# ADDITIONAL EVIDENCE: OTTERS

# Evidence of Eurasian Otter (*Lutra lutra*) population connectivity across the M4 Corridor around Newport Proposed Motorway

**Cardiff University** 

Presented to the Inquiry with a supplementary statement by Gwent Wildlife Trust

In the matter of:

Public Local Inquiry into the M4 relief road around Newport: the effects of the proposed M4 extension across the Gwent Levels

## M4 CaN - Additional Otter Evidence

## Supplementary Statement by Gwent Wildlife Trust

#### Introduction

- Since presenting the otter proof of evidence to the M4 CaN public inquiry in March 2017, we have considered whether additional evidence would be helpful to the inquiry in the matter of otters. Cardiff University have been collecting otter tissues primarily from road traffic accidents, as part of their otter project and therefore have the capability to analyse otter genetics using these tissues.
- 2. The Cardiff University School of Biosciences research staff have therefore been able to undertake a genetic analysis to determine if otters from the area around the M4 CaN including the Gwent Levels and the river Usk are likely to be genetically related. We present this study and its conclusions in the attached paper.

### Discussion

- 3. In order to clarify the importance of this new evidence we wish to highlight the relevant sections of our M4 CaN otter proof of evidence. On page 23 sections 6.3-6.13 of Geoff Liles proof of evidence we refer to the Statement to Inform an Appropriate Assessment prepared by Welsh Government.
- 4. Page 59 of the Statement to Inform an Appropriate Assessment prepared for the M4 CaN (WG 2016) states that "It is considered that otters from the River Usk SAC could also utilise habitat within the adjacent Gwent Levels and, therefore, loss of habitat from the Gwent Levels could impact upon individual otters from the SAC or individual otters that otters from the SAC could interact with" (5.2.89). Shortly afterwards, in 5.2.92 it is stated that "This assessment has taken the precautionary approach of considering that otters from the River Usk SAC could utilise the adjacent Gwent Levels; however, it should be noted that this is very much a worst case scenario, as the River Usk

population is unlikely to use all of the area of the Levels that would be affected by the Scheme."

- 5. We highlighted in our otter proof of evidence prepared by Geoff Liles (page 23) that: There is no evidence to support the claim that *"..the River Usk population is unlikely to use all the area of the Levels that would be affected by the scheme.*"
- 6. We now present the inquiry with evidence detailed in the attached report which contradicts this M4 CaN statement. The conclusions of this report state:
  - a) Individual otters regularly disperse and mate across the Gwent Levels and River Usk (i.e. across the proposed M4 CaN motorway route).
  - b) The populations of otters on either side of the river (and in the river itself) and above and below the proposed route should therefore be treated as a single demographic unit.
  - c) Construction of a road, such as proposed for the M4 CaN motorway, across this area will impede dispersal, fragment both otter habitat and this population, reducing connectivity and thus gene flow.
  - 7 This evidence has implications for the Statement to Inform the Appropriate assessment for the Usk SAC and the maintenance of favourable conservation status of the otter in relation to the M4 CaN proposals.
  - 8 In appendix C1 section 4.3 (pages 20 and 21) of the M4 CaN Usk SAC Statement to Inform the Appropriate Assessment the WG provides a full list of the conservation objectives for the river Usk SAC relating to otters as follows:

For the otter to be considered to be in favourable conservation status, **all** the following conditions need to be satisfied:

'4.3.1 The population of otters in the SAC is stable or increasing over the long term and reflects the natural carrying capacity of the habitat within the SAC, as determined by natural levels of prey abundance and associated territorial behaviour.' 4.3.2 The natural range of otters in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. The natural range is taken to mean those reaches that are potentially suitable to form part of a breeding territory and/or provide routes between breeding territories.

The whole area of the Usk SAC is considered to form potentially suitable breeding habitat for otters. The size of breeding territories may vary depending on prey abundance. The population size should not be limited by the availability of suitable undisturbed breeding sites. Where these are insufficient they should be created through habitat enhancement and where necessary the provision of artificial holts. No otter breeding site should be subject to a level of disturbance that could have an adverse effect on breeding success. Where necessary, potentially harmful levels of disturbance must be managed.

4.3.3 The safe movement and dispersal of individuals around the SAC is facilitated by the provision, where necessary, of suitable riparian habitat, and underpasses, ledges, fencing etc at road bridges and other artificial barriers.

Supporting information: Restrictions on the movement of otters around the SAC, and between adjoining sites are currently a particular concern in the reach through Newport as a result of a continued decrease in undisturbed suitable riparian habitat.'

9 Our proof of evidence prepared by Geoff Liles Highlights at section 6.3 that:

.....'Two of the favourable conservation status components described in 5.2.85 (WG 2016)' (and listed above) 'are relevant here: "No otter breeding site should be subject to a level of disturbance that could have an adverse effect on breeding success" and "The safe movement and dispersal of individuals around the SAC is facilitated by the provision, where necessary, of suitable riparian habitat and underpasses, ledges, fencing etc. at road bridges and other artificial barriers". It is not possible to ensure that these two components / conservation objectives can be achieved, because of the absence of any information on the location of breeding sites and other travel routes.'

