

**Comments by Professor J G Shepherd CBE FRS on “An Assessment of Evidence Supporting a Programme of Wetland Restoration Projects in the New Forest Site of Special Scientific Interest”** (by Jenny Thomas, Iain Diack & Chris Mainstone, Natural England, Final Draft, 16th September 2016)

**This is an interesting paper but sadly it fails almost completely to deliver what is promised in the title, for the reasons discussed below. If this is the best that Natural England can do to provide evidence supporting the continuation of the wetland restoration programme, then there is a very serious problem indeed.**

- 1) **The quality of the evidence (in the references cited) is extremely dubious**, because
  - a) Almost half (12 out of 30) of the references cited are informal and unpublished internal reports that are not generally available (even on the internet) and are therefore inadmissible as evidence in any formal publication.
  - b) Of the remainder only a handful are formally published research & technical reports that may be assumed to have received some level of internal scrutiny and peer review.
  - c) Only one (Langford 1996) is a peer-reviewed publication in a recognised academic journal
- 2) Over half of the paper (8pp out of ~14, excluding references) is a recapitulation of the overall state of wetland habitats in the New Forest, and the general desirability in principle of some restoration work in some places, where it can be achieved at a reasonable cost and with a reasonable probability of success, which is not in dispute. **This material is irrelevant to the question of whether restoration is necessary, desirable, feasible or reasonably practicable in any specific location.**
- 3) The remaining sections of the paper do not discuss the evidence supporting restoration directly, but deal with
  - a) Restoration History and Aims
  - b) Natural England's Aims and Objectives for the New Forest Wetlands
  - c) Monitoring
- 4) **The issue of evidence for the efficacy of the restoration techniques employed is dealt with only in passing**, as follows
  - a) on page 10 it is stated (in relation to the EU LIFE 3 project from 2002 to 2006) that “biological surveys (macro-invertebrates and fish) were undertaken pre and post restoration works, all monitoring reports can be found in the Final Technical Report on the website; [www.newforestlife.org.uk/life3](http://www.newforestlife.org.uk/life3).”
  - b) Unfortunately the report referred to is no longer accessible from this home page (the internal hyper-links are dead). Nevertheless it can still be found at <http://www.newforestlife.org.uk/life3/PDFs/PDFs/FinalReport.pdf> and **this is in fact the only substantial evidence available on the efficacy of the restoration techniques used**
  - c) **The nature, quality, reliability and general applicability of this evidence are not discussed**, which is an astonishing omission in a report that purports to assess such evidence
- 5) For projects since 2006, the only evidence presented is that of the study undertaken by the River Restoration Centre and Jonathon Cox Assoc. (2015). I have commented on this elsewhere. **The evidence it presents is extremely weak, because since 2006 no systematic pre and post restoration surveys have been undertaken. The basic observations on which any assessment of efficacy must be based are therefore not available.**

- a) **The (cursory) discussion of this report again fails to consider the nature, quality, reliability and general applicability of this evidence.** However it concludes with a telling comment, i.e. “There are no examples where techniques which have been found to have failed or be inappropriate have continued to be applied without revision, adaptation or a new approach being adopted”. Note that this does *not* say that no techniques have been found to have failed or be inappropriate: it says only that those that have failed have been discarded. To paraphrase, the contractors have been making it up as they go along, and continue to do so.
- 6) The section on NE’s Aims & Objectives contains little or no material relating to evidence and is largely irrelevant. It does mention favourable comments by Cox et al (2015) and others on the Fletchers Thorns Project. As indicated by the photographs presented, this was a most extreme example of a canalised stream, and it is perhaps the only recent project where there is no dispute that some beneficial effects have been achieved. It provides only weak evidence for the efficacy of the techniques for less extreme examples.
- 7) The section on Monitoring is the most interesting part of the review. **It presents a powerful case for the necessity of adequate systematic pre and post restoration surveys and monitoring. It admits that no such systematic monitoring has been carried out since the conclusion of the LIFE 3 programme in 2006.** It also mentions statements by Cox et al (2015) supporting systematic monitoring, and “concern about the lack of documented evaluation”. It quotes the rather pusillanimous comment by Mainstone (2012) that “some basic level of pre- and post-monitoring is always sensible”, which is a considerable understatement. Without such monitoring there is no evidence, and the sad fact is that **for the New Forest since 2006 there is virtually no relevant evidence.**
- 8) **The concluding remark that there is “compelling evidence to support the success of a number of past restorations, some very good examples of successful wetland restoration” is therefore not supported by the material presented.**