



NMBAQC

NE Atlantic Marine Biological Analytical Quality Control Scheme

Laboratory Reference Module Summary Report

Benthic Invertebrate Component - 2016/17

LR21

05 May 2017

Author: Tim Worsfold

Reviewer: David Hall, NMBAQCS Project Manager

Approved by: Myles O'Reilly, Contract Manager, SEPA

Contact: nmbaqc@apemltd.co.uk



MODULE / EXERCISE DETAILS

Module:	Laboratory Reference (LR)
Exercises:	LR21
Data/Sample Request Circulated:	15th June 2016
Sample Submission Deadline:	29th July 2016
Number of Subscribing Laboratories:	10
Number of LR Received:	6

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Table 1. Summary of mis-identified taxa in the Laboratory Reference Module (LR21) (erroneous identifications in brackets).

LabCode	Taxonomic Errors	Major Taxonomic Group				
		Polychaeta	Oligochaeta	Crustacea	Mollusca	Other
BI_2302	4	<i>Euchone southerni</i> (<i>Euchone cf. pararosea</i>) -	-	<i>Tmetonyx sp.</i> (<i>Tryphosella</i> Type A) -	<i>Vitreolina antiflexa</i> (<i>Vitreolina philippi</i>) <i>Laona quadrata</i> (?) (<i>Philine</i> (Type A))	- -
BI_2309	7	<i>Euchone cf. limnicola</i> (<i>Jasmineira elegans</i>) <i>Neoamphitrite figulus</i> (<i>Lanice conchilega</i>) <i>Polycirrus denticulatus</i> (<i>Polycirrus norvegicus</i>) <i>Syllis parapari</i> (<i>Syllis amica</i>)	- - - -	<i>Caprella linearis</i> (<i>Caprella equilibra</i>) Aoridae female (<i>Microdeutopus anomalus</i>) - -	<i>Haminoea sp.</i> (<i>Roxania utriculus</i>) - - -	- - - -
BI_2312	12	<i>Scolecopsis cantabra</i> (<i>Scolecopsis gilchristi</i>) <i>Sosane sulcata</i> (<i>Ampharete acutifrons</i>) <i>Dipolydora saintjosephi</i> (<i>Dipolydora coeca</i>) - *2 instances in mixtures	- - -	<i>Liocarcinus holsatus</i> (<i>Liocarcinus marmoreus</i>) - -	<i>Mya truncata</i> juv. (<i>Mya arenaria</i>) - *6 instances <i>Mya arenaria</i> juv. (<i>Mya truncata</i>) -	- - -
BI_2313	3	<i>Leiochone sp.</i> (<i>Praxillura longissima</i>) <i>Chaetozone christiei</i> (<i>Chaetozone setosa</i>)	- -	<i>Pontocrates altamarinus</i> (<i>Monoculodes carinatus</i>) -	- -	- -
BI_2319	6	<i>Malmgrenia arenicolae</i> (<i>Glycera tridactyla</i>) - additional in pot <i>Praxillella affinis</i> (<i>Euclymene droebachiensis</i>) <i>Syllis parapari</i> (<i>Syllis armillaris</i>)	- - -	- - -	Cochliopidae Species A (Hydrobiidae) <i>Potamopyrgus antipodarum</i> (Hydrobiidae) - *2 instances -	- - -
BI_2320	11	<i>Gattyana cirrosa</i> (<i>Eunoe nodosa</i>) <i>Eulalia aurea</i> (<i>Phyllodoce laminosa</i> ?) <i>Syllis parapari</i> (<i>Syllis cornuta</i>) <i>Syllis variegata</i> (<i>Syllis amica</i>) <i>Syllis garciai</i> ("Syllis Sp. B") - additional in pot <i>Syllis variegata</i> ("Syllis sp. F") <i>Sphaerosyllis cf. taylori</i> (<i>Sphaerosyllis magnidentata</i> ?) <i>Cossura pygodactylata</i> (<i>Cossura longocirrata</i>) <i>Melinna sp.</i> ("Melinnopsis arctica?") <i>Owenia borealis</i> (<i>Owenia fusiformis</i>)	- - - - - - - - - -	<i>Paramphilochoides odontyx</i> (<i>Paramphilochoides intermedius</i>) - - - - - - - -	- - - - - - - - -	- - - - - - - -
TOTAL	43	24	0	6	13	0
% Error	29	56	0	14	30	0

* = replicates of the same taxon submitted

Table 2. Summary of identification policy differences in the Laboratory Reference Module (LR21) (original identifications in brackets).

