



Education and outreach using digitized museum specimens

Susan Butts, Talia Karim, and Christopher Norris



NSF DBI #1305066

Take our 30-second survey

The U.S. National Science Foundation and iDigBio are required to collect information on use of digitized collections-based specimen data. Please complete the survey. Sustainability of the national digitization effort depends on evidence of data use! **Maybe later.**

Search Records

[Help](#) [Reset](#)

☒ Must have media ☐ Must have map point

[Filters](#) [Mapping](#) [Sorting](#) [Download](#)

[Clear](#)

Family

[Add EOL Synonyms](#)
☐ Present

☐ Missing

Genus

[Add EOL Synonyms](#)
☐ Present

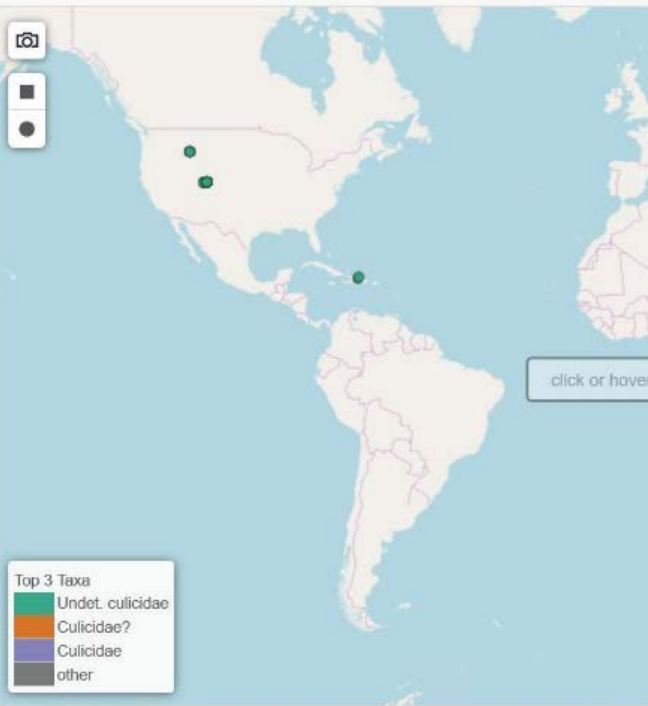
☐ Missing

Basis of Record

☐ Present

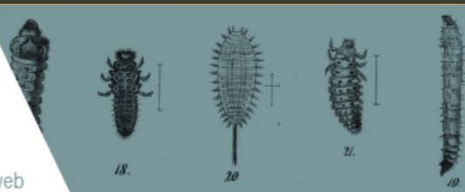
☐ Missing

↓ Scroll To Bottom ↓





Making data and images of millions of insect specimens available on the web



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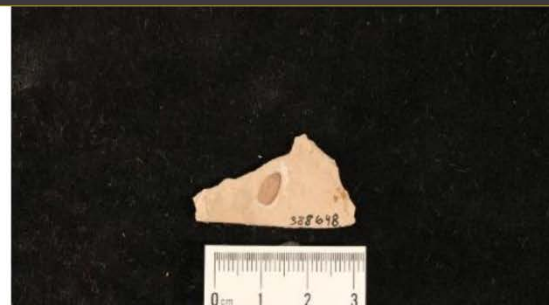
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Fossil Insect Collaborative @ GSA 2016

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Featured Fossils

undet. Coleoptera (YPM IP 388648)



Tweets by @FossilInsectTCN



Latest Comments

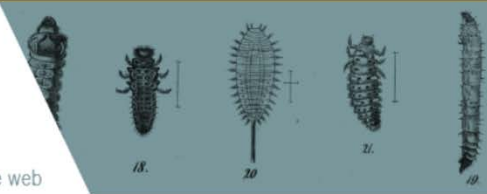
- “ Microgastrinae
- KATJA SELTMANN
View USNM Paleobiology PAL580913.11705449
- “ cute bee
- SUSAN BUTTS
View YPM IP 560556

Featured Institution

Yale



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More



Featured Fossils

undet. Coleoptera (YPM IP 388648)

