

Supplementary information 3: Descriptive statistics of the responses associated with the welfare problems presented by various bird groups

Responses of parrots and parakeets, frugivorous birds, lories and finches associated with the welfare problems (Tables S3-1 to S3-7)

Table S3-1: Increased aggressiveness of parrots and parakeets, frugivorous birds, lories and finches to humans

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	783	76.0	76.5	76.5
	Rarely	151	14.7	14.8	91.3
	Sometimes	77	7.5	7.5	98.8
	Frequently	8	0.8	0.8	99.6
	Very frequently	4	0.4	0.4	100.0
	<i>Total</i>	1023	99.3	100.0	
<i>Missing</i>	Not answered	4	0.4		
	No assessment possible	3	0.3		
	<i>Total</i>	7	0.7		
<i>Total</i>		1030	100.0		

Table S3-2: Increased aggressiveness of parrots and parakeets, frugivorous birds, lories and finches to conspecifics

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	673	65.3	68.2	68.2
	Rarely	221	21.5	22.4	90.6
	Sometimes	71	6.9	7.2	97.8
	Frequently	13	1.3	1.3	99.1
	Very frequently	9	0.9	0.9	100.0
	<i>Total</i>	987	95.8	100.0	
<i>Missing</i>	Not answered	2	0.2		
	No assessment possible	41	4.0		
	<i>Total</i>	43	4.2		
<i>Total</i>		1030	100.0		

Table S3-3: Increased aggressiveness of parrots and parakeets, frugivorous birds, lorries and finches to other companion animals

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	786	76.3	91.9	91.9
	Rarely	44	4.3	5.1	97.1
	Sometimes	19	1.8	2.2	99.3
	Frequently	4	0.4	0.5	99.8
	Very frequently	2	0.2	0.2	100.0
	<i>Total</i>	855	83.0	100.0	
<i>Missing</i>	Not answered	8	0.8		
	No assessment possible	167	16.2		
	<i>Total</i>	175	17.0		
<i>Total</i>	1030	100.0			

Table S3-4: Locomotor stereotypies of parrots and parakeets, frugivorous birds, lorries and finches

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	726	70.5	72.3	72.3
	Rarely	108	10.5	10.8	83.1
	Sometimes	105	10.2	10.5	93.5
	Frequently	52	5.0	5.2	98.7
	Very frequently	13	1.3	1.3	100.0
	<i>Total</i>	1004	97.5	100.0	
<i>Missing</i>	Not answered	6	0.6		
	No assessment possible	20	1.9		
	<i>Total</i>	26	2.5		
<i>Total</i>	1030	100.0			

Table S3-5: Courtship behaviour of parrots and parakeets, frugivorous birds, lorries and finches towards humans

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	695	67.5	68.5	68.5
	Rarely	130	12.6	12.8	81.3
	Sometimes	125	12.1	12.3	93.6
	Frequently	45	4.4	4.4	98.0
	Very frequently	20	1.9	2.0	100.0
	<i>Total</i>	1015	98.5	100.0	
<i>Missing</i>	Not answered	4	0.4		
	No assessment possible	11	1.1		
	<i>Total</i>	15	1.5		
<i>Total</i>	1030	100.0			

Table S3-6: Plucking of own feathers in parrots and parakeets, frugivorous birds, lorries and finches

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	920	89.3	89.9	89.9
	Rarely	53	5.1	5.2	95.1
	Sometimes	28	2.7	2.7	97.8
	Frequently	9	0.9	0.9	98.7
	Very frequently	13	1.3	1.3	100.0
	<i>Total</i>	1023	99.3	100.0	
<i>Missing</i>	Not answered	5	0.5		
	No assessment possible	2	0.2		
	<i>Total</i>	7	0.7		
<i>Total</i>		1030	100.0		

Table S3-7: Plucking of feathers of other birds in parrots and parakeets, frugivorous birds, lorries and finches

