

## Supplementary Materials

### S1: Questionnaire Transcript

**Participant ID = \_\_\_\_\_**

#### **Participant Information Sheet (PIS) and Consent Form**

I am a PhD student at Royal Holloway, University of London and the Institute of Zoology (Zoological Society of London), working with the British Trust for Ornithology. I really appreciate your help and time taking part in the questionnaire. The interview will take about 15 minutes to complete. Please do not look up information from records prior to, or during the questionnaire. All answers should be your own, based on personal knowledge, experience and opinion. Your answer will be anonymous, and it will be impossible for you to be identified after the data are collected. You must be at least 18 years old to participate. You can choose to stop the interview at any time. If you agree to participate in this study, please indicate at the beginning when prompted to do so.

You may contact me, **Lizzie Jones**, at any time for more information:

Lizzie Jones, Royal Holloway University of London.

Contact phone number: (+44) 0-7548-103657

Email: lizzie.jones.2017@live.rhul.ac.uk

1. [Single choice] Are you willing to participate in this survey: Yes No
2. [Single choice] Voice-recording the interview would help us transcribe the interview into a complete text version and provide valuable context. Do you consent for me to record the interview? The recordings will not be disclosed to a third party and will be deleted after the transcription work:

Yes No

3. [Text] Reserve of interest during interview: \_\_\_\_\_

4. [Text] Date of interview: \_\_\_\_\_

5. [Select choice] Interview method: Phone/Video call

## **SECTION 1 – About you**

### **Organisation and role**

1. [Text] Which organisation do you currently work for? (e.g. BTO): \_\_\_\_\_
2. [Text] What is your job title/role within the organisation? \_\_\_\_\_
3. [Number] How long have you worked in that role? \_\_\_\_\_
4. [Number] How long have you worked in environmental management/conservation?  
\_\_\_\_\_

### **Work**

5. [Text] Which reserve do you primarily work in? \_\_\_\_\_
6. [Number] How long have you worked in the reserve mentioned above? \_\_\_\_\_
7. [Number] What proportion of your time working on the reserve do you spend interacting with nature, as opposed to working inside/in the office? \_\_\_\_\_
8. [Text] When was your first visit to the reserve? \_\_\_\_\_

### **Demographics, experience and knowledge**

9. [Number] How old are you? \_\_\_\_\_
10. [Single choice] What is your gender? Male/Female/Prefer not to say/Other
11. [Multiple choice] How often do you go birding/watch birds? Daily/Once a week/Once a month/Once a year/Never
12. [Open-ended] Over your lifetime, how/from where do you think you have gained most of your birding knowledge? \_\_\_\_\_

**SECTION 2 – Future conservation targets (run through all 3 questions per species) -**

**[Spoken by interviewer]** “Please have a pen and paper to hand to write down the following species names for reference – Skylark, Marsh tit, Nightingale, Blackcap, Nuthatch, Buzzard. For continuity I will ask you to refer to summer populations for each species.”

**Species 1 = Skylark**

1. [Number] If your local reserve were managed specifically for Skylark (i.e. management tailored for one species specifically), what would be the maximum summer abundance you might expect for Skylark in your reserve?

[Number] \_\_\_\_\_ **Unit of measure:**  Pairs  Individuals  Territories

[Context] \_\_\_\_\_

2. [Percent/Proportion] Either as a raw number or as a proportion, what is the current population compared to that maximum possible population stated in Q1?

[Number] \_\_\_\_\_

[Context] \_\_\_\_\_

3. [Percent/Proportion] Either as a raw number or as a proportion of that maximum possible population stated above, what would be the most desirable population for this species at this reserve, in balance with other species and ecological processes also occurring?

[Number] \_\_\_\_\_

[Context] \_\_\_\_\_

**Species 2 = Marsh tit**

4. [Number] If your local reserve were managed specifically for Marsh tit (i.e. management tailored for one species specifically), what would be the maximum summer abundance you might expect for Marsh tit in your reserve?

