USDA Forest Insect & Disease Leaflet 162: Spongy Moth

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Note: The Governing Board of the Entomological Society of America elected to change gypsy moth to spongy moth in early 2022. The transition to the new common name will likely be a multi-year process. To maintain consistency for those who have been dealing with this pest, several of our outreach materials may include the previous common name, gypsy moth.

The Forest Insect and Disease Leaflet (FIDL) series



Gypsy Moth

Tom W. Coleman¹, Laurel J. Haavik², Chris Foelker³, and Andrew M. Liebhold Gypsy moth, Lymantria dispar dispar (Linnaeus) (Lepidoptera: Erebidae), is an exotic invasive species introduced from Europe that is spreading south and west in North America. In spring and early summer, gypsy moth caterpillars feed on the leaves of many different tree species, especially oaks. During outbreaks, caterpillars defoliate entire forests. Most broadleaf trees produce new foliage in response to defoliation >50%, allowing them to resume photosynthes Defoliation weakens trees, which renders them more susceptible to secondary mortality agents. Gypsy moth can also directly kill trees, especially if severe defoliation persists for multiple successive seasons. In some years, outbreaks can be massive with defoliation exceeding several million acres. If extensive tree mortality occurs outbreaks can contribute to shifts in

dominance by immune host species. Several related moth species, including L. albescens, L. mathura, L. monacha, L. postalba, umbrosa, and two other subspecies of gypsy moth, L. dispar asiatica and *L. dispar japonica*, the Asian gypsy moth, do not have established populations in North America. Of these, Asian gypsy moth subspecies, L. dispar asiatica and L. dispar japonica, have been the most frequently intercepted and accidentally introduced subspecies in North America Asian gypsy moth surveillance and eradication have been particularly critical because these subspecies have broader host ranges than their European counterpart, and unlike the European subspecies, females are capable of flight.

forest species composition toward

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provides information about insects and diseases affecting

forest trees in the United States. FIDLs are produced through coordinated efforts of the US Forest Service's Forest Health Protection staff and its partners from state forestry, academic and research organizations.

Spongy moth, formerly gypsy moth, Lymantria dispar dispar (Linnaeus) (Lepidoptera: Erebidae), is an exotic invasive species introduced from Europe that is spreading south and west in North America. In spring and early summer, gypsy moth caterpillars feed on the leaves of many different tree species, especially oaks. During outbreaks, caterpillars defoliate entire forests. Most broadleaf trees produce new foliage in response to defoliation >50%, allowing them to resume photosynthesis. Defoliation weakens trees, which renders them more susceptible to secondary mortality agents. Gypsy moth can also directly kill trees, especially if severe defoliation persists for multiple successive seasons. In some years, outbreaks can be massive with defoliation exceeding several million acres. If extensive tree mortality occurs, outbreaks can contribute to shifts in forest species composition toward dominance by immune host species.

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