

GEOCHEMICAL CONTRIBUTIONS TO THE ARCHAEOLOGICAL
EXAMINATION OF PROMONTORY FORTS:
THE USE OF PHOSPHATE ANALYSIS TECHNIQUES
ON ACHILLBEG AND ACHILL ISLANDS, CO. MAYO

Johanna Merici Ullrich, Ph.D.
University College Dublin 2010

Phosphate analysis is a geochemical technique that is used in archaeology to identify areas where organic debris was discarded or collected in the soil. The demarcation of areas of relatively increased phosphate content can be used to create use-of-space models based on the identification of areas where debris was deposited and areas where debris did not collect. The archaeological examination of promontory forts in Ireland has thus far been limited to site surveys and a very small number of excavations. The use of phosphate analysis allows for the identification of areas of more intensive human activity on the headlands, thus illuminating trends in the function and use of promontory forts. The sites of Dun Kilmore and Dungurrough on Achillbeg Island, and Dun Bunnafahy and Gubadoon on Achill Island, Co. Mayo, were tested using the Eidt and Wood Spot Test method (Eidt and Wood 1974: 51-52). This method is a quick and accurate determination of the phosphate status of a soil. Interpretation of use-of-space was made where possible and areas suitable for future excavation were defined on each of the tested forts. Conclusions based on the resultant phosphate patterns from each individual fort allow connections to be drawn between the forts and suggest possible modes of use for promontory forts in general.