



2007

Accomplishments

In

Slowing the Spread of the Gypsy Moth



Since Congress funded the Slow the Spread Program (STS) in the year 2000, eleven states located along the leading edge of gypsy moth populations, in cooperation with the USDA Forest Service, have implemented a region-wide strategy to minimize the rate at which gypsy moth spreads into uninfested areas. STS involves the states of Minnesota, Michigan, Wisconsin, Iowa, Illinois, Indiana, Ohio, West Virginia, Kentucky, Virginia and North Carolina. Tennessee will likely join the program in the near future. As a direct result of this program, impacts that would have occurred on more than 75 million newly infested acres have been prevented since the program's inception 8 years ago.

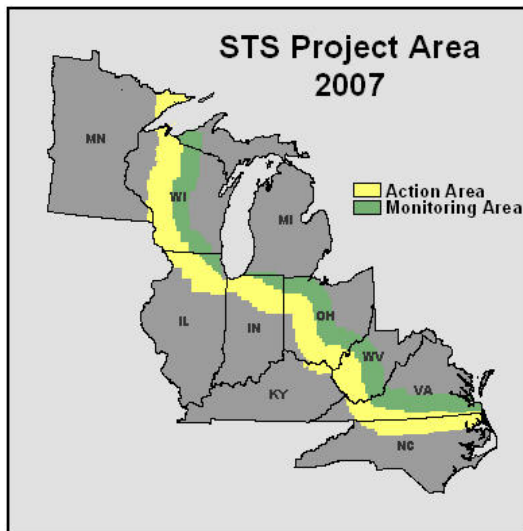
The Benefits

- X STS reduces spread of this destructive pest by more than 70%, which will prevent infestation of more than 190 million acres over the next 20 years (compare maps).
- X STS protects the extensive urban and wild land hardwood forests in the south and upper mid-west while also protecting the environment through the use of gypsy moth specific tactics.
- X STS unifies the partners and promotes a coordinated, region-wide action based on biological need. STS yields a benefit to cost ratio of more than 2.5 to 1 by delaying the onset of impacts that occur as gypsy moth invades new areas.
- X STS insures 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..

Red shaded counties are infested as of 2007; yellow shaded counties will become infested over the next 20 years.

Project Area: After 7 years of stable federal funding in the amount of \$10 million per year, the Forest Service began to implement budget cuts for the STS project in 2007. To respond to this situation the STS Foundation Board of Directors directed the technical committee to investigate the most efficient method to reduce overall costs. After considering various options, the technical committee concluded that the current 170 km wide STS project area, which includes both the action and evaluation areas, cannot be substantially reduced without sacrificing data that is critical to the project. However, the relative widths of the action and evaluation areas can be artificially adjusted in response to fluctuating budget levels; of course spread rates will increase as the action area is narrowed.

The location of the STS area (map) in 2007 was delineated to accommodate budget cuts by narrowing the action zone by 10 km and widening the evaluation zone by the same amount. In 2007 the action and evaluation areas were 90 km and 80 km wide respectively. The location of the active management band (yellow shaded area on map) shifted west and south and the overall size changed from 54 million acres to 48 million acres.



Treatments: During 2006, STS partners detected and delineated 180 distinct gypsy moth colonies within the STS area. Treatments subsequently occurred on just over 425,000 acres during the spring and summer of 2007, including 41,121 acres of treatment on federal lands.

Treatments were successful on 80% of the blocks treated with Btk, Dimilin or Gypchek in 2007. Previous year mating disruption treatments were

successful on 94% of the blocks. Recent work to refine the technology for mating disruption has led to increased spacing between applied swaths. This tactic will continue to be a major part of STS because it is effective, inexpensive and target specific.

State	No. of Infestations Treated	Acres of Treatment	
		Larvicides (Btk, dfb or GypChek)	Mating Disruption
NC	8	1,104	3,739
VA	32	5,761	76,441
OH	42	16,380	186,596
IN	15	7,099	22,787
IL	13	2,701	4,401
WI	63	28,361	70,939
Total	173	61,406	364,903

Trapping: Total numbers of traps planned for the project area decreased by 15% when compared to earlier years. STS partners deployed traps at just over 95% of the 73,190 planned trap sites during 2007. Data from these traps were used to measure spread, evaluate treatment efficacy and to detect / delineate newly established infestations that will need to be treated during 2008.

Economic Assessment: an update to the 1991 assessment was initiated under the direction of Dr. Erin Sills at North Carolina State University in Raleigh, NC.

Funding: The STS program absorbed a 17.5% decrease in federal funding when compared to 2006. During 2007 STS partner contributions collectively totaled:

Forest Service	\$ 8,250,000
State Partners	\$ 2,652,357
TOTAL	\$10,902,367

Spread: The combination of reduced funding and widespread outbreaks in the generally infested area has resulted in increased spread rates. However, the 3-year rolling average is still well below our target rate at 7.3 km per year.

