

BIOLOGICAL EVALUATION

Cooperative Eradication Gypsy Moth Project For Indiana – 2014

Gypsy moth is moving into northern Indiana from the infestations in Michigan and Ohio. Its movement is by natural spread and short distance transport by human activities. To detect the introduction of this pest, the State of Indiana has surveyed since 1972. From 1988 to 1998 the survey used a one-mile grid in the northern third of Indiana and a two-mile grid in the remainder of the state. In 1999, Indiana adopted the Slow-The-Spread (STS) survey protocol developed by the USDA Forest Service. Traps are set in detection (2K or 3K) and delimit (250M, 500M or 1K) grids across the state. The 2013 survey set 8,167 detection traps and 1,597 delimit traps, for a total of 9,764 traps set across the state. Six counties were not trapped in 2013 mostly for economic reasons, but also because of negative trap catches in previous years.

The STS analysis of the 2013 trapping data in Indiana identified potential problem areas (PPA's) at 52 locations in Indiana. The analysis identified higher or equivalent moth catches in delimiting survey grids placed at each site compared to detections and delimits in prior years and recommended action in these areas. The STS analysis did not detect the Tippecanoe County location as one of the potential problem areas. The additional PPA locations are evaluated in a separate environmental assessment for slowing the spread of gypsy moth in northern counties.

The detection of the Tippecanoe County site was made by an individual who identified gypsy moth caterpillars at the location. Additional field survey was conducted by Indiana DNR to determine the extent of the infestation. Indiana DNR and USDA, Forest Service staff reviewed this information and determined this site should have eradication treatment, and which treatment options should be applied. This information, along with locations of gypsy moth habitat, was then used to define where treatment boundaries would be designated for this area.

There are additional proposed treatment sites in Indiana which are proposed for slow the spread treatment. These sites are evaluated in a separate document.

Table 1 shows in the one northern county with the proposed treatment site, the mean number of gypsy moths caught in detection traps has been zero in 2011 and 2013. Tippecanoe County was not trapped in 2009, 2010 and 2012 because of historic negative trap catches and economic reasons.

Map 1 shows various moth lines and several potential problem areas across northern Indiana based on STS analysis of 2013 data. This analysis places the STS action area below the 10-moth line.

Map 2 and 3 show the number of gypsy moths detected in each county for 2012 and 2013, respectively.

Map 4 shows the 10-moth line in Indiana from 2009-2013.

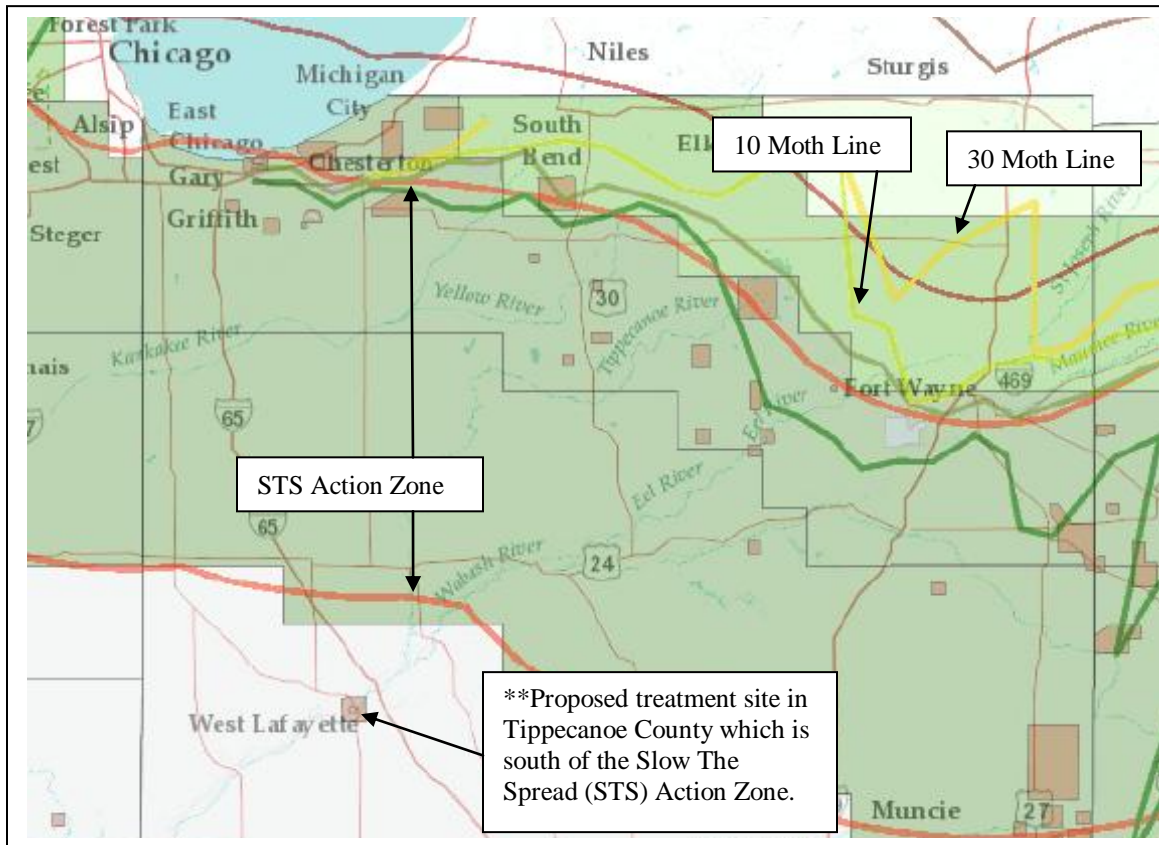
The site and moth trapping data can be viewed at the STS website – <http://yt.ento.vt.edu/da/>

