# Circle Description automatically generated with medium confidenceNE ATLANTIC MARINE BIOLOGICAL AQC SCHEME COMMITTEE MEETING

*Annotated Agenda and minutes – 28th of July 2022 10.00 - 13.00*

<https://zoom.us/j/92474342545?pwd=cHJBR2xVdmM2MkF3R3I0N2lHcUFLQT09>

**Confirmed Attendees:** David Johns (DJ, MBA, Chair), Graham Phillips (GP, EA, Finance Manager), Claire Mason (CM, CEFAS, PSA Technical Manager), Myles O’Reilly (MoR, SEPA, Invertebrates Technical Manager), Claire Taylor (CT, MBA, Technical Secretary), David Hall (DH, APEM Ltd, Benthic Invertebrates), Ross Griffin (RG, Ocean Ecology, Contractors Rep), Matthew Green (MG, NRW, Senior Marine Monitoring Ecologist), Soren Pears (SP, APEM Ltd, Principle Biologist) and Alex Callaway (AC, AFBI, Senior Scientific Officer)

**Apologies:** James Albrecht (Epibiota Technical Manager) and Debbie Walsh (APEM Ltd)

|  |  |  |
| --- | --- | --- |
| 1. **Last Meetings Actions** (summarised below on the agenda) |  | ALL |
| 1. **Minutes of the last meeting** |  | CT |
| Approval of March meeting minutes |  | DJ/CM |
|  |  |  |
| 1. **Epibiota update** |  | JA |
|  |  |  |
| 1. **Phytoplankton update** |  | RS |
|  |  |  |
| 1. **Priorities to HBDSEG** |  | DJ |
|  |  |  |
| 1. **PSA update** |  | CM/LMB |
|  |  |  |
| 1. **Benthic Invertebrates update** |  | DH/MoR |
|  |  |  |
| 1. **Macroalgae update** |  | CY/SP |
|  |  |  |
| 1. **Fish update** |  | JE/DH |
|  |  |  |
| 1. **Zooplankton update** |  | DJ/CT |
|  |  |  |
| 1. **AOB** |  | ALL |
|  |  |  |
| 1. **Finance update\* Confidential** |  | GP |

1. **Actions Arising from Previous Meeting (ALL)**

**Epibiota:**

JOC to look at adding results/reports onto the website. JOC has started to put this together. **Action: to update onto new website – Further Action: DJ to chase JA**

**Miscellaneous:**

New Teams Channel**: Action: All members to check that is it working OK and access is provided. RG sent instructions of how to view the channels**. Any amendments/thoughts please let JOC/RG know. Completed – Update: RG advised to set up teams as a desktop app for one group (own organisation) and other group (JNCC/NMBAQC) as a separate web browser in order to receive notifications. This is because JNCC are administrators with committee members as general users.

Specimen Collections: **Action: MG/RG to arrange separate meeting with JOC, CM, PM and DJ to discuss.** **CM to raise this within Cefas to see if this can be looked at. Could also work together with NRW.** See AOB for further discussion.

An updated UKTAG IQI workbook for use in fish farm industry is almost available. It is hoped to be signed off in early December after an advisory group water framework meeting. **Action: GP to issue once available. MoR advised there will still be limitations. Action: MoR to consult with RG/GP.** Update: GP to make available when finalised (currently out for feedback). **Further update: GP to have completed by the next committee meeting.**

Brief discussion about recording litter in benthic grab samples. **Action: DJ to send CPR Survey plastics protocol to NRW.** Completed

**Website:**

**Action: CM to ask Cefas if we could get any analytical stats** i.e. what pages are the most popular? CT met with Aaron from CEFAS and training given. Cefas need to link up the website with google analytics today or tomorrow.

