BRYNRORIN
ABERMULE, NEWTOWN
POWYS

GREAT CRESTED NEWT SURVEY
&
MITIGATION STRATEGY

FOR
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Dry and silted up.

Unsuitable for breeding great crested newts.

The pond will be dug out as part of the mitigation proposals.

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Unsuitable for breeding great crested newts.

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Maximum number of great crested newts recorded during the survey period: 4 female 4 male.

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Maximum number of great crested newts recorded during the survey period: 3 female 4 male.

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Maximum number of great crested newts recorded during the survey period: 4 female 3 male.

Overhanging vegetation will be removed as part of the mitigation proposals.

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It is of very limited value to great crested newts.

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This will significantly enhance its conservation value to great crested newts.

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This will significantly enhance the hedgerows conservation value to great crested newts.

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1. INTRODUCTION

1.1. Brynrorin Farm is located at SO 141 952, approximately three miles north-east of Newtown, Powys.

1.2. A planning application is being prepared for submission to the local planning authority seeking permission to develop a field at Brynrorin Farm with a free range chicken unit (Plan 1).

1.3. Six ponds are located within 500m of the proposed chicken unit.

1.4. This report details the results of great crested newt *Triturus cristatus* survey work undertaken at the site on the 30th April, 12th May, 19th May and 10th June 2009.

1.5. The survey identified breeding great crested newts in four of the ponds.

1.6. A maximum combined count of 22 great crested newts was made on the 30th April.

1.7. This report sets out mitigation measures to ensure that great crested newts are safeguarded during the construction stage of the development.

1.8. The report also sets out enhancement measures that detail how ponds and terrestrial habitat will be enhanced as part of the development proposals. It is considered that these measures will represent a conservation gain for great crested newts at the site.

2. LEGISLATION

2.1. The great crested newt *Triturus cristatus* is protected under Schedule 5 of the Wildlife and Countryside Act 1981 and is also included in Schedule 2 of the Conservation (Natural Habitats &c.) Regulations 1994 (the Habitats Directive). This means that great crested newts are protected from deliberate killing, injury or capture with their habitat, including a breeding site, resting place or any structure or place used for 'shelter or protection' also protected against damage or destruction. It is also illegal to disturb great crested newts and their eggs are protected from taking or destroying.

2.2. If a proposed development is likely to disturb great crested newts or their habitat a Welsh Assembly Government Wildlife Development Licence may be required before development work can commence.

3. ECOLOGY

3.1. The great crested newt is our largest species of newt and can reach over 15cm in length. Like other British amphibians it is terrestrial and is normally only present in water during the breeding season. It is a long-lived species and in captivity has been reported to reach 27 years of age. It feeds on a range of small invertebrates.

3.2. Typically great crested newts use terrestrial habitats within 250 metres of their breeding ponds. Ideal terrestrial habitat will contain a high proportion of semi-natural habitats such as woodland, scrub and unimproved pasture. A range of different water bodies are used for breeding but generally share one common theme in that they lack fish. Unlike other newt species great crested newt larvae are active swimmers making them particularly susceptible to fish predation.

4. SURVEY METHODS

4.1. The survey methodology comprised egg searches, bottle trapping and night-time torching and followed guidelines set out in *Great Crested Newt Mitigation Guidelines* published by English Nature 2001.

4.2. Surveys were undertaken on the 30th April, 12th May, 19th May and 10th June 2009.

4.3. All survey work was undertaken by two Countryside Council for Wales great crested newt licence holders.

5. RESULTS

POND 1

Description & Observations

A wet depression in the centre of a heavily grazed field. No standing water. Unsuitable for breeding great crested newts (Figure 1).

POND 2

Description & Observations

A small wet depression in the corner of a field. Shaded by trees and silted up. Unsuitable for breeding great crested newts (Figure 2).

POND 3

Description & Observations

A small reservoir pond created by damming a stream in the 1990s. A deep pond with marginal and aquatic vegetation (Figure 3).

% of accessible shoreline	100
% shading from bank side trees & shrubs	0
% of aquatic vegetation cover	20
Frog tadpoles	Present
Toad tadpoles	Present
Fish	Absent

Survey 1

Date	30th April 2009
Maximum day-time air temperature	13°C
Minimum night-time air temperature	9°C
Egg Search	Great crested newt eggs found on emergent and aquatic vegetation.

