

County: Cornwall

Site Name: Crow's Nest

District: Caradon

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981, as amended.

Local Planning Authority: Cornwall County Council
Caradon District Council

National Grid Reference: SX 265700 **Area:** 18.93 (ha) (ac)

Ordnance Survey Sheet 1:50,000: 201 **1:10,000:** SX 27 SE & SX 26 NE

Date Notified (Under 1949 Act): – **Date of Last Revision:** –

Date Notified (Under 1981 Act): 1999 **Date of Last Revision:** –

Other Information:

This is a new site. Cornish path-moss *Ditrichum cornubicum* is protected under Schedule 8 of the 1981 Wildlife and Countryside Act (as amended). The site is within an Area of Outstanding Natural Beauty.

Description and Reasons for Notification:

Crow's Nest is located on the south-east side of Bodmin Moor and is of special interest for its lower plants. Much of the site occupies a small valley in the headwaters of the River Seaton catchment on the edge of the Bodmin Moor granite. The valley and adjacent hillsides are traversed by a series of east-west trending mineral lodes, rich in copper, and some tin ores. Copper mining here dates from about 1830 and continued for over 50 years leaving behind a legacy of old mine buildings, shafts, adits, mine spoil tips, a disused railway and tramways.

The mine spoil tips, associated mine buildings, tracks and the stream banks support a specialised flora of rare mosses and liverworts which are tolerant of the high levels of toxic metals, particularly copper. This contamination has severely restricted the growth of vascular plants, favouring colonisation by specialised mosses and liverworts. To date a total of three nationally rare mosses, three nationally rare liverworts and one nationally scarce liverwort have been recorded at Crow's Nest.

Of particular importance is the occurrence of several colonies of Cornish path-moss *Ditrichum cornubicum*, a nationally rare species, protected under Schedule 8 of the 1981 Wildlife and Countryside Act (as amended) and listed in the UK Steering Group Biodiversity Report 1995 as a globally threatened/declining species. The total World population of this moss is restricted to copper-rich mine waste at two Cornish sites, Crow's Nest and a site near to Minions on the north side of Caradon Hill. Cornish path-moss was first discovered in 1963 and was described as a species new to science in 1976. This is a pioneer species of bare or sparsely vegetated mine waste, and at Crow's Nest occurs on a variety of substrates, including track edges, stream banks and crevices in walls.

Two other nationally rare mosses found at Crow's Nest are *Pohlia andalusica* and *Scopelophila cataractae*. The former moss has a sparse distribution in Britain with the majority of its

British population being confined to metalliferous mine waste. *S. cataractae*, a moss also tolerant of heavy metal contamination, has most of its British population confined to Cornwall.

Crow's Nest is also important for liverworts of the genus *Cephaloziella*. Three national rarities and one nationally scarce species have been recorded here. Of those which are nationally rare *Cephaloziella nicholsonii* is a British endemic, the majority of its population being confined to Cornwall. Cornwall also holds a large proportion of the British population of *Cephaloziella massalongi* with Crow's Nest supporting the most abundant population in east Cornwall. Both *C. nicholsonii* and *C. massalongi* appear to be strictly confined to copper-rich substrates and are particularly abundant on the banks of the stream. The small population of *Cephaloziella calyculata* at Crow's Nest represents the first record for east Cornwall. The nationally scarce liverwort *Cephaloziella stellulifera* also occurs here; its main British populations are concentrated in Cornwall, with a few sites in Devon and Wales.

The site also supports a number of mosses and liverworts that are classified as sub-Atlantic and western British. The Atlantic elements of Britain's bryophyte flora are of international importance and are particularly well represented in western Britain. Characteristic species include the liverwort *Lejeunea lamacerina* which is a strictly Atlantic species and the western British liverwort *Scapania compacta*. Sub-Atlantic species recorded here include the mosses *Campylopus paradoxus*, *Hypnum resupinatum* and *Pytchomitrium polyphyllum* together with the following liverworts, *Lejeunea ulicina*, *Metzgeria temperata* and *Scapania gracilis*.

The moss *Gymnostomum aeruginosum* has only been recorded from three sites in Cornwall including its most recent record here at Crow's Nest.

The stream valley is dominated by high, steep-sided mine spoil tips, almost totally devoid of vegetation apart from lower plants. The valley floor, the flatter tops of the spoil tips and areas where the toxic metals have been leached out, support grassland, bracken and gorse scrub with scattered shrubs and trees, predominantly hawthorn and oak. Remnants of the former landscape of steep slopes covered with granite clitter, bracken, scrub woodland and patchy heathland can still be seen in between the extensive spoil tips and mine workings. Camomile, *Chamaemelum nobile*, occurs on some of the old tramways. This nationally scarce species has declined dramatically in recent years and Cornwall is now one of its strongholds.