Site Environmental Management Plan	
Document:	Form #114
Issue:	#5
Related to:	All Contracts

A85 Connel to Achnacloich VRS Phase 2

Site Environmental Management Plan

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SITE ENVIRONMENTAL MANAGEMENT PLAN

The objective of this Site Environmental Management Plan (SEMP) is to ensure prevention of pollution to land, air or water and compliance with current environmental legislation, and to provide a benchmark for best practice. For the avoidance of doubt, pollution prevention procedures include, but are not necessarily limited to all aspects of traffic, plant and materials management, waste management, surface water and drainage management and asphaltic and concrete management. The SEMP must be included in the site file and used as toolbox talk during site induction for all site personnel. All site personnel must sign to confirm they have received toolbox talk.

1.0 ACRONYMS & ABBREVIATIONS

CAR	Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended)
CNR	Canmore National Record
DMRB	Design Manual for Roads and Bridges
DPMEE	Dust, Particulate Matter and Exhaust Emissions
Duty of Care	A legal obligation to take reasonable care and avoid causing damage.
EPS	Edge Protection System
EWC	European Waste Catalogue
GBRs	General Binding Rules
GPPs	Guidance for Pollution Prevention. In Scotland, GPPs are a series of documents developed by SEPA. Each GPP is targeted at a particular type of business or activity and covers environmental good practice to minimise pollution. The GPPs also make reference to environmental legal obligations.
GPZ	Groundwater Protection Zones
INNS	Invasive Non-Native Species
IGDL	Inventory Garden & Designed Landscape
LGS	Local Geodiversity Site
NRMM	Non-Road Mobile Machinery is a broad category which includes mobile machines, and transportable industrial equipment or vehicles which are fitted with either an internal spark ignition petrol engine, or a compression ignition diesel engine and not intended for transporting goods or passengers on roads. Examples of non-road mobile machinery include, but are not limited to: (i) generators, (ii) bulldozers, (iii) pumps, (iv) construction machinery, (v) mobile cranes, etc.
NMU	Non-Motorised Users are considered to be all non-motorised traffic, including pedestrians, cyclists and equestrians (with particular consideration of the needs of those with disabilities)
NVZ	Nitrate Vulnerable Zone
SAC	Special Area of Conservation
SEMP	A Site Environmental Management Plan describes potential environmental impacts and activities of a project / site and ways to manage and mitigate these.
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Drainage Systems are a sequence of management practices and control structures designed to drain surface water in a more sustainable way than conventional techniques.
SWMP	Site Waste Management Plan
TM	Traffic Management

2.0 General

2.1 A copy of this SEMP must always be kept on-site, with it forming part of the site induction procedure.

2.2 **Any queries or concerns with regard to information detailed in this SEMP should be addressed to the NW Environment Team before any works commence**.

2.3 **This is a DRAFT SEMP for consultation purposes. A final version of the SEMP will be provided prior to works commencing.**

2.4 Some works will be carried out below Mean High Water Springs (MHWS) level. Works carried out below MHWS level will require a Marine Licence from Marine Scotland under the Marine (Scotland) Act 2010. All conditions of the Marine Licence must be strictly adhered to throughout the works.

2.5 Ecological walkovers of the surrounding area were carried out by Highland Ecology and Development (HED) Ltd in August 2021. The walkover identified several signs of otter *(Lutra lutra*) usage such as spraints, lay-up areas and holts along the shore of Loch Etive. Camera trapping of a potential otter natal holt was carried out in July 2022 which determined that the otter holt does not function as a natal holt. Works can therefore progress under the BEAR Scotland organisational otter licence (licence number: 195403) which permits disturbance of non-natal resting places.

2.6 **All measure of the BEAR Scotland Organisational Otter Licence (195403) and Species Protection Plan will be adhered to during construction and a copy of both must be kept on site at all times.**

2.7 A Preliminary Roost Assessment (PRA) carried out by HED in August 2021 identified 6 trees that require further Stage 2 assessment ahead of works that may cause disturbance within 30m. **Works cannot take place until these additional bat surveys have been completed.**

2.8 If works are progressed during the bird breeding season (March to August inclusive) then nesting bird checks must be carried out prior to works. Where evidence is found for breeding birds, a suitable buffer (>5m depending on species) must be established.

2.9 Previous surveys have identified Japanese knotweed (*Fallopia japonica*) within road verges and along the shore throughout the scheme extent. The contractor and machine operators must adhere to an agreed Construction Methodology Statement and mitigation plan which will include a detailed method statement that outlines the management of areas of Japanese knotweed within 7m of the working corridor.

2.10 BEAR Scotland may appoint an Environmental Clerk of Works (EnvCoW) to visit the site periodically to supervise operations onsite during critical work phases and to ensure appropriate environmental safeguards are being adhered to. The EnvCoW will also undertake a pre-construction check for protected species and INNS and advise site staff on appropriate working methods and/or mitigation measures.

2.11 **This SEMP will only remain valid for one year from date of issue**. If works are delayed beyond this date, it is the responsibility of the scheme engineer to inform the NW Environment Team so that the environmental requirements can be reassessed.

3.0 Sensitive Receptors

3.1 Vehicular travellers and non-motorised users (NMUs) that may use the A85 within the scheme extent.

3.2 The 'Clais Dhearg' Site of Special Scientific Interest (SSSI) which lies 130m southwest of the scheme extent (at nearest point) and is designated for:

- Dragonfly assemblage
- Marsh fritillary butterfly (*Euphydryas aurinia*)
- Oligotrophic Loch
- Open water transition fen
- Upland oak woodland

3.3 Populations of protected species including bats (Chiroptera), otter (*Lutra lutra*), red squirrel (*Sciurus vulgaris)*, badger (*Meles meles*) and nesting birds which may be present within the scheme extent.

3.4 One active otter holt which is located approximately 100m north of the works at NM 94174 34478 as well as several otter lay-up areas (Appendix 1).

3.5 Populations of invasive non-native species (INNS) or injurious weeds that may be present on road verges within the scheme extent. In particular, Japanese knotweed, which is known to be present within road verges and along the shore of Loch Etive within the scheme extent (Appendix 1).

3.6 Two areas of woodland listed on the Ancient Woodland Inventory (AWI) as Ancient (of semi-natural origin). One area, 189.91ha in size, lies 140m southwest of the scheme extents and 5.02ha lies 150m west of the scheme.

3.7 The shore of Loch Etive (ID: 200073) which lies to the east of the A85 throughout the scheme extent (approximately 1m at its nearest point).

3.8 Three unclassified watercourses that are culverted beneath the A85 within the scheme extent. All three of these flow in an easterly direction before discharging into Loch Etive.

3.9 The 'Oban and Kintyre' groundwater body and Drinking Water Protected Area (Ground).

4.0 Air Quality

4.1 Where possible and in line with Covid-19 restrictions, construction operatives will be encouraged to car-share, use organised company transport or public transport, reducing greenhouse gas emissions.

4.2 Cutting, grinding, and sawing equipment must also be fitted or used in conjunction with suitable dust suppression techniques e.g., water spray or local exhaust ventilation system that fits directly onto tools.

