A PRACTITIONERS’ GUIDE

TO THE SOUTH MIDLANDS
GCN DISTRICT LICENSING SCHEME
INTRODUCTION

‘District Level’ licensing for great crested newts is where the power to authorise actions that might harm newts is held by the same body that grants planning permission – creating a simpler and quicker ‘one stop shop’ for developers. District Licensing also delivers better newt conservation by using funds raised from development impacts permitted through the planning system to create high quality, sustainable habitat and provide long term management and monitoring.

Extensive survey and modelling allow an assessment of the current great crested newt regional conservation status, and the setting of targets for increasing future conservation status. It also provides an ‘Impact Risk zone’ map that sets four zones of habitat quality (Red, Amber, Green & White) across the region. The spatial zoning determines the different processes that run for any given development and precludes the need for developers to commission their own site-specific newt surveys.

Thus, the South Midlands District Licensing scheme takes account of the wider spatial context and conservation needs of the species, responds to the level of development impact and funds a long-term management and monitoring strategy. The scheme is set up and administered by NatureSpace Partnership (NSP) and is delivered and monitored by experts in amphibian and freshwater habitat conservation through a not-for-profit organisation called the South Midlands Newt Conservation Partnership (SMNCP).

In comparison, existing licensing approaches (and the new ‘strategic’ licensing system proposed by Natural England) require two different processes to run – with planning administered by the LPAs and licensing administered by Natural England. The traditional system focuses on a piecemeal site-by-site approach, and takes little account of cumulative impacts, wider spatial issues or the context of ‘conservation status’. The site-based approach does provide a suite of habitat creation, restoration and management but this is of variable quality and sustainability and there is a widespread lack of long-term commitment to management, monitoring, reporting and enforcement. Despite the efforts of the conservation and ecological consultant community and the monies spent by developers in surveys and mitigation, the outcomes for newts appear to be poor - with a continuing decline in status [e.g. Lewis et al (2016)1, 20122, 20073, 20114], Edgar et al (20055), Germano et al (20156), JNCC Article 17 Report (201389)].
SURVEYING & MODELLING

The South Midlands District Licence is underpinned by an extensive survey - in which environmental DNA sampling, extended Habitat Suitability Index assessments and water quality testing were carried out at over 600 ponds across the region using a stratified sampling methodology. The Durrell Institute of Conservation and Ecology employed advanced modelling techniques to analyse the survey data and model predictions of newt habitat across the region. Modeled outputs were sense-checked with LPA Ecologists, local Wildlife Trusts, the Freshwater Habitats Trust and the Amphibian and Reptile Conservation Trust to test the validity of the modelled predictions and to further inform and refine the modelling process. The final set of models correctly predicted >95% of all the positive records from the eDNA survey and the Local Record Centre data across the region. This allowed us to identify at a landscape scale, where good quality newt habitat occurs across the region, how development will impact newt habitat and how to focus conservation action. The survey and modelling work found that in this region, pond occupancy rates are more than twice the national average, with great crested newts present in >30% of ponds. In the red zone, the occupancy rate is almost 50%.

The map that results defines four main separate spatial zones across the South Midlands region, as shown below right.

The region will be re-surveyed and re-modelled every three years under the scheme.

ASSESSMENT OF CONSERVATION STATUS

A combination of ‘occupancy modelling’ (for reference values) and ‘ensemble modelling’ (to build a habitat suitability layer) has enabled an assessment of conservation status and identification of favourable reference values (FRVs) for the species across this region and provides an objective and spatial basis for evaluating risk, for delivering conservation action and a mechanism for assessing trends. The conservation status assessment and FRVs provide both a baseline (for monitoring) and a target (for conservation efforts across all sectors). The conservation status of a species is considered to be the sum of all influences acting upon it and is therefore
comprised of both biological condition and extrinsic parameters. The approach we used follows the framework outlined in the Bonn Convention 1979 and subsequently refined for the EC Habitats Directive 1992, in which status is assessed through the separate consideration of these different parameters. We followed the framework set out by Natural England in their England-wide FCS assessment, ‘Favourable Conservation Status: England Contribution. Species: S1166 Great Crested Newt *Triturus cristatus*’ v1.0 (Natural England, 2017) and assessed range and distribution, population, habitats and, additionally, for the South Midlands, prospects.