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	904	87.8	90.8	90.8
	Rarely	58	5.6	5.8	96.6
	Sometimes	25	2.4	2.5	99.1
	Frequently	5	0.5	0.5	99.6
	Very frequently	4	0.4	0.4	100.0
	<i>Total</i>	996	96.7	100.0	
<i>Missing</i>	Not answered	2	0.2		
	No assessment possible	32	3.1		
	<i>Total</i>	34	3.3		
<i>Total</i>		1030	100.0		

Responses of raptors and owls associated with the welfare problems (Tables S3-8 to S3-13)

Table S3-8: Increased aggressiveness of raptors and owls to humans

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	26	72.2	72.2	72.2
	Rarely	4	11.1	11.1	83.3
	Sometimes	5	13.9	13.9	97.2
	Frequently	1	2.8	2.8	100.0
	<i>Total</i>	36	100.0	100.0	

Table S3-9: Increased aggressiveness of raptors and owls to conspecifics

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	19	52.8	67.9	67.9
	Rarely	5	13.9	17.9	85.7
	Sometimes	2	5.6	7.1	92.9
	Frequently	1	2.8	3.6	96.4
	Very frequently	1	2.8	3.6	100.0
	<i>Total</i>	28	77.8	100.0	
<i>Missing</i>	No assessment possible	8	22.2		
<i>Total</i>		36	100.0		

Table S3-10: Increased aggressiveness of raptors and owls to other companion animals

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	16	44.4	50.0	50.0
	Rarely	8	22.2	25.0	75.0
	Sometimes	6	16.7	18.8	93.8
	Frequently	2	5.6	6.3	100.0
	<i>Total</i>	32	88.9	100.0	
<i>Missing</i>	No assessment possible	4	11.1		
<i>Total</i>		36	100.0		

Table S3-11: Locomotor stereotypies of raptors and owls

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	24	66.7	70.6	70.6
	Rarely	5	13.9	14.7	85.3
	Sometimes	1	2.8	2.9	88.2
	Frequently	2	5.6	5.9	94.1
	Very frequently	2	5.6	5.9	100.0
	<i>Total</i>	34	94.4	100.0	
<i>Missing</i>	No assessment possible	2	5.6		
<i>Total</i>		36	100.0		

Table S3-12: Courtship behaviour (food begging) of raptors and owls

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	15	41.7	44.1	44.1
	Rarely	6	16.7	17.6	61.8
	Sometimes	8	22.2	23.5	85.3
	Frequently	4	11.1	11.8	97.1
	Very frequently	1	2.8	2.9	100.0
	<i>Total</i>	34	94.4	100.0	
<i>Missing</i>	No assessment possible	2	5.6		
<i>Total</i>		36	100.0		

Table S3-13: Feather plucking in raptors and owls

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	33	91.7	94.3	94.3
	Rarely	1	2.8	2.9	97.1
	Sometimes	1	2.8	2.9	100.0
	<i>Total</i>	35	97.2	100.0	
<i>Missing</i>	No assessment possible	1	2.8		
<i>Total</i>		36	100.0		

Responses of pigeons associated with the welfare problems (Tables S3-14 to S3-18)

Table S3-14: Increased aggressiveness of pigeons to humans

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	35	83.3	85.4	85.4
	Rarely	4	9.5	9.8	95.1
	Sometimes	2	4.8	4.9	100.0
	<i>Total</i>	41	97.6	100.0	
<i>Missing</i>	Not answered	1	2.4		
<i>Total</i>		42	100.0		

Table S3-15: Increased aggressiveness of pigeons to conspecifics

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	22	52.4	55.0	55.0
	Rarely	12	28.6	30.0	85.0
	Sometimes	6	14.3	15.0	100.0
	<i>Total</i>	40	95.2	100.0	
<i>Missing</i>	Not answered	1	2.4		
	No assessment possible	1	2.4		
	<i>Total</i>	2	4.8		
<i>Total</i>		42	100.0		

