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*Biological Control Of Canada Thistle Phase 2 Analyzing The Spread Of Three Natural Insect Enemies*

The title of my project is Biological Control of Canada Thistle: Phase II ... Analyzing the Spread of Three Natural Insect Enemies. This experiment set out to analyze which of the three test insects would provide the best control of a Canada thistle stand, as measured by the distance they spread over a single growing season. I predicted that the Thistle Stem Gall Fly would have the farthest spread because of its winged body. During the growing season of 2007, I went back to the Phase I project site where I initially released the Thistle Stem Gall Fly, Thistle Defoliating Beetle, and Thistle Stem Weevil to collect my data. As I examined plants within the stand, I marked the plants with different insect damage with a different color of flagging tape. After completing analysis of the stand in September 2007, both distance and direction measurements were taken from the center of the original 4 foot by 4 foot enclosure used in Phase I of the project on all damaged plants. Overall, the Thistle Defoliating Beetle had the furthest spread in most directions, but the difference between it and the spread of the Thistle Stem Gall Fly was so small that additional study would be needed to reach a sound conclusion. Because of its limited spread, the Thistle Stem Weevil was ineffective during the first growing season.