

Washington dairy farmers have estimated annual economic losses from wild bird presence on their farms to range between \$1,000 and \$200,000 per farm. These losses can occur through the loss of feed, dissemination of pathogens to the dairy cattle, and damages to the buildings. In addition, wild birds may compete with dairy cattle over feed, reducing the amount of nutrients available to cattle and affecting the feeding behavior of cattle. The objectives of this study were to: 1) record the numbers and species of birds present on Washington dairy farms; 2) determine the nutritional losses that occurred due to bird depredation; 3) observe behavioral changes in cattle feeding; and 4) determine the pathogens present in bird fecal matter on dairy farms. Bird count and roosting site data were recorded using direct observations on eleven Washington dairies in the morning and at night for four weeks. A mixed model ANOVA was used to determine if week, time of day, roost sightings, raptor sightings, environmental temperature, and the number of starlings had an effect on the total number of birds. The total number of birds counted was affected by the time of day ($P = 0.03$), roost sightings ($P = 0.02$), and week ($P = 0.004$). Five farms were visited once in the wintertime to collect bird fecal samples, cattle feed samples, and to record behavioral interactions between wild birds and cattle. Bird fecal samples were analyzed for the presence of *E. coli*, *Campylobacter*, and *Salmonella*. Differences in the presence of pathogens and the quantity of pathogens between locations were determined using a log linear model in SAS. Fresh and bird-depleted feed samples were collected by hand and analyzed for dry matter, total digestible nutrients (TDN), protein, crude fiber, ash, fat, and net energy. Linear regressions were conducted in SAS in order to determine the relationship between the feed components and bird density. Intra- and inter-specific aggressive and aversive behaviors, proportion of head gates used, number of cows eating, and the number of birds at the feed bunk were recorded using on-farm cameras. Differences between locations were analyzed using PROC GENMOD in SAS. *E. coli* was isolated in 34/88 of bird fecal samples and *C. jejuni* was isolated in one sample. *Salmonella* was not recovered in any of the fecal samples. There was no statistical difference in the number of samples positive for *E. coli* or the quantity of *E. coli* among locations ($P = 0.14$; $P = 0.12$). There were no significant differences between bird density and changes in feed components. Additionally, there was a difference in bird density between locations ($P < 0.0001$) and a difference in the proportion of headgates used among locations ($P < 0.0001$).