Spongy moth caterpillars feed on shrub and tree leaves. Airplanes are the most efficient and cost-effective way to apply products to the tree canopy over a large area. Aerial application uses less than a gallon of pesticide per acre and is far less expensive per acre than ground-based pesticide applications.

Professional pilots who fly the spray planes are licensed and certified by the Federal Aviation Administration. They are also licensed and certified by the State of Wisconsin as commercial pesticide applicators. Wisconsin also accepts applicator licensing and certification from qualified states.

Businesses that provide aerial application of pesticides are licensed by the State of Wisconsin. The companies that were awarded the spray contracts for the Wisconsin Cooperative Spongy Moth Program meet all of Wisconsin’s strict requirements as pesticide application businesses.

The spray planes require special flight training. The planes carry global positioning systems (GPS) for computer-controlled spraying precision. While the spray planes are flying, they are monitored by observers in planes flown by Wisconsin DNR pilots.

In recent years, public concern has increased about the possible use of spray planes as instruments of terrorism. The pilots and the Wisconsin Cooperative Spongy Moth Program are aware of this concern and take extra precautions during spongy moth treatments, including:

- Establishing a chain of custody from the product manufacturers to Wisconsin for all of the biological pesticides;
- Securing pesticides according to the current pesticide law;
- Implementing identification requirements and restricting access to planes;
- Notifying of local law enforcement, local officials and local media;
- Securing or disabling planes when not in use.