

LAND AT MULSFORD FARM

**GREAT CRESTED NEWT
ECOLOGICAL MANAGEMENT AND MONITORING
PLAN**

**PLANNING REF P/2017/0799
APP/H6955/A/18/3208119**

DISCHARGE OF CONDITION 7

Report by:
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LAND AT MULSFORD GREAT CRESTED NEWTS ECOLOGICAL MANAGEMENT AND MONITORING PLAN

Condition 7 of the planning consent specifies:

No part of the development shall commence until a long-term Ecological Management and Monitoring Plan in respect of the habitat compensation area required by Condition No.06 has been submitted to and approved in writing by the Local Planning Authority. The land shall thereafter be managed and monitored in strict accordance with Ecological Management and Monitoring Plan as approved.

1 OUTLINE OF ECOLOGICAL MANAGEMENT PLAN

The long-term conservation status of the great crested newts depends on the long-term management of their breeding ponds and terrestrial habitat, much of the latter will be represented by the agreed compensation area. On-going management of these areas is required in order to maintain optimal conditions for GCN. Management of the four main habitats utilised by the GCN at this site is outlined below and summarised in terms of scheduling in Table 1. Details of timing of management and monitoring are shown in Table 2.

Breeding ponds

1. A 15m margin of grassland will be maintained between pond edge and neighbouring crop which will be fenced to avoid disturbance from agricultural activity.
2. Scrub around pond margins to be maintained at or below 30% cover. Excess scrub to be reduced by coppicing outside bird nesting season.
3. Cover of reed mace to be assessed and maintained at no more than 25% cover. Excess reed mace to be removed by hand-pulling outside bird nesting and GCN breeding season (including when larvae are in the ponds).
4. Assess the presence of plant species with value to gcN in pond 1 and pond 2. Species in pond 1: *Carex pseudocyperus*, *Myosotis scorpioides*, *Alisma plantago-aquaticum*. Species in pond 2: *Cicuta virosa*, *Carex pseudocyperus*, *Alisma plantago-aquaticum*.

Rough grassland

1. Boundary to be accurately marked out with stakes.
2. Area to be cut by topping annually in September. Minimum height of cut will be 15cm and any arisings will be left.
3. Invasive weeds such as creeping? thistle to be spot-treated as necessary.
4. An additional cut in March/April to be undertaken (as above) if woody species start to become established.

Scrub

1. A 5-metre zone of scrub is to be allowed to develop by natural regeneration on border of rough grassland adjacent to woodland area.
2. No topping of grass in this area is to be undertaken until low scrub (defined as scrub with a height – 1-2m) develops and thereafter this will be kept between 1-2m by cutting every 3 years. Arisings will be removed. Scrub and grass will be cut on a gradient whereby areas near the woodland will be the tallest at 2m and areas near the grassland will be the shortest at 1m.

Woodland

1. Boundary to be accurately marked out with stakes Trees to be checked annually for 3 years for losses and any losses replaced in first available season.
2. Trees to be maintained weed-free by biennial control for 3 years or until established by using mulch mats at the base of newly planted trees.
3. Grass growth between trees is to be retained and allowed to develop naturally.

2 OUTLINE OF ECOLOGICAL MONITORING PLAN

Overall Timetable (Table 1)

EPS LICENCE	Expected approval May 2019	
GCN TRAPPING AND EXCLUSION	May/June 2019	
CONSTRUCTION	July 2019 onwards	
GRASSLAND ESTABLISHMENT	September 2019	
WOODLAND ESTABLISHMENT	November 2019	
GRASSLAND MAINTENANCE	Annual topping in late summer August 2020	In perpetuity
WOODLAND MAINTENANCE	Mulch mats to be maintained around bases of newly planted trees	3 years
GCN MONITORING	Biennially	20 years
COMPENSATION AREA MONITORING	Biennially	20 years
POND VEGETATION MONITORING	Biennially	20 years
COMPLIANCE MONITORING	Annually	20 years

An annual report (compliance audit) will be produced summarising work completed, results, and future actions.

3 SUMMARY TIMETABLE (Table 2)

This table provides details of timing for long-term management, surveillance, wardening and compliance audit for 20 years, beginning 2020.