4.3 All plant, machinery and vehicles associated with the scheme must be maintained to the appropriate standards and must switch their engines off when not in use.

4.4 The movement of dusty material will be minimised by appropriately planning material movements.

4.5 All delivery vehicles carrying material with dust potential will be covered when travelling to or leaving site, preventing the spread of dust beyond the work area.

4.6 Material stockpiles will be reduced as much as reasonably practicable by using a 'just in time' delivery system. All material will also be stored on made ground (e.g. within the A85 carriageway boundary), away from potential pollution pathways such as drains and watercourses.

4.7 Any stockpiled material on site will be monitored daily to ensure no risk of dust emissions exists. Where a risk of dust emissions exists from stockpiles, these are to be dampened down. This is likely to require the use of mobile water bowsers.

4.8 Materials should be removed from site as soon as is practical.

4.9 Good housekeeping will be employed throughout the works.

5.0 Ecology & Nature Conservation

5.1 Works are to be strictly limited to areas required for access and VRS works. Unnecessary encroachment onto terrestrial or aquatic areas will not be tolerated.

5.2 Site personnel are instructed not to approach or touch any animals seen on site.

5.3 Measures to be implemented to protect the aquatic environment are detailed in Section 11: Road Drainage and Water Environment.

5.4 **Works below MHWS level will be undertaken during periods of low-tide and will avoid the use of any plant or machinery within the watercourse**. **No discharges into any watercourses or drainage systems are permitted**. Appropriate containment measures must be in place to prevent any loss of construction materials into the water environment (e.g. dust, debris, wet concrete). Any dust, concrete debris, or other materials produced during works must be contained and removed from site to be disposed of appropriately. Materials produced during works will not be allowed to enter Loch Etive. **The contractor must provide detailed working and containment methods to be approved by BEAR Scotland prior to works**.

5.5 Site personnel should remain vigilant for the presence of protected species including bats, otter, red squirrel, badger and nesting birds over the works period.

5.6 Site personnel should remain vigilant for the presence of INNS over the works period, particularly within the footprint of or within 7m of excavation works.

5.7 All construction operatives are to be briefed through toolbox talks prior to works commencing using the toolbox talk templates for **bats, otter, red squirrel, badger, nesting birds,** and **injurious weeds and invasive plants** in Appendices 2-7. The talks are to specifically cover ecology and field signs of protected species, identification and biosecurity of injurious weeds and invasive plants, and legislation. Briefings are to be clear and unambiguous, with all staff informed to stop works where a concern is raised. Works may not commence until advice from an appropriately qualified ecologist is sought and appropriate mitigation is in place, where required.

5.8 All measure of the BEAR Scotland Organisational Otter Licence (195403) and Species Protection Plan will be adhered to during construction and a copy of both will be kept on site at all times.

5.9 If deemed necessary, BEAR Scotland will appoint an EnvCoW to visit the site periodically to supervise operations onsite during critical work phases and to ensure appropriate environmental safeguards are being adhered to. The EnvCoW will also undertake a pre-construction check for protected species and advise site staff on appropriate working methods and/or mitigation measures.

5.10 If a bat is found or is seen flying during the day on site, all works must stop and the BEAR NW Environment Team (or EnvCoW) should be contacted.

5.11 If an active bird nest (e.g. eggs or young present, adult sitting on nest) is identified in the vicinity of works, all works within 30m of the nest must stop until the BEAR Scotland NW Environment Team can provide advice.

5.12 Where protected mammals are encountered or move within 50m of the active works, works will cease until the animal(s) move further away than 50m from the construction site or until the BEAR Scotland NW Environment Team can provide advice.

5.13 All material, machinery and equipment will be subject to checks for resting mammals daily prior to any works commencing to prevent entrapment or injury of any mammals.

5.14 A 'soft start' will be implemented on site each day. This will involve switching on vehicles and checking under/around vehicles and the immediate works area for mammals prior to works commencing to ensure none are present and that there is a gradual increase in noise.

5.15 Any excavations, exposed pipes/drains, or areas where an animal could become trapped (e.g. storage containers) will be covered over when not in use, at the end of each shift, and following completion of the works to avoid animals falling in and becoming trapped.

5.16 If fencing is utilised at any point during the works, a gap of 200mm from ground level must be provided, allowing free passage for mammals and preventing entrapment.

5.17 No tree felling is permitted during works.

5.18 If required, artificial lighting should be directed away from woodland, road verges, and water bodies as far as is safe and reasonably practicable.

5.19 If INNS are identified in working areas within the scheme extent, these areas must be avoided and the NW Environment Team contacted for further advice. No works may take place within 7m of any INNS until the NW Environment Team can advise on any additional mitigation requirements.

5.20 Material, machinery, and vehicles should not be stored on or near INNS or injurious weeds.

6.0 Cultural Heritage

6.1 There should be no storage of vehicles, plant, or materials against any buildings, walls or fences.

6.2 People, plant, and materials should, as much as is reasonably practicable, only be present on areas of made / engineered ground (i.e. A85 carriageway). Where access outwith these areas is required for the safe and effective completion of the scheme, it should be reduced as much as is reasonably practicable and ideally be limited to access on foot.

6.3 All site personal are to be briefed on the importance of archaeological finds and are instructed, as part of the site induction, to inform the site supervisor where potential finds are made.

6.4 Should any unexpected archaeological evidence be discovered by the works, construction activities in the vicinity should be halted and the BEAR Scotland NW Environmental Team should be contacted.

7.0 Landscape Effects

7.1 Throughout all stages of the works, the site must be kept clean and tidy, with materials, equipment, plant and wastes appropriately stored, reducing the landscape and visual effects as much as possible.

7.2 Where applicable, upon completion of the works, any damage to the local landscape (i.e. damage to grass verges or hardstanding of the A85) should be reinstated as much as is practicable.

7.3 Works are to avoid encroaching on land and areas where work is not required or does not have permission to do so. This includes general works, storage of equipment/containers and parking.

7.4 The site is to be left clean and tidy following works.

7.5 Mitigation detailed in Section 13.0: Waste and Material Use and Re-use will be strictly adhered to.

8.0 Noise & Vibration

8.1 The best practice means, as defined in Section 72 of the Control of Pollution Act 1974 and BS5228-1:2009+A1:2014 Code of Practice for Noise and Vibration Control on Construction and Open Sites will always be employed to reduce noise to a minimum.

8.2 All site personnel will be fully briefed in advance of works regarding the need to minimise noise during works and of the site-specific sensitivities.

8.3 If any works occur outwith the scheme extent, the contractor must first inform residents within the vicinity of the deliveries and/or additional works. This is particularly important for night works and/or deliveries.

8.4 Plant, machinery and equipment are to be fitted with effective silencers where possible. Where fitted, and where permitted under Health and Safety requirements, white noise reversing alarms should be utilised during construction.

8.5 Where possible, inherently quiet plant should be selected for construction works.

8.6 All plant, machinery, and vehicles will be switched off when not in use.

8.7 All plant will be operated in such a way that reduces noise emissions and will be maintained regularly to the appropriate standards.

