

Gypsy Moth Detection Survey at Mount Rainier National Park- 2019

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IMPORTANCE

The gypsy moth is one of North America's most destructive, non-native forest insect pests. In areas of established populations, gypsy moth caterpillars defoliate millions of acres of forests and urban trees annually. Defoliated trees are susceptible to disease and other insects that may ultimately kill them. Extensive areas of dead and dying trees create a wildfire hazard, decreases water quality, destroys salmon habitat as well as habitat for birds and mammals, and would have an adverse impact on tourism. Monitoring for the presence of gypsy moth at Mount Rainier National Park is important to ensuring that this destructive forest pest does not threaten the health of the forests found within the park boundaries.



Lymantria dispar dispar
European Gypsy Moth (male)

DISCUSSION

Washington State Department of Agriculture's Pest Program conducts a yearly statewide survey for detection of the European gypsy moth, *Lymantria dispar*, and the Asian gypsy moths (including *Lymantria dispar asiatica*, *Lymantria dispar japonica*, *Lymantria albescens*, *Lymantria umbrosa*, and *Lymantria postalba*).

In 2019, a total of 22,683 traps were deployed statewide with 51 of those traps located within the boundaries of the National Park. Our chosen method of surveillance is a brown paper delta trap (Figure 1) baited with a gypsy moth pheromone based string lure. All traps installed in the park were placed out of site from park visitors (i.e. on backsides of trees not visible from parking lots or trails) and kept within 100 feet from main park roads.

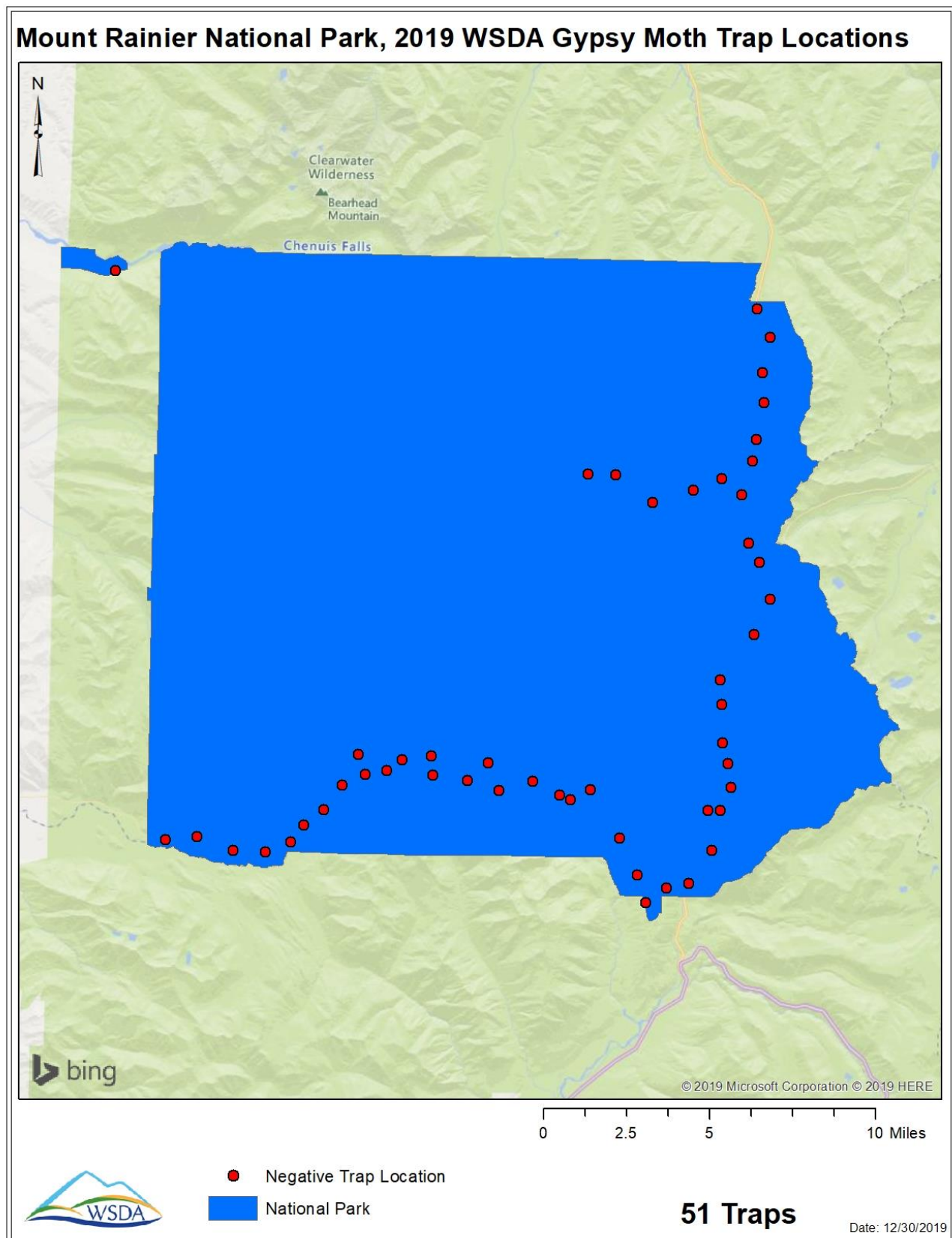
Figure 1. Brown delta trap used for gypsy moth detection trapping at Mount Rainier National Park; examples of traps placed out of site from park visitors



Trap installation began on June 18, 2019 with all traps placed by June 27, 2019; trap distribution is displayed in Figure 2. Traps were inspected, on a 14-day rotation, for the presence or lack of presence of the target species as well as to replace any damaged or missing traps. Frequent mid-season trap inspection allows for immediate response trapping to all moths captured during the flight period which enables us to quickly define the area of infestation and begin planning mitigation activities. All traps were removed from the park by September 26, 2019.

No gypsy moths were trapped at Mount Rainier National Park in 2019.

Figure 2. Gypsy moth trap distribution at Mount Rainier National Park in 2019



FUTURE PLANS

Washington State Department of Agriculture would appreciate the opportunity to continue monitoring for the presence of gypsy moth at Mount Rainier National Park in 2020.