

# Supporting Information

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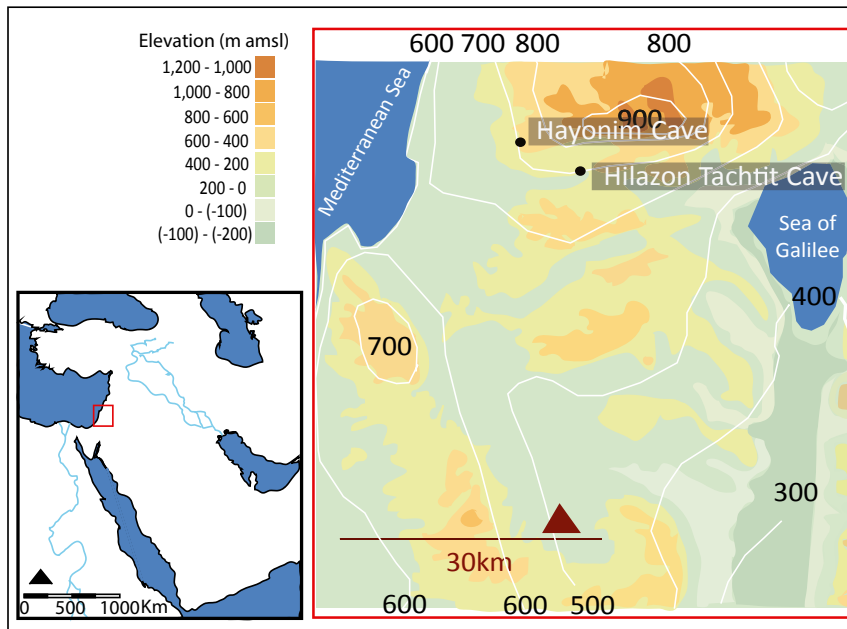


Fig. 51. Regional and local maps of Hayonim and Hilazon Tachtit Caves. White contour lines and black numerals represent modern isohyets (1961–1990).

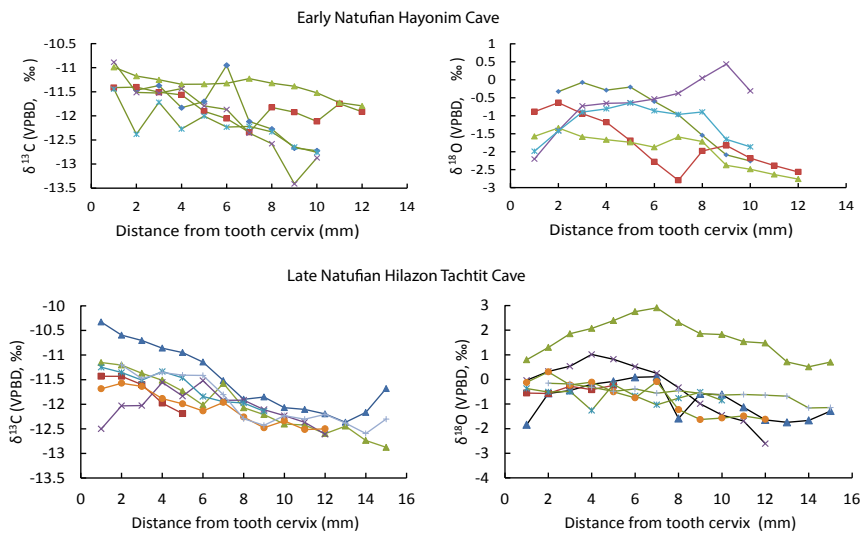


Fig. 52. Sequential sampling results of individual M<sub>3</sub> teeth from Early Natufian Hayonim Cave and Late Natufian Hilazon Tachtit Cave that were not corrected for minor differences in fawn birth timing.



