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	0.08	0.01, 0.85	0.036	2.07	0.48, 9.01	0.3	0.11	0.01, 0.99	0.049	0.01	0.00, 0.08	<0.001
west	2.30	1.28, 4.13	0.005	0.27	0.06, 1.27	0.10	2.04	1.05, 3.94	0.035	1.17	0.62, 2.22	0.6
south	4.49	2.44, 8.29	<0.001	11.1	3.53, 34.7	<0.001	2.00	0.96, 4.15	0.063	2.30	1.16, 4.55	0.017
other	7.66	1.04, 56.6	0.046	3.16	0.11, 92.1	0.5	1,250	335, 4,669	<0.001	6.58	1.12, 38.8	0.037
season												
spring												
summer	1.71	1.40, 2.10	<0.001	1.40	0.81, 2.44	0.2	0.57	0.46, 0.71	<0.001	1.38	1.06, 1.78	0.015
autumn	3.59	2.87, 4.47	<0.001	7.04	4.17, 11.9	<0.001	0.62	0.49, 0.78	<0.001	1.66	1.25, 2.19	<0.001
winter	1.14	0.90, 1.43	0.3	1.08	0.58, 2.01	0.8	0.77	0.62, 0.96	0.022	0.45	0.32, 0.64	<0.001
collection.yr												
2010												
2011	7.38	4.64, 11.7	<0.001	0.45	0.16, 1.25	0.13	2.06	1.13, 3.75	0.018	0.67	0.35, 1.25	0.2
2012	7.52	4.22, 13.4	<0.001	0.37	0.08, 1.70	0.2	2.83	1.45, 5.53	0.002	1.90	0.99, 3.64	0.054
2013	32.8	19.9, 54.1	<0.001	8.65	4.35, 17.2	<0.001	1.10	0.55, 2.21	0.8	3.18	1.79, 5.65	<0.001
2014	6.78	4.26, 10.8	<0.001	1.03	0.48, 2.19	>0.9	4.41	2.48, 7.87	<0.001	4.88	2.96, 8.04	<0.001
2015	0.00	0.00, 0.03	<0.001	0.29	0.14, 0.60	<0.001	0.97	0.55, 1.70	>0.9	0.68	0.41, 1.12	0.13
2016	0.01	0.00, 0.03	<0.001	0.02	0.01, 0.09	<0.001	0.28	0.15, 0.50	<0.001	0.06	0.03, 0.13	<0.001
2017	0.18	0.11, 0.28	<0.001	0.04	0.01, 0.11	<0.001	0.73	0.42, 1.24	0.2	0.36	0.22, 0.59	<0.001
2018	1.06	0.70, 1.60	0.8	0.29	0.14, 0.62	0.001	0.72	0.42, 1.24	0.2	0.61	0.38, 0.98	0.041
2019	1.56	1.04, 2.34	0.033	0.23	0.11, 0.46	<0.001	0.68	0.40, 1.15	0.2	0.32	0.20, 0.51	<0.001
2020	2.50	1.22, 5.12	0.013	0.10	0.00, 2.52	0.2	9.54	4.39, 20.7	<0.001	1.99	0.83, 4.82	0.12
2021	0.85	0.51, 1.42	0.5	0.04	0.00, 0.40	0.006	1.51	0.86, 2.68	0.2	0.43	0.23, 0.79	0.007
2022	5.36	3.39, 8.47	<0.001	0.12	0.02, 0.60	0.010	1.71	0.97, 3.02	0.065	0.13	0.06, 0.30	<0.001
SNP.cluster.group												
other												
PDS000000270.29	0.08	0.02, 0.37	0.001	10.2	4.36, 24.1	<0.001	15.9	11.6, 21.8	<0.001	0.01	0.00, 0.09	<0.001