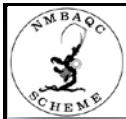
LabCode	Number of differences	Identification policy difference explanations (participant original identifications in brackets)
BI_2302	6	<i>Ampharete</i> sp. (<i>Ampharete finmarchica</i>) - Resolution reduced; 13 AU but palae tapered
		<i>Yoldiella philippiana</i> (<i>Yoldiella propinqua/philippiana</i>) - Resolution increased
		<i>Prionospio</i> cf. <i>aluta</i> (<i>Prionospio aluta</i> (?)) - APEM recording policy
		<i>Aclis walleri</i> (<i>Aclis</i> (?)) - Resolution increased
		<i>Aclis walleri</i> (<i>Aclis walleri</i> (?)) - Resolution increased
		<i>Prionospio</i> cf. <i>cirrifera</i> (<i>Prionospio cirrifera</i>) - APEM recording policy
BI_2309	5	<i>Myrianida</i> sp. epitoke (<i>Autolytus</i>) - Name change
		<i>Phoronis</i> sp. (<i>Phoronis ovalis</i>) - APEM identification policy; <i>Phoronis</i> at genus level, except <i>P. ovalis</i> ; probably not <i>P. ovalis</i>
		<i>Polycirrus</i> sp. (<i>Polycirrus medusa</i>) - APEM identification policy; <i>Polycirrus</i> at genus level
		<i>Pseudocuma longicorne</i> (<i>Pseudocuma longicornis</i>) - Spelling error
		<i>Vaunthompsonia cristata</i> (<i>Vauntomponia cristata</i>) - Spelling error
BI_2312	8	<i>Mya arenaria</i> juv. (<i>Mya arenaria</i>) - APEM policy; separate juveniles below 10mm, at species level
		<i>Scolecopsis squamata</i> type 1 (<i>Scolecopsis</i> sp.) - 2 instances - APEM identification policy; use in house working table for <i>Scolecopsis</i>
		<i>Diplodonta rotundata</i> juv. (<i>Diplodonta rotundata</i>) - 2 instances - APEM policy; separate juveniles below 5mm, at species level
		<i>Tritonia</i> juv. (<i>Tritonia</i>) - APEM policy; separate juveniles below 10mm, at genus level
		Aeolidiidae (Aeolidacea) - APEM policy; separate juveniles below 10mm, at genus level
		<i>Perophora listeri</i> (<i>Pereophora listeri</i>) - Spelling error

Table 2. Summary of identification policy differences in the Laboratory Reference Module (LR21) (original identifications in brackets).

