

## **WEST VIRGINIA - 2023**

### **Forest Health Highlights**

#### **The Resource**

The West Virginia landscape is dominated by more than 11.8 million acres of forest. Due in large part to its varied topography, the forest is a rich diversity of oaks, hickories, spruce, pines, and the WV State Tree—sugar maple. Ninety percent of all forests in West Virginia are privately owned, but there are 8 State Forests, 36 State Parks, 109 Wildlife Management Areas, 2 National Forests, 4 National Park Areas, and 2 National Wildlife Refuges which all provide public enjoyment.

#### **FOREST STEWARDSHIP**

The Forest Management Program is administered by the West Virginia Division of Forestry. The intent of the program is to help private, nonindustrial forest landowners improve their forests by managing them in a sound, scientific manner. Within this program, the Forest Stewardship Program offers a forest management plan written by a professional forester based on the landowner's objectives. Other programs, EQIP and CREP, provide financial assistance for recreation, forest improvement, soil and water protection, wetlands protection, fisheries habitat enhancement, wildlife habitat enhancement, tree planting, and improvement of forest roads.

#### **Special Issues**

#### **LYMANTRIA DISPAR PROGRAMS**

The objectives of the West Virginia Department of Agriculture (WVDA) Lymantria dispar (Gypsy Moth) Program are to continue to minimize the adverse impact on forest resources, preserve aesthetic values, protect people from the annoyance and health problems that can occur when in contact with large numbers of Lymantria dispar (gypsy moth) caterpillars, and slow the spread of Lymantria dispar by reducing populations on the advancing front.

#### **LYMANTRIA DISPAR QUARANTINE**

West Virginia currently has 44 counties regulated and considered generally infested by Lymantria dispar. The WVDA regulates the movement of articles out of these counties into non quarantined counties or states. There were no new counties quarantined in 2023.

#### **SLOW THE SPREAD REGULATORY (Lymantria dispar)**

There were no regulatory insecticide treatments in West Virginia in 2023.

Staff visited 99 sites to investigate the movement of articles capable of transporting the gypsy moth into non-infested areas. Areas visited included Christmas tree sales lots, plant nurseries, mobile home dealers, campgrounds, firewood producers, interstate weigh stations, log yards, sawmills and relative trade shows.

**LYMANTRIA DISPAR (SPONGY MOTH) POPULATION** West Virginia's gypsy moth population in 2023 is increasing in most areas of the state.

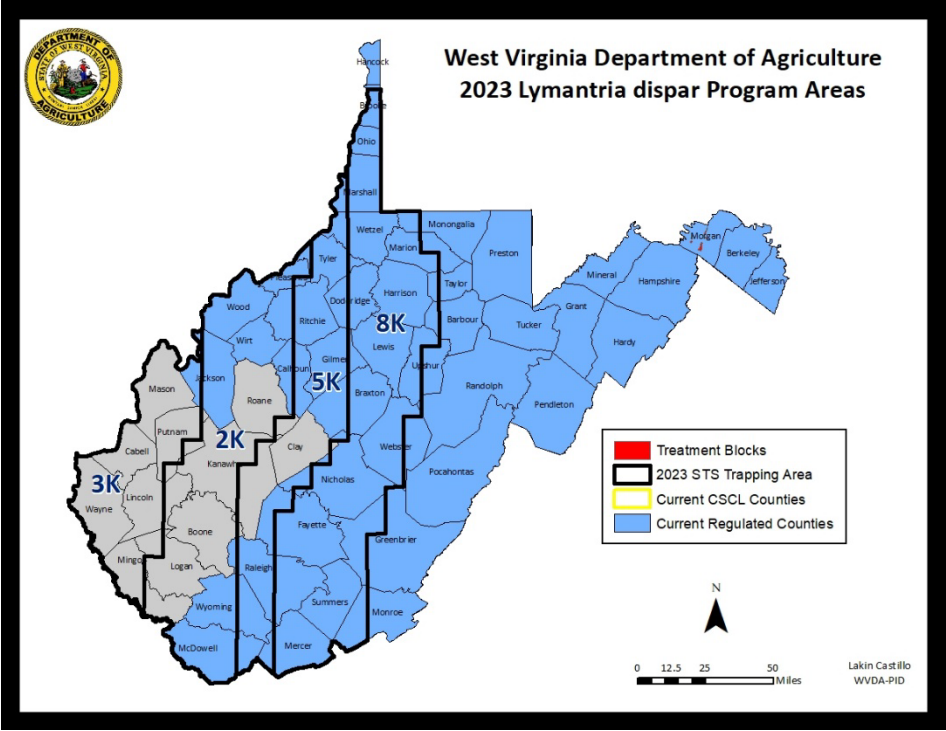
**LYMANTRIA DISPAR COOPERATIVE STATE COUNTY LANDOWNER PROGRAM (CSCL)** WVDA Staff are currently responding to landowner requests and completing surveys on forested lands in West Virginia to determine areas at risk for *Lymantria dispar* defoliation and/or mortality in the spring of 2024. Staff are currently using 1/40-acre plot surveys to determine areas at risk and plan to have surveys completed by late December. Egg mass surveys have determined that over 30,000 acres qualify for treatment in 2024. The spongy moth density in the Eastern Panhandle is high in areas with defoliation expected in 2024 for those areas. The WVDA treated 2,688 acres in the Cooperative State County Landowner (CSCL) Program in 2023.