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USERNAME

susan.butts@yale.edu

PASSWORD

•••••

LOGIN

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Tweets by @FossilInsectTCN



Fossil Insect TCN
@FossilInsectTCN

Need some weekend reading? Check out this new paper on fossil rove beetles. #FossilFriday



May 5, 2017

Fossil Insect TCN

Latest Comments

Microgastrinae

- KATJA SELTMANN

View USNM Paleobiology PAL580913.11705449

cute bee

- SUSAN BUTTS

View YPM IP 560556

Featured Institution

Yale

register



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FILTER BY

FOSSIL/MODERN ¹

COMMON NAME ¹

PERIOD ¹

CONTINENT ¹

GENUS ¹

FOSSIL DEPOSIT ¹

LOCALITY ¹

SOURCE ¹

67628 SPECIMEN RESULTS

HAS MEDIA: [HAS MEDIA](#) ¹



0a1d6fa3-78b4-4d5b-a9be-a0483a
Diptera
Common Name: True flies, Mos...
Fossil Deposit: Green River For...



0a7b73d0-5482-4555-b111-99977f
Coleoptera
Common Name: Beetles
Fossil Deposit: Green River For...



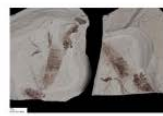
0a7bc01a-9799-4d9c-8c4c-63aaca
Hymenoptera
Common Name: Ants, bees, and...
Fossil Deposit: Green River For...



0a9e12ec-3311-49e5-aed8-50bae5
Ichneumonidae
Common Name: Ichneumon
wasps...
Fossil Deposit: Green River For...



0a30a9a0-6aca-47df-ad94-409452
Coleoptera
Common Name: Beetles
Fossil Deposit: Green River For...



0a97afda-928d-4555-845a-b393f7
Orthoptera
Common Name: Crickets and gr...
Fossil Deposit: Green River For...



0a3329e3-e044-4184-b523-b9065d
Curculionidae
Common Name: Weevils
Fossil Deposit: Green River For...

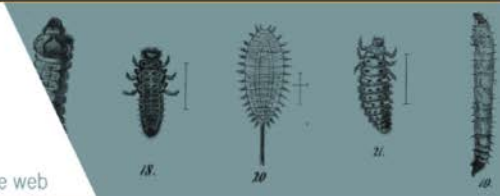


00a47242-592a-400c-867c-aed075
Curculionidae
Common Name: Weevils
Fossil Deposit: Green River For...

default browse



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Search



97654 SPECIMEN RESULTS

HAS MEDIA: [HAS MEDIA](#)

FOSSIL/MODERN: [FOSSILS](#)



FILTER BY

COMMON NAME

PERIOD

CONTINENT

GENUS

FOSSIL DEPOSIT

SOURCE

PROJECT



0a196fa3-78b4-4d5a-a9be-a0483a
Diptera
Common Name: True flies, Mos...
Fossil Deposit: Green River For...



0a7b73d0-5482-4555-b111-99977f
Coleoptera
Common Name: Beetles
Fossil Deposit: Green River For...



0a7bc01e-9799-4d9c-8c4c-63aaca
Hymenoptera
Common Name: Ants, bees, and...
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0a9e12ec-1311-49e5-aed8-505ae5
Ichneumonidae
Common Name: Ichneumon
wasps...
Fossil Deposit: Green River For...



0a30a0ee-6aca-47df-ad94-109452
Coleoptera
Common Name: Beetles
Fossil Deposit: Green River For...



0a97a09a-928d-4555-845a-b393f7
Orthoptera
Common Name: Crickets and gr...
Fossil Deposit: Green River For...



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b523-b9065d
Curculionidae
Common Name: Weevils
Fossil Deposit: Green River For...