8.8 Where ancillary plant such as generators are required, they will be positioned so as to cause minimum noise disturbance. Where deemed necessary, acoustic screens will be utilised.

8.9 Temporary staff toilets/site compound will be located as far as is practicable from sensitive receptors.

9.0 Vehicle Travellers

9.1 Traffic management will be designed in accordance with Chapter 8 of the Traffic Signs Manual.

10.0 Pedestrians, Cyclists, Equestrians and Community

10.1 Appropriate provisions / measures should be implemented within the traffic management to allow the safe passage of NMUs through the site.

11.0 Road Drainage & Water Environment

11.1 All conditions of the Marine Licence must be adhered to for the duration of works. No deviation from the Marine Licence is permitted without the further written consent of Marine Scotland. Should any deviation to the agreed works be required, the BEAR Scotland NW Environmental Team should be contacted in the first instance.

11.2 A copy of the Marine Licence will be retained on site and made available for inspection as required.

11.3 **Works below MHWS level will be undertaken during periods of low-tide and will avoid the use of any plant or machinery within the watercourse. No discharges into any watercourses or drainage systems are permitted**. Appropriate containment measures must be in place to prevent any loss of construction materials into the water environment (e.g. dust, debris, wet concrete). Any dust, concrete debris, or other materials produced during works must be contained and removed from site to be disposed of appropriately.

11.4 All on-site activities should operate in accordance with relevant pollution Best Practice and shall follow that detailed in the attached Toolbox Talk 'Water Pollution – Silt' (Appendix 8).

11.5 All plant and equipment must be regularly inspected for any signs of damage and leaks. A checklist will be present to make sure that the checks have been carried out.

11.6 The designated storage area must be on impermeable ground and fully bunded.

11.7 Rock armour must be washed off site prior to installation to remove fine sediments. **The subcontractor is responsible for making the arrangements to ensure rock armour is clean prior to its arrival on site.**

11.8 All hazardous material utilised on site is required to undergo assessment under the Control of Substances Hazardous to Health (COSHH) Regulations 2002. These assessment(s) will contain a section on environment which highlights any precautions and mitigation requirements.

11.9 All hazardous material will be stored in line with COSHH data within a designated COSHH storage area at least 10m from watercourses, drains, and waterbodies. Oils and chemicals will be stored in appropriately bunded storage cabinets. The COSHH store will be locked with only appropriate personnel having access and an inventory register being maintained.

11.10 Where applicable and practicable, bio-degradable hydraulic fluids and oils should be utilised in machinery.

11.11 Where fuel is stored on site and refuelling actives are undertaken, the following will apply:

- Only suitably double-skinned fuel bowser(s) or tank(s) in line with General Binding Rules the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) will be utilised on site;
- The fuel bowser(s) and/or tank(s) must be stored away at least 10m from any watercourses, waterbodies or drains and away from being struck by plant and machinery;
- All distribution and fuelling nozzles will be fitted with a shut-off valve;
- All refuelling activities are to be undertaken in a designated site with a drip tray positioned underneath the nozzles when not in use;
- All fuel containers and nozzles are to be secured, for example with a lock when not in use; and
- All staff undertaking refuelling actives are to be appropriately trained and undertake these activities in line with site refuelling procedures.

11.12 During refuelling of smaller mobile plant, a funnel and drip trays must be used.

11.13 A spillage control procedure will be in place in which all staff are to be trained.

11.14 Suitable spill kits are to be available on site with all staff to be trained in their use.

11.15 Spill kits must be quickly accessible to capture any spills should they occur.

11.16 The ground / stone around the site of a spill must be removed, double-bagged and taken off site as special contaminated waste.

11.17 All spills must be logged and reported. In the event of any spills into the water environment, all works must stop, and the incident reported to the project manager and the BEAR Scotland NW Environment Team. SEPA must be informed of any such incident as soon as possible using the SEPA Pollution Hotline.

11.18 Generators and static plant may have the potential to leak fuel and/or other hydrocarbons and should have internal bunding where possible. A secondary containment system should also be in place during use to catch leaks or spills. For example, plant nappies or drip trays with a capacity of 110% should be placed beneath the equipment.

11.19 Mitigation detailed in Section 5.0: Ecology and Nature Conservation will be strictly adhered to.

12.0 Geology & Soils

12.1 The parking of machinery/personnel and storage of equipment on verges will be minimised as far as is reasonably practicable.

12.2 Upon completion of the works, any damage to the local landscape (i.e. damage to grass verges) should be reinstated as much as is practicable.

12.3 Topsoil and subsoil reused onsite must be spread evenly in a single layer < 200 mm in height to ensure the soil profile is maintained across the works location.

12.4 Multiple handling of soil derived from excavations must be minimised.

12.5 Topsoil reused onsite must not be traversed by heavy machinery.

12.6 The extent and duration of exposed soil must be kept to the minimum required for the works.

12.7 Mitigation measures to prevent contamination of soils through loss of containment are discussed in Section 11.0: Road Drainage & Water Environment will be strictly adhered to.

13.0 Waste & Material Use & Re-Use

13.1 The subcontractor will adhere to waste management legislation and ensure compliance with their Duty of Care.

13.2 The waste hierarchy (Reduce, Reuse, Recycle and Dispose) will be employed throughout the construction works.

13.3 All appropriate waste documentation must be present on-site and be available for inspection.

13.4 All wastes and unused materials will be removed from site in a safe manner by a licensed waste carrier upon completion of the works. The appointed waste carrier will have a valid SEPA waste carrier registration, a copy of which will be retained by BEAR Scotland. A copy of the waste transfer is also to be provided to BEAR Scotland as early as practicably feasible and retained.

13.5 During the site induction, all staff are to be informed that littering will not be tolerated. Staff are also encouraged to collect any litter seen on site.

13.6 Where applicable, all temporary signage will be removed from site on completion of the works.

13.7 All hazardous material will be stored in line with Section 11.0: Road Drainage & Water Environment.

13.8 A copy of the duty of care paperwork should be provided and filed appropriately in accordance with the Code of Practice (as made under Section 34 of Environmental Protection Act 1990 as amended).

13.9 Any contaminated ground as a result of the works should be removed and transferred off site as special waste.

13.10 Any COSHH waste and special waste should be removed from site by a specialised waste carrier. COSHH waste should NOT be mixed with general waste and/or other recyclables.

Appendix 1 – Location of Highlighted Ecological Features

Loch Etive: Phase 2

[Redacted]

Appendix 2 – Toolbox Talk: Working with Bats

Tool-Box Talk	
Topic:	TTN-008 Toolbox Talk: Working with Bats
Issue No:	3
Date:	21/05/2021

OVERVIEW

There is potential for protected species, including bats, to be present on site. The guidance below must be followed to protect these species and prevent breaches of wildlife legislation.