The CSCL program covered three quarters of the state in 2023.

#### **STS SLOW THE SPREAD TRAPPING PROGRAM**

In West Virginia, the Action Area covered approximately 4,283,360 acres, while the 5k and 8k Monitoring Areas covered 5,694,052 acres. The 2k and 3k base-grids in the Action Area were placed using Delta traps. Milk carton traps were used within the 5k and 8k Monitoring Areas. A total of 3374 Delta traps were used in the STS Action Area and 579 Milk Carton traps were used in the Monitoring Areas. West Virginia had 8 delimit trapping areas during the trapping year of 2022. One (1) 500-meter grid with 6 delta traps, five (5) 1k grids with 48 delta traps, and two (2) 1k grids (48 milk carton traps).

#### **WEST VIRGINIA 2023 *Lymantria dispar* PROGRAM AREA**



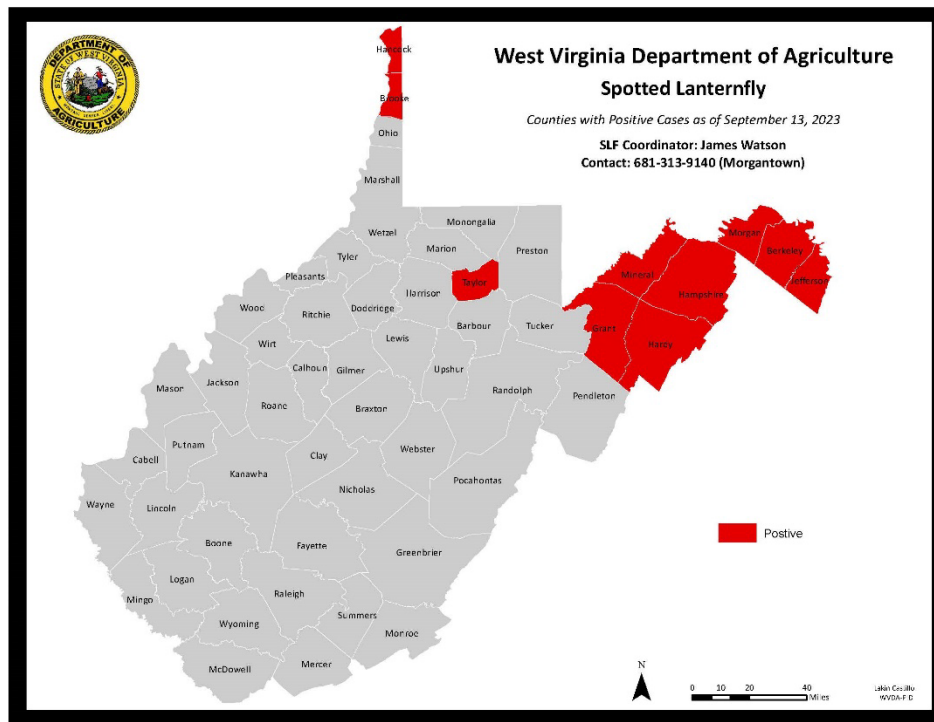
**2023 STS TRAPPING BREAKDOWN**

| <u>Grid</u>             | <u>Proposed</u> | <u>Omits</u> | <u>Set</u>   |
|-------------------------|-----------------|--------------|--------------|
| Regulatory              | 8               | 0            | 8            |
| 2K                      | 2,779           | 9            | 2,770        |
| 3K                      | 648             | 2            | 746          |
| 5K                      | 317             | 0            | 317          |
| 8K                      | 217             | 0            | 217          |
| 1K                      | 304             | 10           | 294          |
| <b>Totals</b>           | <b>4,273</b>    | <b>21</b>    | <b>4,252</b> |
| <u>Project Boundary</u> | <u>Proposed</u> | <u>Omits</u> | <u>Set</u>   |
| STS Action Area         | 3,731           | 21           | 3,710        |
| STS Monitoring          | 534             | 0            | 534          |
| Regulatory              | 8               | 0            | 8            |
| <b>Totals</b>           | <b>4,273</b>    | <b>21</b>    | <b>4,252</b> |
| <u>Trap type</u>        | <u>Proposed</u> | <u>Omits</u> | <u>Set</u>   |
| Delta Traps             | 3463            | 11           | 3,452        |
| Milk Cartons            | 810             | 10           | 800          |
| <b>Totals</b>           | <b>4,273</b>    | <b>21</b>    | <b>4,252</b> |

## FOREST HEALTH PROTECTION PROGRAMS

### Spotted Lanternfly

Spotted Lanternfly populations have now been detected in 10 of West Virginia's 55 Counties. These counties are Jefferson, Berkeley, Morgan, Hampshire, Mineral, Hardy, Grant, Taylor, Brooke, and Hancock. WVDA staff continue to treat spotted lanternfly in infested counties and monitor for arrival in non-infested counties. WVDA has continued its spotted lanternfly outreach and education campaign and encourages all landowners and land managers to kill tree-of-heaven on their properties and lands that they manage. To date, species that have had the most spotted lanternfly feeding activity in WV besides the preferred host tree-of-heaven are black walnut, Virginia creeper, wild and cultivated grapes, staghorn sumac, white mulberry, red maple, and silver maple.