LabCode	Number of differences	Identification policy difference explanations (participant original identifications in brackets)
BI_2313	4	<i>Ampharete cf. acutifrons</i> (<i>Ampharete acutifrons</i>) - APEM identification policy; UK <i>A. acutifrons</i> may be a different species
		<i>Capitella sp.</i> (<i>Capitella giardi</i>) - APEM identification policy; <i>Capitella</i> at genus pending taxonomic revision
		<i>Metopa rubrovittata</i> (<i>Metopa rubrovitta</i>) - Spelling error
		<i>Macropodia sp. juv.</i> (<i>Macropodia parva</i>) - APEM identification policy; separate juveniles below 5mm, at genus level
BI_2319	4	<i>Gnathiidae juv.</i> (<i>Paragnathia formica</i>) - APEM policy to leave juvenile Gnathiidae at family
		<i>Dialychone dunerificta</i> (<i>Chone dunerificta</i>) - Nomenclature update
		<i>Ampharete lindstroemi</i> (<i>Ampharete lindstroemi agg.</i>) - APEM policy to continue separation of <i>A. lindstroemi</i> , <i>A. baltica</i> and <i>A. cf. acutifrons</i>
		<i>Thracia villosiuscula juv.</i> (<i>Thracia villosiuscula</i>) - APEM policy would be to leave at genus below 5mm but identified as juvenile in this case
BI_2320	7	<i>Syllis pontxioi</i> ("Syllis Sp. B") - Nomenclature update - equivalent from previous guide (Garwood, 2006)
		<i>Odontosyllis fulgurans</i> (<i>Odontosyllis fulgarens</i>) - Spelling error
		<i>Proclea graffii</i> (<i>Proclea graffi</i>) - Spelling error
		<i>Parasabella torulis?</i> (<i>Demonax torulus?</i>) - Nomenclature update
		<i>Lyonsia norvegica</i> (<i>Lyonsia norvegica</i>) - Spelling error
		<i>Nototropis falcatus</i> (<i>Atylus falcatus</i>) - Nomenclature update
		<i>Strongylocentrotus droebachiensis</i> ("Stronglylocentrotus droebachiensis") - Spelling error

APPENDIX

LR21 individual summary reports for participating laboratories



NMBQC Scheme Laboratory Reference Interim Results



Laboratory reference: LR21

Audit Completion Date: 20 March 2017

Date received: 10/08/2016

Auditor (lead): Tim Worsfold

Number of participating laboratories: 10

Auditor (review): David Hall

Laboratory Code: BI_2302

Key: Blue text = no change, Green text = change, Red text = change due to error

No.	Original Data (OD) Identification	Audit Data (AD) Identification	Comment	WoRMS List Reference (20/03/17)
1	Ampharete finmarchica	Ampharete sp.	Resolution reduced; 13 AU but palae tapered	Ampharete Malmgren, 1866
2	Diastylis boeckii	Diastylis boeckii		Diastylis boeckii Zimmer, 1930
3	Eumida ockelmanni (?)	Eumida ockelmanni (?)	Uncertainty retained; possibly undescribed species (features different from other E. ockelmanni we have seen)	Eumida ockelmanni Eiby-Jacobsen, 1987
4	Tryphosella Type A	Tmetonyx sp.	Taxonomic error	Tmetonyx Stebbing, 1906
5	Sosane bathyalis	Sosane bathyalis		Sosane bathyalis (Holthe, 1986)
6	Campylaspis macrophthalma	Campylaspis macrophthalma		Campylaspis macrophthalma Sars, 1878
7	Campylaspis (Type A)	Campylaspis (Type A)	Uncertainty retained; unknown (possibly undescribed) species	Campylaspis G.O. Sars, 1865
8	Yoldiella propinqua/philippiana	Yoldiella philippiana	Resolution increased	Yoldiella philippiana (Nyst, 1845)
9	Harmothoe antilopes	Harmothoe antilopes		Harmothoe antilopes McIntosh, 1876
10	Prionospio aluta(?)	Prionospio cf. aluta	APEM recording policy	Prionospio aluta Maciolek, 1985
11	Gracilechinus acutus	Gracilechinus acutus		Gracilechinus acutus (Lamarck, 1816)
12	Nothria conchylega	Nothria conchylega		Nothria conchylega (Sars, 1835)
13	Anobothrus (Type A)	Anobothrus (Type A)	Uncertainty retained; unknown (possibly undescribed) species	Anobothrus Levinsen, 1884
14	Nothria hyperborea	Nothria hyperborea		Nothria hyperborea (Hansen, 1878)
15	Euchone cf. pararosea	Euchone southerni	Taxonomic error	Euchone southerni Banse, 1970
16	Paranaitis (Type A)	Paranaitis (Type A)	Uncertainty retained; unknown (possibly undescribed) species	Paranaitis Southern, 1914
17	Amythasides macroglossus	Amythasides macroglossus		Amythasides macroglossus Eliason, 1955
18	Ampelisca sarsi	Ampelisca sarsi		Ampelisca sarsi Chevreux, 1888
19	Tellimya tenella	Tellimya tenella		Tellimya tenella (Lovén, 1846)
20	Gitana abyssicola	Gitana abyssicola		Gitana abyssicola Sars, 1895
21	Aclis (?)	Aclis walleri	Resolution increased	Aclis walleri Jeffreys, 1867
22	Aclis walleri (?)	Aclis walleri	Resolution increased	Aclis walleri Jeffreys, 1867
23	Vitreolina philippi	Vitreolina antiflexa	Taxonomic error	Vitreolina antiflexa (Monterosato, 1884)
24	Prionospio cirrifer	Prionospio cf. cirrifer	APEM recording policy	Prionospio cirrifer Wirén, 1883
25	Philine (Type A)	Laona quadrata (?)	Taxonomic error	Laona quadrata (S. Wood, 1839)



