



# Additional type and other notable specimens of Mollusca from the Montagu Collection in the Royal Albert Memorial Museum & Art Gallery, Exeter

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## Abstract

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## Key Words

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This paper completes the review of the Col. George Montagu collection of shells in the Royal Albert Memorial Museum & Art Gallery, Exeter. A further twenty-one lots of type material were discovered bringing the total number of type lots to ninety-four. A number of other taxa that are of historic and potential nomenclatural significance are discussed. Specimens that relate to taxa of authors other than Montagu were isolated and consideration was given to the many non-British taxa that Montagu included in his works. To complete the study a list of all species represented in this collection is given.

## Introduction

In 2017 (Oliver et al. 2017) published a catalogue of the extant type material available for molluscan species described by George Montagu in 1803, 1804, 1808, 1813 and 1816. Following on from this further curatorial work was carried out in the Royal Albert Memorial Museum & Art Gallery, primarily to investigate specimens that were described by contemporaries of Montagu notably Richard Pulteney, Edward Donovan, William Turton, Thomas Rackett and E. Mendes da Costa. Of special interest here were the many non-British species included by Montagu. During this work a number of type specimens reported as missing by Oliver et al. in 2017 were located. Given that the Montagu collection had been used as a source of display material, at least twice, and remounted during the process, since its acquisition it

is not surprising that the original data had become obscured. The first part of this paper reports on these newly discovered type specimens.

The remainder of the paper analyses some notable, but not type specimens and the non-British shells extant in the Montagu collection. Many species that Montagu included had been noted by previous British authors such as E. M. da Costa (1778), Pulteney, (1799) and Donovan (1804). Our aim was to compare Montagu's specimens with the published accounts to ascertain how accurately this material had been identified and could it be used as a proxy for type material for which little now remains.

Finally we will give an overview of the entire collection as it now exists in RAMM by presenting a list comparing the names used by Montagu and their current identifications. This will give further insight into how accurate Montagu's works were.

## Additional type specimens

The format of this section follows that adopted by Oliver et al. 2017.

Line 1 gives the original name as given by Montagu.

Line 2 gives the current name, superfamily and family placement. The synonymy of taxa generally follows MolluscaBase but not all taxa are yet included and other sources are quoted where appropriate.

Line 3 gives the full original reference

Line 4 gives the recorded localities as given by Montagu, therefore type localities. None of the original labels indicate the locality; all are subsequently inferred from literature.

Following this gives the data on available specimens, any confirmed designations and our suggested type status are given, Confirmed type material in bold font.

Wherever possible we have tried to give accurate determinations to the type material but we are not expert across the range of taxa included here. Anyone wishing to make lectotype selections is strongly advised to research the original descriptions, figures and specimens and not to rely unquestioning on this catalogue. The primary aim here is to make the collection available to research and is not definitive.

Abbreviations used in the catalogue are as follows:

**EXEMS**, accepted international acronym for the Royal Albert Memorial Museum and Art Gallery in Exeter, England; **RAMM**, abbreviation of Royal Albert Memorial Museum & Art Gallery; **sh.**, a complete shell, if a bivalve then both valves present; **v.**, a single valve of a bivalve; **frag.**, an incomplete and broken shell.

**arcuatum** *Cardium* Montagu, 1803. Figure 1.

*Lucinella divaricata* (Linnaeus, 1758) [LUCINOIDEA, LUCINIDAE].

Montagu G 1803. *Test. Brit. Part 1*. p. 85, Tab. 3 fig. 2. Dredged in Falmouth Harbour, Cornwall.

**EXEMS Moll3744, 1v. Syntype.** Seen in RAMM by Jeffreys (1879: p.3) {"*C(ardium) arcuatum*" *Loripes divaricatus* L.}.

**avonensis** *Mytilus* Montagu, 1803. Figure 2.

*Anodonta anatina* (Linnaeus, 1758) [UNIONOIDEA, UNIONIDAE].

Montagu G 1803. *Test. Brit. Part 1*. p. 172–173, not figured.

River Avon, Wiltshire, England.

**EXEMS Moll4037-8, 2sh. Syntypes.**

**boisi** *Maetra* Montagu, 1803. Figure 3.

*Abra alba* (Wood, 1802) [TELLINOIDEA, SEMELIDAE].

Montagu G 1803. *Test. Brit. Part 1*. p. 98–99, Tab. 3 fig. 7.

Sandwich in Kent (from Boys), Salcombe; Biddeford; Studland.

**EXEMS Moll4287, 2sh. +3v. Syntypes.** No original labels but entered in register as "*Ligula Boysi*".

**cingenda** *Helix* Montagu, 1803. Figure 4.

*Theba pisana* (Müller, 1774) [HELICOIDEA, HELICIDAE].

Montagu G 1803. *Test. Brit. Part 2*. p. 418–420, not figured.

Tenby.

**EXEMS Moll4143, 3sh. Syntypes.** No original labels but entered in register as "*Helix pisana*, *H. cingenda*".

**complanatus** *Donax* Montagu, 1803. Figure 5.

*Donax variegatus* (Gmelin, 1791) [TELLINOIDEA, DONACIDAE].

Montagu G 1803. *Test. Brit. Part 1*. p. 106–107, Tab. 5, fig. 4.

Milton Sands, Falmouth.

**EXEMS Moll3720-22, 2sh + 1v, Syntypes.** No original label but listed as "*D. complanatus*" in register.

**crenella** *Helix* Montagu, 1803. Figure 6.

*Vallonia costata* (Müller, 1774) [PUPILLOIDEA, VALLONIIDAE].

Montagu G 1803. *Test. Brit. Part 1*. p. 441–443, Tab. 13, fig. 3.

From Boys said to be found at Bullstrode (Lightfoot).

**EXEMS Moll4149**, blue card with 4 scars no shells attached.

At some time three lots of *Vallonia* were put together, two from the Montagu collection (lots 4148 and 4149) and one from the Malan collection (lot 4892). Lot 4148 carries a label '*crenella*' while lot 4149 is labelled '*paludosa*'; lot 4892 is labelled '*pulchella*'. The three cards bear 16 scars in total but no shells are attached, seven shells are present but of these only one can be associated with a card. One shell has the remains of blue paper and glue corresponding exactly with a scar on the blue '*paludosa*' card. Consequently we cannot associate any shells with the '*crenella*' card and none of the shells can be regarded as type material of that taxon.

The shell from the *paludosa* card and two others are *Vallonia excentrica* Sterki, 1893 while the other four are probably all *V. costata* (Müller, 1774) (All identified by Ben Rowson).

**diaphana** *Bulla* Montagu 1803. Figure 7.

*Trivia arctica* (Pulteney, 1799) [VELUTINOIDEA, TRIVIDAE].

Montagu G 1803. *Test. Brit. Part 1*. p. 225–226, Tab. 7 fig. 8.

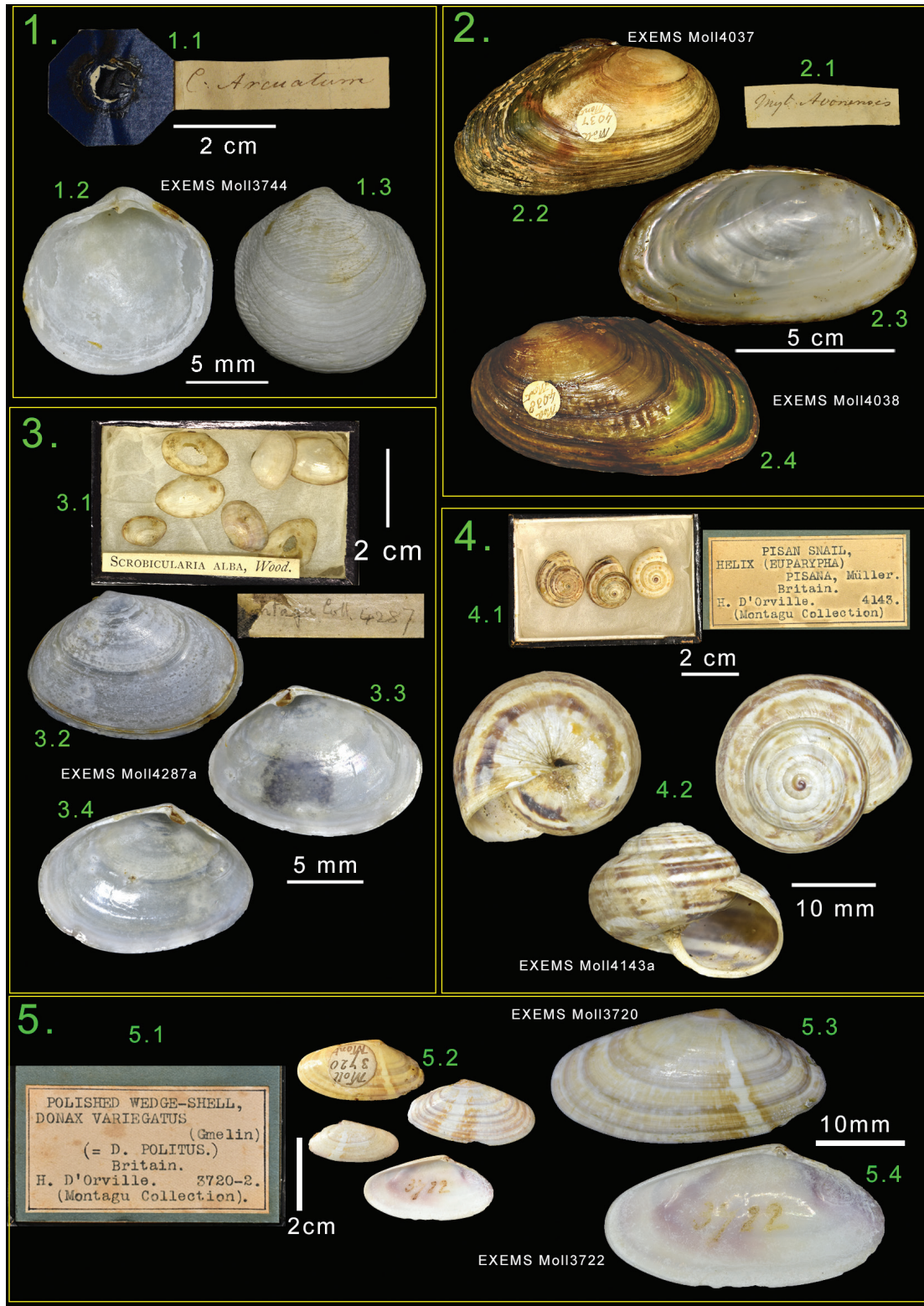
Salcombe Bay; Falmouth.

**EXEMS Moll4311, 2 shells (1 damaged), Syntypes.**

Attached to an original hexagonal mounting card. Wrongly identified as *Diaphana hyalina* (Turton) = *Diaphana minuta* Brown, 1827.

**lacuna** *Helix* Montagu, 1803. Figure 8.

*Lacuna parva* (da Costa, 1778) [LITTORINOIDEA, LITTORINIDAE].



