APPENDIX

WHY DO SOME SHEARWATERS ACCUMULATE STONES AT THEIR NEST ENTRANCES?

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Figure A1

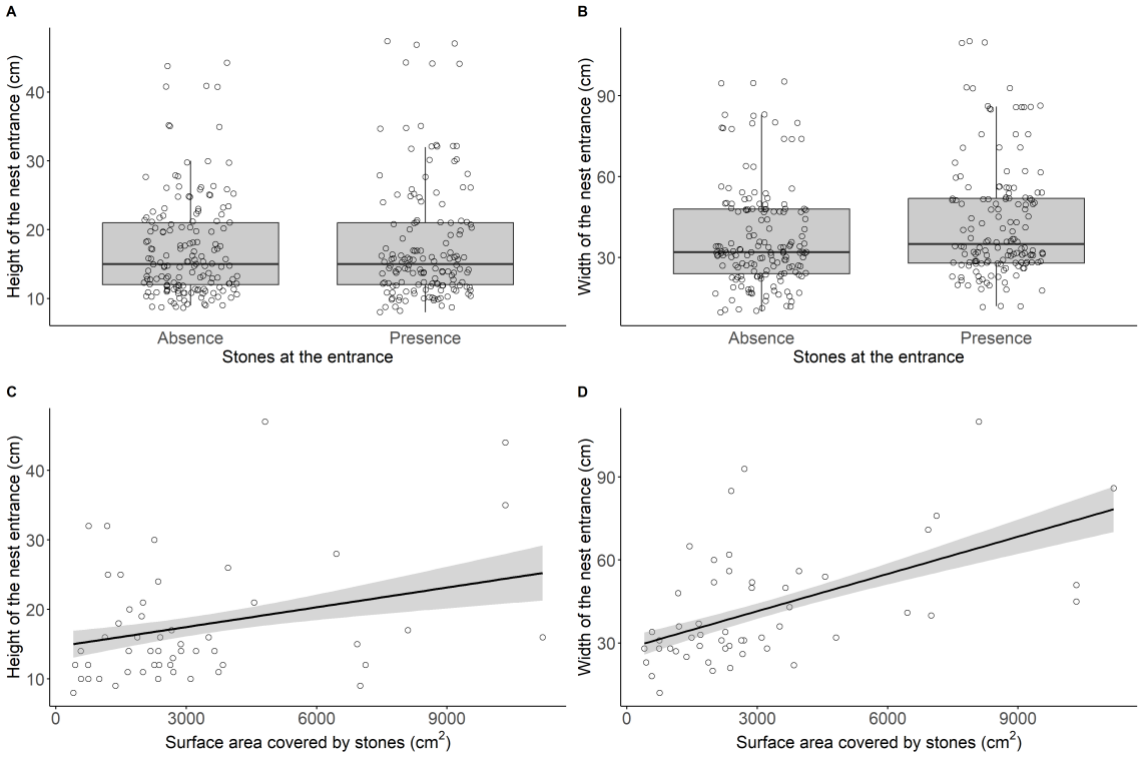


Fig. A1. Variation of height and width of the nest entrances in relation to the presence (A, B) and the surface area covered by stones (cm^2) (C, D). Height of the nest entrance was not different among nests with presence or absence of stones (permutation test: $Z = -0.583$, $p = 0.562$), however, nest with presence of stones were wider at their entrances than nests without stones (permutation test: $Z = -2.569$, $p = 0.011$). Both height and width of the nest entrances positively correlated with the surface area covered by stones (Pearson correlation coefficient, $r = 0.31$, 95% CI [0.157, 0.447] and $r = 0.60$, 95% CI [0.482, 0.691]).