NMBQC Scheme Laboratory Reference Interim Results



Laboratory reference: LR21

Audit Completion Date: 20 July 2016

Date received: 20/06/2016

Auditor (lead): Jessica Taylor / Marta Kazubek

Number of participating laboratories: 10

Auditor (review): Tim Worsfold / David Hall

Laboratory Code: BI2309

Key: Blue text = no change, Green text = change, Red text = change due to error

No.	Original Data (OD) Identification	Audit Data (AD) Identification	Comment	WoRMS List Reference (02/08/16)
1	Alderia modesta	Alderia modesta		Alderia modesta (Lovén, 1844)
2	Ampharete finmarchica	Ampharete finmarchica		Ampharete finmarchica (M. Sars, 1865)
3	Anapagurus chiroacanthus	Anapagurus chiroacanthus		Anapagurus chiroacanthus (Lilljeborg, 1856)
4	Aponuphis bilineata	Aponuphis bilineata		Aponuphis bilineata (Baird, 1870)
5	Autolytus	Myrianida sp. epitoke	Name change	Myrianida Milne Edwards, 1845
6	Caprella equilibra	Caprella linearis	Taxonomic error	Caprella linearis (Linnaeus, 1767)
7	Clymenella cincta	Clymenella cincta		Clymenella cincta (Saint-Joseph, 1894)
8	Eteone barbata	Eteone barbata		Eteone barbata Malmgren, 1865
9	Gammarus finmarchicus	Gammarus finmarchicus		Gammarus finmarchicus Dahl, 1938
10	Glycera tridactyla	Glycera tridactyla		Glycera tridactyla Schmarda, 1861
11	Jasmineira elegans	Euchone cf. limnicola	Taxonomic error	Euchone limnicola Reish, 1959
12	Lanice conchilega	Neoamphitrite figulus	Taxonomic error	Neoamphitrite figulus (Dalyell, 1853)
13	Magelona minuta	Magelona minuta		Magelona minuta Eliason, 1962
14	Microdeutopus anomalus	Aoridae female	Taxonomic error; not Microdeutopus; probably Autonoe	Aoridae Stebbing, 1899
15	Orchestia gammarellus	Orchestia gammarellus		Orchestia gammarellus (Pallas, 1766)
16	Phoronis ovalis	Phoronis sp.	APEM identification policy; Phoronis at genus level, except P. ovalis; probably not P. ovalis	Phoronis Wright, 1856
17	Polycirrus medusa	Polycirrus sp.	APEM identification policy; Polycirrus at genus level	Polycirrus Grube, 1850
18	Polycirrus norvegicus	Polycirrus denticulatus	Taxonomic error (APEM policy: Polycirrus at genus but specimen identified as not P. norvegicus)	Polycirrus denticulatus Saint-Joseph, 1894
19	Procerastea nematodes	Procerastea nematodes		Procerastea nematodes Langerhans, 1884
20	Pseudocuma longicornis	Pseudocuma longicorne	Spelling error	Pseudocuma (Pseudocuma) longicorne (Bate, 1858)
21	Roxania utriculus	Haminoea sp.	Taxonomic error	Haminoea Turton & Kingston [in Carrington], 1830
22	Syllides	Syllides sp.		Syllides Örsted, 1845
23	Syllis amica	Syllis parapari	Taxonomic error	Syllis parapari San Martín & López, 2000
24	Thysanocardia procera	Thysanocardia procera		Thysanocardia procera (Möbius, 1875)
25	Vauntomponia cristata	Vaunthompsonia cristata	Spelling error	Vaunthompsonia cristata Bate, 1858