**Figures 1–5.** 1. *Cardium arcuatum* Montagu, 1803 [*Lucinella divaricata* (Linnaeus, 1758)] 1.1 Original hexagonal, blue, card mount and label. 1.2/1.3 Internal and external views of single right valve, Syntype, EXEMS Moll3744. 2. *Mytilus avonensis* Montagu, 1803 [*Anodonta anatina* (Linnaeus, 1758)] 2.1 Original label. 2.2 external of EXEMS Moll4037, Syntype. 2.3/2.4 external and internal of left valve of EXEMS Moll4038, Syntype. 3. *Maetra boysii* Montagu, 1803 [*Abra alba* (Wood, 1802)] 3.1 Modern box with label indicating Montagu collection. 3.2 external of right valve and 3.3/3.4 internals of left and right valves of EXEMS Moll4287a, Syntype. 4. *Helix cingenda* Montagu, 1803 [*Theba pisana* (Müller, 1774)]. 4.1 “Rowley” box and label containing 3 syntypes numbered 4143. 4.2 basal, apical and lateral views of EXEMS Moll4143a, Syntype. 5. *Donax complanatus* Montagu, 1803. [*Donax variegatus* (Gmelin, 1791)]. 5.1 “Rowley” label for lot 3720-2. 5.2 4 single valves EXEMS Moll3720–2, Syntypes. 5.3 External view of left valve, EXEMS Moll3720. 5.4 Internal view of right valve, EXEMS Moll3722

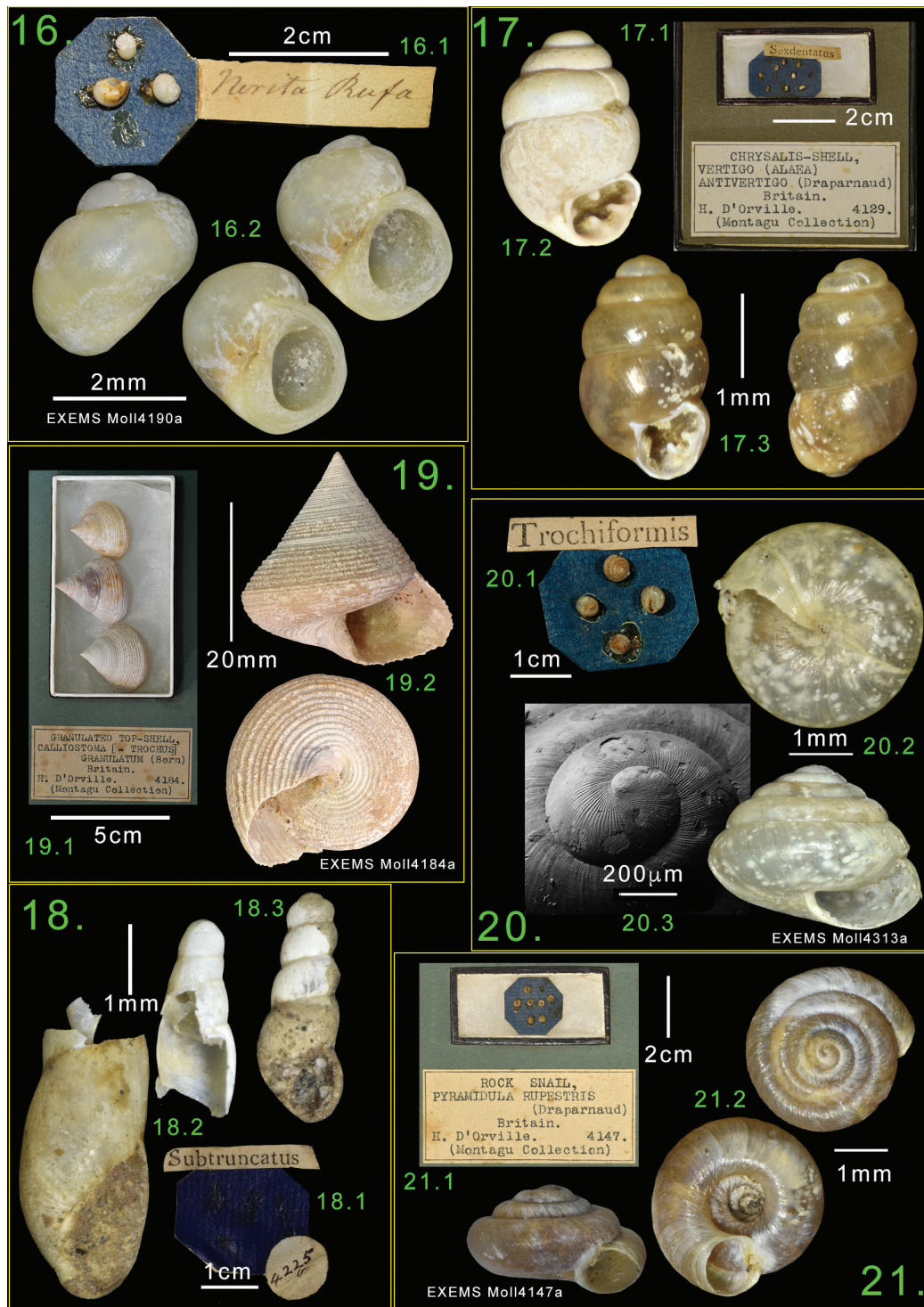


**Figures 6–10.** 6. *Vallonia* spp. 6.1 Mount with two Montagu blue hexagonal cards for *Helix crenella* Montagu, 1803 (EXEMS Moll4149) and *Helix paludosa* da Costa, 1778 (EXEMS Moll4148), no shells attached. 6.2 3 shells identified as *Vallonia excentrica* Sterki, 1893, one can be associated with *paludosa* card (arrowed). 6.3 4 shells tentatively identified as *Vallonia costata* (Müller, 1774). 7. *Bulla diaphana* Montagu, 1803 [*Trivia arctica* (Pulteney, 1799)]. 7.1 “Rowley” box for lot 4311 with 2 shells, Syntypes. 7.2 Montagu hexagonal blue card mount with 1 shell attached. 7.3 Apertural and abapertural views of largest but damaged syntype, EXEMS Moll4311a. 8. *Helix lacuna* Montagu, 1803 [*Lacuna parva* (da Costa, 1778)]. 8.1 Montagu black hexagonal card mount with 5 shells, bottom right (arrowed) is *Lacuna vincita*. 8.2 basal, apertural and abapertural view of 1 of 4 syntypes, EXEMS Moll4189. 9. *Nautilus lacustris* Montagu, 1803 [*Segmentina nitida* (Müller, 1774)]. 9.1 “Rowley” box with blue card and 4 shells, Syntypes, EXEMS Moll4106. 9.2 Montagu blue hexagonal card mount and printed label. 9.3 apical, basal and lateral views of syntype EXEMS Moll4106a. 10. *Helix lutea* Montagu, 1803 [*Radix bathica* (Linnaeus, 1758)]. 10.1 Old box and original hand-written label for lot 4117. 10.2 Apertural and abapertural views of unique syntype EXEMS Moll4117.

- Montagu G 1803. *Test. Brit. Part 2*. p. 428–429, Tab. 13 fig. 6.  
Folkstone in Kent.  
**EXEMS Moll4189, 4sh. Syntypes.** Attached to a black octagonal card, 5<sup>th</sup> shell is *Lacuna vincta*.
- lacustris* Nautilus** Montagu, 1803. Figure 9.  
*Segmentina nitida* (Müller, 1774) [PLANORBOIDEA, PLANORBIDAE].  
Montagu G 1803. *Test. Brit. Part 1*. p. 191–195, Tab. 6 fig. 3.  
Sandwich from Boys.  
**EXEMS Moll4146, 4 sh. Syntypes.** Attached to an original Montagu hexagonal card mount.
- lutea* Helix** Montagu, 1803. Figure 10.  
*Radix balthica* (Linnaeus, 1758) [LYMNAEOIDEA, LYMNAEIDAE].  
Montagu G 1803. *Test. Brit. Part 2*. p. 380–381, Tab. 16 fig. 6.  
South Devon; Salcombe Bay.  
**EXEMS Moll4117, 1sh. Syntype.** Originally glued to a scrap of paper labelled “*lutea*” in Montagu’s hand.
- novacula* Solen** Montagu, 1803. Figure 11  
*Ensis siliqua* (Linnaeus, 1758) [SOLENOIDEA, PHARI-DAE].  
Montagu G 1803. *Test. Brit. Part 1*. p. 47–48, not figured.  
Laugharne, Carmarthenshire.  
**EXEMS Moll3706-7, 2sh. Syntypes.** 3707 with original label “*novacula*” attached. Seen by Jeffreys (1879, p.3) {“*Solen novacula*” *S. siliqua*, having the cardinal teeth broken off}.
- octanfracta* Helix** Montagu, 1803. Figure 12.  
*Omphiscola glaber* (Müller, 1774) [LYMNAEOIDEA, LYMNAEIDAE].  
Montagu G 1803. *Test. Brit. Part 2*. p. 396–398, Tab. 11 fig. 8.  
Between Fowey and Looe in Cornwall.  
**EXEMS Moll4121, 11sh. Syntypes.** No original label, entered in register as “*Limnaea glaber*, *L. octanfracta*”.
- petraea* Helix** Montagu, 1803. Figure 13.  
*Melarhapha neritoides* (Linnaeus, 1758) [LITTORINOIDEA, LITTORINIDAE].  
Montagu G 1803. *Test. Brit. Part 1*. p. 403–404, not figured.  
Mouth of R. Aun (Avon) at Bantum (Bantham) in Devon; Swanage.  
**EXEMS Moll4195, 6sh. Syntypes.** Once attached to a Montagu hexagonal blue mounting card.
- pinna* Solen** Montagu, 1803. Figure 14.  
*Pandora pinna* (Montagu, 1803) [PANDOROIDEA, PANDORIDAE].
- Montagu G 1803. *Test. Brit. Part 2*. p. 566–567, Tab. 15 fig. 3.  
Torcross.  
**EXEMS Moll3703, 1sh. Possible syntype.** This shell has been remounted on a wooden block and although it carries a number from the Montagu collection there are no original labels. In the register it is listed as “*Pandora inaequalis* Linn” with a subscript of “*Pandora obtusa*”. As the name *pinna* is not present on the labels or register we are reluctant to give type status to this shell.
- plebeia* Donax** Pulteney sensu Montagu, 1803. Figure 15.  
*Donacilla cornea* (Poli, 1791) [MACTROIDEA, MESODESMATIDAE].  
Montagu G 1803. *Test. Brit. Part 1*. p. 107–108, Tab. 5 fig. 2.  
Weymouth (from Bryer).  
**EXEMS Moll4277, 7v. Syntypes.** Loose in box with original Montagu label “*plebeia*”.  
Although attributed to Montagu in MolluscaBase and CLEMAM this name is first used by Pulteney (1799) as stated by Montagu.
- rufa* Nerita** Montagu, 1803. Figure 16.  
*Euspira* sp. juveniles [NATICOIDEA, NATICIDAE].  
Montagu, G. 1808. *Suppl. Test. Brit.* p. 150–152, Tab. 30, fig. 3.  
EXEMS Moll4190. 3sh. Attached to octagonal blue card.  
Montagu described this species from a shell given to him or observed from the Laskey cabinet but the size of the shell far exceeds that of the present lot. These may be the small shells collected from Devon and mentioned by Montagu on p. 152. We would not consider these to be of type status.
- sexdentatus* Turbo** Montagu, 1803. Figure 17.  
*Vertigo antivertigo* (Draparnaud, 1801) [PUPILLOIDEA, VERTIGINIDAE].  
Montagu G 1803. *Test. Brit. Part 2*. p. 337–338, Tab. 12 fig. 8.  
Cornwall; Devon; Lackham in Wiltshire.  
EXEMS Moll4129, 8 sh. Attached to an original blue hexagonal mounting card.  
The type status of these shells cannot be confirmed because they are not *Vertigo antivertigo*. All eight shells were removed from the card and their apertures cleaned and none have six apertural teeth. They are all *Vertigo pygmaea* (Draparnaud, 1801) [confirmed by Beata Pokryszko and Robert Cameron] and as such cast doubt about Montagu’s ability to discriminate these small species.
- subtruncatus* Turbo** Montagu, 1803. Figure 18.  
*Truncatella subcylindrica* (Linnaeus, 1767) [TRUNCATELLOIDEA, TRUNCATELLIDAE].  
Montagu G 1803. *Test. Brit. Part 1*. p. 300, Tab. 10, fig. 1.



