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

**Agenda****10th November 2023 1000-1230**

**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, Benthic Invertebrates Technical Manager), Tim Mackie (TM, DAERA Senior Scientific Officer), Claire Taylor (CT, MBA, Technical Secretary), Marianne Wootton (MW, MBA, Zooplankton Technical Manager), Jim Ellis (JE, CEFAS, Fish Technical Manager), Matt Green (MG, NRW, Marine Monitoring Ecologist), Lydia McIntyre-Brown (LMB, APEM Ltd, PSA administrator), Georgina Brackenreed-Johnstone (GBJ, APEM Ltd, Macroalgae administrator), James Albrecht (JA, JNCC, Epibiota Technical Manager), Ross Griffin (RG, Ocean Ecology, Contractors Rep) and Debbie Walsh (DW, APEM Ltd, Fish Administrator).

**Invited Attendee:** Dan Lear (DL, MBA, Head of Data, Information and Technology)

**Apologies:**

|  |  |  |
| --- | --- | --- |
| 1. **Last Meetings Actions** (summarised below on the agenda)
 |  | ALL |
| 1. **Minutes of the last meeting**
 |  | CT |
|  Approval of July meeting minutes |  | DJ |
|  |  |  |
| 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 |
|  |  |  |
| 1. **Fish update**
 |  | JE/DW |
|  |  |  |
| 1. **Zooplankton update**
 |  | MW |
|  |  |  |
| 1. **AOB**
 |  | ALL |
| Update for any literature/reports/timetables to websiteAny QA standards updates?Standard sampling and analytical methods for carbon |  | CTMG |
| 1. **Contractor Questions**
 |  | RG |
| 1. **Finance update\* Confidential**
 |  | GP |

1. **Last Meetings Actions**

**Epibiota:**

MG discussed using quality assurance documents as there was a query using a drop-down video when looking at the flow chart in the guidance framework documents alongside the habitat mapping proforma. Action: JA to look into and review/amend as necessary: MG/JA to arrange a meeting, with additional colleagues to discuss – ongoing. Further action: This is to be looked at later this year during a workshop meeting (one on QC). Any documents produced from this to be sent to CT for uploading onto website. **TO REMOVE**

**Imagery workshop -** Plans are in preparation for an imagery workshop (September/**October 2023**). The aim of the workshop is to review current drop camera still image processing and statistical analysis methods used by UK Government agencies to agree recommended guidelines that can be used for monitoring of the UKs MPA network. Participants have been invited from Statutory Nature Conservation Bodies and other government agencies involved with monitoring seabed habitats. **Action: JA to let MG know who is the NRW contact. DJ also advised JA to approach DEFRA for funding sources, maybe R&D money to tap into. TO REMOVE**

**Macroalgae:**

There is still no new contract for rocky shore – Action: MG to contact CY (maybe via Paul Brazier) to see if there are any further developments. GP is also discussing macroalgae with CY so will ask too. Update: MG to email CY and cc in TM – CY to respond this week**. Further Action: CY has stepped down (see component section). TM may have personnel interested.**

**Benthic:**

MoR and CT have revamped Benthic Inverts literature page, adding unpublished keys and MoR volunteered to do the same for Macroalgae and Fish.Action: MOR to scan in relevant documents (~20 Macroalgae and ~2 Fish) and CT to upload onto website. Post Note: Fish literature added. **Further** **Action: MOR to scan in macroalgae and send to CT for uploading.**

**Particle Size Analysis:**

Annual Report is being worked on. Action: CM to review and forward onto CT once completed for upload onto website.

**Priorities to HBDSEG:**

**eDNA:**

Has been raised at HBDSEG who are looking to NMBAQC to offer QA and best practice. MBA have an EU proposal called Marco-Bolo in the pipeline, which is looking into this initiative, may have to bring in their recommendations.

CM also has a contact and can call for advice. There is also Kate Wade from JNCC – need to try and get some experts together to discuss state of play and perceived problems. Action: JA to discuss further with DJ.

There was much discussion over eDNA and how would this fit our remit. As there has been a big surge on this technique should it form another component of NMBAQC though how would it sit? Work is currently being undertaken using this technique at Scottish fish farms (MOR). Action: CM to put DJ in contact with Vera Fonseca at Cefas who is leading their end (DONE), maybe worth sending an invitation to next committee meeting. MW advised some ICES groups are looking into this – Action DJ/MW to chat and DJ to chat to Sarah Peaty (EA). JE to contact eDNA working group.