00a47242-592e-400c-8b7c-ae075
Curculionidae
Common Name: Weevils
Fossil Deposit: Green River For...

filtered query



COMMON NAME (474 TOTAL)

- A Marsh flies
- B
- C Mason bee
- D Mayflies
- E Meniscus midges
- F
- G Midges
- H Mining Bees
- I
- J Minute black scavenger fly
- K Modern, wing-folding insects
- L
- M Mojarras
- N Mole Cricket
- O Molluscs
- P
- R Monkey grasshoppers
- S Mononmid beetles
- T Mormon cricket
- U
- V Mosquitos
- W Moss animal
- X
- Moist flies
- Mud daubers
- Mud scallop
- Mussels and clams
- Mydas fly
- N
- Nautiloids
- Nautiluses
- Net-winged midges
- Netspinning Caddisflies
- O
- Oil-Collecting Bees
- Orb Weavers
- Ostracods
- Oyster
- P

common
names

eo

sect specimens available on the web

UCATORS

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SPECIMEN RESULTS

HAS MEDIA



4-4c5b-3f9e-a0483a

True flies, Mos...

Green River For...



0a7b73d0-5482-4555-b111-99977f

Coleoptera

Common Name: Beetles

Fossil Deposit: Green River For...



0a7bc01a-9799-4d9c-8c4c-63aac3

Hymenoptera

Common Name: Ants, bees, and...

Fossil Deposit: Green River For...



0a5e12ee-1311-49e5-aed9-505ae5

Ichneumonidae

Common Name: Ichneumon

wasps...

Fossil Deposit: Green River For...



0a478fad-4a09-4a09-4a09

Beetles

Green River For...



0a97a1ba-928b-4555-845a-b393b7

Orthoptera

Common Name: Crickets and gr...

Fossil Deposit: Green River For...



0a3329e3-e0d4-4884-b523-69065d

Curculionidae

Common Name: Weevils

Fossil Deposit: Green River For...



00a47242-592e-400c-8b7c-aed7f5

Curculionidae

Common Name: Weevils

Fossil Deposit: Green River For...



LOGIN TO ADD TO
LIGHTBOX/ASSIGNMENT

COMMENTS (0)

