Supplement of Comparative analysis of six common foraminiferal species of the genera Cassidulina, Paracassidulina, and Islandiella from the Arctic–North Atlantic domain

Alix G. Cage et al.

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### Supplementary Table S1. Sample details for specimens illustrated in Figs 1-5.

<table>
<thead>
<tr>
<th>Species</th>
<th>Figure(s)</th>
<th>Sample details</th>
<th>Comments/reference</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Cassidulina laevigata</em></td>
<td>1a, 5 (Holotype original illustration)</td>
<td>Unknown, core ±56°07′27″E, 0-1 cm (56.1922°N, 6.479233°W, 185 m water depth)</td>
<td>d'Ortho (1926), Plate 15, Figs 4-5</td>
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<tr>
<td></td>
<td>1b, 5 (Aperture, Chamber arrangement, Chamber shape, Proloculus area)</td>
<td>core ±56°07′27″E, 0-1 cm (56.1922°N, 6.479233°W, 185 m water depth)</td>
<td>this study</td>
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<tr>
<td></td>
<td>1c</td>
<td>core ±56°07′27″E, 0-1 cm (56.1922°N, 6.479233°W, 185 m water depth)</td>
<td>this study</td>
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<tr>
<td></td>
<td>1d</td>
<td>core ±56°07′27″E, 0-1 cm (56.1922°N, 6.479233°W, 185 m water depth)</td>
<td>this study</td>
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<tr>
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<td>1e</td>
<td>core ±56°07′27″E, 0-1 cm (56.1922°N, 6.479233°W, 185 m water depth)</td>
<td>this study</td>
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<tr>
<td></td>
<td>1f, 5 (Aperture)</td>
<td>Expedition 93030, core 03L, 3-4 cm (64.2843°N, 24.2570°W, 254 m water depth)</td>
<td>this study</td>
</tr>
<tr>
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<td>1g</td>
<td>Expedition 93030, core 03L, 4-5 cm (64.2843°N, 24.2570°W, 254 m water depth)</td>
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<tr>
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<td>1h</td>
<td>Expedition 93030, core 03L, 6-7 cm (64.2843°N, 24.2570°W, 254 m water depth)</td>
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<td><em>Cassidulina neoeretis</em></td>
<td>2a, 5 (Holotype original illustration)</td>
<td>see Supplementary Table S2</td>
<td>Seidenkrantz (1995), Plate 1, Fig. 1</td>
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<td></td>
<td>2b, 5 (Chamber arrangement, Chamber shape)</td>
<td>Expedition 89200, core A9GC, 0-2 cm (79.6641°N, 104.2375°W, 418 m water depth)</td>
<td>this study</td>
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<td>2c</td>
<td>Expedition 89200, core A9GC, 0-2 cm (79.6641°N, 104.2375°W, 418 m water depth)</td>
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<tr>
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<td>2d, 5 (Aperture)</td>
<td>Expedition OD1507, core 009MC, 0-2 cm (81.0101°N, 61.276887°W, 931 m water depth)</td>
<td>Jennings et al. (2020)</td>
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<td>2f</td>
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<td>2h</td>
<td>MGUH no. 22211; Upper Weichselian, core 1007 off Eocene Islands, North Atlantic (60.7483°N, 4.51483°W, 1125 m water depth), sample no. 18</td>
<td>Seidenkrantz (1995), Plate 2, Fig. 5</td>
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<td>2i</td>
<td>MGUH no. 22212; Upper Weichselian, core 1007 off Eocene Islands, North Atlantic (60.7483°N, 4.51483°W, 1125 m water depth), sample no. 11</td>
<td>Seidenkrantz (1995), Plate 2, Fig. 6</td>
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<td>see Supplementary Table S2</td>
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<tr>
<td><em>Cassidulina teretis</em></td>
<td>3a, 5 (Holotype original illustration)</td>
<td>see Supplementary Table S2</td>
<td>Tappan (1951), Plate 1, Fig. 30b</td>
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|                  | 3b, 5 (Holotype Image)           | see Supplementary Table S2 | Paleobiology Collections of the Smithsonian National Museum of Natural History (https://collections.nmnh.si.edu/)
<p>|                  | 3c                               | MGUH no. 22206; Pleistocene, Clyde Foreland, Baffin Island, Canada | Seidenkrantz (1995), Plate 1, Fig. 13 |
|                  | 3d                               | MGUI no. 22205; Pleistocene, Clyde Foreland, Baffin Island, Canada | Seidenkrantz (1995), Plate 1, Fig. 12a |
|                  | 3e                               | MGUI no. 22223; OPD Hole 644A, lowermost middle Pleistocene | Seidenkrantz (1995), Plate 2, Fig. 17 |</p>
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<tr>
<th>Taxon</th>
<th>Aperture</th>
<th>Upper Pliocene, Gulf of Maine, North Sea</th>
<th>Seidenkranz (1995), Plate 4, Fig. 2</th>
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<tr>
<td>Paracassidina novaerthensis</td>
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<td>3c</td>
<td>MGUH no. 22203; Recent, Emerald Basin, off Nova Scotia, Canada</td>
<td>Seidenkranz (1995), Plate 1, Fig. 10a</td>
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<td>3d, 5 (Chamber arrangement, Chamber shape, Proloculus area)</td>
<td>MGUH no. 22203; Recent, Emerald Basin, off Nova Scotia, Canada</td>
<td>Seidenkranz (1995), Plate 1, Fig. 10b</td>
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<td>3e</td>
<td>MGUH no. 22229; Holocene, Gulf of Maine, USA, sample E-2F-92-C2, 425 m below sea floor; Specimen provided by Prof. Detmar Schnitzer, University of Maine, USA</td>
<td>Seidenkranz (1995), Plate 5, Fig. 9</td>
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<td>Islandiella heleneae</td>
<td>4a</td>
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<td>4b, 5 (Aperture)</td>
<td>Expedition 89200, core A9GC, 0-2 cm (79.6417°N, 104.2375°W, 418 m water depth)</td>
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<td>4c, 5 (Aperture, Chamber arrangement, Chamber shape, Proloculus area)</td>
<td>Expedition 2008020, core 042PC, 800 cm (75.5793°N, 70.629571°W, 580 m water depth)</td>
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<td>see Supplementary Table S2</td>
<td>Leeblich and Tappan (1953), Plate 24, Fig. 4b</td>
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<td>Islandiella norcrossi</td>
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<td>see Supplementary Table S2</td>
<td>Cushman (1933), Plate 2, Fig. 7b</td>
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<td>4g</td>
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<td>this study</td>
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<td>4h, 5 (Proloculus area)</td>
<td>Expedition 2011804, core 001BC, 0-1 cm (74.15966°N, 80.600333°W, 779 m water depth)</td>
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<td>4i</td>
<td>Expedition 2011804, core 002BC, 0-1 cm (69.16361°N, 100.71217°W, 63 m water depth)</td>
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<td>4j, 5 (Chamber arrangement, Chamber shape)</td>
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<td>4k, 5 (Aperture)</td>
<td>Expedition 2011804, core 001BC, 0-1 cm (76.329333°N, 71.222666°W, 658 m water depth)</td>
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Abbreviations:
MGOUH = Natural History Museum of Denmark Palaeontology Type Collection (https://samlinger.snm.ku.dk/en/dry-and-wet-
collections/geology/palaeontology-type-collection/)