Table S3-16: Increased aggressiveness of pigeons to other companion animals

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	33	78.6	84.6	84.6
	Rarely	5	11.9	12.8	97.4
	Frequently	1	2.4	2.6	100.0
	<i>Total</i>	39	92.9	100.0	
<i>Missing</i>	Not answered	1	2.4		
	No assessment possible	2	4.8		
	<i>Total</i>	3	7.1		
<i>Total</i>		42	100.0		

Table S3-17: Locomotor stereotypies of pigeons

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	27	64.3	71.1	71.1
	Rarely	6	14.3	15.8	86.8
	Sometimes	2	4.8	5.3	92.1
	Frequently	1	2.4	2.6	94.7
	Very frequently	2	4.8	5.3	100.0
	<i>Total</i>	38	90.5	100.0	
<i>Missing</i>	Not answered	2	4.8		
	No assessment possible	2	4.8		
	<i>Total</i>	4	9.5		
<i>Total</i>		42	100.0		

Table S3-18: Feather picking in pigeons

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	32	76.2	78.0	78.0
	Rarely	7	16.7	17.1	95.1
	Sometimes	1	2.4	2.4	97.6
	Frequently	1	2.4	2.4	100.0
	<i>Total</i>	41	97.6	100.0	
<i>Missing</i>	Not answered	1	2.4		
<i>Total</i>		42	100.0		

Responses of ornamental fowl and ratites associated with the welfare problems (Tables S3-19 to S3-23)

Table S3-19: Increased aggressiveness of ornamental fowl and ratites to humans

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	301	86.0	86.7	86.7
	Rarely	31	8.9	8.9	95.7
	Sometimes	14	4.0	4.0	99.7
	Frequently	1	0.3	0.3	100.0
	<i>Total</i>	347	99.1	100.0	
<i>Missing</i>	Not answered	1	0.3		
	No assessment possible	2	0.6		
	<i>Total</i>	3	0.9		
<i>Total</i>		350	100.0		

Table S3-20: Increased aggressiveness of ornamental fowl and ratites to conspecifics

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	221	63.1	63.7	63.7
	Rarely	85	24.3	24.5	88.2
	Sometimes	36	10.3	10.4	98.6
	Frequently	4	1.1	1.2	99.7
	Very frequently	1	0.3	0.3	100.0
	<i>Total</i>	347	99.1	100.0	
<i>Missing</i>	Not answered	1	0.3		
	No assessment possible	2	0.6		
	<i>Total</i>	3	0.9		
<i>Total</i>		350	100.0		

Table S3-21: Increased aggressiveness of ornamental fowl and ratites to other companion animals

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	269	76.9	79.6	79.6
	Rarely	41	11.7	12.1	91.7
	Sometimes	24	6.9	7.1	98.8
	Frequently	4	1.1	1.2	100.0
	<i>Total</i>	338	96.6	100.0	
<i>Missing</i>	Not answered	2	0.6		
	No assessment possible	10	2.9		
	<i>Total</i>	12	3.4		
<i>Total</i>		350	100.0		

Table S3-22: Locomotor stereotypies of ornamental fowl and ratites

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	256	73.1	75.1	75.1
	Rarely	37	10.6	10.9	85.9
	Sometimes	32	9.1	9.4	95.3
	Frequently	12	3.4	3.5	98.8
	Very frequently	4	1.1	1.2	100.0
	<i>Total</i>	341	97.4	100.0	
<i>Missing</i>	Not answered	4	1.1		
	No assessment possible	5	1.4		
	<i>Total</i>	9	2.6		
<i>Total</i>		350	100.0		

Table S3-23: Feather picking in ornamental fowl and ratites

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
<i>Valid</i>	Never	282	80.6	82.0	82.0
	Rarely	54	15.4	15.7	97.7
	Sometimes	8	2.3	2.3	100.0
	<i>Total</i>	344	98.3	100.0	
<i>Missing</i>	Not answered	2	0.6		
	No assessment possible	4	1.1		
	<i>Total</i>	6	1.7		
<i>Total</i>		350	100.0		