Establishment of a Type Specimen Collection at the Alaska State Geologic Material Center

Contributed by Robert L. Ravn, IRF Group

GMC467

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State of Alaska
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Division of Geological & Geophysical Surveys
GEOLOGIC MATERIALS CENTER
ESTABLISHMENT OF A TYPE SPECIMEN COLLECTION AT THE ALASKA STATE GEOLOGIC MATERIALS CENTER

Publication of new genera and species for fossil material is governed by a number of important rules, in order to ensure taxonomic rigor and validity. Principal among these are the designation of a single “holotype” specimen to represent the new taxon, and placement of that specimen in a properly curated facility to be held in permanent custody for the purpose of possible future re-examination. As of November 2019, the Geologic Materials Center has established the first such collection of holotype specimens for fossil materials.

Ten such holotypes of palynological specimens described in papers by Ravn (2017) and Ravn and Goodman (2017) have now been placed in the collection, with anticipation that many more fossils, of various kinds, will likewise be curated similarly in the future.

The ten new holotypes, all remains of microscopic marine algae from the North Slope region of Alaska, are illustrated below:

<table>
<thead>
<tr>
<th>DGGS Palynology Holotypes</th>
<th>Well and depth</th>
<th>England Finder Coords</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fromea nohrhansenii Ravn 2017</td>
<td>Natchiq 1 5790-5880</td>
<td>O8</td>
</tr>
<tr>
<td>Fromea quasitabulata Ravn 2017</td>
<td>Walakpa 1 2112.6</td>
<td>G22/4</td>
</tr>
<tr>
<td>Fromea gordonwoodii Ravn 2017</td>
<td>Nigliq 1 7950-7980</td>
<td>Z27/4</td>
</tr>
<tr>
<td>Fromea xantha Ravn 2017</td>
<td>Kalubik 3 6750-6780</td>
<td>U37/1</td>
</tr>
<tr>
<td>Paranelsoniella woodii Ravn &amp; Goodman 2017</td>
<td>Kup River State 1 7260-7290</td>
<td>L27/2</td>
</tr>
<tr>
<td>Paranelsoniella minuta Ravn &amp; Goodman 2017</td>
<td>Long Island 1 7740-7750</td>
<td>Z45/2</td>
</tr>
<tr>
<td>Cyclopsiella mickeyi Ravn 2017</td>
<td>Narvaq 1-5040-5070</td>
<td>W35/4</td>
</tr>
<tr>
<td>Xanthocysta ovata Ravn &amp; Goodman 2017</td>
<td>Kalubik 3 4440-4530</td>
<td>Q34/3</td>
</tr>
<tr>
<td>Wallodinium contortum Ravn 2017</td>
<td>Wolfbutton 32-7-8 6100</td>
<td>T24/3</td>
</tr>
<tr>
<td>Fromea polaris Ravn 2017</td>
<td>North Star 3 9536</td>
<td>J40/1</td>
</tr>
</tbody>
</table>
Fremea quasitabulata Ravn 2017
Oxfordian (Upper Jurassic)

Fremea polaris Ravn 2017
Hauterivian (Lower Cretaceous)

Fremea gordonwoodii Ravn 2017
Toarcian (Lower Jurassic)

Fremea nohrhansenii Ravn 2017
Albian (Lower Cretaceous)

Waldolinium contortum Ravn 2017
Albian (Lower Cretaceous)

Fremea xantha Ravn 2017
Barremian (Lower Cretaceous)

Cyclospiella mickeyi Ravn 2017
Santonian (Upper Cretaceous)

Paranelsoniella minutula
Ravn & Goodman 2017
Turonian (Upper Cretaceous)

Paranelsoniella woodii
Ravn & Goodman 2017
Turonian (Upper Cretaceous)

Xanthocysta ovata
Ravn & Goodman 2017
Cenomanian (Upper Cretaceous)
REFERENCES