1. **Minutes from the last meeting -** approved
2. **Epibiota Update**

There was an imagery workshop 24/25 October for government agencies looking at drop camera imagery. New processes are to be implemented with a report to be produced by the end of the month. Once reviewed, this will go onto the JNCC website.

Reference collections are being uploaded for imagery including shelf examples (majority deep sea). Echinoderms are currently being completed with possibly sponges to follow.

In terms of the Big Picture group, QAF guidance has been reviewed. JA advised group are looking for funding to implement BEAGLE software. Action: DJ to email JA as this maybe appropriate for HBDSEG.

1. **Phytoplankton Update**

All participant results have been received and the Oceanteacher taxonomy assessment completed. We have the IPI workshop in Denmark between 3-7 December 2023- with the provisional agenda to be drafted.

Provisional results for the exercise should be sent by the end of this month and hoping to have the report ready and the certificates for the end of the year.

We have 16 places booked at the workshop, with 12 confirmed attendees, so there is room for a few more. Action: All to contact RS if interested.

1. **Priorities to HBDSEG**

Next meeting Feb 2024. Action: ALL to contact DJ/TM if there is anything for discussion.

1. **PSA Update**

**PARTICLE SIZE ANALYSIS COMPONENT PROGRESS REPORT**

**2023-24, Year 30**

* 1. **Subscriptions (to date)**

|  |  |  |  |
| --- | --- | --- | --- |
| LabCode | PS 88/89 | PS90/ 91 | PS – OS28/29/30 |
|  PSA\_3001 | 1 | 1 | - |
| PSA\_3002 | 1 | 1 | - |
| PSA\_3003 | 1 | 1 | 1 |
| PSA\_3004 | 1 | 1 | 1 |
| PSA\_3005 | 1 | 1 | 1 |
| PSA\_3006 | 1 | 1 | 1 |
| PSA\_3007 | 1 | 1 | - |
| PSA\_3008 | 1 | 1 | - |
| PSA \_3009 | 1 | 1 | - |
| PSA \_3010 | 1 | 1 | 1 |
| PSA \_3011 | 1 | 1 | 1 |
| PSA \_3012 | 1 | 1 | 1 |
| PSA \_3013 | 1  | 1  | - |
| PSA \_3014 | 1 | 1 | - |
| PSA \_3015 | 1 | 1 | 1 |
| PSA \_3020 | - | - | 1 |
| PSA \_3021 | - | - | 1 |
| ° (change from 2022/23) | **15(-2)**  | **15 (-2)** | **10(-7)** |

* 1. **2023-2024, Year 30 Operations**

Particle Size exercises are to be distributed in line with the 2023-2024 timetable (available below). Returns, results and exercise status details are summarised in the table below.

|  |  |  |
| --- | --- | --- |
| Exercise | Status | Returns / Comments |
| PS88 | Samples to be distributed 01/12/23Submission deadline 02/02/24Interim reports to be issued 09/02/24Final Report to be issued 29/02/24**Exercise in preparation** | Sands Test0 out of 15 returned results |
| PS89 | Samples to be distributed 01/12/23Submission deadline 02/02/24Interim reports to be issued 09/02/24Final Report to be issued 29/02/24**Exercise in preparation** | Diamicton Test0 out of 15 returned results |
| PS90 | Samples to be distributed 01/03/24Submission deadline 26/04/24Interim reports to be issued 03/05/24Final Report to be issued 31/05/24**Exercise in preparation** | Fines Test0 out of 15 returned results |
| PS91 | Samples to be distributed 01/03/24Submission deadline 26/04/24Interim reports to be issued 03/05/24Final Report to be issued 31/05/24**Exercise in preparation** | Diamicton Test0 out of 15 returned results |
| OS28-30 | Sample data to be requested 15/11/23Data submission deadline Batch 1 15/12/2023/ Batch 2 22/03/24Sample submission deadline Batch 1 26/01/2024/ Batch 2 26/04/24OS Module Summary Report deadline Batch 1 22/03/2024/ Batch 2 05/07/24**Exercises on-going** | 0 out of 10 data sets submitted0 out of 30 samples selected0 out of 30 samples received0 out of 10 reports sent |
| 2023/24 Annual Report & SoPs | Annual Report & Statement of Performance documents deadline 26/07/24 | Report template drafted. |

* 1. **2022-2023, Year 29 Operations**

Particle Size exercises were distributed in line with the 2022-2023 timetable. With exception to an ongoing review into one participant’s PS results all exercises are complete and Statements of Performance sent. Action: CM to follow up as so far, no response.

