

## **SURFICIAL LITHIC DEPOSITS AS EVIDENCE OF LAND-USE PATTERNS IN THE REGION OF COLONET, BAJA CALIFORNIA, MEXICO**

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*Land use during the prehistoric era in the coastal region of Colonet, Baja California can be defined from different variables. One of the most important is the complex of lithic artifacts exposed on surface, which allows us to recognize the functional relationships between the features of the territory of appropriation of those ancient communities and the lithic technology used in their cultural practices. This approach is part of the results of the archaeological research project, "Coastal Archaeology as a Development Factor in Rural Communities of the Colonet-El Rosario Corridor, Baja California, Mexico," whose surface exploration season was conducted between August 2007 and April 2008.*

The discussion of land use in the coastal region of northwest Baja California during prehistoric times may be addressed from various perspectives. The proposal presented here relies mainly on the observed lithic materials displayed on the surface during the archaeological recording carried out in the region of Colonet, Baja California (Figure 1).

The archaeological sites in Colonet, mostly shell midden camps, join the landscape, forming prehistoric corridors located in direct proximity to access to natural resources located both in the terrestrial environment (material sources for tool-making, flora, and fauna) and in the aquatic environment, such as rivers, streams, vernal pools, springs, and the maritime zone (Figure 2).

On the other hand, the seasonality of food resources determined the lifestyle characterized by high mobility which is reflected in the archaeological context with the presence of numerous archaeological sites.

This evident mobility required in-depth knowledge of the environment, not only to meet the needs of food and clothing, but also to learn about the properties of the materials used for the elaboration of tools for hunting, fishing, and plant and seed processing. The land use in this region is determined by the existing dynamics in the availability of abiotic and biotic resources.

Despite the fact that most of the sources of materials in the Colonet region are located very near the archaeological sites, other sources can be found at a great distance from this coastal region. Let's take a look at some cases.

### **BASALT**

The main source of fine-grained basalt is located on the Punta Colonet mesa's cliffs, at an altitude that varies between 100 and 120 m above sea level (Figure 3). At the same time, landslides from this material tumble to the beach and have created an impressive barrier of basaltic pebbles towards the southeast and north of the mesa (Figure 4)—stones that, by the way, are exported to the U.S. for landscaping. The vesicular basalt comes from the openings caused by water that flows down the mesa on its southern side.

### **QUARTZ AND GRANITE**

These originated from granite rocks of the Peninsular Range batholith and are located inside of the ravines that run down to the river and to the beach.



Figure 1. Punta Colonet in northwest Baja California.

## OBSIDIAN

Although not all of the sources for this material are known, the obsidian deposits already identified in Baja California are located away from the Colonet region. From geochemical analyses performed on two small rock flakes/slabs found on surface, the composition of the elements (oxygen, sodium, aluminum, silicon, potassium, calcium, and iron) was compared with samples taken from other archaeological sites (Figure 5). Subsequently a statistical analysis was done, giving as a result three main groups, composed of Colonet, Vallecitos, and Ángel de la Guarda Island samples (Télliz et al. 2007). This similarity seems to indicate the presence of one or more obsidian trade routes through which Colonet received this valuable resource.

## THE ARTIFACTS

### Basalt

#### *Knives and Fragmented Projectile Points, Scrapers, Cores, and Slabs with Traces of Retouching and Use*

These form the vast majority of artifacts collected on the surface. Lithic workshops, where completed bifaces and preforms were shaped, have been located. These sites are mainly located in the margins of ancient rivers at some elevation on the landscape. Unfortunately, agriculture has been a major factor altering archaeological contexts (plough disks could have removed items from contexts at depth and placed them on surface). Recorded artifacts tell us of greater specialization in the process of manufacturing stone tools (Figure 6). These artifacts could have been used both for the hunting of marine and terrestrial animals and for the subsequent butchering of them. The marked mobility of the human groups that occupied Colonet could have allowed the fast recovery of animal and plant species during



*Figure 2. Colonet Bay with Punta Colonet in the background.*



*Figure 3. Punta Colonet, basaltic mesa's cliff.*



Figure 4. Basaltic pebbles and cobbles down on the beach.

