Abstract No: A-244

MINERAL VARIATION ACROSS AN ESTURINE RAISED BOG IN WALES

Fred M. Slater

School of Biosciences, Cardiff University, Bridgehill, Newbridge on Wye, Llandrindod WellsLD1 6LY, United Kingdom

*Corresponding author: slaterfm@cf.ac.uk

Cors Fochno or Borth Bog is a raised bog on the southern side of the Dyfi estuary on the west coast of Wales, United Kingdom. It forms part of the Dyfi Biosphere Reserve, is a Ramsar listed wetland, a National Nature Reserve and a Special Area of Conservation (SAC). The JNCC say of this site "Although a substantial part of the former peatland complex has been taken for agriculture, the surviving core area supports the largest expanse of primary near-natural raised bog in an estuarine context within the UK". Indeed of the 2,400ha of Cors Fochno listed in the land enclosures of the nineteenth century some 700ha still remain with an active raised dome of some 200ha. Current local sources of pollution onto the site are mainly limited to occasional drift of lime dust from agricultural sources, smoke from the now rare surface vegetation fires, the occasional marginal ingress of seawater in times of flood and the almost constant input of marine minerals in the inland drift of sea spray. Historically some parts of the bog margins were contaminated by lead mining activity which can still be detected in analyses of overlying peats. This paper examines the mineral content of peat and plants from across the bog in relation to these external inputs and speculates on their ecological significance.

Keywords: -