NMBQC Scheme Laboratory Reference Interim Results



Laboratory reference: LR21

Audit Completion Date: 17 March 2017

Date received: 03 August 2016

Auditor (lead): Tim Worsfold / Carol Milner

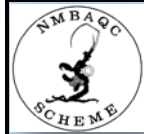
Number of participating laboratories: 10

Auditor (review): David Hall

Laboratory Code: BI_2312

Key: Blue text = no change, Green text = change, Red text = change due to error

No.	Original Data (OD) Identification	Audit Data (AD) Identification	Comment	WoRMS List Reference (17/03/17)
1	Mya arenaria	Mya truncata juv.	Taxonomic error	Mya truncata Linnaeus, 1758
2	Mya arenaria	Mya truncata juv.	Taxonomic error	Mya truncata Linnaeus, 1758
3	Mya arenaria	Mya truncata juv.	Taxonomic error	Mya truncata Linnaeus, 1758
4	Mya arenaria	Mya truncata juv.	Taxonomic error	Mya truncata Linnaeus, 1758
5	Mya arenaria	Mya truncata juv.	Taxonomic error	Mya truncata Linnaeus, 1758
6	Mya arenaria	Mya arenaria juv.	APEM policy; separate juveniles below 10mm, at species level	Mya arenaria Linnaeus, 1758
7	Mya arenaria	Mya truncata juv.	Taxonomic error	Mya truncata Linnaeus, 1758
8	Scolecopsis sp.	Scolecopsis squamata type 1	APEM identification policy; use in house working table for Scolecopsis	Scolecopsis (Scolecopsis) squamata (O.F. Muller, 1806)
9	Scolecopsis sp.	Scolecopsis squamata type 1	APEM identification policy; use in house working table for Scolecopsis	Scolecopsis (Scolecopsis) squamata (O.F. Muller, 1806)
10	Scolecopsis gilchristi	Scolecopsis cantabra	Taxonomic error	Scolecopsis (Scolecopsis) cantabra (Rioja, 1918)
11	Mya truncata	Mya arenaria juv.	Taxonomic error	Mya arenaria Linnaeus, 1758
12	Liocarcinus holsatus	Liocarcinus holsatus		Liocarcinus holsatus (Fabricius, 1798)
13	Liocarcinus holsatus	Liocarcinus holsatus		Liocarcinus holsatus (Fabricius, 1798)
14	Liocarcinus marmoreus	Liocarcinus holsatus	Taxonomic error	Liocarcinus holsatus (Fabricius, 1798)
15	Ampharete acutifrons	Sosane sulcata	Taxonomic error	Sosane sulcata Malmgren, 1866
16	Diplodonta rotundata	Diplodonta rotundata juv.	APEM policy; separate juveniles below 5mm, at species level	Diplodonta rotundata (Montagu, 1803)
17	Diplodonta rotundata	Diplodonta rotundata juv.	APEM policy; separate juveniles below 5mm, at species level	Diplodonta rotundata (Montagu, 1803)
18	Eumida bahusiensis	Eumida bahusiensis		Eumida bahusiensis Bergstrom, 1914
19.1	Dipolydora coeca	Dipolydora coeca	mixture, see below	Dipolydora coeca (Örsted, 1843)
19.2		Dipolydora saintjosephi	Additional taxon in pot	Dipolydora saintjosephi (Eliason, 1920)
20	Polydora ciliata	Polydora ciliata		Polydora ciliata (Johnston, 1838)
21.1	Dipolydora coeca	Dipolydora coeca	mixture, see below	Dipolydora coeca (Örsted, 1843)
21.2		Dipolydora saintjosephi	Additional taxon in pot	Dipolydora saintjosephi (Eliason, 1920)
22	Tritonia	Tritonia juv.	APEM policy; separate juveniles below 10mm, at genus level	Tritonia Cuvier, 1798
23	Aeolidacea	Aeolidiidae	APEM identification policy; Aeolidiidae separated at family level or lower	Aeolidiidae Gray, 1827
24	Pereophora listeri	Perophora listeri	Spelling error	Perophora listeri Wiegman, 1835
25	Cheirocratus intermedius	Cheirocratus intermedius		Cheirocratus intermedius G.O. Sars, 1894