Torching

Great crested newt Male	4
Great crested newt Female	4
Total number of great crested newts observed	8
Common Newt	3
Palmate Newt	4
Common/Palmate newt sp.	14

Bottle Trapping. Number of traps set	**30**
Great crested newt Male	4
Great crested newt Female	1
Total number of great crested newts captured	5
Common Newt	3
Palmate Newt	5

Survey 2

Date	12th May 2009
Maximum day-time air temperature	14°C
Minimum night-time air temperature	7°C

Torching

Great crested newt Male	1
Great crested newt Female	4
Total number of great crested newts observed	5
Common Newt	present
Palmate Newt	present
Common/Palmate newt sp.	80

Bottle Trapping. Number of traps set	**30**
Great crested newt Male	2
Great crested newt Female	4
Total number of great crested newts captured	6
Common Newt	6
Palmate Newt	12

Survey 3

Date	19th May 2009
Maximum day-time air temperature	11°C
Minimum night-time air temperature	6°C

Torching

Great crested newt Male	2
Great crested newt Female	2
Total number of great crested newts observed	4
Common Newt	present
Palmate Newt	present
Common/Palmate newt sp.	50

Bottle Trapping. Number of traps set	**30**
Great crested newt Male	2
Great crested newt Female	0
Total number of great crested newts captured	2
Common Newt	4
Palmate Newt	6

Survey 4

Date	10th June 2009
Maximum day-time air temperature	12°C
Minimum night-time air temperature	7°C

Torching

Great crested newt Male	2 (terrestrial in grass by pond)
Great crested newt Female	0
Total number of great crested newts observed	2
Common Newt	present
Palmate Newt	present

Bottle Trapping. Number of traps set **0**

Sudden flash flooding in the local area prevented the setting of bottle traps.

POND 4

Description & Observations

A small garden pond created in the 1990s. Covered with duckweed (Figure 4).

% of accessible shoreline	100
% shading from bank side trees & shrubs	0
% of aquatic vegetation cover	100 (duckweed)
Frog tadpoles	None observed
Toad tadpoles	None observed
Fish	Absent

Survey 1

Date	30th April 2009
Maximum day-time air temperature	13°C
Minimum night-time air temperature	9°C
Egg Search	Great crested newt eggs found on emergent vegetation.

Torching (Hindered by duckweed)

Great crested newt Male	1
Great crested newt Female	2
Total number of great crested newts observed	3
Common Newt	0
Palmate Newt	0

Bottle Trapping. Number of traps set	**10**
Great crested newt Male	3
Great crested newt Female	4
Total number of great crested newts captured	7
Common Newt	2
Palmate Newt	0

Survey 2

Date	12th May 2009
Maximum day-time air temperature	14°C
Minimum night-time air temperature	7°C

Torching (Hindered by duckweed)

Great crested newt Male	0
Great crested newt Female	1
Total number of great crested newts observed	1
Common Newt	0
Palmate Newt	0

Bottle Trapping. Number of traps set	**10**
Great crested newt Male	1
Great crested newt Female	2
Total number of great crested newts captured	3
Common Newt	0
Palmate Newt	0

Survey 3

Date	19th May 2009
Maximum day-time air temperature	11°C
Minimum night-time air temperature	6°C

Torching (Hindered by duckweed)

Great crested newt Male	2
Great crested newt Female	1
Total number of great crested newts observed	4
Common Newt	1
Palmate Newt	0

Bottle Trapping. Number of traps set	**10**
Great crested newt Male	2
Great crested newt Female	2
Total number of great crested newts captured	4
Common Newt	0
Palmate Newt	0

Survey 4

Date	10th June 2009
Maximum day-time air temperature	12°C
Minimum night-time air temperature	7°C

Torching (Hindered by duckweed)

Great crested newt Male	0
Great crested newt Female	1
Total number of great crested newts observed	1
Common Newt	0
Palmate Newt	0

Bottle Trapping. Number of traps set **0**

Sudden flash flooding in the local area prevented the setting of bottle traps.

POND 5

Description & Observations

A small roadside pond. Surrounded by trees and scrub. Edges poached by sheep. No aquatic or significant emergent vegetation (Figure 5).

% of accessible shoreline	100
% shading from bank side trees & shrubs	100
% of aquatic vegetation cover	0
Frog tadpoles	Present
Toad tadpoles	None observed
Fish	Absent

Survey 1

Date	30th April 2009
Maximum day-time air temperature	13°C
Minimum night-time air temperature	9°C
Egg Search	Great crested newt eggs found on emergent vegetation.

