

Characteristic	Aquatic_Animal			Clinical/Human			Land_Animal			Plants		
	OR	95% CI	p-value	OR	95% CI	p-value	OR	95% CI	p-value	OR	95% CI	p-value
USRegion												
northeast												
midwest	0.09	0.01, 0.88	0.038	2.14	0.54, 8.44	0.3	0.10	0.01, 0.89	0.039	0.01	0.00, 0.09	<0.001
west	2.20	1.22, 3.98	0.009	0.41	0.10, 1.70	0.2	1.99	1.05, 3.79	0.036	1.24	0.65, 2.35	0.5
south	4.64	2.50, 8.58	<0.001	7.53	2.44, 23.3	<0.001	1.88	0.92, 3.85	0.083	2.26	1.14, 4.47	0.020
other	16.8	2.19, 129	0.007	1.20	0.00, 348	>0.9	1,918	421, 8,741	<0.001	11.1	1.59, 77.7	0.015
season												
spring												
summer	1.67	1.36, 2.05	<0.001	1.50	0.88, 2.56	0.14	0.56	0.45, 0.70	<0.001	1.25	0.97, 1.61	0.089
autumn	3.40	2.72, 4.24	<0.001	6.42	3.84, 10.7	<0.001	0.56	0.45, 0.71	<0.001	1.50	1.14, 1.97	0.004
winter	1.10	0.87, 1.39	0.4	1.02	0.55, 1.87	>0.9	0.69	0.55, 0.86	<0.001	0.43	0.31, 0.61	<0.001
collection.yr												
2010												
2011	7.63	4.79, 12.1	<0.001	0.62	0.25, 1.52	0.3	1.97	1.10, 3.52	0.022	0.93	0.51, 1.70	0.8
2012	8.16	4.55, 14.6	<0.001	0.27	0.05, 1.46	0.13	3.00	1.56, 5.79	0.001	2.16	1.12, 4.17	0.021
2013	43.5	25.9, 73.2	<0.001	10.5	5.29, 20.7	<0.001	1.55	0.79, 3.07	0.2	3.99	2.20, 7.23	<0.001
2014	7.23	4.55, 11.5	<0.001	0.89	0.42, 1.89	0.8	3.74	2.14, 6.55	<0.001	5.22	3.16, 8.61	<0.001
2015	0.00	0.00, 0.07	0.001	0.33	0.16, 0.68	0.002	1.00	0.58, 1.73	>0.9	0.84	0.51, 1.38	0.5
2016	0.00	0.00, 0.38	0.026	0.03	0.01, 0.09	<0.001	0.33	0.19, 0.59	<0.001	0.08	0.04, 0.16	<0.001

PDS000025311.254	0.95	0.66, 1.37	0.8	1.51	0.83, 2.74	0.2	1.59	1.12, 2.25	0.009	0.99	0.67, 1.46	>0.9
PDS000025433.69	0.00	0.00, 0.02	<0.001	0.22	0.10, 0.49	<0.001	0.09	0.06, 0.15	<0.001	0.11	0.07, 0.18	<0.001
PDS000025466.70	0.00	0.00, 0.09	0.002	0.90	0.22, 3.65	0.9	1.12	0.71, 1.78	0.6	3.15	2.10, 4.73	<0.001
PDS000058419.26	0.02	0.00, 0.06	<0.001	5.58	2.59, 12.0	<0.001	0.09	0.02, 0.42	0.002	0.63	0.44, 0.90	0.012
PDS000058430.33	0.01	0.00, 0.03	<0.001	0.42	0.25, 0.71	0.001	0.01	0.00, 0.09	<0.001	0.19	0.14, 0.26	<0.001
PDS000083553.8	0.00	0.00, 0.04	<0.001	0.33	0.14, 0.78	0.012	0.70	0.50, 0.99	0.044	0.19	0.13, 0.30	<0.001
