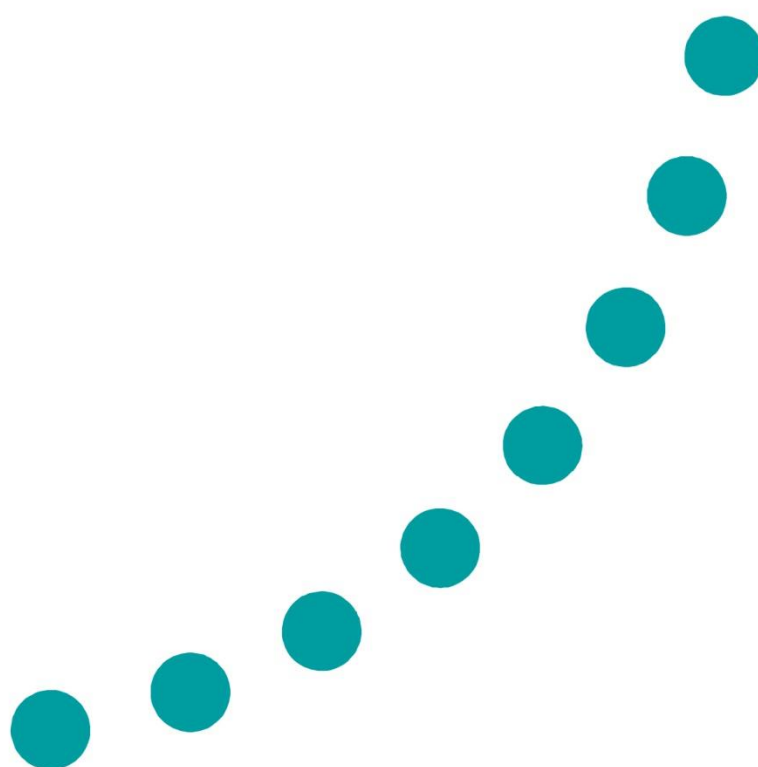




WREXHAM INDUSTRIAL ESTATE PLOT C4

Great Crested Newt Trapping and Translocation

Welsh Government

Wrexham Industrial Estate – Plot C4 Great Crested Newt Trapping and Translocation

1 Project Background

The purpose of the proposed works is to prepare the identified site for future vegetation clearance and construction development. The development will be restricted to the southern portion of the site, with the northern part retained as a wildlife mitigation area.

Previous surveys have identified a small population of newts within the Wrexham Industrial Estate area, with a peak count of 7, and therefore an exclusion and translocation exercise is required.

2 The Site

The site is located within the north western corner of the Wrexham Industrial Estate, an area of land situated on the north western side of Abenbury Way and to the south east of Erilas Lane.

The site comprises a variety of habitats which include semi-improved grassland, with broad-leaved semi-natural woodland along the northern and southern boundaries of the site. Dense/continuous scrub is present and extends along the southern end of the site. A watercourse is also located within the woodland area to the southern end of the site, as shown in the Phase 1 Habitat Plan, included within Annex 6 of the GCN Licence.

Access will be provided by agreement with the Welsh Government in two locations, one to the south western corner of the site (to be used as the main access into the development site) and the second is located in the north eastern corner, within the one way fencing, as shown in Figure 2134/002. This second access point should be used for accessing the proposed mitigation area to the north of the development area. Once construction of the ponds and refugia has been undertaken, the site should be accessed from the southern access point, in order to maintain minimum disturbance.

3 Proposed Works

Full details of the fencing and exclusion methodology are contained within a European Protected Species Licence application (Reference No: 57898) and associated Great Crested Newt Exclusion Fencing layout and ecological mitigation drawings for land at Abenbury Way (Plot C4), Wrexham Industrial Estate.

Details of the location of the proposed amphibian exclusion, one way and drift fencing are shown in Figures 2134/002 and 2134/SK003. Exclusion fencing will be erected to enclose the working zone of the proposed new development and the temporary storage areas, and one way fencing will be installed surrounding the associated mitigation area/site and accesses required. Within the working zone drift fencing will be erected to improve potential GCN capture rates allowing efficient removal of individuals from the working area. Both pitfall traps and artificial amphibian refugia (i.e. carpet tiles) will be placed at 5m centres along the inner face of the perimeter fence and on both sides of the internal drift fencing. Artificial reptile refugia (i.e. roofing felt tiles) will be placed within the exclusion area at a density of 50No per hectare, or at an average of 14m centres.

