**BIRD DAMAGE ON DAIRIES –** Western Sustainable Ag and Research Education (WSARE) Project Questionnaire

*Three Whatcom County dairy farms (Eaglemill Farms, TJ VeenAcres, and Steensma Dairy) are conducting research to identify the scope of bird damage to various dairies in Washington State, and to investigate and perform trials on bird management techniques for dairies. Please answer the questions below regarding bird presence and damage on your dairy operation.*

(The survey is anonymous and individual farm information will be kept confidential.)

1) What is the location of your dairy? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 (County) (Zipcode)

2) How many head are at this location? \_\_\_\_\_\_\_\_\_\_How many are being milked? \_\_\_\_\_\_\_\_\_

3) In what type of facility do you house your milk cows?

 ☐ tie stall or stanchion ☐ group housing such as bedded pack, compost facility

 ☐ free stall ☐ other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4) How do you store cow feed? (check all that apply)

 ☐ commodity shed ☐ bunker silo (tarped or covered) ☐ upright silo ☐ grain tank ☐ hay bales (in barn or tarped) ☐ wrapped bales ☐ ag-bag silage ☐ other\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5) Do you experience bird damage on your dairy operation? ☐Yes ☐No

6) Where have you observed birds? (check all that apply)

☐ in cow housing facilities ☐ on stored feed ☐ on feed while cows are eating ☐ elsewhere \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7) Where have you observed bird droppings? (check all that apply)

 ☐ on the feed ☐ in water troughs ☐ on stalls/bedding

 ☐ in barn rafters ☐ other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8) Estimate percentage of your cattle feed that is ruined due to bird damage? \_\_\_\_\_\_\_\_\_\_\_\_\_\_%

9) At peak numbers, how many birds do you see per day on your dairy?

 ☐ under 100 ☐ 100-1,000 ☐ 1,000-10,000

 ☐ 10,000 – 25,000 ☐ 25,000-50,000 ☐ > 50,000

10) How confident are you in identifying bird species that you see on your dairy operation?

 ☐ Very confident (You can identify a majority of the bird species you see)

 ☐ Somewhat confident (You can identify a few of the most common species you see)

 ☐ Not confident (You can’t identify most of the bird species you see)

11) Rank the species of birds that cause the most damage to your operation. Consider any bird activity that results in loss of feed or causes an expense related to cleaning or repairs.

|  |  |
| --- | --- |
| **Bird Species** | **Rank 1-5 (1=Most common)** |
| **European Starling** |  |
| **Sparrow** |  |
| **Pigeon** |  |
| **Crow** |  |
| **Unknown/other** |  |

12) Indicate which measures you have used to control birds in the last 5 years, their effectiveness, and the cost of implementing the measure. Leave blank if you haven’t used that method.

|  |  |  |
| --- | --- | --- |
| **Method of control:** | Effectiveness  | **Cost of implementing** |
|  Not  | Somewhat  |  Very  |
| **Wildlife Services (such as USDA trapping)** |  |  |  | $ |
| **Chemical toxicants****(Starlicide, Complete)** |  |  |  | $ |
| **Chemical repellants****(Avitrol, etc)** |  |  |  | $ |
| **Shooting** |  |  |  | $ |
| **Trapping/Capture Devices** |  |  |  | $ |
| **Netting/Bird Proofing** |  |  |  | $ |
| **Habitat Modification (tree/brush removal, etc)** |  |  |  | $ |
| **Raptor enhancements (kestrel, owl nest boxes)** |  |  |  | $ |

13) Estimate the total annual economic damage caused by birds on your dairy operation?

$\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

14) What is the closest distance of your cow housing and feed storage to any fruit crops such as cherries, apples, blueberries or grapes (whether it is your own fruit crop or someone else’s)?

☐ < ¼ mile ☐ ¼ - 1 mile ☐ 1-2 miles ☐ 2-5 miles ☐ 5-10 miles ☐ > 10 miles

15) Do you consider rodents (mice, voles, rats) to be a problem on your dairy, and if so, can you estimate total annual economic damage from rodents? $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

THANK YOU for your time!