SHARE



Culicidae

Mosquitos

6135F90F-8010-41FF-A831-685E64

UNIVERSITY OF COLORADO MUSEUM OF PALEONTOLOGY

Identifier

Anderson,
Evan

Identified

May 14 2015
at 20:00

TAXONOMY

Kingdom: Animalia

Phylum: Arthropoda

Class: Insecta

Order: Diptera

Family: Culicidae

STRATIGRAPHY

Rock Unit

Formation: Green River Formation

LOCALITY

Continent: North America

Country: United States

State/Province: Colorado

County: Garfield

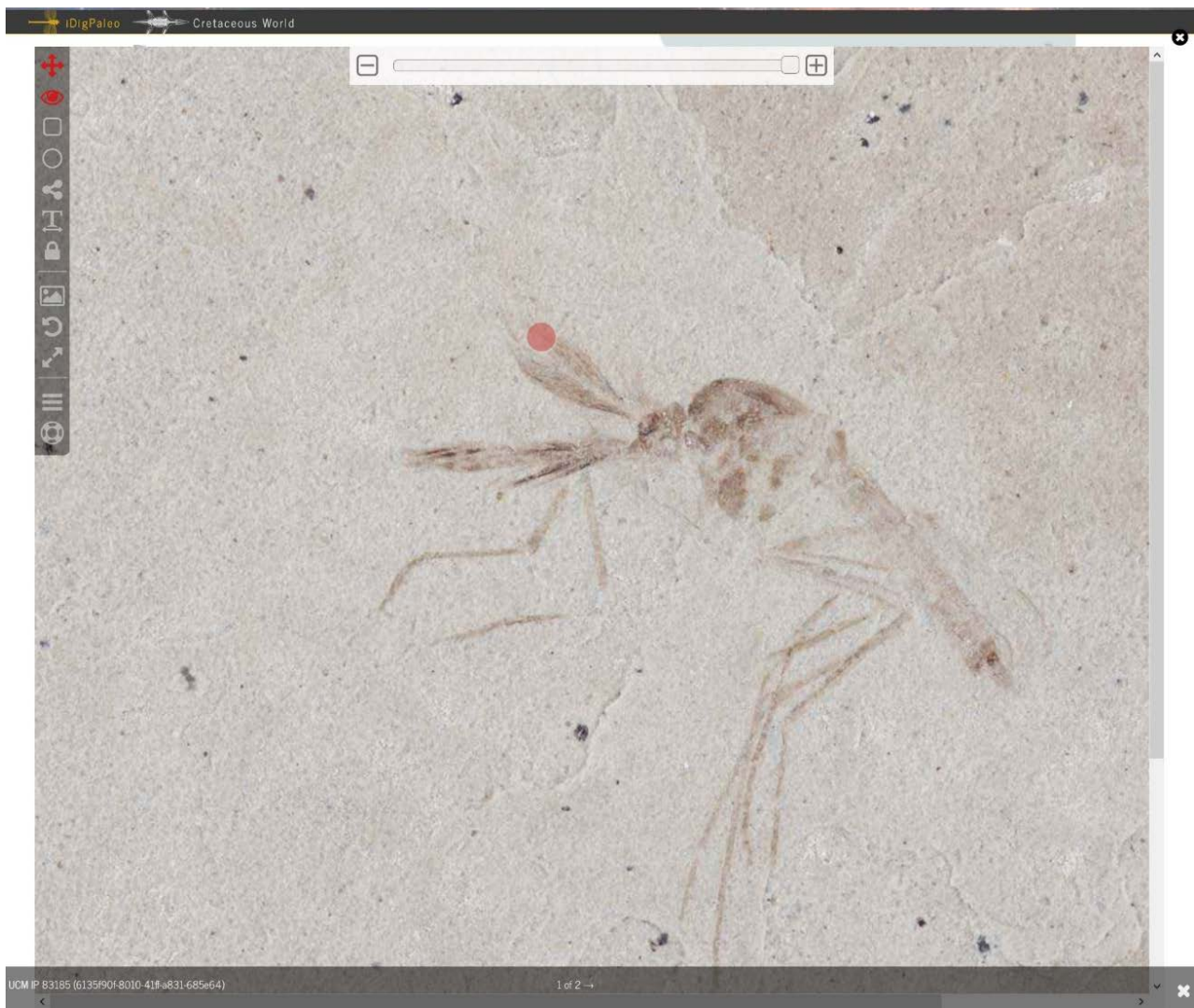
Locality: Claudia's Place



object record



tools



zoom

UDigPaleo Cretaceous World

DigPaleo

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abdomen length

This image is scaled at 1mm = 5X of width.
To change scale enter the length with units (mm, cm, m, km, in, ft, miles, etc.) of the currently selected measurement below.

UCM P 83185 UCM

Length 1mm SET

UCM P 83185 (613590f-8010-41f-a831-685e64)

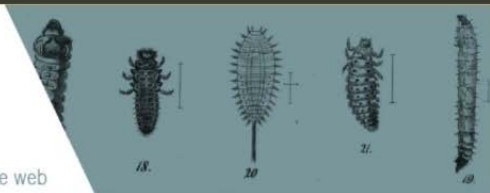
1 of 2

White River National Forest

measure/
annotate



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Culicidae

Mosquitos

6135F90F-8010-41FF-A831-685E64

UNIVERSITY OF COLORADO MUSEUM OF PALEONTOLOGY

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Rock Unit

Formation: Green River Formation

LOCALITY

Continent: North America

Country: United States

State/Province: Colorado

County: Garfield

Locality: Claudia's Place



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COMMENTS (0)

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assemble



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ADD ITEM TO ASSIGNMENT

Rio Blanco Field Trip

OR
CREATE A NEW ASSIGNMENT

NAME

Your assignment

DESCRIPTION

SAVE

ADD TO ASSIGNMENT

COMMENTS (0)

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STRATIGRAPHY

Rock Unit

Formation: Green River Formation

LOCALITY

Continent: North America

Country: United States

State/Province: Colorado

County: Garfield

Locality: Claudia's Place

curate



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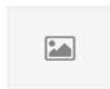
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CLASSROOM

ANTS

ant records with images

[VIEW](#)

Items: 11 Comments: 1 Responses: 0

RIO BLANCO FIELD TRIP

Geology 540 Green River Field Trip

[VIEW](#)

Items: 4 Comments: 0 Responses: 0



TEST2

[VIEW](#)

NEW ASSIGNMENT

Your Groups

Groups are an easy way to share your assignments with your classes. Simply make a group, and use the Share Assignment button to link your assignments with groups. Individual students can join the group by following the group's Url.