Torching

Great crested newt Male	3
Great crested newt Female	4
Total number of great crested newts observed	7
Common Newt	1
Palmate Newt	1
Common/Palmate newt sp.	5

Bottle Trapping. Number of traps set	**20**
Great crested newt Male	3
Great crested newt Female	4
Total number of great crested newts captured	7
Common Newt	2
Palmate Newt	0

Survey 2

Date	12th May 2009
Maximum day-time air temperature	14°C
Minimum night-time air temperature	7°C

Torching

Great crested newt Male	2
Great crested newt Female	3
Total number of great crested newts observed	5
Common Newt	2
Palmate Newt	1
Common/Palmate newt sp.	7

Bottle Trapping. Number of traps set	**20**
Great crested newt Male	3
Great crested newt Female	3
Total number of great crested newts captured	6
Common Newt	0
Palmate Newt	0

Survey 3

Date	19th May 2009
Maximum day-time air temperature	11°C
Minimum night-time air temperature	6°C

Torching

Great crested newt Male	1
Great crested newt Female	2
Total number of great crested newts observed	3
Common Newt	present
Palmate Newt	present

Bottle Trapping. Number of traps set	**20**
Great crested newt Male	2
Great crested newt Female	1
Total number of great crested newts captured	3
Common Newt	0
Palmate Newt	1

Survey 4

Date	10th June 2009
Maximum day-time air temperature	12°C
Minimum night-time air temperature	7°C

Torching

Great crested newt Male	0
Great crested newt Female	1
Total number of great crested newts observed	1
Common Newt	0
Palmate Newt	1

Bottle Trapping. Number of traps set **0**
Sudden flash flooding in the local area prevented the setting of bottle traps.

POND 6

Description & Observations

A private pond located on a nearby farm. Abundant emergent and aquatic vegetation. Probably created in recent times (Figure 6).

An egg search undertaken on the 12th May 2009 confirmed the presence of breeding great crested newts.

6. MITIGATION & ENHANCEMENTS

Existing habitats

6.1. The site proposed for the chicken unit is dominated by heavily grazed improved pasture (Plan 1 & Figure 7). This habitat type is of very limited value to great crested newts.

6.2. The wood located approximately 50m to the north-west of the proposed chicken unit is unfenced and the ground flora has been grazed out by sheep (Plan 1 & Figure 8). In its current state the wood is of very limited value to great crested newts.

6.3. The hedgerows located between Pond 3 and the proposed chicken unit are grazed by sheep and are largely lacking a ground flora (Plan 1 & Figure 9). The hedgerows are currently of very limited value to great crested newts.

6.4. Pond 3 is located approximately 250m from the proposed chicken unit. The other three ponds that support great crested newts are located between 300m and 400m from the proposed chicken unit.

6.5. Great crested newt exclusion fencing is not required because the existing poor quality habitat and lack of interconnectivity will prevent great crested newts from entering the development site.

6.6. If grazing pressure was reduced and rank grass was allowed to develop the site would become favourable for great crested newts. In this instance exclusion fencing should be used to prevent colonisation by great crested newts. Great crested newt exclusion fence design is set out in Appendix 1.

Ecological enhancement proposals for great crested newts

6.7. As part of the development proposals ecological enhancements will be undertaken for the benefit of great crested newts. Enhancement proposals are set out below and are summarised on Plan 1.

6.8. Pond 1 is silted up and is currently unsuitable for breeding great crested newts. The pond will be restored as part of the development proposals. The pond will be dug out with an excavator under the guidance of an Ecological Clerk of Works.

6.9. Pond 5 is overshadowed by trees and scrub that prevents the growth of aquatic and emergent vegetation that would benefit great crested newts. Overshadowing trees and scrub will cut back as part of the development proposals. These works will be carried out under the guidance of an Ecological Clerk of Works.

6.10. The wood located 50m to the north-west of the proposed chicken unit is heavily grazed by sheep. This has prevented the establishment of a ground flora and rank vegetation that would benefit great crested newts. As part of the development proposal the wood will be fenced off from sheep and chickens.

6.11. The hedgerows located between Pond 3 and the wood are heavily grazed by sheep. This has prevented the establishment of a ground flora and rank vegetation that would benefit great crested newts. As part of the development proposal the hedgerows will be fenced off from sheep and chickens.

7. CONCLUSION

7.1. Survey work undertaken at Brynrorin Farm on the 30th April, 12th May, 19th May and 10th June 2009 confirmed the presence of great crested newts in four ponds.

