



ARBOR VITAE

ECOLOGY • FORESTRY • LAND USE

AMPHIBIAN CONSERVATION PLAN

REVISION 'A' NOVEMBER 2022

Project name: MAELOR NURSERIES

Species: Great Crested Newt

Grid Reference: SJ47063713

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1 BACKGROUND

Planning consent is being sought for the erection of a series of polytunnels covering existing, cultivated tree nursery beds at Maelor Nurseries.

The proposed siting of the polytunnels could have ecological implications for trees and hedgerows, along with certain protected species including bats, breeding birds and great crested newts.

A preliminary ecological assessment identified three ponds within 250 metres of the site, one of which appeared to have potential to support great crested newts. eDNA analysis was carried out on a water sample from the pond and this proved 'positive'.

RESULTS							
Date sample received at Laboratory:				27/04/2021			
Date Reported:				10/05/2021			
Matters Affecting Results:				None			
Lab Sample No.	Site Name	O/S Reference	SIC	DC	IC	Result	Positive Replicates
1403	MAELOR POND 2	SJ 4689 3679	Pass	Pass	Pass	Positive	1

Discussions between Arbor Vitae Environment and Natural Resources Wales' Species Officer have concluded that a European Protected Species development licence may be required if the proposed works "are considered likely to breach species protection legislation".

It was also agreed that a Conservation Plan would be required and that this would assume, on the basis of the positive eDNA test, that a 'medium' population of GCN was present.

The following document has been prepared to evaluate whether or not the proposed works are likely to result in a breach of species protection legislation (the Risk Assessment) and also to set out a Conservation Plan, including mitigation, compensation and enhancement, which will ensure that the favourable conservation status of GCN at the site and in the area is maintained.

2 RISK ASSESSMENT

It has been demonstrated that one pond (known as Pond 2) supports great crested newt (assumed to be a medium population). This pond lies 121 metres from the edge of the site proposed for polytunnels and 130m from the end of the hedge (Hedge 1) proposed for removal.

Pond 2 lies within an area of scrub and tall tussocky grassland vegetation which extends to approximately 2.5 hectares. This is regarded as more than adequate terrestrial habitat to support a medium population of GCN. Jehle (2000) demonstrated that 95% of all GCN summer refuges fell within 63m of the breeding pond and it is considered reasonable to assume in this case that the vast majority of GCN breeding in Pond 2 are using the habitat found immediately adjacent to the pond as terrestrial habitat. This is especially likely given the poor suitability of terrestrial habitats beyond it.

The area of land that exists between Pond 2 and the proposal area includes a well-used access road and an area of dry, bare ground in use as a working area and car park for the nursery. This is dry sandy unvegetated ground and provides at least a partial barrier to dispersal into the proposal area (see Photos below). Hence there is poor connectivity from the breeding site to the proposed development site.

Foraging opportunities for GCN on the proposal site are very limited due to the current highly intensive arable land use. Hedgerow 1 provides some suitable terrestrial habitat but is a small 'target' at considerable distance from the breeding pond and separated from it by inimical habitat.

In conclusion, the risk of a breach of species protection legislation by the proposals is considered to be minimal, given:

- The distance of the breeding pond from the proposal area
- The intervening habitat forming a barrier to dispersal into the proposal area
- The abundance of high-quality habitat around the breeding pond reducing likelihood of newts dispersing beyond it
- The hedge to be removed is a small 'target' in the landscape.

Even so mitigation measures in the form of reduced hedge removal and a reasonable avoidance method statement are proposed to further minimise the residual risk of an offence

Photo – View from the proposal site towards the breeding pond (Pond 2) showing distance and bare ground barrier to GCN dispersal into the former

