

LAND MANAGEMENT TOOLKIT



Eastern Valleys Uplands Project - Local Wildlife Sites

The following information outlines the best practice guidelines for managing the habitat type listed below in a manner that is sympathetic to wildlife. It is part of a series relating to various habitat types and management issues that have been produced by your local Wildlife Trusts.

No.19 Post Industrial (Colliery Spoil)

What are Post Industrial (Colliery Spoil) Habitats?

Colliery Spoil is an industrial legacy from the coal industry. Originally this formed dark "scars" on the South Wales valley sides but many of these "scars" have now become vegetated both naturally and through intentional landscaping. Habitats formed on the colliery spoil include acid grassland, heath, scrub, woodland and, in lower lying areas, wetland. These are all interspersed with areas that still remain sparsely vegetated.



Grayling



Centaury

Green Tiger Beetle

What wildlife do they support?

Re-vegetated Colliery Spoil can support many of the species typical of the habitats that can form on the spoil. Additionally the thin, sparsely vegetated soils that are well drained and heat up quickly are particular features of the colliery spoil and these support a number of species that thrive in this habitat such as reptiles, the Grayling butterfly and various other invertebrates. The thins soils can also support Lichen heath which is a scarce habitat normally associated with coastal areas. A huge variety of flora can also develop on the spoil. Where the spoil is landscaped it can sometimes provide suitable conditions for species such as Lapwing to breed.







Moonwort

Common Lizard

Lapwing

Why preserve/enhance them?

Despite being man-made the re-vegetating spoil can over-time develop into a very interesting mosaic of habitat due to the varied topography and their quite often undisturbed nature. This, coupled with the thin soils, creates quite a specialised habitat that is almost unique to the South-Wales Valleys. Therefore there is an increasing appreciation of their wildlife and cultural value which we have a duty to preserve, particularly as they can act as a refuge for species displaced by agricultural intensification and development in the wider environment.

Threats

The following can all lead to the loss/degradation of this habitat:

- Some tips still have much usable coal and there is the potential for these to be mined in the future.
- Forestry planting.
- Development with colliery spoil re-profiled to create development plateaus.
- A public perception that colliery spoil is an ugly "eyesore" and needs landscaping and tidying up.
- Natural succession changes with scrub/woodland replacing valuable open habitats.
- Concerns over safety of colliery spoil tips that may result in sites being re-profiled.

Management Recommendations

The following is recommended to ensure the valuable Post Industrial (Colliery Spoil) habitat is managed sympathetically for wildlife and is thus preserved and enhanced:

Preservation/Enhancement of Post Industrial (Colliery Spoil)

- As the habitat that develops on Colliery Spoil is essentially a mosaic of different habitats, reference should be made to the Toolkits specific to the relevant habitat that requires management. Those likely to be of particular relevance are No.3 Acid Grassland and No.7 Heath. Additionally No.11 Scrub Control may be of relevance if the Scrub is invading areas where open species-rich habitat is developing. However it should be borne in mind that the presence of Scrub is ecologically important within the mosaic of habitats that form on Colliery Spoil so may not need control and could be encouraged in certain localities.
- With the Toolkits outlined above, grazing is an important consideration in the management of the habitats. This may also be the case on older, well vegetated, Colliery Spoil, however, where the impoverished thin soils result in a sparse covering of grassland/heath, grazing may not be beneficial either for the livestock or the habitat.
- Tree planting should be considered to enhance the mosaic of habitats present. However this should only be where natural regeneration is poor, and it will not impact upon species-rich open habitats or provide concealment for predators on sites where breeding Lapwing are present.
- Consideration should be made to creating scrapes/depressions within the landscape to create localised wetlands within the mosaic as long as these are not at the expense of other valuable wildlife habitats.
- Where valuable habitat has developed on sites that have been re-profiled for future development, then due consideration needs to be given retaining areas of important habitat and providing mitigation for any habitat lost or damaged as a result of development.

There may be further issues that are reducing/threatening the ecological value of your Post Industrial (Colliery Spoil) Habitat such as:

- Invading Scrub SCRUB IS AN IMPORTANT COMPONENT OF REGENERATING COLLIERY SPOIL BUT CAN, IN THE ABSENCE OF GRAZING, INVADE VALUABLE OPEN GRASSLAND AREAS. If this is the case remove any invading Scrub between October to March (avoiding the bird-breeding season) by either hand pulling or cutting otherwise this will shade out and out compete traditional grassland species. Stumps should be spot treated with a suitable herbicide to prevent regrowth. Refer to separate Toolkit No. 11 Scrub Control for more detail. Refer to separate Toolkit No.20 Rhododendron Control if this species is involved
- **Invasive weeds** Control the spread of highly invasive weeds such as ragwort, thistles, nettles and docks, as well as alien species such as Himalayan Balsam, and Japanese Knotweed. These can be controlled with minimum harm to wildlife.
 - Ragwort can be hand pulled (wear suitable gloves) in May before it sets seed.
 - **Thistles, nettles,** and **docks** can be controlled by mowing them to a height of about 15cms before they flower and set seed.
 - **\cdot\tau Himalayan Balsam** can also be controlled by hand-pulling before it sets seed.
 - Japanese Knotweed will require spot treatment with a suitable herbicide.

Refer to separate Toolkits – No. 13 & 14 Invasive Weed Control for more detail.

Creation of Post Industrial (Colliery Spoil) Habitat

In areas where colliery spoil has recently been created or more long-standing Colliery Spoil has needed to be re-profiled there is the opportunity for habitat creation. In many cases habitat regeneration will occur naturally over time. It may however be desirable to undertake certain measures to speed the process and influence the type and quality of habitats that develop. This could be achieved by the formation of more undulating ground to allow the formation of drier slopes and wet hollows together with native, local provenance seeding and planting. The detail of this work is beyond the scope of this document but your Local Wildlife Trust would be delighted to advise you further.

Should you require any further advice regarding the management of your Local Wildlife Site please do not hesitate to contact your local Wildlife Trust:

Gwent Wildlife Trust

Tel: 01600 740600

e-mail: info@gwentwildlife.org

Wildlife Trust of South & West Wales

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Other toolkits available are:

No.1 Neutral Grassland (Hay Meadows)

No.2 Neutral Grassland (Pasture)

No.3 Acid Grassland

No.4 Calcareous Grassland

No.5 Marshy Grassland

No.6 Marsh Grassland (with Marsh Fritillary)

No.7 Heath

No.8 Hedgerows

No.9 Salt Marsh & Coastal Grazing Marsh

No.10 Ponds & Lakes

No.11 Scrub control

No.12 Bracken control

No.13 Invasive weed control (natives - thistle,

dock etc.)

No.14 Invasive weed control (aliens - Japanese

Knotweed, Himalayan Balsam etc.)

No.15 Ffridd

No.16 Blanket Bog

No.17 Upland Broad-leaved Woodland

No.18 Upland Flushes

No 20 Rhododendron & Cherry Laurel Control

Further useful documents include:

Post-industrial Land Habitat Statement – Caerphilly County Borough Council – Biodiversity Action Plan http://your.caerphilly.gov.uk/countryside/sites/your.caerphilly.gov.uk.countryside/files/pdf/actionplan/vol 1-pt2-post-industrial-land.pdf

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