The Annual Report has been sent to the component manager (Claire Mason – Cefas) for review.

**Particle Size Component 2023-2024 Timetable (Scheme Year 30)**

|  |  |  |
| --- | --- | --- |
| **Module / Exercise** | **Event** | **Date** |
| PS88 & PS89 | Samples distributed | 01/12/23 |
|  | Results deadline | **02/02/24** |
|  | Interim reporting deadline | 09/02/24 |
|  | Final report deadline | 29/02/24 |
|  |  |  |
| PS90 & PS91 | Samples distributed | 01/03/24 |
|  | Results deadline | **26/04/24** |
|  | Interim reporting deadline | 03/05/24 |
|  | Final report deadline | 31/05/24 |
|  |  |  |
| OS28 - 30 | Request for sample data distributed | 15/11/23 |
|  |  |  |
| Batch 1 | Data submission deadline for sample selection | **15/12/23** |
|  | Selected samples submission deadline | **26/01/24** |
|  | Interim report final deadline (for samples received before 23 December 2022) | 22/03/24 |
|  |  |  |
| Batch 2 | Data submission deadline for sample selection | **22/03/24** |
|  | Selected samples submission deadline | **26/04/24** |
|  | Interim report final deadline | 05/07/24 |
|  |  |  |
| Annual Report | Annual report deadline | 26/07/24 |
|  |  |  |
| Workshop  | Venue TBC  | TBC |

Guidance to be updated following on from workshop. Action: CM to implement this prior to next NMBAQC committee meeting (likely to be March 24).

1. **Benthic Invertebrates Update**

**BENTHIC INVERTEBRATE COMPONENT PROGRESS REPORT**

**2023-24, Year 30**

* 1. **Subscriptions (to date)**

|  |  |  |  |
| --- | --- | --- | --- |
| LabCode | RT65/66 | LR28 | OS83/84/85 |
|  BI\_3001 | 1 | 1 | 1 |
| BI\_3002 | 1 | 1 | 1 |
| BI\_3003 | 1 | - | 1 |
| BI\_3004 | 1 | - | 1 |
| BI\_3005 | 1 | - | - |
| BI\_3006 | 1 | - | 1 |
| BI\_3007 | 1 | - | 1 |
| BI\_3008 | 1 | - | - |
| BI\_3009 | 1 | - | - |
| BI\_3010 | 1 | - | - |
| BI\_3011 | 1 | - | 1 |
| BI\_3012 | 1 | - | 1 |
| BI\_3013 | 1  | - | - |
| BI\_3014 | 1 | 1 | - |
| BI\_3015 | 1 | 1 | - |
| BI\_3016 | 1 | - | - |
| BI\_3017 | 1 | - | - |
| BI\_3018 | 1 | 1 | - |
| BI\_3019 | 1 | 1 | 1 |
| BI\_3020 | 1 | - | - |
| BI\_3021 | 1 | - | - |
| BI\_3030 | - | - | 1 |
| BI\_3031 | - | - | 1 |
| BI\_3032 | - | - | 1 |
| BI\_3033 | - | - | 1 |
| BI\_3034 | - | - | 1 |
| BI\_3035 | - | - | 1 |
| BI\_3036 | - | - | 1 |
| BI\_3037 | - | - | 1 |
| BI\_3038 | - | - | 1 |
| BI\_3039 | - | - | 1 |
| BI\_3040 | - | - | 1 |
| BI\_3041 | - | - | 1 |
| BI\_3042 | - | - | 1 |
| ° (change from 2022/23) | **21 (-2)**  | **6 (-)** | 1. **(-15)**
 |

Drop in total numbers above can relate to Black Sea consortium who are dependent upon funding to participate.

**7.2 2023-2024, Year 30 Operations**

Benthic Invertebrate exercises are to be distributed in line with the 2023-2024 timetable (available below). Returns, results and exercise status details are summarised in the table below.

