

A database for the Devonian faunas of New York state

Daniel Krisher
DLKFossil@gmail.com

Introduction

Over 150 years of research has generated a wealth of data concerning the Devonian taxa and biostratigraphy of New York. The use of this data has been hampered by its publication in a multiplicity of journals spanning many years. To address the lack of a comprehensive guide to the Devonian taxa and biostratigraphy of New York a database has been created which aggregates all taxonomic and biostratigraphic data in a single source.

Data

Data sources

Peer reviewed and non-peer reviewed literature
Monographs and other large format publications
Existing databases such as the Paleobiology Database
Fieldguides
Published and unpublished master's theses and doctoral dissertations

Data integrity

The sources for all taxonomic, stratigraphic and biogeographic data are documented on the Reference Form

A non-judgmental view is taken for the validity of taxonomic data. The taxonomy of a taxon is considered valid unless it is overridden by newer data

A non-judgmental view is taken for validity of all specimen identifications. The identification is considered valid unless overridden by newer data

A non-judgmental view is taken for the validity of all reported stratigraphic and biogeographic data. The reported data is considered valid unless it is overridden by newer data

Modern stratigraphic nomenclature is used whenever possible. If conversion to newer nomenclature is not possible or at all uncertain, the older stratigraphic nomenclature contained in the reference is used

Database forms

Reference form

Literature Ref. #:	<input type="text" value="33"/>	Title:	The Siphonophrentidae (Rugose Corals, Devonian) of Eastern North America
Author (s):	<input type="text" value="Oliver Jr., William A."/>	Journal/Book:	<input type="text" value="United States Geological Survey Bulletin"/>
Issued:	<input type="text" value="1992"/>	Vol:	<input type="text" value="2024B"/>
		Pages:	<input type="text" value="B1 - B32"/>
PaleoBio DB Ref. #:	<input type="text" value="NA"/>	PaleoBio DB Collection #:	<input type="text"/>
Stratigraphic Data:	<input type="text" value="Data Entered"/>		
Taxonomic Data:	<input type="text" value="Data Entered"/>		
Biogeographic Data:	<input type="text" value="Data Not Entered"/>		