Min.diff	1.01	1.00, 1.01	0.050	1.03	1.03, 1.04	<0.001	0.96	0.96, 0.97	<0.001	0.97	0.96, 0.97	<0.001
USregion * season												
midwest * summer	1.27	0.75, 2.17	0.4	2.17	0.72, 6.53	0.2	1.19	0.87, 1.62	0.3	11.1	7.68, 16.0	<0.001
west * summer	2.62	2.00, 3.43	<0.001	1.82	0.82, 4.04	0.14	1.33	0.94, 1.89	0.11	1.81	1.34, 2.46	<0.001
south * summer	0.63	0.47, 0.86	0.003	0.32	0.14, 0.75	0.009	1.47	1.10, 1.97	0.009	0.81	0.58, 1.12	0.2
other * summer	0.05	0.03, 0.09	<0.001	0.48	0.26, 0.90	0.021	0.42	0.26, 0.69	<0.001	0.49	0.32, 0.75	<0.001
midwest * autumn	0.02	0.01, 0.05	<0.001	0.15	0.04, 0.60	0.007	2.18	1.58, 3.02	<0.001	2.73	1.84, 4.07	<0.001
west * autumn	0.15	0.11, 0.20	<0.001	0.26	0.12, 0.54	<0.001	2.32	1.66, 3.26	<0.001	0.80	0.58, 1.12	0.2
south * autumn	1.08	0.79, 1.47	0.6	0.08	0.03, 0.19	<0.001	0.87	0.63, 1.21	0.4	0.62	0.43, 0.90	0.011
other * autumn	0.15	0.09, 0.24	<0.001	0.14	0.08, 0.25	<0.001	0.73	0.45, 1.18	0.2	0.33	0.21, 0.51	<0.001
midwest * winter	0.04	0.01, 0.09	<0.001	0.91	0.24, 3.47	0.9	1.34	0.99, 1.84	0.062	11.7	7.54, 18.1	<0.001
west * winter	0.52	0.38, 0.70	<0.001	0.28	0.11, 0.76	0.012	0.95	0.68, 1.33	0.8	1.68	1.15, 2.48	0.008
south * winter	0.29	0.20, 0.40	<0.001	0.14	0.04, 0.42	<0.001	1.47	1.08, 2.01	0.014	0.82	0.53, 1.26	0.4
other * winter	3.66	2.20, 6.08	<0.001	1.39	0.68, 2.85	0.4	3.74	2.28, 6.15	<0.001	0.19	0.10, 0.36	<0.001
USregion * collection.yr												
midwest * 2011	0.04	0.00, 1.16	0.061	0.02	0.00, 0.69	0.031	0.56	0.05, 5.95	0.6	2.56	0.36, 18.1	0.3
west * 2011	0.34	0.18, 0.63	<0.001	5.97	1.38, 25.9	0.017	0.09	0.04, 0.18	<0.001	1.26	0.60, 2.67	0.5
south * 2011	1.29	0.66, 2.53	0.5	0.24	0.05, 1.11	0.068	0.37	0.16, 0.84	0.017	1.78	0.79, 4.05	0.2
other * 2011	0.00	0.00, 0.00	<0.001	60,847	2,110, 1,754,990	<0.001	9.16	0.00, 45,198	0.6	0.22	0.01, 8.54	0.4
midwest * 2012	0.05	0.00, 1.02	0.051	1.26	0.17, 9.67	0.8	4.94	0.50, 49.0	0.2	8.85	1.33, 58.8	0.024
west * 2012	0.00	0.00, 0.00	<0.001	1.58	0.18, 13.5	0.7	0.02	0.01, 0.04	<0.001	0.33	0.15, 0.75	0.007
south * 2012	0.05	0.02, 0.11	<0.001	1.33	0.20, 8.80	0.8	0.50	0.22, 1.16	0.11	1.36	0.60, 3.12	0.5
other * 2012	7.99	0.07, 946	0.4	12,814	9.21, 17,820,629	0.010	0.00	0.00, 0.10	0.004	17.4	0.15, 2,047	0.2