1. **Approval of April Meeting Minutes (DJ/CT)** Approved
2. **Epibiota update (JA) – awaiting update**
3. **Phytoplankton update (RS)**

The IPI programme is already up and running. This year we have approximately 80 analysts, less than I expected. Obviously, the large number of analysts from last year is related to not having an exercise in 2020. Furthermore, there have been changes with some laboratories that have been participating for years but not this year for the first time. I do not know what this signifies yet, whether there is a change to the periodicity to which laboratories want to participate in the PT scheme or there are other internal reasons I am not aware of.

I suppose, we will have a better idea next year whether this is just a blip, an effect of not having the 2020 exercise or something different.

Anyway, all materials were shipped at the beginning of July and the exercise is underway. We are slightly delayed with the Oceanteacher exercise and this should be ready in August. Results to be back by the end of September.

One problem that has arisen this year are that packages sent to EU laboratories have been charged customs duty. This includes all packages and even 'non-commercial' invoices, as is our case. It is generating some problems with laboratories, which did not envisage these extra payments**. I haven't asked yet, but I wanted to ask what is the situation in the UK with these packages? I imagine customs duty is applied there.** This was discussed, with DH advising APEM have seen an increase in costs and important to ensure there is a commercial invoice. Also experiencing delays in customs and have switched to using formaldehyde rather than alcohol.

This year we will have a workshop in Denmark again but we have not set a date yet. This is likely to be at the end of November, beginning of December.

1. **Priorities to HBDSEG (DJ).**

DJ advised there was a meeting last week and the Natural Capital programme is looking at filling monitoring gaps. Part of the plan is for us to make sure any new monitoring is aligned with NMBAQC protocols (i.e. check for new methodology) – **ACTION DJ to keep watch.**

eDNA was also discussed and this is an area that is growing quickly. It was discussed by the committee - do we need eDNA as another component? What involvement does NMBAQC play in this?Whilst many labs now participate in eDNA, there is no one undertaking QA/QC**. Action: DJ to mention this area is being looked into at next HBDSEG meeting and for the committee to let DJ/CT know if they are aware of any experts in this field of work. CM may have contact in Weymouth and there was a meeting to discuss community eDNA which she will try to get minutes from. DJ to follow up with HVR on JNCC work in this area.**

1. **PSA update (CM/SP)**

**2021-22, Year 28**

* 1. **Subscriptions**

|  |  |  |  |
| --- | --- | --- | --- |
| LabCode | PS80/81 | PS82/83 | PS-OS22/23/24 |
| PSA\_2801 | 1 | 1 | 1 |
| PSA\_2802 | 1 | 1 | 1 |
| PSA\_2803 | 1 | 1 | 1 |
| PSA\_2804 | 1 | 1 | 1 |
| PSA\_2805 | 1 | 1 | 1 |
| PSA\_2806 | 1 | 1 | 1 |
| PSA\_2807 | 1 | 1 | 1 |
| PSA\_2808 | 1 | 1 | 1 |
| PSA\_2809 | 1 | 1 | - |
| PSA\_2810 | 1 | 1 | - |
| PSA\_2811 | 1 | 1 | - |
| PSA\_2812 | 1 | 1 | - |
| PSA\_2813 | 1 | 1 | - |
| PSA\_2814 | 1 | 1 | - |
| PSA\_2815 | 1 | 1 | - |
| PSA\_2816 | - | - | 1 |
| PSA\_2817 | - | - | 1 |
| PSA\_2818 | 1 | 1 | 1 |
| PSA\_2819 | - | - | 1 |
| PSA\_2820 | - | - | 1 |
| PSA\_2821 | - | - | 1 |
| PSA\_2822 | - | - | 1 |
| PSA\_2823 | **-** | **-** | 1 |
| PSA\_2824 | **-** | **-** | 1 |
| PSA\_2825 | **-** | **-** | 1 |
| PSA\_2826 | **-** | **-** | 1 |
| PSA\_2827 | **-** | **-** | 1 |
| PSA\_2828 | **-** | **-** | 1 |
| PSA\_2829 | 1 | 1 | - |
| PSA\_2835 | 1 | 1 | - |
| Total (change from last year) | **18 (+1)** | **18 (+1)** | 1. **(+9)** |

