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Data S1

Recapture histories used for and resighting and survival rates estimated by the best-supported mark-recapture model in the study.

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File list (files found within DataS1.zip)

Gownaris&Boersma_RecaptureHistories.txt
Gownaris&Boersma_BestSupportedModel_ResightingRates.txt
Gownaris&Boersma_BestSupportedModel_SurvivalRates.txt

Description

Gownaris&Boersma_RecaptureHistories.txt - This file includes recapture histories for the 44,374 chicks banded at Punta Tombo from 1983-2010. The first character of each record refers to the individual's sex and the second character refers to the individual's breeding state. Each year during the breeding season (September-February), resighted individuals were assigned to one of three sex categories, based only on information gathered that year: Male (M), Female (F), or uncertain sex (u). Resighted individuals were assigned to one of four breeding states: pre-breeder (P; haven't yet bred), breeder (B; currently breeding), non-breeder (N; previously bred but not currently breeding), or uncertain (u; breeding state unknown). The model also included two

unobservable states for temporary emigrants: unobservable pre-breeder (X) and unobservable non-breeder (Y). All individuals start as “uP” when banded as chicks (unknown sex, pre-breeding state). Leading zeros are for years prior to an individual’s hatch year and zeros following the initial “uP” indicate a year when an individual was not resighted.

Gownaris&Boersma_BestSupportedModel_ResightingRates.txt - This file includes sex, year, and breeding state-specific resighting rates with upper and lower 95% confidence intervals, as estimated based on the best-supported mark-recapture model from this study. Resighting took place during the breeding season, from September-February (e.g. BreedingSeason 1984 refers to September 1984-February 1985). Breeding state "P" refers to pre-breeders, breeding state "B" refers to breeders, and breeding state "N" refers to non-breeders. Individuals in states "X" or "Y" are unobservable and thus have resighting rates of zero (not shown). Resighting rates were higher for males (M) than for females (F), highest for breeders and lowest for pre-breeders, and increased over time for all groups.

Gownaris&Boersma_BestSupportedModel_SurvivalRates.txt - This file includes sex, age, year, and breeding-state specific survival rates with upper and lower 95% confidence intervals, as estimated based on the best-supported mark-recapture model resulting from this study. In this model, survival varied with sex and with additional variables specific to each age class. The survival rate of juveniles varied with year. Adult survival (ages 2-18) varied with breeding state, year, and age and elder adult survival (ages ≥ 19) varied with breeding state and as a linear, decreasing function of age. Cohort refers to the hatch year and NonbreedingSeason refers to the survival interval (April-August). Survival rates for breeding state "B" are applicable to breeders, observable non-breeders, and unobservable non-breeders. Survival rates for breeding state "P" are applicable to observable pre-breeders and unobservable pre-breeders. Survival rates were higher for males (M) than for females (F) and were higher in individuals aged 1-18 than in juveniles (Age 0) or elder individuals (Ages ≥ 19). In some cases, parameters were inestimable; i.e. confidence intervals spanned [0,1].