midwest * 2013	0.02	0.00, 0.36	0.007	0.01	0.00, 0.06	<0.001	5.35	0.54, 53.3	0.2	16.5	2.56, 106	0.003
west * 2013	0.02	0.01, 0.04	<0.001	0.01	0.00, 0.08	<0.001	0.03	0.01, 0.06	<0.001	0.16	0.07, 0.34	<0.001
south * 2013	0.16	0.08, 0.35	<0.001	0.16	0.04, 0.58	0.006	0.78	0.31, 1.95	0.6	1.96	0.85, 4.56	0.12
other * 2013	0.40	0.04, 3.99	0.4	228	0.72, 72,252	0.065	0.01	0.00, 0.06	<0.001	0.09	0.01, 1.07	0.057
midwest * 2014	0.06	0.00, 0.95	0.045	0.05	0.01, 0.33	0.002	1.93	0.20, 18.5	0.6	8.95	1.44, 55.5	0.019
west * 2014	0.03	0.01, 0.05	<0.001	0.28	0.06, 1.29	0.10	0.04	0.02, 0.09	<0.001	0.65	0.33, 1.25	0.2
south * 2014	0.11	0.06, 0.20	<0.001	0.13	0.04, 0.48	0.002	0.72	0.34, 1.55	0.4	0.62	0.30, 1.26	0.2
other * 2014	0.11	0.01, 1.25	0.076	4,276	13.4, 1,369,198	0.005	0.00	0.00, 0.03	<0.001	0.34	0.03, 3.23	0.3
midwest * 2015	583	4.69, 72,356	0.010	0.14	0.03, 0.68	0.015	5.89	0.63, 55.3	0.12	30.0	4.85, 185	<0.001
west * 2015	767	11.2, 52,793	0.002	0.88	0.21, 3.65	0.9	0.22	0.11, 0.42	<0.001	0.42	0.21, 0.82	0.011
south * 2015	173	2.48, 11,993	0.017	0.14	0.04, 0.55	0.005	0.79	0.37, 1.69	0.6	0.52	0.25, 1.07	0.074
other * 2015	208	1.89, 22,912	0.026	2,533	8.60, 745,764	0.007	0.01	0.00, 0.03	<0.001	3.44	0.46, 25.6	0.2
midwest * 2016	283,038	148, 542,934,983	0.001	1.05	0.10, 11.2	>0.9	12.3	1.28, 117	0.030	136	20.2, 923	<0.001
west * 2016	1,916	1.38, 2,660,807	0.041	5.48	0.78, 38.4	0.087	0.40	0.20, 0.81	0.012	2.47	1.05, 5.83	0.039

south * 2016	1,843	1.32, 2,569,406	0.042	2.17	0.32, 14.9	0.4	7.35	3.39, 15.9	<0.001	3.73	1.46, 9.55	0.006
other * 2016	487	0.27, 868,624	0.11	1,400	4.42, 443,682	0.014	0.00	0.00, 0.00	<0.001	4.30	0.58, 31.7	0.2
midwest * 2017	2.71	0.24, 30.1	0.4	0.78	0.13, 4.60	0.8	7.48	0.80, 69.7	0.077	32.9	5.31, 204	<0.001
west * 2017	6.54	3.44, 12.4	<0.001	5.93	1.02, 34.6	0.048	0.10	0.05, 0.20	<0.001	0.96	0.48, 1.92	>0.9
south * 2017	1.85	0.96, 3.57	0.066	0.77	0.16, 3.77	0.7	0.34	0.16, 0.72	0.005	0.46	0.22, 0.98	0.044
other * 2017	0.09	0.01, 0.79	0.029	2,680	8.85, 811,741	0.007	0.00	0.00, 0.00	<0.001	1.92	0.27, 13.4	0.5