**6.2** **2021-2022, Year 28 Operations**

All circulations of PS exercises were distributed in line with the 2021-2022 timetable (available below). Returns and results are summarised in the table below.

|  |  |  |
| --- | --- | --- |
| Exercise | Status | Returns / Comments |
| PS80 | Samples distributed: 08/10/2021 | Fines Test |
| Sample deadline: 03/12/2021 |  |
| Interim reports issued: 22/12/2021  Final reports issued: 21/01/2022 | 14 out of 18 returned results  1 communicated non-participation |
| **Exercise complete** | 3 non-communicated non-participation |
| PS81 | Samples distributed: 08/10/2021 | Diamicton Test |
| Sample deadline: 03/12/2021 |  |
| Interim reports issued: 22/12/2021  Final reports issued: 21/01/2021 | 14 out of 18 returned results  1 communicated non-participation |
| **Exercise complete** | 3 non-communicated non-participation |
| PS82 | Samples distributed: 19/11/2021 | Mud/Sand Test |
| Sample deadline: 14/01/2022 |  |
| Interim reports issued: 28/01/2022  Final reports issued: 25/02/2022 | 16 out of 18 returned results  2 non-communicated non-participation |
| **Exercise complete** |  |
| PS83 | Samples distributed: 19/11/2021 | Gravel Test |
| Sample deadline: 14/01/2022 |  |
| Interim reports issued: 28/01/2022  Final reports issued: 25/02/2022  **Exercise complete** | 16 out of 18 returned results  2 non-communicated non-participation |
| PS-OS22-24 | Samples request sent: 08/10/2021 |  |
| Batch 1  Data submission deadline: 05/11/2021  Sample submission deadline: 10/12/2021  Reports Issued: 01/04/2022  **Exercise complete** | 18 out of 21 data sets submitted  54 out of 63 samples selected  54 out of 63 samples received  18 out of 21 reports sent  1 communicated non-participation  2 non-communicated non-participation |
| Batch 2  Data submission deadline: 25/03/2022  Sample submission deadline: 15/04/2022  Reports issued: 30/06/2022  **Exercise complete** |

* 1. **Issues arising**

All PS and PS-OS exercises are now complete - other than the communicated non-participation two other PS-OS participants did not send any data or samples. Batch 1 PS-OS Reports were delayed by 1 week from published deadline due to delays in the receipt of data from the AQC laboratory, but reports were distributed the same day the data were received.

Statements of Performance will be produced the week ending 15th July and then sent to David Johns and Claire Mason to review, providing there are no issues these will be sent to participants by the end of July. **Action: SP to resend. Post meeting note: Action complete**

* 1. **Other news**

Lydia McIntyre-Brown returned from maternity leave on 11th July 2022 and will be reprising her role as Scheme Administrator for the PS component going forward. **Action: CT to see if LMB can be added to teams group**

**Particle Size Component 2021-2022 Timetable (Scheme Year 28)**

|  |  |  |
| --- | --- | --- |
| **Module / Exercise** | **Event** | **Date** |
| PS80 & PS81 | Samples distributed | 08/10/2021 |
|  | Results deadline | **03/12/2021** |
|  | Interim reporting deadline | 22/12/2021 |
|  | Final report deadline | 21/01/2022 |
|  |  |  |
| PS82 & PS83 | Samples distributed | 19/11/2021 |
|  | Results deadline | **14/01/2022** |
|  | Interim reporting deadline | 28/01/2022 |
|  | Final report deadline | 25/02/2022 |
|  |  |  |
| PS-OS22–24 | Request for sample data distributed | 08/10/2021 |
|  |  |  |
| Batch 1 | Data submission deadline for sample selection | **05/11/2021** |
|  | Selected samples submission deadline | **10/12/2021** |
|  | Interim report final deadline (for samples received before 10 December 2021) | 25/03/2022 |
|  |  |  |
| Batch 2 | Data submission deadline for sample selection | **25/03/2022** |
|  | Selected samples submission deadline | **15/04/2022** |
|  | Interim report final deadline | 01/07/2022 |
|  |  |  |
| Annual Report | Annual report deadline | 29/07/2022 |
|  |  |  |
| Workshop |  | TBC |

MoR advised SEPA signed up but never actually did anything with the samples. Soren advised these could be disposed of.

