Amphibia-Reptilia

Spatial pattern and shelter distribution of the ocellated lizard (*Timon lepidus*) in two distinct Mediterranean habitats

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Supplementary material

Table S1. Mean distances between shelters and estimated shelter density for the AKDE range (50%, 95% and 50% to 95%) of each lizard. Bold rows correspond to individuals with a non-stable variogram, which were not considered in the analyses.

Lizard ID	Site	95% AKDE	50% AKDE	50% to 95% AKDE	Mean distance between shelters − 95% AKDE	Shelter density − 95% AKDE	Mean distance between shelters − 50% AKDE	Shelter density − 50% AKDE	Mean distance between shelters − 50% to 95% AKDE	Shelter density − 50% to 95% AKDE
TIMLEP_A01	A	7955.16	922.45	7032.71	24.28	0.0011	6.52	0.0023	18.51	0.0013
TIMLEP_A02	A	4413.63	769.43	3644.20	15.2	0.0024	5.93	0.0033	17.45	0.0018
TIMLEP_A03	**A**	**7411.99**	**2149.37**	**5262.53**	**17.49**	**0.0019**	**10.62**	**0.0029**	**14.78**	**0.0010**
TIMLEP_A04	A	11785.77	2357.68	9428.09	19.06	0.0014	8.95	0.0022	22.05	0.0012
TIMLEP_A05	A	11378.72	2127.54	9251.18	18.52	0.0013	8.42	0.0027	22.24	0.0008
TIMLEP_A06	A	5209.24	1304.94	3904.31	15.88	0.0021	9.56	0.0028	18.74	0.0007
TIMLEP_A07	A	30409.37	7828.68	22580.69	51.17	0.0003	10.41	0.0028	21.74	0.0011
TIMLEP_A08	A	9499.51	1664.19	7835.32	52.4	0.0005	7.45	0.0025	64.12	0.0002
TIMLEP_B01	**B**	**5115.78**	**1222.85**	**3892.93**	**25.56**	**0.0014**	**26.14**	**0.0013**	**25.32**	**0.0012**
TIMLEP_B02	B	92049.48	22499.87	69549.61	34.41	0.0007	33.21	0.0007	33.74	0.0007
TIMLEP_B03	**B**	**28769.70**	**5164.79**	**23604.91**	**31.24**	**0.0007**	**29.78**	**0.0007**	**30.47**	**0.0008**
TIMLEP_B04	B	2113.21	411.42	1701.79	27.78	0.0024	26.56	0.0023	27.12	0.0023
TIMLEP_B05	**B**	**2910.11**	**570.96**	**2339.14**	**26.68**	**0.0027**	**26.98**	**0.0026**	**26.53**	**0.0026**

TIMLEP_B06	B	12256.19	2678.25	9577.94	33.34	0.0009	35.41	0.0009	32.36	0.0007
TIMLEP_B07	B	15146.29	3103.37	12042.92	31.98	0.0011	32.13	0.0011	31.89	0.0012
TIMLEP_B08	**B**	**669.59**	**171.36**	**498.23**	**30.44**	**0.0045**	**31.24**	**0.0042**	**31.29**	**0.0044**
TIMLEP_B09	B	1718.67	352.95	1365.73	28.27	0.0029	29.71	0.0028	29.21	0.0027
TIMLEP_B10	B	53321.81	13657.87	39663.94	32.74	0.0010	33.87	0.0009	32.45	0.0010
TIMLEP_B11	B	36893.19	8992.41	27900.78	34.12	0.0010	34.36	0.0010	33.98	0.0012

Table S2. Tracking summary by individuals with means ± standard error. Abbreviations: ASS = Absolute sample size, ESS = Effective sample size, M = male, F = female.