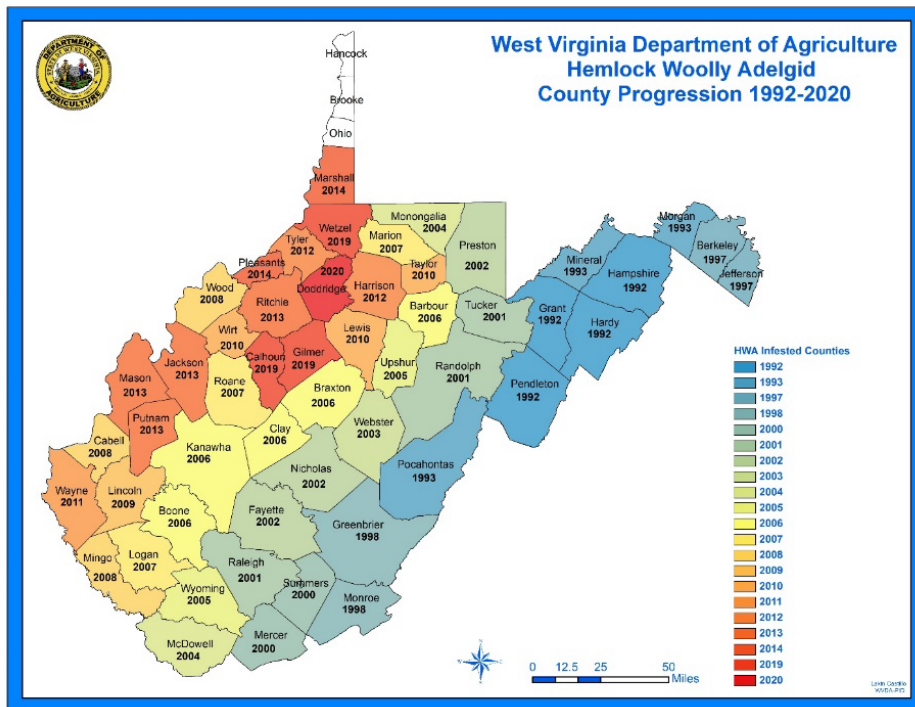
### Bacterial Leaf Scorch/Oak Decline

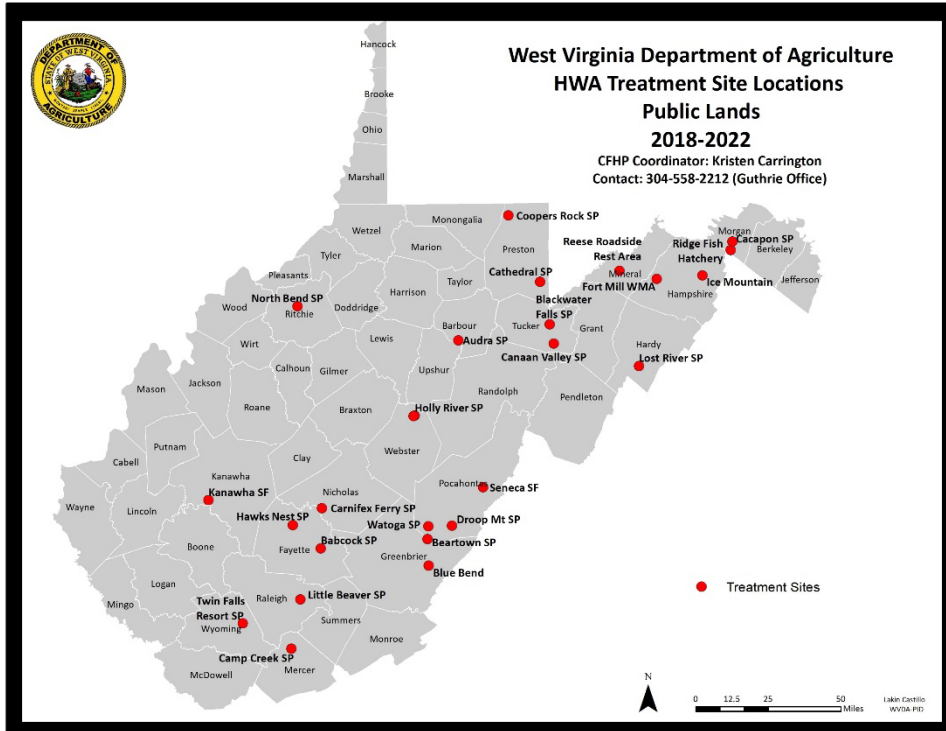
WVDA staff have been observing an abundance of symptoms on members of the red oak group that resemble bacterial leaf scorch disease in recent years. Tests from symptomatic trees in Grant, Mineral, and Pendleton Counties have confirmed the presence of bacterial leaf scorch. Thus, it is likely that other trees exhibiting the same symptoms are also infected with bacterial leaf scorch. Even healthy oaks in rural settings are being killed. Bacterial leaf scorch typically only an issue on stressed urban trees so the fact that whole hillsides of healthy oaks are turning brown and dying is not only cause for concern, but also very unusual.