It is your responsibility to ensure the work you do is done without harming or disturbing protected species and/or their places of shelter or breeding. **The operator/person committing the offence will be held legally responsible.**

If you have any concerns that bats are being disturbed by works, contact the BEAR NW, NE, or SE Environment Team or BEAR Control Room (if outside of normal office hours).

LEGAL PROTECTION

All UK bats are European Protected Species and are protected by law, along with their roosts, under the Conservation (Natural Habitats &c.) Regulations 1994 (as amended in Scotland). There has been no change in the protected status of European Protected Species as a result of Brexit. It is an offence to deliberately or recklessly:

- Kill, injure, or capture a bat;
- Disturb or harass a bat; or
- Damage, destroy, or obstruct access to any place a bat uses as a roost.

If an offence listed above occurs, the operator/person committing the crime can be **sentenced to up to six months' imprisonment and/or unlimited fines**. Additionally, any profits made as a consequence of not following lawful process can be confiscated and items used to commit the offences (e.g. vehicles, plant, machinery) can be forfeited.

ECOLOGY AND THREATS TO BATS

Bats are nocturnal mammals that use echolocation (high-frequency sounds) to navigate. They occur in rural and urban areas in habitat such as woodland, farmland, parks, and gardens and are often seen feeding over water. All species of bats in the UK feed on insects. Bats may use a variety of places for roosting, including holes, cracks and crevices within structures (e.g. bridges, retaining walls), buildings, and trees. They are frequently found roosting in old masonry bridges and walls and may use roost features in more modern bridges as well, such as expansion joints.

Bats are vulnerable to human activity and to the loss foraging and roosting habitat. Sensitive times for bats include winter (when bats hibernate) and the summer maternity period (when females nurse their young). Bats take a long time to reach maturity and breed; **therefore, any disturbance to bats, especially during the sensitive times, can have considerable impact on population recovery.**

Tool-Box Talk	
Topic:	TTN-008 Toolbox Talk: Working with Bats
Issue No:	3
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BAT SPECIFIC MITIGATION AND WORKING METHODS

Specific controls are in place on site that all site staff will follow:

- **Site staff will remain vigilant for sightings of bats.**
  - If any bats are found on the bridge or are seen on the ground or flying during the day, staff should contact the BEAR NW, NE, or SE Environment Team for advice. BEAR Control Room should be contacted outside of normal office hours.
- **No night works should be undertaken where possible.**
  - Works should be scheduled to reduce the requirement and duration of any night work where possible and safe to do so.
- **Artificial lighting should be avoided where possible and safe to do so.**
  - If artificial lighting is required, it should be used for as short a duration as possible and only where required (i.e. light should only be directed on the immediate area of works).
  - Artificial lighting (including lights from the site compound and other infrastructure) should be directed away from nearby watercourses, trees, or other suitable habitat where possible and safe to do so.
  - If lighting is required, it should be angled in such a way (where possible and safe to do so) that it will not act as a barrier for bats commuting or foraging in the area.
- **Disturbance from work-related activities should be reduced where possible.**
  - Continuous activities that could disturb bats (e.g. site compounds, generators, storage of heavy machinery with engines running, etc.) should be positioned at least 30m away from sensitive features (e.g. bridges, buildings, trees) where possible.

STEPS TO TAKE IF BATS ARE FOUND

If bats are found in the immediate working area, on the ground, or flying outside during the day:

- Bats may land on the ground if they are injured or grounded - **STOP WORKS.**
- Bats are nocturnal and will not normally be active during daylight hours - **STOP WORKS.**
- Report the incident to the BEAR NW, NE, or SE Environment Team or BEAR Control Room (if outside normal office hours).
- **DO NOT TRY TO CATCH BATS. DO NOT HANDLE BATS** without instruction.
- Advice will be given on how to proceed.

Appendix 3 – Toolbox Talk: Working with Otters

Tool-Box Talk	
Topic:	TTN-011 Toolbox Talk: Working with Otters
Issue No:	4
Date:	21/05/2021

OVERVIEW

There is potential for protected species, including otters, to be present on site. The guidance below must be followed to protect these species and prevent breaches of wildlife legislation.

It is your responsibility to ensure the work you do is done without harming or disturbing protected species and/or their places of shelter or breeding. **The operator/person committing the offence will be held legally responsible**.

If you have any concerns that otters are being disturbed by works, contact the BEAR NW, NE, or SE Environment Team or BEAR Control Room (if outside of normal office hours).

LEGAL PROTECTION

Otters are a European Protected Species and are protected by law, along with their resting sites, under the Conservation (Natural Habitats &c.) Regulations 1994 (as amended in Scotland). There has been no change in the protected status of European Protected Species as a result of Brexit. Otters also receive protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). It is an offence to deliberately or recklessly:

- Kill, injure, or capture an otter;
- Disturb or harass an otter; or
- Damage, destroy, or obstruct access to any place which otters may use for shelter/protection or breeding (i.e. holts, couches).

If an offence listed above occurs, the operator/person committing the crime can be **sentenced to imprisonment and/or fines**. Additionally, any profits made as a consequence of not following lawful process can be confiscated and items used to commit the offences (e.g. vehicles, plant, machinery) can be forfeited.

ECOLOGY AND THREATS TO OTTERS

Otters are semi-aquatic mammals that can be found in both freshwater and coastal habitats. Otters in freshwater habitats are primarily nocturnal, whereas those found in coastal environments are frequently active during the day. Otters live in dens called holts, usually near the edges of watercourses or waterbodies, and will feed on fish, crustaceans, amphibians, and sometimes small mammals. Otter scat is called spraint and is used to mark territory. It usually contains fish bones and becomes flaky and whitish with age. Above-ground resting sites are called couches and can be found in dry, sheltered locations near water, such as under bridges or below overhanging riverbanks. Breeding can take place at any time of year and young are raised in below-ground dens called natal holts. All resting sites (holts and couches) are protected by law from disturbance and destruction.

Otters are vulnerable to human activity and to the loss foraging habitat and resting sites. Natal holts are particularly sensitive as the young are not fully mobile for a few months. **Therefore, disturbance to otters or disturbance, damage, or destruction of their resting sites, especially natal holts, can have a considerable impact on local populations.**

Tool-Box Talk	
Topic:	TTN-011 Toolbox Talk: Working with Otters
Issue No:	4
Date:	21/05/2021

OTTER SPECIFIC MITIGATION AND WORKING METHODS

Specific controls are in place on site that all site staff will follow:

- Any machinery stored on site must be checked at the start of each shift for resting otters.
- A "soft start" must be implemented on site each morning. This will involve switching on vehicles and checking under/around vehicles and the immediate work area for otters prior to works commencing to ensure none are present and that there is a gradual increase in noise.
- Any excavations, entrances to pipes/drains, or areas where an animal could be trapped (e.g. storage containers) must be covered over when not in use, at the end of each shift, and following completion of the works to avoid otters or other animals falling into them and becoming trapped.
- If excavations (e.g. trenches) cannot be covered, escape ramps must be installed to allow trapped mammals to escape.
- If fencing is utilised at any point during the works, a gap of 200mm from ground level must be provided, allowing free passage for otters and preventing entrapment.
- Artificial lighting used during night works must be directed away from watercourses and any potential otter resting sites as far as is safe and reasonably practicable.
- Passage for otters under bridges and along watercourses (both upstream and downstream) must be maintained for the duration of the works where possible.
- If exclusion zones around otter resting sites are required, no works may take place within exclusion zones and site staff must not enter exclusion zones.
- All pollution prevention measures detailed in the Site Environmental Management Plan must be adhered to.
- Staff must remain vigilant for sightings of otters.