**A Conservation Strategy for Newts**

The conservation strategy has three complementary aims: to create and manage aquatic breeding habitat, to create and manage terrestrial habitat, and to improve landscape connectivity. Pond density will be increased in areas of existing newt habitat, with enhanced terrestrial habitat in association with the ponds – and these areas will be extended outwards into the wider countryside, with additional aquatic and terrestrial habitat created to restore and enhance connectivity in the landscape. The modelled map provides an overview of newt habitat in the region and allows conservation efforts to be directed towards the places where it will have most value for the population across the landscape. The conservation strategy aims to increase the current range, to increase the numbers of occupied ponds and the numbers of ‘good’ ponds (HSI ≥ 0.7), to increase the extent of suitable habitat and, to improve the prospects for the population (through habitat design, site selection and long-term management).

**Creating Compensatory Habitat**

The District Licence requires that compensatory habitat is created ahead of development impacts. In 2018 we have invested £200k into upfront compensatory habitat provision, funded through a loan from the Esmée Fairburn Foundation. The landscape-scale strategic selection of locations included the identification of ‘conservation target areas’ where conservation efforts would be particularly beneficial (see figure overleaf). These are based on modelled habitat quality, eDNA and traditional newt data and local knowledge of areas most likely to be suitable for habitat creation (including previous and current pond creation projects).
The conservation target areas are focussed primarily to extend the red/amber zone landscapes to maximise opportunities for sustainable range increase and encompass areas where the existing habitat and geology makes pond creation and management most likely to be successful (e.g. see Biggs et al (2017), Biggs et al (2005) and McGoff et al (2017)). Delivery of compensation is spatially driven, with new and enhanced habitat provided in the local authority area and National Character Area in which impacts are authorised. Specific sites for habitat creation and management are selected to provide places with long-term viability – sites which are not prone to flooding, not allocated for development and are in areas which provide sources of unpolluted water. This scale of habitat compensation provides greater benefit than the retention or creation of piecemeal and fragmented habitat within the confines of, or tied in proximity to, development sites - unless a particular development site happens to support very important habitat critical for the population.

The District Licence requires that for every occupied pond lost to development, at least four good (HSI ≥ 0.7) ponds will be created under the scheme, along with terrestrial habitat creation, enhancement and management. Ponds will be created, usually in clusters, where they will make the largest increase in overall pond density within the range of existing newt ponds, so allowing the outward expansion of the range through the colonisation of new habitats. Pond design will follow the published advice for great crested newts from Amphibian and Reptile Conservation Trust and Freshwater Habitats Trust, with an emphasis on ensuring that ponds will remain clean water habitats and are likely to suffer low impacts from fish and waterfowl. Terrestrial habitat will comprise woodland, scrub, rough grassland, hedgerows and other habitats of high value for newts throughout the year, providing good cover, foraging and sheltering (including overwintering) opportunities.
EMBEDDING THE MITIGATION HIERARCHY

The mitigation hierarchy is embedded in the South Midlands scheme. There is a quantified three-stage metric-based assessment of development proposals in the red and amber zones, and major schemes in the green zone. The metrics have been specifically designed for this purpose, and assess whether a site needs to be avoided in whole or in part and/or whether on-site mitigation is required and/or, where appropriate, what charge would be required to compensate for the net impacts of the development, through the South Midlands conservation strategy:

1. Where on-site habitats are critical in terms of maintaining conservation status (e.g. loss of habitats at the location would result in a loss of range (at the 10km or 1km level), or cause fragmentation of critical areas), the metric assessment identifies either that the site should be entirely avoided and the development not permitted under the district licence, or that parts of the site need to be avoided (and retained, enhanced, managed and monitored) in order for the impacts to be permissible under the district licence;
2. Where the development proposals are capable of being covered under the district licence, there is an assessment of the need for on-site mitigation (whether that be through timing of works, requirements for hand/destructive searches, vegetation clearance and in some cases, fencing and trapping) to reduce impacts; and
3. An assessment of the financial contribution required to compensate for the impacts of the development through the landscape-scale conservation strategy.