midwest * 2018	4.11	0.45, 37.8	0.2	0.19	0.05, 0.74	0.017	25.6	2.75, 238	0.004	38.0	6.23, 232	<0.001
west * 2018	0.94	0.50, 1.77	0.9	0.32	0.03, 3.18	0.3	0.00	0.00, 0.05	<0.001	0.64	0.32, 1.29	0.2
south * 2018	1.21	0.64, 2.29	0.5	0.23	0.05, 1.08	0.062	1.45	0.68, 3.09	0.3	1.05	0.50, 2.18	>0.9
other * 2018	0.22	0.03, 1.87	0.2	3,268	11.1, 960,767	0.005	0.01	0.00, 0.04	<0.001	16.7	2.29, 122	0.006
midwest * 2019	0.48	0.05, 4.89	0.5	0.20	0.05, 0.86	0.030	37.0	4.00, 343	0.001	54.2	8.83, 333	<0.001
west * 2019	0.12	0.06, 0.22	<0.001	0.43	0.05, 3.46	0.4	0.03	0.01, 0.08	<0.001	2.78	1.40, 5.53	0.003
south * 2019	0.04	0.02, 0.08	<0.001	0.10	0.02, 0.50	0.005	0.42	0.20, 0.88	0.022	1.03	0.50, 2.12	>0.9
other * 2019	0.91	0.11, 7.54	>0.9	0.17	0.00, 6,058	0.7	0.00	0.00, 0.10	0.014	0.00	0.00, 2,842	0.4
midwest * 2020	0.29	0.02, 3.54	0.3	0.48	0.02, 14.5	0.7	0.61	0.06, 6.19	0.7	33.5	4.76, 236	<0.001
west * 2020	1.34	0.52, 3.43	0.5	0.06	0.00, 2,072,775,462	0.8	0.00	0.00, 0.42	0.028	2.54	0.86, 7.47	0.090
south * 2020	0.31	0.13, 0.73	0.007	0.28	0.01, 9.29	0.5	0.01	0.00, 0.02	<0.001	0.21	0.08, 0.60	0.003
other * 2020	0.32	0.04, 2.54	0.3	9.13	0.02, 5,470	0.5	0.00	0.00, 0.01	<0.001	0.08	0.01, 0.66	0.019
midwest * 2021	2.30	0.14, 37.5	0.6	0.51	0.02, 12.0	0.7	4.78	0.48, 47.6	0.2	253	38.4, 1,661	<0.001
west * 2021	2.62	1.25, 5.47	0.011	1.47	0.03, 66.7	0.8	0.46	0.21, 0.98	0.045	13.5	5.93, 30.9	<0.001
south * 2021	0.00	0.00, 0.07	0.001	0.17	0.01, 4.07	0.3	0.74	0.33, 1.63	0.4	1.08	0.45, 2.59	0.9
other * 2021	0.02	0.00, 0.20	0.001	152	0.42, 54,906	0.095	0.00	0.00, 0.01	<0.001	6.41	0.82, 50.0	0.076
midwest * 2022	0.03	0.00, 2.24	0.11	0.82	0.05, 14.4	0.9	5.82	0.59, 57.5	0.13	1,308	182, 9,408	<0.001
west * 2022	0.58	0.27, 1.23	0.2	6.30	0.57, 69.7	0.13	0.04	0.01, 0.19	<0.001	115	42.8, 309	<0.001
south * 2022	0.00	0.00, 0.01	<0.001	0.23	0.02, 3.21	0.3	0.46	0.21, 1.00	0.050	5.77	2.12, 15.7	<0.001
other * 2022	0.04	0.00, 1.65	0.089	11,140	23.4, 5,306,925	0.003	0.04	0.00, 0.43	0.009	132	7.49, 2,321	<0.001

<sup>a</sup> Covariate SNP:cluster.group and interactions USRegion:season are shown

<sup>1</sup> OR = Odds Ratio, CI = Confidence Interval

<sup>a</sup> Reference level is represented as -