NEW GROUP

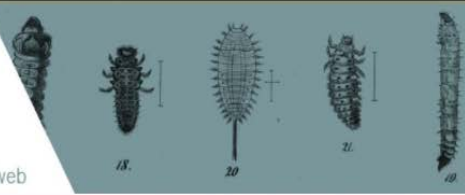
teacher workshop
5 members



assignments



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BACK RIO BLANCO FIELD TRIP (4 items) ⚙



Geology 540 Green River Field Trip

All assignments

Edit Name/Description

Share Assignment

Manage Assignment Access

Start presentation

New Assignment

New User Group

Manage Your User Groups



YPM IP 454192, undet.
Syrphidae



YPM IP 793737,
Hymenoptera



YPM IP 454419, undet.
Mantodea



6135f90f-8010-41f8-
a831-685e64, Culicidae

COMMENTS

add your comment

SAVE

UCM IP 83185



6135F90F-8010-41FF-A831-685E64



How we got here...

*A database is
not enough...*

- common names
- curated collections (assignments)
- background materials
- videos from collections/field
- lesson plans based on NGSS+



iDigPaleo Teacher Workshop - Yale Peabody Museum
July 20-21, 2015

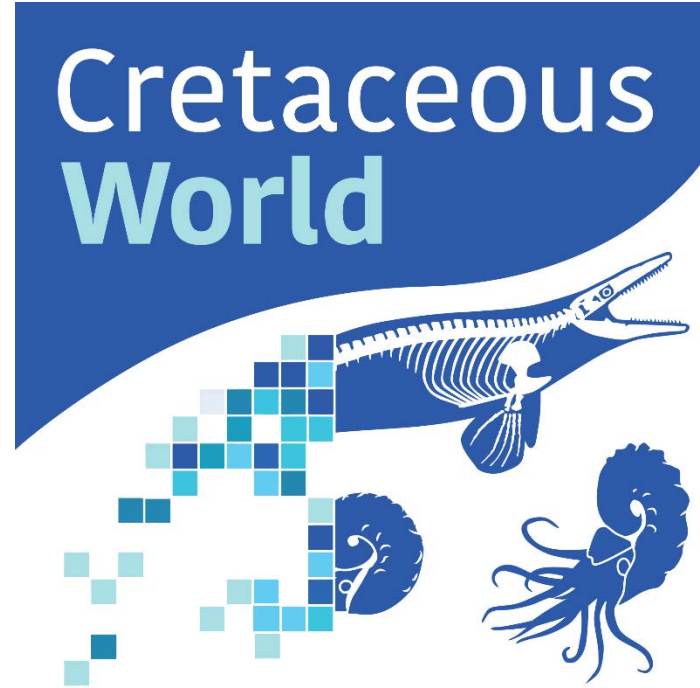
Critical analysis – by the audience

- heading logic
- facets for querying
- navigation issues
- user experience



EVOLUTIONS high school interns - Yale Peabody Museum
2016-2017

Coming soon...



cretaceousworld.org



NSF DBI #1601884



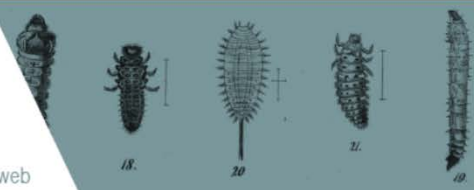
Cretaceous World TCN

Look at WIS:

- IP/VP/micro
- biodiversity
- food webs
- faunal invasion
- climate change



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Featured Fossils

undet. Coleoptera (YPM IP 388648)



Tweets by @FossilInsectTCN

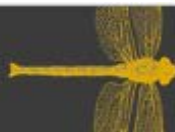


Latest Comments

- Microgastrinae
- KATJA SELTMANN
View USNM Paleobiology PAL580913.11705449
- cute bee
- SUSAN BUTTS
View YPM IP 560556

Featured Institution

Yale



iDigPaleo



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Fossil Insect Collaborative @ GSA 2016

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Featured Fossils

undet. Coleoptera (YPM IP 388648)



