CITATION

WEST TAYVALLICH PENINSULA
SITE OF SPECIAL SCIENTIFIC INTEREST
Argyll and Bute

Site code: 1612

NATIONAL GRID REFERENCE: NR 706834

OS 1:50,000 SHEET NO: Landranger Series 55, 62
1:25,000 SHEET NO: Explorer Series 358

AREA: 658.15 hectares

NOTIFIED NATURAL FEATURES

Geological: Structural and metamorphic geology: Dalradian

DESCRIPTION

West Tayvallich Peninsula SSSI occurs along the west coast of the Tayvallich peninsula, approximately 12 km west of Lochgilphead. The rocks of the site are assigned to the Dalradian Supergroup, which originated as ocean sediments before 570 million years ago. They represent the Tayvallich Subgroup of the Argyll Group and are deformed into a large downfold, the Tayvallich Syncline. This fold represents major rock structures affecting much of the south-west Grampian Highlands. Its shape causes successively younger rocks to occur south-westwards through the site.

At the site's northern end the Crinan Grit Formation, dominated by altered marine sandstones, records coarse sediment deposition in the ancient ocean. A reduction in this sediment is indicated by the succeeding Tayvallich Slate and Limestone Formation, which forms distinctive thin outcrops.

South-west of Tayvullin the site is dominated by rocks formed from underwater eruptions, the Tayvallich Volcanic Formation. Outcrops show how underwater lava flows affected sea-floor sediments, notably around Port nan Clach Cruinn. Distinctive pillow-shaped lavas, and deposits of lava fragments called hyaloclastites, record how molten magma encountered seawater. The origin of the most exceptional deposit, the Loch na Cille Boulder Bed, is still debatable. Rock masses also solidified from sub-surface magma, such as that forming Rubha na h-Airde.

The youngest rocks are altered sandstones called the Kells Grit, around Keillbeg. They are assigned to the lowermost Southern Highland Group of the Dalradian.

This SSSI has considerable importance in the history of geology. Among its exceptional features, it has the best exposures of volcanic rock in the whole Dalradian of Scotland, and one rock mass has provided a rare and critical date of 600 million years ago. Above all, the site is nationally important because it superbly represents both an important part of the Dalradian sequence, and the rock structures that control its distribution. It helps reveal key aspects of how crustal plate movements created an ocean basin, and then destroyed it during formation of the Caledonian mountain belt.

NOTIFICATION HISTORY

First notified under the 1949 Act: 1963 and 1974 as An Aird, Tayvallich SSSI
Re-notified under the 1981 Act: 12 March 1992 as West Tayvallich Peninsula SSSI with a 598 ha increase in area.
Notification reviewed under the 2004 Act: 10 December 2010

REMARKS

Measured area of site corrected (from 661.7 ha).

A small intertidal part of West Tayvallich Peninsula SSSI overlaps part of Ulva, Danna and the McCormaig Isles SSSI.

Part of West Tayvallich Peninsula SSSI overlaps part of Tayvallich Juniper and Fen SSSI, which is designated for the biological features listed below.

Woodlands:	Upland oak woodland
Woodlands:	Juniper scrub
Fens:	Valley fen
Dragonflies:	Dragonfly assemblage

Part of West Tayvallich Peninsula SSSI is also part of the Tayvallich Juniper and Coast Special Area of Conservation (SAC), which is designated for the European habitat and species listed below.

Habitat	:	Juniper on heaths or calcareous grasslands
Species	:	Marsh fritillary butterfly (Euphydryas aurinia)
	:	Otter (Lutra lutra)