Achieving Our Mission
Slowing the Spread of Gypsy Moth
2010 Accomplishment Report

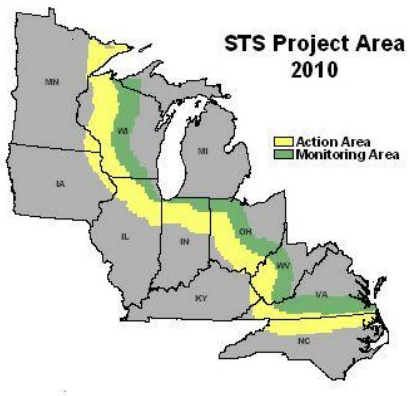
Executive Summary: States located along the leading edge of gypsy moth populations and highlighted in this document have cooperatively worked with the USDA Forest Service, to implement a project to slow the spread of the gypsy moth. This work has been ongoing since Congress funded the strategy in the 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:

- ***Reduces*** the spread of this destructive pest by at least 60%, which has prevented infestation of almost 100 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 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.
- I**nsures** that actions are standardized 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 and measure spread rates each year.

2010 Gypsy Moth Slow the Spread Accomplishments

Funding: After three years of budget reductions, the project returned to full funding in 2010. Partner contributions during 2010 included the following:

Forest Service	$10,500,000
State Partners	$2,909,443
TOTAL	$13,409,443



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

Trapping: Partners deployed traps at 95% of the 89,959 planned trap sites during 2010. 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 2011.

Illinois Indiana Iowa Kentucky Minnesota N.Carolina Ohio Virginia W.Virginia Wisconsin

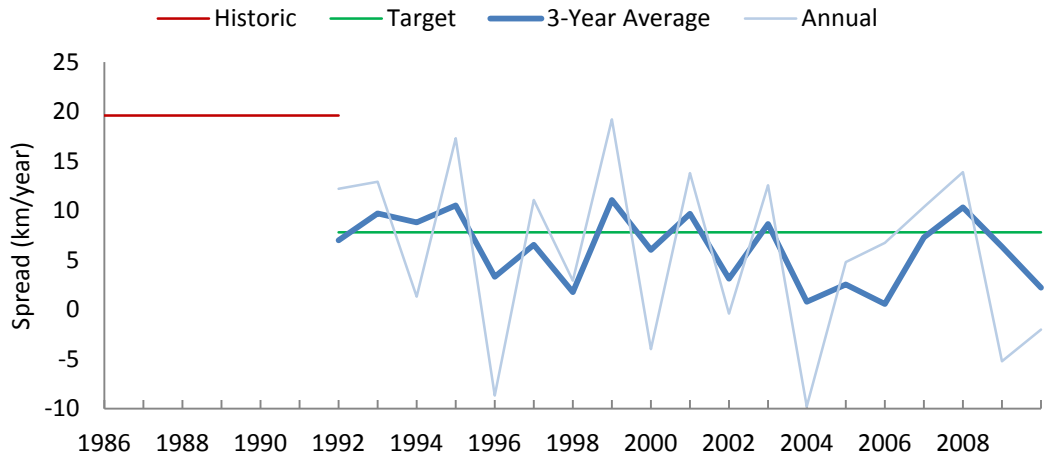
Treatments: Partners detected and delineated more than 200 distinct gypsy moth colonies within the program area in 2009. Treatments subsequently occurred on just over 530,000 acres during the spring and summer of 2010 to reduce spread associated with these recently established infestations. Mating disruption was again the most widely used treatment and will continue to be a major part of STS because it is effective, inexpensive and target specific.

STATE	# OF COLONIES MANAGED	ACRES OF TREATMENT Larvicides (Btk, dfb or GypChek)	ACRES OF TREATMENT Mating Disruption
IL	28	3,752	3,450
IN	21	5,111	13,093
MN	5	2,152	99,025
NC	6	3,628	3,000
OH	45	6,178	105,223
VA	12	2,383	14,822
WI	92	40,459	167,288
WV	4	0	62,588
TOTAL	213	63,663	468,489

Treatments were successful on 98 of the 119 blocks (81%) treated with Btk, Dimilin or Gypchek in 2009. Previous year mating disruption treatments were successful on 73 of the 76 blocks (96%). Both Disrupt II and SPLAT-GM were used on the mating disruption projects. The addition of a 2nd disruptant (SPLAT-GM) has led to greater competition and reduced prices for mating disruption treatments.

Spread: The effect of 3 consecutive years of reduced funding combined with an outbreak in the Mid-Atlantic States is evident in the steady increase in spread rates observed from 2005 to 2008. Spread rates decreased once the outbreak collapsed in 2008. Since inception of the program, spread has averaged 4 km per year.

Rate of Spread Measured in the STS Program Area



Summary of 2010 project activities that contribute to the success of the STS program

Category	Accomplishment	Cost (thousands)
Monitoring	≈ 90,000 pheromone traps deployed in 10 states, spread measured and all treatments evaluated.	$5,678 (≈$63.44 per trap)
Treatments	>200 infestations totaling ≈ 532,000 acres treated; 88% treated with gypsy moth specific products	$6,479 (≈$12.18 per acre)
Data management	Streamlined and standardized planning; data collection and evaluation of all implemented actions	$1,022
Technology Development	New product developed for use in mating disruption; better understanding of phenology in northern areas	$230