Tweets by @FossilInsectTCN

**Fossil Insect TCN**
@FossilInsectTCN

Need some weekend reading? Check out this new paper on fossil rove beetles. #FossilFriday



May 5, 2017

**Fossil Insect TCN**

Latest Comments



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- KATJA SELTMANN

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cute bee

- SUSAN BUTTS

[View YPM IP 560556](#)

Featured Institution

Yale

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undet. Gastropoda (YPM IP 592772)

Hoploscaphtes nicolleti (YPM IP 051880)

YPM IP
051880

Featured Fossils



Tweets by @FossilInsectTCN

Fossil Insect TCN
@FossilInsectTCN

Need some weekend reading?
Check out this new paper on fossil
rove beetles. #FossilFriday



May 5, 2017

Fossil Insect TCN
@FossilInsectTCN

A lovely fossil insect from the
UCMP collection to send us into
the weekend. #FossilFriday

Participating Institutions



AMERICAN MUSEUM OF
NATURAL HISTORY



UNIVERSITY OF KANSAS
NATURAL HISTORY MUSEUM

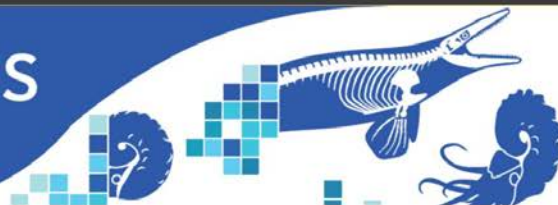


SOUTH DAKOTA SCHOOL OF
MINES



UNIVERSITY OF TEXAS - AUSTIN

Cretaceous World

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35928 SPECIMEN RESULTS

HAS MEDIA: [HAS MEDIA](#)

FILTER BY

COMMON NAME

AGE

STATE/PROVINCE

GENUS

FOSSIL DEPOSIT

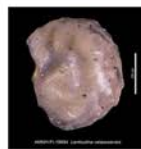
SOURCE



AMNH FI 037790A
Pseudocythereis reticulata
Common Name: Seed shrimps
&a..
Fossil Deposit: Mt Laurel



AMNH FI 037790B
Pseudocythereis reticulata
Common Name: Seed shrimps
&a..
Fossil Deposit: Mt Laurel



AMNH FI 126854
Lenticulina velascoensis
Common Name: Forams
Fossil Deposit: Velasco



AMNH FI 126855
Astacolus velascoensis
Common Name: Forams
Fossil Deposit: Velasco



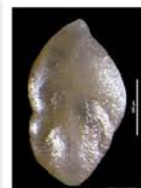
AMNH FI 126886
Frondicularia elongata
Common Name: Forams
Fossil Deposit: Mendez



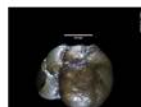
AMNH FI 126887
Lagena aspera apiculata
Common Name: Forams
Fossil Deposit: Velasco



AMNH FI 126888
Oolina simplex lacrima
Common Name: Forams
Fossil Deposit: Velasco



AMNH FI 126889
Polymorphina mendizensis
Common Name: Forams
Fossil Deposit: Velasco



COMMON NAME (110 TOTAL)

A A
B
C Abra
D Alabama live-bearing snail
E Ammonite
F Ammonite Cephalopod
H
J Ammonites
L
M An Order of Sea Snails
N An order of snails
O Ark
P Ark shells
R
S Arks
T Arthropods
V
W Awning Clam
I

B

Baikalian cottoid fish
Barnacles
Belemnite
Bittersweet clams
Bladder Snails
Bristlemallow
Brittlestars
Bubble snails
Bulminid snails

C

Calcareous tubeworms
Cephalopods
Cerith Snails
Ceriths
Clam



35928 SPECIMEN RESULTS ⚙

HAS MEDIA: [HAS MEDIA](#) 📷



AMNH FI 037780A
Pseudocythereis reticulata
Common Name: Seed shrimps
&a...
Fossil Deposit: Mt Laurel



AMNH FI 037780B
Pseudocythereis reticulata
Common Name: Seed shrimps
&a...
Fossil Deposit: Mt Laurel