A PROPORTIONATE & RESPONSIVE SCHEME

The South Midlands scheme is uniquely designed to respond to the level of developer uptake and varying impacts. Where the risks to newts are potentially high, there is a site-based assessment of impacts, using habitat information provided by the developer’s ecological consultant, together with other data we hold such as pond information and connectivity analysis data, land cover data and aerial photography. Depending on the impacts of the specific development proposal, the financial contribution required to address those impacts through the District Licensing scheme varies and is proportionate to the specific impacts. For developments which are low risk, there is a one-off standard payment to enable entry into the scheme. Thus, unlike previous national pilots, the level of compensatory habitat delivered through the scheme responds to the level of development impact - where developmental impacts are high, then more compensatory habitat is created in response.
**OVERALL ‘NET GAIN IN CONSERVATION STATUS’**

In the South Midlands scheme the interpretation of ‘net gain’ is informed by an understanding of conservation status, considering not only absolute change (e.g. numbers of ponds), but also how the actions are affecting the achievement of favourable conservation status (FCS). The FCS targets for great crested newts in this region set the context for the District Licensing scheme to deliver net gain in great crested newt conservation status through the planning system. So, whilst there is an absolute requirement under the district licences to provide four ponds in compensation for every occupied pond lost (or damaged), our conservation strategy includes more nuanced targets, including increasing the range, increasing the extent of suitable terrestrial habitat and improving the prospects of the population. The habitats created and managed under the South Midlands scheme will have wider biodiversity benefits too, delivering net gain for a variety of habitats and species.

**ENSURING LONG-TERM MANAGEMENT**

The District Licence requires that funding is allocated to ensure that all habitats created under the scheme will be managed for at least 25 years. On top of this, further monies are set aside from developer’s contributions to create an endowment fund that will (after 10 years of the scheme’s operation) have enough funds to pay for the annual management costs of all habitats created under the scheme *in perpetuity*. The monies paid into the endowment fund are held by the not-for-profit South Midlands Newt Conservation Partnership.

The SMNCP is responsible for managing habitats in the long term and this will be delivered under long-term management contracts with landowners and other management organisations. Both NatureSpace and the SMNCP have entered into legally-binding 25 year contracts with Natural England to deliver the scheme. Site specific management plans are written to ensure aquatic and terrestrial habitats are managed to remain suitable, functional and in good condition, with the requirement for remedial action to be undertaken should monitoring reveal any issues with establishment or maintenance. Terrestrial habitat will be managed to maintain a heterogeneous landscape of high quality for newts, maintaining connectivity between ponds.
**MONITORING & REPORTING**

The South Midlands District Licensing scheme fully funds a long-term monitoring programme. The main objective of the monitoring programme is to demonstrate how effective the South Midlands District Licensing scheme is at creating an overall net gain in great crested newt conservation status in this region. Monitoring under the scheme will measure the loss of newt ponds and habitat through development impacts, the gain in newt ponds and habitat through the scheme and their management, and the overall status and distribution of newts. The scheme’s monitoring will provide regional great crested newt data which can contribute towards the national assessment of great crested newt status and will also provide data on the contribution of the scheme to wider biodiversity enhancement. Monitoring data will also be collected to allow re-evaluation of models defining species occurrence, suitable habitats and habitat connectivity analysis, and so enable updating of the Impact Risk Map and Conservation Priority Map and the conservation status assessment, on a three-yearly cycle.

