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Acceso y circulación de andesita y obsidiana durante el Holoceno en Patagonia Centro-Meridional

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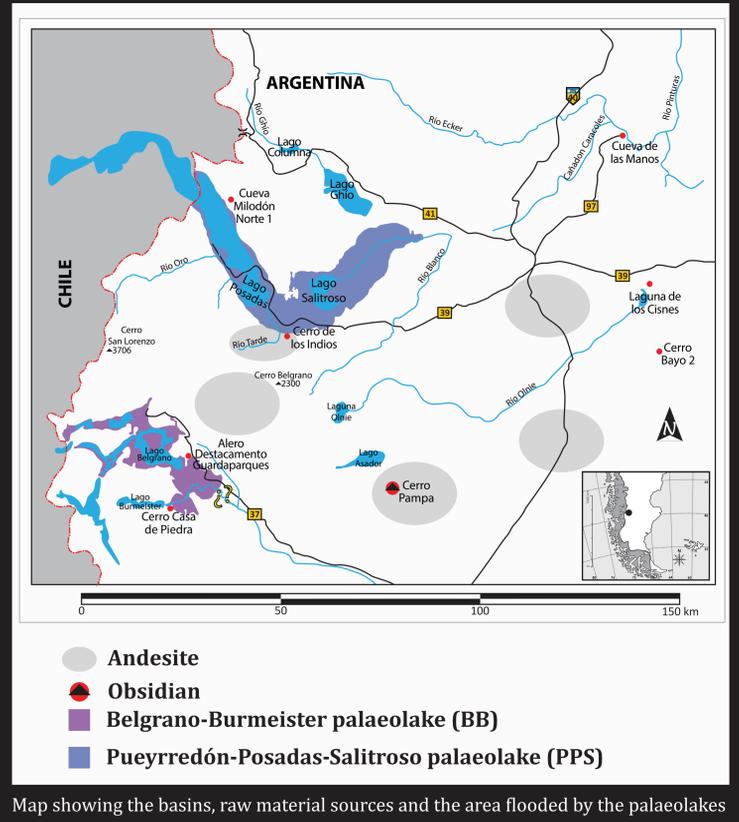


This poster discusses different aspects related to the andesite and obsidian availability and circulation at different moments of the occupation sequence in the Northwestern area of the Santa Cruz province, Argentine Patagonia. We take into account the lithic record of three multicomponent residential sites located in two different lake basins:

Basin	Site
Pueyrredón-Posadas-Salitroso	<ul style="list-style-type: none"> • Cueva Milodón Norte 1 (CMN1) • Cerro de los Indios 1 (CI1)
Belgrano-Burmeister	<ul style="list-style-type: none"> • Cerro Casa de Piedra 7 (CCP7)

These three sites were occupied in different moments during the Holocene. Their lithic records represent different strategies of raw material selection and acquisition. We propose that potential regional circulation routes would have been affected differentially by the paleolakes present in both basins since Pleistocene up until mid-Holocene.

Site	Date	Reference
Cerro de los Indios 1	990±110	De Nigris <i>et al.</i> 2004
	3860±90	De Nigris <i>et al.</i> 2004
Cueva Milodón Norte 1	1950±30	Aschero <i>et al.</i> 2009
	7982±45	Sacchi <i>et al.</i> 2016
Cerro Casa de Piedra 7	1927±41	Civalero <i>et al.</i> 2006-2007
	10690±72	Aschero <i>et al.</i> 2006



We took into account chipped stone tools, cores and blanks (artefactos formatizados, núcleos y FNRC *sensu* Aschero 1975, rev. 83). Percentages of basalt/andesite and obsidian were obtained distinguishing these two raw materials from the rest of the assemblages.

Obsidian and basalt/andesite have a different spatial distribution. Obsidian comes from a single location (Pampa del Asador), while basalt/andesite varieties have a wider distribution throughout the regional landscape and is a local raw material. One of these secondary sources can be found close to CI1- (See map).

	Cueva Milodón Norte 1				Cerro de los Indios 1				Cerro Casa de Piedra 7			
	Andesita	Obsidiana	Otras	TOTAL	Andesita	Obsidiana	Otras	TOTAL	Andesita	Obsidiana	Otras	TOTAL
2000-later	16	31	73	120	622	536	969	2127	-	-	-	-
4000-2000	7	10	31	48	388	469	1125	1982	12	62	71	145
6000-4000	4	8	17	29	-	-	-	-	43	291	284	618
8000-6000	1	1	3	5	-	-	-	-	44	363	196	603
10000-8000	-	-	-	-	-	-	-	-	37	258	142	437
Total	28	50	124	202	1010	1005	2094	4109	136	974	693	1803

	Cueva Milodón Norte 1				Cerro de los Indios 1				Cerro Casa de Piedra 7			
	Andesita	Obsidiana	Otras	TOTAL	Andesita	Obsidiana	Otras	TOTAL	Andesita	Obsidiana	Otras	TOTAL
2000-later	13,33	25,83	60,83	100	29,24	25,20	45,56	100	-	-	-	-
4000-2000	14,58	20,83	64,58	100	19,58	23,66	56,76	100	8,28	42,76	48,97	100
6000-4000	13,79	27,59	58,62	100	-	-	-	-	6,96	47,09	45,95	100
8000-6000	20,00	20,00	60,00	100	-	-	-	-	7,30	60,20	32,50	100
10000-8000	-	-	-	-	-	-	-	-	8,47	59,04	32,49	100
Total	13,86	24,75	61,39	100	24,58	24,46	50,96	100	7,54	54,02	38,44	100

Table showing the number of elements in each site (top) and the percentage of each kind of rock and lapse considered (bottom)

Years BP	Lakes level	Archaeological sites	Lithic Raw material
10000-8000	Both high	CCP7	Obsidian has an overwhelming representation, implying a low energy route to and from the Pampa del Asador source. Scarce selection of basalts , although there are secondary sources nearby Pampa del Asador.
8000-6000	Both high	CMN1	Obsidian and basalt/ andesite lesser representation than other raw materials. To access the sources it is necessary to travel a longer distance to the East due to the presence of the paleolake.
		CCP7	There are no significant changes in the distinctive pattern already mentioned at CCP7.
6000-4000	PPS-high	CMN1	Both paleolakes begin to subside, progressively allowing human occupation. Nevertheless, raw material selection patterns are similar to the previous period in both sites.
	BB-low	CCP7	
4000-2000	Both at current levels	CMN1	CMN1 has the same pattern in raw material selection than CI1, in the south-center portion of the basin.
		CI1	Begins to be occupied, basalt/andesite selection does not mirror the vicinity of the source; while obsidian , a non-local raw material, has higher frequencies in the assemblages.
		CCP7	Similar pattern to the described for the previous periods. The site is abandoned <i>ca.</i> 2000 years BP.
2000-later	Both at current levels	CMN1	Basalt/andesite frequencies remain low and those of obsidian grow slightly.
		CI1	Basalt/andesite and obsidian frequencies begin to grow.

Comparisons between sites reveal distinctive patterns of raw material acquisition that cannot be linked to the paleolake subside variable. Other variables as different technological strategies or changes related to settlement or mobility organization (wider or narrower action ranges) may better explain the observed patterns.

Refernces



Poster