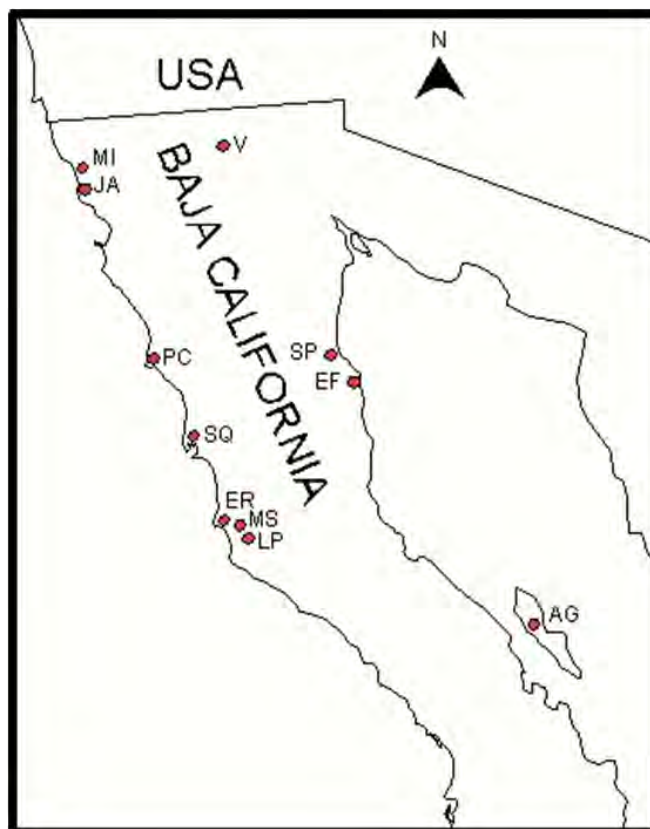


Figure 5. Localities of obsidian samples. V = Vallecitos; MI = Mesa Los Indios; JA = Jatay; PC = Punta Colonet; SP = Sierra Pinta; EF = El Faro; SQ = San Quintín; ER = El Rosario; MS = Mesa La Sepultura; LP = Las Pintas; AG = Isla Ángel de la Guarda.



Figure 6. Preforms of knives made of fine-grained basalt.

the seasons when humans were absent and busy collecting seeds in the intermountain region.

#### *Complete Projectile Points*

Scarce projectile points were located on the mesa, next to the dirt roads and very close to the material removed during the construction of these roads, which could also imply that they were altered from their original contexts. Their conservation status allows us to infer that they were failed or missed shots during the hunting of small game (Figure 7).

#### **Vesicular Basalt**

This material was used only for the making of portable mortars.

#### **Quartz**

The only specimen crafted from this material is a projectile point of foliaceous shape (Figure 7).

#### **Granite**

This material was mainly used for the manufacturing of mortars and grinding stones. There are two samples of grinders made out of granite.

The gathering and processing of plants and seeds was a fundamental practice in the way of life of the human groups that inhabited the Colonet region. It is confirmed by the presence of a large number of grinding instruments and the presence—still today—of plants native to that region, such as *Agave shawii*, jojoba, and chia, among others (Figure 8).

### **CONCLUSIONS**

The fundamental ways of subsistence are basic elements in the type of occupation of the territory. In Colonet, as well as in other coastal sites of Baja California, environmental adaptations of prehistoric



*Figure.7 In situ projectile point of foliaceous shape, made of quartz.*



*Figure 8. Prehistoric groups used native plants such as Agave shawii, jojoba, and chia, among many others.*

human groups were determined by two dynamically interrelated factors. On one hand, the exploitation of seasonal food resources generated a high mobility of these groups, and on the other hand, the direct access to sources of materials for the crafting of tools necessary for their survival practices, such as hunting and the processing of plants, seeds, and fruit, can be seen in the lithic materials found on surface. Finally, the mobility of these groups of hunters-fishers-gatherers could have stimulated the recovery of game during the seasons in which these groups moved to other locations in search for food.

#### REFERENCE CITED

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