There will then be a period of capture to make reasonable effort to remove any Great Crested Newts and other amphibians from the construction area prior to any further works commencing. Great Crested Newt capture will be implemented for a minimum period of 30 days, under suitable weather conditions, and will continue until no further GCN are captured for 5 consecutive trapping nights, after which completion of the trapping effort will be agreed in discussion with Natural Resources Wales. Following completion of

the trapping periods, destructive searches will be undertaken by hand within the trapping area to capture any remaining GCN or other amphibians and reptiles.

Upon completion of capture of GCN, amphibians and reptiles from the working zone, sections of the internal drift fencing will be removed to allow access for works within the construction zone. However the perimeter fencing will be retained to prevent GCN moving back into the working zone.

The capture programme is intended to make all reasonable efforts to remove all GCN and reptiles from working areas to comply with the legislation. It will be necessary to maintain the amphibian exclusion fencing throughout the construction period, which will be the responsibility of the Contractor, with daily fencing checks being undertaken and recorded within a Fence Log. Daily checks will also be undertaken during the period of no works and checks and records of all repairs made will be recorded within the Fence Log. The fencing checks will be undertaken by the licensee or their appointed representatives.

4 Roles and Responsibilities

- Licence Holder: Welsh Government
- Named Ecologist: Sam Shove- TACP: The named ecologist will be acting on behalf of the licence holder and will be responsible for undertaking regular checks to ensure continued compliance with the EPS Licence.
- Contractor: Will be responsible for the implementation of the amphibian exclusion, one way and drift fencing, as well as the installation of pitfall traps and artificial GCN and reptile refugia. The contractor will be responsible for undertaking checks of the exclusion and one way fencing to ensure the fencing is maintained to a suitable standard to ensure newts/amphibians cannot return to the construction area and any repairs are undertaken when necessary, this will occur during the trapping period and post trapping prior to the start of construction/development in April 2015. Fencing checks and repairs should be recorded by the contractor within a Fence Log.

The Contractor will also be responsible for carrying out the daily checks and management of pitfall traps and refugia, and the translocation of all amphibians and reptiles to the receptor area. These checks and translocation will be carried out by suitably qualified and licenced ecologists and full records kept of all animals captured and translocated. The contractor will also be responsible for the construction of the ponds, excavated soil mounds/hibernacula/refugia within the mitigation area. All of the mitigation and enhancement works and the construction works will be completed in agreement with and under supervision of suitable qualified and licenced ecologists in accordance with the Great Crested Newt Mitigation Guidelines (English Nature, 2001)

5 Methodology

5.1 Fencing design and erection:

The following best-practice approach, based on the advice and fencing details within the Great Crested Newt Mitigation Guidelines (English Nature 2001), will be adopted. See Appendix 1.

- The exclusion fence should be sufficiently robust to withstand the capture programme, interim and construction periods.
- The outer perimeter fence shall be of the semi-permanent type, providing greater durability, and should be free standing.
- Prior to erection, the fence line should be inspected by the licence holder and/or their accredited agents to ensure that no amphibians are present in the fence construction area.
- The exclusion fence should be buried to a depth of 500mm beneath the ground surface.

- The fence should be erected so as to incorporate a curl at the top to prevent amphibians from climbing into the construction area.
- With regard to access points both within the perimeter and drift fencing, lipped channels will be installed and the exclusion fence tied in appropriately to ensure that there are no gaps etc. which would allow newts to enter the site. Where this is not possible the exclusion fencing should be extended away from the working corridor on both sides of the construction area for a distance of at least 5m. Under this arrangement, this would necessitate a newt travelling some distance to be able to cross or enter the working corridor which is considered to be very unlikely. The installation of pitfall traps either side of these accesses should also be used to further reduce this risk.
- The one way fencing should be positioned at a maximum angle of 45 degrees, in order to allow the newts to leave the proposed mitigation site. The fence should incorporate a curl at the top to prevent any newts, reptiles, amphibians returning into the area.
- Internal drift fencing should be utilised to maximise capture rates and target key areas such as hedgerows, trees/tree lines and areas of vegetation clearance etc. The internal drift fencing should be maintained for the duration of the capture programme, after which it would be removed to allow construction access.