[Number] \_\_\_\_\_ **Unit of measure:**  Pairs  Individuals  Territories

[Context] \_\_\_\_\_

5. [Percent/Proportion] Either as a raw number or as a proportion, what is the current population compared to that maximum possible population stated in Q1?

[Number] \_\_\_\_\_

[Context] \_\_\_\_\_

6. [Percent/Proportion] Either as a raw number or as a proportion of that maximum possible population stated above, what would be the most desirable population for this species at this reserve, in balance with other species and ecological processes also occurring?

[Number] \_\_\_\_\_

[Context] \_\_\_\_\_

**Species 3 = Nightingale**

7. [Number] If your local reserve were managed specifically for Nightingale (i.e. management tailored for one species specifically), what would be the maximum summer abundance you might expect for Nightingale in your reserve?

[Number] \_\_\_\_\_ **Unit of measure:**  Pairs  Individuals  Territories

[Context] \_\_\_\_\_

8. [Percent/Proportion] Either as a raw number or as a proportion, what is the current population compared to that maximum possible population stated in Q1?

[Number] \_\_\_\_\_

[Context] \_\_\_\_\_

9. [Percent/Proportion] Either as a raw number or as a proportion of that maximum possible population stated above, what would be the most desirable population for this species at this reserve, in balance with other species and ecological processes also occurring?

[Number] \_\_\_\_\_

[Context] \_\_\_\_\_

**Species 4 = Blackcap**

10. [Number] If your local reserve were managed specifically for Blackcap (i.e. management tailored for one species specifically), what would be the maximum summer abundance you might expect for Blackcap in your reserve?

[Number] \_\_\_\_\_ **Unit of measure:**  Pairs  Individuals  Territories

[Context] \_\_\_\_\_

11. [Percent/Proportion] Either as a raw number or as a proportion, what is the current population compared to that maximum possible population stated in Q1?

[Number] \_\_\_\_\_

[Context] \_\_\_\_\_

12. [Percent/Proportion] Either as a raw number or as a proportion of that maximum possible population stated above, what would be the most desirable population for this species at this reserve, in balance with other species and ecological processes also occurring?

[Number] \_\_\_\_\_

[Context] \_\_\_\_\_

**Species 5 = Nuthatch**

13. [Number] If your local reserve were managed specifically for Nuthatch (i.e. management tailored for one species specifically), what would be the maximum summer abundance you might expect for Nuthatch in your reserve?

[Number] \_\_\_\_\_ **Unit of measure:**  Pairs  Individuals  Territories

[Context] \_\_\_\_\_

14. [Percent/Proportion] Either as a raw number or as a proportion, what is the current population compared to that maximum possible population stated in Q1?

[Number] \_\_\_\_\_

[Context] \_\_\_\_\_

15. [Percent/Proportion] Either as a raw number or as a proportion of that maximum possible population stated above, what would be the most desirable population for this species at this reserve, in balance with other species and ecological processes also occurring?

[Number] \_\_\_\_\_

[Context] \_\_\_\_\_

**Species 6 = Buzzard**

16. [Number] If your local reserve were managed specifically for Buzzard (i.e. management tailored for one species specifically), what would be the maximum summer abundance you might expect for Buzzard in your reserve?

[Number] \_\_\_\_\_ **Unit of measure:**  Pairs  Individuals  Territories

[Context] \_\_\_\_\_

17. [Percent/Proportion] Either as a raw number or as a proportion, what is the current population compared to that maximum possible population stated in Q1?

[Number] \_\_\_\_\_

[Context] \_\_\_\_\_

18. [Percent/Proportion] Either as a raw number or as a proportion of that maximum possible population stated above, what would be the most desirable population for this species at this reserve, in balance with other species and ecological processes also occurring?

[Number] \_\_\_\_\_

[Context] \_\_\_\_\_



**SECTION 3 – Species memories and perceptions since first visit to reserve**

1. [Multiple choice] Since your first experience of the reserve to now, do you think each of these species have: Increased, declined or stayed the same in your local area? Or please state if the species was/is not present, or if you don't know.

