

Table 4. Effect of time and sex on survival probability of king penguins from Crozet Islands

Models	DEV	ΔAIC_i	NP	wi
$[P_i \phi_t]$	1,422.84	9.23	8	0.0053
$[P_i \phi_s]$	1,453.58	25.97	1	0.0000
$[P_i \phi_i]$	1,453.58	25.97	1	0.0000
$[P_i \phi_{t*s}]$	1,419.23	21.62	16	0.0000
$[P_i \phi_{t+s}]$	1,422.56	10.95	9	0.0022
$[P_i \phi_{t(26,137,458)}]$	1,423.61	0.00	3	0.5326
$[P_i \phi_{t(137,458)+t(26)+s}]$	1,423.32	1.71	4	0.2264
$[P_i \phi_{t(137,458)+t(26)*s}]$	1,423.26	1.65	4	0.2335

ϕ , survival probability; P , recapture probability; i , constant; t , time dependence; s , sex effect;

+, additive model; *, model with interaction; DEV, Deviance; NP, Number of estimated parameters, wi: AIC weight; ΔAIC_i , Difference in value between AIC (Akaike's Information Criterion) of the most parsimonious model and the model in question.

The AIC weight (w_i) with the highest value indicates the best model (shown in bold).

Numbers from 1 to 8 correspond to the years (from 1998 to 2005). Years 2 (1999) and 6 (2003) = bad years.