

## Executive Summary

The STS project completed the 2018 trapping season with overall project compliance to the protocols established in 1999 and agreed upon by the cooperating agencies of the project. In summary, the database generated 61,594 trap sites within the STS project area for the 2018 season and traps were deployed at nearly 99% of the planned sites (60,863 traps were placed).

The trapping protocols are designed to ensure a high degree of data integrity, which is necessary because the data dictate all decisions made within the project. This year the project met or exceeded the standards on most measures. The protocol for trap location is that 90% of the traps will be placed within a defined distance (30% of the intertrap distance) of the grid node. This measure, known as the target circle, is intended to maintain the spatial integrity of the trapping. With 95.28% of traps within the target circle, the project met the target. In many cases, a choice must be made between omitting a site and placing the trap outside the target circle. It is almost always better to place a trap outside the target than to omit that trap.

Standard / Protocol	Measure	Target	2018
Spatial integrity of the trapping grids	100% of the grid nodes are accounted for in the database as deleted, omitted or placed	100%	99.998% (one node)
	% of the nodes with placed traps	> 95%	98.91%
Trap location	% of the traps placed within a defined distance of the grid node	> 95%	95.28%
Field inspections	% of the trap sites checked	> 10%	13.52%
	% of the checked sites that passed	NA	98.85%
Trap placement and removal dates	Evaluated against model predictions based on current year weather data	NA	98.74%
Compliance with decision algorithm recommendations	DA recommends treatments	NA	93.97%
	DA recommends delimits (A “meets or exceeds” standard is used here.)	NA	96.80%

With the implementation of GPS technology and this year reaching our goal of implementing the “trapper gadget” project wide, the trapping data have become less of an issue. The numbers in this report indicate that there is essentially no risk that faulty decisions will be made based upon data quality. This is particularly gratifying in a project that includes multiple government agencies covering a broad geographic range, and is the result of excellent cooperation among all parties involved.