Wildlife Biology

WLB-00497

Brogi, R., Brivio, F., Bertolucci, C., Benazzi, M., Luccarini, S., Cappai, N., Bottero, E., Pedrazzoli, C., Columbano, N., Apollonio, M. and Grignolio, S. 2019. Capture effects in wild boar: a multifaceted behavioural investigation. – Wildlife Biology 2019: wlb.00497

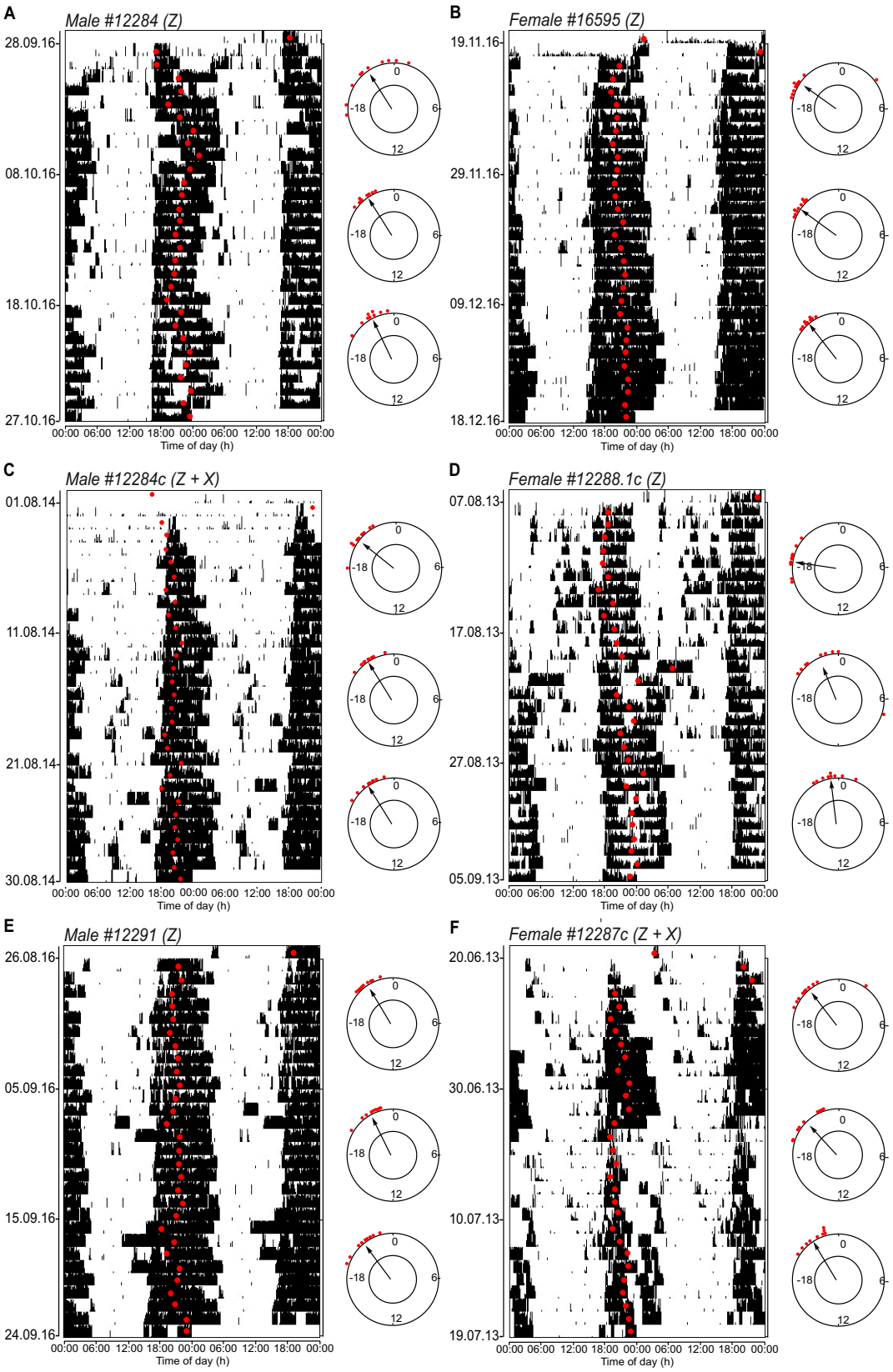
Appendix 1

In these supplementary materials we reported the results that we chose not to include in the main text to favour the readability of the manuscript, but that we considered useful to fully understand the analysis used in this study. The rationale and the details of the analysis process were described in the text.