Skylark – increasing / stable / declining / not present / not sure

Marsh tit – increasing / stable / declining / not present / not sure

Nightingale – increasing / stable / declining / not present / not sure

Blackcap – increasing / stable / declining / not present / not sure

Nuthatch – increasing / stable / declining / not present / not sure

Buzzard – increasing / stable / declining / not present / not sure

2. [Multiple choice] Please rank the six species in order of how much conservation priority you think each species should receive on your reserve in an ideal scenario (1= highest priority, 6 = lowest priority)

Skylark  \_\_\_\_\_

Marsh tit  \_\_\_\_\_

Nightingale  \_\_\_\_\_

Blackcap  \_\_\_\_\_

Nuthatch  \_\_\_\_\_

Buzzard  \_\_\_\_\_

[Other notes] \_\_\_\_\_

**SECTION 4 – Reflection on targets**

1. Having talked about species population trends, would you like to change your answers to any of the conservation target questions for any species?

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**Table S1:** Question outline in order found in the questionnaire, with data format, rationale and an outline of the analysis for each question.

Question Category	Question/ data collected	Data format	Question rationale	Analysis
<b>Interview consent and info</b>	Willingness and recording	Binary - Yes/No	Consent required	Anyone stating 'no' will not be interviewed
	Location/Reserve	Short answer text	Enables t-test matching	Convert to numeric to ensure anonymity
	Date of interview	Date format (dd/mm/yyyy)	-	-
<b>Occupational Experience and Demographics</b>	Years working in bird conservation	Continuous (years)	Cumulative conservation work experience throughout lifetime	Exploratory statistics based on outcome of paired t-tests.
	Current organisation	Short answer text (e.g. RSPB)	Group participants by organisation	
	Current role	Categorical options (e.g. Student)	Group participant by role	
	Years in current role	Continuous (years)	Measure of experience in current role	If age difference is revealed then could plot/ run correlations between greater population estimates and age, years of experience, different roles, organisations etc.
	Years on reserve	Continuous (years)	Measure of experience working in reserve	
	Years since first memory of reserve	Continuous (years)	Measure of total experience of reserve and approximate position of 'baseline' memory	
	Age	Continuous (years)	Lifetime experience	
	Gender	Categorical – M/F/Prefer not to say	May impact experience or role	
Education	Categorical (e.g., Undergraduate)	Indicator of knowledge/seniority	Could also run mixed models to explore parameter estimates.	
<b>Birding experience/ knowledge</b>	Birding experience frequency	Likert scale (0 = never, 5 = everyday)	Measure of exposure to current local bird populations	
	Knowledge source	Short answer text	Self-evaluation of knowledge – interesting to compare ambitiousness with personal experience	
<b>Management perceptions (section repeated per species)</b>	Maximum possible abundance	Continuous – number of pairs/territories	Measure of overall ambitiousness and willingness to consider hypothetical targets	Paired t-tests comparing older and younger, or more and less experienced groups per species metrics collected (e.g. current, target and maximum possible abundance)
	Current proportion of maximum	Proportion (percentage or fraction acceptable)	Difference between current and maximum gives 'current ambitiousness' (potentially also accuracy if reserve level data available)	
	Desirable proportion of maximum	Proportion (percentage or fraction acceptable)	Difference between desirable and maximum gives 'future ambitiousness' (potentially also accuracy if reserve level data available)	
<b>Perceptions of conservation priority + reflection</b>	Trend perception	Categorical (Increased, decreased, remained the same, not sure)	Perception of long-term species trends on the local reserve	Compare management estimates and trend accuracy measures
	Rank by conservation priority	Ranking (1=highest, 6=lowest. Force one rank per species)	Perception of relative species conservation need/priority	Compare management estimates and conservation priority estimates
	Reflection: Change targets	Short answer text	Measures effect of question ordering – have people considered trends and priority when making abundance management decisions?	Compare likelihood of different age groups choosing to change targets given previous question

**Table S2.** Correlation matrix of the pairwise correlation values between all experience-based continuous predictors (including age, years in current role, years working on current reserve/site, years since first visit to reserve/site (baseline) and years working in conservation) for all paired participants (n=36).  
Abbreviations: Cons. = Conservation, Res. = Reserve.