PDS000000366.504	1.80	1.56, 2.06	<0.001	0.60	0.45, 0.80	<0.001	0.53	0.45, 0.62	<0.001	0.09	0.07, 0.11	<0.001
PDS000003277.110	0.04	0.01, 0.20	<0.001	6.00	2.66, 13.5	<0.001	0.57	0.31, 1.05	0.072	6.10	4.47, 8.32	<0.001
PDS000003294.17	0.01	0.00, 0.23	0.003	0.07	0.00, 0.94	0.045	0.00	0.00, 0.00	<0.001	1.32	0.98, 1.78	0.070
PDS000005985.27	0.04	0.00, 5.28	0.2	0.00	0.00, 5.48	0.13	0.11	0.00, 35.9	0.5	0.01	0.00, 4.99	0.14
PDS000024311.16	0.02	0.01, 0.11	<0.001	0.21	0.05, 0.93	0.040	0.17	0.12, 0.25	<0.001	0.00	0.00, 0.00	<0.001
PDS000024349.25	0.01	0.00, 0.04	<0.001	0.07	0.03, 0.15	<0.001	1.38	1.04, 1.82	0.026	0.00	0.00, 0.17	0.010
PDS000024645.152	0.53	0.38, 0.74	<0.001	0.01	0.00, 0.23	0.005	0.15	0.10, 0.24	<0.001	0.01	0.00, 0.06	<0.001
PDS000024647.66	0.01	0.00, 0.04	<0.001	0.05	0.03, 0.10	<0.001	0.30	0.19, 0.48	<0.001	0.01	0.00, 0.05	<0.001
PDS000024856.163	0.01	0.00, 0.06	<0.001	1.59	0.94, 2.69	0.085	1.90	1.36, 2.64	<0.001	0.78	0.55, 1.11	0.2
PDS000024934.86	0.02	0.01, 0.04	<0.001	1.84	1.27, 2.68	0.001	0.47	0.34, 0.64	<0.001	1.30	1.09, 1.55	0.004
PDS000024989.120	0.13	0.10, 0.16	<0.001	0.45	0.31, 0.67	<0.001	0.59	0.49, 0.71	<0.001	0.33	0.28, 0.40	<0.001
PDS000025154.24	0.01	0.00, 0.41	0.013	0.46	0.03, 7.39	0.6	0.00	0.00, 4,127	0.4	0.00	0.00, 0.36	0.015
PDS000025233.7	0.52	0.14, 1.89	0.3	0.20	0.07, 0.59	0.004	23.3	14.5, 37.4	<0.001	0.50	0.18, 1.40	0.2

	OR	95% CI	p-value	OR	95% CI	p-value	OR	95% CI	p-value	OR	95% CI	p-value
PDS000025311.254	0.88	0.62, 1.26	0.5	1.30	0.72, 2.36	0.4	1.43	1.01, 2.01	0.044	0.91	0.62, 1.33	0.6
PDS000025433.69	0.00	0.00, 0.02	<0.001	0.18	0.08, 0.41	<0.001	0.09	0.05, 0.15	<0.001	0.11	0.07, 0.18	<0.001
PDS000025466.70	0.00	0.00, 0.04	<0.001	0.70	0.19, 2.63	0.6	0.97	0.62, 1.54	>0.9	2.69	1.80, 4.00	<0.001
PDS000058419.26	0.01	0.00, 0.05	<0.001	5.47	2.51, 11.9	<0.001	0.14	0.04, 0.45	0.001	0.60	0.42, 0.86	0.005
PDS000058430.33	0.01	0.00, 0.03	<0.001	0.50	0.29, 0.84	0.010	0.01	0.00, 0.08	<0.001	0.19	0.14, 0.25	<0.001
PDS000083553.8	0.00	0.00, 0.04	<0.001	0.25	0.10, 0.61	0.002	0.66	0.47, 0.93	0.019	0.22	0.14, 0.33	<0.001
Min.diff	1.01	1.00, 1.01	0.004	1.04	1.03, 1.04	<0.001	0.96	0.96, 0.97	<0.001	0.97	0.97, 0.98	<0.001