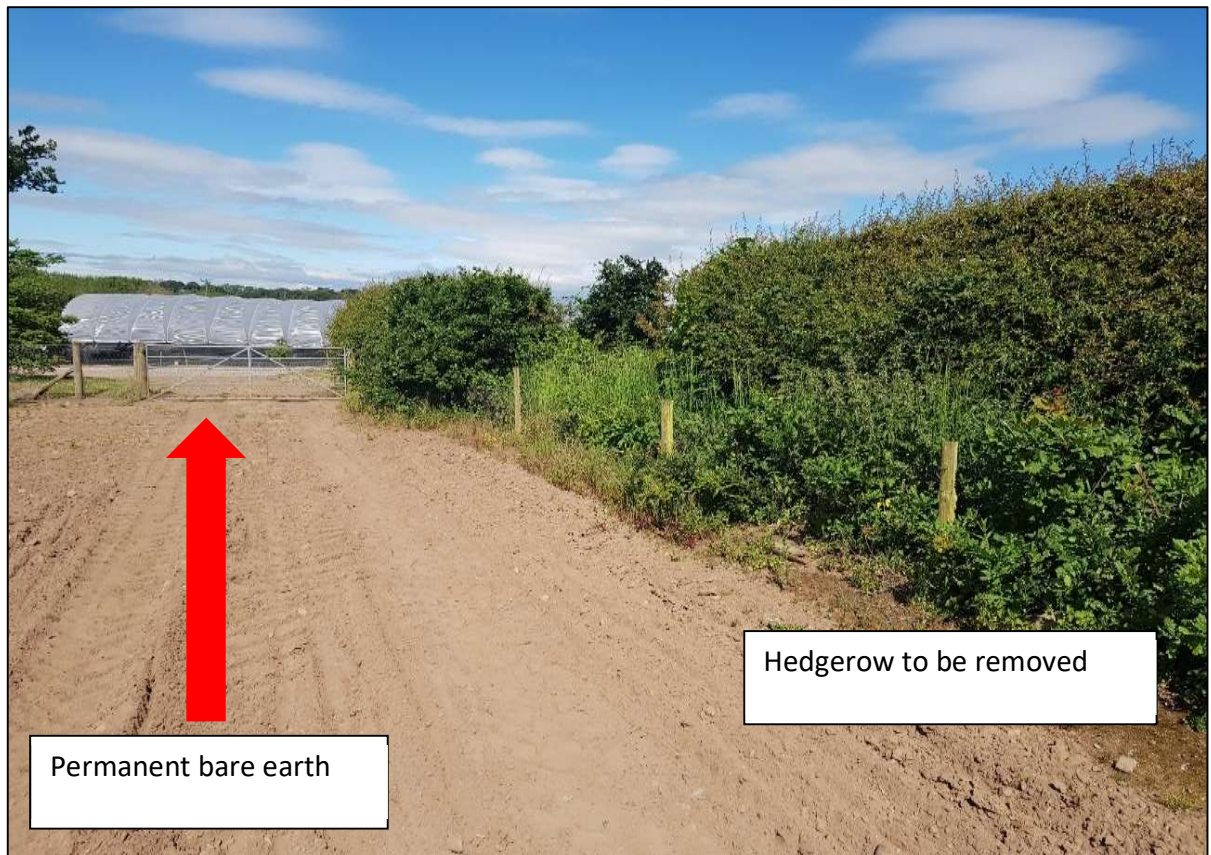
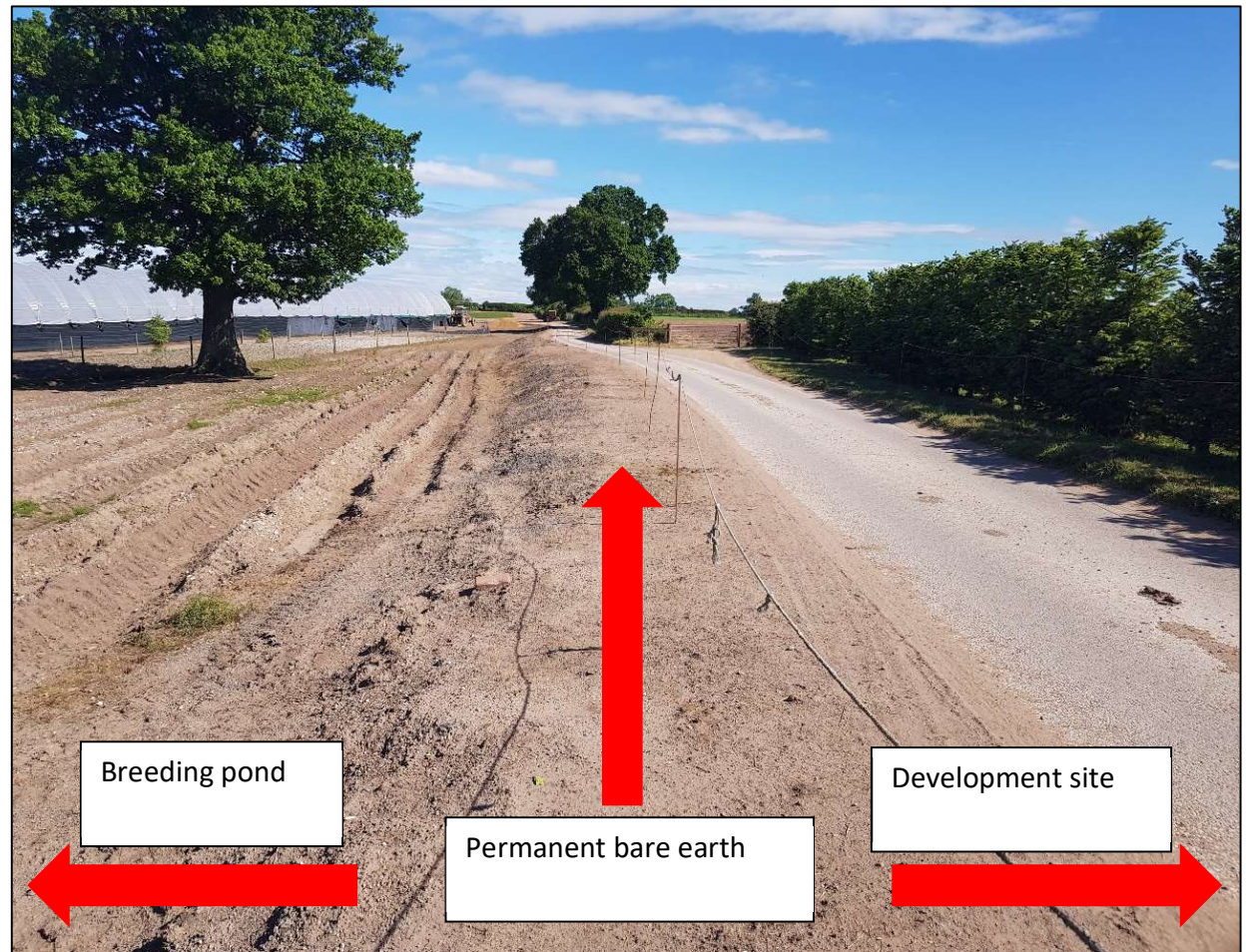