	<i>Age</i>	<i>Baseline Years</i>	<i>Years in Cons.</i>	<i>Years on Res.</i>	<i>Years in Role</i>
<i>Age</i>		0.79***	0.87***	0.78***	0.66***
<i>Baseline Years</i>			0.81***	0.78***	0.67***
<i>Years in Cons.</i>				0.83***	0.70***
<i>Years on Res.</i>					0.84***
<i>Years in Role</i>					

*Computed correlation used Pearson-method with pairwise-deletion.*

**Table S3.** Summary statistics for paired participant perceptions of maximum, current and target abundance (number of pairs) per species, separated into high and low number of years since first visit to the participant's focal reserve. Abbreviations: n = number of pairs, iqr = inter-quartile range, sd = standard deviation, se = standard error, ci = confidence interval.

<b>Summary statistics of perceptions of abundance per species</b>											
<i>Species</i>	<i>Group</i>	<i>variable</i>	<i>n</i>	<i>min</i>	<i>max</i>	<i>median</i>	<i>iqr</i>	<i>mean</i>	<i>sd</i>	<i>se</i>	<i>ci</i>
Skylark	High	Max	15	0.0	500	20.0	43.5	88.4	169.2	43.7	93.7
Skylark	Low	Max	15	0.0	570	20.0	24.0	77.6	161.4	41.7	89.4
Skylark	High	Current	15	0.0	500	3.0	7.0	43.7	128.7	33.2	71.3
Skylark	Low	Current	15	0.0	513	2.0	8.5	57.6	147.4	38.0	81.6
Skylark	High	Target	15	0.0	500	5.0	17.5	45.1	127.3	32.9	70.5
Skylark	Low	Target	15	0.0	513	5.0	17.5	50.0	133.6	34.5	74.0
Marshtit	High	Max	17	0.0	50	10.0	16.0	13.1	12.8	3.1	6.6
Marshtit	Low	Max	17	0.0	100	12.0	25.0	18.3	25.3	6.1	13.0
Marshtit	High	Current	17	0.0	20	0.0	5.0	3.8	6.0	1.5	3.1
Marshtit	Low	Current	17	0.0	20	0.0	6.0	3.8	5.5	1.3	2.8
Marshtit	High	Target	17	0.0	20	4.0	15.0	7.4	8.1	2.0	4.2
Marshtit	Low	Target	17	0.0	40	10.0	12.0	9.4	10.5	2.6	5.4
Nightingale	High	Max	14	0.0	150	7.5	21.2	24.4	40.2	10.7	23.2
Nightingale	Low	Max	14	0.0	150	13.5	15.0	27.6	43.0	11.5	24.8
Nightingale	High	Current	14	0.0	50	0.0	2.0	6.3	13.9	3.7	8.0
Nightingale	Low	Current	14	0.0	42	0.0	5.2	6.2	12.4	3.3	7.2
Nightingale	High	Target	14	0.0	100	5.5	15.5	14.5	26.0	6.9	15.0
Nightingale	Low	Target	14	0.0	45	5.5	9.5	10.6	13.7	3.7	7.9
Blackcap	High	Max	18	0.0	250	35.0	60.0	62.2	70.5	16.6	35.0
Blackcap	Low	Max	18	20.0	300	45.0	37.5	68.6	73.6	17.3	36.6
Blackcap	High	Current	18	0.0	100	18.0	27.5	26.3	25.6	6.0	12.7
Blackcap	Low	Current	18	8.0	200	20.0	15.0	35.8	45.5	10.7	22.6
Blackcap	High	Target	18	0.0	100	22.5	25.0	33.0	26.2	6.2	13.0
Blackcap	Low	Target	18	7.5	150	30.0	39.0	40.2	35.0	8.3	17.4
Nuthatch	High	Max	16	0.0	250	19.0	20.0	36.7	61.2	15.3	32.6
Nuthatch	Low	Max	16	2.0	150	27.5	45.8	44.6	42.7	10.7	22.8
Nuthatch	High	Current	16	0.0	40	7.0	12.2	9.9	10.1	2.5	5.4
Nuthatch	Low	Current	16	0.0	60	8.5	19.8	14.1	16.3	4.1	8.7
Nuthatch	High	Target	16	0.0	50	13.5	12.5	16.4	14.5	3.6	7.7
Nuthatch	Low	Target	16	0.0	120	11.0	17.5	20.9	29.6	7.4	15.8
Buzzard	High	Max	18	1.0	30	3.0	1.8	5.3	6.7	1.6	3.3
Buzzard	Low	Max	18	1.0	20	3.5	3.8	6.9	6.7	1.6	3.4
Buzzard	High	Current	18	0.0	10	1.5	2.0	2.9	3.1	0.7	1.5
Buzzard	Low	Current	18	0.0	15	2.0	1.8	3.7	3.9	0.9	1.9
Buzzard	High	Target	18	1.0	15	3.0	1.0	3.7	3.6	0.9	1.8
Buzzard	Low	Target	18	0.0	20	2.5	2.8	4.4	4.6	1.1	2.3