Lizard ID	Site	Sex	ASS	ESS	Start date	End date	Duration (days)	Mean time lag (hours)
TIMLEP_A01	A	M	72.00	74.11	2013-05-02	2013-07-17	76	25.69 ± 5.25
TIMLEP_A02	A	F	93.00	67.92	2013-05-02	2013-07-17	76	19.82 ± 3.24
TIMLEP_A03	A	M	16.00	8.22	2013-05-13	2013-06-24	42	66.89 ± 36.87
TIMLEP_A04	A	M	40.00	28.68	2013-05-02	2013-06-21	50	30.89 ± 7.53
TIMLEP_A05	A	M	15.00	15.21	2013-05-12	2013-06-14	33	56.55 ± 33.94
TIMLEP_A06	A	F	68.00	38.38	2013-05-02	2013-07-15	74	26.51 ± 9.20
TIMLEP_A07	A	M	18.00	10.84	2013-06-10	2013-06-20	10	14.13 ± 4.36
TIMLEP_A08	A	F	31.00	11.49	2013-05-29	2013-06-18	20	16.00 ± 4.84
TIMLEP_B01	B	F	27.00	1.98	2011-04-11	2011-05-14	33	30.46 ± 3.82
TIMLEP_B02	B	M	32.00	17.76	2011-04-06	2011-05-19	43	33.29 ± 4.05
TIMLEP_B03	B	F	25.00	8.64	2011-04-11	2011-05-10	29	29.00 ± 1.99
TIMLEP_B04	B	F	18.00	0.79	2011-04-14	2011-05-03	19	26.82 ± 1.88
TIMLEP_B05	B	F	21.00	20.41	2011-04-16	2011-05-10	24	28.80 ± 2.15
TIMLEP_B06	B	F	32.00	17.05	2011-04-06	2011-05-16	40	30.97 ± 2.94
TIMLEP_B07	B	F	37.00	4.83	2011-04-11	2011-05-31	50	33.33 ± 3.81
TIMLEP_B08	B	M	14.00	5.05	2011-04-11	2011-04-25	14	25.85 ± 1.78
TIMLEP_B09	B	F	30.00	19.06	2011-04-12	2011-05-14	32	28.44 ± 1.80
TIMLEP_B10	B	M	19.00	6.40	2011-04-29	2011-05-31	32	42.67 ± 7.68
TIMLEP_B11	B	M	14.00	2.66	2011-05-04	2011-05-19	15	27.69 ± 2.41

Table S3. Wilcoxon tests results for the differences in AKDE ranges between sexes and sites.

Sex	AKDE range	Site	W	p
Males	95%	Inter-site	0	0.057
Females	95%	Inter-site	6	1
Males	50%	Inter-site	0	0.057
Females	50%	Inter-site	6	1
Between males and	95%	Within site A	11	0.114
Between males and females	50%	Within site A	10	0.229
Between males and females	95%	Within site B	12	0.057
Between males and females	50%	Within site B	12	0.057
Sexes combined	95%	Inter-site	16	0.318
Sexes combined	50%	Inter-site	16	0.318

Table S4. Wilcoxon tests results for the differences in shelter density between sexes, sites and AKDE ranges. Bold lines correspond to significant differences.

Sex	Shelter density	Site	W	p
Between males and	Within 50% AKDE	Within site A	2.5	0.285
Between males and	Between 50% and 50-95%	Within site A	8	0.629
Between males and	Within 50% AKDE	Within site B	1.5	0.154
Between males and	Between 50% and 50-95%	Within site B	3	0.368
Sexes combined	**Between 50% and 50-95%**	**Within site A**	**0**	**0.002**
Sexes combined	Between 50% and 50-95%	Within site B	26	0.897
Sexes combined	Within 95% AKDE	Inter-site	26	0.902
Sexes combined	**Within 50% AKDE**	**Inter-site**	**42.5**	**0.024**

Table S5. Wilcoxon tests results for the differences in average distance between shelters between sexes, sites and AKDE ranges. Bold lines correspond to significant differences.

Sex	Distance between shelters	Site	W	p
Between males and	Within 50% AKDE	Within site A	4	0.629
Between males and	Between 50% and 50-95% AKDE	Within site A	5	0.857
Between males and	Within 50% AKDE	Within site B	3	0.4
Between males and	Between 50% and 50-95% AKDE	Within site B	0	0.057
Sexes combined	**Between 50% and 50-95%**	**Within site A**	**49**	**0.001**
Sexes combined	Between 50% and 50-95% AKDE	Within site B	19	0.535
Sexes combined	Within 95% AKDE	Inter-site	14	0.209
Sexes combined	**Within 50% AKDE**	**Inter-site**	0	**0.001**