**Table S1. Gazelle tooth enamel carbonate isotope data**

Sample	Phase	n	$\delta^{13}\text{C}$ (‰)				$\delta^{18}\text{O}$ (‰)			
			$\bar{x}$	$\delta^{13}\text{C}_{\text{min}}$	$\delta^{13}\text{C}_{\text{max}}$	$\Delta^{13}\text{C}$	$\bar{x}$	$\delta^{18}\text{O}_{\text{min}}$	$\delta^{18}\text{O}_{\text{max}}$	$\Delta^{18}\text{O}$
1	EN HC	12	-12.46	-12.94	-12.05	0.90	-5.38	-6.47	-3.88	2.59
2	EN HC	14	-12.19	-12.64	-11.67	0.97	-5.36	-5.74	-4.81	0.94
3	EN HC	12	-10.75	-11.36	-10.30	1.07	-3.09	-4.05	-2.35	1.69
4	EN HC	8	-11.13	-11.72	-10.93	0.79	-3.91	-5.11	-1.36	3.74
6	EN HC	8	-11.15	-11.33	-10.84	0.50	-0.52	-0.86	0.07	0.94
8	EN HC	8	-12.41	-12.45	-12.29	0.16	-2.34	-2.92	-1.23	1.69
9	EN HC	4	-10.89	-11.29	-10.32	0.97	-2.21	-3.42	-0.97	2.45
11	EN HC	5	-12.00	-12.41	-11.60	0.81	-2.32	-2.98	-1.63	1.35
13	EN HC	7	-11.80	-12.65	-10.94	1.72	-3.16	-3.95	-2.25	1.71
33	EN HC	10	-11.90	-12.72	-10.95	1.77	-0.93	-2.26	-0.07	2.19
34	EN HC	12	-11.81	-12.34	-11.40	0.94	-1.78	-2.80	-0.64	2.16
35	EN HC	12	-11.37	-11.79	-10.99	0.80	-1.92	-2.76	-1.34	1.42
36	EN HC	3	-13.28	-13.51	-13.15	0.35	-1.50	-1.53	-1.46	0.07
37	EN HC	10	-12.02	-13.41	-10.88	2.52	-0.64	-2.20	0.44	2.64
38	EN HC	10	-12.20	-12.76	-11.44	1.32	-1.20	-1.99	-0.65	1.34
5	LN HC	6	-11.16	-11.60	-10.86	0.73	-2.82	-3.22	-2.32	0.90
7	LN HC	4	-11.44	-11.64	-11.16	0.48	-0.90	-1.88	-0.35	1.54
10	LN HC	8	-12.71	-13.50	-11.62	1.88	-2.90	-4.39	-1.71	2.68
12	LN HC	8	-12.06	-12.82	-11.71	1.11	-0.79	-2.27	0.70	2.97
14	LN HC	9	-13.08	-13.46	-12.56	0.89	-2.79	-3.77	-2.08	1.69
15	LN HC	8	-12.46	-13.45	-11.76	1.69	-1.72	-3.03	-0.60	2.43
17	LN HC	4	-14.25	-14.84	-13.59	1.25	-1.45	-2.34	-0.62	1.72
19	LN HC	2	-11.63				0.73			
20	LN HC	1	-11.32				1.12			
22	LN HTC	16	-12.38	-13.25	-11.85	1.39	-3.10	-4.58	-0.27	4.31
24	LN HTC	9	-12.12	-12.83	-11.40	1.43	-0.95	-2.22	0.54	2.91
25	LN HTC	9	-11.57	-12.03	-11.03	0.99	-1.87	-2.39	-1.51	0.88
26	LN HTC	11	-13.53	-14.27	-12.78	1.49	-4.64	-5.61	-3.55	2.06
27	LN HTC	3	-13.12	-13.47	-12.94	0.53	-3.49	-4.18	-2.62	1.56
28	LN HTC	6	-11.96	-12.74	-11.59	1.15	-0.20	-1.24	0.60	1.84
29	LN HTC	1	-12.47				0.24			
30	LN HTC	5	-13.02	-13.59	-12.23	1.36	-1.73	-3.10	-0.55	2.56
31	LN HTC	3	-12.35	-12.85	-12.07	0.78	-1.72	-2.38	-1.28	1.10
32	LN HTC	5	-12.35	-12.75	-11.82	0.93	0.02	-0.60	0.82	1.42
39	LN HTC	15	-11.50	-12.37	-10.33	2.04	-0.78	-1.85	0.11	1.95
40	LN HTC	5	-11.73	-12.19	-11.43	0.76	-0.41	-0.57	-0.24	0.33
41	LN HTC	15	-12.02	-12.88	-11.15	1.72	1.67	0.51	2.91	2.40
42	LN HTC	12	-12.05	-12.61	-11.52	1.09	-0.30	-2.61	1.01	3.62
43	LN HTC	10	-11.67	-12.14	-11.25	0.89	-0.67	-1.26	-0.20	1.06
44	LN HTC	12	-12.08	-12.51	-11.57	0.94	-0.75	-1.63	0.31	1.93
45	LN HTC	15	-11.96	-12.60	-11.20	1.40	-0.57	-1.16	-0.16	1.00
18	HC	6	-12.13	-12.60	-11.50	1.10	-2.78	-3.32	-2.25	1.07
21	HC	2	-12.13				-3.25			

