

# Invasive Insects of Greatest Concern to Pennsylvania

## Tier Descriptions:

**Tier 1 | Early Detection/Prevention:** Species in this category are absent from target regions and should receive the highest level of early detection survey efforts. Natural resource professionals should conduct delineation surveys for Tier 1 species and assign species detected to the appropriate tier.

**Tier 2 | Eradication:** Species in this category occur in small localized populations and should receive the highest level of early detection response efforts. High impact species with low enough abundance and suitable treatment method(s) should make eradication feasible in a given area.

**Tier 3 | Containment:** Species in this category are spreading and increasing in number, and should receive targeted and strategic management to slow their spread as they are likely too widespread to eradicate. Surrounding regions could be left at risk if Tier 3 species are left unattended.

**Tier 4 | Local Control:** Species in this category are established throughout the state or target region and cannot be feasibly eradicated. Land managers should instead focus efforts on localized management over time to contain, exclude, or suppress to protect high-priority resources like rare native species or recreational assets. Managers are advised to be strategic when deciding if/when to control Tier 4 species.

**Tier 5 | Monitor:** Species in this category need more research, mapping, and monitoring to understand their invasiveness. This includes naturalized species and cultivated-only species that are known to be invasive in other regions, but are not yet invasive here. Invasiveness may change with environmental or genetic changes. Land managers should monitor populations on a regular basis to see if they are starting to become invasive. If invasive infestations are detected, species should be assigned to an appropriate tier.

Common Name	Scientific Name	Tier	Regulatory Status
Spotted-wing drosophila	<i>Drosophila suzukii</i>	1	
Asian garden beetle	<i>Maladera castanea</i>	1	
Giant hornet	<i>Vespa mandarinia</i>	1	Federal
Asian longhorned beetle	<i>Anoplophora glabripennis</i>	1	Federal
Crape myrtle bark scale	<i>Eriococcus lagerstroemiae</i>	1	Federal
European fire ant	<i>Myrmica rubra</i>	1	
Kudzu bug	<i>Megacopta cribraria</i>	1	
Red imported fire ant	<i>Solenopsis invicta</i>	1	Federal
Spruce longhorned beetle	<i>Tetropium fuscum</i>	1	Federal
Winter moth	<i>Operophtera brumata</i>	1	
European cherry fruit fly	<i>Rhagoletis cerasi</i>	1	Federal
Box tree moth	<i>Cydalima perspectalis</i>	2*	Federal
Allium leaf miner	<i>Phytomyza gymnostoma</i>	3	
Cherry curculio	<i>Anthonomus consors</i>	3	
Elm zigzag sawfly	<i>Aproceros leucopoda</i>	3	Federal
Fall armyworm	<i>Spodoptera frugiperda</i>	3	
Lily leaf beetle	<i>Lilioceris lilii</i>	3	Federal
Sirex woodwasp	<i>Sirex noctilio</i>	3	Federal

Spotted lanternfly	<i>Lycorma delicatula</i>	3	State
Viburnum leaf beetle	<i>Pyrrhalta viburni</i>	3	
Balsam woolly adelgid	<i>Adelges piceae</i>	4	
Brown marmorated stinkbug	<i>Halyomorpha halys</i>	4	
Elongate hemlock scale	<i>Fiorinia externa</i>	4	
Emerald ash borer	<i>Agrilus planipennis</i>	4	
Introduced pine sawfly	<i>Diprion similis</i>	4	
Japanese beetle	<i>Popillia japonica</i>	4	
Spongy moth	<i>Lymantria dispar</i>	4	Federal
Hemlock woolly adelgid	<i>Adelges tsugae</i>	4	Federal

\*Note: Currently in Erie County only.