References:
Cushman, J.A.: New arctic foraminifera collected by Captain R.A. Bartlett from Fox Basin and of the northeast coast of Greenland, Smithsonian Miscellaneous Collection, 89, 1-8, 1933.
### Cage et al., Supplementary Table 2

<table>
<thead>
<tr>
<th>Species</th>
<th>Type level</th>
<th>Type locality</th>
<th>Type specimen</th>
<th>Comments/reference</th>
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<td><em>Cassidulina laevigata</em></td>
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<td>Not given</td>
<td>d'Orbigny (1826)</td>
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<td><em>Cassidulina neoteretis</em></td>
<td>Holotype</td>
<td>Late Weichselian, Boring 1007 off Faeroe Islands (60°44.69N, 4°30.89W; 1125 m water depth), sample 19</td>
<td>Dept. of Earth Sciences, Aarhus University; holotype no. MGUH 22189</td>
<td>Seldenkrantz (1995)</td>
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<td>Paratype</td>
<td>Late Weichselian, Boring 1007 off Faeroe Islands (60°44.69N, 4°30.89W; 1125 m water depth), sample 19</td>
<td>Dept. of Earth Sciences, Aarhus University; holotype no. MGUH 22195</td>
<td>Re-imaged for this study</td>
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<td><em>Cassidulina teretis</em></td>
<td>Holotype</td>
<td>Pleistocene (Gubik Formation)</td>
<td>Core at 100-105 ft in Point Barrow Core Test 1, N-NE of Barrow village, N Alaska</td>
<td>US National Museum of Natural History, Washington DC; holotype no. USNM 560409</td>
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<td><em>Paracassidulina neocarinata</em></td>
<td>Holotype</td>
<td>Recent</td>
<td>Ragged Key (75 fathoms water depth), Florida</td>
<td>US National Museum of Natural History, Washington DC; holotype no. USNM 16375a</td>
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<td>Paratype</td>
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<td>Ragged Key (75 fathoms water depth), Florida</td>
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<td><em>Islandiellina helmae</em></td>
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<td>Recent</td>
<td>3 miles offshore (37 m water depth) brw. Point Barrow Base Camp and Barrow village, N Alaska</td>
<td>US National Museum of Natural History, Washington DC; holotype no. USNM P 2107b</td>
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<tr>
<td><em>Islandiellina norcrossi</em></td>
<td>Holotype</td>
<td>Recent</td>
<td>5 miles off (7 fathoms water depth) Cape Borlase Warren, NE Greenland</td>
<td>US National Museum of Natural History, Washington DC; holotype no. USNM 26139</td>
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</tbody>
</table>

**References:**


Cushman, J.A.: New arctic foraminifera collected by Captain R.A. Bartlett from Fox Basin and of the northeast coast of Greenland, Smithsonian Miscellaneous Collection, 89, 1-8, 1933.