1. **Benthic Invertebrate update (DH/MOR)**

**2021-22, Year 28**

* 1. **Subscriptions**

Some adjustments (reductions) have been made to the subscription levels following clarification of final subscription requirements (shown in red text below).

|  |  |  |  |
| --- | --- | --- | --- |
| LabCode | RT61/62 | LR26 | OS77/78/79 |
| BI\_2801 | 1 | 1 | 1 |
| BI\_2802 | 1 | 1 | 1 |
| BI\_2803 | 1 | 1 | 1 |
| BI\_2804 | 1 | - | 1 |
| BI\_2805 | 1 | - | 1 |
| BI\_2806 | 1 | 1 | - |
| BI\_2807 | 1 | 1 | - |
| BI\_2808 | 1 | - | 1 |
| BI\_2809 | 1 | 1 | - |
| BI\_2810 | 1 | - | 1 |
| BI\_2811 | 1 | - | 1 |
| BI\_2812 | 1 | - | 1 |
| BI\_2813 | 1 | - | - |
| BI\_2814 | 1 | - | - |
| BI\_2815 | 1 | - | - |
| BI\_2816 | 1 | - | - |
| BI\_2817 | 1 | - | - |
| BI\_2818 | 1 | - | - |
| BI\_2819 | 1 | - | - |
| BI\_2820 | 1 | - | - |
| BI\_2821 | 1 | - | - |
| BI\_2822 | 1 | - | - |
| BI\_2823 | 1 | - | - |
| BI\_2825 | - | - | 1 |
| BI\_2826 | - | - | 1 |
| BI\_2827 | - | - | 1 |
| BI\_2828 | - | - | 1 |
| BI\_2829 | - | - | 1 |
| BI\_2830 | - | - | 1 |
| BI\_2831 | - | - | 1 |
| BI\_2832 | - | - | 1 |
| BI\_2833 | - | - | 1 |
| BI\_2834 | - | - | 1 |
| BI\_2835 | - | - | 1 |
| BI\_2836 | - | - | 1 |
| BI\_2837 | - | - | 1 |
| BI\_2838 | - | - | 1 |
| BI\_2839 | - | - | 1 |
| BI\_2840 | - | - | 1 |
| BI\_2841 | - | ~~1~~ | 1 |
| BI\_2842 | - | - | 1 |
| BI\_2843 | - | - | 1 |
| BI\_2844 | - | - | 1 |
| BI\_2845 | - | - | 1 |
| BI\_2846 | - | - | 1 |
| BI\_2847 | - | - | ~~1~~ |
| BI\_2848 | - | - | ~~1~~ |
| BI\_2849 | - | - | ~~1~~ |
| ° (change from 2021/22) | **23 (+1)** | **6 (-)** | 1. **(+3)** |

**7.2 2021-2022, Year 28 Operations**

Benthic Invertebrate exercises are being distributed in line with the 2021-2022 timetable (available below). Returns, results and exercise status details are summarised in the table below.

