# **Slowing the Spread of Gypsy Moth**

USDA Forest Service
Northeastern Area
State and Private Forestry



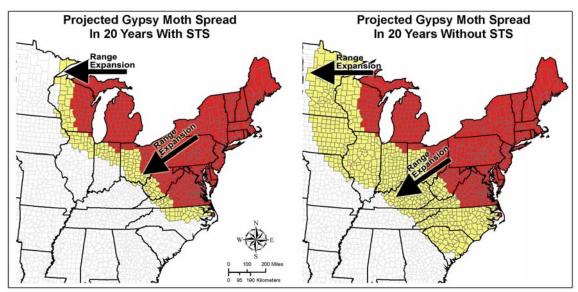
**Description:** Gypsy moth, a nonnative invasive insect pest brought to this country from Europe, has been established and spreading in the United States for almost 140 years. Despite this long establishment period, more than two-thirds of its potential U.S. habitat is still free of this pest. The Slow the Spread (STS) pilot project demonstrated that the current and future rate of spread of gypsy moth could be greatly reduced through intensive monitoring and use of environmentally sensitive treatments. The benefits of reducing the rate of spread exceed the costs of treatment and monitoring by more than 3 to 1. It is estimated that the STS program will prevent infestation of more than 150 million acres of urban and residential areas, and forests over the next 20 years. Full funding for a national STS program was achieved in FY 2000 and STS is now part of USDA's national gypsy moth management strategy. The STS program is managed by a nonprofit foundation made up of the states involved in the project.

## **Key Issues**

- In 2007, 11 states participated in the program North Carolina, Virginia, West Virginia, Kentucky, Ohio, Indiana, Illinois, Michigan, Wisconsin, Iowa and Minnesota. Tennessee will become an active participant as soon as gypsy moth moves into that state.
- Improvements in technology that control low density gypsy moth populations by disrupting their mating have enhanced the program's environmental viability.
- Novel management structure (nonprofit foundation) unifies the partners, increases accountability and promotes action based on biological need rather than availability of matching funds.
- STS yields a benefit-to-cost ratio of more than 3 to 1 by delaying the costs of managing and economic impacts from gypsy moth infestations as the insect invades new areas.
- STS protects the extensive urban and wildland hardwood forests in the south and upper mid-west

# **Accomplishments**

- The rate of spread has been reduced by more than 70 % to about 5 km per year. In just 8 years, this program has prevented the impacts that would have occurred on more than 60 million newly infested acres
- Almost 50 million acres from Minnesota to North Carolina were intensively managed in 2007; an additional 30 million acres were monitored less intensively to measure the program's effect on the rate of spread.
- Almost 80,000 pheromone traps were deployed in 2007 to detect or delineate newly established colonies that may require treatment in 2008 and to evaluate past treatments.
- 173 distinct gypsy moth colonies totaling more than 426,000 acres were treated during the spring and summer of 2007. Mating disruption, a gypsy moth-specific tactic, was used on 85% of these acres.



Scientists estimate that without the STS program the gypsy moth will infest an additional 150 million acres over the next 20 years, causing economic impacts to state and local governments and landowners.

## **Budget History**

Gypsy Moth Slow the Spread Program				
(\$ Thousands)				
	FY 2005	FY 2006	FY 2007	FY 2008
Totals	10,000	\$10,193	\$9,574	

#### **Future Direction**

- Continue to manage program implementation through the STS Foundation.
- Plan an STS initiative to accommodate potential reductions in future funding.
- Continue an active and strong Forest Service technical role in the STS program.
- Promote the STS business model as a template for responding to other invasive forest pests.

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