2006



Accomplishments



Slowing the Spread of the Gypsy Moth



Since Congress funded the Slow the Spread Program (STS) in the year 2000, ten 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. As a direct result of this program, spread has been dramatically reduced by more than 70% from the historical level of 13 miles per year to 3 miles per year. In just 6 years, this program has prevented the impacts that would have occurred on more than 40 million newly infested acres.

The Benefits

- STS reduces spread of this destructive pest to 3 miles per year, which will prevent infestation of more than 150 million acres over the next 20 years (compare maps).
- STS protects the extensive urban and wild land hardwood forests in the south and upper mid-west.
- STS protects the environment through the use of gypsy moth specific treatment tactics.
- STS unifies the partners and promotes a well coordinated, region-wide action based on biological need.
- STS yields a benefit to cost ratio of more than 4 to 1 by delaying the onset of impacts that occur as gypsy moth invades new areas.
- STS Involves the states of Minnesota, Michigan, Wisconsin, Illinois, Indiana, Ohio, West Virginia, Kentucky, Virginia and North Carolina. Iowa will likely join the program in the near future
- STS uses a powerful decision algorithm to insure that planned actions are standardized across the multiple administrative and jurisdictional boundaries in the program. Movement of project boundaries, location of incipient infestations, prioritizing and delineating infestations for treatment and measuring spread rates are all standardized and streamlined by the decision algorithm.



Red shaded counties are infested as of 2005; yellow shaded counties will become infested over the next 20 years. **Project Area**: The location of the 51 million acre areas on map) in 2006 was delineated according band managed under STS (yellow & green shaded to recommendations from the STS Decision Algorithm (DA). The project area changed very little when compared with 2005.



Treatments: During 2005, STS partners detected and delineated 209 distinct gypsy moth colonies within the STS area. Treatments subsequently occurred on just over 541,000 acres during the spring and summer of 2006. This included 110,688 acres of treatment on federal lands.

Treatments were successful on 82% of the blocks treated with Btk, Dimilin or Gypchek in 2006. Previous year mating disruption treatments were also successful on 82% of the blocks. Mating disruption will continue to be a major part of STS because it is effective, inexpensive and target specific.

	No. of	Acres of Treatment	
State	Colonies Managed	Larvicides (Btk, dfb or GypChek)	Mating Disruption
NC	8	2,149	8,010
VA	27	13,412	56,021
WV	6	10,840	10,181
OH	21	37,455	43,597
IN	29	10,810	26,529
IL	26	3,931	23,344
WI	87	34,543	122,794
MN	5	2,015	135,662
Total	209	115,155	426,138

Trapping: STS partners deployed traps at just over 95% of the 86,890 planned trap sites during 2006. Data from these traps were used to measure spread, evaluate treatment efficacy and to detect or delineate newly established infestations that will need to be treated during 2007.

Spread: Gypsy moth populations rebounded in some areas that have been infested for years. Despite this pressure from behind the line, spread rates remain low across the entire STS area.

Funding: The STS project received \$10 million in funding from the Forest Service to implement the program in 2006. During 2006 STS partner contributions collectively totaled:

Forest Service	\$ 9,900,500
State Partners	\$ 3,225,325
TOTAL	\$13,125,825

Activity	Accomplishment	Cost
Monitoring	≈ 84,000 pheromone traps deployed in 10 states	\$4.48 million (\$50.39 per trap)
Treatments	209 infestations totaling ≈ 541,000 acres treated > 75% treated with gypsy moth specific products	\$7.18 million (\$13.27 per acre)
Indirect	Indirect on grants, data management, GIS, decision support and project evaluation	\$1.21 million
Technology Development	Promising new product for mating disruption evaluated, initiated new economic assessment	\$0.26 million

Summary of major project activities