**Figures 11–15.** 11. *Solen novacula* Montagu, 1803 [*Ensis siliqua* (Linnaeus, 1758)] 11.1 External of right valve of syntype EXEMS Moll3707 with original label. 11.2 Internals of left and right valves of syntype EXEMS Moll3707. 12. *Helix octanfracta* Montagu, 1803 [*Omphiscola glaber* (Müller, 1774)]. 12.1 “Rowley” box with 11 shells, Syntypes, EXEMS Moll4121. 12.2 Apertural and abapertural views of a single syntype, EXEMS Moll4121a. 13. *Helix patraea* Montagu, 1803 [*Melarhapha neritoides* (Linnaeus, 1758)]. 13.1 “Rowley” box with card and 6 shells, Syntypes, EXEMS Moll4185. 13.2 Montagu hexagonal blue card with printed label. 13.3 Apertural and abapertural views of syntype EXEMS Moll4195a. 14. *Solen pinna* Montagu, 1803 [*Pandora pinna* (Montagu, 1803)]. 14.1 Green coloured wooden mount with single Montagu specimens attached. 14.2 Exterior of right and left valves of EXEMS Moll3703, possible syntype. 15. *Donax plebeia* Montagu, 1803 [*Donacilla cornea* (Poli, 1791)]. 15.1 Original label and 7 shells all syntypes EXEMS Moll4277. 15.2 Internal and external views of a single right valve, EXEMS Moll4277a.



**Figures 16–21.** 16. *Nerita rufa* Montagu, 1803 [*Euspira* sp. juveniles]. 16.1 Montagu hexagonal blue card mount and hand written label with 3 shells all EXEMS Moll4190. 16.2 Abapertural, apertural and basal views of a single shell, EXEMS Moll4190a. 17. *Turbo sexdentatus* Montagu, 1803 [*Vertigo antivertigo* (Draparnaud, 1801)]. 17.1 “Rowley” box with blue card mount and 8 shells, EXEMS Moll4129. 17.2 Apertural view of a worn shell. 17.3 Apertural and abapertural views of a fresh shell. All are *Vertigo pygmaea* (Draparnaud, 1801). 18. *Turbo subtruncatus* Montagu, 1803 [*Truncatella subcylindrica* (Linnaeus, 1767)]. 18.1 Montagu blue hexagonal card mount with printed label. 18.2 Larger, but broken, syntype EXEMS Moll4255b. 18.3 Smaller syntype, mostly apex EXEMS Moll5255b. 19. *Trochus tenuis* Montagu, 1803 [*Calliostoma granulatum* (Born, 1778)]. 19.1 “Rowley” box with 3 shells, syntypes, EXEMS Moll4184. 19.2 Apertural and basal views of a single syntype, EXEMS Moll4184a. 20. *Helix trochiformis* Montagu, 1803 [*Euconulus fulvus* (Müller, 1774)]. 20.1 Montagu blue hexagonal card and printed label with 4 shells, all syntypes, EXEMS Moll4313. 20.2 Basal and apertural views of a single syntype, EXEMS Moll4313a. 20.3 Scanning electron micrograph of the apex. 21. *Helix umbilicata* Montagu, 1803 [*Pyramidula umbilicata* (Montagu, 1803)]. 21.1 “Rowley” box with card mount and 7 shells, all syntypes EXEMS Moll4147. 21.2 apertural, dasal and apical views of a single syntype, EXEMS Moll4147a.

Southampton; Salcombe.

**EXEMS Moll4255b, 1sh. + 1 broken sh. Syntypes.**

In tube, once attached to Montagu blue hexagonal mounting card.

**tenuis** *Trochus* Montagu, 1803. Figure 19.

*Calliostoma granulatum* (Born, 1778) [TROCHOIDEA, TROCHIDAE].

Montagu G 1803. *Test. Brit. Part 1.* p. 275–277, Tab. 10 fig 3.

Poole, Weymouth from Pulteney.

**EXEMS Moll4184, 3sh. Syntypes.** No original labels but listed as *T. tenuis* in register.

**trochiformis** *Helix* Montagu, 1803. Figure 20.

*Euconulus fulvus* (Müller, 1774) [GASTRODONTOIDEA, EUCONULIDAE].

Montagu G 1803. *Test. Brit. Part 2.* p. 427–428 Tab. 11 fig. 9.

By R. Avon; Lackham in Wiltshire.

**EXEMS Moll4313, 4 sh. Syntypes.** Attached to Montagu blue hexagonal mounting card.

**umbilicata** *Helix* Montagu, 1803. Figure 21.

*Pyramidula umbilicata* (Montagu, 1803) [PUPILLOIDEA, PYRAMIDULIDAE].

Montagu G 1803. *Test. Brit. Part 2.* p. 434–435 Tab. 13 fig. 2.

Tenby.

**EXEMS Moll4147, 7sh. Syntypes.** Attached to Montagu blue hexagonal mounting card but no original label. Register entry as “*Helix rupestris*, *H. umbilicata*”.

## Notable specimens

**ambiguus** *Turbo*, sensu Montagu ms. Figure 22.

EXEMS Moll4274, 1sh. With original Montagu label.

*Turbo ambiguus* is now considered to be a *Fossarus* and does not resemble the present shell in any way, which is an *Epitonium* and was not included in any of Montagu’s publications. The origin of the view that *T. ambiguus* was an *Epitonium* is unclear although Dillwyn (1817) was of the opinion that it was similar to *E. clathrus*. In a manuscript by William Lyons of Tenby he noted that Montagu identified a shell sent by him as this species. Montagu seemed to be aware that it is a different species from the similar *Epitonium clathrus* but failed to include it. It was subsequently described as *Epitonium turtonis* (Turton, 1819).

**costatus** *Turbo* J.Adams, 1797. Figure 25.

*Manzonina crassa* (Kanmacher, 1798) [TROCHOIDEA, TURBINIDAE].

Montagu G 1803. *Test. Brit. Part 2.* p. 311–312, Tab. 10, fig. 3

EXEMS Moll4212, 6sh (+ 1sh *Rissoa parva*).

The descriptions and figures given by Adams in his papers (Adams 1797a,b, 1800a, b) are scant and poor. Adams’ shells cannot be located and there is no evidence that Montagu ever saw them, deriving all his information from the papers. The identity of Adams’ species is not always clear but Montagu’s interpretations of them are among the first and may well have influenced later interpretations such as those by Dillwyn (1817) and Turton (1819).

Here we illustrate *Turbo costatus* sensu Montagu and see that it conforms to the current concept as *Manzonina crassa*.

**discrepans** *Mytilus* Montagu, 1803 (1808) in part. Figure 23.

*Musculus niger* (Gray, 1824) [MYTILOIDEA, MYTILIDAE].

Montagu, G. 1808. *Suppl. Test. Brit.* p. 65, Tab. 26, fig. 4.

EXEMS Moll3938, 1sh.

The shells originally described by Montagu in 1803 as *M. discrepans* are *Musculus discors* but in 1808 he noted a very large shell with a dark periostracum coming from Scotland and figured this on plate 26. This shell is probably the one present here and is *Musculus niger*.

**distorta** *Ligula* Montagu, 1808. Figure 24.

*Thracia convexa* (Wood, 1815) [THRACIOIDEA, THRACIIDAE].

Montagu, G. 1808. *Suppl. Test. Brit.* p. 166, not figured.

Locality uncertain, may be Devon.

EXEMS Moll4288, 1v. Hinge mostly lost and valve broken in two. Original Montagu label present.

Montagu appears to have had some confusion with both *Thracia pubescens* and *Thracia distorta*. He described *Thracia distorta* in 1803 under *Mya* and considered his larger thin shells as *Ligula distorta*.

The one existing shell is *Thracia convexa* described and named by Wood some seven years later, but there is no mention of Montagu’s shells by Wood (1815).

**hians** *Maetra* Pulteney, 1799. Figure 26.

*Lutraria oblonga* (Gmelin, 1791) [MACTROIDEA, MACTRIDAE].

Montagu G 1803. *Test. Brit. Part 1.* p. 101–102, not figured.

Between Truro and Falmouth.

EXEMS Moll3770-1, 2sh. (1 with original Montagu label).

Montagu (1803) considered that this species was the *magna* of da Costa and *oblonga* of Gmelin, a situation that continued until Lucas (1985) argued that *magna* of da Costa was a synonym of *lutraria* Linnaeus, a position adopted by Huber (2010). Mollus-





**Figures 22–31.** 22. *Turbo ambiguus* sensu Montagu ms [*Epitonium turtonis* (Turton, 1819)] Label, abapertural and apertural views of EXEMS Moll4274. 23. *Mytilus discrepans* sensu Montagu 1808 [*Musculus niger* (Gray, 1824)] Exterior of left valve in box with original label EXEMS Moll3938. 24. *Ligula distorta* Montagu, 1808 [*Thracia convexa* (Wood, 1815)], Label, interior and exterior of single right valve, EXEMS Moll4288. 25. *Turbo costatus* Adams, 1797 [*Manzonina crassa* (Kanmacher, 1798)] Montagu hexagonal blue card mount with 7 shells, furthest right is *Rissoa parva*; one enlarged, apertural view, EXEMS Moll4212. 26. *Mactra hians* Pulteney, 1799 [*Lutraria oblonga* (Gmelin, 1791)], external and internal views of a left valve, EXEMS Moll3771. 27. *Turbo interruptus* Adams, 1800 [*Rissoa parva* (da Costa, 1778)], Montagu black card mount with 3 shells, one enlarged abapertural view, EXEMS Moll4224. 28. Montagu's specimens of *Pecten jacobaeus* (Linnaeus, 1758) EXEMS Moll4000. 29. *Venus laminosa* Montagu, 1808 [*Chamelea striatula* (da Costata, 1778)], EXEMS Moll4290. 30. *Otina ovata* (Brown, 1827) Montagu's mount and 1 remaining shells of his "new No 3". 31. *Bulla punctalineata* Montagu ms [*Roxania utriculus* (Brocchi, 1814)], EXEMS Moll4302.

caBase, which appears to follow Huber, considers *hians* of Pulteney to be a synonym of *oblonga* but *magna* of da Costa a synonym of *lutraria*. However the figures in da Costa and Pulteney are identical, those of Pulteney being based on da Costa. This would appear to challenge both Lucas and Huber and necessitates a new look at this synonymy.

***interruptus* Turbo** J. Adams, 1800. Figure 27.

*Rissoa parva* (da Costa, 1778) [RISSEOIDEA, RISSOIDAE].

Montagu G 1803. *Test. Brit. Part 2.* p. 329–330, not figured.

EXEMS Moll4224, 3sh.

This is another example of an Adams species represented in the Montagu collection and as with *Turbo costatus* (above) these shells conform with current taxonomy as a smooth form of *Rissoa parva* (da Costa).

***jacobaeus* Pecten** Linnaeus. Figure 28.

*Pecten jacobaeus* (Linnaeus, 1758) [PECTINOIDEA, PECTINIDAE].

Montagu G 1803. *Test. Brit. Part 1.* p. 144–145, not figured.

EXEMS Moll4000, 1sh.

Montagu included this species with little doubt although he accepted that it was rarely collected off the south of the British Isles. The single shell in RAMM is *P. jacobaeus* but this Mediterranean species is not known to live around the British Isles. The specimen is entire and in good condition and would appear to have been live collected.

***laminosa* Venus** Montagu, 1808. Figure 29.

*Chamelea striatula* (da Costa, 1778) [VENEROIDEA, VENERIDAE].

Off May Island, Firth of Forth (from Laskey)....

EXEMS Moll4290 1sh.; 4291 1sh.; 4293 2v.

Montagu in describing *Venus laminosa* noted that he found the group of *Venus cancellata* difficult. He described *Venus laminosa* in 1808 (pp. 38–40) linking it with *Venus cancellata* and using a shell from the Laskey cabinet from the Firth of Forth as the basis. Jeffreys (1863, p. 346) gives it as a var. of *Venus gallina* and from then on the name disappears from the literature and is not in MolluscaBase or CLEMAM.

In RAMM there are 3 lots marked as new on the labels but in the register two of these lots are identified as *Venus gallina* var *laminosa*.

