

**Cynulliad Cenedlaethol Cymru**  
**Y Pwyllgor Amgylchedd a Chynaliadwyedd**  
**NRW 2015 – 33**  
**Cyfoeth Naturiol Cymru – Craffu Cyffredinol 2015**  
**Ymateb gan Ian Miller (Saesneg Yn Unig)**

**NRW scrutiny - submission to WG Environment & Sustainability Committee:**

Submission made by Dr Ian Miller - marine scientist [trained at the School of Ocean Sciences, UWB] and specialist in coastal zone management; long term resident of Anglesey/Ynys Môn.

The Committee has requested that submissions use appropriate examples to illustrate issues raised. The following provides two examples of NRW management & practice failures.

**1. Failure to comply with Freedom of Information [FoI] regulations.**

Sand dune habitat assessment reports for the Newborough site and carried out as part of CCW/NRW's obligations under Article 17 of the Habitats Directive were request formally in Sept., 2013 but not delivered until 31/03/15; only then after a further request in February, 2015. CCW/NRW took eighteen months to fulfil a straight forward request for reports they had completed in January, 2013. Furthermore the requested reports were those prepared by the assessing dune conservation officer. What was finally provided were reports modified by the area team manager in Sept.,2013.

The assessment surveys were carried out in the summer of 2012 (July) and reports completed by the dune conservation officer in Jan. 2013; they were reviewed by the area team leader in Sept. 2013. CCW had previously submitted it's completed Welsh dune assessment report to JNCC in April, 2013. The reports were available at the time of the FoI request but CCW stated that they were not and that they needed additional time to deliver the reports - reports completed by the competent officer in Jan., 2013. A spurious excuse was used to not provide the reports and even then the agency failed to deliver the reports that had been reviewed in Sept. 2013 when the FoI request was made.

Only after a further request was sent in February 2015 were modified reports finally provided eighteen months after the initial request.

**2. Failure to meet acceptable standards of scientific practice**

The 2012 dune habitat assessment reports have only just been made available and they have highlighted a consistent problem with scientific practice within CCW/NRW.

Apparently driven by a need to justify an agenda the agency has compromised its habitat assessments by failing to ensure appropriate scientific standards are met.

The six yearly habitat assessments carried out to meet requirements under Article 17 of the Directive require an objective assessment of habitat condition. To ensure these assessments are objective every effort must be made to avoid biasing the surveys; NRW appear to have done the opposite and actually set out to bias their results. To illustrate we can review the habitat assessments carried out in the summer of 2012: assessment of fixed dune 'grassland', so-called 'grey dunes' [Habitat type 2130 *Fixed dunes with herbaceous vegetation*].

The UK sand dune management standards recommend that sample points in a survey are made up of 4m<sup>2</sup> areas for assessment for habitat attributes; attributes such as the presence of positive or negative indicator plant species. CCW/NRW used 0.79m<sup>2</sup> areas [0.5m radius circles] to assess the presence of positive (desirable) indicator species but inflated the search area to 12.6m<sup>2</sup> [2m radius circles] when assessing the presence of negative (undesirable) plants.

Habitat assessments must be objective and unbiased and to ensure that they are requires that a standardized assessment plot area is used. NRW used an area < 20% of that recommended by CSM standards for the positive species search and inflated the search area to > 300% of the recommended area when assessing the presence of negative indicator plants. This shrinking and inflating the search areas grossly biased the assessment of the presence of positive and negative indicator species. The search area for positive indicator species was only 6% of the area searched for negative indicator species. Moreover CCW/NRW required that negative species should be totally absent from the sample plots sixteen times the size of plots searched for positive plant species.

The UK sand dune management standards state that negative species should be: '*no more than rare*' if non-native and '*no more than frequent*' if native species. These standards have specific ecological meaning [DAFOR scale]: '*no more than rare*' meaning found in no more than 1 - 20% of sample plots and '*no more than frequent*' meaning found in no more than 41 - 60% of plots. Total negative species cover should be < 5% of the habitat area. CCW/NRW's total absence requirement in grossly over inflated plot areas goes far beyond the agreed UK standards for sand dune management and would almost guarantee that a habitat failed to meet the assessment target.

It should be noted that this issue and other related issues regarding good scientific practice were raised at the Science Review regarding CCW's 2005 habitat condition assessments. This was not a new issue.

CCW/NRW have seriously biased their assessment of the presence of positive and negative indicator species; grossly underestimating positive species presence and seriously over estimating negative species presence. This methodology fails to meet

acceptable scientific standards and the agency was well aware of this from previous discussion at the Newborough Science Review (2009/10).

NRW appear to have no functional expert oversight and there is an obvious need for a quality assurance system that will ensure appropriate habitat assessment standards are met across agency.

### **Summary**

Quality scientific practice requires that habitat assessments are objective and as far as possible free of sampling bias. If a problem is observed then careful research is needed to determine the cause before appropriate remedial action can be planned. The agency's approach at Newborough appears to be one of justifying an agenda by biasing habitat assessments in order to be able to state that dune habitats are in an unfavourable state. For example, at the time of SAC designation in 2004 mobile dunes were classified as in an excellent conservation state and despite NRW's recent claims there is no evidence that that condition had subsequently changed. The agency's approach is the antithesis of good science and conservation practice and it is in need of a quality assurance system to ensure scientific practice meets acceptable standards.