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RESEARCH BRIEF

The Tigre Projectile Point in Central Argentina: Implications for the Initial Peopling of the Region

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ABSTRACT

We report a Tigre projectile point discovered in Central Mountains of Argentina and discuss its implications for the initial peopling of the central Argentina. This type of projectile point is typical of early groups from the plains of Uruguay and south of Brazil (ca. 12,552 to 11,231 cal yr BP). Its coexistence with Fishtail projectile points in central Argentina would indicate that there was more than one exploring stage during the Pleistocene–Holocene transition.

KEYWORDS

Tigre projectile point; Central Mountains of Argentina; initial peopling

The human occupation of southern South America occurred as early as ca. 14,000 cal yr BP (Dillehay 1997), with a demographically viable population at or soon after 13,000 cal yr BP in widely separated locations like the plains of Uruguay, Argentinian Pampas and Patagonia (Steele and Politis 2009). In this peopling process, areas with a lower cost of access were settled before areas naturally less accessible (Borrero 1994; Miotti 2006). Therefore people moved through the coastal plains and mayor river valleys first, and then moved into the interior of the continent (Miotti 2006; Miotti and Magnin 2012). These groups were characterized by the presence of distinctive projectile points like Fishtail and Tigre points, among others.

Tigre is a typical stemmed projectile point type of early groups in the plains of Uruguay and southern Brazil, with an age range between ca. 12,552 and 11,231 cal yr BP (e.g., Suárez 2015, 2017). Tigre points are a little more recent than Fishtail projectile points, which have been recovered and dated throughout South America in many sites between ca. 13,000 and 11,000 cal yr BP (e.g., Flegenheimer, Miotti, and Mazzia 2013; Loponte, Carbonera, and Silvestre 2015; Miotti and Terranova 2015; Nami 2007). Here, we report a newly discovered Tigre projectile point (Figure 1) from the Central Mountains of Argentina and discuss its implications for the initial peopling of the central Argentina.

A collector found the Tigre point close to the modern shore of San Roque Lake (Córdoba province, Argentina), and it is currently deposited in the Numba Charava museum (Villa Carlos Paz, Córdoba). The point's dimensions are 64 mm in length, 28 mm in maximum width, and 10 mm in thickness. The point's stem is 26.5 mm in length, 15 mm in maximum width, and 7 mm in maximum thickness. The point's blade is slightly convex, with evidence of resharpening activities, and the base of the stem is convex and its sides are straight with signs of abrasion. The tip of the point bears a longitudinally oriented flake scar with a step termination, typical of impact fractures (Weitzel et al. 2014). The final design was achieved through bifacial thinning with later marginal and ultramarginal retouching. The raw material of the Tigre point is a red microcrystalline silica. The source of this rock has not been located.

The human occupation of central Argentina dates from the Pleistocene/Holocene transition between ca. 13,000 and 10,000 cal yr BP (Figure 2). At the El Alto 3 site, in the basal unit was uncovered the oldest evidence for human presence in the region. Three charcoal concentrations associated with the cultural remains were dated to 9371 ± 51 (AA-94987), 9790 ± 80 (LP-1420), and 11,010 ± 80 ^{14}C yr BP (LP-1506) (Rivero 2009, 2012). Recent radiocarbon analysis of human bones from the Gruta de Candonga site has yielded a single date of 10,450 ± 50 ^{14}C yr BP (SRLA-1062; Cornero, Neves, and Rivero 2014). Other evidence for a Paleoindian occupation of central Argentina is scarce and consists only of five Fishtail projectile points found in surface collections from four localities: one recovered from Embalse de Río Tercero (Schobinger 1974), two from the Estancia La Suiza 1 locality in San Luis province (Laguens et al. 2007), one from the San Roque Lake shoreline (Rivero, Heider, and Pastor 2015), and one from the Characato site (Cattáneo, Izeta, and Caminoa 2016). This Paleoindian record is of low density,

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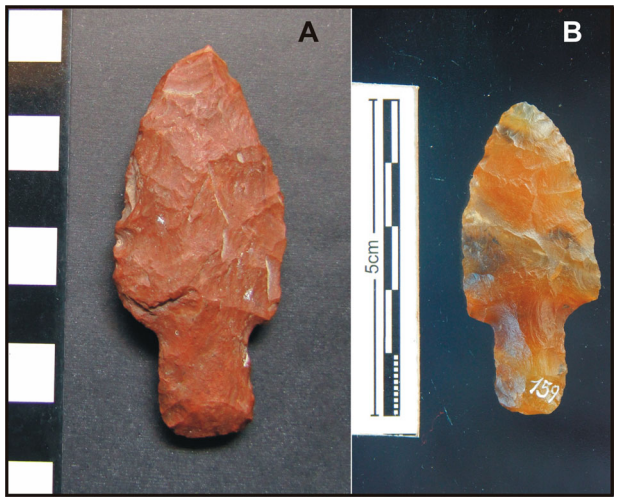

Figure 1 Tigre points: (A) Tigre projectile point from San Roque Lake (Central Mountains of Argentina) (photo by Diego Rivero); (B) Tigre projectile point from Uruguay River (photo courtesy of Rafael Suárez).