Photo – View of the intervening bare ground and access track between Pond 2 and the development site



3 LEGISLATION

Great Crested Newts (GCN) are a European Protected Species (EPS) and they and their habitats are fully protected under national (Wildlife & Countryside Act 1981 (as amended)) and European law (The Habitats and Species Regulations 2017 (as amended)). The combined legislation makes it illegal to:

- deliberately capture, kill or injure a great crested newt;
- damage or destroy a breeding site or resting place
- intentionally or recklessly obstruct access to any place used for shelter and protection including resting and breeding places, whether occupied or not;
- deliberately, intentionally or recklessly disturb a great crested newt when in a place of shelter;
- possess a great crested newt, or any part of it, unless acquired lawfully;
- sell, barter, exchange or transport or offer for sale great crested newts or parts of them.

4 MITIGATION

In order to minimise any residual risk of any offence, mitigation will be put in place in the form of:

a) Hedgerow retention

Hedges 2 and 3 (as shown on Figure 1) will now be retained

b) A Reasonable Avoidance Method Statement incorporating Risk Avoidance Measures, as below:

5 REASONABLE AVOIDANCE METHOD STATEMENT

Site induction

- A toolbox talk will be given to all site personnel in order to make them aware of the possible presence of GCN, how to identify this species and the avoidance measures to be used on site.
- A paper copy of the avoidance measures will be retained on site together with the contact details of the GCN licensed ecologist.

Timing & duration

- All works will take place during daylight hours when GCN are unlikely to be moving around.