10 The failure of the scheme surveys to confirm any breeding sites for the otter has left any breeding sites present under the footprint of the scheme and in the vicinity of the scheme extremely vulnerable to disturbance or destruction with or without a licence. It is clear from our additional evidence presented here that breeding sites on the Gwent Levels within the footprint or close vicinity of the M4 CaN scheme can be considered to

be vital for the maintenance of favourable conservation status of the otter population in the Usk SAC.

- 11 Permanent loss of habitats, including potential undisturbed resting and breeding sites under the footprint of the scheme can also be considered in the light of this evidence to be a material consideration in relation to the favourable conservation status of the otter in the Usk SAC.
- 12 We also wish to highlight here the supporting information which is provided with the final set of SAC favourable conservation status conditions for the otter under 4.3.3 (above) which highlights that '*Restrictions on the movement of otters around the SAC, and between adjoining sites are currently a particular concern in the reach through Newport as a result of a continued decrease in undisturbed suitable riparian habitat*'
- 13 The M4 CaN will therefore be contributing to decreasing habitat availability and connectivity which had already previously been identified as a problem for the SAC population of otters.
- 14 In the Environmental Statement an attempt is made to assess likely impacts of the road on otters. In the absence of any detailed information provided by the inadequate Arup and RPS surveys on how otters use the area throughout the year, which breeding sites, resting sites, feeding sites and travel routes (including 'short-cuts') will be affected, it is not possible to assess any of the likely effects for land take, construction phase and operational phase. <u>The assessment of likely effects has no validity.</u>
- 15 This lack of adequate information clearly also has serious implications for the validity of the Statement to inform the Appropriate Assessment, particularly in the light of this additional evidence which highlights that the population of otters on the Gwent Levels and the river Usk SAC form a single demographic unit (in other words are one inter-breeding population).
- 16 Geoff Liles otter proof also states in section 6.5:

'Section 5.2.90' .. (of the Statement to Inform the Appropriate Assessment) 'refers to post-construction habitat replacement and states that it will be an "...increase in habitats of potential value to otters including reens, field ditches, woodland, scrub and reed

beds..). There are two important points here. First, because of the absence of information on the locations and types of habitat / features of existing otter breeding & resting sites, it is not possible to assess what habitats / features need to be replaced, or where they should be located. Second, "potential value to otters" is very vague. For habitat to be of potential value to otters it must have the right characteristics and be in the right place. Reed beds are mentioned as a habitat to be increased (9.9 ha). If as it appears, the created reed beds are in water treatment areas which will inevitably become heavily polluted, they are likely to present a safety and health hazard to otters."

## Conclusions

- 17 Our main otter proof of evidence highlights the fact that the otter surveys undertaken for the M4 CaN scheme have not been adequate for the purpose of locating breeding sites, resting sites or travel routes within the footprint of the M4 CaN scheme or in the surrounding area. The surveys were so inadequate they failed to confirm any breeding sites (the potential site listed for the Docks Way Landfill was already known about before the 2014 and 2015 M4 CaN surveys) .Therefore the M4 CaN scheme has not taken into account any confirmed and adequately described otter breeding or resting sites in its design both in terms of the footprint of the road and its associated structures, nor has it taken any resting or breeding sites into account in its retention of habitats or the location and type of habitat creation. This approach has clearly failed to ensure that adverse effects on the otter population have been minimised.
- 18 The new otter evidence provided in the attached report confirms that otters breeding in the Gwent Levels are part of the same population as using the Usk SAC and therefore breeding and resting sites (and indeed key otter habitats and travel routes) on the Gwent levels as well as within the Usk SAC, are vital for the population of otters in the Usk SAC. Therefore any impacts of the M4 CaN scheme on otters will have serious implications for the favourable conservation status of a key feature of the Usk SAC.
- 19 The degree of connectivity of otter habitats on the Gwent Levels is also likely to be vital for the population of otters in the SAC.
- 20 We conclude that the M4 CaN scheme has failed to demonstrate that the otter population of the SAC will not be adversely affected by loss of habitat, connectivity, travel routes, breeding and resting sites on the Gwent Levels.

- 21 As a final point we would like to ask the inspector if he considers that in the light of all the evidence heard whether he considers the otter has been given the same attention to detail, the same effort regarding survey work, the same level of species specific consideration as the other European protected species, specifically, bats and dormice for this scheme?
- 22 Has the M4 CaN scheme in its design made any effort to avoid breeding and resting sites for the otter in its footprint? And made every effort to identify breeding sites at an early stage?
- 23 Would we for example, be expecting surveys for dormice and bat roosts to be undertaken as a last minute affair just prior to construction so that we can then licence removal/destruction of their nesting or maternity roosts weeks before the bulldozers go in? Or worse, leave all their key roosts and nesting habitats vulnerable to being discovered whilst work has started?
- 24 This is, in our view, what the scheme has proposed for otters after failing to complete adequate surveys for the Environmental Statement and Draft Orders.