Table A1. Monitored wild boar with specified sex, study area, administered drug treatment, date of capture and time when they were sedated. F: female; M: male. OAC: Oasi Alpe di Catenaia; PFNC: Foreste Casentinesi National Park. Z: wild boar sedated with zolazepam-tiletamine; Z + X: wild boar sedated with zolazepam-tiletamine-xylazine.

Collar ID	Sex	Study area	Drug treatment	Date of capture	Time of sedation
8319	M	PNFC	Z	01.07.16	5:55
8749	M	PNFC	Z	30.06.16	6:12
12284	M	PNFC	Z	27.09.16	6:18
12284c	M	OAC	Z + X	31.07.14	7:44
12287c	F	OAC	Z + X	19.06.13	6:24
12288.1c	F	OAC	Z	06.08.13	7:40
12288.2c	M	OAC	Z + X	25.08.14	6:30
12290	M	PNFC	Z	28.09.16	6:30
12290c	F	OAC	Z + X	29.07.14	10:04
12291	M	PNFC	Z	25.08.16	6:23
12292c	F	OAC	Z + X	12.07.13	7:24
16595	F	PNFC	Z	18.11.16	8:35
16596	F	PNFC	Z	12.10.16	8:40
16597	F	PNFC	Z	27.06.16	6:00
16599	F	PNFC	Z	13.07.16	6:15
16600	F	PNFC	Z	27.09.16	8:40
16602	F	PNFC	Z	13.07.16	7:42
16603	M	PNFC	Z	24.06.16	5:10

Figure A1


A
Male #12284 (Z)
28.09.16
08.10.16
18.10.16
27.10.16
00:00 06:00 12:00 18:00 00:00 06:00 12:00 18:00 00:00
Time of day (h)
B
Female #16595 (Z)
19.11.16
29.11.16
09.12.16
18.12.16
00:00 06:00 12:00 18:00 00:00 06:00 12:00 18:00 00:00
Time of day (h)
C
Male #12284c (Z + X)
01.08.14
11.08.14
21.08.14
30.08.14
00:00 06:00 12:00 18:00 00:00 06:00 12:00 18:00 00:00
Time of day (h)
D
Female #12288.1c (Z)
07.08.13
17.08.13
27.08.13
05.09.13
00:00 06:00 12:00 18:00 00:00 06:00 12:00 18:00 00:00
Time of day (h)
E
Male #12291 (Z)
26.08.16
05.09.16
15.09.16
24.09.16
00:00 06:00 12:00 18:00 00:00 06:00 12:00 18:00 00:00
Time of day (h)
F
Female #12287c (Z + X)
20.06.13
30.06.13
10.07.13
19.07.13
00:00 06:00 12:00 18:00 00:00 06:00 12:00 18:00 00:00
Time of day (h)
0
6
12
18

