Supplement

Table S1: Sample site characteristics and summaries of tree-ring fire records

Watershed	Site no.	Site code	Area (ha)	Elevation (m)	Lat (S)	Lon (W)	Period used for smoothing fire record: Fire years All	Period used for smoothing fire record: Fire years Widespread*
Baker								
	1	CAS	63	132	47°	72°	1676-2004	1798-2004
	2	VAR	16	28	47°	73°	1559-2004	1755-2004
	3	LAL	12	20	47°	73°	1673-2004	1729-2004
	4	CRU	15	23	47°	73°	1788-2004	1825-2004
	5	TOR	18	21	47°	73°	1709-2004	1851-2004
Quetru-Pascua								
	6	ENT	103	38	48°	73°	1550-2004	
	7	LLE	20	84	48°	73°	1565-2004	
	8	PAS	45	40	48°	73°	1752-2004	NA
	9	BER	21	35	48°	73°	1851-2004	
	10	CHU	48	79	48°	73°	1834-2002	
Bravo								
	11	BRA	116	7	48°	72°	1612-2004	
	12	ENR	14	135	48°	72°	1822-2004	NA
	13	CIS	9	280	48°	72°	1915-2002	

*No widespread fire year chronologies were developed for the Quetru-Pascua and Bravo watershed due to their lack of peaks in CHAR records.

Table S2: Radiocarbon ages from the mallines Casanova (MCa), Tortel (MTo), and Leal (MLe). Calibrated ages determined with CALIB v6.0 and CALIBomb (Hua and Barbetti, 2004; Reimer et al., 2004).

Site number	Lab Code	Depth (cm)	14C age (BP) ±	Cal BP (2ø)
MTo	83166	10-11	-115±15	AD 1956(Mar) – 1957(Jun) (1.00)
MTo	83167	37-38	890±15	740-800 (0.62) 810-830 (0.07) 865-900 (0.32)
MTo	83168	57-58	1395±15	1290-1330 (1.00)
MTo	83169	92-93	2855±20	2885-2910 (0.09) 2920-3040 (0.87) 3045-3060 (0.04)
MLe	83170	15-16	155±15	>Modern-0 (0.01) 5-30 (0.20) 85-110 (0.02) 140-150 (0.12) 170-220 (0.49) 255-280 (0.16)
MLe	83171	36-37	285±20	290-330 (0.42) 360-370 (0.02) 370-430 (0.56)
MLe	83172	58-59	1735±15	1570-1580 (0.03) 1600-1700 (0.97)
MLe	83173	92-93	3190±20	3370-3450 (1.00)
MCa	83174	10-11	-525±15	AD 1957(Dec) – 1958(Aug) (1.00)

MCa	83175	37-38	745±15	665-690 (1.00)
MCa	83176	62-63	1410±20	1290-1340 (1.00)
MCa	83177	93-94	1785±20	1620-1670 (0.27) 1690-1740 (0.55) 1750-1810 (0.18)
MCa	83178	143-144	3685±15	3975-4085 (1.00)
MCa	83179	242-243	6370±20	7255-7330 (0.92) 7355-7370 (0.03) 7390-7410 (0.05)
MCa	83180	312-313	7165±25	7950-8020 (1.00)
MCa	83181	333-334	8780±20	9700-9900 (1.00)