

**CYFOETH NATURIOL CYMRU
NATURAL RESOURCES WALES**

SITE OF SPECIAL SCIENTIFIC INTEREST: CITATION

SWANSEA

SIX PIT, SWANSEA VALE AND WHITE ROCK

Date of Notification:

National Grid Reference:

O.S. Maps:

1:50,000 Sheet number:159

1:10,000 Sheet number:SS69 NE

Site Area:

9.95 ha

Description:

Six Pit, Swansea Vale and White Rock is of special interest for its calaminarian grassland, lichen assemblage, and for the vascular plant spring sandwort *Minuartia verna*.

Six Pit, Swansea Vale and White Rock is located in central Swansea. It predominantly follows the line of a dismantled railway line that ran from Six Pit junction (near the modern-day Nant y Ffin Road) south to a station at Swansea Vale, south of where Atlantic Close is now located, and on to the now demolished White Rock works in Hafod. From the eighteenth until the end of the nineteenth century, Swansea was the world centre of copper smelting, leaving large areas of metal contaminated land in the lower Swansea Valley. Six Pit, Swansea Vale and White Rock represents the last fragment of this habitat, the vast majority of which has been reclaimed for industrial, residential or recreational development.

Calaminarian grassland is present in several locations at the site. This habitat, which also occurs on naturally metal-bearing rock outcrops, has developed here on former waste tips arising from metal smelting. Typical vascular plant species of this community include spring sandwort and sea campion *Silene uniflora* together with specialised ecotypes of more widespread grassland species, such as the metal-tolerant form of common bent *Agrostis capillaris*. Six Pit, Swansea Vale and White Rock is particularly interesting for its population of spring sandwort since the British distribution of this species is centred on metal-rich rock strata and mine spoil in north Wales and the Pennines and it occurs here at one of the most southerly locations in Britain.

The calaminarian grassland also has a high cover of mosses and liverworts (bryophytes), including several notably metal-tolerant species. The most abundant are *Weissia controversa* var. *densifolia* and *Bryum pallescens*, with the metal-tolerant forms of *Solenostoma gracillimum*, *Brachytheciastrum velutinum* and *Pohlia annotina* also present.

Lichens are also prominent in the calaminarian community, including *Cladonia rangiformis*, *C. chlorophaea*, and *C. pyxidata* and the lichen assemblage includes a number of scarce and very interesting species confined to open metal-rich soils. These include *Coppinsia minutissima*, *Gyalidea subscutellaris*, *Micarea cinerea*, *Rhizocarpon furfurosum* and *Stereocaulon vesuvianum* var. *symphycheileoides*. Of particular note are tiny, ephemeral lichens of the genus *Vezdaea*, including *V. cobria*, *V. leprosa*, *V. retigera*, and *V. rheocarpa*.

Remarks:

The site is owned by the City and County of Swansea