Activity	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Check presence and extent of all areas of woodland and rough grassland in compensation area- landowner and ecologist	-		-		-		-		-	
Check vigour of new trees in first three years, and replace loss- landowner	-	-	-							
Cut rough grassland areas annually in September, spot treat nuisance weeds (Dock, Nettle, Thistle) minimum cut height 15cm, arisings left- landowner	-	-	-	-	-	-	-	-	-	-
Leave a 5m wide area between woodland and rough grassland in south field to become low scrub (1-2m), by infrequent cutting- landowner liaising with ecologist			-			-			-	
Leave a 5m wide area between woodland and rough grassland in north field to become low scrub (1-2m), by infrequent cutting- landowner liaising with ecologist				-			-			-
Cut rough grassland areas annually in March/April, if woody species start to take hold, minimum cut height 15cm, arisings left- landowner liaising with ecologist		-	-	-	-	-	-	-	-	-
Check both pools for GCN eggs, torch both pools on up to 6 occasions in alternate years or until a medium population size class has been confirmed (whichever is sooner). N.B. trapping is likely to be required instead if torching methods fail to confirm continued presence of a medium population. Results to be fed into Cofnod as part of the compliance audit- ecologist		-		-		-		-		-
Assess percentage of pool 1 margin covered		-		-		-		-		-

by scrub (30% in 2017), take fixed point photo.										
Assess percentage of pool 2 margin covered by scrub (30% in 2017), take fixed point photo.		-		-		-		-		-
Assess percentage cover of pool 1 by <i>Typha</i> .	-	-		-		-		-		-
Assess percentage cover of pool 2 by <i>Typha</i>	-	-		-		-		-		-
Assess presence of plant species of interest and/or which provide good egg laying material in Pool 1: <i>Carex pseudocyperus</i> , <i>Myosotis scorpioides</i> , <i>Alisma plantago-aquaticum</i> (all present in 2016)	-	-		-		-		-		-
Assess presence of plant species of interest and/or which provide good egg laying material in Pool 2: <i>Cicuta virosa</i> , <i>Carex pseudocyperus</i> , <i>Alisma plantago-aquaticum</i> (all present in 2016)	-	-		-		-		-		-
Instigate pool management in pool 1 if scrub and/or <i>Typha</i> increase significantly or important plants are disappearing. Carry out necessary management under a separate Conservation Licence where necessary.			(-)			(-)			(-)	
Instigate pool management in pool 2 if scrub and/or <i>Typha</i> increase significantly or important plants are disappearing. Carry out necessary management under a separate Conservation Licence where necessary.			(-)			(-)			(-)	
Keep this table, log book with details, results, and photographs updated as part of the compliance audit.	-	-	-	-	-	-	-	-	-	-

Activity	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
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Check presence and extent of all areas of woodland and rough grassland in compensation area	-		-		-		-		-	
Cut rough grassland areas annually in September, spot treat nuisance weeds (Dock, Nettle, Thistle) minimum cut height 15cm, arisings left- landowner	-	-	-	-	-	-	-	-	-	-
Leave a 5m wide area between woodland and rough grassland in south field to become low scrub (1-2m), by infrequent cutting- landowner liaising with ecologist			(-)			(-)			(-)	
Leave a 5m wide area between woodland and rough grassland in north field to become low scrub (1-2m), by infrequent cutting- landowner liaising with ecologist				(-)			(-)			(-)
Cut rough grassland areas annually in March/April, if woody species start to take hold, minimum cut height 15cm, arisings left - landowner liaising with ecologist		(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Check both pools for GCN eggs, torch both pools on up to 6 occasions in alternate years or until a medium population size class has been confirmed (whichever is sooner). N.B. trapping is likely to be required instead if torching methods fail to confirm continued presence of a medium population. Results to be fed into Cofnod as part of the compliance audit- ecologist		-		-		-		-		-
Assess percentage of pool 1 margin covered by scrub (30% in 2017), take fixed point photo.		-		-		-		-		-
Assess percentage of pool 2 margin covered by scrub (30% in 2017), take fixed point photo.		-		-		-		-		-
Assess percentage cover of pool 1 by <i>Typha</i> .		-		-		-		-		-
Assess percentage cover of pool 2 by <i>Typha</i>		-		-		-		-		-
Assess presence of plant species of interest and/or which provide good egg laying material		-		-		-		-		-

in Pool 1: Carex pseudocyperus, Myosotis scorpioides, Alisma plantago-aquaticum (all present in 2016)										
Assess presence of plant species of interest and/or which provide good egg laying material in Pool 2: Cicutia virosa, Carex pseudocyperus, Alisma plantago-aquaticum (all present in 2016)		-		-		-		-		-
Instigate pool management in pool 1 if scrub and/or <i>Typha</i> increase significantly or important plants are disappearing. Carry out necessary management under a separate Conservation Licence where necessary.		(-)			(-)			(-)		
Instigate pool management in pool 2 if scrub and/or <i>Typha</i> increase significantly or important plants are disappearing. Carry out necessary management under a separate Conservation Licence where necessary.		(-)			(-)			(-)		
Keep this table, log book with details, results, and photographs updated as part of the compliance audit.	-	-	-	-	-	-	-	-	-	-

Responsible persons:

Monitoring, pond management and detailed habitat works, compliance audit: approved Ecologist

Grassland management: landowner