|  |  |  |
| --- | --- | --- |
| Exercise | Status | Returns / Comments |
| RT65 | Specimens to be distributed 01/12/23Submission deadline 02/02/24Interim reports to be issued 09/02/24Ring Test Bulletin to be issued 29/02/24**Exercise in preparation** | General Ring Test |
| RT66 | Specimens to be distributed 01/03/24Submission deadline 26/04/24Interim reports to be issued 03/05/24Ring Test Bulletin to be issued 31/05/24**Exercise in preparation** | Targeted Ring Test – TBC |
| LR28 | Request for specimens to be distributed 15/11/23Submission deadline 26/01/24Interim reports deadline 15/03/24LR Module Summary Report to be issued 22/03/24**Exercise in preparation** | 0 of the 6 sets of specimens received. |
| OS83-85 | Sample data to be requested 15/11/23Data submission deadline Batch 2 22/03/24Sample submission deadline Batch 2 26/04/24OS Module Summary Report deadline 05/07/24**Exercises on-going** | 1 out of 22 datasets received; 3 out of 3 requested samples received. 0 of 3 samples reported to date; 3 samples with the external auditor. |
| 2023/24 Annual Report & SoPs | Annual Report & Statement of Performance documents deadline 26/07/24 | Report template drafted. |

* 1. **2022-2023, Year 29 Operations**

Benthic Invertebrate exercises were distributed in line with the 2022-2023 timetable. Returns, results and exercise status details for live exercises are summarised in the table below.

|  |  |  |
| --- | --- | --- |
| Exercise | Status | Returns / Comments |
| OS80-82 | Sample data requested 28/10/22Data submission deadline Batch 2 24/03/23Sample submission deadline Batch 2 28/04/23 (extended 09/06/23)OS Module Summary Report deadline 14/07/23**Exercises in progress** | Final 3 Own Samples received 20/10/23; analysis on-going. All other Own Samples have been reported.Draft OS Summary Report updated with all sample data reported to date. |
| 2022/23 Annual Report & SoPs | Annual Report & Statement of Performance documents deadline 28/07/23 | Report and SoP documents drafted with all completed modules; OS module pending. |

Post Meeting Note: SOPs sent to MOR/DJ in batches to review before uploading to website. Action: CT

* 1. **Issues arising**
1.

**Taxonomic Workshops**

**7.4.1**

**Expert Taxonomic Workshop, University of Galway**

The taxonomic workshop originally planned for late November 2023 in Galway has been postponed until 2024 due to illness with one of the taxonomic leaders. New dates and details will be confirmed as soon as possible along with the issue of a workshop EOI form.

**7.4.2**

**Benthic Invertebrate Taxonomic Workshop Guidelines for Presenters**

A guidance document for NMBAQC scheme taxonomic workshop contributors, created for session leaders ahead of the next Expert Workshop, has been modified as a best practice guidance document and is now available on the [NMBAQC website](https://www.nmbaqcs.org/media/imiciytn/nmbaqc_expertsworkshoppresenterrequirements_jul23.pdf).

The committee congratulated DH and team regarding work on TDP. This is a ‘live’ document and would be useful to review annually with version control Action: MOR

Up to date, there have been no comments or issues. Action: CT to promote again via social media – X and mail chimp as this will become the standard procedure soon.

**Invertebrate Component 2023-2024 Timetable (Scheme Year 30)**

|  |  |  |
| --- | --- | --- |
| **Module / Exercise** | **Event** | **Date** |
| RT65 - General | Samples distributed | 01/12/23 |
|  | Results deadline | **02/02/24** |
|  | Interim reporting deadline | 09/02/24 |
|  | Final report deadline | 29/02/24 |
|  |  |  |
| RT66 - Targeted | Samples distributed | 01/03/24 |
|  | Results deadline | **26/04/24** |
|  | Interim reporting deadline | 03/05/24 |
|  | Final report deadline | 31/05/24 |
|  |  |  |
| LR28 | Protocol and request for specimens distributed | 15/11/23 |
|  | Specimen submission deadline | **26/01/24** |
|  | Interim reports deadline | 15/03/24 |
|  | LR summary report deadline | 22/03/24 |
|  |  |  |
| OS83–85 | Request for sample data distributed | 15/11/23 |
|  |  |  |
| Batch 1 | Data submission deadline for sample selection | **15/12/23** |
|  | Selected samples submission deadline | **26/01/24** |
|  | Interim report final deadline (for samples received before 23 December 2022) | 22/03/24 |
|  |  |  |
| Batch 2 | Data submission deadline for sample selection | **22/03/24** |
|  | Selected samples submission deadline | **26/04/24** |
|  | Interim report final deadline | 05/07/24 |
|  |  |  |
|  | OS summary report deadline | 19/07/24 |
|  |  |  |
| Annual Report | Annual report deadline | 26/07/24 |
|  |  |  |
| Workshop – experts | Venue TBC (University of Galway) | TBC (Spring 2024) |
|  |  |  |
| Workshop – beginners | TBC – subject to demand | TBC |