NMBAC Scheme Laboratory Reference Interim Results



Laboratory reference: LR21

Audit Completion Date: 27 July 2016

Date received: 05 July 2016

Auditor (lead): Marta Kazubek / Jessica Taylor

Number of participating laboratories: 10

Auditor (review): Tim Worsfold / David Hall

Laboratory Code: BI_2313

Key: Blue text = no change, Green text = change, Red text = change due to error

No.	Original Data (OD) Identification	Audit Data (AD) Identification	Comment	WoRMS List Reference (2/8/16)
1	Polygordius appendiculatus	Polygordius appendiculatus		Polygordius appendiculatus Fraipont, 1887
2	Scoloplos (Scoloplos) armiger	Scoloplos armiger		Scoloplos (Scoloplos) armiger (Müller, 1776)
3	Glycinde nordmanni	Glycinde nordmanni		Glycinde nordmanni (Malmgren, 1866)
4	Lygdamis murata	Lygdamis murata		Lygdamis murata (Allen, 1904)
5	Ampharete acutifrons	Ampharete cf. acutifrons	APEM identification policy; UK A. acutifrons may be a different species	Ampharete acutifrons (Grube, 1860)
6	Cumopsis fagei	Cumopsis fagei		Cumopsis fagei Băcescu, 1956
7	Nephtys caeca	Nephtys caeca		Nephtys caeca (Fabricius, 1780)
8	Harmothoe glabra	Harmothoe glabra		Harmothoe glabra (Malmgren, 1866)
9	Streblospio benedicti	Streblospio benedicti		Streblospio benedicti Webster, 1879
10	Capitella giardi	Capitella sp.	APEM identification policy; Capitella at genus pending taxonomic revision	Capitella Blainville, 1828
11	Othomaera othonis	Othomaera othonis		Othomaera othonis (Milne Edwards, 1830)
12	Monoculodes carinatus	Pontocrates altamarinus	Taxonomic error	Pontocrates altamarinus (Bate & Westwood, 1862)
13	Pseudomystides limbata	Pseudomystides limbata		Pseudomystides limbata (Saint-Joseph, 1888)
14	Sphaerosyllis bulbosa	Sphaerosyllis bulbosa		Sphaerosyllis bulbosa Southern, 1914
15	Metopa rubrovittata	Metopa rubrovittata	Spelling error	Metopa rubrovittata Sars, 1882
16	Lagis koreni	Lagis koreni		Lagis koreni Malmgren, 1866
17	Eulalia mustela	Eulalia mustela		Eulalia mustela Pleijel, 1987
18	Praxillura longissima	Leiochone sp.	Taxonomic error	Leiochone Grube, 1868
19	Sabellaria spinulosa	Sabellaria spinulosa		Sabellaria spinulosa (Leuckart, 1849)
20	Macropodia parva	Macropodia sp. juv.	APEM identification policy; separate juveniles below 5mm, at genus level	Macropodia Leach, 1814
21	Chaetozone setosa	Chaetozone christiei	Taxonomic error	Chaetozone christiei Chambers, 2000
22	Sabellaria spinulosa	Sabellaria spinulosa		Sabellaria spinulosa (Leuckart, 1849)
23	Microdeutopus gryllotalpa	Microdeutopus gryllotalpa		Microdeutopus gryllotalpa Costa, 1853
24	Spirobranchus lamarcki	Spirobranchus lamarcki		Spirobranchus lamarcki (Quatrefages, 1866)
25	Caprella equilibra	Caprella equilibra		Caprella equilibra Say, 1818