|  |  |  |
| --- | --- | --- |
| Exercise | Status | Returns / Comments |
| RT61 | Specimens distributed 08/10/21;  Submission deadline 03/12/21;  Interim reports issued 15/12/21;  Ring Test Bulletin reported 07/01/22;  **Exercise complete** | General Ring Test;  20 out of 23 subscribing labs participated; 21 data sets received, inclusive of multiple analyst entries. |
| RT62 | Specimens distributed 19/11/21;  Submission deadline 14/01/22;  Interim reports issued 31/01/22;  Ring test Bulletin deadline 25/02/22;  **Exercise in progress** | Targeted Ring Test – Gastropoda  19 out of 23 subscribing labs participated; 21 data sets received, inclusive of multiple analyst entries. |
| LR26 | Request for specimens distributed 08/10/21;  Submission deadline 28/01/22;  Interim reports deadline 18/03/22;  LR Module Summary Report deadline 25/03/22;  **Exercise in progress** | Three of six sets of specimens received to date; one late submission awaited; one reported |
| OS77-79 | Sample data requested 08/10/21;  Data submission deadline Batch 1 05/11/21;  Sample submission deadline Batch 1 10/12/21;  Interim report final deadline Batch 1 25/03/22;  Data submission deadline Batch 2 25/03/22;  Sample submission deadline Batch 2 15/04/22;  Interim report final deadline Batch 2 01/07/22;  OS Module Summary Report deadline 15/07/22;  **Exercises in progress** | 26\* out of 31 datasets received;  50\* out of 78 requested samples received, including 4 samples for external audit; 3 samples complete/reported to date (multiple samples in progress) |

\*now 28/31 for OS77-79 and 57/84 for samples received.

* 1. **Issues arising**

**Timetable overruns**

RTB62 & TDP schedule

Due to a sudden and serious illness involving a key technical specialist at APEM the RTB (RT62) and TDP work packages did not progress according to the original schedule. However, I am pleased to report that the individual concerned has made an excellent recovery to good health recently and these work packages are now being progressed. Update : RT 62 to soon to be ready for uploading onto website.

OS & LR submissions schedule

Several participants are experiencing/reporting significant workloads and resourcing issues post the pandemic lockdowns and, as such, the LR and OS modules have extended deadlines to facilitate maximum participation levels.

**Taxonomic Discrimination Protocol (TDP) Development**

TDP development draft version (and TDP spreadsheet) was circulated to the scheme participants and appropriate Committee members for comment (16/11/21). We are still awaiting feedback ahead of producing a finalised Version 1 for upload to the scheme website.

Project milestones:

* first draft shared with NMBAQC Scheme participants and initial comments requested before 2021-year end;
* Ring Test Bulletins going forwards (RT61 onwards) now include notes regarding the TDP, where relevant;
* publication of first draft TDP (overview, family level, one family to species level) on Scheme website;
* workshop to agree family level TDP;
* completion of provisional TDP to species level for all groups;
* circulation of each provisional species level TDP for participant feedback;
* workshops or feedback to resolve species level TDP for each group;
* publication of full TDP (overview and all taxa) on Scheme website.
  1. **Outstanding issues**

**Sample Distribution Issues**

No update/response, to date: Unfortunately, there was a failed delivery of RT62 to a participant based in Tenerife. Material could not be delivered in alignment with the exercise deadlines, so the options of a credit note for 2022/23 participation has been offered alongside re-attempting delivery and ‘unofficial’ participation/reporting for this exercise.