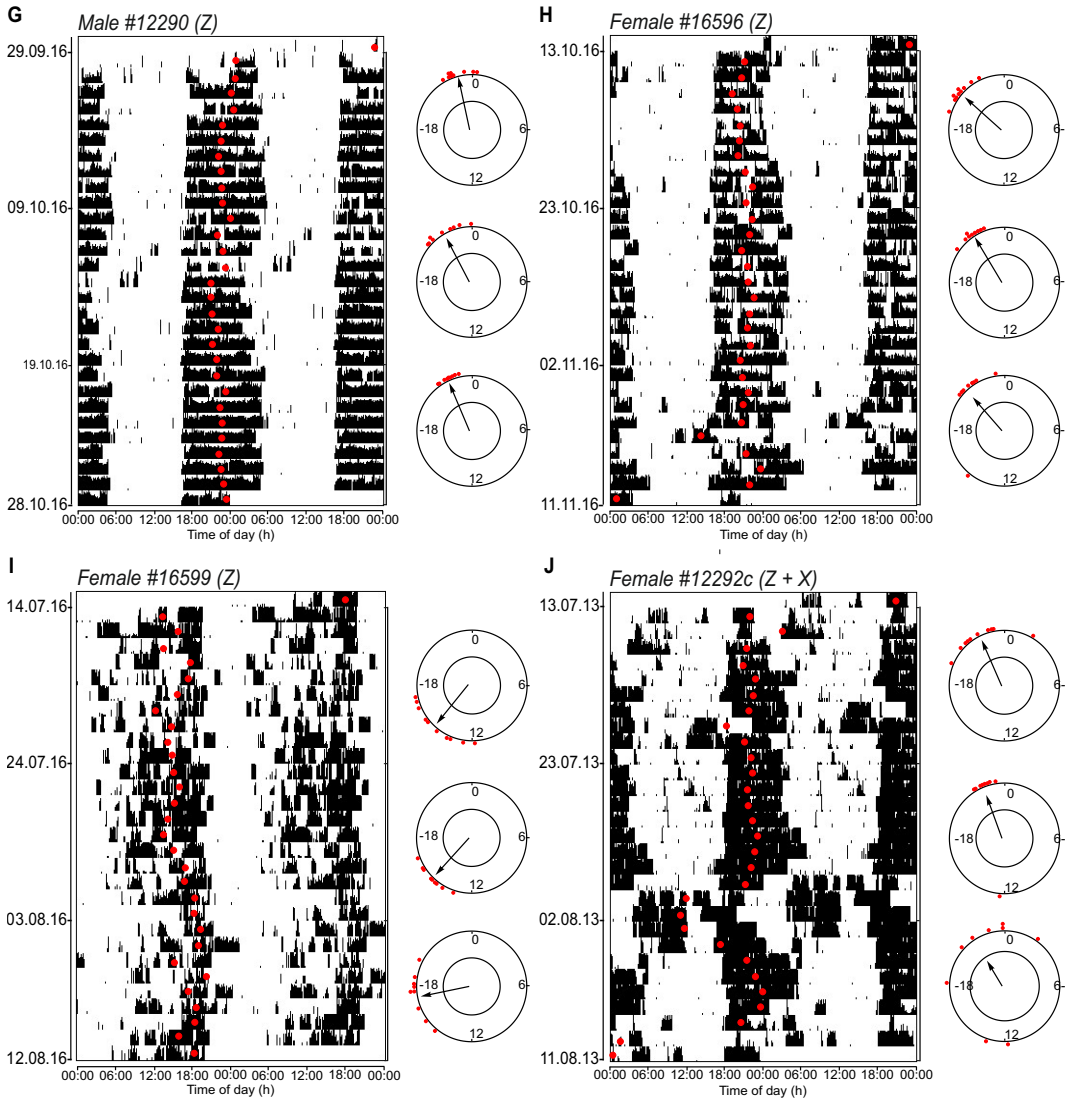


Figure A1. Actograms of daily activity of 10 radio-collared wild boar. Records are double plotted on a 48-h time scale to help the interpretation. Red dots on the actograms mark daily acrophases. On the right-hand of the actograms circular diagrams showing acrophases for 10-day intervals are plotted. Dots represent daily acrophases and arrows indicate the average acrophases represented as vector. The circle inside each panel represents critical values of Rayleigh test ($p<0.05$). Z: wild boar sedated with zolazepam-tiletamine; Z + X: wild boar sedated with zolazepam-tiletamine and xylazine.

