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http://www.swansea.ac.uk/iss/researchsupport/cronfa-support/
Scratching the Surface: geology and landscape trails in rural Swansea

Scratching the Surface is a set of ten leaflets interpreting geology and landscape along short walking trails near Swansea (Fig. 1). The project was funded from 2012-2014 by the European Agricultural Fund for Rural Development and the Welsh Government under City and County of Swansea’s Rural Development Business Plan, the aim of which was to stimulate the rural economy. The project uses the lure of geology as a reason to visit rural areas and use local facilities such as pubs, cafes, accommodation and public transport. Funding covered staff time for myself and a colleague (Professor Siwan Davies), leaflet design (by Icon Creative Design of Newport, Gwent), Welsh translation (by Dr Dyfed Elis-Gruffydd), printing of 5000 copies of each leaflet, and website design. While the concept of ‘virtual guided walks’ is far from radical, the project demonstrates how careful design of outreach materials can effectively promote the understanding of geology, geodiversity and landscape evolution and contribute to rural economic wellbeing.

Two parts of the City and County of Swansea are defined as rural: the popular and geologically varied Gower Peninsula, designated Britain’s first Area of Outstanding

Fig. 1 The ten Scratching the Surface leaflets (including bilingual versions of Llanmadoc Hill and Paviland Cliffs).
Natural Beauty in 1956, and part of the central Coalfield plateau north of the M4 motorway, a much less frequented area of rough upland grazing and former mining valleys. In keeping with the ethos of the Business Plan it was decided to focus trail routes in less popular parts of both areas (Fig. 2). This introduced challenges, particularly in the northern area where there is little exposure, and the project does not address demand for geological information about ‘honey-pot’ areas such as Rhossili.

![Location of the ten Scratching the Surface trails.](image)

The target audience is non-geologists interested in the countryside. A maximum trail length of about 10 km makes the trails accessible to casual walkers as well as dedicated hikers. The leaflets are attractively designed with eye-catching colour images (Fig. 3). They are bilingual and can be folded to show either Welsh or English content (Fig. 1). Although this results in some duplication, it aids usability in the field. Route information is provided on Ordnance Survey 1:25,000 map extracts and in the text, where it is clearly distinguished from geological information (Fig. 3), making the leaflets effective for people looking for an interesting walk, regardless of their interest in geology. The trails are circular, but most have a destination such as a prominent view-point or local attraction. Geological interpretations are based on observations but the narrative tells a story - as in an expert-led guided walk - rather than just pointing out features of interest. Most trails build an understanding of one or two key aspects, such as the formation of coal, coal-mining methods, geological structure or the glacial legacy in the landscape.
Fig. 3 An extract from the trail guide to Penmaen and Three Cliffs Bay (Geology, prehistory and history in South Gower). Notice the distinction between route information (pale background) and geological information.

While paper leaflets may be thought by some to be an archaic medium, they were preferred for this project for their ease of distribution and practical use in the field, and they allowed the authors to focus on content and communication rather than technology. A website (under construction: http://geography.swan.ac.uk/scratchingthesurface) is, however, an integral part of the project. This will provide PDF downloads of the leaflets, audio recordings of three trails (funded through the project and made by Audio Trails Ltd), GPX files and route updates, as well as links to organisations such as the Geologists’ Association, British Geological Survey, Gower Society, National Trust and local archaeology, conservation and history groups.

In the first year, 40% of the leaflets have been distributed, mainly through tourist attractions, caravan parks and public libraries, although this reliance on existing tourist infrastructure means distribution in the less developed northern area is more challenging. The leaflets give additional focus and rationale to ‘live’ activities such as
talks and guided walks (Fig. 4), for which there is an insatiable public appetite, and they provide a tangible, lasting product for such public outreach activities.

Fig. 4  Scratching the Surface of Cefn Drum in June 2016 with a group from Pontarddulais (image by Alastair Duncan, www.stillwalks.com).

For a set of these free leaflets, contact the author with a mailing address.

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