STEPS TO TAKE IF OTTERS ARE FOUND

- Otters are most likely to be found in or near water.
- If you see an otter near or within the site compound or works area, **STOP WORKS** until the otter moves at least 50m away from works or until the BEAR Scotland NW, NE, or SE Environment Team can provide advice.
- Report the incident to the BEAR NW, NE, or SE Environment Team or BEAR Control Room (if outside normal office hours).
- **DO NOT APPROACH THE OTTER**. Advice will be given on how to proceed.

Appendix 4 – Toolbox Talk: Working with Red Squirrels

Tool-Box Talk	
Topic:	TT-092 Toolbox Talk: Working with Red Squirrels
Issue No:	2
Date:	21/05/2021

OVERVIEW

There is potential for protected species, including red squirrels, to be present on site. The guidance below must be followed to protect these species and prevent breaches of wildlife legislation.

It is your responsibility to ensure the work you do is done without harming or disturbing protected species and/or their places of shelter or breeding. **The operator/person committing the offence will be held legally responsible**.

If you have any concerns that red squirrels are being disturbed by works, contact the BEAR NW, NE, or SE Environment Team or BEAR Control Room (if outside of normal office hours).

LEGAL PROTECTION

Red squirrels and their dreys (resting places) are protected by law under Schedules 5 and 6 of the Wildlife and Countryside Act (WCA) 1981 (as amended), and as amended by the Nature Conservation (Scotland) Act 2004. It is an offence to deliberately or recklessly:

- Kill, injure, or take a red squirrel;
- Disturb a red squirrel when it is occupying a structure of place for shelter or protection; or
- Damage, destroy, or obstruct access to a red squirrel drey or any other structure which a red squirrel uses for shelter or protection.

If an offence listed above occurs, the operator/person committing the crime can be **sentenced to imprisonment and/or fines**. Additionally, any profits made as a consequence of not following lawful process can be confiscated and items used to commit the offences (e.g. vehicles, plant, machinery) can be forfeited.

ECOLOGY AND THREATS TO RED SQUIRRELS

Red squirrels are found primarily in areas of woodland, as they feed, nest, and breed in trees. Mixed conifer woodland is ideal for red squirrel, as they feed on seeds from pine, spruce, and larch cones, along with nuts, fungi, and vegetation. They are active all year round and are can be seen during the day, although they are more active at dawn and dusk. Red squirrel nests are called dreys. They are approximately spherical (about the size of a football), built of leaves and twigs, and are usually found in forked branches or near the trunk of mature or semi-mature trees. Red squirrels may also nest in tree cavities where available. The breeding season for red squirrel runs from February to September (inclusive) and is a sensitive period for red squirrel.

The UK's red squirrel population has declined dramatically due to competition with the invasive grey squirrel for resources and habitat. Grey squirrels also carry squirrelpox, a virus lethal to red squirrels but not to greys. Scotland is the stronghold of the red squirrel and supports 75% of the UK population. Red squirrels and their dreys are vulnerable to human activity and to the loss of foraging habitat and resting sites. **Therefore, any disturbance to red squirrels or their resting sites, especially breeding dreys, can have considerable impact on population recovery.**

Tool-Box Talk	
Topic:	TT-092 Toolbox Talk: Working with Red Squirrels
Issue No:	2
Date:	21/05/2021

RED SQUIRREL SPECIFIC MITIGATION AND WORKING METHODS

Specific controls are in place on site that all site staff will follow:

- Works during the red squirrel breeding season (February to September inclusive) that could cause disturbance or destruction of dreys (e.g. tree felling, works within 50m of a red squirrel drey) should be avoided where possible.
- A "soft start" must be implemented on site each morning. This will involve switching on vehicles and checking under/around vehicles and the immediate work area for red squirrels prior to works commencing to ensure none are present and that there is a gradual increase in noise.
- Any excavations, entrances to pipes/drains, or areas where an animal could be trapped (e.g. storage containers) must be covered over when not in use, at the end of each shift, and following completion of the works to avoid red squirrels or other animals falling into them and becoming trapped.
- If excavations (e.g. trenches) cannot be covered, escape ramps must be installed to allow trapped mammals to escape.
- Artificial lighting used during night works must be directed away from sensitive habitat that may be used by red squirrels (e.g. woodland) as far as is safe and reasonably practicable.
- If exclusion zones around red squirrel dreys are required, no works may take place within exclusion zones and site staff must not enter exclusion zones.
- Exclusion zones of 50m should be established around any breeding dreys. If monitoring confirms that the drey is not used for breeding, smaller exclusion zones (5m or to the nearest neighbouring tree, whichever is less) may be required. Works will otherwise require a licence from NatureScot to proceed.
- All pollution prevention measures detailed in the Site Environmental Management Plan must be adhered to.
- Staff must remain vigilant for sightings of red squirrels.

STEPS TO TAKE IF RED SQUIRRELS ARE FOUND

- Red squirrels are most likely to be active around dawn and dusk.
- If you see a red squirrel near or within the site compound or works area, STOP WORKS until it moves at least 50m away from works or until the BEAR Scotland NW, NE, or SE Environment Team can provide advice.
- Report the incident to the BEAR NW, NE, or SE Environment Team or BEAR Control Room (if outside normal office hours).
- DO NOT APPROACH THE RED SQUIRREL. Advice will be given on how to proceed.


Drey – Trees for Life


Squirrel-chewed cone – BEAR Scotland

Appendix 5 – Toolbox Talk: Working With Badger

Tool-Box Talk	
Topic:	TT-007 Toolbox Talk: Working with Badgers
Issue No:	3
Date:	21/05/2021

OVERVIEW

There is potential for protected species, including badgers, to be present on site. The guidance below must be followed to protect these species and prevent breaches of wildlife legislation.

It is your responsibility to ensure the work you do is done without harming or disturbing protected species and/or their places of shelter or breeding. **The operator/person committing the offence will be held legally responsible.**

If you have any concerns that badgers are being disturbed by works, contact the BEAR NW, NE, or SE Environment Team or BEAR Control Room (if outside of normal office hours).

LEGAL PROTECTION

Badgers and their setts are protected under the Protection of Badgers Act 1992, as amended by the Wildlife and Natural Environment (Scotland) Act 2011. Offences under the Act include:

- Wilfully taking, injuring, or killing a badger;
- Cruelty to a badger;
- Intentional or reckless interference with a badger sett;
- Sale or possession of a badger; and
- Marking or ringing of a badger.

