

Supplementary Materials:

Table S1. Distribution of land use/land cover type (%) across sampling locations.

Land use/land cover type (%)	Sampling locations	
	MA04	MA05
Crop Barley/Soybeans	1.5	-
Barren	-	4.12
Corn	29.79	4.3
Deciduous Forest	11.38	64.42
Evergreen Forest	-	0.93
Other Hay/Non Alfalfa	2.31	3.53
Grass/Pasture	2.41	5.33
Shrubland	0.45	1.39
Soybeans	19.95	3.55
Sod/Grass Seed	0.27	-
Developed/Open Space	3.01	8.82
Developed/Low Intensity	0.49	1.22
Open Water	0.68	0.56
Woody Wetlands	17.32	-
Herbaceous Wetlands	0.33	-
Winter Wheat	8.99	0.87

Table S2. Rainfall amounts (mm) for the one day (Rain1) or seven days (Rain7) preceding sampling events for *S. enterica* or *L. monocytogenes* at four sites.

	MA04		MA05		MA10		MA11	
	Rain1	Rain7	Rain1	Rain7	Rain1	Rain7	Rain1	Rain7
10/24/2016	0.25	2.79	0	2.5	0	25.4	0	63.50
11/14/2016	0	0	0	3.30	0	6.35	0	4.57
12/5/2016	8.12	12.19	5.84	23.11	0	3.30	10.66	16.25
1/23/2017	0	0.25	16.76	26.41	5.08	22.35	0	0.76
3/13/2017	0	14.98	0	6.09	16.76	26.41	1.52	2.79
4/17/2017	0	29.71	1.77	3.81	0	6.09	0	21.33
5/8/2017	45.97	47.49	0.25	37.84	1.77	3.81	0	0
6/12/2017	0	57.40	0	0	0.25	37.84	0.25	7.36
6/26/2017	0	17.27	0	15.24	0	0	27.94	29.97
7/17/2017	0	0.50	0	23.36	0	15.24	0	30.98
8/8/2017	3.30	13.97	30.73	30.73	0	23.36	0	5.33
8/21/2017	37.59	37.84	0	4.82	30.73	30.73	0	0.50
9/11/2017	0.25	21.33	0	20.57	0	20.57	0.76	11.93
9/25/2017	0	3.30	0	0	0	0	0	1.01
10/16/2017	0	0.76	4.31	24.38	4.31	24.38	3.55	22.60
10/30/2017	2.28	92.45	39.87	45.21	39.87	45.21	0	2.79
11/13/2017	0	12.19	0	30.48	0	30.48	0	0
12/11/2017	0	1.52	0	5.33	0	5.33	106.42	129.79
1/22/2018	0	2.28	0	0.76	0	0.76	0	14.98
2/12/2018	0	122.42	54.35	100.83	54.35	100.83	0	1.01
3/12/2018	0	0.50	0.25	0.25	0.25	0.25	0	0
4/9/2018	0	7.62	0	1.01	0	1.01	0.50	143.51

5/7/2018	0	0	0	0	0	0	26.6	33.78
5/21/2018	0	62.99	0	86.61	0	86.61	0.76	1.52
6/4/2018	0	17.27	38.86	67.56	38.86	67.56	0	13.71
6/18/2018	44.4	55.11	0	0	0	0	0	80.01
7/16/2018	0	0	0	0	0	0	0	0
8/6/2018	0	0	0	62.48	0	62.48	0	0