These shells are certainly *Chamelea gallina* (*striatula*) but their status as types is doubtful as the type was in the Laskey cabinet. The description is of a wholly white shell with four teeth in each valve and this does not agree with the RAMM shells. Montagu stated that he had a single shell from Devonshire but was about half the size.

***Otina ovata*** (Brown, 1827). Figure 30.

EXEMS Moll4244, 1sh.

This species was described by Turton in 1819 as *Helix otis* but is present in the Montagu collection labelled “New No 3”.

***punctalineata* Bulla** Montagu ms. Figure 31.

EXEMS Moll4302, 1sh.

The single shell is *Roxania utriculus* (Brocchi, 1814) but Montagu’s name was never published; if it had been it would have taken priority over that of Brocchi. This is a British species.

## Exotic species

***ambiguum* Buccinum** Pulteney, 1799. Figure 32.

Montagu G 1803. *Test. Brit. Part 1.* p. 242–243, pl. 9 fig 7.

EXEMS Moll4263, 1sh.

This species is included and figured by Montagu and is currently regarded a synonym of the Caribbean nassariid *Phrontis antillarum* (D’Orbigny, 1847) by MolluscaBase. Jeffreys (1867, p. 353) regarded it as a synonym of the common British *Tritia incrassata* (Ström, 1768).

There are three scars on the mounting card but only one shell is present and this is about half the size of that given by Montagu. Given the small size of the RAMM shell there is uncertainty about its identity with a consensus that it may well be a worn and juvenile *Tritia incrassata* and that it is not *Phrontis antillarum*. Montagu stated that he had shells from Pulteney but also from Mr Bryer, all from Dorset.

***ampulla* Bulla** Linnaeus / *Bulla striata*. Figure 33.

Montagu G 1803. *Test. Brit. Part 1.* p. 206, pl. 7 fig 1.

EXEMS Moll4300, 1sh.

This single shell is probably that described as *Bulla ampulla*; the label *ampulla* is hand written and attached to a blue card but that for *striata* is printed and probably later in date. Both names are entered in the register. *Bulla ampulla* is Indo-Pacific and *B. striata* is not British. Given the number of West Indian exotics included by Montagu it is more likely that this is *Bulla occidentalis* A. Adams, 1850, the western Atlantic sister species to *B. striata*. (Manuel Malaquias pers. comm.)

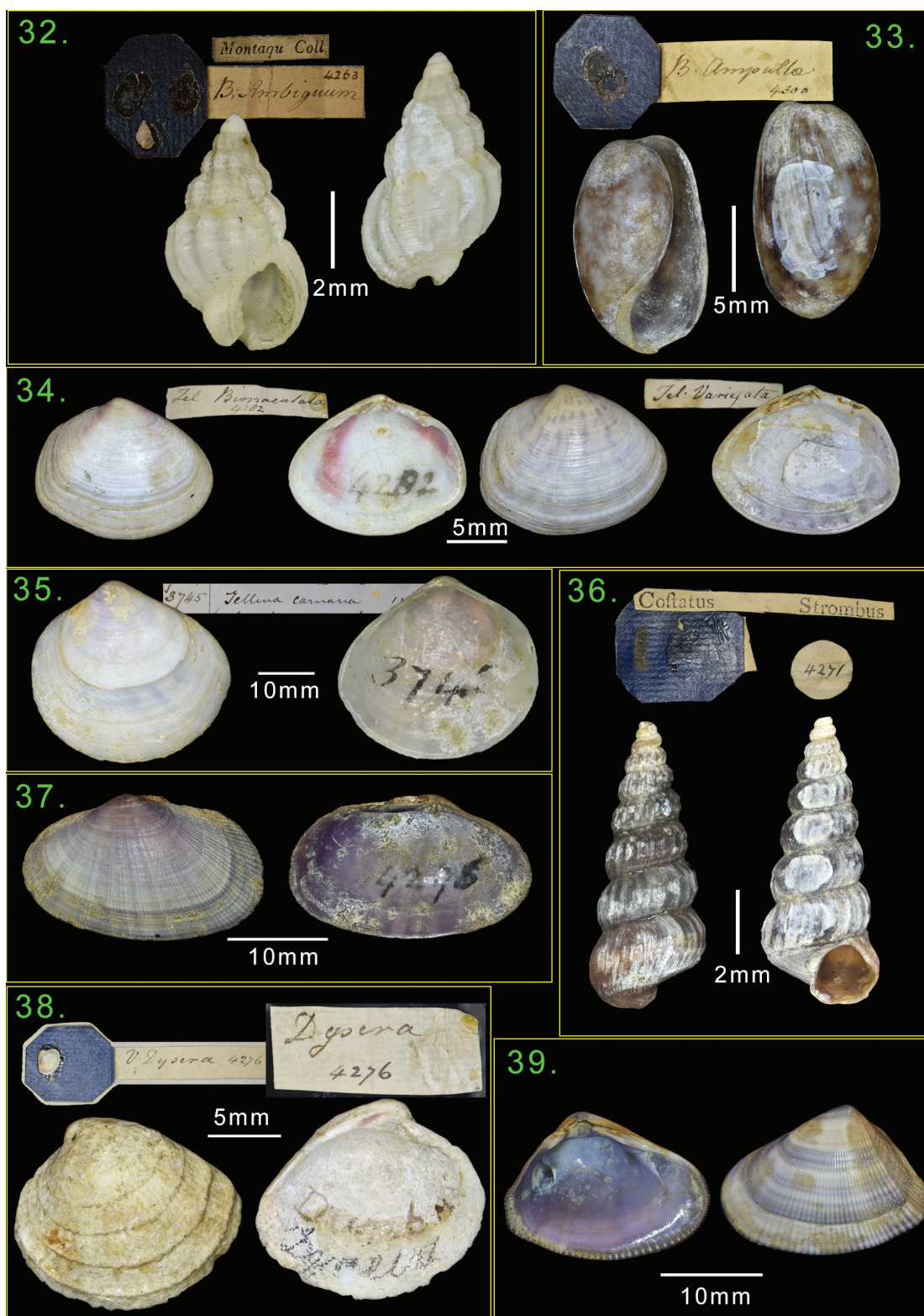
***bimaculata* Tellina** Linnaeus, 1758. Figure 34.

*Heterodonax bimaculatus* (Linnaeus, 1758) [TELLINOIDEA, PSAMMOBIIDAE].

Montagu G 1803. *Test. Brit. Part 1.* p. 69–70.

EXEMS Moll4280 (as *variegata*) 2sh. & EXEMS Moll4282 1sh.

Montagu described both under *Tellina bimaculata* and stated that he got shells from Mr Bryer collected



**Figures 32–39.** 32. *Buccinum ambiguum* Pulteney, 1799, Single remaining shell from Montagu mount is *Tritia incrassata* (Strøm, 1768), EXEMS Moll4263. 33. *Bulla ampulla* Linnaeus, 1758 Montagu mount and original label probably now *Bulla occidentalis* A. Adams. 1850. 34. Valves and original Montagu labels of *Tellina bimaculata* and *Tellina variegata*, both are *Heterodonax bimaculata* (Linnaeus, 1758), EXEMS Moll4280 & 4282. 35. *Tellina carnaria* Linnaeus, 1758 [*Strigilla carnaria* (Linnaeus, 1758)], register entry and single valve for EXEMS Moll3745. 36. *Strombiformis costatus* da Costa, 1778 [*Cerithideopsis costata* (da Costa, 1778)], Montagu mount and single remaining shell. EXEMS Moll4271. 37. *Venus deflorata* Linnaeus, 1758 [*Asaphis deflorata* (Linnaeus, 1758)], EXEMS Moll4296. 38. *Venus dysera* Gmelin, 1791, Montagu mount with 1 valve and 1 loose valve marked “Dunbar” EXEMS Moll4276, probably *Chione cf. elevata* (Say, 1822). 39. *Donax denticulatus* Linnaeus 1758, one of 2 valves from the Montagu collection EXEMS Moll3728.

between Weymouth and Portland. Both EXEMS-Moll4280 & 4282 are *Heterodonax bimaculata* (Linnaeus, 1758) a Caribbean shell.

**carnaria** *Tellina* Linnaeus, 1758. Figure 35.

*Strigilla carnaria* (Linnaeus, 1758) [TELLINOIDEA, TELLINIDAE].

Montagu G 1803. *Test. Brit. Part 1*. p. 73–74.

EXEMS Moll3745, 1v.

Montagu included this species but was sceptical of the reports of da Costa and Pulteney that it was common, Montagu himself having never found it. Montagu did not state where the shell he described came from. The RAMM valve is *Strigilla carnaria*, a widespread Caribbean species.

**costatus** *Strombiformis* da Costa, 1778. Figure 36.

*Cerithideopsis costata* (da Costa, 1778) [CERITHIOIDEA, PLANAXIIDAE].

Montagu G 1803. *Test. Brit. Part 1*. p. 255.

EXEMS Moll4271, 1sh.

This species is included by Montagu under *Strombus costatus* Pult. and stated that he collected it from Milton Sands in South Devon; da Costa stated that it was found in Cornwall. Montagu appears to accept that this was an English shell. Jeffreys also stated that this is the *Strombus turboformis* Montagu, 1808 but this taxon is not mentioned in MolluscaBase.

In the USNM, the Jeffreys collection contains 13 shells as from the Republic of Ireland but Jeffreys (1867) himself refuted this species as British. One of the USNM lots is labelled as from ballast. These shells may actually be from Dillwyn who went to Ireland to collect on spoil heaps but from the description in Dillwyn (1817, p. 678–9) and as Jeffreys states these are *Cerithium reticulatum*.

The shell in RAMM is the Caribbean *Cerithideopsis costata* (da Costa, 1778) and is labelled as *costatus* so cannot be taken for *turboformis*, the type of which remains unfound.

**deflorata** *Venus* Linnaeus, 1758. Figure 37.

*Asaphis deflorata* (Linnaeus, 1758) [TELLINOIDEA, PSAMMOBIIDAE].

Montagu G 1803. *Test. Brit. Part 1*. p. 123, pl. 3 fig 4 EXEMS Moll4296, 1sh. + 1v.

Although numbered in the Montagu register these shells are not named. They agree entirely with Montagu's description and the smaller complete shell may be the one mentioned by Montagu as coming from Falmouth. Pennant (1777) was the first to say this was a British shell but he gave no locality.

**denticulatus** *Donax* Linnaeus, 1758. Figure 39.

*Donax denticulatus* Linnaeus, 1758 [TELLINOIDEA, DONACIDAE].

Montagu G 1803. *Test. Brit. Part 1*. p. 104–5.

EXEMS Moll3728, 2v.

The two valves present in RAMM carry the label “*Do trunculus*” but this was changed in the register to *Donax denticulatus*. Montagu describes *D. denticulatus* and his description fits with these shells. He stated that he was given shells by Mr Bryer presumably from Weymouth. Montagu doubted it to be British, it is a West Indian species currently accepted as *Donax denticulatus* Linnaeus, 1758.

**dysera** *Venus* Gmelin, 1791. Figure 38.

*Chione cf. elevata* (Say, 1822) [VENEROIDEA, VENERIDAE].

Montagu, G. 1808. *Suppl. Test. Brit.* p. 42 and p.174.

EXEMS Moll4276, 2v worn.

Two valves labelled as *dysera* are present, one labelled from Dunbar in Scotland. The Dunbar locality agrees with the locality of Firth of Forth given by Montagu and as received from Laskey (Laskey 1811). This species is included in the Supplement (1808, p. 42 and in the list of North British on p. 174). Both valves are worn and belong to the genus *Chione* but their identity is not certain although most probably *Chione elevata* Say, 1822 rather than *C. dysera* or *C. cancellata* (Peter Roopnarine pers. comm.).

**fausta** *Tellina* Pulteney, 1799. Figure 42.

*Arcopagia fausta* (Pulteney, 1799) [TELLINOIDEA, TELLINIDAE].