5.2 Capture Methods

- Pitfall traps should be installed along the inside of the exclusion and drift fencing at 5m intervals. This density of pitfall traps will maximise the rate of capture, hence speeding up the capture programme. The rims of the pitfall traps should be at ground level in order to maximise capture rate. Lids should be put on the traps during the day to avoid predation, and a mammal ladder of adequate diameter should be present within each trap. A flotation device should also be placed within each trap to protect newts and any other captives should traps become flooded due to rainfall. Lids will also be put on the traps overnight in the case of any predicted adverse or inappropriate trapping weather.
- Artificial GCN refugia, for example carpet tiles, should be used as a secondary method of capture and will be located adjacent to the exclusion fence also at 5m intervals, (ensuring there is a pitfall trap/artificial refugia every 2.5m) and adjacent to areas of good potential habitat, for example around sections of hedgerow.
- Artificial reptile refugia, in the form of 1x1m and 0.5x0.5m roofing felt tiles, should be placed at a density of 50 tiles per hectare within the capture area.

5.3 Capture Programme

The fencing should be inspected on a daily basis with temporary repairs made immediately and permanent repairs made within 24 hours. A record of fence inspection and damage repair work should be kept by the licence holder and/or their accredited agents during the capture exercise as evidence that the newt-proof barrier is being properly maintained. Once trapping has ceased daily inspections of the fencing should be made by either the Project Ecologists or an appointed member of site staff and repairs made immediately, or where a repair cannot ensure an effective exclusion barrier then the section of fencing shall be fully replaced. Again temporary repairs made immediately and permanent repairs made within 24 hours, and full records and logs of these checks and repairs should be kept.

Great Crested Newts

- Pitfall traps should be left open overnight and checked the following morning by no later than 10am (earlier if temperatures rise rapidly) to ensure that amphibians are not left in full morning sun.
- Artificial GCN refugia should also be checked in the same timescale.

- Captures should be recorded with notes on location (compartment number and trap number), species, sex and life-stage. Water levels in traps should not be allowed to get too high, especially in times of heavy rainfall to ensure protection of newts and other animals.
- After each trap has been checked, the lid should be replaced and the trap left closed during the day. The traps should then be re-opened in the late afternoon/evening – any time after 4pm – for the night time capture.
- Any amphibians captured should be moved to the mitigation area, as identified within figures 2134/002 and 2134/SK003, and released as soon as possible. Captured amphibians should be transported using suitable, lidded containers with air-holes (e.g. maggot boxes).
- Pitfall trapping should be a continuous process, with traps open every day unless the weather indicates zero or very low capture rates.
- A 'trapping night' is counted as one during which the weather and seasonal conditions indicate newt capture is likely. Such conditions are generally taken to be: night air temperature $>5^{\circ}\text{C}$, with rain (or if no rain, there should have been some rain (minimum of approximately 5mm) in the last few days, such that the ground is damp).

Other Amphibians

- Artificial refugia should be checked daily during suitable weather and temperature conditions.
- Any amphibians captured should be moved to the receptor area and released as soon as possible. Captured amphibians should be transported using suitable, lidded containers with air-holes (e.g. maggot boxes).

Reptiles

- Artificial reptile refugia, 1x1m and 0.5x0.5m roofing felt tiles, should be checked daily during suitable weather and temperature conditions.
- Any reptiles captured should be moved to the receptor area and released as soon as possible. Captured reptiles should be transported using suitable, lidded containers with air-holes (e.g. maggot boxes).
- Captures should be recorded with notes on location (compartment number), species, sex and life stage.

The completion of the capture programme will be defined on the basis of capture rates and would essentially be a pre-defined period without any new captures as agreed in discussion with Natural Resources Wales (NRW).

6 Schedule of Quantities

<i>Item</i>	<i>Description</i>	<i>Quantity</i>
1	Semi-permanent amphibian exclusion fence	450 m
2	One-way temporary fencing	120 m
3	Internal drift fencing	535 m
4	Pitfall traps	300 No
5	Artificial amphibian refugia (carpet tiles or similar)	300 No
6	Artificial reptile refugia (roofing felt tiles)	60 No
7	Access channels (3m wide)	2 No
8	Ponds, average 115m ² , 1.0m deep	4 No
9	Earth banks, average 40m ² , maximum 0.8m high, maximum 1 in 2 sides	5 No
Total GCN Exclusion Area		11,400m ²

APPENDIX 1:

Extract from Great Crested Newt Mitigation Guidelines (English Nature 2001)

Figure 4: Fence and pitfall trap design

Recommended design for exclusion fence (temporary amphibian fence), drift fence, and pitfall trap placement. This design can be used for a variety of capture and exclusion/retention purposes (see text and [Figure 5: Common fencing and trapping patterns](#)).

