

The Potential Impact of the Río Negro Valley on the Late-Pleistocene Peopling of Patagonia

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Flowing eastwards along the Pampean-Patagonian border, the Río Negro drains Andean meltwaters across the Southern Cone for nearly 1,000 km before emptying into the Atlantic Ocean. Late-Pleistocene archaeological sites have not yet been detected in the Río Negro Valley for three reasons. First, previous explorations for early sites in southern South America have mainly focused on caves and rockshelters (Borrero 2001). In the middle and lower Río Negro Valley, however, exposed bedrock is a highly friable sandstone; therefore, rockshelters do not exist in this region nor were they likely present during the late Pleistocene. As a result, it is necessary to search for open-air sites preserved in stratified contexts, a significantly more difficult prospect. The second reason that early sites are not readily visible is that alluvial and eolian deposits likely buried these sites, requiring a thorough understanding of the regional landscape history of the late Quaternary. Third, sites in the original lower valley and coast have not been found because up to 200 km of this valley segment exposed during the late Pleistocene now lies submerged under the ocean (Zárate and Blasi 1993).

To the north and south of the Río Negro Valley, however, there are numerous late-Pleistocene sites in the Pampas and Patagonia (Borrero 1999a, 1999b, 2001; Gruhn 2004; Miotti 2004; Miotti and Salemme 2004; Politis et al. 2004). In fact, by 11,000 RCYBP humans occupied all major environmental zones throughout South America (Gruhn 2004), and by 11,000–10,000 RCYBP settlement was widespread in some areas of southern South America (Miotti and Salemme 1999; Rabassa et al. 2000). Clearly, late-Pleistocene populations could not avoid crossing the Río Negro Valley on their migratory routes even if they followed the Atlantic coast by land. Some groups, attracted by the landscape and environment, may have chosen to settle in the Río Negro Valley, perhaps delaying or impeding the intensity of initial colonization of Patagonia during the late Pleistocene.

The Río Negro Valley is a prominent feature of the regional landscape. The largest river in southern South America, the channel averages 500 m across and the valley width varies from 5 to 25 km. River discharge varies from 1,000 to 4,000 m³/s, producing a swift and potentially dangerous current posing great difficulty for crossing. Therefore, migratory groups would have needed to stop momentarily in this valley in order to locate a feasible crossing. During this period, populations may have been attracted to settle in this valley for two reasons. First, based on ethnographic evidence that this valley served as a

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thoroughfare (Nacuzzi 1998), the waterway provides a direct west-east route allowing access to a variety of environments along its length and provides access to the coast by groups inhabiting higher altitudes. In addition, Miotti (2004) suggests that river systems such as the Río Negro provided pathways for coastal groups to penetrate upstream into the mountains. Second, located on the border between the Pampas and Patagonia, the Río Negro Valley is an ecotone offering a wide diversity of natural resources for subsistence. As a rich ecotone which offered thoroughfare access to a range of environments from the mountains to coastal plains, this valley may have attracted long-term settlement.

6 Archaeological evidence from the Holocene implies that groups inhabiting the valley either were mobile within the valley or were migratory groups who settled temporarily en route to adjacent regions. Current analysis of 30 archaeological sites of the 219 sites recorded in the middle Río Negro Valley generally suggests that this valley was well inhabited and that the majority of occupations were short term (i.e., temporary campsites). Groups exploited a variety of locally available resources and primarily performed domestic activities, specifically lithic production and food processing. Lithics from these sites represent all phases of manufacture, from procurement to retouching, and primary materials nearly always originated from local fluvial gravels. Polished tools of local sandstone may have been used to process vegetables and make flour (e.g., of *Prosopis* sp.) or *Charqui*, the salty and dry meat of guanaco (*Lama guanicoe*). In general, faunal remains from these sites included numerous taxa: guanaco (*Lama guanicoe*), Pampas deer (*Ozotoceros bezoarticus*), ñandú (Rheidae), small armadillo (*Chaetophractus* sp., *Saedyus pichy*), mara (*Dolichotis patagonum*) and many species of freshwater mollusks and fish.

7 Detailed investigation of the landscape history and archaeological record of the middle Río Negro Valley is ongoing, and future work will help clarify whether this hospitable ecotone potentially affected settlement patterns by attracting long-term settlement, and whether this could have impeded migration further into southern South America.

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