Montagu G 1803. *Test. Brit. Part 1*. p. 64–5.

EXEMS Moll4278, 1v.

Montagu included this species without questioning its origin. Pulteney is said to have found it at Weymouth. Montagu quotes a size of 1.75 inches but the RAMM shell is very large, 2.75 inches (70 mm). It is *Arcopagia* (*Johnsonella*) *fausta* (Pulteney, 1799), which is Caribbean in distribution.

**fragilis** *Solen* Pulteney, 1799. Figure 40.

*Tagelus divisus* (Spengler, 1794) [TELLINOIDEA, SOLECURTIDAE].

Montagu G 1803. *Test. Brit. Part 1*. p. 51–2. & 1808 *Suppl. Test. Brit.* p.26

EXEMS Moll3716, 1v.

Considerable confusion surrounded this taxon in early years through its likeness to *Solen antiquatus* = *Azorinus chamasolen* resulting in both Maton & Rackett and Turton making incorrect references to other authors such as Pennant. The name is Pulteney's and was described by Montagu (1803, p. 51–52) who states he received a shell from Rackett collected on the Dorset coast. In 1808 (p. 26) Montagu referred to the confusion made by Rackett establishing that *fragilis* is not *antiquatus*.

The single valve in RAMM is *Tagelus divisus* (Spengler, 1794) a species from the NE coast of the USA.



**Figures 40–46.** 40. *Solen fragilis* Pulteney, 1799 [*Tagelus divisus* (Spengler, 1794)], single valve and Montagu label, EXEMS Moll3716. 41. *Venus granulata* Gmelin 1791 [*Leukoma granulata* (Gmelin, 1791)], Single valve with Montagu label, EXEMS Moll4286. 42. *Tellina fausta* Pulteney, 1799 [*Arcopagia fausta* (Pulteney, 1799)] Montagu label and single valve, EXEMS Moll4278. 43. *Tellina laeta* Pulteney, 1799, 2 valves with a Montagu label, EXEMS Moll4279; upper, white valve is *Eurytellina alternata* (Say, 1822); lower, pink valve is *Eurytellina cf. angulosa* (Gmelin, 1791). 44. *Venus guineensis* Gmelin, 1791 [*Lamelliconcha circinata* (Born, 1778)], Single valve and Montagu label marked “Weymouth”, EXEMS Moll4295. 45. *Helix octona* Linnaeus, 1758 [*Subulina octona* (Bruguière, 1789)], Single shell from Montagu blue card mount attached to wooden plinth; label reads “Mr Dillwin, Bantry Bay”, EXEMS Moll4275. 46. *Buccinum lineatum* da Costa, 1778 [*Angiola lineata* (da Costa, 1778)], Montagu card mount with 2 remaining shells, one enlarged.

***granulata*** Venus Gmelin, 1791. Figure 41.

*Leukoma granulata* (Gmelin, 1791) [VENEROIDEA, VENERIDAE].

Montagu G 1803. Test. Brit. Part 1. p. 122–3.

EXEMS Moll4286, 1v.

This species is described by Montagu and he stated that he took it from sand in Falmouth harbour. The RAMM shell is *Leukoma granulata* (Gmelin, 1791) a Western Atlantic species.

***guineensis*** Venus Gmelin, 1791. Figure 44.

*Lamelliconcha circinata* (Born, 1778) [VENEROIDEA, VENERIDAE].

Montagu, G. 1808. Suppl. Test. Brit. p. 48 and p.168.

EXEMS Moll4295, 1v.

Venus *guineensis* was included in the Supplement (1808, p. 48) on the basis of a shell from Scotland collected by Laskey. The shell in RAMM is labelled as from Weymouth and is probably the shell mentioned on page 168 where Montagu noted a small shell from the Bryeran cabinet collected from Weymouth. The RAMM shell is *Lamelliconcha circinata* (Born, 1778), Venus *guineensis* is a synonym, a species from the West Indies..

***laeta*** Tellina Pulteney, 1799. Figure 43.

Montagu G 1803. Test. Brit. Part 1. p. 57–8.

EXEMS Moll4279, 2v.

Montagu included this species in Testacea Britannica and again had specimens from Mr Bryer collected between Poole and Weymouth. Current synonymy places this species as a junior synonym of *Tellina angulosa* Gmelin (1791) but we are doubtful of this for one of the valves here. The larger white specimen has the pallial sinus attached to the adductor by a thin line; following Boss (1968) this would place it as *Eurytellina alternata* (Say, 1822).

***lineatum*** Buccinum da Costa, 1778. Figure 46.

*Angiola lineata* (da Costa, 1778) [CERITHIOIDEA, PLANAXIDAE].

Montagu G 1803. Test. Brit. Part 1. p. 245–6.

EXEMS Moll4264, 2sh.

*Buccinum lineatum* da Costa is included in the Testacea Britannica but Montagu was initially doubtful about the inclusion of this species as British but he then stated that they collected it between Weymouth and Portland and that Mr Bryer also collected it from Weymouth. The two shells (remaining of four) now present in the RAMM collection are undoubtedly *Angiola lineata* da Costa, 1778 as currently understood. It is very doubtful that they were collected alive in the British Isles.

***octona*** Helix Linnaeus, 1767. Figure 45.

*Subulina octona* (Bruguière, 1789) [ACHATINOIDEA, ACHATINIDAE].

Montagu, G. 1808. Suppl. Test. Brit. p. 144.

## EXEMS Moll4275, 1sh.

This species was introduced as British by Pulteney (1799) and restated by Maton & Rackett (1807) and then by Montagu, all referring this taxon to Linnaeus. Montagu (1808) was reluctant to accept this species as British but it would appear that specimens were in circulation in the early 19<sup>th</sup> century. The Lyons collection, (dating from around 1810) in Tenby contains two lots both with Weymouth (from Miss Pocock) as their origin, and in keeping with the original record of Pulteney. The RAMM label gives the source as “Mr Dillwin, Bantry Bay” and this would coincide with Dillwyn’s visit to Ellen Hutchins the Irish botanist in 1809. The RAMM and Tenby shells are in good condition but it is not known if they were collected from sites in the UK or from collections brought back from its native Caribbean.

Jeffreys (1864, p. 299) concluded that Pulteney had mistakenly used the name for *Omphiscola glaber* by adopting the name of *Helix octona* Pennant, 1777.

***pallida*** Voluta or Bulla Linnaeus, 1758. Figure 48.

*Hyalina pallida* (Linnaeus, 1758) [MARGINELLIDAE].

Montagu G 1803. Test. Brit. Part 1. p. 232–233.

EXEMS Moll4301, 2 sh.

Montagu stated that da Costa must have been mistaken in regarding it as common on west coasts and goes on to say that neither he nor Pulteney ever found it. The provenance of the two shells in RAMM is not known, the species is widespread in the Caribbean

***pintado*** Turbo Figure 47.

*Littoraria pintado* (Wood, 1828) [LITTORINOIDEA, LITTORNIDAE].

EXEMS Moll4307, 2sh.

This species is not included in any of Montagu’s publications and it is puzzling, as it was not described until 1828 by Wood. The mount and label are typical of all of the Montagu mounts in Exeter. This is the only original label in the Montagu collection that bears a species name erected after the death of Montagu. There are a number of unpublished names on similar labels and one can only surmise that this is a manuscript name adopted at a later date by Wood.

These shells have the operculum in place suggesting they were collected alive, which is unlike the majority of the exotic shells in the collection as most are worn and have some degree of incrustation upon them. It is noteworthy that the specimens of *Echinolittorina ziczac* (Gmelin, 1791) in the Montagu collections also have the operculum in place and appear live collected.

***proficua*** Tellina Pulteney, 1799. Figure 50.

*Semele proficua* (Pulteney, 1799) [TELLINOIDEA, SEMELIDAE].



**Figures 47–53.** 47. *Turbo pintado* Wood, 1828. [*Littoraria pintado* (Wood, 1828)], Montagu card mount and label with 1 of 2 shells, EXEMS Moll4307. 48. *Voluta pallida* Linnaeus, 1758 [*Hyalina pallida* (Linnaeus, 1758)], Montagu card and label with 2 shells, larger shell cleaned, EXEMS Moll4301. 49. *Tellina striata* Gmelin, 1791 [*Eurytellina lineata* (Turton, 1819)], Montagu label and 2 valves, upper valve marked “Dunbar”, EXEMS Moll4281. 50. *Tellina proficua* Pulteney, 1799 [*Semele proficua* (Pulteney, 1799)], Montagu label and single valve, EXEMS Moll4283. 51. *Venus tigerina* Linnaeus, 1753, Montagu label and single valve, EXEMS Moll4285, is *Codakia orbicularis* (Linnaeus, 1785). 52. *Voluta triplicata* Donovan, 1802 [*Tralia ovula* (Bruguière, 1789)], Montagu mount, label and single shell, EXEMS Moll4298. 53. *Turbo ziczac* Gmelin, 1791 [*Echinolittorina ziczac* (Gmelin, 1791)], Montagu mount, label and 1 of 2 shells, EXEMS Moll4306.

Montagu G 1803. Test. Brit. Part 1. p. 66–7.

EXEMS Moll4283, 1v.

*Tellina proficua* Pulteney is described by Montagu and he stated that he received his shell from Rackett and that it came from Dorsetshire. Montagu's shell consists of a single left valve and is rather worn, it does agree with *Semele proficua* (Pulteney, 1799) as currently understood. Pulteney stated he also got his shells from Dorsetshire between Poole and Weymouth. This a Caribbean species.

**striata** *Tellina* Gmelin. Figure 49.

*Eurytellina lineata* (Turton, 1819) [TELLINOIDEA, TELLINIDAE].

EXEMS Moll4281, 2v.

Montagu described this species in 1803, figured it in 1808 and stated he got his shells from Mr Bryer from between Poole and Weymouth. One valve however is marked “Dunbar” and this species is noted in 1808, List of North British Shells.

Boss (1966) placed *Tellina striata* sensu Montagu into synonymy of *Tellina lineata* Turton, 1819, now *Eurytellina lineata* (Turton, 1819) a widespread Caribbean species.

**tigerina** *Venus* Linnaeus, 1758. Figure 51.

*Codakia orbicularis* (Linnaeus, 1758) [LUCINOIDEA, LUCINIDAE].

EXEMS Moll4285, 1v.

Montagu described and figured *Venus tigerina* indicating that it is a West Indian shell. The RAMM shell is *Codakia orbicularis* (Linnaeus, 1758) [confirmed by John Taylor pers. comm.] from the West Indies and agrees approximately in size but not in shape, so doubtfully the illustrated shell.

**triplicata** *Voluta* Donovan, 1802. Figure 52.

*Tralia ovula* (Bruguière, 1789) [ELLOBIOIDEA, ELLOBIIDAE].

Montagu, G. 1808. Suppl. Test. Brit. p. 99.

EXEMS Moll4298, 1sh.

Montagu included this species in the Supplement and stated that he had a shell of this species from Guernsey. A single shell is present in RAMM with an original Montagu label and card.

Martins (1996) noted that the type of *triplicata* could not be found and cited Montagu as the next British author to include the species in the British fauna. Dillwyn (1817) quotes directly from Montagu. Frias Martins (1996) illustrated a shell from the Turton collection identified a *triplicata* but coming from the West Indies. The Montagu shell is *Tralia ovula* Bruguière, 1789 as confirmed by Tony Frias Martins (pers. comm.).

**ziczac** *Turbo* Gmelin, 1791. Figure 53.

*Echinolittorina ziczac* (Gmelin, 1791) [LITTORINOIDEA, LITTORINIDAE].

Montagu, G. 1808. Suppl. Test. Brit. p. 135.

EXEMS Moll4306, 2sh.

The two shells in RAMM have intact operculums indicating they were live collected. Montagu included this species in his Supplement but said nothing of its provenance. It is a common Caribbean shell.

