

Appendix E.

Table 1. β estimates for covariates in the single-survey models. Only covariates that had beta estimates not overlapping zero influenced mallard abundance in a model, and are the only covariates reported in the table.

November 2009	Posterior Mean	95% C.I.		Standard Deviation	Mean/SD
Soy Field *	3.26	2.05	4.58	0.64	5.1
Surface Water					
Wetland *	2.84	0.52	5.07	1.15	2.47
Surface Water					

December 2009	Posterior Mean	95% C.I.		Standard Deviation	Mean/SD
Rice Field	1.09	0.52	1.68	0.29	3.7
Wetland	1.21	0.65	1.79	0.29	4.13
Permanent Water	1.0	0.31	1.7	0.35	2.8
Rice Field *	2.43	0.69	4.23	0.9	2.69
Surface Water					
Soy Field *	5.94	3.92	7.96	1.03	5.73
Surface Water					

Early-January 2010	Posterior Mean	95% C.I.		Standard Deviation	Mean/SD
Rice Field	1.22	0.59	1.92	0.34	3.59
Soy Field	0.83	0.14	1.57	0.36	2.29
Wetland	1.51	0.96	2.13	0.3	5.03
Fallow Field	2.15	1.1	3.26	0.55	3.9
Permanent Water	1.87	1.18	2.6	0.36	5.15
Soy Field *	4.32	2.52	6.15	0.92	4.68
Surface Water					
Wetland *	2.15	0.67	3.58	0.74	2.87
Surface Water					

Late-January 2010	Posterior Mean	95% C.I.		Standard Deviation	Mean/SD
Rice Field	1.38	0.88	1.9	0.26	5.29

Soy Field	1.3	0.77	1.86	0.28	4.68
Wetland	1.4	0.88	1.94	0.27	5.14
Fallow Field	1.93	0.97	2.92	0.5	3.86
Permanent Water	1.23	0.62	1.84	0.31	3.96
Rice Field * Surface Water	2.45	0.53	4.35	0.97	2.52
Soy Field * Surface Water	3.16	2.03	4.3	0.58	5.5

November 2010	Posterior Mean	95% C.I.		Standard Deviation	Mean/SD
Rice Field	1.22	0.4	2.27	0.47	2.61
Fallow Field	1.58	0.06	3.4	0.85	1.87
Wetland * Surface Water	21.1	8.18	34.37	6.59	3.2

December 2010	Posterior Mean	95% C.I.		Standard Deviation	Mean/SD
Wetland	1.0	0.58	1.45	0.22	4.51
Permanent Water	0.93	0.28	1.56	0.33	2.82
Soy Field * Surface Water	4.14	0.49	7.74	1.86	2.23
Wetland*Surface Water	3.67	0.75	6.51	1.47	2.5
Fallow Field * Surface Water	22.08	11.84	33.1	5.44	4.06

Early-January 2011	Posterior Mean	95% C.I.		Standard Deviation	Mean/SD
Rice Field	1.17	0.6	1.86	0.32	3.67
Wetland	1.0	0.39	1.76	0.35	2.85
Fallow Field	1.62	0.74	2.68	0.5	3.26
EQIP	-1.78	-0.27	-0.09	0.04	4.02
Soy Production	0.0001	0.000043	0.00017	0.00003	3.24

January 2011	Posterior Mean	95% C.I.		Standard Deviation	Mean/SD
Rice Field	1.61	1.14	2.1	0.25	6.57
Soy Field	1.08	0.56	1.62	0.27	3.98
Wetland	1.03	0.57	1.51	0.24	4.24
Fallow Field	1.51	0.64	2.38	0.44	3.41
Permanent Water	1.23	0.56	1.89	0.34	3.6
Soy Field * Surface Water	6.17	3.4	9.0	1.43	4.32
Wetland * Surface Water	7.0	4.58	9.39	1.24	5.62

November 2011	Posterior Mean	95% C.I.		Standard Deviation	Mean/SD
Rice Field	0.99	0.24	1.83	0.4	2.45
Rice Field*Surface Water	7.22	2.93	11.95	2.29	3.15
Fallow Field*Surface Water	25.91	7.9	45.4	9.54	2.72

December 2011	Posterior Mean	95% C.I.		Standard Deviation	Mean/SD
Rice Field	1.24	0.79	1.73	0.24	5.19
Soy Field	0.93	0.46	1.43	0.25	3.72
Wetland	1.2	0.72	1.7	0.25	4.75
Permanent Water	1.04	0.34	1.74	0.36	2.91
Fallow Field	1.02	0.27	1.81	3.9	2.62
EQIP	1.06	0.54	1.58	0.27	3.98
Rice Production	0.000043	0.000017	0.00007	0.000013	3.24

