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## PYRITE AND BONE DIAGENESIS IN TERRESTRIAL SEDIMENTS EVIDENCE FROM THE WEST RUNTON FRESHWATER BED

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### **ABSTRACT**

Recent research into the carbon and sulphur geochemistry of the organic-rich, Pleistocene sediments of the West Runton Freshwater Bed, Norfolk. Have demonstrated how groundwater effects can bring about post-diagenetic remobilisation of pyritic sulphur and how this, in turn, can influence subsequent use of bulk C/S ratios as a tool to distinguish freshwater from marine sediments. Microscopic examination of fossil bones from the Freshwater Bed illustrates some of the initial stages of pyrite diagenesis and the transition from finely divided framboidal pyrite to more massive forms. In addition, the state of preservation of histological structures in the fossil bones reflect the chemical environment prevailing in the sediments in which the bones became buried. This burial environment has contributed to the remarkably good state of preservation of fossils from West Runton.

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### NORFOLK SOILS AND SOIL MAPS

### W.M. Corbett

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### **ABSTRACT**

The history of soil survey in Norfolk is reviewed and the changes in methodology described. Variation in soils is determined by geology and geomorphic processes and the different scales at which these factors operate is explained. It was from these bases that a soil sampling technique, to recognise and classify soils, and to delineate and define soil map units, evolved.

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# A POSSIBLE PRESENT-DAY PROCESS ANALOGUE FOR THE ORIGIN OF THE MARINE FAUNA OF THE LATE PLEISTOCENE MARCH GRAVELS OF THE FENLAND

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### **ABSTRACT**

Recent fluviatile sediments of Bathurst Island, Canadian Arctic Archipelago, contain a reworked marine fauna. The process producing the reworking may explain the origin of the marine fauna in the fluviatile March Gravels in Fenland.

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