1. **Macroalgae Update**

**MACROALGAE BIOMASS AND PERCENTAGE COVER COMPONENT PROGRESS REPORT**

**2023-24, Year 30**

**8.1 Subscriptions - TBC**

|  |  |  |
| --- | --- | --- |
| LabCode | OMC | OMB |
| BI\_2901 |  |  |
| BI\_2902 |  |  |
| BI\_2903 |  |  |
| BI\_2904 |  |  |
| BI\_2905 |  |  |
| BI\_2906 |  |  |
| BI\_2907 |  |  |
| BI\_2908 |  |  |
| BI\_2909 |  |  |
| BI\_2910 |  |  |
| BI\_2911 |  |  |
| ° (change from 2022/23) |  |  |

* 1. **2022-2023, Year 29 Operations – Outgoing Scheme Year**

Submission and results status detailed for RT14 exercises are summarised in the table below.

|  |  |  |
| --- | --- | --- |
| Exercise | Status | Returns / Comments |
| RT14OMB | Request for specimens distributed 23/01/23;Submission deadline 03/03/23;Interim reports deadline 31/03/23;Final Report deadline 28/04/23; | 8 out of 11 datasetsreceived  |
| RT14OMC | Request for specimens distributed 23/01/23;Submission deadline 04/03/23;Interim reports deadline 31/03/23;Final Report deadline 28/04/23; | 9 out of 11 datasets received |

* 1. **2023-2024, Year 30 Operations**

Biomass and Percentage Cover Macroalgal exercises are to be distributed in line with the 2023-2024 timetable (available below).

|  |  |  |
| --- | --- | --- |
| Exercise | Status | Returns / Comments |
| RT15OMC | Specimens distributed 26/01/24;Submission deadline 08/03/24;Interim report to be issued 05/04/24;Final Report deadline 03/05/24;**Exercise in preparation** | Awaiting final participant list |
| RT15OMB | Specimens to be distributed 26/01/24;Submission deadline 08/03/24;Interim reports to be issued 05/04/24;Final Report deadline 03/05/24;**Exercise in preparation** | Awaiting final participant list  |

* 1. **Issues arising**
* Awaiting list of participants for both Biomass and Percentage Cover components.
* Awaiting correct address and contact details for participants.
	1. **Personnel**

David has been informed by Claire Young that she would like to stand down from her position as macroalgal Technical Manager due to increasing work and competing priorities.

1. **Fish Update:**

**FISH COMPONENT PROGRESS REPORT**

**2022-2023, Year 29**

* 1. **Subscriptions (to date)**

|  |  |  |
| --- | --- | --- |
| LabCode | F-RRT15 | F-RT17 |
|  F\_3001 | 1 | 1 |
| F\_3002 | 1 | - |
| F\_3003 | - | 1 |
| F\_3004 | - | 1 |
| F\_3005 | 1 | 1 |
| F\_3006 | - | 1 |
| F\_3007 | - | 1 |
| F\_3008 | 1 | 1 (suggest second subscription) |
| F\_3009 | 1 | - |
| F\_3010 | 1 | - |
| F\_3011 | 1 | - |
| F\_3012 | 1 | - |
| F\_3013 | 1 | - |
| F\_3014 | 1 | - |
| Total (change from last year) | **10 (+2)** | 1. **(-1)**
 |

**9.2 2023-2024, Year 30 Operations**

Timetable yet to be agreed. Hoping for FRRT to be circulated by end 2023 and FRT Q1 2024.

* 1. **2022-2023, Year 29 Operations**

2022-2023 timetable for fish exercises created, as summarised in the table below.

|  |  |  |
| --- | --- | --- |
| Exercise | Status | Returns / Comments |
| F-RRT14 | Request for specimens distributed 17/10/22Specimen submission deadline 16/12/22Final report deadline Delayed 03/2023**Exercise in progress** | Request for specimens sentRequest for deadline extension7 out of 8 submitted |
| F-RT16 | Samples distributed Delayed 03/2023Results deadline Delayed Interim report deadline Delayed Final report deadline Delayed **Exercise in progress** | Specimens sent out 17th JulyDeadline extended to 17 SeptemberIn progress for reviewIn progress |

* 1. **Issues arising**

F-RRT14 - boxes distributed, no shipping problems. One lab with multiple submissions has requested a deadline extension. Results collated ready for distribution to participants for final check.

