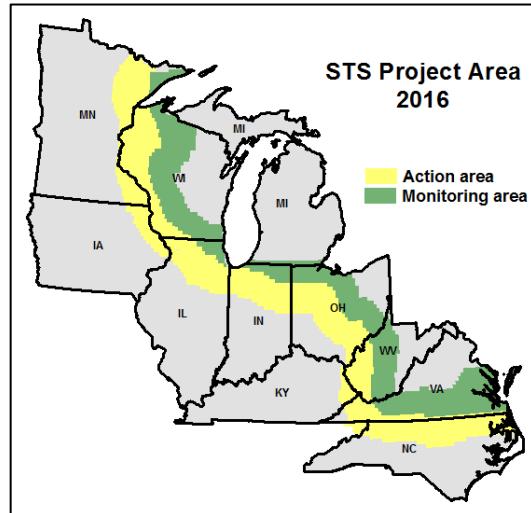




Executive Summary: States located along the leading edge of gypsy moth populations and highlighted in this document have cooperatively worked with the USDA Forest Service to implement a program to slow the spread of the gypsy moth since the year 2000 when Congress funded the strategy. The goal of the 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 150 million acres since the program's inception in the year 2000.
- **Yielded** a benefit to cost ratio 3 to 1 by delaying the onset of impacts that occur as gypsy moth invades new areas.
- **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, area-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 each year.



2016 Gypsy Moth Slow the Spread Accomplishments

Funding: Partner contributions during 2016 included the following:

Forest Service, operations	\$ 7,458,000
Forest Service, technology development	\$ 115,000
State Partners	\$ 2,454,700
TOTAL	\$10,027,700

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

Trapping: As allocations for STS have been reduced, the program has not been able to maintain the optimized trapping strategy, which dictates a 2 km spacing between base grid traps throughout the STS action area. Various strategies to cut the program's trapping costs have been implemented over the past 8 years, including narrowing the width of the action area (2006 to 2012), widening spacing between the base grid traps to 3 km across the entire action area (2013 and 2014 and most recently splitting the action area in half with the proximal portion trapped at 2 km and the distal portion at 3 km (2015 and 2016).



Illinois



Indiana



Iowa



Kentucky



Minnesota



N.Carolina



Ohio



Virginia



W.Virginia



Wisconsin

The “split” strategy has maintained the resolution in the trapping data needed for decision making while also reducing costs by decreasing total traps from 90,000 per year to 65,000 per year.

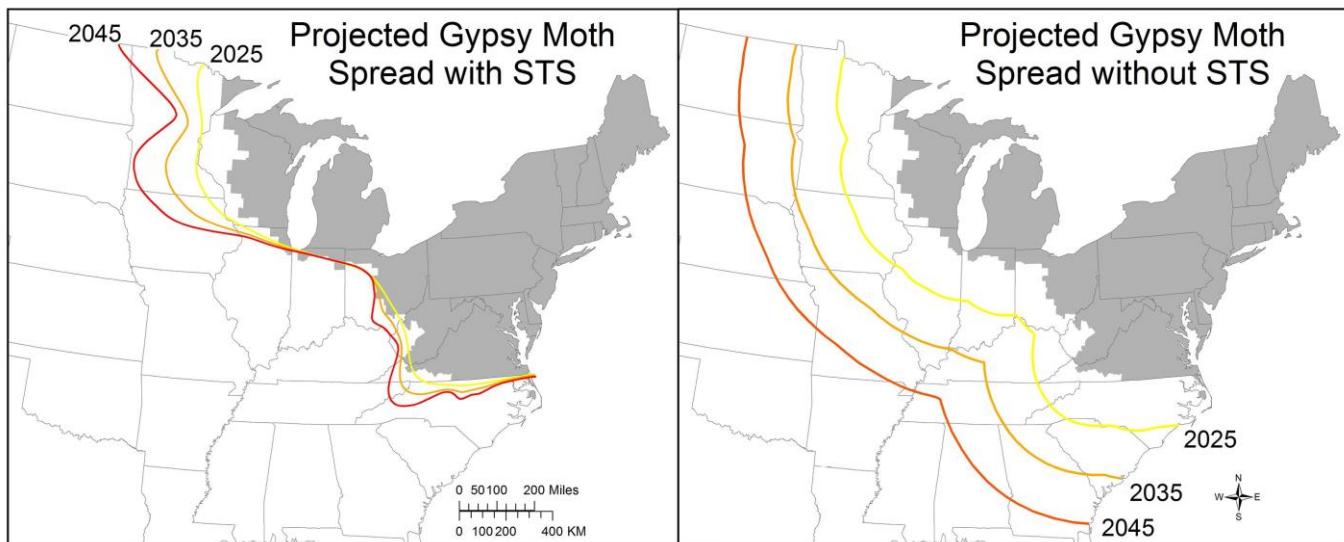
Treatments: Partners delineated more than 100 distinct gypsy moth colonies within the program area in 2015. Treatments subsequently occurred on just over 451,700 acres during the spring and summer of 2016 to reduce spread associated with those recently established infestations. Mating disruption continues 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
IA	3	0	10,200
IL	1	0	31,949
IN	11	1,089	4,573
MN	5	1,135	4,895
NC	9	2,910	22,781
OH	41	2,407	140,140
VA	6	0	37,250
WI	86	16,577	175,842
TOTAL	162	24,118	427,630

Treatments were successful on 47 of the 54 blocks (87%) treated with stand-alone *Btk* or Gypchek in 2016. Previous year (2015) mating disruption treatments were successful on 59 of the 64 blocks (92%).

Spread: Spread rates remained stable or decreased slightly everywhere except Virginia and North Carolina. Despite the drastic increases in those two states, the average rate of spread in 2016 remained low at 3.8 km.

A new projected spread map (below) was developed for STS that more accurately represents the variability in spread rates across the population front.



Summary of 2016 project accomplishments and cost; costs include federal and state matching funds.

Category	Accomplishment	Cost (thousands)
Monitoring	≈ 65,000 pheromone traps deployed in 10 states, spread measured and all treatments evaluated.	\$4,450 (\$69 per trap)
Treatments	162 infestations totaling 451,748 acres treated; 95% treated with gypsy moth specific products	\$4,430 (\$10 per acre)
Data management	Streamlined and standardized data collection, planning and evaluation of all implemented actions	\$1,033
Technology Development	Upper population thresholds for mating disruption investigated.	\$115