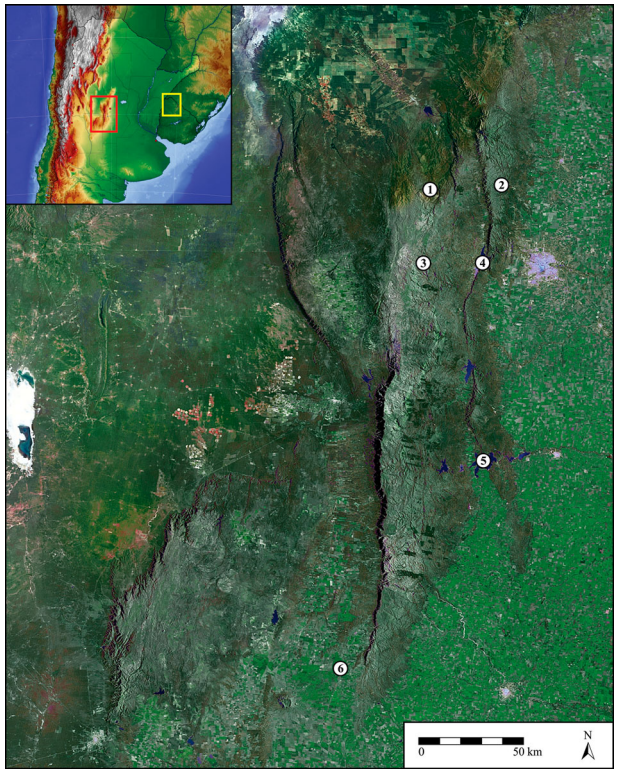

Figure 2 Map of Central Mountains and early archaeological sites mentioned in the text: (1) Characato; (2) Gruta de Candonga; (3) El Alto 3; (4) San Roque Lake; (5) Embalse de Río Tercero; (6) Estancia La Suiza 1. Red rectangle: Central Mountains of Argentina; yellow rectangle: major sites with Tigre projectile points in Uruguay and Brazil. Map by Sebastián Pastor.

especially when compared to other regions of the Southern Cone of South America like Uruguay, Chile, and the Pampas and Patagonia in Argentina (e.g., Steele and Politis 2009; Suárez 2011, 2017).

Other early dates for the region are clustered between 9200 and 4500 cal yr BP, when the archaeological signal increases and becomes more constant. This archaeological record is characterized by sites with a technology of lanceolate projectile points, known as Ayampitín points (e.g., González 1960; Rivero and Berberián 2011; Rivero 2012).

The scarce archaeological evidence dating to the Pleistocene–Holocene transition of central Argentina can be explain by the interpretation of the settlement and mobility strategies of scattered and low density groups that slowly spread through empty spaces (Borrero 1994). Accordingly, these humans would have entered the interior of South America in small numbers along the Atlantic coast, using the large Río de la Plata and Uruguay River basins as natural routes of entry and dispersal (Miotti 2006; Laguens 2009; Suárez 2011, 2017). These rivers also would have facilitated the dispersal of the groups, and once new spaces, landscapes, and territories were explored, they would have served as a path back to previously established base camps (Suárez 2017). In this context, central Argentina would have been reached by small exploring groups that originated from population nodes in the Argentinian Pampas, Uruguay, and southern Brazil plains (Flegenheimer, Miotti, and Mazzia 2013; Laguens 2009; Miotti and Terranova 2015; Suárez 2017). Likely Fishtail points provide a record of these events; however, the Tigre point recovered in the Central Mountains – the first record for this type of projectile point in central Argentina – suggests that there was more than one exploring stage in central Argentina during the Pleistocene–Holocene transition, producing the sparse and scattered archaeological signal. The evidence thus suggests that these exploring groups had a low density and, probably, had been isolated from major population nodes, making long-term biological reproduction and population growth difficult (e.g., Moore and Moseley 2001).

These observations have strong implications for the peopling of central Argentina because we could be facing failed colonization situations. Only after ca. 9200 cal yr BP could there have occurred a new exploration and colonization process (Rivero 2012; Rivero and Berberián 2011) that finally led to the effective settlement of the region.

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Disclosure statement

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