## List of taxa present in the Montagu collection in RAMM Exeter

The following is a summary of the entire Montagu collection in RAMM. The collection contains few duplicate lots and was perhaps a voucher series retained by Montagu's wife Eliza, following the sale of the major part of the collection to the then British Museum. All lots are listed including duplicates. The first line in bold text is the name as used by Montagu in his publications and in these he gave the authority but not the date, the second in normal text is our current identification using nomenclature from MolluscaBase. A number of specimens bear label names that are not present in any of Montagu's publications or only bear labels that are more recent. Type material is denoted by the prefix superscript T.

### **Anomia ephippium** Linnaeus-

*Anomia ephippium* Linnaeus, 1758

### **Arca fusca** Donovan-

*Tetrarca tetragona* (Poli, 1791)

### **Arca lactea** Linnaeus-

*Striarca lactea* (Linnaeus, 1758)

### **Arca minuta** Gmelin-

*Nuculana minuta* (Müller, 1776)

### **Arca nucleus** Linnaeus-

*Nucula nucleus* (Linnaeus, 1758)

### **Arca pilosa** Linnaeus-

*Glycymeris glycymeris* (Linnaeus, 1758)

### **Buccinum ambiguum** Pulteney-

*Tritia incrassata* (Strøm, 1768)

### **Buccinum lapillus** Linnaeus-

*Nucella lapillus* (Linnaeus, 1758)

### **Buccinum lineatum** da Costa-

*Angiola lineata* (da Costa, 1778)

### **<sup>T</sup>Buccinum minimum** Montagu

*Chauvetia brunnea* (Donovan, 1804)

### **Buccinum reticulatum** Linnaeus-

*Tritia reticulata* (Linnaeus, 1758)

### **<sup>T</sup>Buccinum terrestre** Montagu

*Cecilioidea acicula* (Müller, 1774)

### **Buccinum undatum** Linnaeus-

*Buccinum undatum* Linnaeus, 1758

### **Bulla akera** Gmelin-

*Akera bullata* (Müller, 1776)

### **Bulla ampulla** Linnaeus-

*Bulla occidentalis* A.Adams, 1850

### **Bulla aperta** Linnaeus-

*Philine aperta* (Linnaeus, 1767)

### **Bulla cylindracea** Pennant-

*Cylichna cylindracea* (Pennant, 1777)



- <sup>†</sup>Bulla diaphana Montagu**  
*Trivia arctica* (Pulteney, 1799)
- Bulla fontinalis Linnaeus-**  
*Physa fontinalis* (Linnaeus, 1758)
- <sup>†</sup>Bulla haliotoidea Montagu**  
*Lamellaria perspicua* (Linnaeus, 1758)
- Bulla hydatis Linnaeus-**  
*Haminoea hydatis* (Linnaeus, 1758)
- Bulla hypnorum Linnaeus-**  
*Aplexa hypnorum* (Linnaeus, 1758)
- Bulla lignaria Linnaeus-**  
*Scaphander lignarius* (Linnaeus, 1758)
- <sup>†</sup>Bulla obtusa Montagu**  
*Retusa obtusa* (Montagu, 1803)
- <sup>†</sup>Bulla plumula Montagu**  
*Berthella plumula* (Montagu, 1803)
- Cardium amnicum Gmelin-**  
*Pisidium amnicum* (Müller, 1774)
- <sup>†</sup>Cardium arcuatum Montagu-**  
*Lucinella divaricata* (Linnaeus, 1758)
- Cardium corneum Linnaeus-**  
*Sphaerium corneum* (Linnaeus, 1758)
- Cardium echinatum Linnaeus-**  
*Acanthocardia echinata* (Linnaeus, 1758)
- Cardium edule Linnaeus-**  
*Cerastoderma edule* (Linnaeus, 1758)
- Cardium edule Linnaeus-**  
*Cerastoderma edule* (Linnaeus, 1758)
- <sup>†</sup>Cardium elongatum Montagu-**  
*Cerastoderma edule* (Linnaeus, 1758)
- Cardium exiguum Gmelin-**  
*Parvicardium exiguum* (Gmelin, 1791)
- Cardium fasciatum Montagu-**  
*Parvicardium exiguum* (Gmelin, 1791)
- Cardium lacustre Gmelin-**  
*Musculium lacustre* (Müller, 1774)
- Cardium laevigatum Linnaeus-**  
*Laevicardium crassum* (Gmelin, 1791)
- <sup>†</sup>Cardium rubrum Montagu**  
*Lasaea rubra* (Montagu, 1803)
- Cardium rusticum Donovan-**  
*Cerastoderma edule* (Linnaeus, 1758)
- Chiton albus Linnaeus-**  
*Stenosemus albus* (Linnaeus, 1767)
- Chiton fascicularis Linnaeus-**  
*Acanthochitona fascicularis* (Linnaeus, 1767)
- <sup>†</sup>Cypraea bullata Montagu-**  
*Trivia arctica* (Pulteney, 1799)
- Cypraea europaea Montagu-**  
*Trivia arctica* (Pulteney, 1799)
- <sup>†</sup>Cypraea europaea Montagu-**  
*Trivia monacha* (da Costa, 1778)
- <sup>†</sup>Cypraea voluta Montagu-**  
*Erato voluta* (Montagu, 1803)
- <sup>†</sup>Donax castaneus Montagu-**  
*Ervilia castanea* (Montagu, 1803)
- <sup>†</sup>Donax complanatus Montagu-**  
*Donax variegatus* Gmelin, 1791)
- Donax denticulatus Linnaeus-**  
*Donax denticulatus* Linnaeus, 1758
- Donax irus Linnaeus-**  
*Irus irus* (Linnaeus, 1758)
- <sup>†</sup>Donax plebeia Montagu-**  
*Donacilla cornea* (Poli, 1791)
- Donax trunculus Linnaeus-**  
*Donax vittatus* da Costa, 1778
- Haliotis tuberulata Linnaeus-**  
*Haliotis tuberulata* Linnaeus, 1758
- Helix alba Gmelin-**  
*Gyraulus albus* (Müller, 1774)
- Helix aspersa Gmelin-**  
*Cornu aspersum* (Müller, 1774)
- Helix auricularia Linnaeus-**  
*Radix auricularia* (Linnaeus, 1758)
- <sup>†</sup>Helix cantiana Montagu-**  
*Monacha cantiana* (Montagu, 1803)
- <sup>†</sup>Helix caperata Montagu-**  
*Candidula intersecta* (Poiret, 1801)
- <sup>†</sup>Helix cingenda Montagu**  
*Theba pisana* (Müller, 1774)
- Helix contorta Linnaeus-**  
*Bathyomphalus contortus* (Linnaeus, 1758)
- Helix cornea Linnaeus-**  
*Planorbarius corneus* (Linnaeus, 1758)
- Helix cristata Müller-**  
*Valvata cristata* (Müller, 1774)
- <sup>†</sup>Helix decussata Montagu-**  
*Zebinella decussata* (Montagu, 1803)
- Helix detrita Montagu non Müller-**  
*Drymaeus elongatus* (Röding, 1798)
- Helix fossaria Montagu?-**  
*Galba truncatula* (Müller, 1774)
- Helix gibbsii ms in Leach**  
*Monacha cartusiana* (Müller, 1774)
- Helix hortensis Gmelin-**  
*Cepaea hortensis* (Müller, 1774)
- <sup>†</sup>Helix labiosa Montagu, 1803-**  
*Rissoa membranacea* (Adams, 1800)
- <sup>†</sup>Helix lackhamensis Montagu-**  
*Ena montana* (Draparnaud, 1801)
- Helix laevigata Linnaeus-**  
*Velutina velutina* (Müller, 1776)
- Helix lapicida Linnaeus-**  
*Helicigona lapicida* (Linnaeus, 1758)
- Helix limosa Linnaeus and Helix peregra Linnaeus –**  
*Radix labiata* (Rossmässler, 1835)
- Helix lubrica Gmelin-**  
*Cochlicopa lubrica* (Müller, 1774)
- <sup>†</sup>Helix lutea Montagu, 1803-**  
*Radix balthica* (Linnaeus, 1758)
- Helix nautilus Linnaeus-**  
*Gyraulus crista* (Linnaeus, 1758)
- Helix obscura Gmelin-**  
*Merdigera obscura* (Müller, 1774)
- <sup>†</sup>Helix octanfracta Montagu-**  
*Omphiscola glabra* (Müller, 1774)

- Helix octona* Linn.-**  
*Subulina octona* (Bruguière, 1789)
- Helix palustris* Gmelin-**  
*Stagnicola palustris* (Müller, 1774)
- <sup>T</sup>*Helix petraea* Montagu-**  
*Melarhaphe neritoides* (Linnaeus, 1758)
- Helix polita* Pulteney-**  
*Melanella polita* (Linnaeus, 1758)
- Helix pomatia* Linnaeus-**  
*Helix pomatia* Linnaeus, 1758
- Helix putris* Linnaeus-**  
*Succinea putris* (Linnaeus, 1758)
- Helix radiata* da Costa-**  
*Discus rotundatus* (Müller, 1774)
- Helix spinulosa* Lightfoot-**  
*Acanthinula aculeata* (Müller, 1774)
- Helix spirorbis* Linnaeus-**  
*Anisus spirorbis* (Linnaeus, 1758)
- Helix stagnalis* Linnaeus and *Helix fragilis* Linnaeus-**  
*Lymnaea stagnalis* (Linnaeus, 1758)
- <sup>T</sup>*Helix subcarinata* Montagu-**  
*Tornus subcarinatus* (Montagu, 1803)
- <sup>T</sup>*Helix trochiformis* Montagu-**  
*Euconulus fulvus* (Müller, 1774)
- <sup>T</sup>*Helix umbilicata* Montagu-**  
*Pyramidula umbilicata* (Montagu, 1803)
- Helix virgata* Pulteney-**  
*Cernuella virgata* (da Costa, 1778)
- Helix viviparia* Linnaeus-**  
*Viviparus viviparus* (Linnaeus, 1758)
- Helix vortex* Linnaeus-**  
*Anisus vortex* (Linnaeus, 1758)
- Ligula distorta* Montagu-**  
*Thracia convexa* (Wood, 1815)
- <sup>T</sup>*Ligula prismatica* Montagu-**  
*Abra prismatica* (Montagu, 1808)
- <sup>T</sup>*Macra boysii* Montagu-**  
*Abra alba* (Wood, 1802)
- <sup>T</sup>*Macra cinerea* Montagu-**  
*Macra stultorum* (Linnaeus, 1758)
- Macra compressa* Pulteney-**  
*Scrobicularia plana* (da Costa, 1778)
- Macra hians* Pulteney-**  
*Lutraria oblonga* (Gmelin, 1791)
- Macra solida* Linnaeus-**  
*Spisula solida* (Linnaeus, 1758)
- Macra stultorum* Linnaeus-**  
*Macra stultorum* (Linnaeus, 1758)
- Macra subtruncata* da Costa-**  
*Spisula subtruncata* (da Costa, 1778)
- <sup>T</sup>*Macra tenuis* Montagu-**  
*Abra tenuis* (Montagu, 1803)
- <sup>T</sup>*Macra triangularis* Montagu-**  
*Goodallia triangularis* (Montagu, 1803)
- <sup>T</sup>*Macra truncata* Montagu-**  
*Spisula solida* (Linnaeus, 1758)
- Macra truncata* Montagu-**  
*Spisula subtruncata* (da Costa, 1778)
- <sup>T</sup>*Murex adversus* Montagu-**  
*Marshallora adversa* (Montagu, 1803)
- <sup>T</sup>*Murex attenuatus* Montagu-**  
*Mangelia attenuata* (Montagu, 1803)
- Murex corneus* Linnaeus-**  
*Colus gracilis* (da Costa, 1778)
- Murex despectus* Linnaeus-**  
*Neptunea antiqua* (Linnaeus, 1758)
- Murex erinaceus* Linnaeus-**  
*Ocenebra erinaceus* (Linnaeus, 1758)
- <sup>T</sup>*Murex gracilis* Montagu-**  
*Comarmondia gracilis* (Montagu, 1803)
- <sup>T</sup>*Murex linearis* Montagu-**  
*Raphitoma linearis* (Montagu, 1803)
- <sup>T</sup>*Murex muricatus* Montagu-**  
*Trophonopsis muricatus* (Montagu, 1803)
- <sup>T</sup>*Murex nebula* Montagu-**  
*Bela nebula* (Montagu, 1803)
- <sup>T</sup>*Murex purpureus* Montagu-**  
*Raphitoma purpurea* (Montagu, 1803)
- Murex reticulatus* da Costa-**  
*Bittium reticulatum* (da Costa, 1778)
- <sup>T</sup>*Murex rufus* Montagu-**  
*Propebela rufa* (Montagu, 1803)
- <sup>T</sup>*Murex septangularis* Montagu-**  
*Haedropleura septangularis* (Montagu, 1903)
- <sup>T</sup>*Murex tubercularis* Montagu-**  
*Cerithiopsis tubercularis* (Montagu, 1803)
- <sup>T</sup>*Murex turricula* Montagu-**  
*Propebela turricula* (Montagu, 1803)
- Mya arenaria* Linnaeus-**  
*Mya arenaria* (Linnaeus, 1758)
- <sup>T</sup>*Mya distorta* Montagu-**  
*Thracia distorta* (Montagu, 1803)
- <sup>T</sup>*Mya inaequalis* Montagu-**  
*Corbula gibba* (Olivi, 1792)
- Mya margaritifera* Linnaeus-**  
*Margaritifera margaritifera* (Linnaeus, 1758)
- <sup>T</sup>*Mya ovalis* Montagu-**  
*Unio tumidus* Philippon, 1788
- <sup>T</sup>*Mya pholadia* Montagu-**  
*Rocellaria dubia* (Pennant, 1777)
- Mya praetenuis* Pult-**  
*Cochlodesma pratenuis* (Pulteney, 1799)
- Mya pubescens* Pulteney-**  
*Thracia phaseolina* (Lamarck, 1818)
- Mya pubescens* Pulteney-**  
*Thracia pubescens* (Pulteney, 1799)
- <sup>T</sup>*Mya striata* Montagu-**  
*Lyonsia norwegica* (Gmelin, 1791)
- <sup>T</sup>*Mya suborbicularis* Montagu-**  
*Kellia suborbicularis* (Montagu, 1803)
- Mya truncata* Linnaeus-**  
*Mya truncata* (Linnaeus, 1758)
- Mytilis discors* Linnaeus-**  
*Musculus subpictus* (Cantraine, 1835)
- Mytilis incurvatus* Pennant-**  
*Mytilus edulis* Linnaeus, 1758