Hedgerow removal

- Hedgerow 1 will be coppiced following the end of the bird-nesting season (Mid-August) and all arisings will be removed from the site. Coppicing will reduce the height of cut stems to around 15cm ensuring minimal ground disturbance.
- The increased light and decreased humidity levels in the base of the hedge will render it less suitable habitat for any GCN and thus encourage dispersion away from the hedge, if present.
- The hedge will be retained in this state for at least 4 weeks and then removed. This will be carried out with due diligence and with supervision by an ecologist.
- If any GCN are discovered at this stage, all work will cease until a European Protected Species Development Licence is obtained from NRW.

Site clearance

- Any possible objects which may conceal GCN such as large stones, logs or other materials will be inspected and removed from site.
- If any GCN are discovered at this stage, all work will cease until a European Protected Species Development Licence is obtained from NRW.

Site compound

- The site compound will be situated on an area of existing hard-standing to avoid creating GCN resting places beneath stored materials etc.
- All site materials will be stored on pallets or other raised objects to avoid creating resting places/refuges for GCN.
- Any toxic or poisonous materials will be safely stored within a locked container.

Construction methods and special precautions

- All excavations on site will be covered at night or ramps will be provided to allow amphibians to exit excavations. All excavations will be checked for amphibians each morning prior to the re-commencement of works.
- All exposed new pipework and drains will be capped at night so as to avoid trapping amphibians.
- All excavated materials/waste will be stored in skips or similar and not on the ground where it could be used as a refuge/resting area by amphibians. Alternatively, all waste will be removed from site daily unless being used to create the amphibian hibernacula.
- All stored building materials that might be used as temporary resting places by amphibians will be stored off the ground on pallets or similar.