Figure A2

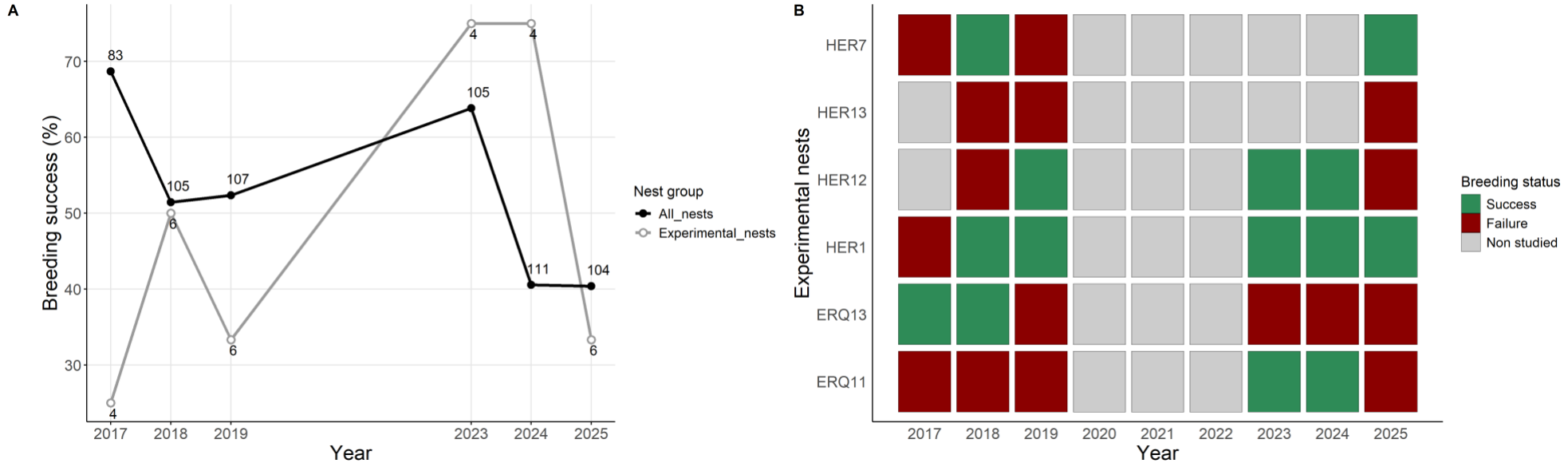


Fig. A2. Breeding success for the population and the manipulated nests (A) and detailed breeding output per manipulated nest (B) during the periods 2017-2019 and 2023-2025. In A), numbers indicate sample size of monitored nests. Monitoring procedures and nests were those described in Rodríguez et al. (2022). Breeding outcome of 2017-2019 were published in Rodríguez et al. (2022).