USregion * season												
midwest * summer	1.14	0.68, 1.92	0.6	2.36	0.70, 7.93	0.2	1.10	0.80, 1.51	0.5	10.9	7.52, 15.9	<0.001
west * summer	2.56	1.96, 3.35	<0.001	2.49	1.09, 5.72	0.031	1.27	0.89, 1.81	0.2	1.62	1.19, 2.20	0.002
south * summer	0.59	0.44, 0.80	<0.001	0.25	0.10, 0.58	0.001	1.40	1.05, 1.88	0.023	0.68	0.49, 0.95	0.023
other * summer	0.06	0.03, 0.10	<0.001	0.53	0.28, 1.00	0.049	0.46	0.28, 0.75	0.002	0.51	0.33, 0.77	0.002
midwest * autumn	0.01	0.01, 0.04	<0.001	0.11	0.02, 0.51	0.005	1.86	1.35, 2.58	<0.001	2.40	1.61, 3.60	<0.001
west * autumn	0.13	0.10, 0.18	<0.001	0.27	0.13, 0.59	<0.001	2.23	1.59, 3.13	<0.001	0.73	0.53, 1.02	0.069
south * autumn	0.99	0.73, 1.36	>0.9	0.04	0.02, 0.10	<0.001	0.72	0.52, 1.00	0.050	0.53	0.37, 0.77	<0.001
other * autumn	0.14	0.09, 0.23	<0.001	0.13	0.07, 0.23	<0.001	0.69	0.43, 1.11	0.13	0.31	0.20, 0.48	<0.001
midwest * winter	0.04	0.02, 0.09	<0.001	0.93	0.23, 3.73	>0.9	1.15	0.84, 1.58	0.4	11.6	7.45, 18.1	<0.001
west * winter	0.48	0.36, 0.65	<0.001	0.40	0.15, 1.08	0.069	0.85	0.60, 1.19	0.3	1.70	1.15, 2.51	0.008
south * winter	0.26	0.18, 0.36	<0.001	0.07	0.02, 0.23	<0.001	1.26	0.92, 1.72	0.14	0.72	0.47, 1.12	0.15
other * winter	3.97	2.39, 6.61	<0.001	1.51	0.73, 3.12	0.3	4.04	2.44, 6.70	<0.001	0.20	0.10, 0.39	<0.001
USregion * collection.yr												
midwest * 2011	0.04	0.00, 1.55	0.083	0.02	0.00, 1.57	0.077	0.56	0.05, 5.91	0.6	3.16	0.45, 22.2	0.2
west * 2011	0.33	0.17, 0.60	<0.001	10.6	2.05, 54.9	0.005	0.09	0.05, 0.20	<0.001	1.91	0.88, 4.15	0.10
south * 2011	1.46	0.74, 2.86	0.3	0.47	0.10, 2.16	0.3	0.36	0.16, 0.83	0.017	2.47	1.06, 5.74	0.036
other * 2011	0.05	0.00, 2.84	0.15	269	4.31, 16,786	0.008	0.12	0.01, 1.57	0.11	1.84	0.06, 57.7	0.7
midwest * 2012	0.10	0.01, 1.87	0.12	1.22	0.19, 7.97	0.8	4.64	0.47, 45.8	0.2	10.3	1.60, 66.4	0.014
west * 2012	0.00	0.00, 0.00	<0.001	1.34	0.16, 10.9	0.8	0.02	0.01, 0.05	<0.001	0.41	0.18, 0.91	0.029
south * 2012	0.06	0.03, 0.12	<0.001	0.80	0.14, 4.63	0.8	0.49	0.21, 1.15	0.10	1.54	0.67, 3.51	0.3
other * 2012	4.33	0.22, 85.5	0.3	836	12.1, 57,814	0.002	0.00	0.00, 0.01	<0.001	6.70	0.37, 121	0.2
