

"Nomadic" strategies for sedentary populations: prehistoric anthropogenic landscape alterations as indications of climatic coping strategies applicable to the present day

Stefan L. SMITH

ANEE, University of Helsinki, Finland

Corresponding author: Stefan L. Smith. E-mail: stefan.smith@dunelm.org.uk

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One of the issues beginning to manifest itself due to anthropogenically-induced climate change is a heightened difficulty in the acquisition of basic resources, largely due to the challenges of long-term planning under increasingly unpredictable conditions. Specifically, we are starting to struggle to accommodate the growing uncertainty of year-on-year climate variation, and thereby such critical issues as agricultural yields, water accessibility, and livestock holding capacities. These problems are greatly compounded by the near-absolute hegemony of sedentism in the present day, not simply in terms of habitation, but also labour, financing, and indeed worldview. These deeply ingrained concepts make it particularly difficult to meld this combination of unpredictability and desired durability into workable solutions. When examining past anthropogenic landscapes, it becomes clear that this hegemony was neither universally present, nor practiced in a binary dichotomy. Instead, a variety of nuanced relationships with sedentism were often the norm. This did not manifest exclusively in the well-documented practice of seasonal nomadism. In many cases, the sociocultural and environmental pressures of uncertain climatic conditions produced communities that appear to be largely sedentary, but in fact utilised a combination of what are generally considered "nomadic" practices as survival strategies. These manifests themselves in specific anthropogenic landscape alterations, which in many cases are still visible in the present day. This paper will examine these factors using case studies from the author's region of research in the Jordanian, Syrian, and Iraqi deserts. Aerial- and ground-based investigations carried out over the last decade show that this region's prehistoric inhabitants modified a vast landscape in a way that indicates a broad selection of subsistence strategies that defy binary sedentary-or-nomadic categorisations. These appear as widespread stone structures, some of which, such as animal husbandry enclosures and game-catching devices, are traditionally seen as evidence for "mobile pastoralist" lifestyles. Others, such as water-catchment features, indicate a more stationary form of landscape use. Moreover, the substantial extent of all these features, the effort required for their construction, the evidence for their consistent re-use, the wealth of material they present, and the discovery of far-reaching anthropogenic tracks connecting them strongly suggest longevity of occupation. Together, these phenomena indicate nomadic-style extraction of resources combined with sedentary-style forward planning and locationally stable habitats familiar to us nowadays. A number of these strategies could therefore be applied to present-day policies to alleviate the burden of climate-induced resource acquisition problems. These include flexible use of agricultural and pastoral resources, low-level biosensitive landscape modifications across large areas for periodic re-use, and the adaptation of human labour dictated by the climatic conditions of any given year. The implementation of these in turn requires programmes such as micro-financed short-term loans, security

measures for resource acquisition installations during their periods of non-use, and financing for the training of diversified skills. Most importantly, the education of the next generation in the mere existence of these options, as well as the showcasing of their applicability to our lives, could have immense impacts on future attitudes and thus potential for weathering the challenges ahead.