- Mytilus anatinus** Linnaeus-  
*Anodonta anatina* (Linnaeus, 1758)
- <sup>†</sup>**Mytilus avonensis** Montagu-  
*Anodonta anatina* (Linnaeus, 1758)
- Mytilus barbatus** Linnaeus-  
*Modiolus barbatus* (Linnaeus, 1758)
- <sup>†</sup>**Mytilus discrepans** Montagu-  
*Musculus discors* (Linnaeus, 1767)
- Mytilus edulis** Linnaeus-  
*Mytilus edulis* Linnaeus, 1758
- Mytilus incurvatus** Pennant-  
*Mytilus edulis* Linnaeus, 1758
- Mytilus modiolus** Linnaeus-  
*Modiolus modiolus* (Linnaeus, 1758)
- Mytilus pellucidus** Pennant-  
*Mytilus edulis* Linnaeus, 1758
- Mytilus praecisus** Montagu-  
*Sphenia binghami* Turton, 1819
- Mytilus rugosus** Linnaeus-  
*Hiatella arctica* (Linnaeus, 1758)
- <sup>†</sup>**Nautilus lacustris** Montagu-  
*Segmentina nitida* (Müller, 1774)
- Nerita fluviatilis** Linnaeus-  
*Theodoxus fluviatilis* (Linnaeus, 1758)
- Nerita glaucina** Linnaeus-  
*Euspira catena* (da Costa, 1778)
- Nerita pallidula** da Costa-  
*Lacuna pallidula* (da Costa, 1778)
- <sup>†</sup>**Patella apertura** Montagu-  
*Diodora graeca* (Linnaeus, 1758)
- Patella chinensis** Linnaeus-  
*Calyptrea chinensis* (Linnaeus, 1758)
- Patella fissura** Linnaeus-  
*Emarginula fissura* (Linnaeus, 1758)
- Patella fluviatilis** Gmelin-  
*Ancylus fluviatilis* Müller, 1774
- Patella lacustris** Linnaeus-  
*Acroloxus lacustris* (Linnaeus, 1758)
- Patella militaris** Linnaeus-  
*Capulus ungaricus* (Linnaeus, 1758)
- Patella pellucida** Linnaeus-  
*Patella pellucida* Linnaeus, 1758
- Pecten distortus** da Costa-  
*Talochlamys pusio* (Linnaeus, 1758)
- Pecten jacobaeus** Linnaeus-  
*Pecten jacobaeus* (Linnaeus 1758)
- Pecten maximus** Linnaeus-  
*Pecten maximus* (Linnaeus, 1758)
- Pecten obsoletus** Pennant-  
*Palliolum tigrinum* (Müller, 1776)
- Pecten opercularis** Linnaeus-  
*Aequipecten opercularis* (Linnaeus, 1758)
- Pecten varius** Linnaeus-  
*Mimachlamys varia* (Linnaeus, 1758)
- Pholas candidus** Linnaeus-  
*Barnea candida* (Linnaeus, 1758)
- Pholas crispata** Linnaeus-  
*Zirfaea crispata* (Linnaeus, 1758)
- Pholas dactylus** Linnaeus-  
*Pholas dactylus* Linnaeus, 1758
- Pholas parvus** Pennant-  
*Barnea parva* (Pennant, 1777)
- Pholas striatus** Linnaeus-  
*Martesia striata* (Linnaeus, 1758)
- Pinna pectinata** Linnaeus / **Pinna ingens** Pennant-  
*Atrina fragilis* (Pennant, 1777)
- Solen antiquatus** Pulteney-  
*Azorinus chamasolen* (da Costa, 1778)
- Solen fragilis** Pulteney-  
*Tagelus divisus* (Spengler, 1794)
- Solen legumen** Linnaeus-  
*Pharus legumen* (Linnaeus, 1758)
- <sup>†</sup>**Solen novacula** Montagu-  
*Ensis siliqua* (Linnaeus, 1758)
- Solen pellucidus** Pennant-  
*Phaxas pellucidus* (Pennant, 1777)
- <sup>†</sup>**Solen pinna** Montagu-  
*Pandora pinna* Montagu
- Solen vagina** Linnaeus-  
*Solen vagina* Linnaeus, 1758
- Solen vespertinus** Gmelin-  
*Gari depressa* (Pennant, 1777)
- Strombus costatus** da Costa-  
*Cerithideopsis costata* (da Costa, 1778)
- Strombus pes pelecani** Linnaeus-  
*Aporrhais pespelecani* (Linnaeus, 1758)
- Tellina bimaculata** Linnaeus-  
*Heterodonax bimaculatus* (Linnaeus, 1758)
- Tellina carnaria** Linnaeus-  
*Strigilla carnaria* (Linnaeus, 1758)
- Tellina crassa** Gmelin-  
*Arcopagia crassa* (Pennant, 1777)
- Tellina donacina** Linnaeus-  
*Moerella donacina* (Linnaeus, 1758)
- Tellina fabula** Gmelin-  
*Fabulina fabula* (Gmelin, 1791)
- Tellina fausta** Pulteney-  
*Arcopagia fausta* (Pulteney, 1799)
- Tellina fervensis** Gmelin-  
*Gari fervensis* (Gmelin, 1791)
- <sup>†</sup>**Tellina flexuosa** Montagu  
*Thyasira flexuosa* (Montagu, 1803)
- Tellina lactea** Linnaeus-  
*Loripes orbiculatus* (Poli, 1791)
- Tellina laeta** Pulteney-  
*Tellina angulosa* Gmelin, 1791 ?
- <sup>†</sup>**Tellina laskeyi** Montagu  
Uncertain
- Tellina proficua** Pulteney-  
*Semele proficua* (Pulteney, 1799)
- <sup>†</sup>**Tellina radula** Montagu  
*Lucinoma borealis* (Linnaeus, 1767)
- <sup>†</sup>**Tellina rotundata** Montagu-  
*Diplodonta rotundata* (Montagu, 1803)
- Tellina solidula** Pulteney-  
*Limecola balthica* (Linnaeus, 1758)

- Tellina squalida** Pulteney-  
*Bosemprella incarnata* (Linnaeus, 1758)
- Tellina striata** Gmelin-  
*Eurytellina lineata* (Turton, 1819)
- Tellina tenuis** da Costa-  
*Macomangulus tenuis* (da Costa, 1778)
- Teredo navalis** Linnaeus-  
*Nototeredo norvagica* (Spengler, 1792)
- Teredo navalis** Linnaeus-  
*Nototeredo norvagica* (Spengler, 1792)
- Trochus cinereus** da Costa-  
*Steromphala cineraria* (Linnaeus, 1758)
- Trochus crassus** Pulteney-  
*Phorcus lineatus* (da Costa, 1778)
- Trochus exiguus** Pulteney-  
*Jujubinus exasperatus* (Pennant, 1777)
- Trochus magus** Linnaeus-  
*Gibbula magus* (Linnaeus, 1758)
- Trochus striatus** Linnaeus-  
*Jujubinus striatus* (Linnaeus, 1758)
- <sup>†</sup>Trochus tenuis** Montagu-  
*Calliostoma granulatum* (Born, 1778)
- <sup>†</sup>Trochus tumidus** Montagu-  
*Gibbula tumida* (Montagu, 1803)
- <sup>†</sup>Trochus umbilicatus** Montagu-  
*Steromphala umbilicalis* (da Costa, 1778)
- Trochus ziziphinus** Linnaeus-  
*Calliostoma zizyphinum* (Linnaeus, 1758)
- <sup>†</sup>Turbo biplicatus** Montagu-  
*Alinda biplicatus* (Montagu, 1803)
- <sup>†</sup>Turbo bryereus** Montagu-  
*Schwartziella bryerea* (Montagu, 1803)
- <sup>†</sup>Turbo canalis** Montagu-  
*Lacuna vincta* (Montagu, 1803)
- Turbo carychium** Müller-  
*Carychium minimum* (Müller, 1774)
- <sup>†</sup>Turbo cingillus** Montagu  
*Cingula trifasciata* (J. Adams, 1800)
- Turbo clathratulus** Turton-  
*Epitonium clathratulum* (Kanmacher, 1798)
- Turbo clathrus** Linnaeus-  
*Epitonium clathrus* (Linnaeus, 1758)
- <sup>†</sup>Turbo crassior** Montagu-  
*Lacuna crassior* (Montagu, 1803)
- <sup>†</sup>Turbo decussatus** Montagu-  
*Parthenina decussata* (Montagu, 1803)
- <sup>†</sup>Turbo dispar** Montagu-  
*Littorina dispar* (Montagu, 1816)
- Turbo elegans** Gmelin-  
*Pomatius elegans* (Müller, 1774)
- <sup>†</sup>Turbo elegantissimus** Montagu-  
*Turbonilla lactea* (Linnaeus, 1758)
- Turbo fontinalis** Pulteney-  
*Valvata piscinalis* (Müller, 1774)
- Turbo interruptus** Adams-  
*Rissoa parva* (da Costa, 1778)
- <sup>†</sup>Turbo interstinctus** Adams in-Montagu-  
*Parthenina interstinctus* (Adams, 1797)
- <sup>†</sup>Turbo jugosus** Montagu-  
*Littorina saxatilis* (Olivi, 1792)
- <sup>†</sup>Turbo laminatus** Montagu-  
*Cochlodina laminata* (Montagu, 1803)
- Turbo littoreus** Linnaeus-  
*Littorina littorea* (Linnaeus, 1758)
- Turbo muscorum** Linnaeus-  
*Pupilla muscorum* (Linnaeus, 1758)
- Turbo obtusatus** Linnaeus-  
*Littorina littorea* (Linnaeus, 1758)
- Turbo parvus** da Costa-  
*Rissoa parva* (da Costa, 1778)
- Turbo pullus** Linnaeus-  
*Tricolia pullus* (Linnaeus, 1758)
- <sup>†</sup>Turbo punctura** Montagu  
*Alvania punctura* (Montagu, 1803)
- <sup>†</sup>Turbo quadrifasciatus** Montagu-  
*Lacuna vincta* (Montagu, 1803)
- Turbo ruber** Montagu not Adams-  
*Barleeia unifasciata* (Montagu, 1803)
- Turbo rudis** Donovan-  
*Littorina saxatilis* (Olivi, 1792)
- Turbo sexdentatus** Montagu-  
*Vertigo pygmaea* (Draparnaud, 1801)
- <sup>†</sup>Turbo spiralis** Montagu-  
*Spiralinella spiralis* (Montagu, 1803)
- <sup>†</sup>Turbo striatulus** Montagu-  
*Alvania carinata* (da Costa, 1778)
- Turbo striatus** Adams 1797 sensu Montagu-  
*Onoba semicostata* Montagu, 1803)
- <sup>†</sup>Turbo subtruncatus** Montagu-  
*Truncatella subcylindrica* (Linnaeus, 1767)
- <sup>†</sup>Turbo tenebrosus** Montagu-  
*Littorina saxatilis* (Olivi, 1792)
- <sup>†</sup>Turbo tenebrosus** Montagu-  
*Littorina saxatilis* (Olivi, 1792)
- Turbo terebra** Linnaeus-  
*Turritella communis* Risso, 1827
- <sup>†</sup>Turbo truncatus** Montagu-  
*Truncatella subcylindrica* (Linnaeus, 1767)
- Turbo ulvae** Pennant-  
*Peringia ulvae* (Pennant, 1777)
- <sup>†</sup>Turbo unicus** Montagu-  
*Graphis albida* (Kanmacher, 1798)
- <sup>†</sup>Turbo unidentatus** Montagu-  
*Odostomia unidentata* (Montagu, 1803)
- <sup>†</sup>Turbo unifasciatus** Montagu-  
*Barleeia unifasciata* (Montagu, 1803)
- <sup>†</sup>Turbo vinctus** Montagu-  
*Lacuna vincta* (Montagu, 1803)
- <sup>†</sup>Turbo vitreus** Montagu-  
*Hyala vitrea* (Montagu, 1803)
- <sup>†</sup>Turbo zetlandicus** Montagu-  
*Alvania zetlandica* (Montagu, 1816)
- Turbo ziczac** Gmelin-  
*Echinolittorina ziczac* (Gmelin, 1791)
- Venus aurea** Gmelin-  
*Politapes aureus* (Gmelin, 1791)

