

Research Grade specimen upload checklist:

Significance:

Why is this important?

- The associated information from your research grade specimens will be sent to the Global Biodiversity Information Facility (GBIF). This information is referred to as occurrence data, which can be used to analyze the range of different organisms through time and space. GBIF is free to anyone and is frequently used for scientific research and classroom education. With your help as community scientists, collectively, we can expand our knowledge of life on Earth.

In short:

Images

- Post *clear*, identifiable photo(s) of a single specimen with a scale

Classification

- Classify your specimen as completely and accurately as possible

Location

- Record the location where the specimen was found as precisely as possible (at the very least to the nearest town, but GPS coordinates are the ideal)

Geologic Context

- Record the geologic unit and geologic age of the locality where the specimen was collected

Last steps

- Read and respond to eMuseum curators' comments on your specimen and edit the associated data accordingly. This step is the most often overlooked, but typically the most important to ensuring your specimen is marked research grade.

In detail:

Images

- Clear* photo(s) highlighting identifiable features of a single specimen
 - Multiple views are almost always useful for identification and are strongly encouraged though, rarely, a single photo may suffice.
 - Make sure your photos do not include multiple specimens and highlight only a single fossil.

- Must include scale, such as a scale bar or coin (follow this link <http://www.myfossil.org/wp-content/uploads/2020/07/myFOSSIL-printable-scale.pdf> for a printable version of a myFOSSIL scalebar):

EXAMPLE- not research grade:



This example does include a scale bar, but the post contains more than one specimen and the photo is too blurry, as well as too bright and overexposed. Therefore, it would not qualify as a research grade specimen.

EXAMPLE- research grade:



This post contains multiple, clear photos showing different views with a scalebar. This post would qualify as research grade.

The main objective of the provided images is for confirmation that the specimen is identified as completely and accurately as possible.

Classification

- Fill out taxonomic identification as completely as possible
 - In some cases, you may not be able to identify further than animal (Kingdom Animalia) or plant (Kingdom Plantae), but in others you may be able to identify the fossil all the way down to species. This would require all of the higher-level

taxonomy to be filled out. The **Taxon Wizard** on the myFOSSIL website is very useful in auto-filling many of these data.

- External websites such as The Paleobiology Database (<https://paleobiodb.org/>) and Fossilworks (<http://fossilworks.org/>) can be useful in figuring out the classification of your specimens.
- If you are struggling to identify your specimen or an expert believes you may have misidentified it, eMuseum curators will comment on your post suggesting some edits to be made by you before the specimen can be marked as research grade.
- It is crucial that you take the time to read these comments and make the suggested changes for your specimen to be marked as research grade.
- Do not hesitate to comment on your specimen if you are struggling to identify it. The myFOSSIL community can be helpful in honing in on an identification.

Location

- Record your location as completely and accurately as possible
 - Please note at least the Country, State, County, and nearest Town (some of this may differ slightly for international specimens) of the locality from where the specimen was collected.
 - Accurate GPS coordinates, in decimal degrees, are strongly encouraged and can be acquired in a number of ways (Google Maps/Earth, phone GPS, GPS receiver).
 - myFOSSIL gives you the option to hide the precise GPS coordinates of more sensitive sites you may not want publicly available.

Geologic Context

- Record both lithostratigraphy and geologic age as accurately and completely as possible
 - You can find the geologic unit, or lithostratigraphy (group, formation, and/or member), your specimen came from using geologic maps (either available through the USGS, phones apps such as Mancos, or online resources like MacroStrat) or other resources, such as field guides.
 - This part can be a bit tricky if you are unsure of geological terminology or the geology of the area you are collecting. Always remember to reach out to the community if you are having trouble figuring out the geologic context of a site.
 - Once you have identified the geologic unit the specimen originated from, enter the geologic age of that geologic unit (For example, Geologic Unit = Calvert Formation, Geologic Age = Miocene). These data can be found within the resources used to identify the lithostratigraphy.

Update Associated Data

- Check comments on your uploaded specimens for suggested or necessary edits from the community and eMuseum curators before your specimen can be marked as research grade
 - These comments may ask you to post some more, or different, photos; update your geologic context; update or change your taxonomic classification; and/or make other edits.

Other notes

- Add associated data for the specimen, such as the Identifier, Collector, Event Data, or Field Notes to add scientific value to your specimen
 - Although these data are not critical for your specimen to be considered research grade, they provide important context to the specimen.
 - The more context you provide, the easier it will be for eMuseum curators to help you make your specimen research grade!