AMNH FI 1
Lenticular
Common P
Fossil Depo



AMNH FI 1
Colina sir
Common h

Cretaceous World



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Hoploscaphites nicolletii

Ammonites

TCN
CRETACEOUS WORLD

YPM IP 051880

YALE PEARBODY MUSEUM OF NATURAL HISTORY

Sex

macroconch

TAXONOMY

Kingdom: Animalia

Phylum: Mollusca

Class: Cephalopoda

Order: Ammonoidea

Family: Scaphitidae

Genus: Hoploscaphites

Species: nicolletii

Scientific Authorship

(Morton)

Nomenclatural Code

ICZN

STRATIGRAPHY

Geologic Time Period

Period: Late Cretaceous

Age: Maastrichtian

Rock Unit

Formation: Fox Hills

Member: Trail City

LOCALITY

Continent: North America

Country: USA

State/Province: South Dakota

County: Dewey

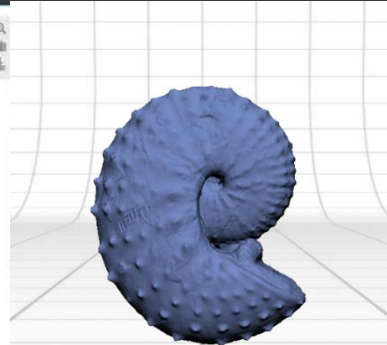
Cretaceous World

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Hoploscaphites nicolletii

Ammonites

TCN
CRETACEOUS WORLD

YPM IP 051880

YALE PEARBODY MUSEUM OF NATURAL HISTORY

Sex

macroconch

TAXONOMY

Kingdom: Animalia

Phylum: Mollusca

Class: Cephalopoda

Order: Ammonoidea

Family: Scaphitidae

Genus: Hoploscaphites

Species: nicolletii

Scientific Authorship
(Morton)Nomenclatural Code
ICZN

STRATIGRAPHY

Geologic Time Period

Period: Late Cretaceous

Age: Maastrichtian

Rock Unit

Formation: Fox Hills

Member: Trail City

LOCALITY

Continent: North America

Country: USA

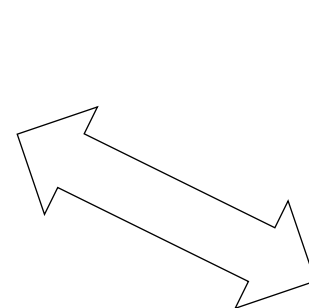
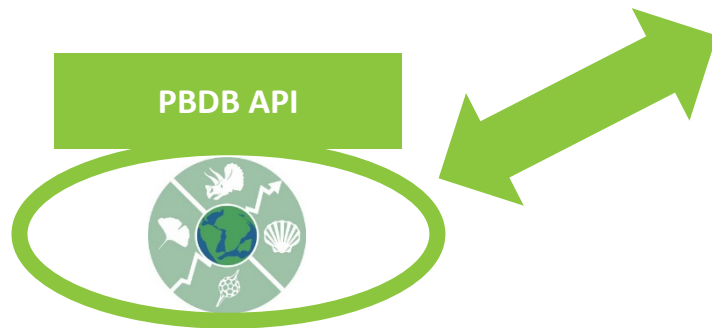
State/Province: South Dakota

County: Dewey

3D embedded viewer



ePANDDA



NSF DBI #1540984

Thank you

Developer: *Whirl-i-Gig*, Seth Kaufman (Principal), Michael Benowitz, and others

FIC TCN PIs: Talia Karim (Lead), Dena Smith, David Grimaldi, Brian Farrell, Sam Heads, Michael Engel, Alton Dooley, Susan Butts, Chris Norris, and Diane Erwin

Cretaceous World TCN PIs: Bruce Lieberman (Lead), James Beach, K. Christopher Beard, Neil Landman, Laura Wilson, Jonathan Hendricks, Laurie Anderson, Maribeth Price, Talia Karim, Corinne Myers, Ann Molineux, Rowan Martindale, Matthew Brown, Susan Butts, and Christopher Norris

Collaboration with ePANDDA, iDigBio, Gary Motz (PaleoNiches PEN), and Florissant Fossil Beds NM



EARTH CUBE