BY THE RIVERS OF BABYLON: PATTERNS OF HETERARCHY,
SUSTAINABLE WETLAND AGROECOLOGY, AND URBAN DYNAMICS
IN OLD BABYLONIAN MASHKAN-SHAPIR

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ABSTRACT

Archaeological investigations of the largest urban centers in southern Mesopotamia have excluded collection and detailed interpretation of faunal remains. This exclusion has resulted in a biased interpretation of urban dynamics based largely on architecture, site planning, artifact distribution, and textual evidence. The samples that do exist from these sites are often incomplete. Additionally, textual evidence pertaining to animal exploitation is essentially silent when it comes to pig husbandry and offers little information on the exploitation of fish and other wild resources. While addressing these biases with the analysis of faunal material from the late second millennium (BCE) urban site of Mashkan-shapir, this study also aims to shed light on the complex interplay between urban life and the natural diversity of the southern Mesopotamian wetlands. The site is presented as a model for heterarchical sociopolitical organization and sustainable agroecological approach to subsistence. A fundamental link is made between sustainability and heterarchy.
Results of the analysis of over 7000 specimens from excavation, as well as nearly 2900 specimens from systematic flotation, indicate that wetland resources were an integral part of the site economy. The data suggest pigs were a major dietary component, and suggest low intensity cultivation of free roaming "street pigs" as the likely pig rearing strategy. Ovicaprid remains indicate a strong bias towards sheep with the primary goal of wool production. The study attempts to describe and quantify the role of wetlands as a sustainable resource adding to the vitality and success of Mashkan-shapir. The data suggest an urban setting intimately linked to wetland ecosystems. This model of wetland exploitation is compared to both ancient and modern data including modern models of mixed species sustainable agroecosystems to illustrate the efficiency and sustainability of the proposed Mashkan-shapir model. The data from Mashkan-shapir suggest that a heretofore unexamined or hidden portion of the economy based on fishing, hunting, household level pig husbandry, and wetland resource exploitation, played a crucial role in the lives of Mesopotamian urbanites.