The Protection of Badgers Act 1992 defines a sett as 'any structure or place which displays signs indicating current use by a badger'. Interfering with a badger sett includes:

- Damaging or destroying a sett or any part of it;
- Obstructing access to a sett;
- Disturbing a badger while it is in a sett; and
- Causing or allowing a dog to enter a badger sett.

If an offence listed above occurs, the operator/person committing the crime can be **sentenced to imprisonment and/or fines**. Additionally, any profits made as a consequence of not following lawful process can be confiscated and items used to commit the offences (e.g. vehicles, plant, machinery) can be forfeited.

ECOLOGY AND THREATS TO BADGERS

Badgers are nocturnal and are widespread throughout the UK. They are found in a variety of habitats, including woodland, farmland, scrub, and grassland. Badgers feed primarily on earthworms, but also eat small mammals, fruit, roots, and tubers. They leave their droppings in small pits called latrines, which are used to mark territory. Badgers are highly social and live in underground tunnel networks called setts, which may consist of one or several holes. The main sett is used for breeding, whereas annex or outlier setts are used less frequently. Setts in current use by badgers are recognised by tidy D-shaped holes with large soil heaps.

Tool-Box Talk	
Topic:	TT-007 Toolbox Talk: Working with Badgers
Issue No:	3
Date:	21/05/2021

Badgers are vulnerable to disturbance from human activity and to the loss of foraging habitat and setts. The breeding season (December to June inclusive) is a particularly sensitive time as the young are not fully mobile for a few months. **Therefore, any disturbance to badgers or their setts, especially during the breeding season, can have considerable impact on population recovery. Licences to interfere with a sett are not usually granted during the badger breeding season.**

BADGER SPECIFIC MITIGATION AND WORKING METHODS

Specific controls are in place on site that all site staff will follow:

- Any machinery stored on site must be checked at the start of each shift for resting badgers.
- A "soft start" must be implemented on site each morning. This will involve switching on vehicles and checking under/around vehicles and the immediate work area for badgers prior to works commencing to ensure none are present and that there is a gradual increase in noise.
- Avoid using heavy machinery within 30m of a sett, light machinery within 20m of a sett, or hand-digging or scrub clearance within 10m of a sett without first obtaining advice from the BEAR Scotland NW, NE, or SE Environment Team.
- Any excavations, entrances to pipes/drains, or areas where an animal could be trapped (e.g. storage containers) must be covered over when not in use, at the end of each shift, and following completion of the works to avoid badgers or other animals falling into them and becoming trapped.
- If excavations (e.g. trenches) cannot be covered, escape ramps must be installed to allow trapped mammals to escape.
- If fencing is utilised at any point during the works, a gap of 200mm from ground level must be provided, allowing free passage for badgers and preventing entrapment.
- Artificial lighting used during night works must be directed away from sensitive habitats (e.g. woodland, scrub) as far as is safe and reasonably practicable.
- If exclusion zones around badger setts are required, no works may take place within exclusion zones and site staff must not enter exclusion zones.
- All pollution prevention measures detailed in the Site Environmental Management Plan must be adhered to.
- Staff must remain vigilant for sightings of badgers and setts.
- If in any doubt whether a hole could be a badger sett, stop works and seek advice from the BEAR Scotland NW, NE, or SE Environment Team.

STEPS TO TAKE IF BADGERS ARE FOUND

- Badgers are most likely to be active at night or around dawn and dusk.
- If you see a badger near or within the site compound or works area, **STOP WORKS** until it moves at least 50m away from works or until the BEAR Scotland NW, NE, or SE Environment Team can provide advice.
- Report the incident to the BEAR NW, NE, or SE Environment Team or BEAR Control Room (if outside normal office hours).
- **DO NOT APPROACH THE BADGER**. Advice will be given on how to proceed.

Appendix 6 – Toolbox Talk: Birds

Tool-Box Talk	
Topic:	TT-048 Toolbox Talk: Birds
Issue No:	3
Date:	21/05/2021

OVERVIEW

There is potential for protected species, including breeding birds, to be present on site. The guidance below must be followed to protect these species and prevent breaches of wildlife legislation.

It is your responsibility to ensure the work you do is done without harming or disturbing protected species and/or their places of shelter or breeding. **The operator/person committing the offence will be held legally responsible.**

If you have any concerns that breeding birds are being disturbed by works, contact the BEAR NW, NE, or SE Environment Team or BEAR Control Room (if outside of normal office hours).

LEGAL PROTECTION

All species of breeding birds are protected by law under the Wildlife and Countryside Act (WCA) 1981 (as amended), and as amended by the Nature Conservation (Scotland) Act 2004. Further protection is provided by various schedules of the WCA 1981 to some rarer species or those vulnerable to disturbance and/or persecution. Schedule 1 birds (e.g. golden eagle, barn owl, red- and black-throated divers) receive the highest levels of protection. For all wild birds, it is an offence to deliberately or recklessly:

- Kill, injure, or capture a bird;
- Take, damage, destroy, or interfere with a nest of any bird while it is in use or being built;
- Obstruct or prevent any bird from using its nest; or
- Take or destroy an egg of any bird.

If an offence listed above occurs, the operator/person committing the crime can be **sentenced to imprisonment and/or fines**. Additionally, any profits made as a consequence of not following lawful process can be confiscated and items used to commit the offences (e.g. vehicles, plant, machinery) can be forfeited.

ECOLOGY AND THREATS TO BREEDING BIRDS

Over 400 bird species are regularly recorded in the UK, including both resident breeding species and migrants. In general, the breeding bird season runs from March to August (inclusive), although some bird species may breed earlier or later. Often the duration of the breeding season is dependent on weather conditions. Birds can use all types of habitat for breeding and may nest in trees, shrubs, grass, cliffs, shorelines, buildings, structures, on the ground, etc. Nests may be difficult to see and some bird species may raise multiple broods during a season. Gestation time and the time it takes chicks to fledge vary by species. The period that a nest is 'active' can range from a few weeks to three months or longer.

All active wild bird nests are protected by law. Levels of protection can vary by species and are usually stronger for species that are rarer, more vulnerable, or in severe population decline. Many of these species are vulnerable to human activity and the loss of foraging habitat and nesting sites. **Therefore, destruction of nests and disturbance to breeding birds or their nesting sites can have considerable impact on population recovery.**

Tool-Box Talk	
Topic:	TT-048 Toolbox Talk: Birds
Issue No:	3
Date:	21/05/2021

BREEDING BIRD SPECIFIC MITIGATION AND WORKING METHODS

Specific controls are in place on site that all site staff will follow:

- Works should be completed outwith the breeding bird season (March to August, inclusive) where possible to avoid impacting nesting birds.
- Any required vegetation clearance or tree felling should be undertaken outwith the breeding bird season where possible.
- Any brash or log piles produced during felling or vegetation clearance should be removed from site of placed at least 30m away from the working area (where possible) prior to the breeding bird season to reduce the risk of birds nesting near works.
- If works will occur during the breeding bird season, a nesting bird check should be undertaken within 24 hours prior to works.
- If an active bird nest is found (e.g. eggs or chicks present, adult sitting on nest), works must stop and the BEAR NW, NE, or SE Environment Team will be contacted. The BEAR Control Room should be contacted outside of normal office hours.
- If exclusion zones around active nests are required, no works may take place within exclusion zones and site staff must not enter exclusion zones.
- Any active nests must remain undisturbed until the nest is no longer active (e.g. all young fledge and leave the nest or nest is abandoned).
- All pollution prevention measures detailed in the Site Environmental Management Plan must be adhered to.
- Staff must remain vigilant for sightings of active bird nests.