NMBQC Scheme Laboratory Reference Interim Results



Laboratory reference: LR21

Audit Completion Date: 16 March 2017

Date received: 01 August 2016

Auditor (lead): Carol Milner



Number of participating laboratories: 10

Auditor (review): Tim Worsfold/ David Hall

Laboratory Code: BI_2319

Key: Blue text = no change, Green text = change, Red text = change due to error

No.	Original Data (OD) Identification	Audit Data (AD) Identification	Comment	WoRMS List Reference (16/03/17)
1	Tanaopsis graciloides	Tanaopsis graciloides		Tanaopsis graciloides (Lilljeborg, 1864)
2	Pinnotheres pisum	Pinnotheres pisum		Pinnotheres pisum (Linnaeus, 1767)
3	Schistomysis ornata	Schistomysis ornata		Schistomysis ornata (G. O. Sars, 1864)
4	Paragnathia formica	Gnathiidae juv.	APEM policy to leave juvenile Gnathiidae at family	Gnathiidae Leach, 1814
5	Bathyporeia sarsi	Bathyporeia sarsi		Bathyporeia sarsi Watkin, 1938
6	Barentsia matsushimana	Barentsia matsushimana		Barentsia matsushimana Toriumi, 1951
7	Scolecopsis korsuni	Scolecopsis korsuni		Scolecopsis korsuni Sikorski, 1994
8	Nephtys caeca	Nephtys caeca		Nephtys caeca (Fabricius, 1780)
9	Aricidea minuta	Aricidea minuta		Aricidea (Aricidea) minuta Southward, 1956
10.1	Glycera tridactyla	Glycera tridactyla		Glycera tridactyla Schmarda, 1861
10.2		Malmgrenia arenicolae	Additional taxon in pot	Malmgrenia arenicolae (Saint-Joseph, 1888)
11	Chone dunerificta	Dialychone dunerificta	Nomenclature update	Dialychone dunerificta (Tovar-Hernández, Licciano, Giangrande, 2007)
12	Ampharete lindstroemi agg.	Ampharete lindstroemi	APEM policy to continue separation of A. lindstroemi, A. baltica and A. cf. acutifrons	Ampharete lindstroemi Malmgren, 1867 sensu Hesse, 1917
13	Hesionura elongata	Hesionura elongata		Hesionura elongata (Southern, 1914)
14	Eulalia mustela	Eulalia mustela		Eulalia mustela Pleijel, 1987
15	Euclymene droebachiensis	Praxillella affinis	Taxonomic error	Praxillella affinis (M. Sars in G.O. Sars, 1872)
16	Malmgrenia arenicolae	Malmgrenia arenicolae		Malmgrenia arenicolae (Saint-Joseph, 1888)
17	Streptosyllis bidentata	Streptosyllis bidentata		Streptosyllis bidentata Southern, 1914
18	Sphaerosyllis bulbosa	Sphaerosyllis bulbosa		Sphaerosyllis bulbosa Southern, 1914
19	Syllis armillaris	Syllis parapari	Taxonomic error	Syllis parapari San Martín & López, 2000
20	Thracia villosiuscula	Thracia villosiuscula juv.	APEM policy would be to leave at genus below 5mm but identified as juvenile in this case	Thracia villosiuscula (MacGillivray, 1827)
21	Megastomia conoidea	Megastomia conoidea		Megastomia conoidea (Brocchi, 1814)
22	Peringia ulvae	Peringia ulvae		Peringia ulvae (Pennant, 1777)
23	Hydrobiidae	Cochliopidae Species A	Taxonomic error (new introduction, also found in Thames, species yet to be determined)	Cochliopidae Tryon, 1866
24	Hydrobiidae	Potamopyrgus antipodarum	Taxonomic error (P. antipodarum now in family Tateidae)	Potamopyrgus antipodarum (Gray, 1843)
25	Hydrobiidae	Potamopyrgus antipodarum	Taxonomic error (P. antipodarum now in family Tateidae)	Potamopyrgus antipodarum (Gray, 1843)