**Invertebrate Component 2021-2022 Timetable (Scheme Year 28)**

|  |  |  |
| --- | --- | --- |
| **Module / Exercise** | **Event** | **Date** |
| RT61 - General | Samples distributed | 08/10/21 |
|  | Results deadline | **03/12/21** |
|  | Interim reporting deadline | 10/12/21 |
|  | Final report deadline | 24/12/21 |
|  |  |  |
| RT62 - Targeted | Samples distributed | 19/11/21 |
|  | Results deadline | **14/01/22** |
|  | Interim reporting deadline | 28/01/22 |
|  | Final report deadline | 25/02/22 |
|  |  |  |
| LR26 | Protocol and request for specimens distributed | 08/10/21 |
|  | Specimen submission deadline | **28/01/22** |
|  | Interim reports deadline | 18/03/22 |
|  | LR summary report deadline | 25/03/22 |
|  |  |  |
| OS77–79 | Request for sample data distributed | 08/10/21 |
|  |  |  |
| Batch 1 | Data submission deadline for sample selection | **05/11/21** |
|  | Selected samples submission deadline | **10/12/21** |
|  | Interim report final deadline (for samples received before 22 October 2021) | 25/03/22 |
|  |  |  |
| Batch 2 | Data submission deadline for sample selection | **25/03/22** |
|  | Selected samples submission deadline | **15/04/22** |
|  | Interim report final deadline | 01/07/22 |
|  |  |  |
|  | OS summary report deadline | 15/07/22 |
|  |  |  |
| Annual Report | Annual report deadline | 29/07/22 |
|  |  |  |
| Workshop – experts | Venue TBC | TBC |
|  |  |  |
| Workshop – beginners | TBC – subject to demand | TBC |

DH advised of interest in joining from several Black Sea countries (MBA has also been approached) who are also keen to participate in workshops. DH is looking to undertake beginners workshop (s), dependant on demand, in August/September and to organise an expert workshop, which will maintain and enhance current skill levels. Both will be run as NMBAQC workshops and details sent via mailchimp in due course. MoR also has three starters who may look at attending.

1. **Macroalgae update (CY)**

**2021-22, Year 28**

|  |  |  |
| --- | --- | --- |
| Lab Code | Rt13 OMC | RT13 OMB |
| MA\_2901 | 1 | 1 |
| MA\_2902 | 1 | 2 |
| MA\_2903 |
| MA\_2904 | 1 | 1 |
| MA\_2905 | 1 | 1 |
| MA\_2906 | 1 | 1 |
| MA\_2907 | 1 | 1 |
| MA\_2908 | 1 | 1 |
| MA\_2909 | 1 | 1 |
| MA\_2910 | 1 | - |
| MA\_2911 | 1 | - |
| MA\_2912 | 1 | 1 |
| Total (change from last year) | **11 (+4)** | 1. **(+6)** |

* 1. **Subscriptions**

**8.2 2021-2022, Year 28 Operations**

|  |  |  |
| --- | --- | --- |
| Exercise | Status | Returns / Comments |
| RT13 OMC | Samples distributed: 24/01/2022 |  |
| Sample deadline: 04/03/2022 |  |
| Interim reports issued: 01/04/2022  Final reports issued: 22/04/2022 | 1 non-communicated non-participation  1 \* see Issues arising |
| **Exercise complete** | 9 out of 11 returned results |
| RT13 OMB | Samples distributed: 24/01/2022 |  |
| Sample deadline: 04/03/2022 |  |
| Interim reports issued: 01/04/2022  Final reports issued: 22/04/2022 | 1 non-communicated non-participation  2 \*see Issues arising |
| **Exercise complete** | 1. out of 10 returned results |

All circulations of MA exercises will be distributed in line with the 2021-2022 timetable (available below). Returns and results are summarised in the table below.

**8.3 Issues arising**

The previous ring test, RT12 2021, used Lab Code **MA28\*\*** it was therefore decided to avoid confusion for labs that had previously participated to use MA29\*\* for these Year 28 ring tests and to amend this issue in the following year.

All MA (OMB and OMC) exercises are now complete.

One participant signed up for both OMB and OMC but did not send any data or samples and provided no communication.

Due to an error in the provided participant contact details one participant did not receive either the OMB or OMC exercises until after the final report was issued. The details have now been updated for any future participation. The participant was provided with the exercise material for an internal/unofficial comparison if they chose to do so.