*Abbreviations - Group = Experience group, Max = Maximum.*

**Table S4.** Linear model results investigating the relationship between paired differences in years of experience and paired differences in perceptions of current, maximum and target abundance for each of the six species.

**Linear model results for current, maximum and target abundance**

<i>Predictors</i>	<b>Maximum</b>			<b>Current</b>			<b>Target</b>		
	<i>Estimates</i>	<i>CI</i>	<i>p</i>	<i>Estimates</i>	<i>CI</i>	<i>p</i>	<i>Estimates</i>	<i>CI</i>	<i>p</i>
(Intercept)	14.48	-21.36 – 50.32	0.42	-13.91	-52.60 – 24.78	0.48	-10.03	-57.70 – 37.63	0.68
Experience	-1.11	-2.61 – 0.39	0.14	0.23	-1.39 – 1.85	0.78	0.15	-1.85 – 2.15	0.88
Species [Buzzard]	-14.83	-65.52 – 35.85	0.56	14.20	-40.51 – 68.92	0.61	10.73	-56.68 – 78.13	0.75
Species [Marsh Tit]	-15.45	-66.28 – 35.38	0.55	14.83	-40.04 – 69.71	0.59	8.30	-59.30 – 75.90	0.81
Species [Nightingale]	-16.29	-67.91 – 35.34	0.53	13.12	-42.61 – 68.85	0.64	10.04	-58.61 – 78.70	0.77
Species [Nuthatch]	20.23	-32.63 – 73.09	0.45	12.32	-44.75 – 69.38	0.67	11.97	-58.33 – 82.28	0.74
Species [Skylark]	-2.09	-54.91 – 50.72	0.94	-10.03	-67.04 – 46.99	0.73	-5.23	-75.47 – 65.01	0.88
Experience * Species [Buzzard]	1.04	-1.08 – 3.17	0.33	-0.29	-2.58 – 2.01	0.80	-0.22	-3.05 – 2.60	0.88
Experience * Species [Marsh Tit]	0.88	-1.24 – 3.01	0.41	-0.28	-2.58 – 2.01	0.81	-0.16	-2.99 – 2.66	0.91
Experience * Species [Nightingale]	1.02	-1.25 – 3.30	0.37	-0.18	-2.64 – 2.28	0.89	0.09	-2.94 – 3.12	0.95
Experience * Species [Nuthatch]	-1.05	-3.22 – 1.13	0.34	-0.36	-2.71 – 1.99	0.76	-0.48	-3.37 – 2.42	0.74
Experience * Species [Skylark]	1.03	-1.17 – 3.22	0.35	0.30	-2.07 – 2.66	0.80	0.39	-2.53 – 3.31	0.79
Observations	98			98			98		
R <sup>2</sup> / R <sup>2</sup> adjusted	0.117 / 0.004			0.017 / -0.108			0.008 / -0.118		

**Table S5.** Ordinal logistic regression model results and odds ratios investigating the relationship between paired differences in years of experience and paired differences in levels of agreement of perceived species trends ('total agreement', 'adjacent agreement' and 'no agreement') for each of the six species.