Early-January 2012	Posterior Mean	95% C.I.		Standard Deviation	Mean/SD
Rice Field	1.15	0.7	1.63	0.24	4.88
Wetland	0.95	0.5	1.44	0.24	3.95
Surface Water	2.09	1.58	2.59	0.26	8.06
Managed Land	0.52	0.23	0.82	0.15	3.46

Rice Production	0.000043	0.000014	0.000074	0.000015	2.84
Corn Production	0.000032	0.000009	0.00006	0.000012	2.66

Late-January 2012	Posterior Mean	95% C.I.		Standard Deviation	Mean/SD
Rice Field	1.1	0.71	1.5	0.2	5.55
Wetland	1.08	0.74	1.43	0.18	6.1
Fallow Field	1.05	0.34	1.77	0.37	2.88
Open Water	1.14	0.53	1.75	0.31	3.64
Soy Field *					
Surface Water	767.04	506.74	1030.31	133.53	5.75

November 2012	Posterior Mean	95% C.I.		Standard Deviation	Mean/SD
Rice Field	1.72	1.18	2.3	0.29	6.03
Soy Field	0.92	0.28	1.59	0.33	2.75
Wetland	1.06	0.55	1.61	0.27	3.94
Fallow Field	1.54	0.56	2.54	0.51	3.03
Permanent Water	1.29	0.48	2.08	0.41	3.13
Wetland *	6.4	2.07	10.7	2.2	2.91
Surface Water					

December 2012	Posterior Mean	95% C.I.		Standard Deviation	Mean/SD
Rice Field	0.76	0.31	1.25	0.24	3.14
Wetland	7.15	0.24	1.25	0.26	2.78
Surface Water	2.02	1.38	2.67	0.33	6.2
Fallow Field	0.95	0.05	1.89	0.47	2.02
Rice Production	0.000043	0.000014	0.00007	0.000014	3.03
Soy Production	0.000023	0.0000085	0.000037	0.0000073	3.09

Early-January 2013	Posterior Mean	95% C.I.		Standard Deviation	Mean/SD
Rice Field	7.77	0.34	1.2	0.21	3.64

Soy Field	0.67	0.26	1.11	0.22	3.06
Wetland	1.17	0.76	1.61	0.22	5.39
Surface Water	3.39	2.51	4.28	0.45	7.54
Fallow Field	1.57	0.83	2.32	0.38	4.12
EQIP	0.87	0.32	1.4	0.28	3.13
Rice Production	0.000038	0.000014	0.000062	0.000012	3.08
Soy Production	0.000016	0.0000022	0.00003	0.0000072	2.22

Late-January 2013	Posterior Mean	95% C.I.		Standard Deviation	Mean/SD
Wetland	0.48	0.11	0.86	0.19	2.5
Fallow Field	1.59	0.87	2.3	0.36	4.36
Permanent Water	0.59	0.02	1.14	0.28	2.1
Rice Field * Surface Water	2.29	1.11	3.5	0.6	3.82
Soy Field * Surface Water	5.13	3.98	6.3	0.6	8.62

November 2013	Posterior Mean	95% C.I.		Standard Deviation	Mean/SD
Rice Field	1.29	0.67	1.92	0.32	4.03
Wetland	0.71	0.2	1.25	0.27	2.66
Fallow Field	1.84	0.92	2.8	0.47	3.89
Wetland*Surface Water	18.32	10.82	26.16	3.95	4.64

December 2013	Posterior Mean	95% C.I.		Standard Deviation	Mean/SD
Surface Water	2.33	1.91	2.76	0.22	10.6
Permanent Water	0.83	0.06	1.64	0.4	2.06
Managed Land	0.43	0.1	0.76	0.17	2.55
Corn Production	0.0003	0.00014	0.0005	0.000081	3.6

Early-January 2014	Posterior Mean	95% C.I.		Standard Deviation	Mean/SD
Wetland Permanent Water	1.81	1.21	2.51	0.33	5.43
Fallow Field	2.12	1.32	3.01	0.43	4.87
Rice Production	1.28	0.35	2.31	0.5	2.58
Corn Production	0.00005	0.000022	0.00008	0.000014	3.47
	0.000028	0.0000076	0.00005	0.000011	2.62