Figure A2

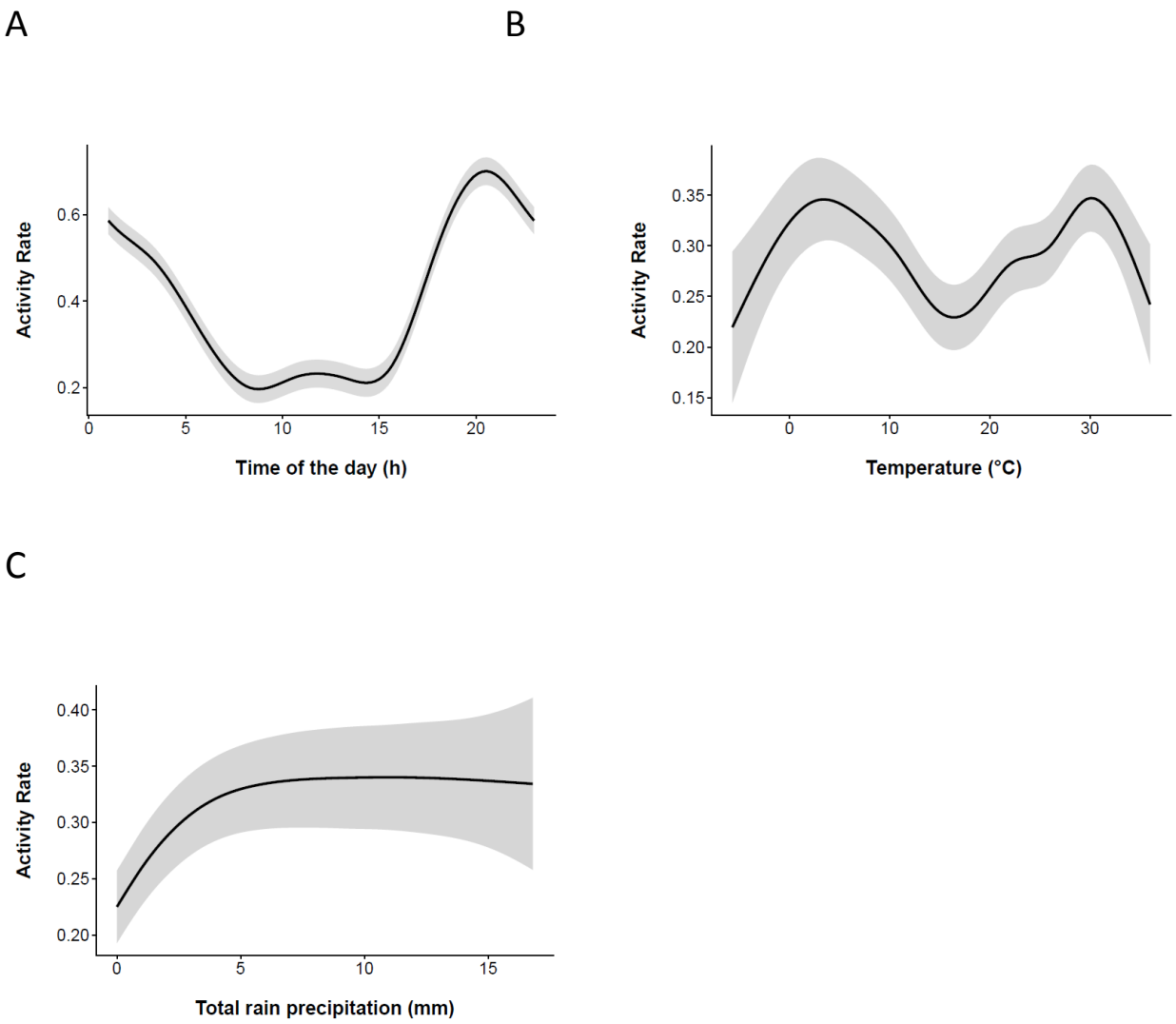


Figure A2. Effects of independent variables on wild boar activity. Reported activity rate values were predicted by the best generalised additive mixed model (see the text for more details). Graphs A, B and C show the effects of time of the day, mean air temperature and rain precipitation, respectively.