6 COMPENSATION AND ENHANCEMENTS

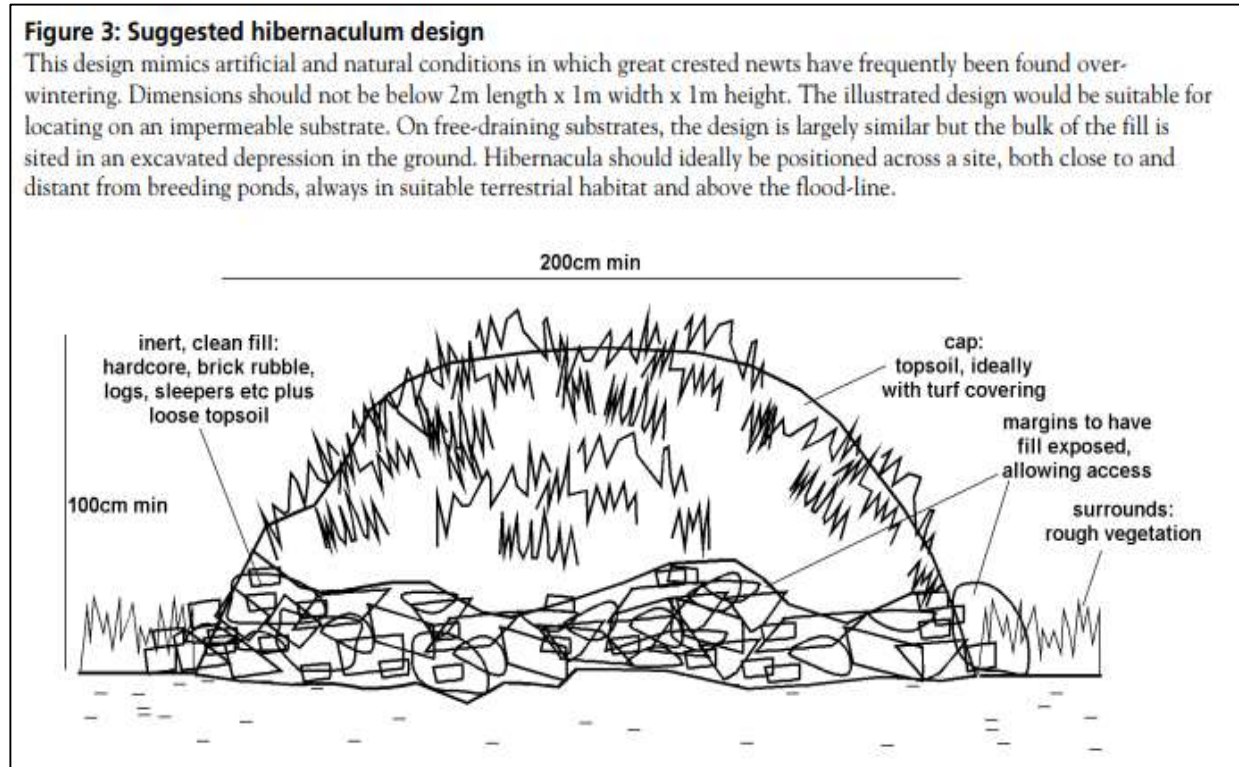
Creation of wildlife ponds

Three new small ponds will be created within 50 metres of the existing pond. These will occupy areas of currently bare ground which do not offer shelter or hibernating opportunities. The three areas will have vegetation removed by herbicide and cutting in the summer preceding the construction of ponds. This will reduce the attractiveness of the three areas to GCN. The pond construction will be carried out between November and February when GCN are not active and will be hibernating in suitable habitat elsewhere on site.

The new ponds will be irregular in shape in order to create diversity around the margins. The overall surface area will be at least 100m² and each pond will be securely fenced for safety and conservation reasons. Natural regeneration will rapidly vegetate the margins of the pond.

Creation of amphibian hibernacula

Three amphibian hibernacula will be created on site, one within 10m of each of the new ponds. The hibernacula will measure 2m long by 1m wide and be at least 1m high, to follow the 'Suggested



hibernaculum design' within Figure 3 of the Great Crested Newt Mitigation Guidelines.

The base of the hibernacula will be constructed using hardcore, brick rubble, logs, rough timber and loose topsoil. There will be sufficient ground-level gaps between the materials to allow newts to enter in several locations. The hibernacula will be built up in layers and overlaid with topsoil and a final layer of turf.

Hedgerow planting

A new mixed native hedgerow will be planted to the north of the proposed development. This will be parallel to an existing hedgerow and the intervening gap of approximately 20 metres will be planted with dense native scrub species.

Creation of GCN Conservation Area

The area of rough grassland and scrub surrounding Pond 2 and amounting to approximately 2.5 ha, will be designated as a GCN Conservation Area. A Management Plan for the long-term management of this area is set out below.

CONSERVATION AREA MANAGEMENT PLAN

The dedicated GCN Conservation Area will encompass 2.5 ha of land and include existing open water, three newly constructed ponds, scrub, new hedgerows and rough grassland

This matrix of habitats will be maintained to ensure that the extent of each habitat remains the same:

Hedgerow

A new species-rich native hedgerow will be planted to define the eastern and southern extent of the area. species will include hawthorn, blackthorn, hazel, field maple, holly, dogwood and guelder rose planted in a double row with 6 plants per metre. After 5 years growth, or sooner if necessary, the hedge will be cut to maintain a height of 2 metres.

Scrub

The willow scrub is likely to spread and invade neighbouring grass areas. This will be monitored and willow will be periodically coppiced to ensure it does not extend its area. Brash resulting from coppicing will be piled to create GCN refugia.

Grassland

A half of the grassland area will be cut each year in late summer with arisings collected and left in piles as refugia. This will maintain open, foraging areas for GCN and prevent scrub encroachment, whilst also retaining some longer areas as shelter for GCN.

Open water

No management will be required but annual monitoring will be carried out to ensure that marginal vegetation is not encroaching to an unacceptable degree into open water. The annual liaison meeting will discuss this issue.

Monitoring

The site will be inspected/ monitored annually to assess the success of management practices. This will be discussed at annual management liaison meetings. GCN population assessments will be carried out annually in April/May using standard methods.

On-going liaison

An annual management review will be carried out each year in September by the appointed ecologist and this will be discussed at an annual liaison meeting between the site owners (Maelor Nurseries), the site agents (Roger Parry and Partners) and the ecologist (currently Arbor Vitae

Environment Ltd). Details of the meeting will be sent to NRW for consideration. The review will consider the following topics:

- Effectiveness of management
- Recommendations for changes to management practices
- Opportunities for further biodiversity enhancements
- Results of GCN monitoring

Figure One Proposed Site Plan

