



Scottish Natural Heritage

**HEWAN BANK  
Site of Special Scientific Interest**

**SITE MANAGEMENT STATEMENT**

**Site code: 779**

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**Purpose**



This is a public statement prepared by SNH for owners and occupiers of the SSSI. It outlines the reasons it is designated as an SSSI and provides guidance on how its special natural features should be conserved or enhanced. This Statement does not affect or form part of the statutory notification and does not remove the need to apply for consent for operations requiring consent.

We welcome your views on this statement.

**Description of the site**

Hewan Bank Site of Special Scientific Interest (SSSI) is located south-east of Loanhead by Polton, Midlothian. The ice-age glacial sedimentary deposits at Hewan Bank include two till layers (sediments laid down directly by a glacier). The Hewan Bank sediments are of national importance, as they are a rare exposure of Midland Valley glacial sediments.

Ice masses from the Highlands and the Southern Uplands extended into the Midland Valley (the lowland central belt area) during the Late Devensian of the last ice age, approximately 18,000 years ago. The sediments in the Hewan Bank section contain material transported by glaciers from the Highlands as well as the Southern Uplands, which were deposited by the ice in the Midland Valley. Earlier interpretations suggested that the tills represented two separate ice sheet stages, but they are now considered to reflect the complex and highly variable sedimentary environments associated with the melting of a single ice sheet of composite origin from separate sources in the Highlands and Southern Uplands. The Hewan Bank section is therefore important, as it shows a sequence through glacial sediments in the Midland Valley and also for study of the interaction between ice masses.

The site is bordered by the River North Esk and covers an area of woodland on the west river bank. The site lies within an ash/oak dominated woodland valley of Ancient origin, containing two woodland SSSIs (Roslin Glen and Bilston Burn). This valley is also classed as a Priority Habitat within the Midlothian Local Biodiversity Action Plan. Hewan Bank SSSI also falls within the historical designed landscape of Roslin Glen and Hawthornden Castle, which also includes the majority of Roslin Glen SSSI and an



area of Bilston Burn SSSI. While the Hewan woodland has been modified by the planting of non-natives species such as sycamore and conifers, the woodland contains some semi-natural attributes and although the habitat is not presently of SSSI quality, the site is a valuable wildlife resource. Sand martins have nested in the Hewan Bank in the past.

Springfield Mill Wildlife Site is located on the opposite bank of the River North Esk. This former industrial site, managed by Midlothian Ranger Service, now includes naturally regenerated woodlands with recent plantings of various native species, two seasonal ponds, a wildflower meadow and associated public access.

The 2006 site condition monitoring (SCM) assessment of the feature found it to be in an 'unfavourable-declining' condition. This was on account of developing tree and scrub cover which has obscured the sediment bank. However the area is prone to land-slippage and, following the SCM survey visit, a series of land-slip events occurred, resulting in the key exposures of the two types of till being buried under a layer of soil. This overlying soil layer has since re-vegetated with developing scrub. The uppermost unit of gravel and the middle unit of sand are currently visible although actively eroding.

Since the 2006 SCM assessment a long-term view to management has been adopted, in light of the fact that the feature may become naturally re-exposed as and when the landslip is reactivated in the future. The SSSI is now considered to be a buried site until such time as the feature is re-exposed by land slippage and it is therefore considered acceptable that the geological interest is largely buried by slumping and natural vegetation growth. The site is now considered to be in a 'favourable-maintained' condition.

<b>Natural features of Hewan Bank SSSI</b>	<b>Condition of feature (and date monitored)</b>
Quaternary of Scotland	Favourable-maintained (October 2006)

Scrub/woodland encroachment	Path/bank erosion
	

## **Past and present management**

Hewan Bank SSSI is an actively eroding sedimentary bank, which has a scrub layer that is best described as developing ash/elm woodland and there is a cyclical relationship between land slips and erosion resulting in exposure of bare substrate followed by scrub colonisation.