**Macroalgae Biomass and Percentage Cover Component 2021-2022 Timetable (Scheme Year 28)**

|  |  |  |
| --- | --- | --- |
| **Module / Exercise** | **Event** | **Date** |
| RT13 OMB | Samples distributed | 24/01/2022 |
|  | Results deadline | **04/03/2022** |
|  | Interim reporting deadline | 01/04/2022 |
|  | Final report deadline | 22/04/2022 |
|  |  |  |
| RT13 OMC | Samples distributed | 24/01/2022 |
|  | Results deadline | **04/03/2022** |
|  | Interim reporting deadline | 01/04/2022 |
|  | Final report deadline | 22/04/2022 |
|  |  |  |

**Action: DJ to contact CY to see if she will be able to attend the next committee meeting.**

MoR raised the importance of keeping terminology consistent – there was too much discrepancy with the use of component/module/exercises. This may need looking at on the macroalgae section of the website. **Action: CT to contact CY.**

1. **Fish update (JE/DW)**

DH advised all Year 28 fish work has been completed and the annual report signed off by JE. SOPs are also completed and the team are getting prepped for next year’s ring tests.

1. **Zooplankton Update**

The next ring test will be held later in the year with the MBA lab currently gathering specimens. Awaiting report from last ring test – still with CPR Senior Analyst.

1. **AOB**

**Contractor Questions (RG):**

RG had one question concerning keys which maybe a recurring issue**. Action: RG to respond, asking for further information and clarification.**

**Action: DH/MoR/GP may need to revisit taxonomic literature and update**

**From CM:**

Short review of updated NMBAQC website for next Bulletin of the Porcupine Natural History Society for raising NMBAQC profile – December next edition. **Action: Paragraph needed and CM to find out deadline from Laura Hanley.**

**From MoR:**

1. eDNA sampling/analysis – this is a major emerging biological field with huge QA issues.  Does NMBAQC intend to delve into this area?  If not then who provides guidance on QA etc? See page 3 for discussion.
2. Did we agree to develop an NMBAQC standard Species List for shelf Fauna and Flora with associated codes for MCS, IQI, Aphia, NBN etc?  This would facilitate data exchange among CMAs, contractors, DACs etc?  However, could be quite a big undertaking to establish and maintain such a list. MG advised it was agreed that the species list was to be updated periodically on NMBAQC website.
3. Can we generate some guidance justifying the continued use of formaldehyde as a fixative for fauna – on our website or perhaps attached to an updated Macrofauna PRP?  This could avoid us repeatedly having to clarify this issue following internal Health & Safety reviews.

This was discussed by the committee, and was felt it was not our place to provide Health and Safety guidance. Perhaps we could point organisations to the 2014 ISO guidelines/QA standards on our website. The experience of the committee is there is no real alternative to formalin as a fixative.

1. Website Tweaking: Is triple bar menu icon intuitive?  Text for links appears too faint and needs to be bolder to stand out.  Under Useful Links page there is no link provided to the various CMAs that sit on the committee. The Search Icon seems to just take you to Google – how can we search within the website? Would like to have the 5% external QA guidance somewhere on the website but can’t find it anywhere?  Need to generate a paragraph re-iterating this.  We don’t cover QA of Seabird or Marine Mammal communities but there is no signpost to who covers these on the website.

**Action: CT to set up a ‘clinic’ for members towards the end of summer to contact her live to discuss amendments/additions/tweaks etc.**

**From CM/MG:**

The different types of manufacturers used in the PSA was discussed and if using different machines, did this highlight a difference in results? CM said machines should be broadly comparable in their results and needs to be made clear in the metadata what instrument was being used. CM to think about, particularly concerning chemistry projects which was not previously an issue.

**From MG:**

Specimen Collections was discussed and specifically how NRW retain a reference collection with the Museum of Wales, who have one specimen from every one of their surveys. This now needs streamlining, with space and finances needing to be considered. MG is looking at criteria for deciding what is retained: first record of specimen, taxa which are difficult to ID, taxa often absent, species of concern etc and wanted to know what others did. DJ advised the MBA has found it hard to secure funding for their curation projects.

**DONM: tba, likely Oct/Nov 2022**