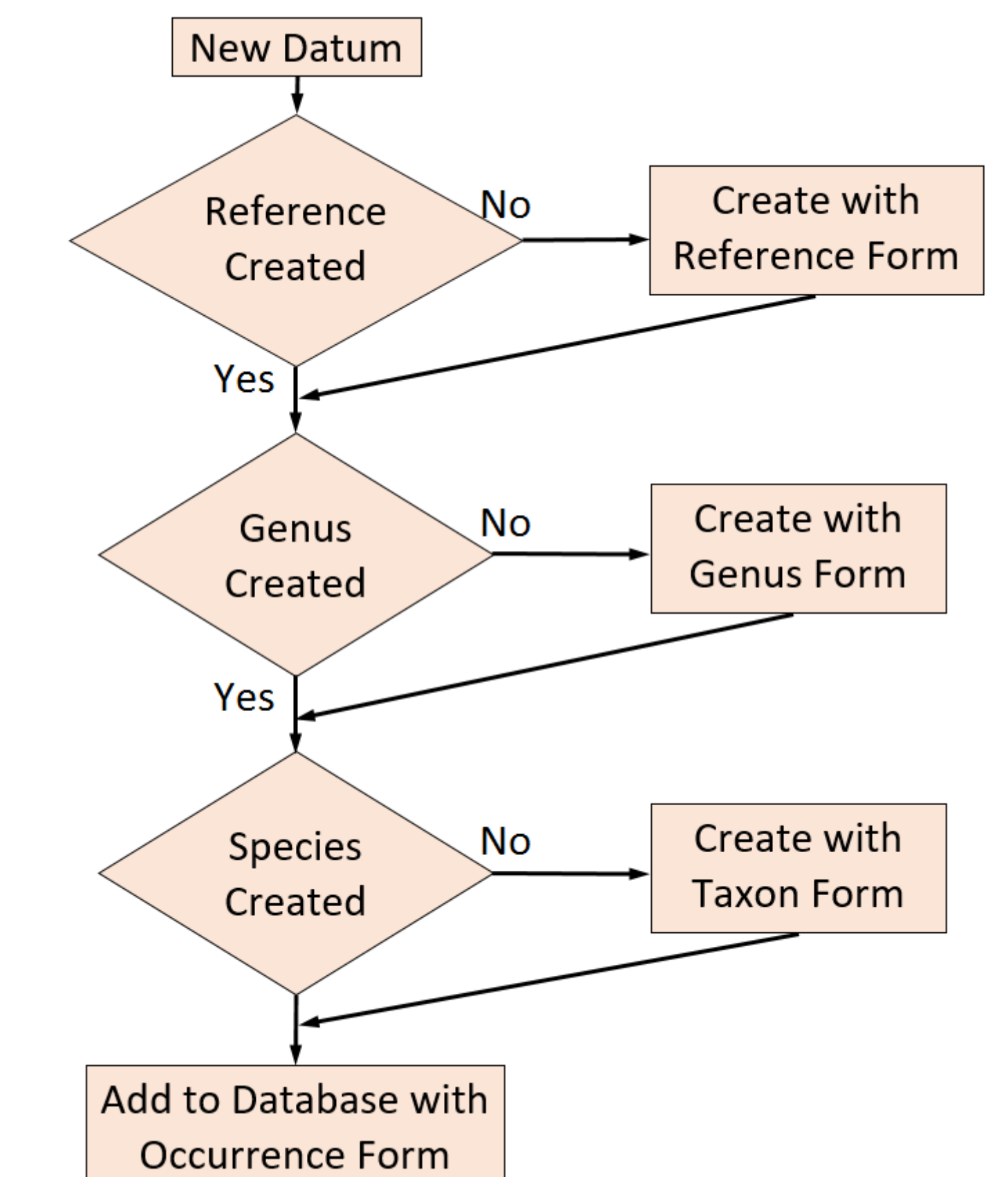
Taxon form

Taxon Name: <input type="text" value="Enallophrentis simplex"/>	
Genus: <input type="text" value="Enallophrentis"/>	Subgenus: <input type="text"/>
Species: <input type="text" value="simplex"/>	Subspecies: <input type="text"/>
Variety: <input type="text"/>	
Taxon Status - NY: <input type="text" value="Valid"/>	Taxon Comments - NY: <input type="text" value="New York specimens were Heterophrentis simplex per Ref. 33"/>
Taxonomy	Taxa Description
Taxa Level 1: <input type="text" value="Cnidaria"/>	Linsley 1994 Plate: <input type="text" value="NA"/>
Taxa Level 2: <input type="text" value="Anthozoa"/>	Wilson 2014 Page: <input type="text" value="52"/>
Taxa Level 3: <input type="text" value="Hexacorallia"/>	Diagnostic References: <input type="text" value="33"/>
Taxa Level 4: <input type="text" value="Rugosa"/>	Diagnostic Features: <input type="text"/>
Taxa Level 5: <input type="text" value="Stauriida"/>	
Taxa Level 6: <input type="text" value="Streptelasmatina"/>	
Taxa Level 7: <input type="text" value="Siphonophrentidae"/>	
Taxa Level 8: <input type="text"/>	
Taxa Level 9: <input type="text"/>	
Source: <input type="text" value="PaleoBio Db"/>	
Comments: <input type="text"/>	

Occurrence form

Record #: <input type="text"/>	Taxon Name: <input type="text" value="Enallophrentis simplex"/>	
Genus: <input type="text" value="Enallophrentis"/>	Subgenus: <input type="text"/>	Species: <input type="text" value="simplex"/>
Subspecies: <input type="text"/>	Variety: <input type="text"/>	
Genus Qualifier: <input type="text"/>	Subgenus Qualifier: <input type="text"/>	Species Qualifier: <input type="text"/>
Subspecies Qualifier: <input type="text"/>	Variety Qualifier: <input type="text"/>	
Taxon Status - NY: <input type="text" value="Valid"/>	Taxon Comments - NY: <input type="text" value="Was formerly Heterophrentis simplex per Ref. 33"/>	
Taxonomy	Strata	Location
Taxa Level 1: <input type="text" value="Cnidaria"/>	Series: <input type="text" value="Middle Devonian"/>	Location: <input type="text" value="Penn Dixie East"/>
Taxa Level 2: <input type="text" value="Anthozoa"/>	Stage: <input type="text" value="Givetian"/>	Latitude: <input type="text" value="42.77697"/>
Taxa Level 3: <input type="text" value="Hexacorallia"/>	Group: <input type="text" value="Hamilton"/>	Longitude: <input type="text" value="-78.83139"/>
Taxa Level 4: <input type="text" value="Rugosa"/>	Formation: <input type="text" value="Moscow"/>	7 1/2 Topo: <input type="text" value="Buffalo SE"/>
Taxa Level 5: <input type="text" value="Stauriida"/>	Member: <input type="text" value="Windom"/>	County: <input type="text" value="Erie County"/>
Taxa Level 6: <input type="text" value="Streptelasmatina"/>	Comments: <input type="text" value="Bay View Coral Bed"/>	State: <input type="text" value="New York"/>
Taxa Level 7: <input type="text" value="Siphonophrentidae"/>		Comments: <input type="text"/>
Taxa Level 8: <input type="text"/>		
Taxa Level 9: <input type="text"/>		
Source: <input type="text" value="PaleoBio Db, Ref.33"/>	Data Source	
Comments: <input type="text"/>	Literature Ref. #: <input type="text" value="25"/>	Title: <input type="text" value="Regional Variation and Paleontology of Two Corals Beds in the Middle Devonian Hamilton Group of Western New York"/>
	PaleoBioDB Ref. #: <input type="text" value="905"/>	
	Author(s): <input type="text" value="Baird, Gordon C. and Carlton E. Brett"/>	Date: <input type="text" value="1983"/>
	Journal: <input type="text" value="Journal of Paleontology"/>	Vol: <input type="text" value="57"/>
		Pages: <input type="text" value="417 - 446"/>

Data process flow



Data input methods

Data is commonly entered manually using one of the existing input forms but can also be entered by:

Excel file
ODBC file
Text file
dBASE file

Database search and output

Using existing or custom forms the database can be searched using any data field or combination of data fields

Output can be by a custom report or data can be exported as:

Excel file
ODBC file
Text file
dBASE file
PDF file