

Environmental Tool Box Talks - Pg1

Ecology - on site



Damaging, disturbing or removing protected species can result in prosecution under a range of Environmental Legislation and is increasingly found within contract conditions.

Areas of Natural Beauty and native animal, plant and insect species are often held in very high regard by the General Public and therefore draw a high level of media attention. They are subject to an abundance of legal protection now, which is likely to increase in the future.

SITE ACTIVITIES
General construction site activities, especially demolition, site clearance dewatering and removal of ponds

May lead to the following impacts



- IMPACTS**
- Removal of habitats, and habitat fragmentation
 - Disturbance to Birds, Bats and Badgers and other protected species
 - Removal of trees and hedgerows
 - Disturbance to aquatic wildlife and water quality
 - Lowering of the local water table
 - Disturbance to wildlife from noise and vibration
 - Damage to retained trees
 - Interference with movement and life cycles of wildlife
 - Vegetation damage through trampling by people and vehicles
 - High levels of noise which may disturb adjacent ecology
 - Damage, removal or burial of important rock formations or landforms
 - *Also be aware that ecological resources off site may be affected by activities taking place on site*

Disturbance to Natural Features and Wildlife can be monitored during construction activities in the following ways:

- ✓ Check conditions of fences protecting wildlife and damage to wildlife features
- ✓ Be aware of any new wildlife features and timings of nesting seasons (April - September)
- ✓ Quality of groundwater, surfacewater and watercourses
- ✓ Compliance against method statements, risk assessments, site Environmental Plan and company Environmental Management System
- ✓ Unexpected ecological finds can arise during the works. We have the responsibility to deal with these in the correct manner and within the legislation.



DURING SITE WORKS



Disturbance to Natural features and Wildlife can be minimised pre construction in the following ways:

- ✓ Wildlife features/ ecologically important sites should be identified as soon as possible before the site works commence and identified with the use of warning and explanation signs
- ✓ Liaise with Statutory bodies and local groups to explain the measures you are taking to protect the flora and fauna
- ✓ Designate protected areas
- ✓ Fence off sensitive areas with explanatory signs
- ✓ Establish buffer zones and temporary exclusion areas
- ✓ Translocate wildlife features if possible (a licence may be required)
- ✓ Inform personnel of sensitive areas and what the explanatory/warning signs in use mean, and what would happen if the areas were damaged
- ✓ Plan the habitat clearance to avoid any nesting, hibernation or rearing seasons
- ✓ Consents should be obtained where required. Any consent conditions must be implemented and maintained.
- ✓ Do not excavate or block any animal burrows without prior consent

PRE WORKS



HOW DO I KNOW IF THERE IS A PROBLEM...

Construction works may attract protected species - sand stockpiles can become a nesting site for Sand Martins. Spoil heaps can be colonised by badgers, particularly if the surrounding water table is high. Be aware of this when moving materials

How to recognise when problems do arise and what to do about them...
The best thing to do is prevent them arising, however the following indicate that there is a serious ecological problem on site

- Bats or other nocturnal animals being seen during daylight hours or found on the ground near to the site
- Injured birds / smashed eggs / young unaccompanied fledglings
- Dead fish floating in watercourses affected by works

AND WHAT DO I DO...

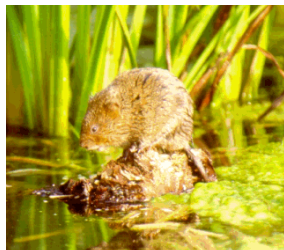
What actions to take if problems arise...
If you suspect that a protected plant or animal may be affected by your operations, stop and seek advice before continuing from for example the on site ecologist, Environmental Co-ordinator, English Nature or the local Wildlife Trust.

Environmental Tool Box Talks - Pg2 Ecology-Legislation & Invasive Species



Wildlife & Countryside Act 1991

Provides the power to designate and protect habitats as Special Sites of Scientific Interest (SSSIs), National Nature Reserves (NNR), Limestone Pavements and Marine Nature Reserves. The WCA also make it an offence to disturb, injure or kill listed species of plant and animals, to kill or disturb nesting birds during the nesting season which can last from April to September.



