

Supplemental Text

Regarding Settlement Pattern Analysis

Richard Pailes (1997:187) has suggested that the largest sites throughout the Río Sonora region may be concealed by modern towns. This may affect the shape of the rank-size curves and the associated *A*-statistics provided in the article. This is an extremely difficult proposition to test and is more apt to be true for the Sonora Valley than for the Moctezuma Valley. Some minimal artifactual evidence can be found on the edges of modern day Moctezuma and Cumpas, but it is hard to discern if it is prehistoric or historic and its extent is unknowable. Moctezuma and Cumpas are located on low first terraces—significantly different landforms from the high second and third terraces where virtually all recorded sites are found. In the case of Cumpas, local folklore holds that the preexisting indigenous community lived at Son H:13:2, Las Clavelinas. In fact, all the largest sites located during survey were adjacent to these large modern centers. Based on first principles, it seems unlikely a lost primate center would be located very close by, since such settlements tend to greatly restrict the growth of their nearest neighbors. Conversely, missionaries, who determined the location of modern towns, likely located them optimally near several large population centers in order to maximize access to human capital. Nevertheless, an attempt was made to model the potential for another level in the site hierarchy by estimating the approximate size of the oldest parts of both towns located on fairly level ground for both the Moctezuma and Sonora Valley. This led to the inclusion of two more large sites in both samples. It should be emphasized these are highly conjectural estimates. In both cases the alternate estimates only slightly reduce the convexity of distributions (denoted in Supplemental Table 1 as “altered”).

References Cited in Supplemental Materials

Doolittle, William E.

1979 Pre-Hispanic Occupance in the Middle Río Sonora Valley: From an Ecological to Socioeconomic Focus, Geography, University of Oklahoma, Norman.

Fish, Suzanne K., Paul R. Fish, and John H. Madsen

1992 Evolution and Structure of the Classic Period Marana Community. In *The Marana Community in the Hohokam World*, edited by Suzanne K. Fish, Paul R. Fish and John H. Madsen, pp. 20-40. Anthropological Papers of the University of Arizona No. 56. University of Arizona Press, Tucson.

Fish, Suzanne K., and Paul R. Fish

2004 In the Trincheras Heartland: Initial Insights from Full-Coverage Survey. In *Surveying the Archaeology of Northwest Mexico*, edited by Gillian E. Newell and Emiliano Gallaga, pp. 47-64. The University of Utah Press, Salt Lake City.

Gallaga, Emiliano

2006 *An Archaeological Survey of the Onavas Valley, Sonora, Mexico: A Landscape of Interactions During the Late Prehispanic Period*. Anthropology. Ph.D. Dissertation, Department of Anthropology, University of Arizona, Tucson.