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Electronic Supplementary Material

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Title: **Probing into farmers' perceptions of a globally endangered ecosystem service provider**

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Table S1. Information about GPS locations used for analyzing the probability of consistency between data of GPS-tagged vultures and farmers' awareness of vulture presence at their farms. PVC: individual identifier. Locations: number of GPS-fixes retained after removing non-stationary locations, i.e. locations with speed higher than 2 m/s and altitude higher than 25 meters. Days: number of days with information on stationary locations. Min date: date of the first location for each individual. Max date: date of the last location for each individual. Locations total: total number of locations, including stationary and non-stationary. Days total: total number of days, including stationary and non-stationary locations.

PVC	locations	days	min date	max date	locations total	days total
225	326726	914	2013-07-01	2015-12-31	591679	914
226	325525	914	2013-07-01	2015-12-31	578904	914
228	588846	914	2013-07-01	2015-12-31	1234537	914
22C	375463	912	2013-07-01	2015-12-31	632599	912
22T	395452	914	2013-07-01	2015-12-31	680585	914
22W	67602	137	2013-07-01	2013-11-14	109045	137
22X	378273	914	2013-07-01	2015-12-31	720759	914
237	314246	912	2013-07-01	2015-12-31	553926	912
2X1	415875	914	2013-07-01	2015-12-31	795628	914
2X2	509825	912	2013-07-01	2015-12-31	1027161	912
2X3	273701	844	2013-07-01	2015-12-30	465455	914
2X4	219430	914	2013-07-01	2015-12-31	405831	914
2X5	621664	905	2013-07-01	2015-12-31	1177793	905
3FC	237965	914	2013-07-01	2015-12-31	468382	914
3FF	212434	893	2013-07-01	2015-12-31	364119	893
3NP	549832	791	2013-10-23	2015-12-31	942524	791
231	238637	797	2013-10-26	2015-12-31	483968	797
234	66407	583	2014-05-28	2015-12-31	141662	583
371	62930	583	2014-05-28	2015-12-31	119133	583
224	52736	580	2014-05-31	2015-12-31	98786	580
341	66970	580	2014-05-31	2015-12-31	116251	580
2XV	43590	578	2014-06-02	2015-12-31	65050	578
2XM	24863	221	2015-05-23	2015-12-31	45355	221
3PU	22837	222	2015-05-23	2015-12-31	43497	222

PVC	locations	days	min date	max date	locations total	days total
3PX	20474	222	2015-05-23	2015-12-31	39677	222
2XC	26248	221	2015-05-25	2015-12-31	47636	221
3FA	19610	221	2015-05-25	2015-12-31	45052	221
221	1322	89	2015-09-16	2015-12-31	26645	107
222	1030	90	2015-09-16	2015-12-31	27837	107
255	719	81	2015-09-16	2015-12-29	31135	107
370	1074	94	2015-09-16	2015-12-31	28306	107
3AC	797	76	2015-09-16	2015-12-29	29090	107
3XV	804	100	2015-09-16	2015-12-31	18232	107
254	775	87	2015-09-17	2015-12-31	30217	107
40H	686	82	2015-09-19	2015-12-30	18245	105
22M	726	76	2015-09-20	2015-12-29	21723	104
22P	519	74	2015-09-20	2015-12-31	24562	104
2XX	1131	84	2015-09-20	2015-12-31	26344	104
40C	569	78	2015-09-20	2015-12-31	26482	105
40F	59	19	2015-09-20	2015-11-06	3065	56
20H	700	79	2015-09-22	2015-12-31	13815	102
2XJ	475	59	2015-09-22	2015-12-30	18467	102
2XL	966	78	2015-09-22	2015-12-31	23453	102
257	607	82	2015-09-23	2015-12-31	28610	101
3AU	705	74	2015-09-23	2015-12-31	28954	102
40J	591	80	2015-09-23	2015-12-31	12157	102

Table S2. Demographic information of the surveyed farmers' on Fuerteventura. Surveys evaluated farmers' perception of Canarian Egyptian Vultures and awareness of their presence in their own farms. Position: charge of the farmer in the farm. Sex: sex of the surveyed farmer (Male or Female). N: total number of surveyed farmers. N (GPS analyses): number of surveyed farmers' answers included for comparison with vultures GPS data.

Position	Sex	Range of age	N	N (GPS analyses)
Manager	M	< 30	2	2
Manager	M	30-40	2	2
Owner	F	> 60	1	1
Owner	F	30-40	1	1
Owner	F	40-50	4	4
Owner	F	50-60	2	1
Owner	M	< 30	1	1
Owner	M	> 60	6	6
Owner	M	30-40	9	8
Owner	M	40-50	10	9
Owner	M	50-60	19	18
Shepherd	M	40-50	1	1
Shepherd	M	50-60	1	1

Table S3. Variables used to evaluate farmers' perception about Canarian Egyptian vultures on Fuerteventura and to analyze consistency between farmers' awareness of vulture presence and GPS data. Question in surveys column shows question asked to farmers during face-to-face surveys.