Water voles: *It is an offence to disturb or enter a are now protected under the above act and the Water Vole Regulations 1999. It is an offence to destroy their habitat. Replacing habitat is now generally a condition of Planning Permission*



It is an offence to disturb an otter or damage or destroy its place of shelter without the appropriate licence. Fines start at £1000 per offence.



A licence is required to disturb or handle Great Crested newts. fines up to £4000 per individual Habitat & breeding sites are also protected.

Conservation (Natural Habitats etc.) Regulations 1994:
Provides the power to designate and protect habitats designated as Special Areas of Conservation (SAC), Sites of Community Interest and Special Protection Areas (SPA), collectively known as "European Sites"

Town & Country Planning Act 1990:
Provides the power to protect specified trees and woodlands through the serving of Tree Preservation Orders (TPOs)

Countryside and Rights of Way Act 2000:
Extends the public's ability to enjoy the countryside, modernises the rights of way system and strengthens wildlife law enforcement.

Wild Mammals (Protection) Act 1996:
Makes it an offence to knowingly inflict suffering on and/or kill any wild animal.

Planning (Listed Buildings & Conservation Areas) Act 1990:
Provides powers to declare conservation areas to protect historic buildings and areas.

Hedgerow Regulations 1997:
Make it an offence to remove a protected hedge without obtaining permission from the Local Authority



Protection of Badgers Act 1992:
Provides protection to Badgers and Badger Setts, and makes it an offence to kill or injure a badger or interfere with its sett. It prevents the use of heavy machinery within 30 metres and the use of hand tools within 10m of an active sett entrance. Fines start at £1000 and destruction of a sett can also lead to a prison sentence.

There are various pieces of legislation involved in the preservation in habitat preservation, the most current pieces are as follows, but if any further detail is required then reference should be made to the register of legislation which is within the EMS Controlled document folder, or regularly updated on the intranet.

Invasive Plant Species



Giant Hogweed - *Heracleum mantegazzium*

Giant Hogweed was imported as an ornamental from the Caucasus in the last century. It has now naturalised and become prolific in many areas often growing to over 6 feet in height. The plant is particularly noted for its psoralens within the sap which can make the skin hypersensitive to sunlight (with swelling, painful blisters and lesions): the hollow stems have always been popular with children, but the poisonous sap can cause severe and painful blistering/skin irritation. Each plant can produce more than 10,000 seeds in a season and the plant itself is very difficult to irradiate. The best time for removal is before it seeds during June and July, by cutting (or the use of a herbicide through consent from the EA) below ground level every two weeks as removal above will encourage further growth.

Invasive Plant Species are becoming increasingly common, especially on river banks, and increasingly on roadsides. Once these species take hold they are very difficult to get rid of and some can even cause injury. Applicable legislation comes from the WCA 1991 (Giant Hogweed and Japanese Knotweed only), which covers noxious plants. The plant waste will have to be disposed of as difficult waste.



Himalayan balsam - *Impatiens grandiflora*

This attractive plant is an escapee from Victorian gardens and has covered much of Britain. It spread particularly rapidly along riverbanks. During spring tiny seedlings emerge and this is the time it can be most easily destroyed - usually by cutting at ground level. It produces attractive flowers in July and by October their ripe pods burst scattering seeds not only around the plant but possibly also into nearby watercourses which provides an ideal dispersal mechanism for the seeds. In many instances the plants reach and sometimes exceed head height.



Japanese Knotweed grows quickly and aggressively. Large dense thickets form rapidly and shade out other plants. It can tolerate partial shade and is competitive in moist, rich soil. Japanese Knotweed is commonly found along roadsides, railways and on stream banks. The rate of growth is very dramatic as the plant spreads through its roots. Eradicate through cutting or mowing or at a last resort through use of herbicide by arrangement with the EA. It has to be cut once every two weeks throughout the growing season.

This plant was introduced from Asia as an ornamental and is still sometimes used in gardens. Japanese Knotweed is a large, robust perennial that spreads by long creeping rhizomes to form dense thickets. The stems are stout and cane like and around 4-9 feet tall.



Japanese Knotweed - *Polygonum cuspidatum*