In 2000 funding was secured under a Forestry Commission Woodland Grant Scheme (WGS) to undertake a woodland survey and prepare a Management Plan (MP) for Hewan Wood. The key objectives of the MP were to enhance the overall biodiversity value of the woodland through native tree planting and the removal of non-native and/or invasive species. As part of the consultation on the draft MP, SNH provided advice on areas or slopes to be left unplanted, in order to protect the geological exposures of the SSSI.

In 2002 the majority of the site was purchased by the Esk Valley Trust with grant assistance from SNH. The remainder of the site is owned by Midlothian Council (MLC).

In 2002 measures to divert the existing 'Right of Way' on the narrow ridge of Hewan Bank were implemented due, in large, to public safety concerns. This included the installation of over sixty path steps and diversion waymarkers. Regular human traffic had exacerbated the erosion of the ridge in one particular area making the path unsafe.

In 2003 sections of the path under MLC ownership were restored and upgraded with grant assistance from SNH.

Any future plans to regenerate natural woodland in the site should, if managed, not be detrimental to the site's geological interest. Trees should not be planted within 10m of the sedimentary deposits in the bank and ground cover should be managed on bank faces which currently have sediment exposure.

The 'Ancient' woodland at this site was not included within the SSSI designation due to the proportion of planted exotic trees. Removal of exotic trees would help restore the semi-natural nature of the site making it more akin to the neighbouring woodland SSSIs.

Extraction of sand or gravel from the Hewan Bank could potentially have a positive or negative effect on the site's geological interest. Material should not be removed from currently exposed bank faces, and further extraction and regeneration of the land after extraction should only be undertaken with negotiation, to safeguard the geological interest of the site.

Currently the exposures of the two types of glacial till present are buried under a layer of soil which has re-vegetated with developing scrub. The uppermost unit of gravel and the middle unit of sand are currently visible in places although actively eroding. In order to re-expose these tills, considerable scrub/tree removal work would be required followed by hand excavation of the overlying soils. However, due to the cyclical relationship between land slips and erosion resulting in exposure of bare substrate followed by scrub colonisation, the immediate benefits of such remedial management would be temporary in nature.

It is currently considered acceptable that, while the geological interest is obscured by slumping and natural vegetation growth, the glacial tills could become re-exposed during future landslide events.

In 2010 the Esk Valley Trust erected interpretation signs explaining the importance of the geological site, its national significance, and the interaction with the landslips that expose it periodically.

A specific Management Plan has been prepared for Hewan Wood (including Hewan Bank SSSI) under the River North Esk Woodland Management Plan (Lothian and Fife Green Network Partnership, 2010) with associated prescriptions/recommendations for enhanced public access and positive woodland management.

In the future, the site could benefit from entry into an appropriate Rural Development Contract scheme which will be run under the Scotland Rural Development Programme (SRDP) (available 2007-2013). This could offer benefits for improved public access and positive woodland management while aiming to protect and maintain the geological interest of the SSSI.

**Objectives for Management** (and key factors influencing the condition of natural features)

We wish to work with the owners to protect the site and to maintain and where necessary enhance its features of special interest. SNH aims to carry out site survey, monitoring and research as appropriate to increase our knowledge and understanding of the site and its natural features and monitor the effectiveness of management.

**Considering the dynamic nature of the SSSI, management should remain largely non-interventional until such time as the feature is re-exposed by land slippage.**

- 1. Maintain access to rock sediment banks through the removal of vegetation as appropriate.**
- 2. Remove non-native trees in order to restore the semi-natural nature of Hewan Wood, in keeping with the neighbouring woodland SSSIs.**
- 3. Maintain SSSI interpretation panels and manage areas around panels for amenity and access.**

**Other factors affecting the natural features of the site**

Despite the provision of an alternative route, the original 'Right of Way' ridge path route is currently still used by equestrians, pedestrians and mountain bikers alike. This knife-edge route is particularly precarious and susceptible to land-slip/erosion with ongoing concerns for public safety and its use should be actively discouraged.

Date last reviewed: 17 August 2011