Variable	Question in surveys
<i>ESP index</i>	Among the species that you see, could you evaluate how much beneficial or harmful are they for you? Evaluate them between 1 (very harmful) and 5 (very beneficial). Why do you consider each one beneficial or harmful?
<i>Scavenging services (%)</i>	Among the species that you see eating carcasses at your farm, which of them do you think that participate more in removing such carcasses? Could you sort the species according to their importance in the disposal of carrion?
<i>Presence</i>	Do Egyptian vultures visit your farm? Yes No
<i>TimeSlots</i>	What time do Egyptian vultures usually visit your farm?: Morning Midday Afternoon
<i>Number</i>	How many Egyptian vultures do you usually see in your farm?

Table S4. Top-ranked candidate models for the probability of consistency between data of GPS-tagged vultures and farmers' awareness of vulture presence (*Presence*) at their farms. Models selected for model averaging are shown in bold. Models including uninformative parameters and correlated variables were removed. Delta AICc: difference in AICc between each model and the best model (lowest AICc). AICcWt: AICc weights. Cum.Wt: Cumulative weights. Radius: threshold distances around the farms. K: number of parameters. ModelLik: likelihood of each model.

Model	AICc	Delta AICc	AICcWt	Cum.Wt	Variable	K	ModelLik
<i>Radius 180 m</i>							
772	67.645	0	0.286	0.286	Goat Sheep + Dist Roost + Num days + Gender	5	1
38	68.613	0.968	0.176	0.462	Goat Sheep + Dist Roost	3	0.616
647	69.694	2.049	0.103	0.565	Goat Sheep + Dist Main AFS + Dist Roost + Num days	5	0.359
242	69.96	2.315	0.090	0.655	Goat Sheep + Num days + Gender	4	0.314
108	70.28	2.635	0.077	0.731	Num days + Gender	3	0.268
418	70.342	2.697	0.074	0.806	Dist Roost + Num days + Gender	4	0.260
2	71.799	4.154	0.036	0.841	Goat Sheep	2	0.125
40	71.898	4.253	0.034	0.876	Goat Sheep + Num days	3	0.119
105	72.438	4.793	0.026	0.902	Dist Roost + Gender	3	0.091
12	72.631	4.986	0.024	0.925	Dist Roost	2	0.083
892	72.897	5.252	0.021	0.946	Dist Main AFS + Dist Roost + Dist Terr + Num days	5	0.072
0	72.98	5.335	0.020	0.966	1	1	0.069
292	73.008	5.363	0.020	0.985	Dist Main AFS + Dist Roost + Dist Terr	4	0.068
293	73.598	5.953	0.015	1	Dist Main AFS + Dist Roost + Num days	4	0.051
<i>Radius 393 m</i>							
97	72.603	0	0.700	0.700	Num days + Gender	3	1
14	75.140	2.537	0.197	0.897	Num days	2	0.281
0	76.842	4.239	0.084	0.981	1	1	0.120
248	79.792	7.189	0.019	1	Dist AFS + Dist Roost + Dist Terr	4	0.027

Table S5. Top-ranked candidate models for the probability of consistency between data of GPS-tagged vultures and farmers' awareness of vulture presence in each time slot (*TimeSlots*). Models selected for model averaging are shown in bold. Models including uninformative parameters and correlated variables were removed. Delta AICc: difference in AICc between each model and the best model, (lowest AICc). AICcWt: AICc weights. Cum.Wt: Cumulative weights. Radius: threshold distances around the farms. K: number of parameters. ModelLik: likelihood of each model.

Model	AICc	Delta AICc	AICcWt	Cum.Wt	Variable	K	ModelLik
<i>Radius 180 m</i>							
95	86.51	0	0.363	0.363	Max indivs day + Hour + (1 farm ID)	5	1
263	87.317	0.808	0.242	0.605	Goat Sheep + Dist Roost + Hour + (1 farm ID)	6	0.668
16	87.821	1.311	0.188	0.793	Hour + (1 farm ID)	4	0.519
48	89.194	2.684	0.095	0.888	Dist Main AFS + Max indivs day + (1 farm ID)	4	0.261
40	89.909	3.399	0.066	0.954	Goat Sheep + Dist Roost + (1 farm ID)	4	0.183
0	90.66	4.151	0.046	1	(1 farm ID)	2	0.126
<i>Radius 393 m</i>							
16	85.828	0	0.321	0.321	Hour + (1 farm ID)	4	1
263	86.033	0.206	0.289	0.610	Goat Sheep + Dist Roost + Hour + (1 farm ID)	6	0.902
525	86.231	0.404	0.262	0.872	Age + Goat Sheep + Dist Roost + Hour + (1 farm ID)	7	0.817
40	89.814	3.986	0.044	0.916	Goat Sheep + Dist Roost + (1 farm ID)	4	0.136
0	89.873	4.045	0.042	0.958	(1 farm ID)	2	0.132
128	89.916	4.088	0.042	1	Age + Goat Sheep + Dist Roost + (1 farm ID)	5	0.129

Figure S1. Movements of GPS-tagged Canary Egyptian vultures (N= 46) over Fuerteventura used for analyzing the probability of consistency between GPS data and farmers' awareness of vulture presence at their farms.