Table 1. Mean number of gypsy moths per detection trap (milk carton and delta) in the proposed county for 2009 to 2013.

County	2009	2010	2011	2012	2013
Tippecanoe	*n/a	*n/a	0.00	*n/a	0.00

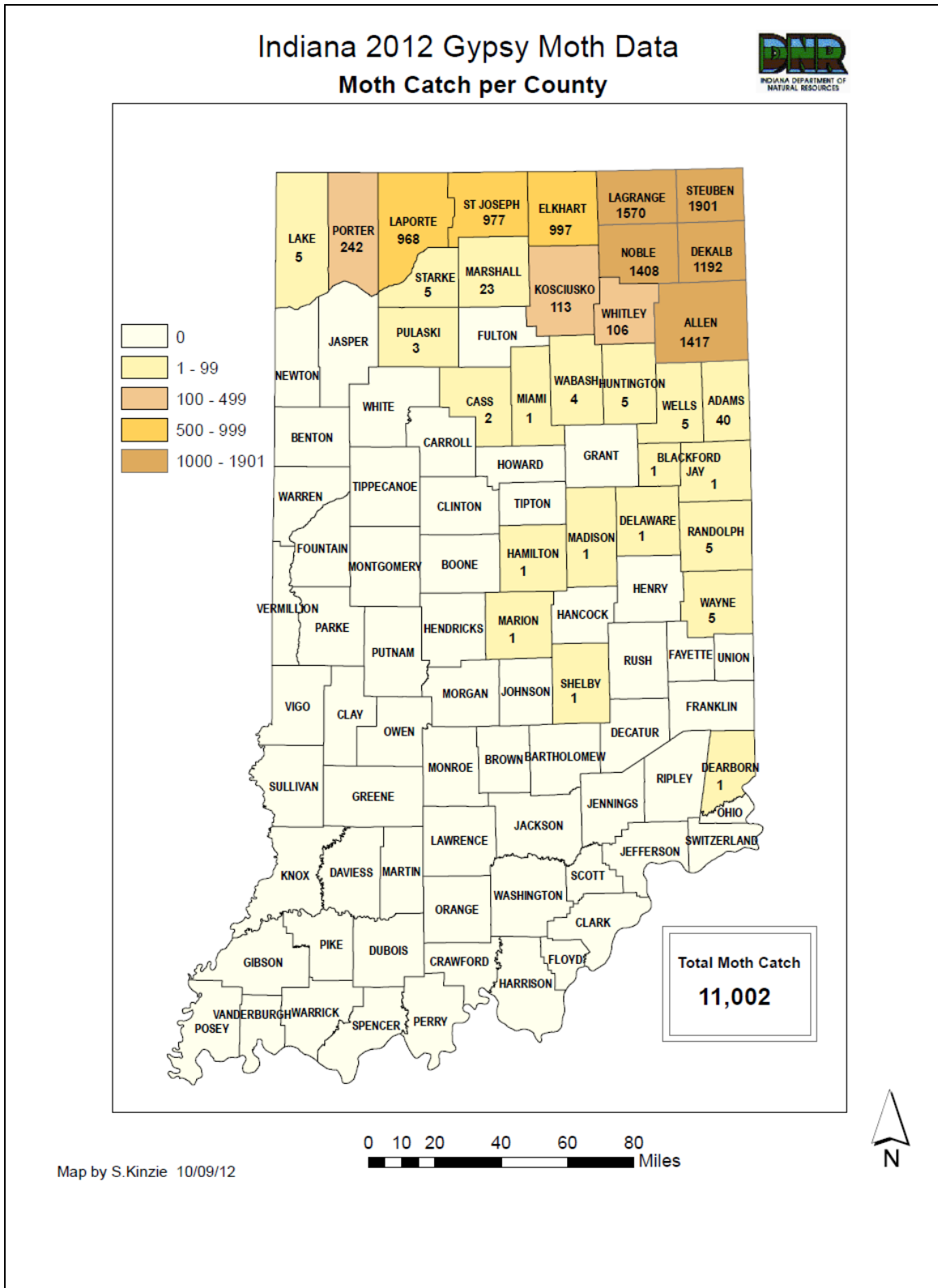
*Tippecanoe County was not trapped in 2009, 2010 or 2012.