Ordinal logistic regression model results							
Variable	Value	SD	t.value	P.value	OddsRatios	2.5%	97.5%
Experience	-0.013	0.031	-0.406	0.685	0.987	0.926	1.050
SpeciesBuzzard	-0.786	1.097	-0.717	0.473	0.456	0.048	3.825
SpeciesMarsh Tit	-1.297	1.490	-0.870	0.384	0.273	0.009	4.293
SpeciesNightingale	-0.409	1.391	-0.294	0.769	0.664	0.035	10.488
SpeciesNuthatch	-0.532	1.223	-0.435	0.664	0.587	0.048	6.466
SpeciesSkylark	2.452	1.316	1.863	0.062	11.612	0.921	169.633
Experience:SpeciesBuzzard	0.001	0.048	0.027	0.978	1.001	0.908	1.100
Experience:SpeciesMarsh Tit	0.032	0.059	0.543	0.587	1.033	0.920	1.171
Experience:SpeciesNightingale	0.023	0.060	0.381	0.703	1.023	0.907	1.160
Experience:SpeciesNuthatch	0.047	0.050	0.929	0.353	1.048	0.951	1.161
Experience:SpeciesSkylark	-0.040	0.054	-0.742	0.458	0.961	0.863	1.068
Total agreement/Adjacent values	-0.172	0.741	-0.232	0.817			
Adjacent values/No agreement	3.155	0.934	3.380	0.001			

**Table S6.** Frequency of individual's perceived conservation priority for each species (n=35).

Perceived conservation priority level	Skylark	Marsh tit	Nightingale	Blackcap	Nuthatch	Buzzard
High	14	19	21	9	5	9
Medium	10	7	3	16	19	22
Low	11	9	11	10	11	4

**Table S7.** Cumulative link ordinal logistic regression analysis results, investigating the effect of participant experience and participant perceptions of long-term local species population trend (since first visit to the reserve) on perceptions of ranked species conservation priority for all species (Results Section 3.3.).

<b>Cumulative link mixed model results</b>					
<b>Species</b>	<b>Variable</b>	<b>Estimate</b>	<b>SD</b>	<b>z.value</b>	<b>P.value</b>
<b>Skylark</b>	HighMedium	-0.648	0.892	-0.726	0.468
	MediumLow	1.165	0.869	1.341	0.180
	Experience	-0.003	0.037	-0.085	0.932
	Trend (Same)	0.384	1.084	0.354	0.723
	Experience:Trend (Same)	0.044	0.053	0.841	0.400
<b>Nightingale</b>	HighLow	3.756	2.903	1.294	0.196
	Experience	0.134	0.094	1.422	0.155
	Trend (Not present)	3.076	3.879	0.793	0.428
	Experience:Trend (Not present)	0.032	0.121	0.267	0.789
<b>Blackcap</b>	HighMedium	-1.360	0.840	-1.619	0.105
	MediumLow	0.993	0.649	1.529	0.126
	Experience	-0.001	0.028	-0.033	0.974
	Trend (No change)	0.374	0.837	0.447	0.655
	Experience:Trend (No change)	0.002	0.037	0.064	0.949
<b>Nuthatch</b>	HighMedium	-24.507	0.001	-26380.981	0.000
	MediumLow	7.438	0.001	8089.985	0.000
	Experience	-0.489	0.002	-288.164	0.000
	Trend (No change)	-1.433	0.001	-1544.737	0.000
	Experience:Trend (No change)	-0.019	0.001	-13.567	0.000

**Table S8.** Odds ratios for cumulative link ordinal logistic regression analysis results, investigating the effect of participant experience and participant perceptions of long-term local species population trend (since first visit to the reserve) on perceptions of ranked species conservation priority for all species (Results Section 3.3.).