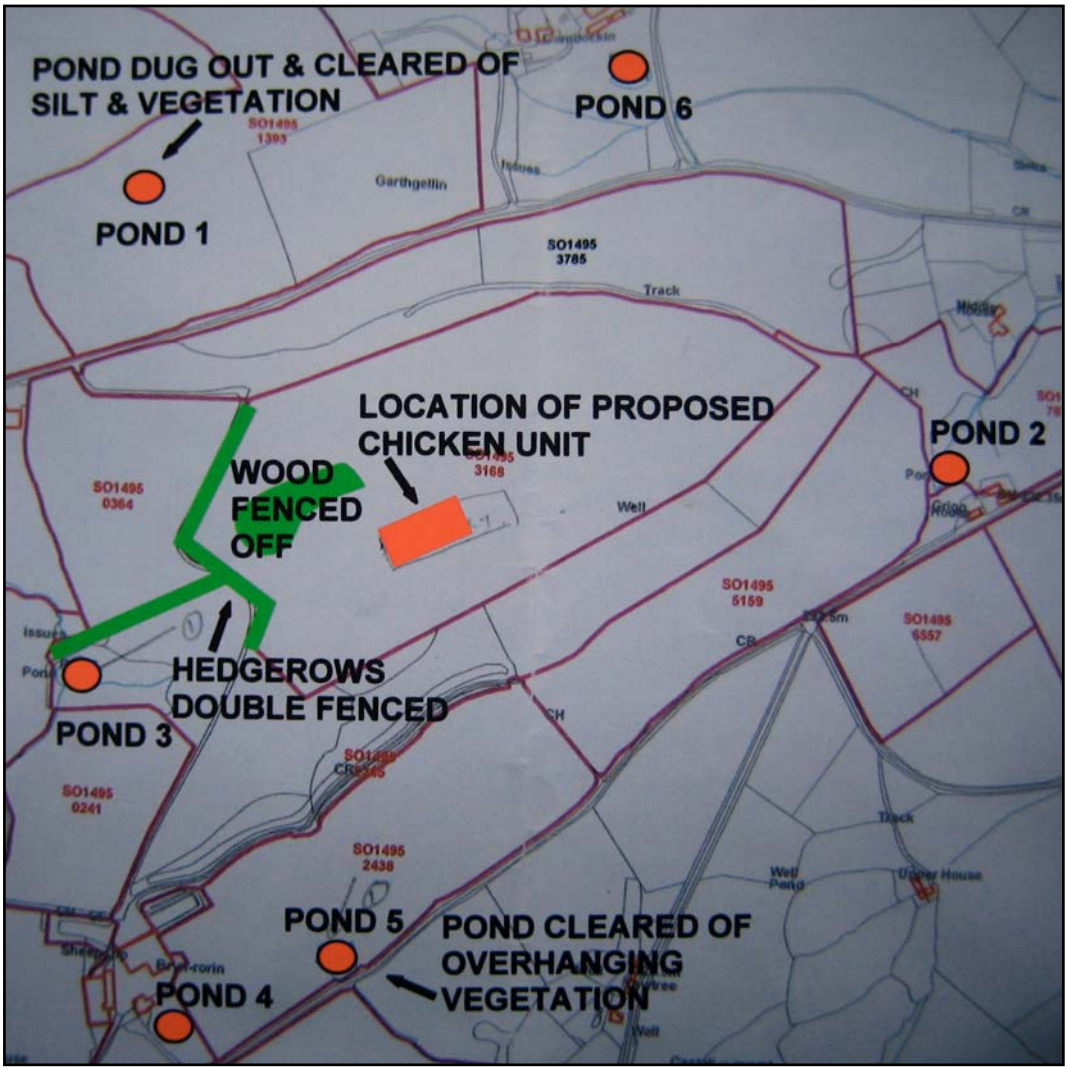
7.2. A maximum combined count of 22 great crested newts was made on the 30th April.

7.3. Great crested newts will not be impacted on by the development proposals because the development site comprises poor quality habitat that lacks interconnectivity with great crested newts breeding ponds.

7.4. The enhancement measures set out in this report include pond restoration and ecological enhancements to the wood and hedgerows.

7.5. There are no reasons for refusing planning permission on the grounds of great crested newt conservation. The habitat enhancement measures set out in this report will result in a conservation gain for great crested newts.

Plan 1



Location of ponds and enhancement proposals.

Figure 1

Pond 1

Dry and silted up.

Unsuitable for breeding great crested newts.

The pond will be dug out as part of the mitigation proposals.

Figure 2

Pond 2

Small pond. Dry and silted up.

Unsuitable for breeding great crested newts.

Figure 3

Pond 3

Reservoir.

Maximum number of great crested newts recorded during the survey period: 4 female 4 male.

Figure 4

Pond 4

Garden pond.

Maximum number of great crested newts recorded during the survey period: 3 female 4 male.

Figure 5

Pond 5.

Roadside pond overshadowed by trees and scrub.

Maximum number of great crested newts recorded during the survey period: 4 female 3 male.

Overhanging vegetation will be removed as part of the mitigation proposals.

Figure 6

Pond 6

Private pond on nearby farm. Great crested newts confirmed as breeding.

Figure 7

Site of the proposed chicken unit.

It is of very limited value to great crested newts.

Figure 8

The wood adjoining the proposed chicken unit will be fenced off from sheep and chickens.

This will significantly enhance its conservation value to great crested newts.

Figure 9

The hedgerows that link the Pond 3 with the wood will be double fenced to protect them from sheep grazing.

This will significantly enhance the hedgerows conservation value to great crested newts.

Appendix 1

Great crested newt exclusion fence design