midwest * 2013	0.04	0.00, 0.68	0.026	0.01	0.00, 0.07	<0.001	7.73	0.78, 76.8	0.081	22.4	3.60, 139	<0.001
west * 2013	0.02	0.01, 0.05	<0.001	0.02	0.00, 0.14	<0.001	0.03	0.01, 0.08	<0.001	0.21	0.10, 0.44	<0.001
south * 2013	0.21	0.10, 0.44	<0.001	0.19	0.05, 0.72	0.015	1.21	0.48, 3.04	0.7	2.49	1.09, 5.70	0.030
other * 2013	1.30	0.13, 13.4	0.8	126	3.58, 4,469	0.008	0.02	0.00, 0.14	<0.001	0.16	0.01, 1.86	0.14
midwest * 2014	0.05	0.00, 1.15	0.061	0.05	0.01, 0.33	0.002	1.78	0.19, 16.9	0.6	10.3	1.70, 61.8	0.011
west * 2014	0.02	0.01, 0.04	<0.001	0.32	0.06, 1.60	0.2	0.04	0.02, 0.08	<0.001	0.72	0.37, 1.39	0.3
south * 2014	0.11	0.06, 0.22	<0.001	0.10	0.03, 0.38	<0.001	0.64	0.29, 1.39	0.3	0.66	0.33, 1.35	0.3
other * 2014	0.14	0.02, 1.25	0.078	678	21.5, 21,442	<0.001	0.00	0.00, 0.01	<0.001	0.22	0.03, 1.62	0.14
midwest * 2015	202	7.53, 5,446	0.002	0.12	0.02, 0.71	0.019	6.20	0.66, 57.9	0.11	39.9	6.66, 239	<0.001
west * 2015	191	21.4, 1,705	<0.001	1.23	0.26, 5.78	0.8	0.22	0.11, 0.44	<0.001	0.56	0.29, 1.09	0.090
south * 2015	49.5	5.43, 452	<0.001	0.13	0.03, 0.53	0.004	0.84	0.39, 1.81	0.7	0.64	0.31, 1.32	0.2
other * 2015	108	5.52, 2,129	0.002	1,038	34.6, 31,173	<0.001	0.01	0.00, 0.03	<0.001	5.98	0.95, 37.7	0.057
midwest * 2016	15,507	904, 266,038	<0.001	1.57	0.16, 15.8	0.7	14.6	1.53, 139	0.020	171	25.7, 1,133	<0.001
west * 2016	80.9	16.0, 408	<0.001	6.55	0.80, 53.8	0.081	0.52	0.25, 1.08	0.080	3.12	1.30, 7.51	0.011

	OR	CI	p	OR	CI	p	OR	CI	p	OR	CI	p
south * 2016	90.1	17.6, 461	<0.001	2.92	0.43, 19.6	0.3	8.48	3.84, 18.8	<0.001	4.94	1.91, 12.8	0.001
other * 2016	54.0	4.52, 645	0.002	625	18.0, 21,760	<0.001	0.00	0.00, 0.00	<0.001	8.36	1.32, 52.9	0.024
midwest * 2017	3.20	0.25, 41.4	0.4	1.08	0.17, 6.62	>0.9	7.90	0.85, 73.3	0.069	37.7	6.29, 226	<0.001
west * 2017	6.45	3.42, 12.2	<0.001	6.23	0.86, 45.0	0.070	0.09	0.04, 0.18	<0.001	1.01	0.51, 2.02	>0.9
south * 2017	2.06	1.07, 3.95	0.030	0.54	0.09, 3.30	0.5	0.40	0.19, 0.85	0.017	0.50	0.24, 1.05	0.068
other * 2017	0.20	0.02, 1.57	0.12	1,141	35.5, 36,715	<0.001	0.00	0.00, 0.00	<0.001	2.94	0.50, 17.4	0.2