**CLMM - Odds Ratios**

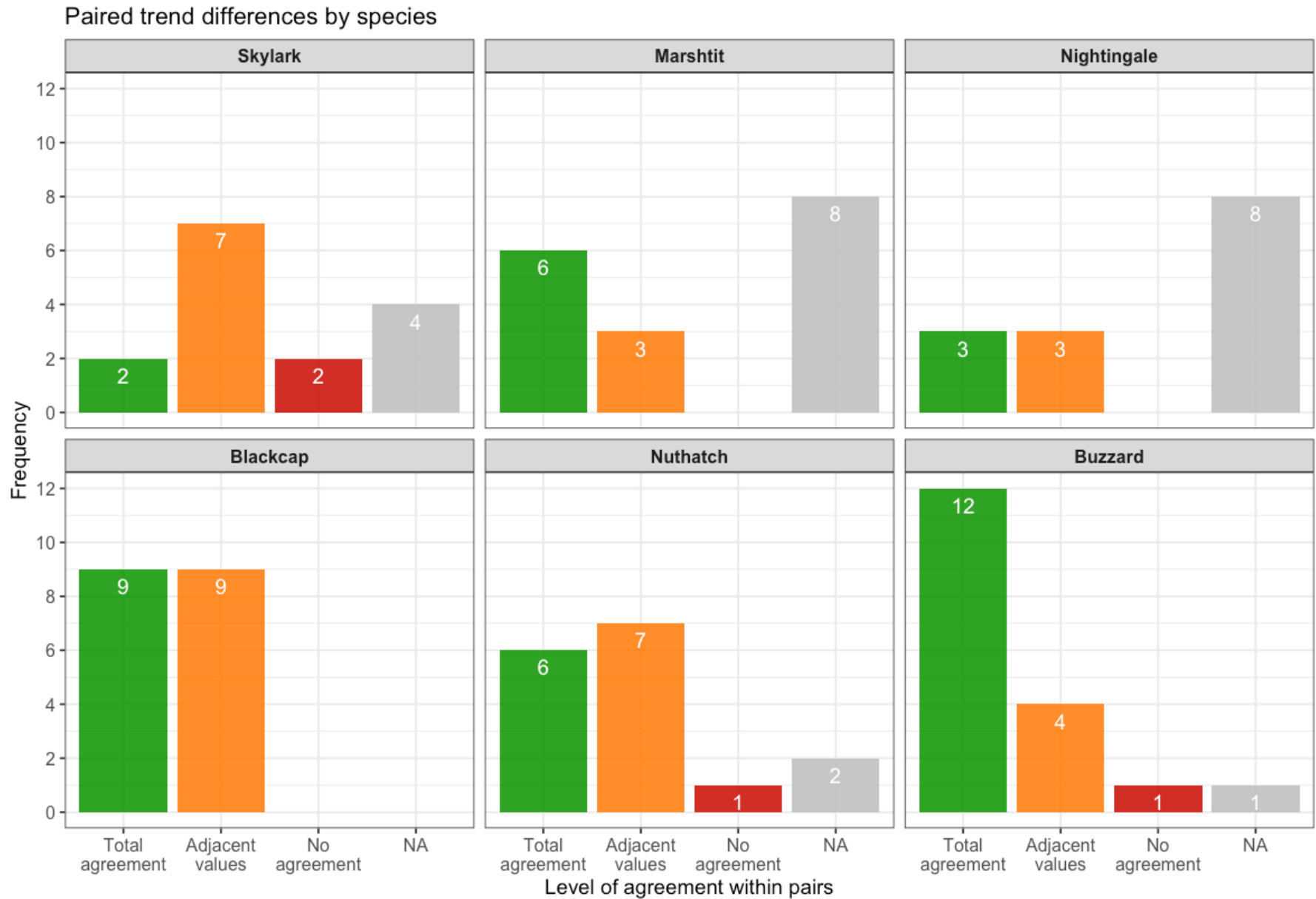
<b>Species</b>	<b>Variable</b>	<b>OddsRatios</b>	<b>2.5%</b>	<b>97.5%</b>
	HighMedium	0.523	0.091	3.004
	MediumLow	3.206	0.584	17.596
<b>Skylark</b>	Experience	0.997	0.927	1.072
	Trend (Same)	1.468	0.175	12.295
	Experience:Trend (Same)	1.045	0.943	1.160
	HighLow	42.770	0.145	12654.754
<b>Nightingale</b>	Experience	1.144	0.951	1.376
	Trend (Not present)	21.671	0.011	43423.396
	Experience:Trend (Not present)	1.033	0.815	1.308
	HighMedium	0.257	0.049	1.331
	MediumLow	2.698	0.756	9.632
<b>Blackcap</b>	Experience	0.999	0.946	1.056
	Trend (No change)	1.453	0.282	7.489
	Experience:Trend (No change)	1.002	0.933	1.077
	HighMedium	0.000	0.000	0.000
	MediumLow	1699.746	1696.686	1702.812
<b>Nuthatch</b>	Experience	0.613	0.611	0.615
	Trend (No change)	0.239	0.238	0.239
	Experience:Trend (No change)	0.981	0.978	0.983



