



Slow · the · Spread

National Slow the Spread of the Gypsy Moth Project

"... Using Tomorrow's Technology for Gypsy Moth Management Today"

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Fact Sheet

Trap Inspections : Quality Control Failure Reasons Explained

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The quality control of the Slow the Spread (STS) trapping program is a key element in maintaining the high quality of the data used within the STS program. Proper trap assembly, trap deployment, and trapper log entries are a few of the items monitored during quality control inspections. Cooperators are required to inspect 10 percent of the total traps placed during the trapping season. Cooperators can use these inspections to address concerns regarding a particular trapper's performance or address trapping issues highlighted by the STS Trapping Reports.

What follows is a brief description and discussion of the QC failure reasons used to indicate trap inspection failure. The QC failure code is given in round brackets "()" followed by the name and discussion of the failure reason.



(A) : Trap not Assembled Correctly

Trapping supervisors will examine the Milk Carton and Delta traps for proper assembly. Common mistakes made when assembling the Milk Carton Trap are improper assembly of the "Hood", failure to remove "punch-outs" for moth entry openings, and improper attachment of the pesticide strip.



(C) : Trap Placed too far from Grid Node

Trappers are given a distance tolerance within which to set a trap. This distance is calculated as 30 percent of the inter-trap distance of the current STS grid density. For example, if a trapper is setting a trap located in a 2 kilometer grid, then the maximum distance from the pre-determined coordinates that the trap can be placed would be 600 meters (30 percent of 2000 meters). The 600 meters from the pre-determined trap location would define the radius of the trap's Target Circle. Trappers can set traps outside of the target circle, but this requires notification and approval from the trapper's supervisor. Traps set outside of the target circle without approval would fail QC inspection with this failure reason.



(D) : Directions to the Site are Incorrect or Incomplete

As part of the trapper maintaining a "Trapper Log", the trapper is required to log all trap placement and inspection information. One of the most important items the trapper logs is directions to the trap placement site. Trapping supervisors or another trapper will often use these directions to locate the exact site of trap placement. Failure to adequately document the trap location will cause the trap to fail QC inspection.



(G) : Grid Set at Wrong Spacing

On exceptionally rare occasions, a trapper will omit traps in a planned delimit in order to match the grid spacing of the surrounding base grid sites. An example of this would be omitting every other trap in a 500 meter delimit in order to preserve the 1 kilometer spacing of the surrounding base grid.

 **(I) : Trap Information not Recorded Correctly on Trap**

Trappers are required to label the traps with basic information. At a minimum, trapping protocols require that the trapper's initials and unique trap identifier be written on the trap. Additional information is often add and varies among cooperators. Incomplete information on the trap will be cause for QC failure.

 **(R) : Record Filled Out, No Trap Set**

In rare cases, a trapper will have recorded a trap placement or inspection and the trapping supervisor is unable to verify that the trap has been placed or inspected. The suspicion of data falsification would cause the QC inspection to fail with this error code.

 **(T) : Delta Trap Set Where Milk Carton Indicated**

All trap locations and trap types (Milk Carton or Delta) are pre-determined before trap placement begins. Field maps are generated indicating the location and type of trap to be set at a given location. Setting the wrong trap type could compromise the data collected by underestimating the number of moths in a given area.

 **(U) : UTM's Recorded Incorrectly on Data Sheet**

Trappers are required to record the UTM Easting and Northing of the trap's location in their trapper log. Trapping supervisors will use these coordinates to aid in locating the trap in the field. If the coordinates are found to be significantly different the trap will fail QC inspection.

 **(X) : Trapper did not Remove Trap from Field**

Quality control inspections are also carried out on traps that are shown to be removed from the field. If a trapper indicates that a Final Inspection has been performed on a trap and a supervisor finds that the trap is still in the field, it will fail QC inspection.

 **(M) : Multiple Traps Set at One Site**

If more than one trap is found at a single pre-determined location, then the traps will fail QC inspection. Occasionally, a trapper will become confused when reading a field map and set a trap at an incorrect location, causing multiple traps to be set at a given location.

 **(S) : Trap Set too Low to Ground**

For a trap to be effective it must be high enough above the ground to dispense the pheromone at a level that male moths will intercept it. Traps too low to the ground will create a pheromone plume below average flight levels.

 **(W) : Inspection Incorrectly Done**

Trappers who preform mid-season inspections and fail to follow the procedures for recording inspection information on the trap, counting potential male moths in the trap, or any additional required inspection procedures would cause the QC inspection to fail.

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