Figure A3

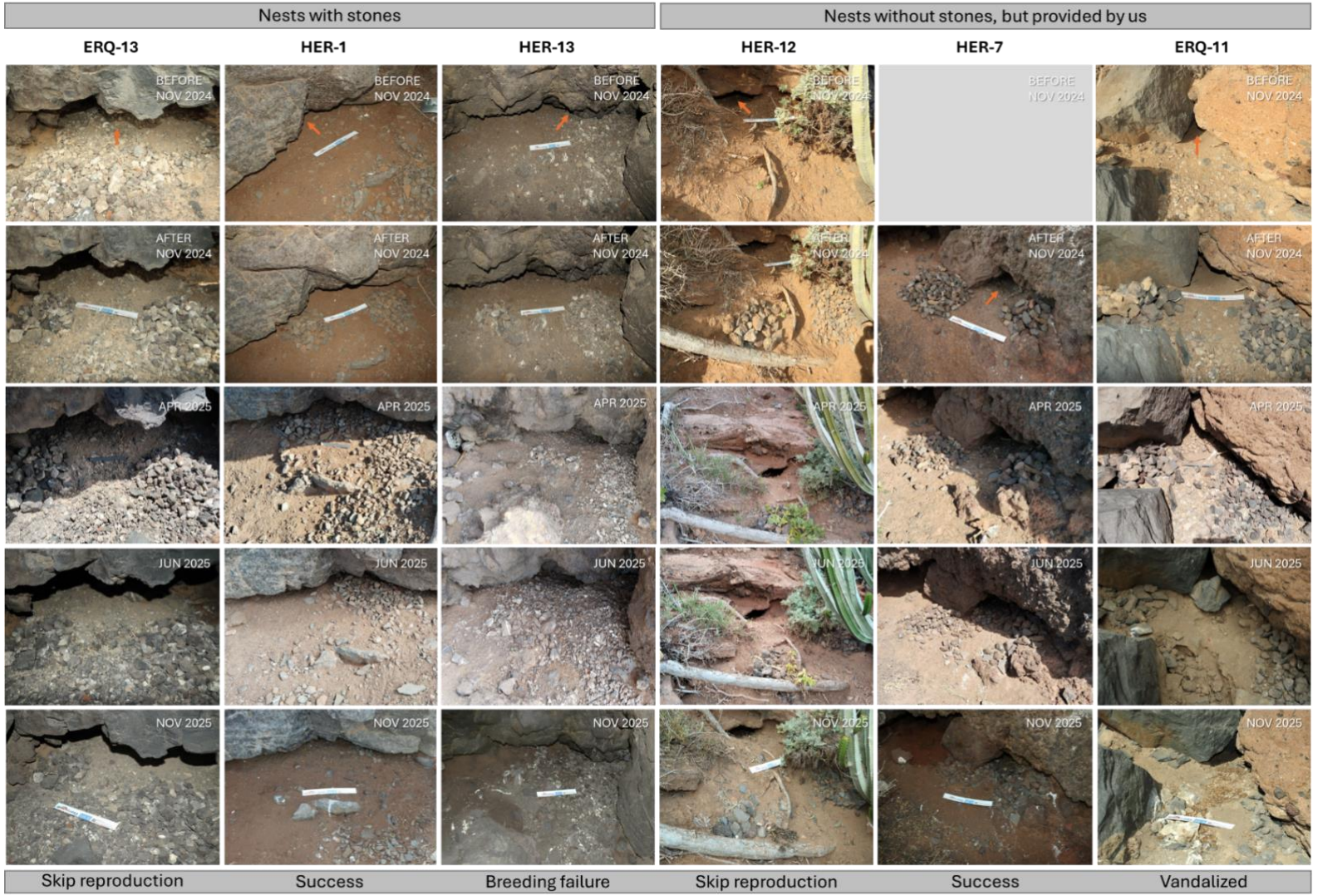

Nests with stones
Nests without stones, but provided by us
ERQ-13
HER-1
HER-13
HER-12
HER-7
ERQ-11
BEFORE NOV 2024
AFTER NOV 2024
APR 2025
JUN 2025
NOV 2025
Skip reproduction
Success
Breeding failure
Skip reproduction
Success
Vandalized

Fig. A3. Sequential images of stone relocation in Cory's Shearwater nests. Six nests are shown before and after experimental manipulation. From right to left, ERQ-13, HER-1 and HER-13 which originally contained stones, and HER-12, HER-7 and ERQ-11 which lacked stones prior to the experiment. The top row represents nests before manipulation (November 2024), the second row shows the creation of two small piles (November 2024), and the third, fourth and fifth rows illustrates the relocation and redistribution of stones by the birds (April 2025, June 2025 and November 2025, respectively). The white scale bar represents 30 cm, and the nest entrance is indicated by an orange arrow. Nest ERQ-11 had a big stone at the entrance, and the camera trap was found inside the cavity in June visit. We assumed this nest was vandalized, causing breeding failure.

Videos

Videos A1-4. Videos recorded by the camera traps showing shearwaters collecting stones at the nest entrance proximities. The date and time are stamped on the videos and correspond to the local time. Videos are available at Rodríguez & Rodríguez (2026).

REFERENCES

Rodríguez, B., Siverio, F., Acosta, Y., & Rodríguez, A. (2022). Breeding success of Cory's Shearwater in relation to nest characteristics and predation by alien mammals. *Ardeola*, *69*(1), 115-128. https://doi.org/10.13157/arla.69.1.2022.sc1

Rodríguez, A., & Rodríguez, B. (2026). Videos recorded by the camera traps showing shearwaters collecting stones at the nest entrance proximities [Dataset]. *DIGITAL.CSIC*. https://doi.org/10.20350/digitalCSIC/18287