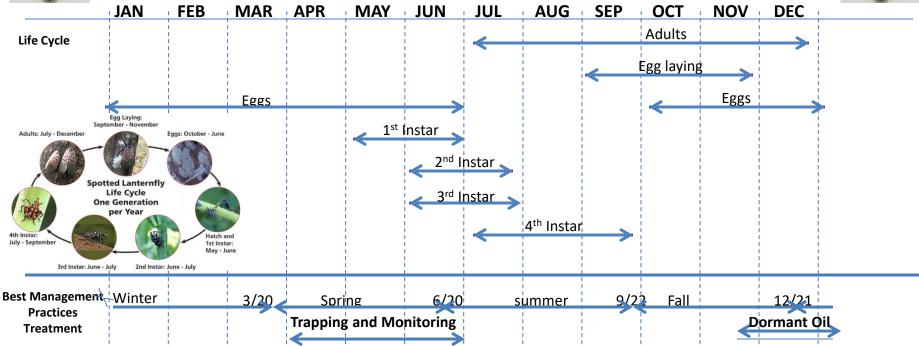


Spotted Lantern Fly Management Practices





Acceptable trapping techniques take many different forms, however they all have one common function, they all wrap the entire circumference of the trunk to prevent SLF from climbing into the canopy to feed. Traps for SLF take advantage of the nymph life stage in spring through early summer. At this stage, their proboscis is too small to feed through the thicker bark of the trunk. Since they cannot fly yet, they must climb to the outer ends of the newest branches to feed on the softest tissues. During wind events, they get knocked out of the tree canopy and have to climb back up, forcing them to cross the

The most efficient and cost effective trapping system found so far is the sticky tree-band with a wire cage. The adhesive of the tree-band is UV and weather resistant, and is extremely effective at catching nymph stage SLF. The addition of the wire cage is HIGHLY recommended.

While some adult SLF will be trapped, tree-banding is most effective for controlling the nymph stages on trees or shrubs that have a large enough stem(s). This technique does not work for hosts that have multiple stems smaller than 4" DBH. Traps should be installed before the first brood emerges in late April or early May.

Systemic treatments

In combination with trapping, or when trapping is not an option, or if SLF has already reached adult form, systemic insecticide applications become the next best option. Products containing the active ingredient Imidacloprid of Dinotefuran are recommended as they prove to have the highest impact on SLF while minimizing environmental impact as long as very precise timing is followed. Both of these products CANNOT be applied during flower blooms as they are highly toxic to bees, butterflies, and other pollinators. Fortunately, blooms are finishing right around the time the first wave of SLF starts to reach adulthood in July.

Imidacloprid should be used earlier in the season (right after blooms finish). It has a slow uptake, taking up to 6 weeks to reach the tips of the tallest trees, but it has 4-6-month residual. Therefore, if used early in the season, it offers season long control from as little as just one application.

Dinotefuran, on the other hand, has extremely fast uptake, reaching the tips of branches in even the tallest trees in 2-3 weeks. However, it only has a 2-3-month residual. The fast uptake on Dinotefuran makes it an ideal option for applications later in the season if the window for Imidacloprid was missed. Either product can be applied AFTER bloom drop through either soil drench method or basal trunk spray method.

If control with traps and treatment with systemic products is not available contact insecticide sprays are also available. These options should ONLY be used if other options have been exhausted. Contact insecticide sprays are not as effective in controlling SLF as the other options described above as they are limited by their ability to only kill insects they come in contact with. This makes them considerably less effective the larger the tree is. Contact insecticides are also broad spectrum, meaning they will kill ANY insect they come in contact with, including the beneficial insects like ladybugs, butterflies, or bees.

Dormant of horticultural oils and soaps, are a contact insecticide that have been shown to offer some good post-season control by suffocating eggs that cannot be reached for physical destructions such as smashing or scraping. Oils and soaps should be applied in the late fall or early winter, after all adults have died off for the season. When applied properly, the oil will coat, and penetrate the egg masses, creating a barrier to the air and suffocating the eggs before they have a chance to develop.

Contact insecticidal sprays should only be used to supplement the trapping and systemic treatments if absolutely necessary, but implementation of the traps and systemic treatments at the appropriate time usually provides enough control to eliminate the need for contact insecticides.