In sync with the uptick in bacterial leaf scorch infections, WVDA staff have received numerous reports from landowners in the eastern panhandle areas of "oak decline". When WVDA staff have visited the sites there are usually two common issues present. One is members of the red

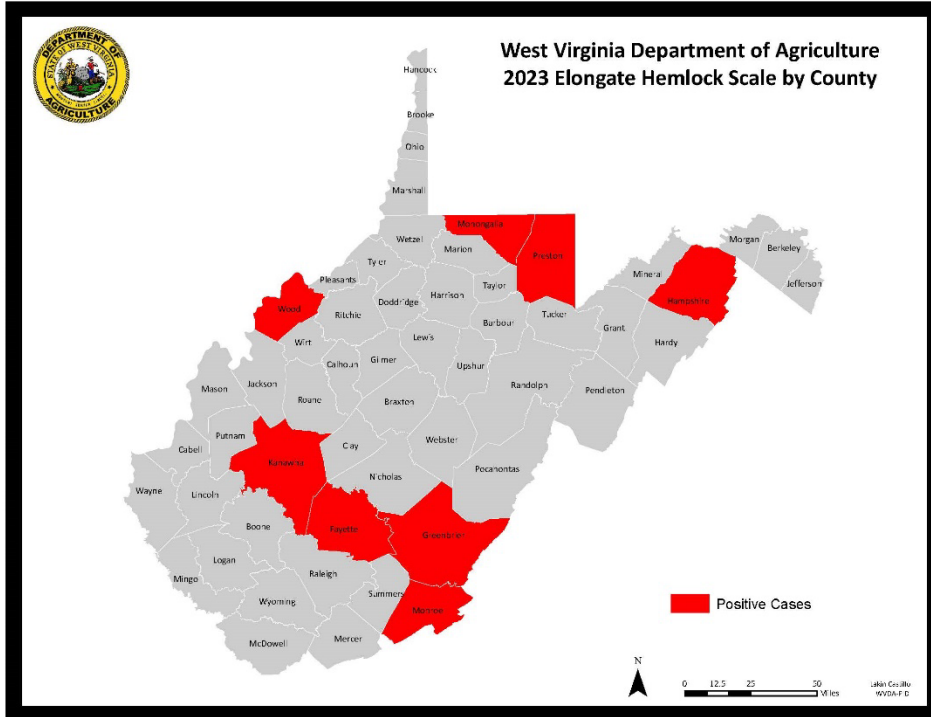
oak group that are infected with bacterial leaf scorch. The other is white and/or red oaks that are growing on a VERY poor site and are at the end of their productive life span due to the harsh growing conditions. On these poor sites, the oaks are stressed and prone to a host of disease issues that would not normally be an issue on good quality sites. It is possible that having so many stressed oaks has contributed to the outbreak of bacterial leaf scorch.

