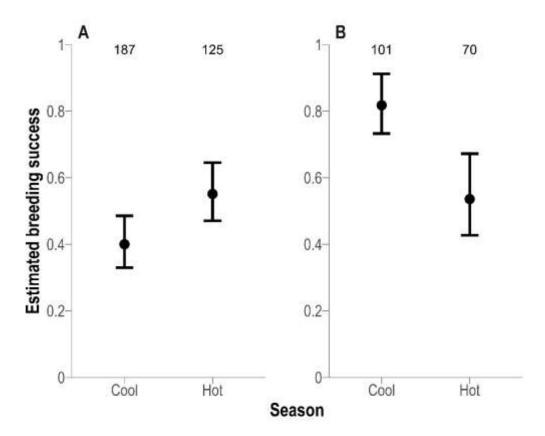
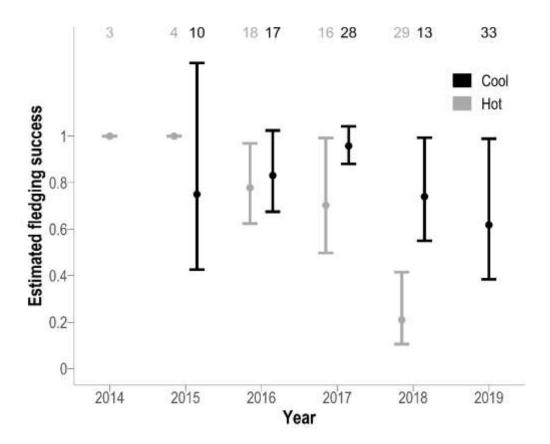
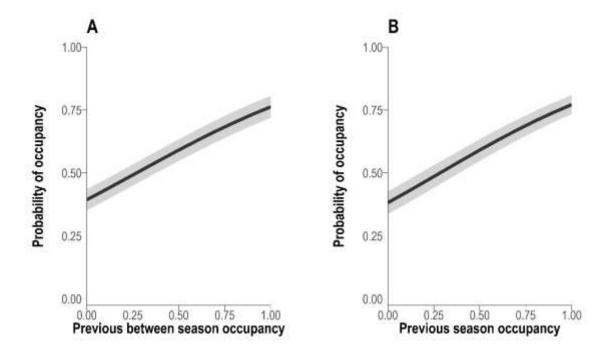
## **Appendix**



**Fig. S1.** Mayfield estimates of nesting success for two seasonal populations of storm petrels breeding in artificial nest chambers on Egg Island. A) hatching success and B) fledging success. Error bars represent 95% confidence intervals. Sample sizes are indicated at the top.



**Fig. S2.** Annual Mayfield estimates of fledging success for storm petrels breeding in artificial nest chambers on Egg Island for each season (hot season; grey, cool season; black). Error bars represent 95% confidence interval. Sample sizes are indicated at the top.



**Fig. S3.** Probability of a chamber being occupied with respect to A) the occupancy in the same season of the previous year (e.g. cool season vs. previous cool season), and B) occupancy in the previous season (e.g. cool season vs. hot). Solid lines represent model predictions based on the most parsimonious model for occupancy (Table 2, model 4), using mean values in each model for installation length (4.06 seasons) and in plot A, mean previous season occupancy (0.5), and in plot B), mean between season occupancy (0.5). Shaded areas around the fitted lines represent ± one standard error (SE).



**Fig. S4.** Artificial nest chamber with large downy storm petrel chick (top) and downy with feathers Brown Noddy *Anous stolidus* (bottom) sheltering inside found during routine monitoring at the end of the 2016 hot season on Egg Island (Photo: Annalea Beard).