Figure A3

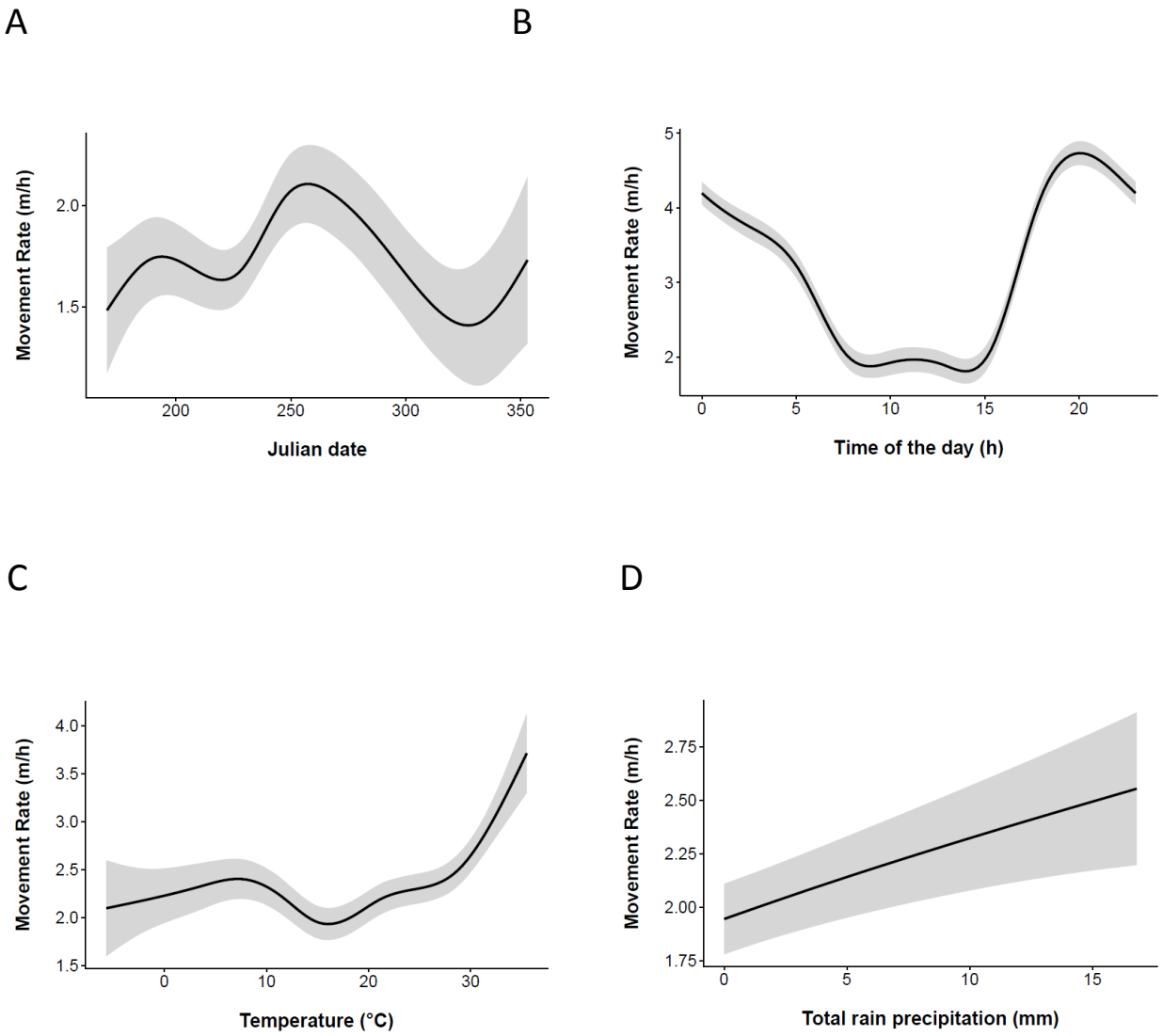


Figure A3. Effects of independent variables on wild boar movements. Reported movement rate values were predicted by the best generalised additive mixed model (see the text for more details). Graphs A, B, C and D show the effects of Julian date, time of the day, mean air temperature and rain precipitation, respectively.