TITLE

Spatial structure in migration routes maintained despite regional convergence among eastern populations of Swainson's Thrushes

AUTHORS

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SUPPLEMENTARY MATERIAL

Table S1. Parameters of the 16 intervals of 5°N latitude: cell size in degree (1 x 1, 0.1 x 0.1, 0.01 x 0.01), R^M coefficients (partial Mantel test, 10 000 permutations), number of individuals (n

Birds) and receiving stations (N stations) per interval, standard error and lower/upper limit of the 95% confidence interval based on 100 bootstraps samples.

Cell size (degree)	Interval (°N)	N Birds	N Stations	R Mantel	Standard error	95% CI Lower limit	95% CI Upper limit
1 x 1	45 to 40	142	36	0,35	0,05	0,26	0,44
1 x 1	44 to 39	186	40	0,28	0,04	0,20	0,35
1 x 1	43 to 38	174	35	0,26	0,04	0,18	0,33
1 x 1	42 to 37	155	28	0,21	0,04	0,14	0,28
1 x 1	41 to 36	126	22	0,13	0,03	0,07	0,20
1 x 1	40 to 35	95	14	0,12	0,04	0,04	0,21
1 x 1	39 to 34	24	8	0,27	0,14	0,00	0,54
1 x 1	38 to 33	21	7	0,36	0,17	0,04	0,69
1 x 1	37 to 32	27	6	0,30	0,10	0,10	0,49
1 x 1	36 to 31	21	5	0,39	0,21	-0,02	0,80
1 x 1	35 to 30	34	7	0,14	0,08	0,00	0,29
1 x 1	34 to 29	63	11	0,18	0,04	0,10	0,27
1 x 1	33 to 28	68	10	0,15	0,04	0,07	0,23
1 x 1	32 to 27	65	10	0,17	0,04	0,08	0,25
1 x 1	31 to 26	65	9	0,17	0,05	0,07	0,26
1 x 1	30 to 25	59	8	0,15	0,06	0,04	0,27
0.1 x0.1	45 to 40	142	125	0,25	0,03	0,18	0,31
0.1 x0.1	44 to 39	186	141	0,22	0,03	0,17	0,28
0.1 x0.1	43 to 38	174	122	0,20	0,03	0,15	0,26
0.1 x0.1	42 to 37	155	81	0,20	0,03	0,13	0,26
0.1 x0.1	41 to 36	126	63	0,14	0,03	0,08	0,20
0.1 x0.1	40 to 35	95	36	0,16	0,04	0,08	0,24
0.1 x0.1	39 to 34	24	17	0,22	0,13	-0,03	0,46
0.1 x0.1	38 to 33	21	12	0,20	0,18	-0,16	0,56
0.1 x0.1	37 to 32	27	9	0,24	0,10	0,03	0,44
0.1 x0.1	36 to 31	21	7	0,37	0,19	-0,02	0,75
0.1 x0.1	35 to 30	34	11	0,21	0,08	0,05	0,37
0.1 x0.1	34 to 29	63	21	0,18	0,04	0,10	0,27
0.1 x0.1	33 to 28	68	22	0,15	0,03	0,09	0,22
0.1 x0.1	32 to 27	65	22	0,17	0,04	0,08	0,25
0.1 x0.1	31 to 26	65	19	0,16	0,04	0,08	0,25
0.1 x0.1	30 to 25	59	17	0,15	0,07	0,02	0,28
0.01 x 0.01	45 to 40	142	141	0,25	0,03	0,20	0,31
0.01 x 0.01	44 to 39	186	163	0,25	0,03	0,20	0,31
0.01 x 0.01	43 to 38	174	145	0,25	0,02	0,20	0,29
0.01 x 0.01	42 to 37	155	99	0,24	0,03	0,19	0,30
0.01 x 0.01	41 to 36	126	76	0,20	0,03	0,15	0,25

0.01 x 0.01	40 to 35	95	44	0,25	0,03	0,18	0,32
0.01 x 0.01	39 to 34	24	19	0,18	0,13	-0,07	0,43
0.01 x 0.01	38 to 33	21	12	0,20	0,16	-0,11	0,50
0.01 x 0.01	37 to 32	27	10	0,35	0,10	0,15	0,54
0.01 x 0.01	36 to 31	21	8	0,51	0,18	0,17	0,86
0.01 x 0.01	35 to 30	34	13	0,36	0,09	0,18	0,54
0.01 x 0.01	34 to 29	63	24	0,21	0,04	0,12	0,30
0.01 x 0.01	33 to 28	68	25	0,19	0,05	0,09	0,28
0.01 x 0.01	32 to 27	65	24	0,20	0,05	0,10	0,29
0.01 x 0.01	31 to 26	65	21	0,19	0,05	0,10	0,28
0.01 x 0.01	30 to 25	59	18	0,15	0,05	0,04	0,26

Table S2. Description of the different tag models deployed among the different tagging site and year of capture: burst interval, estimated lifespan of all tags deployed, number of tags deployed and approximate starting and ending dates associated. We used the median deployment date for the starting date because we deployed tags on different days within a tagging season.

Site	Year	Burst interval	lifespan	N	Starting date (median)	Ending date
ABO	2016	11	198	26	2016-08-07	2017-02-21
ABO	2016	11	390	14	2016-08-29	2017-09-23
ABO	2016	23	266	1	2016-08-03	2017-04-26
ABO	2016	35	303	5	2016-09-02	2017-07-02
ABO	2017	11	390	1	2017-09-06	2018-10-01
ABO	2017	20	515	61	2017-08-20	2019-01-17
BPBO	2017	20	515	25	2017-09-14	2019-02-11
BPBO	2018	20	445	24	2018-09-12	2019-12-01
FM	2014	13	213	15	2014-07-17	2015-02-15
FM	2015	10	186	5	2015-06-25	2015-12-28
FM	2015	13	209	8	2015-06-11	2016-01-06
FM	2016	5	254	13	2016-06-08	2017-02-17
FM	2017	20	515	8	2017-07-25	2018-12-22
MBO	2017	5	233	2	2017-07-29	2018-03-19
MBO	2017	6	134	20	2017-08-11	2017-12-23
MBO	2018	7	212	38	2018-08-12	2019-03-12
MBO	2018	10	79	10	2018-09-15	2018-12-03
MBO	2018	15	159	6	2018-09-28	2019-03-06

MV	2017	20	515	8	2017-08-08	2019-01-05
OOT	2014	6	137	36	2014-09-19	2015-02-03
OOT	2014	13	213	6	2014-09-15	2015-04-16
OOT	2015	10	186	3	2015-09-15	2016-03-19
OOT	2015	13	209	23	2015-09-24	2016-04-20
OOT	2016	5	254	1	2016-09-24	2017-06-05
OOT	2016	11	390	15	2016-09-12	2017-10-07
OOT	2017	20	515	18	2017-09-15	2019-02-12

Table S3.

Figure S1. Migration rates (km/h) calculated for 210 segments occuring on the same night for 110 Swainson's Thrushes equiped with radio-transmitters. Migration rates were calculated by mesuring the distance between receving stations and the time elapsed between consecutive detections. The migration rates do not represent the ground speed of migrating thushes as distance might have been overestimated due to the variation of the detection range of the receiving stations. The mean migration rate (50.3 km/h) is represented by the vertical broken line.