1. Identify Hub Types

PestHubMap is meant to serve as a prediction and survey tool to monitor and track an invasive species. The key premise of the app is to display locations (or hubs) on a map that are considered likely to spread the pest. One must determine the types of locations or properties likely to spread the pest, depending on their spread mechanisms and feeding preference. Locations likely to spread the pest will be referred to as hubs.

PestHubMap was developed to combat the spread of the spotted lanternfly *(Lycorma delicatula*)*,* known to hitchhike on cars and trains and to gravitate towards *Ailanthus altissima*, a species commonly found in highly disturbed areas. With that in mind we worked with the PA Department of Agriculture to select property types with a predicted high concentration of preferred hosts, high vehicle traffic, transportation depots and high impact locations. We selected the following categories for the types of hubs to map:

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| --- | --- | --- |
| Airports | Fairgrounds | Summer Camps |
| Amusement Parks | Farmer’s Markets | Timber Producers |
| Auctions | Flea Markets | Truck Rentals |
| Boat Launches | Landscapers | Truck Stops |
| Campgrounds | Marinas | Vineyards |
| Casinos | Racetracks | Wineries |
| Colleges | Railroads |  |
| Distribution Centers | Stadiums |  |

This instructional example will use the following hub types:

* Hospitals
* Police Stations
* Universities