

Hardiman, M *et al.* 2016. Fire history on the California Channel Islands spanning human arrival in the Americas. *Phil. Trans. R. Soc. B* **371** doi: 10.1098/rstb.2015.0167

Supplementary information

SI Table 1 – Radiocarbon Dates used in this study

ID Code	Publication code		¹⁴C age (yr)	1-sigma age error (yr)	Sample Type	Reference
SRI-09-16a	UCIAMS	66947	10000	25	charcoal	Scott et al (2010)
SRI-09-28	UCIAMS	66950	11020	25	charred wood	Scott et al (2010)
SRI-09-75	UCIAMS	66952	13665	35	charcoal	Scott et al (2010)
SRI-09-80	UCIAMS	66953	12840	30	charcoal	Scott et al (2010)
SRI-09-82	UCIAMS	66954	11875	30	charcoal	Scott et al (2010)
SRI-09-86	UCIAMS	66955	11765	30	charcoal	Scott et al (2010)
SRI-09-88	UCIAMS	66956	11865	25	charcoal	Scott et al (2010)
SRI-09-94	UCIAMS	66957	14010	35	charcoal	<i>This Study</i>
SRI-10-102	UCIAMS	84960	10580	25	charred coprolites	<i>This Study</i>
SRI-10-102	UCIAMS	84959	10575	25	charcoal	<i>This Study</i>
SRI-10-103	UCIAMS	84961	11270	120	charred twigs	<i>This Study</i>
SRI-10-14	UCIAMS	81563	15470	60	charcoal	<i>This Study</i>
SRI-10-17	UCIAMS	81564	12440	35	charcoal	<i>This Study</i>
SRI-10-18	UCIAMS	81565	14730	40	charcoal	<i>This Study</i>
SRI-10-24	UCIAMS	84937	10515	25	charred twigs and wood	<i>This Study</i>
SRI-10-29	UCIAMS	84938	12805	50	charred twigs	<i>This Study</i>
SRI-10-37	UCIAMS	84940	10890	25	charred twigs	<i>This Study</i>
SRI-10-42	UCIAMS	84941	10850	25	charcoal	<i>This Study</i>
SRI-10-44	UCIAMS	84942	12300	45	charcoal	<i>This Study</i>
SRI-10-47	UCIAMS	84944	12310	30	charred twigs	<i>This Study</i>
SRI-10-47	UCIAMS	84943	11885	30	charred coprolites	<i>This Study</i>
SRI-10-48	UCIAMS	81566	12195	45	charcoal	<i>This Study</i>
SRI-10-5	UCIAMS	84935	11005	40	charcoal	<i>This Study</i>
SRI-10-52	UCIAMS	84945	11000	25	charred twigs	<i>This Study</i>
SRI-10-53	UCIAMS	81567	10970	230	charcoal	<i>This Study</i>
SRI-10-53	UCIAMS	81568	10650	230	Charred Spherule (fungal sclerotia)	<i>This Study</i>
SRI-10-56	UCIAMS	84947	11095	30	charred coprolites	<i>This Study</i>
SRI-10-56	UCIAMS	84946	11035	30	charred twigs	<i>This Study</i>
SRI-10-59	UCIAMS	81569	10820	180	charcoal	<i>This Study</i>
SRI-10-62	UCIAMS	84949	11030	30	charred twigs	<i>This Study</i>
SRI-10-63	UCIAMS	84950	11755	30	charred coprolites	<i>This Study</i>
SRI-10-63	UCIAMS	84951	11005	25	charcoal	<i>This Study</i>

SRI-10-65	UCIAMS	81571	11405	30	charcoal	<i>This Study</i>
SRI-10-7	UCIAMS	84936	10875	30	charred twigs	<i>This Study</i>
SRI-10-73	UCIAMS	84952	10620	20	charcoal	<i>This Study</i>
SRI-10-78	UCIAMS	84953	11900	60	charred twigs	<i>This Study</i>
SRI-10-82	UCIAMS	84954	11910	40	charred coprolites	<i>This Study</i>
SRI-10-86b	UCIAMS	84962	11695	25	charred twigs	<i>This Study</i>
SRI-10-86b	UCIAMS	84963	11415	30	charred coprolites	<i>This Study</i>
SRI-10-91	UCIAMS	84955	11005	25	charcoal	<i>This Study</i>
SRI-10-93	UCIAMS	84956	11135	25	charred twigs and wood (combined)	<i>This Study</i>
SRI-10-94	UCIAMS	84957	11090	25	charcoal	<i>This Study</i>
SRI-10-99	UCIAMS	84958	10535	20	charcoal	<i>This Study</i>
SRI-13-11	OxA	29224	11130	50	small charred axis	<i>This Study</i>
SRI-13-11	OxA	29225	11085	50	small charred axis	<i>This Study</i>
SRI-13-25	OxA	31852	11240	45	small charred axis	<i>This Study</i>
SRI-09-19	UCIAMS	66948	11230	30	charcoal	<i>This Study</i>
SRI-09-23	UCIAMS	66949	11765	25	charcoal	<i>This Study</i>
SRI-09-29c	UCIAMS	66951	11625	25	charcoal	<i>This Study</i>

SI Table 2 – Location of Sites*

Canyon	Site Number	UTM Northing	UTM Easting
Arlington	I	762.445	3764.541
Arlington	II	762.429	3764.655
Arlington	III	762.528	3764.547
Arlington	V	761.68	3765.41
Arlington	VI	761.255	3765.749
Arlington	VII	761.41	3765.54
Arlington	VIII	762.406	3764.8

***Note:** Universal Transverse Mercator easting and northing coordinates (km), Zone 11. NAD27 (North American Datum 1927).

SI Fig 1 – Example of Sedimentary section (I_o) with charcoal rich layers shown (see Fig. 2 for key). Note: at approximate depths.



REFERENCES

Scott AC, Pinter N, Collinson ME, Hardiman M, Anderson RS, Brain APR, Smith SY, Marone F, Stampanoni M. 2010. Fungus, not comet or catastrophe, accounts for carbonaceous spherules in the Younger Dryas “impact layer”. *Geophysical Research Letters* **37**, L14302.