

**THE ORIGIN OF GRANITE ERRATICS IN THE PLEISTOCENE
PATELLA BEACH, GOWER, SOUTH WALES**

by

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Rare pebbles of granite have been discovered in the raised *Patella* beach at Butterslade, Gower, South Wales. Their petrography, trace element geochemistry and the Rb/Sr whole rock age of 55 ± 5 Ma confirm that they are derived from the Lundy granite which is about 49km to the southwest of Gower. Amino acid analyses of fossil gastropods in the *Patella* beach have provided an age of 210000 years. Various hypotheses of transportation of pebbles from Lundy and Pembrokeshire to Butterslade are considered. Erratics from Pembrokeshire were probably transported by Pleistocene ice into the area while clasts of Lundy granite were moved by progradation of beach deposits, northeastwards towards Gower during glacio-eustatic marine transgressions in the Pleistocene.