**Table S9.** Table of power to detect a significant relationship between experience groups for mean perceived maximum, current and optimal abundance at alpha = 0.05 along a gradient of increasing sample size from n=25 to n=250 for each species.

Abundance measurement	Species	Normality test	Power at Sample size (n)									
			25	50	75	100	125	150	175	200	225	250
<b>Maximum abundance</b>	Skylark	Wilcoxon	0.149	0.249	0.362	0.462	0.550	0.618	0.684	0.748	0.810	0.840
	Marsh tit	T-test	0.169	0.300	0.425	0.536	0.632	0.712	0.777	0.830	0.871	0.903
	Nightingale	T-test	0.157	0.277	0.391	0.496	0.589	0.669	0.736	0.792	0.837	0.873
	Blackcap	Wilcoxon	0.078	0.100	0.138	0.160	0.189	0.218	0.258	0.276	0.300	0.328
	Nuthatch	T-test	0.029	0.111	0.144	0.178	0.211	0.244	0.277	0.310	0.342	0.374
	Buzzard	T-test	0.238	0.435	0.600	0.727	0.819	0.883	0.926	0.954	0.972	0.983
<b>Current abundance</b>	Skylark	Wilcoxon	0.077	0.116	0.124	0.172	0.209	0.239	0.268	0.303	0.343	0.362
	Marsh tit	T-test	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Nightingale	T-test	0.051	0.052	0.053	0.053	0.054	0.055	0.056	0.057	0.058	0.059
	Blackcap	Wilcoxon	0.456	0.744	0.900	0.961	0.988	0.996	0.998	0.999	1.000	1.000
	Nuthatch	T-test	0.341	0.610	0.788	0.892	0.948	0.976	0.989	0.995	0.998	0.999
	Buzzard	T-test	0.238	0.435	0.600	0.727	0.819	0.883	0.926	0.954	0.972	0.983
<b>Optimal abundance</b>	Skylark	Wilcoxon	0.049	0.055	0.056	0.061	0.064	0.064	0.066	0.067	0.071	0.074
	Marsh tit	T-test	0.139	0.239	0.337	0.430	0.515	0.591	0.658	0.717	0.767	0.809
	Nightingale	T-test	0.176	0.315	0.445	0.559	0.657	0.736	0.800	0.850	0.889	0.918
	Blackcap	Wilcoxon	0.404	0.692	0.854	0.935	0.977	0.990	0.996	0.998	1.000	1.000
	Nuthatch	T-test	0.141	0.243	0.343	0.437	0.524	0.601	0.668	0.726	0.776	0.818
	Buzzard	T-test	0.156	0.274	0.388	0.492	0.585	0.665	0.732	0.788	0.833	0.870

**Figure S1.** Histograms comparing the frequency of calculated differences between paired perceptions of species trends. ‘Total agreement’ represents full agreement within the pair, ‘Adjacent values’ represents a difference of one level (e.g., increasing vs. no change) and ‘No agreement’ represents the reporting of opposite trends were reported within a pair. ‘NA’ represents pairs in which either member of a pair perceived the species as ‘not present’ or ‘don’t know’.



**Figure S2.** Power curves of required sample size (number of reserves) against statistical power for each of the six species for; **A.** maximum abundance, **B.** current abundance and **C.** optimal abundance, grouping participants by experience. For full results see Table S8.