Map 1. Results of the 2013 Gypsy Moth Slow-The-Spread Analysis showing moth lines and several potential problem areas for northern Indiana. Shaded boxes indicate potential problem areas as determined by the analysis of the 2013 trapping data. The proposed treatment site is south of the Slow-The-Spread Action Zone, and is proposed for eradication.

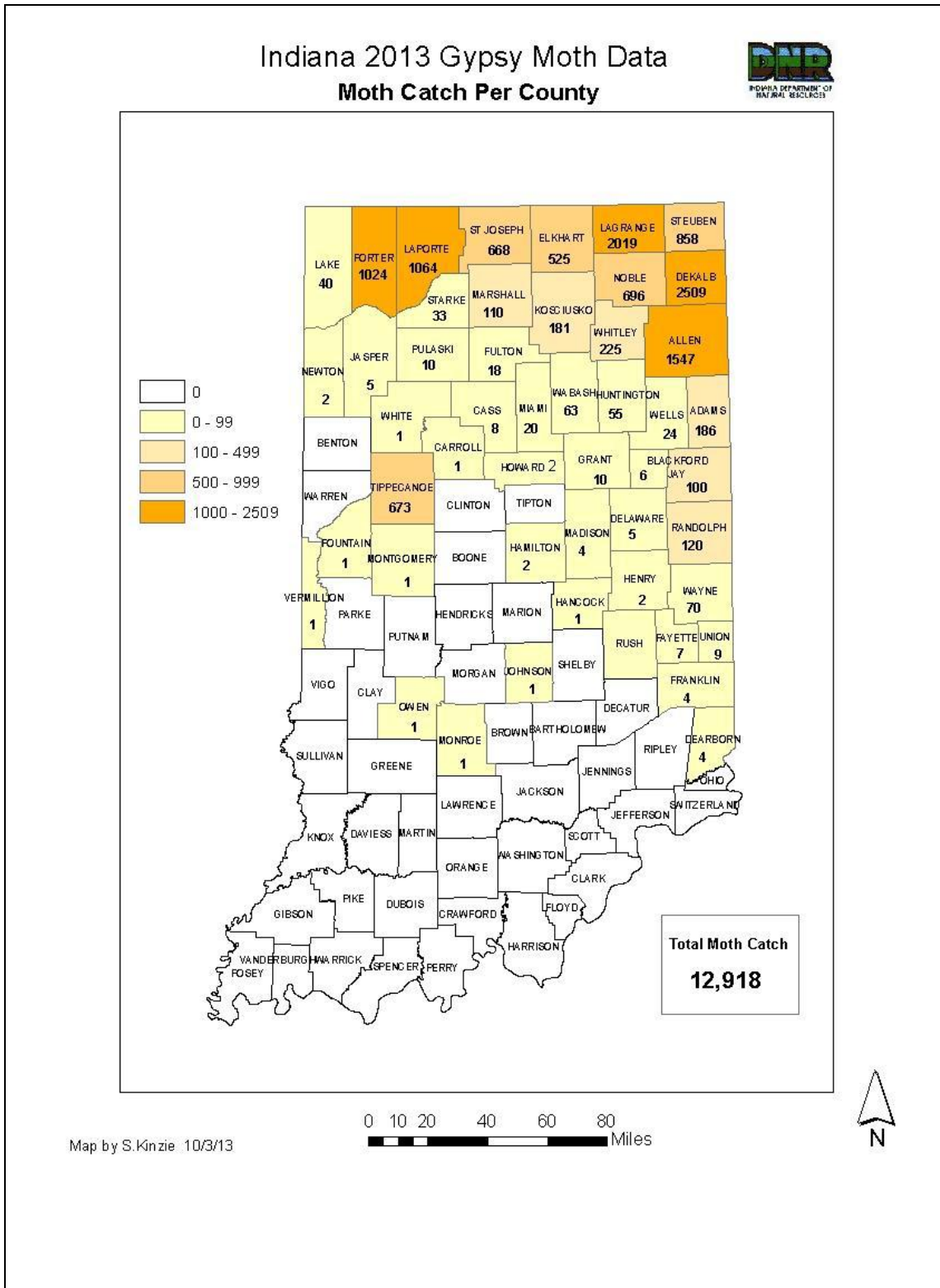


**Proposed treatment site was added into the STS analysis data after the 2013 find of the gypsy moth caterpillars at the site.

Map 2. Male moth catches by county for 2012.



Map 3. Male moth catches by county for 2013.



Map 4. The 10-moth line of Gypsy Moth in Indiana from 2009 to 2013.