F-RT16 – Continued to have problems sourcing enough fish for the exercise. Hope to have enough species to distribute this month through a planned survey in March.

A light box has been purchased which should help with image quality of the specimens, as was highlighted the previous year.

F-RRT14 – 7 out of 8 submitted. Interim results sent, report in progress due to be sent for review.

R-RT16 – 6 out of 8 submitted. Awaiting one more submission. One box sent out was not frozen on receipt. This box included some spares of specimens as multiple people would be giving submissions. These unfortunately had to be disposed of and due to the small amount of specimens I had available, I was unable to send out a second box. I have suggested applying for at least two registrations if specimens are to be transported to different locations or will be handled by multiple teams.

* 1. **Taxonomic Workshop**

Currently no taxonomic workshop is planned for fish. A targeted workshop can be developed if sufficient interest is shown.

* 1. **Outstanding issues**

N/A

**Fish Component 2022-2023 Timetable (Scheme Year 29)**

|  |  |  |
| --- | --- | --- |
| Module / Exercise | Event | Date |
|  |  |  |
| F-RRT14 | Protocol and request for specimens distributed (including supply of fish postage boxes) | 17/10/22 |
|  | Specimen submission deadline | **16/12/22** |
|  | Final report deadline | Delayed 03/2023 |
|  |  |  |
| F-RT16 | Samples (specimens & images) distributed | Delayed 03/2023 |
|  | Results deadline | **05/23** |
|  | Interim reporting deadline | 06/23 |
|  | Final report deadline | 06/23 |
|  |  |  |
| Annual Report | Annual report deadline | Delayed |
|  |  |  |
| Workshop – experts | TBC – subject to demand | TBC |

The committee discussed where to put fish larvae – into Zooplankton or Fish component? MW advised fish larvae are included into the Zooplankton component if there is an ask and the MBA has had an increase in interest in fish larvae identification lately. As stereomicroscopes as required, its best placed in Zooplankton. If anyone has any fish larval material, please let MW know.

1. **Zooplankton Update:**

Certificates have been sent out to participants who attended the last ring test with a report currently being compiled and we are now busy sorting out specimens for the next ring test (Autumn 2024), including some good samples received from the Bark Europa cruise. MW undertook a separate results meeting for the Scotland participants who were unable to travel to the workshop due to rail strikes.

Nalani Schnell (Natural History Paris) tasked MW with writing an article about the NMBAQC scheme.

1. **AOB:**

Dan Lear gave the committee a quick insight into his role as lead of the MBA data team and project coordinator for DASSH. Dan is interested in identifying datasets which have gone through the NMBAQC process and would like to ensure datasets through the scheme are captured in MEDIN standards (MEDIN reports also to HBDSEG). MG advised NRW have datasets which don’t make it through, and they are currently running two separate systems (Same for EA). Action: Dan to contact MG for further discussion. GP to chat to Roger Proudfoot as the EA are looking to overhaul their database.

JA advised the Big Picture group has developed a standard for images which will recommend to MEDIN. CM advised at Cefas there has been a lot of discussion around the data with a unique identifier created on each dataset.

Action: ALL to email Dan (dble@mba.ac.uk) with any post meeting questions.

**From MG:**

One thing that has been discussed at various groups recently is developing / agreeing standard sampling and analytical methods for carbon (using samples obtained from sediments grabs and cores). It has been raised at HBDSEG, and identified as a priority by the UK Blue Carbon Evidence Partnership. It would be interesting to know whether the NMBAQC has this on their radar.

Claire Mason gave a short presentation on the aims and objectives from a recent Blue Carbon Standardised workshop. There is to be a follow up workshop Jan/Feb 24 (currently compiling list of invitees) which will look at techniques. British Standards Part 19 is also coming up for review. Action: ALL to email CM with questions

The following paper was also highlighted by CM: <https://discovery.ucl.ac.uk/id/eprint/10160308/1/Graves%20et%20al%202022%20fmars-09-926215.pdf>

**Miscellaneous:**

CT is to step down as Technical Secretary once a replacement has been found due to work commitments.

MOR asked for a copy of the NMBAQC article MG wrote for the Porcupine Society. Action: MG to forward

1. **Contractor Questions:**

One contractor query was raised pertinent to the Fish component and relates to staff absence/communication problems. This has generated a review of the protocols, including staff back up to ensure any similar problems are alleviated. There was also discussion as to how frozen fish samples are sent and how the process could be improved.

1. **Finance \*Confidential**

**DONM: ~ March 2024**