The Ballantrae, Complex

Byne Hill — Representative of an important component of the Ballantrae Ophiolite. Exceptional illustration of a zoned gabbro-leucotonalite body intruded into ophiolitic serpentinite.

Slockenray Coast — Representative of several components of the Ballantrae Ophiolite. Exceptional features of upper part include ophiolitic mélange, mixing of coeval lava flows of different compositions and a lava-front delta. Lower part is an exceptional gabbro pegmatite contained within serpentinite cut by pyroxenite veins.

Knocklaugh — Representative of basal zone of Ballantrae Ophiolite. Internationally important section allowing interpretation of the metamorphic dynamothermal aureole at the base of an ophiolite in terms of its obduction while still hot.

Millenderdale — Unique representative within the Ballantrae Ophiolite of multiple dyke intrusion into gabbro. Exceptional development of unusual metamorphic and textural relationships.

Knockormal — Exceptional occurrences of blueschist and garnet-clinopyroxenite within the Ballantrae Ophiolite. Internationally important historically as a possible zone of very high pressure metamorphism.

Games Loup — Representative of interveining between ultramafic components of the Ballantrae Ophiolite and juxtaposition of ultramafic rock and spilitic pillow lavas by faulting.

Balcreuchan Port to Port Vad — Representative of Balcreuchan Group, the upper part of the Ballantrae Ophiolite. Exceptional example of structural imbrication of varied lava sequence, and the only unambiguous British example of boninitic lavas.

Bennane Lea — Representative of highest exposed part of Ballantrae Ophiolite, faulted against ultramafic rock. Exceptional illustration of relationships between deep-water chert, volcaniclastic sandstone, mass-flow conglomerate and submarine lava.

References