

1 Year-round variation in the isotopic niche of Scopoli's shearwater (*Calonectris diomedea*)
2 breeding in contrasting sea regions of the Mediterranean Sea

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8 **Appendix A SUPPLEMENTARY MATERIAL**

9 **Tables S1.** List of Scopoli's shearwaters tracked with GPSs, geolocators (GLS) and sampled for
10 Stable Isotope Analysis of primary (P1) and secondary (S8) feathers. Information is presented
11 accordingly to the colony of origin, sex and year of sampling/ occurrence of migratory event.
12 Sex was determined on the basis of body measurements (Lo Valvo, 2001), vocalization or
13 comparison with the mate.

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Sampled birds	Male	Female	Unknown	Year of sampling	Colony
GPS-tracking	11	13	2	2009-10	Tremiti
	43	37	2	2011/13/18-19	La Maddalena
	52	38	6	2008-09/12	Pelagie
GLS-tracking	4	2	1	2011-12	Tremiti
	0	1	0	2012-13	Tremiti
	6	6	0	2018-19	La Maddalena
	6	5	0	2011-2012	Pelagie
Stable Isotope Analysis	8	9	2	2016	Tremiti
	10	12	0	2016	La Maddalena
	9	10	0	2016	Pelagie

15 **Table S2.** Percentage of overlap between non-breeding KUD 90% estimated for each Scopoli's
 16 shearwater populations over the whole non-breeding period (see Methods). For the sake of
 17 simplicity, KUD90% of birds from Tremiti (Adriatic Sea, Eastern Mediterranean) shows a 24%
 18 and 39% of overlap with KDE 90% of birds from La Maddalena (Tyrrhenian Sea, Western
 19 Mediterranean) and Pelagie (Sicilian Channel, Ionian Sea and Central Mediterranean).

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	Tremiti (Adriatic Sea)	La Maddalena (Tyrrhenian Sea)	Pelagie (Sicilian Channel)
Tremiti (Adriatic Sea)	-	24%	39%
La Maddalena (Tyrrhenian Sea)	76%	-	37%
Pelagie (Sicilian Channel)	72%	22%	-

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32 **Figure S1** a) 90% KDE of Scopoli's shearwater during the breeding period in three marine
33 regions within the Mediterranean (Tremiti: N = 26 tracked birds, La Maddalena: N = 82, Pelagie:
34 N = 96). Colony of origin is represented by a star; b) 90% KDE of shearwaters from the same
35 three populations estimated for the whole non-breeding period. Birds from the three colonies
36 (Tremiti: N = 7, La Maddalena: N = 12, Pelagie: N = 11) have been tracked over different years
37 between 2009 and 2019 (for more details see Methods section 2.1 and Appendix A Table S1).