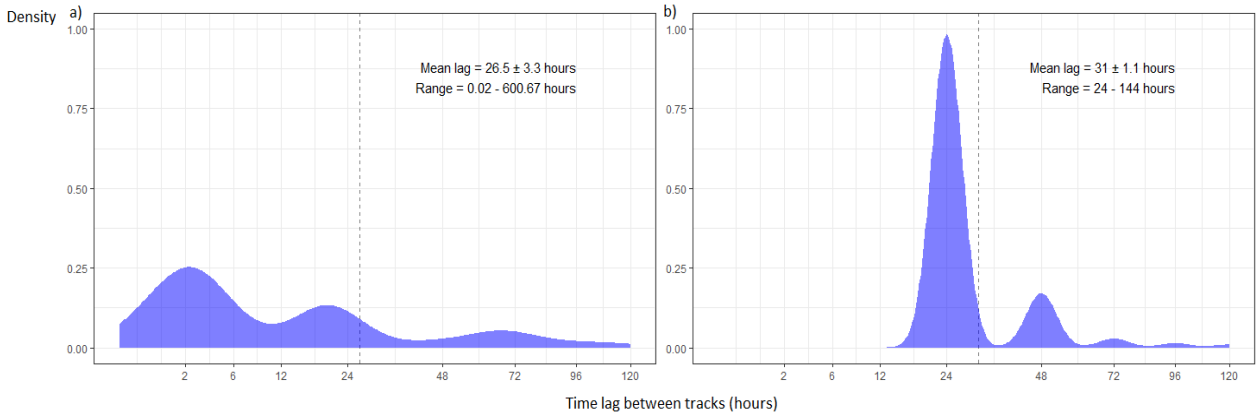

Figure S1. Density plot of the time lag in hours between tracks on site A (a) and site B (b). Dotted lines represent the mean time lag.

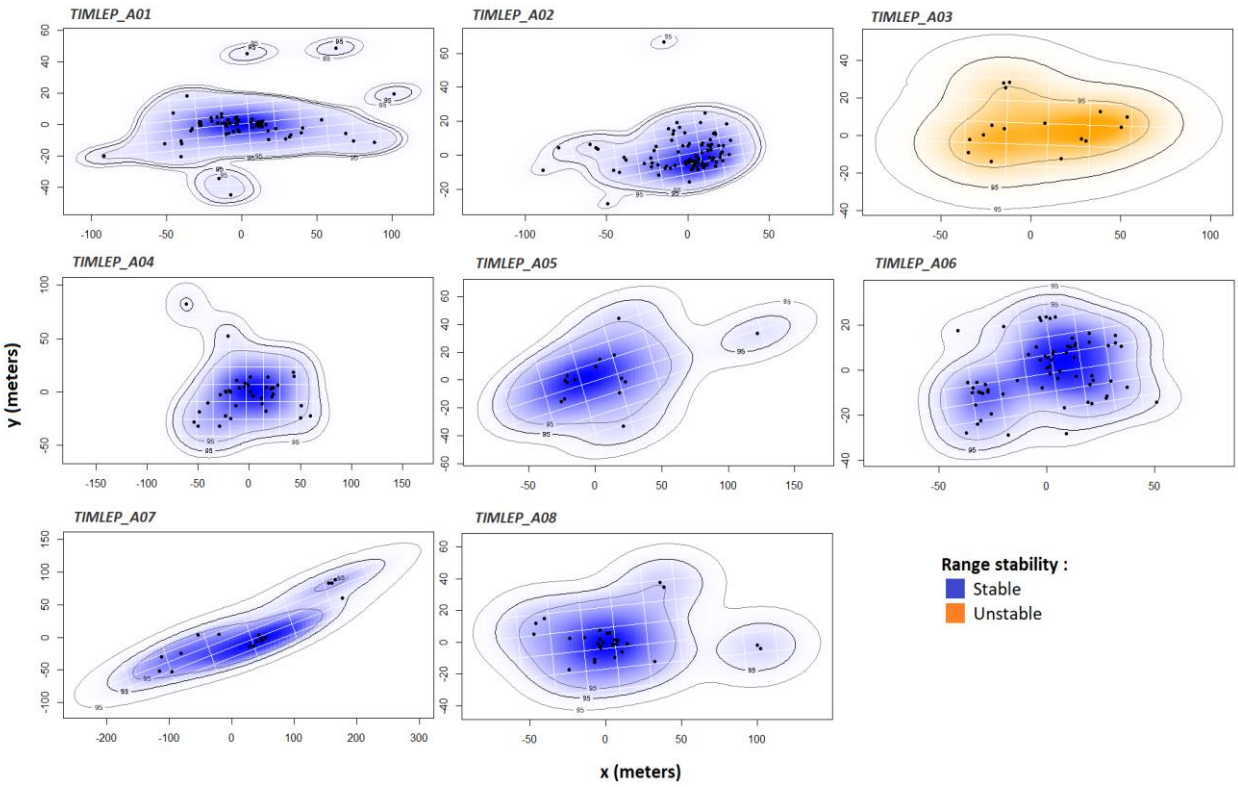

Figure S2. pHREML wAKDEc for low, estimated and high ranges computed with 95% AKDE for the 8 individuals at site A. Sightings of lizards are represented by black dots. Longitude (x) and latitude (y) axis are in meters. Bootstrapped pHREML wAKDEc are represented for individuals 5 and 8.