**Table S2. Provenience data for the gazelle molars available for this study**

Number	Site	Year	Square	Subsquare	Depth below datum	Locus	Fauna Cat. No.	Phase
1	HC	1978	L	30	c	245–250	15903	EN
2	HC		H	25	a+d	266–270	16066–16067	EN
3	HC	1978	K	30	a	246–250	7 15908+15909	EN
4	HC	1969	I	25	c	238–248	16095	EN
5	HC	1975	K	26	c	184–189	15882	LN
6	HC	1978	K	30	a	235–240	16098+16099	EN
7	HC		J	26		190–195	16068	LN
8	HC	1977	M	28	b	204–210	15880	EN
9	HC	1978	J	30	b	245–250	15901	EN
10	HC	1979	O	24	a	180	15886	LN
11	HC	1977	M	27	a+c	208–217	15906	EN
12	HC	1979	O	27	d	145–150	16087	LN
13	HC	1978	I	29	d	240–245	16090	EN
14	HC	1978	Q	27	a+d	165	15899	LN
15	HC	1979	M	23	b	175–180	15891+15892	LN
16	HC	1977	M	24	d	173–178	15895	LN
17	HC	1975	L	25+26	c+a	188–195	15893	LN
18	HC		I	30	b	240	16074	
19	HC	1979	O	30	d	145–150	15913	LN
20	HC	1975	K	26	d	193–202	15887	LN
21	HC	1975	M	28	b	154–158	779	
22	HTC	2001	M	13	a	318–325	1 3014	LN
24	HTC	2001	J	14	d	310–315	2 3025	LN
25	HTC	2001	L	14	d	334	1 3021	LN
26	HTC	2001	M	13	b	335–340	3022	LN
27	HTC	2006	M	13	c	365–370	1	LN
28	HTC	2001	J	14	d	310–315	3026	LN
29	HTC	2005	M	14	a	357–361	1 5316	LN
30	HTC	2001	L	14	b	332	1 3018	LN
31	HTC	2005	J	14+15	c+d, b		2 4558	LN
32	HTC	2005	M	14	d	307–328	1	LN
33	HC	1998	O	24	c	222	8	EN
34	HC	1999	O	32	a	195–200	3605	EN
35	HC	1998	N	24	b	222–225	2519	EN
36	HC	1994	N	24	d	215	8 107	EN
37	HC	1994	P	32	a	176	2	EN
38	HC	1977	M	28	a	198–203		EN
39	HTC	2001	M	14	c	335–340	3039	LN
40	HTC	2008	K	14	a	373	2 5784	LN
41	HTC	2006	M	14	a	360–365	1 5302	LN
42	HTC	2000	K	12	d	320–325	1674	LN
43	HTC	2008	J	14	b	355	2 5519	LN
44	HTC	2001	K	14	c	315–320	3040	LN
45	HTC	2005	K	14	a	345	2 4365	LN