STEPS TO TAKE IF BREEDING BIRDS ARE FOUND

- Birds can build nests in trees, shrubs, structures, cavities, or on the ground during March to August.
- Signs of active bird nests include:
  - Birds sitting on a nest;
  - Eggs present in a nest;
  - Birds seen flying with twigs/grass/other nesting material; or
  - Birds seen flying with insects/food for young.
- If you see an active bird nest near or within the site compound or works area, **STOP WORKS.**
- Report the incident to the BEAR NW or NE Environment Team or BEAR Control Room (if outside normal office hours).
- **DO NOT APPROACH THE BIRD NEST**. Advice will be given on how to proceed.

Appendix 7 – Toolbox Talk: Working with Injurious Weeds & Invasive Plants

TOOLBOX TALK

Working with Injurious Weeds & Invasive Plants

WHAT ARE THEY?

An **injurious weed** is a weed that has been designated by an agricultural or other governing authority as a plant that is injurious to agricultural or horticultural crops, natural habitats or ecosystems and humans or livestock. Typically, they are plants that grow aggressively, multiply quickly without natural controls (native herbivores, soil chemistry, etc.), and display adverse effects through contact or ingestion.

An **invasive species** is a species that has a tendency to spread to a degree believed to cause damage to the environment, human economy or human health.

WHAT SHOULD HAPPEN IF THESE PLANTS ARE FOUND ONSITE?

- Inform and consult your supervisor about the appropriate method of control.
- These may include:
  - leave well alone
  - dig up and deep-bury
  - control using herbicides

LEGISLATION

BEAR Scotland Ltd. is required to prevent spreading of injurious weeds and invasive species under:

- Weeds Act 1959;
- Schedule 9 of the Wildlife and Countryside Act 1981;
- Wildlife and Natural Environment (Scotland) Act 2011; and
- BEAR Scotland Ltd. contracts.

The following are classified as injurious weeds or invasive species:

Broad-Leaved Dock

Where: It can be found next to water or on disturbed ground. Well-known as remedy for stinging nettle irritations.

How it spreads? Seeds - can produce up to 60,000 seeds per year.

Description: Flower stalks up to 1m remaining brown during the wintertime and very large oval leaves with round tips.

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TOOLBOX TALK

Working with Injurious Weeds & Invasive Plants

 	**Curled Dock** Where: It grows in a wide variety of habitats, including disturbed soil, waste areas, roadsides, fields/meadows, shorelines, and forest edges How it spreads? Seeds spread by the wind or sticking to clothes and animal fur Description: Flower stalks up to 1m and smooth leaves shooting from basal rosette, with distinctive waved or curled edges.
 	**Common Ragwort** Where: Found in waste land, roadsides and grazing pastures. Grows in all cool and high rainfall areas. How it spreads? Seeds Description: Stems reach height up to 2m. Leaves have an unpleasant smell. The florets are bright yellow. Flowering period from June to November. Other: Classified as an injurious weed by the Weeds At 1959. Harmful to livestock. Controlled by cutting, hand-pulling or by using herbicides
 	**Creeping Thistle** Where: Native in cultivated fields, waste places, hedgerows and grassland. How it spreads? Seeds Description: Height up to 1.5m. Stems are mostly without spiny wings, but leaves are very spiny, lobed and smaller on the upper part of the flower stem. Pink-purple flowers.

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TOOLBOX TALK

Working with Injurious Weeds
&
Invasive Plants

Spear Thistle

Where: It colonises mostly bare disturbed ground and heavily grazed land.

How it spreads? Seeds are dispersed by wind, mud, water, human activity and possibly by ants.

Description: Up to 1.5m tall. The stem is winged, with numerous longitudinal spine-tipped wings along its full length. The leaves are stoutly spine, grey-green and smaller on the upper part of the flower stem

Himalayan balsam

Where: Commonly found on riverbanks and other damp habitat but can be found almost anywhere.

How it spreads? Seeds explode from pods when disturbed.

Description: Up to 2m tall with soft green or red-tinged stem. The crushed foliage has a strong musty smell. Pink flowers with a hooded shape between June and October.

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TOOLBOX TALK

Working with Injurious Weeds
&
Invasive Plants

Giant Hogweed

Where: Mainly at coastal areas and riverbanks

How it spreads? Seeds are dispersed short distances by wind

Description: Up to 5.5m. Mature plant has huge leaves and a stout, bright green stem with extensive dark reddish-purple splotches and prominent coarse white hairs. Hollow, ridges stems vary from 3-8cm in diameter. The umbrella-shaped flowers can grow up to 100cm in diameter. After several years of growth, the plant flowers between June and July.

Other: The sap is phototoxic. Contact with the plant sap prevents the skin from being able to protect itself from sunlight which results in skin blisters and burns. Protective clothing, including eye protection, should be worn when handling the plant.