midwest * 2018	5.82	0.55, 62.1	0.14	0.15	0.03, 0.69	0.015	26.0	2.81, 240	0.004	45.7	7.74, 270	<0.001
west * 2018	0.95	0.51, 1.78	0.9	0.58	0.06, 5.48	0.6	0.00	0.00, 0.04	<0.001	0.74	0.37, 1.49	0.4
south * 2018	1.49	0.79, 2.82	0.2	0.22	0.04, 1.14	0.071	1.57	0.72, 3.40	0.3	1.33	0.64, 2.77	0.4
other * 2018	0.68	0.08, 5.48	0.7	1,647	54.4, 49,839	<0.001	0.01	0.00, 0.06	<0.001	34.8	5.56, 218	<0.001
midwest * 2019	0.75	0.06, 8.80	0.8	0.15	0.03, 0.81	0.027	40.0	4.34, 369	0.001	66.1	11.1, 394	<0.001
west * 2019	0.12	0.06, 0.22	<0.001	0.64	0.08, 5.35	0.7	0.04	0.01, 0.10	<0.001	3.00	1.51, 5.97	0.002
south * 2019	0.05	0.02, 0.09	<0.001	0.08	0.01, 0.44	0.004	0.45	0.21, 0.97	0.042	1.08	0.52, 2.23	0.8
other * 2019	2.18	0.27, 17.6	0.5	0.00	0.00, 0.00	<0.001	0.00	0.00, 0.01	<0.001	0.00	0.00, 545	0.4
midwest * 2020	0.64	0.05, 8.39	0.7	0.71	0.02, 24.6	0.9	0.57	0.06, 5.82	0.6	35.4	5.13, 245	<0.001
west * 2020	1.25	0.48, 3.25	0.6	0.07	0.05, 0.09	<0.001	0.00	0.00, 722	0.2	2.62	0.88, 7.82	0.085
south * 2020	0.34	0.14, 0.80	0.014	0.35	0.01, 12.3	0.6	0.01	0.00, 0.02	<0.001	0.21	0.07, 0.61	0.004
other * 2020	0.74	0.09, 5.85	0.8	3.08	0.03, 317	0.6	0.00	0.00, 0.01	<0.001	0.12	0.02, 0.79	0.028
midwest * 2021	8.01	0.57, 113	0.12	0.79	0.02, 39.6	>0.9	5.87	0.59, 58.0	0.13	282	44.4, 1,797	<0.001
west * 2021	2.57	1.24, 5.34	0.012	43.7	2.75, 694	0.007	0.56	0.26, 1.23	0.15	13.7	6.08, 31.0	<0.001
south * 2021	0.00	0.00, 0.07	0.001	0.09	0.00, 14.9	0.4	0.79	0.35, 1.77	0.6	0.96	0.40, 2.27	>0.9
other * 2021	0.03	0.00, 0.41	0.008	120	2.13, 6,720	0.020	0.00	0.00, 0.02	<0.001	9.44	1.42, 62.6	0.020
midwest * 2022	0.03	0.00, 2.78	0.13	0.46	0.02, 11.9	0.6	4.72	0.48, 46.3	0.2	1,250	178, 8,786	<0.001
west * 2022	0.56	0.27, 1.19	0.13	7.08	0.63, 79.6	0.11	0.07	0.02, 0.23	<0.001	131	48.0, 359	<0.001
south * 2022	0.00	0.00, 0.01	<0.001	0.21	0.02, 2.61	0.2	0.48	0.22, 1.06	0.070	6.49	2.34, 18.0	<0.001
other * 2022	0.08	0.00, 2.66	0.2	2,834	46.7, 171,917	<0.001	0.04	0.00, 0.41	0.007	172	11.8, 2,506	<0.001

[a] Covariate SNP.cluster.group and interactions USregion:season are shown

[1] OR = Odds Ratio, CI = Confidence Interval

[a] Reference level is represented as -