**Hemlock Woolly Adelgid (HWA)**—HWA can now be found in 52 WV counties. WVDA continued to treat high-value and high-visibility infested hemlocks with Imidicloprid by inserting CoreTect tablets into the soil, and trunk injections; 1,907 hemlocks were treated at six sites on state lands in 2023. Previous release sites of *L. nigrinus* were monitored for predator survival and impact on HWA.

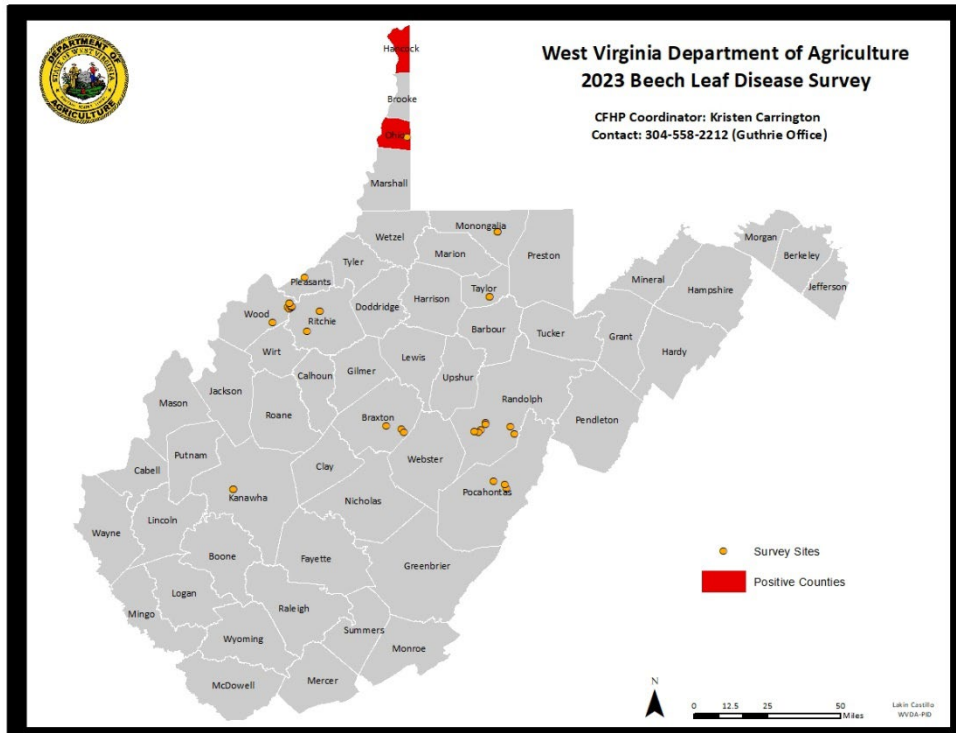




**Elongate Hemlock Scale-** EHS has been found in eight WV counties, Fayette, Greenbrier, Hampshire, Kanawha, Monongalia, Preston, Monroe and Wood. Surveys will continue throughout the fall and winter of 2023.



**Beech Leaf Disease-** WVDA surveyed for Beech Leaf Disease and revisited the eight long-term monitoring plots in areas of high risk and abundant beech resource. BLD was found in County in the Northern Panhandle of the state in 2020 and since then the disease has been found in areas of the park adjacent to the original discovery. Another detection was made in Ohio County and a new plot was established.



**Oak Decline Plots** -The WVDA has established 5 long-term monitoring plots for oak decline. Two in Monongalia, one in Greenbrier, one in Pocahontas and one in Morgan Counties. Plots will be revisited every two years.

