Natural predators as a means to limit wildlife damage at the dairy-fruit interface: Report to dairy participants

USDA Western Sustainable Agriculture Research and Education Farmer-Rancher Project FW14-012

December 2016

Karen Steensma, Trinity Western University & Washington State University Susan Kerr, Washington State University Brian Garries, Washington State University



December 20, 2016

To: Whatcom County dairy farmers cooperating on bird research project

Re: Bird population report, fall 2016

Thank you so much for allowing us to visit your farm this fall for data collection on bird populations. We have created a profile specifically for each dairy, as well as a comparison totaling all eleven sites (10 milking cow facilities + 1 dry cow-heifer facility) so that you can examine your specific farm bird patterns in the context of the other farms studied.

Farms chosen represent a cross section of the primary agricultural region of Whatcom County, including farms from Lynden, Sumas, Everson, Custer, and Ferndale areas.

All participating dairies have remained (and will continue to remain) anonymous in our dissemination of these results, and in a presentation made on November 16 at the Whatcom Conservation District Farm Speaker Series.

Dairies were visited twice per day, one day per week, usually near sunrise and again near sunset. Some dairies showed differing mid-day patterns of bird activity, and were also visited mid-day in order to encompass this phenomenon. A statistically significant overall increase in bird numbers on dairies was seen across the 4 weeks of data collection, as expected during fall corn silage harvest and cooling weather patterns.

These data have already provided an excellent basis for a continuing USDA Sustainable Agriculture Research and Education project, with collaborators Dr Amber Adams-Progar and Dr Susan Kerr of WSU, as well as Dr Stephanie Shwiff of USDA-APHIS, joining in the next 2-3 seasons of research to seek solutions for this ongoing issue.

Our next steps will be more in-depth study of 4 dairies, in which we will collect data on starling impacts on dairy cow welfare, including feeding behavior of cows when birds are present on feed lines, spread of pathogens by birds, and loss of nutritional value of feed when birds are present. This will include an economic analysis of these impacts, as well as netting and falconry trials.

Please let me know if you have any questions, and thank you once again for your support of this research project.

Sincerely,

Karen Steensma Research Associate, Washington State University Associate Professor, Trinity Western University steensma@twu.ca 360-739-5972