	NMBAC Scheme Laboratory Reference Interim Results			
	Laboratory reference: LR21	Audit Completion Date: 17 March 2017		
	Date received: 15/08/2016	Auditor (lead): Tim Worsfold / Carol Milner		
	Number of participating laboratories: 10	Auditor (review): David Hall		
Laboratory Code: BI_2320				

Key: Blue text = no change, Green text = change, Red text = change due to error

No.	Original Data (OD) Identification	Audit Data (AD) Identification	Comment	WoRMS List Reference (17/03/17)
1	Eunoe nodosa	Gattyana cirrhosa	Taxonomic error	Gattyana cirrhosa (Pallas, 1766)
2	Phyllodoce laminosa?	Eulalia aurea	Taxonomic error	Eulalia aurea Gravier, 1896
3	Syllis cornuta	Syllis parapari	Taxonomic error	Syllis parapari San Martín & López, 2000
4	Syllis amica	Syllis variegata	Taxonomic error	Syllis variegata Grube, 1860
5.1	"Syllis Sp. B"	Syllis pontxioi	Nomenclature update; mixture, see below	Syllis pontxioi San Martín & López, 2000
5.2		Syllis garciai	Taxonomic error; most abundant species in pot	Syllis garciai (Campoy, 1982)
6	"Syllis sp. F"	Syllis variegata	Taxonomic error	Syllis variegata Grube, 1860
7	Odontosyllis fulgurans	Odontosyllis fulgurans	Spelling error	Odontosyllis fulgurans (Audouin & Milne Edwards, 1833)
8.1	Sphaerosyllis magnidentata?	Sphaerosyllis cf. taylori	Taxonomic error; mixture, see below	Sphaerosyllis taylori Perkins, 1981
8.2		Sphaerosyllis cf. taylori epitoke	Taxonomic error	Sphaerosyllis taylori Perkins, 1981
9	Aricidea cerrutii	Aricidea cerrutii		Aricidea (Acмира) cerrutii Laubier, 1966
10	Prionospio dubia	Prionospio dubia		Prionospio dubia Day, 1961
11	Cossura longocirrata	Cossura pygodactylata	Taxonomic error	Cossura pygodactylata Jones, 1956
12	"Melinnopsis arctica?"	Melinna sp.	Taxonomic error; dorsal brim absent so unknown sp., or damaged?	Melinna Malmgren, 1866
13	Amage scotica	Amage scotica		Amage scotica Clark, 1952
14	Proclea graffi	Proclea graffii	Spelling error	Proclea graffii (Langerhans, 1884)
15	Demonax torulus?	Parasabella torulis?	Nomenclature update	Parasabella torulis (Knight-Jones & Walker, 1985)
16	Lyonsia norvegica	Lyonsia norvegica	Spelling error	Lyonsia norvegica (Gmelin, 1791)
17	Pharus legumen	Pharus legumen		Pharus legumen (Linnaeus, 1758)
18	Mactra stultorum	Mactra stultorum		Mactra stultorum (Linnaeus, 1758)
19	Ampelisca gibba	Ampelisca gibba		Ampelisca gibba Sars, 1883
20	Atylus falcatus	Nototropis falcatus	Nomenclature update	Nototropis falcatus (Metzger, 1871)
21	Paramphilochoides intermedius	Paramphilochoides odontyx	Taxonomic error	Paramphilochoides odontonyx (Boeck, 1871)
22	Scalpellum scalpellum	Scalpellum scalpellum		Scalpellum scalpellum (Linnaeus, 1767)
23	"Strongylocentrotus droebachiensis"	Strongylocentrotus droebachiensis	Spelling error	Strongylocentrotus droebachiensis (O.F. Müller, 1776)
24	Owenia fusiformis	Owenia borealis	Taxonomic error	Owenia borealis Koh, Bhaud & Jirkov, 2003
25	Owenia borealis	Owenia borealis		Owenia borealis Koh, Bhaud & Jirkov, 2003