Electronic appendix A

This is an electronic appendix to the paper by Oro *et al*. 2004 Influence of food availability on demography and local population dynamics in a long-lived seabird. *Proc. R. Soc. Lond.* B **271**, 387–396. (DOI 10.1098/rspb.2003.2609.)

Electronic appendices are refereed with the text. However, no attempt is made to impose a uniform editorial style on the electronic appendices.

Table 4. Discard availability (in tons of fishes) estimated through statistics of fish catches from fishermen's guild bulletins, which in this area are highly correlated with the amount of fish discarded.
(The lack of catches indicates the periods of trawling moratorium. Data are separated by month and grouped for the egg-laying and incubation periods (variable denoted by $\varepsilon 1$ and $\varepsilon 3$ (as categorical) in the models) and chick-rearing period (variables denoted by $\varepsilon 2$ in the models).)

year	March	April	May	June	July	stage affected	total egg-laying and incubation periods	total chick-rearing period	total breeding season
1992	105.7	0	0	138.9	149.7	laying and incubation	105.7	288.6	394.2
1993	148.8	109.2	136.0	0	0	chick rearing	394.0	0	394.0
1994	141.2	124.6	0	0	135.7	incubation and early chick rearing	265.8	135.7	401.5
1995	133.4	103.5	114.1	0	0	chick rearing	351.0	0	351.0
1996	104.1	124.2	121.7	0	0	chick rearing	349.9	0	349.9
1997	118.8	141.4	69.8	0	73.5	early chick rearing	330.0	73.5	403.5
1998	146.7	142.1	150.3	0	0	chick rearing	439.0	0	439.1
1999	130.4	93.5	130.4	0	0	chick rearing	354.4	0	354.4
2000	152.2	129.0	165.0	0	0	chick rearing	446.1	0	446.2

Table 5. Set of models starting from the initial model (T_t, ϕ_t, p_t) and also taking into account the age effect (both the two age classes effect (a) and the true age effect (A); see text for explanations) and resight effort effect on recapture probabilities.
(For each model, we give the number of estimable parameters (np), its deviance (DEV) and the Akaike Information Criterion (AIC), which results from (DEV + 2 × np). Model notation is according to Lebreton *et al.* (1992). Bold type denotes the provisionally selected model.)

model	np	DEV	AIC
(T_t, ϕ_t, p_t)	22	559.002	603.002
(T_t, ϕ_t, p)	15	741.313	771.313
(T_t, ϕ, p_t)	17	559.022	591.022
(T, ϕ, p_t)	10	608.807	628.807
(T_a, ϕ, p_t)	11	596.505	618.505
(T_A, ϕ_A, p_t)	12	843.529	867.529
$(T_{t+A}, \phi_{t+A}, p_t)$	21	817.755	859.755
$(T_{t+A}, \phi_{t+A}, p_{t+A})$	22	812.021	856.021
(T, ϕ, p_e)	4	623.575	631.575
(T_a, ϕ, p_e)	5	610.038	620.038
$(T_a, \phi, p_{\tilde{e}})$	5	614.263	614.263
(T_t, ϕ_A^2, p_t)	17	841.145	875.145
(T_t, ϕ_A, p_t)	17	840.467	874.467
(T_a, ϕ_A, p_t)	17	842.606	876.606
(T_A, ϕ, p_t)	11	564.410	586.410
$(T_{\tilde{A}}, \phi, p_t)$	**11**	**554.969**	**576.969**
$(T_{\tilde{A}5}, \phi, p_t)$	11	559.313	581.313
$(T_{\tilde{A}6}, \phi, p_t)$	11	557.513	579.513
$(T_{\tilde{A}7}, \phi, p_t)$	11	557.989	579.989
(T_ω, ϕ, p_t)	12	560.401	584.401

Table 6. Set of models starting from the provisionally selected model ($T_{\tilde{A}}$, ϕ, p_t) and taking into account the effect of food availability (as amounts of trawler discards (ε)) on the three parameters: transient, survival and recapture.
(For each model, the number of identifiable parameters (np), its deviance (DEV) and the Akaike Information Criterion (AIC) are shown. Bold type denotes the finally selected model.)

model	np	DEV	AIC
$(T_{\tilde{A}}, \phi, p_t)$	11	554.969	576.969
$(T_{\tilde{A}+\varepsilon}, \phi, p_t)$	12	553.805	577.667
$(T_{\tilde{A}+\varepsilon 1}, \phi, p_t)$	12	556.265	580.265
$(T_{\tilde{A}+\varepsilon 2}, \phi, p_t)$	12	552.288	576.288
$(T_{\tilde{A}+\varepsilon 3}, \phi, p_t)$	12	**547.160**	**571.160**
$(T_{\tilde{A}+\varepsilon 3}, \phi, p_{\tilde{A}+\varepsilon 3})$	7	562.421	576.421
$(T_{\tilde{A}+\varepsilon 3}, \phi, p_{\tilde{A}+\varepsilon 2})$	7	569.007	583.007
$(T_{\tilde{A}+\varepsilon 3}, \phi, p_{\tilde{A}+\varepsilon 1})$	7	574.199	588.199
$(T_{\tilde{A}+\varepsilon 3}, \phi, p_{\varepsilon 3})$	6	574.658	586.658
$(T_{\tilde{A}+\varepsilon 3}, \phi_\varepsilon, p_t)$	13	551.678	577.678
$(T_{\tilde{A}+\varepsilon 3}, \phi_{\varepsilon 1}, p_t)$	13	552.712	578.712
$(T_{\tilde{A}+\varepsilon 3}, \phi_{\varepsilon 2}, p_t)$	13	552.170	578.170
$(T_{\tilde{A}+\varepsilon 3}, \phi_{\varepsilon 3}, p_t)$	13	551.337	577.337
$(T_{\varepsilon 3}, \phi, p_t)$	11	555.009	577.009