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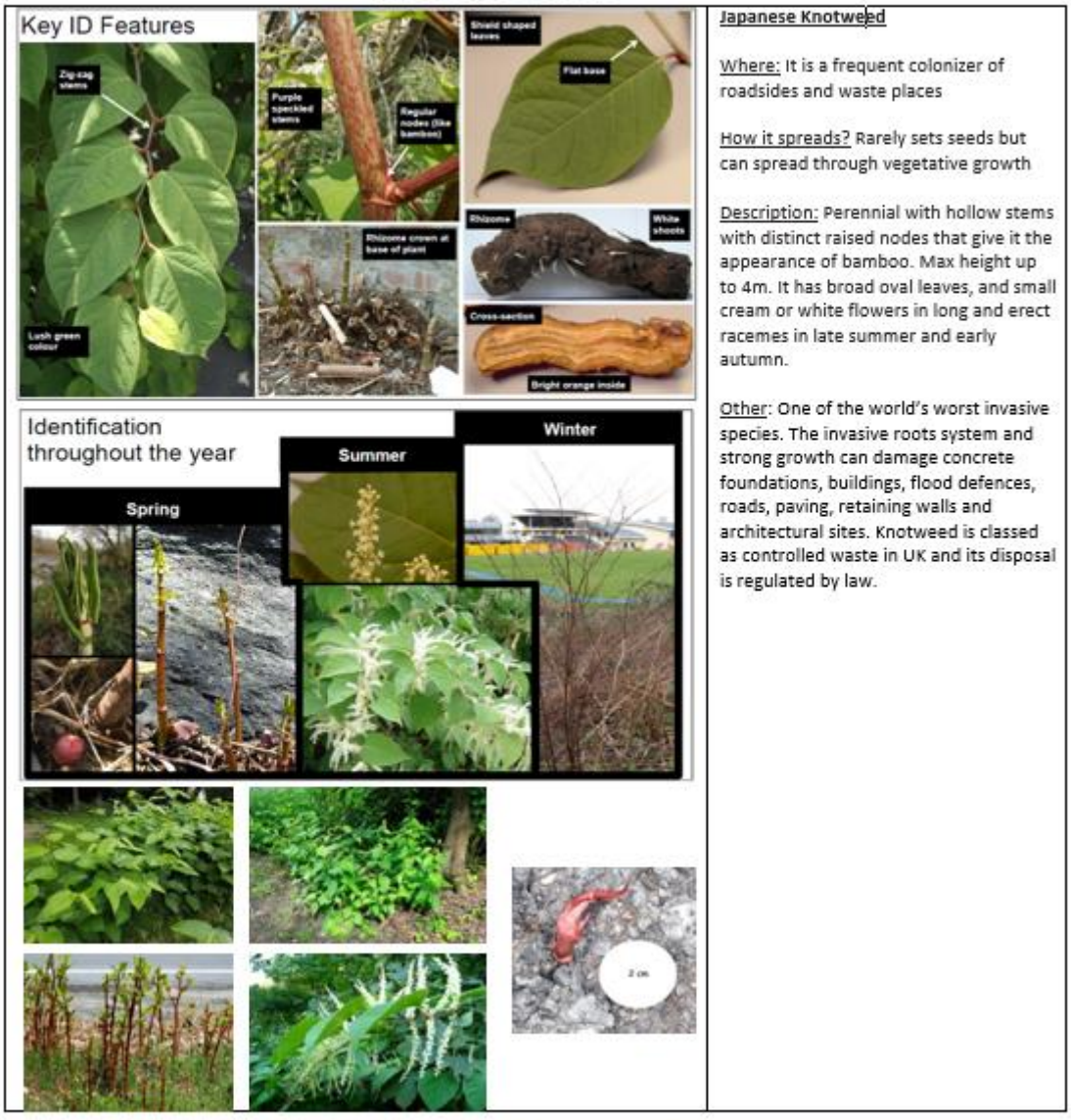
TOOLBOX TALK

Working with Injurious Weeds & Invasive Plants



Japanese Knotweed

Where: It is a frequent colonizer of roadsides and waste places

How it spreads? Rarely sets seeds but can spread through vegetative growth

Description: Perennial with hollow stems with distinct raised nodes that give it the appearance of bamboo. Max height up to 4m. It has broad oval leaves, and small cream or white flowers in long and erect racemes in late summer and early autumn.

Other: One of the world's worst invasive species. The invasive roots system and strong growth can damage concrete foundations, buildings, flood defences, roads, paving, retaining walls and architectural sites. Knotweed is classed as controlled waste in UK and its disposal is regulated by law.

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TOOLBOX TALK

Working with Injurious Weeds & Invasive Plants

Oilseed Rape

Where: Due to extensive agricultural use it is commonly seen on roadside verges.

How it spreads? Seeds

Description: Up to 1m tall with yellow flowers.

Other: Classified in the 4G Term Maintenance Contract as invasive therefore it must be controlled

Rosebay Willowherb

Where: Grows on waste land, scrub, rocks, woodlands and gardens.

How it spreads? Seeds remain viable in the seed bank for years. Once seedings are established the plant quickly reproduce by seeds and rhizomes.

Description: Up to 2.5m tall. Magenta to pink flowers blooms progressively from bottom to top from June to September. Flowers are succeeded by long narrow seed pods which curl open from their tips when ripe to release tiny seeds with fine white fluffy hairs that are dispersed on the wind.

Other: Classified in the 4G Term Maintenance Contract as invasive therefore it must be controlled. Can be controlled by forking out, cutting or with use of herbicide.

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REF No: TTN-009
Revision: 2
Date: 25/03/20

TOOLBOX TALK

Working with Injurious Weeds
&
Invasive Plants

Rhododendron Ponticum

Where: It colonises moorlands, uplands, shady woodlands and areas of acid soils, often in shaded areas.

How it spreads? Spreads by seed and layering.

Description: Densely branched evergreen shrub with though, leathery, dark green, oval leaves. It produces purple, funnel-shaped flowers in spring

Horsetail

Where: Wasteland, meadows and gardens

How it spreads? Vegetative reproduction and regeneration is by detached rhizome sections or tubers. Tubers germinate when separated from the rhizome

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Appendix 8 – Toolbox Talk: Water Pollution - Silt

REF No: TTN-012
Revision: 2
Date: 11/12/17

TOOLBOX TALK

Water Pollution - Silt

WHAT IS IT?

- Silt is the term used for very fine particles of soils
- During rain events silt can be washed off construction sites into nearby drains and watercourses.
- Silt pollution can be caused by rainwater runoff from topsoil stripped areas of site, pumping out and dewatering of excavations and cleaning of ditches and drains.
- Proper planning can avoid pollution and prosecution.

WHY IS IT IMPORTANT?

- To avoid environmental harm:
  - Large amounts of silt suspended in water can suffocate fish by blocking their gills,
  - Large amounts of silt will remove essential oxygen from the water and kill plants, animals and insects living in the water by stopping sunlight reaching them.
  - Silt can often combine with other contaminants such as oils and chemicals potentially causing greater pollution than silt alone.

DO's

- Only discharge silty water into designated settlement systems e.g. settlement tanks
- Check the effectiveness of site drainage and settlement systems; discolouration may indicate high pollutant levels.
- Maintain settlement systems periodically by cleaning out and disposing of correctly
- Stop pumping and contact your Supervisor if you believe there to be a problem
- Ensure all hard standings are kept clean. Notify your Supervisor if an area is silty or covered in mud
- Notify Site Supervision immediately if you see silt entering a watercourse or drain. Attempt to stop the flow or divert the course, using sand bags, excavating a grip or terram covered Straw bales.

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Show next page (Right Arrow)

REF No: TTN-012
Revision: 2
Date: 11/12/17

TOOLBOX TALK

Water Pollution - Silt

DO NOT

- Dewater any excavation without getting approval from your Supervisor as to where to discharge too
- Pump silty water directly into rivers, ditches or surface water drains
- Strip land of vegetation unless absolutely necessary, vegetation can naturally reduce silt run off
- Store soil, stone or similar materials within 10m of watercourses or drains
- Dig a grip to release ponded water to a watercourse

BECAUSE OF THE POTENTIAL FOR HARM, IT IS ILLEGAL TO ALLOW SILT TO ENTER A WATERCOURSE OR DRAIN. SILT POLLUTION SPOILS THE APPEARANCE OF WATERCOURSES, IS EASILY TRACEABLE TO THE SITE IT ORIGINATED FROM AND HAS BEEN RESPONSIBLE FOR SOME MAJOR PROSECUTIONS

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REGISTER OF PERSONNEL RECEIVING SEMP TOOLBOX TALK

NAME	COMPANY	SIGNATURE	DATE

NAME	COMPANY	SIGNATURE	DATE

Inducted by: _____ **Date:** _____