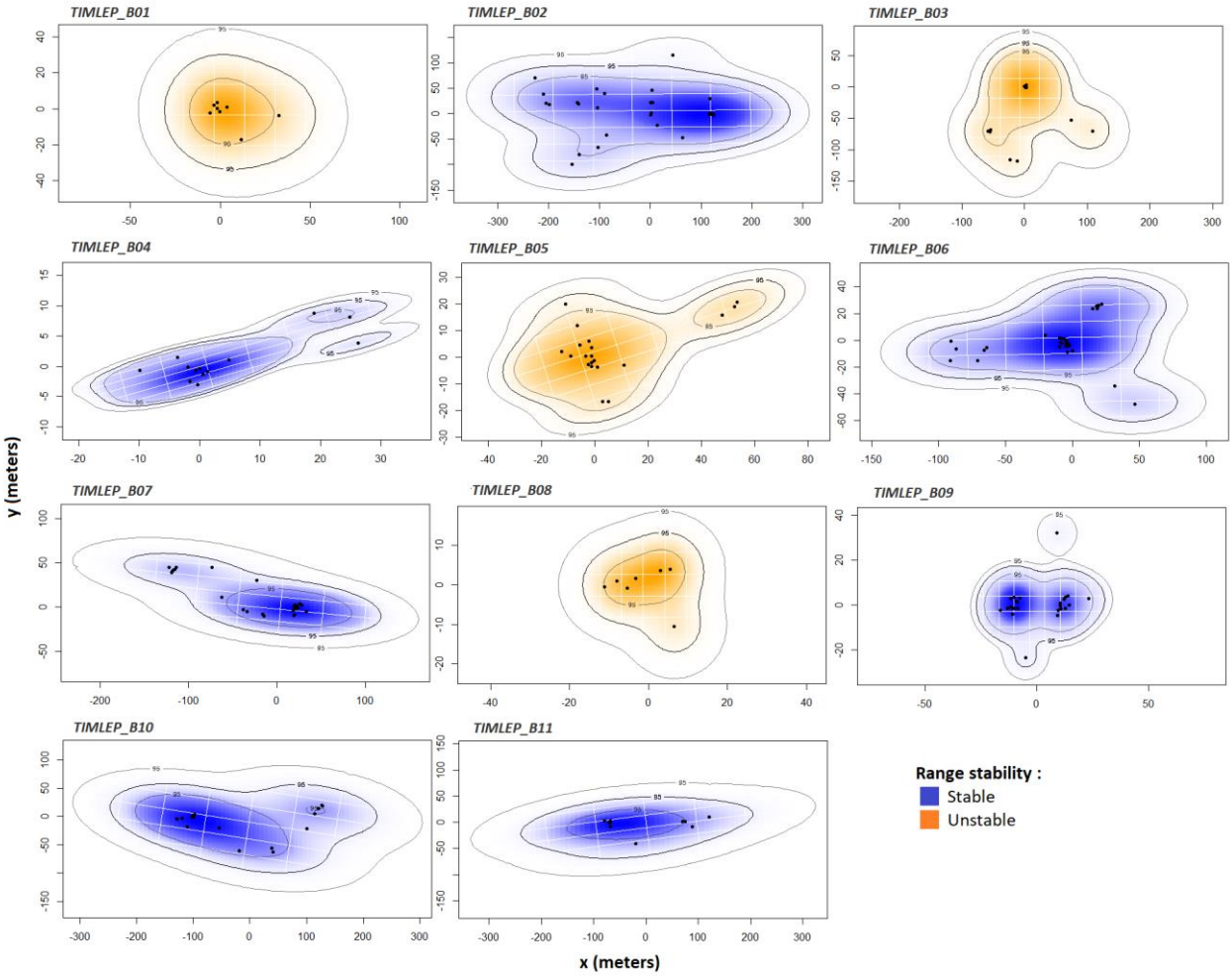

Figure S3. pHREML wAKDEc for low, estimated and high ranges computed with 95% AKDE for the 11 individuals from site B. Sightings of lizards are represented by black dots. Longitude (x) and latitude (y) axis are in meters. Bootstrapped pHREML wAKDEc are represented for individuals 1, 3, 4, 7 and 11.