We have key activity measures for monitoring outputs – including numbers, density and quality of ponds, the extent and quality of terrestrial habitat and future viability. We will also monitor outcomes by looking at the number of occupied ponds (measured using eDNA), and if we have created stronger newt populations than were present before development (using population counts - including through bottle trapping and capture-mark-recapture).

The scale of the conservation programme depends on the number of developers entering the scheme and the impacts being addressed through the scheme – the greater the impacts, the more habitat, management and monitoring the scheme will provide.

**DISEASE CONSIDERATIONS**

The biosecurity guidelines in Amphibian Disease Precautions: A guide for UK fieldworkers. Advice Note 4 (available from [www.arguk.org](http://www.arguk.org)) must be observed by all licence users and the usual requirements in regard to disease testing apply as for any other translocations where great crested newts would be moved out of their range. In addition, as part of our ongoing monitoring programme, we are working with Nature Metrics (one of our partners) to include testing for pathogens including Chytrid, as part of our programme of eDNA testing.
**PARTNERSHIP WORKING**

The South Midlands District Licensing scheme provides a truly ‘landscape-scale’ conservation project with adjacent planning authorities working together with the leading conservation non-governmental organisations and the private sector, to deliver net gain for great crested newts and wider biodiversity through an environmentally sustainable, long-term strategy. This partnership approach demonstrates how parties across all sectors can come together and work to design and deliver a scheme which delivers a step-change in conservation for great crested newts.

**A SIGNIFICANT ROLE FOR ENVIRONMENTAL CONSULTANTS**

Applications made by developers to enter the District licensing scheme must be written by a suitably experienced ecologist, who must also do any survey work which informs the applications. All applications require either a Phase 1 Habitat Survey or a Preliminary Ecological Appraisal, detailing the habitats on site and the impacts arising from the proposed development. Applications can be informed by HSI data (this is mandatory for major developments in the red zone). Pond survey data is not required, although where it is available, this helps to further inform the assessment.

All developments authorised under a district licence in the South Midlands are recommended to follow best practice measures, as set out in ‘Best Practice Principles’ (NatureSpace, 2018). This includes seeking advice from a suitable qualified ecologist before works commence and for that ecologist to provide:

- A site induction tool box talk
- Guidance on reasonable avoidance measures to reduce risks to newts
- Supervision of site works (where appropriate)
- Supervision of further licensed avoidance measures under the district licence where appropriate - such as hand, destructive or night searches, and potentially, use of temporary amphibian fencing to prevent newts moving onto a development site during works.
In the red zone, ‘GCN Mitigation Principles’ (NatureSpace, 2018) must be adhered to – this is a condition of the district licence and will be a condition of the specific planning consent. These principles set out the requirements for mitigation measures to comply with the district licence and also provides advice on experience requirements for supervising ecologists.

There is also a recording requirement for anyone working under the district licence. Records must be kept of any movement of newts, with dates, sites of capture and release, sex and ages of all captured and released newts. Any injury or mortality must also be recorded. Records must be submitted to NatureSpace or the Local Planning Authority.

**FUTURE EXPANSION OF DISTRICT LICENSING**

District Licensing for great crested newts will expand across the country from 2019 onwards – during 2018 Natural England have been surveying large parts of England and the surveys will be completed for the rest of England during 2019. Specifically, the NatureSpace South Midlands scheme will expand into a further 8 Local Planning Authorities to the west of the existing region, including Local Planning Authorities through Gloucestershire up to and including the Forest of Dean. We anticipate the expanded areas to be ready to operate District Licensing by February 2019.

**FURTHER INFORMATION**

For more information about the district licensing scheme and how you could use the district licence to help your developer clients contact NatureSpace –

[https://naturespaceuk.com/contact/](https://naturespaceuk.com/contact/)

If you are interested in helping with conservation management under the scheme or you know of sites which might be suitable for long-term newt conservation, please contact the South Midlands Newt Conservation Partnership directly –

[https://freshwaterhabitats.org.uk/newt-partnership/](https://freshwaterhabitats.org.uk/newt-partnership/)
References


