

Caption

This file contains Electronic Supplementary Material 1 for manuscript:

Evidence for the effectiveness of controlling muskrat (*Ondatra zibethicus* L.) populations by trapping. submitted to the European Journal of Wildlife Research

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The contents are referred to in the document as Electronic Appendix 1. It contains the AICc model selection tables and detailed tables with parameter estimates.

Electronic appendix 1. AICc model selection tables and detailed tables with parameter estimates

Number of unique individuals per primary occasion

season	year	Dinteloord	Lelystad	OVP
spring	2014	7	7	18
autumn	2014	NA	3	14
spring	2015	4	5	4
autumn	2015	9	8	12
spring	2016	18	7	NA
autumn	2016	8	4	NA
spring	2017	51	19	NA

Dinteloord

Model selection results for Dinteloord.

S	GammaDoublePrime	GammaPrime	p	c	f0	model	npar	AICc	DeltaAICc	weight	Deviance
2	~1	~1	~1	~session	~session	No.migration.Sdot.pses	15	674.3	0.0	0.9	339.9
6	~1	~1	~1	~session	~session	rand.migration.dot.session	17	678.8	4.5	0.1	339.9
4	~time	~1	~1	~session	~session	No.migration.St.pses	20	681.2	6.9	0.0	335.5
1	~1	~1	~1	~1	~session	No.migration.Sdot.pdot	9	685.7	11.4	0.0	364.4
8	~time	~1	~1	~session	~session	rand.migration.t.s	22	685.9	11.5	0.0	335.5
5	~1	~1	~1	~1	~session	rand.migration.dot.dot	11	690.0	15.7	0.0	364.4
3	~time	~1	~1	~1	~session	No.migration.St.pdot	14	692.3	18.0	0.0	360.1
7	~time	~1	~1	~1	~session	rand.migration.t.dot	16	696.8	22.5	0.0	360.1

Parameter estimates for Dinteloord

					estimate	se	lcl	ucl
S	g1	c1	a0	t1	0.236	0.059	0.139	0.370
p	g1	s1	t1		0.357	0.064	0.243	0.490
p	g1	s2	t1		0.750	0.153	0.377	0.937
p	g1	s3	t1		0.625	0.086	0.449	0.773
p	g1	s4	t1		0.195	0.054	0.110	0.323
p	g1	s5	t1		0.316	0.042	0.240	0.402
p	g1	s6	t1		0.420	0.053	0.322	0.525
p	g1	s7	t1		0.357	0.025	0.310	0.406
f0	g1	a0	s1	t0	0.000	0.000	0.000	0.000
f0	g1	a0	s2	t0	0.000	0.000	0.000	0.000
f0	g1	a0	s3	t0	0.000	0.000	0.000	0.000
f0	g1	a0	s4	t0	1.609	2.139	0.223	11.622
f0	g1	a0	s5	t0	0.420	1.142	0.024	7.328
f0	g1	a0	s6	t0	0.000	0.000	0.000	0.000
f0	g1	a0	s7	t0	1.077	1.393	0.154	7.521
Gamma"	g1	c1	a0	t1	0.000	0.000	0.000	0.000

S is survival probability. p is recapture probability. f0 is required for estimating abundance, lcl = lower confidence level, ucl = upper confidence level.

Lelystad

Model selection results for Lelystad.

S	GammaDoublePrime	GammaPrime	p	c	f0	model	npar	AICc	DeltaAICc	weight	Deviance
1	~1	~1	~1	~1	~session	No.migration.Sdot.pdot	9	437.5	0.0	0.6	203.6
5	~1	~1	~1	~1	~session	rand.migration.dot.dot	11	438.8	1.2	0.3	200.0
2	~1	~1	~1	~session	~session	No.migration.Sdot.pses	15	445.6	8.1	0.0	197.0
3	~time	~1	~1	~1	~session	No.migration.St.pdot	14	446.4	8.8	0.0	200.2
6	~1	~1	~1	~session	~session	rand.migration.dot.session	17	446.6	9.1	0.0	192.7
7	~time	~1	~1	~1	~session	rand.migration.t.dot	16	447.2	9.7	0.0	195.9
4	~time	~1	~1	~session	~session	No.migration.St.pses	20	455.2	17.6	0.0	193.0
8	~time	~1	~1	~session	~session	rand.migration.t.s	22	456.0	18.5	0.0	188.1

Parameter estimates for Lelystad.

					estimate	se	lcl	ucl
S	g1	c1	a0	t1	0.235	0.059	0.139	0.370
Gamma''	g1	c1	a0	t1	0.000	0.000	0.000	1.000
Gamma'	g1	c1	a1	t2	0.020	25.168	0.000	1.000
p	g1	s1	t1		0.359	0.017	0.326	0.393
f0	g1	a0	s1	t0	0.000	0.000	0.000	0.000
f0	g1	a0	s2	t0	0.000	0.000	0.000	0.000
f0	g1	a0	s3	t0	0.000	0.000	0.000	0.000
f0	g1	a0	s4	t0	0.000	0.000	0.000	0.000
f0	g1	a0	s5	t0	0.000	0.000	0.000	0.000
f0	g1	a0	s6	t0	0.000	0.000	0.000	0.000
f0	g1	a0	s7	t0	1.036	1.324	0.151	7.129

Oostvaardersplassen

Model selection results for OVP.

S	GammaDoublePrime	GammaPrime	p	c	f0	model	npar	AICc	DeltaAICc	weight	Deviance
5	~1	~1	~1	~1	~session	Rand.migration.dot.dot	8	268.7	0.0	0.6	175.6
1	~1	~1	~1	~1	~session	No.migration.Sdot.pdot	6	271.4	2.7	0.1	182.6
7	~time	~1	~1	~1	~session	Rand.migration.t.dot	10	271.9	3.2	0.1	174.3
6	~1	~1	~1	~session	~session	Rand.migration.dot.session	11	271.9	3.2	0.1	172.0
3	~time	~1	~1	~1	~session	No.migration.St.pdot	8	274.2	5.5	0.0	181.1
8	~time	~1	~1	~session	~session	Rand.migration.t.s	13	275.2	6.5	0.0	170.7
2	~1	~1	~1	~session	~session	No.migration.Sdot.pses	9	275.6	6.9	0.0	180.3
4	~time	~1	~1	~session	~session	No.migration.St.pses	11	278.6	9.9	0.0	178.8

Parameter estimates for OVP.

					estimate	se	lcl	ucl
S	gOVP	c1	a0	t1	0.368	0.08	0.228	0.533
Gamma''	gOVP	c1	a0	t1	0.209	0.156	0.04	0.626
Gamma'	gOVP	c1	a1	t2	0	0	0	0
p	gOVP	s1	t1		0.621	0.028	0.564	0.675
f0	gOVP	a0	s1	t0	0	0	0	0
f0	gOVP	a0	s2	t0	0	0	0	0
f0	gOVP	a0	s3	t0	0	0	0	0
f0	gOVP	a0	s4	t0	0	0	0	0