**Venus chione** Linnaeus-  
*Callista chione* (Linnaeus, 1758)  
**Venus compressa** Montagu  
*Astarte sulcata* (da Costa, 1778)  
**Venus decussata** Linnaeus-  
*Ruditaptus decussatus* (Linnaeus, 1758)  
**Venus dysera** Gmelin-  
*Chione cf. elevata* Say, 1822  
**Venus exoleta** Linnaeus-  
*Dosinia exoleta* (Linnaeus, 1758)  
**Venus granulata** Gmelin-  
*Leukoma granulata* (Gmelin, 1791)  
**Venus guineensis** Gmelin-  
*Lamelliconcha circinata* (Born, 1778)  
**Venus islandica** Linnaeus-  
*Arctica islandica* (Linnaeus, 1767)  
**Venus laminosa** Montagu-  
*Chamelea striatula* (da Costata, 1778)  
**Venus laminosa** Montagu-  
*Chamelea striatula* (da Costata, 1778)  
**Venus laminosa** Montagu-  
*Chamelea striatula* (da Costata, 1778)  
<sup>†</sup>**Venus minima** Montagu-  
*Gouldia minima* (Montagu, 1803)  
**Venus ovata** Pennant-  
*Timoclea ovata* (Pennant, 1777)  
<sup>†</sup>**Venus paphia** Montagu-  
*Timoclea ovata* (Pennant, 1777)  
<sup>†</sup>**Venus perforans** Montagu-  
*Venerupis corrugata* (Gmelin, 1791)  
<sup>†</sup>**Venus pullastra** Montagu-  
*Venerupis corrugata* (Gmelin, 1791)  
**Venus scotica** Maton & Rackett-  
*Astarte sulcata* (da Costa, 1778)  
**Venus striatula** da Costa-  
*Chamelea striatula* (da Costa, 1778)  
**Venus tigrina** Linnaeus-  
*Codakia orbicularis* (Linnaeus, 1785)  
**Venus triangularis** Montagu  
*Gouldia minima* (Montagu, 1803)  
**Venus undata** Pennant-  
*Mysia undata* (Pennant, 1777)  
**Venus verrucosa** Linnaeus-  
*Venus verrucosa* Linnaeus, 1758  
**Venus virginea** Linnaeus-Montagu  
 confused *Politapes aurea* and *P. rhomboides*  
<sup>†</sup>**Voluta bidentata** Montagu-  
*Auriculinea bidentata* (Montagu, 1808)  
<sup>†</sup>**Voluta denticulata** Montagu-  
*Myosotella denticulata* (Montagu, 1803)  
**Voluta pallida** Linnaeus-  
*Hyalina pallida* Linnaeus, 1758  
**Voluta triplicata** Donovan-  
*Tralia ovula* (Bruguière, 1789)  
**Unpublished-Littorina** sp.  
**Unpublished (new No 3)**-*Otina ovata* (Brown, 1827)  
**Unpublished-Botula fusca** (Gmelin, 1791)  
**Unpublished-Epitonium turtonis** (Turton, 1819)

**Unpublished-Eulima** sp.  
**Unpublished-Littoraria pintado** (Wood, 1828)  
**Unpublished-Polinices** sp.  
**Unpublished-Roxania utriculus** (Brocchi, 1814)  
**Unpublished-Turbonilla lactea** (Linnaeus, 1758)  
**Unpublished-Pholadidea loscombiana** Turton, 1819  
**Unpublished-Epitonium principalis** MS

## Discussion

The Montagu collection in RAMM was donated by Montagu's son Henry d'Orville in 1874 and at that time the register numbering sequence started at 3639 and ended at 4537. Rosemary Brind who compiled the first list of types (1979) noted that numbers 4135 to 4537 were missing. Oliver et al. (2017) surmised that these shells may have been retained by JG Jeffreys but could provide no evidence. Relevant to this Harriet Wood of the National Museum of Wales has uncovered a letter from JRle B Tomlin to JD Dean written in 1935. Both Tomlin and Dean were interested in historic collections and Tomlin was prompted to visit Exeter to examine their collection. At this time Tomlin also noted the missing material and in his letter clearly suggests that this was lent to JG Jeffreys but never returned. Consequently some Montagu material should be present in the Smithsonian within the Jeffreys collection. As noted in our earlier paper recognising the provenance of lots in the Jeffreys collection is difficult, as the original labels have been removed. The relevant portion of this letter is reproduced here with a transcript. It seems clear now that the missing lots will not be found in RAMM.

“Some years ago, when I was in Exeter, I took the trouble to go thoroughly into the matter of the Montagu spp.-on what Jeffreys reported in J. of Conch. II, 1–4. Unluckily the shells were all sent to J. with the help of the Curator. I ran down the entry in their records of the sending of the parcel to Jeffreys (I think it was in 1878). But there is no record of their return: the old scoundrel pinched them + no doubt they are now in Washington. I looked carefully through their collection and none of the spp mentioned in J. C. are forthcoming. I think the matter ought to be taken up and restitution demanded from the U. S. Nat. Mus. If properly and courteously done I think the things would be returned”

The remaining collection is contained in 316 lots covering register numbers 3639–4134 but no longer representing the number of shells noted in the register and it would appear that many, especially of the smaller shells, have become dislodged from the mounts and lost, some time prior to 1979. The majority of the shells verified by Brind in 1979 are present. The number of type bearing lots is now 92.

Although Montagu continued to publish up to his untimely death our review suggests that he was still studying shells and recognizing species not included in his earlier works, such as *Otina* and *Roxania*.

We have examined 23 non-native species included by Montagu (1803, 1808) but not described by him. Most

Some years ago, when I was in Exeter, I took the trouble to go thoroughly into the matter of the Montagu shells on which Jeffreys reported in *J. of Conch.* II. 1-4. Unfortunately the shells were all sent to J. - with the help of the Curator I ran down the entry in their records of the sending of the parcel to Jeffreys (I think it was in 1878). But there is no record of their return: the old scoundrel pinched them & no doubt they are now at Washington. I looked carefully through their coll. & none of the sp. mentioned in the p.c. are forthcoming. I think the matter ought to be taken up, & restitution demanded from the U.S. Nat. Mus. If properly & courteously done, I think the things would be returned.

**Figure 54.** Part of a letter from J R Le B Tomlin to J D Dean concerning the fate of part of the Montagu collection in RAMM, Exeter; dated 25/May/1935.

were reputedly collected from the south coast of England, mainly Dorset, and many by Mr Bryer although some were given by Pulteney, Boys and Laskey. These shells for the major part have been identified correctly suggesting that there was consistency between these early collectors. The underlying issue with the non-British shells included by Montagu is not their identity their provenance as discussed by Oliver et al. (2017). Although the source as ballast was considered by Oliver et al. (2017) it was the co-occurrence of species found on the south coast of England and in Scotland that gave rise to the suspicion that the shells were not found naturally. The species are exclusively from the Caribbean region and all but two represented by empty shells showing signs of being long dead. If there had been an underhand attempt to introduce exotic species then one might expect such shells to be from numerous localities and to be in good condition. The Caribbean (West Indian) origin fits well with the bulk of the trade during the late 18<sup>th</sup> century and given the number of ships lost at this time (Boult 2003) it may not be unreasonable to assume that access to the ballast of a wrecked ship could produce this assemblage of shells. Where suspicion still arises is the co-occurrence of these species reported from Scotland by Laskey (1811) and in Montagu's (1808) list of North British Shells.

The lack of accuracy of records kept by collectors may also have added to our suspicions. For example Pulteney (1799) records *Subulina octona* from Weymouth but gives no details as to where. Weymouth is repeated by Miss Pocock for the shells sent to Lyons in Tenby and the shells collected by Dillwyn give only Bantry Bay as

the locality. Nowhere is there any mention of this being a terrestrial species, typically found in hot houses. Once introduced into the British literature it would appear that such species were in demand by collectors and shells were then sourced but spuriously given the collection site as that of the original finding.

It must also be reminded that wooden shipping of the 18<sup>th</sup> century was a much different environment for possible translocation of organisms. The ships built up a much larger volume of fouling organisms enabling non-attached species such as snails to remain protected. This could explain how Montagu had two species of Caribbean littorinids with intact opercula in his collection.

The vast majority of Montagu's determinations are accurate according to the literature of the time. Montagu is honest in his admissions of being uncertain about certain taxa e.g. his confusion with species of *Thracia*. Although the nomenclature is often mistaken and Montagu was prone to introducing new names for known species he seldom splits species on minute differences. The RAMM collection is however far from complete and lacks many of the minute marine and terrestrial species such as those in the families Pyramidellidae and Vertiginidae. In some cases the extant material does not conform with the description given such as *Turbo sexdentatus* where none of the shells have six teeth and do not conform with the current concept of being a junior synonym of *Vertigo antivertigo*. This indicates that caution must be used when considering the type status of specimens and questions how consistent Montagu was in his identifications especially of these smaller species.

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