

**Think you found an egg? Read this first! Dinosaur Egg Guide- Basic pdf**

**The Fossil Forum:** <http://www.thefossilforum.com/>

**This guide online:** [www.thefossilforum.com/index.php?/topic/92370-think-you-found-an-egg-read-this-first-dinosaur-egg-guide-basic/](http://www.thefossilforum.com/index.php?/topic/92370-think-you-found-an-egg-read-this-first-dinosaur-egg-guide-basic/)

## **The Basic Dinosaur Egg Guide**

Many people often mistake a concretion for an egg, to help clarify what is a concretion, and what is a real egg, here is a guide.

**A quick overview with examples:**

<https://www.youtube.com/watch?v=bM-8vzz27n0>

### **How to spot a concretion:**

**How are they different from eggs?**

A concretion is a rather common rock made of tightly compressed minerals. Typically, concretions are a smooth sphere or oval with little to no surface texture or just a few bumps. Often nearly a perfect sphere, sometimes more of an oval. In a concretion, there is no eggshell. If you cannot see eggshell then you do not have an egg. If it looks the same shape as modern egg, such as from chicken then you do not have an egg. Concretions may have fragments breaking off and these will tend to be smooth on both sides. They tend to be dull earthy colors with a different composition in the center, as seen by a change in color. A different color in the center normally means you do not have an egg. Often circular bandings can be seen around exterior of concretions. Sizes of concretions range from just an inch, or a few millimeters, up to more than 10 ft (3 m). Egg sizes, along one side, range from just an inch or a few millimeters and top out at around 8 in (20 cm). If you find an oval or round shape, which is larger than 8 in (20 cm) along a side then it is probably not an egg.

**For more information on concretions:**

<https://www.priweb.org/index.php/education/education-projects-programs/earth-101/concretions>

<http://tumblehomelearning.com/geologists-find-largest-dinosaur-eggs-in-the-world-another-fraudulent-fossil/>

<https://en.wikipedia.org/wiki/Concretion>

In video form: <https://www.youtube.com/watch?v=B5IoyLEwkMY>

Example of concretions, these three were incorrectly given an ID as “dinosaur eggs” however they are clearly not:



From Tumblehome Learning, link above

### **Pseudofossils:**

There are some pseudofossils, which can have a similar appearance to an actual egg, right down to seeming like there are bits of eggshell.

This pseudofossil does look similar to an egg and even seems to have eggshell, however it is not an egg and is actually geologic. The surface ranges too much in texture and composition. Pic from Montana State University, taken by P. Germano



### **Trace fossils:**

Many times, an actual trace fossil can be mistaken for an egg, common examples of this are pupa cases and cocoons. As one can see below, they do tend to have an egg-like shape and are yet another perfect example of why shape alone should not be used when trying to identify eggs. The three below are important trace fossils, just not eggs.

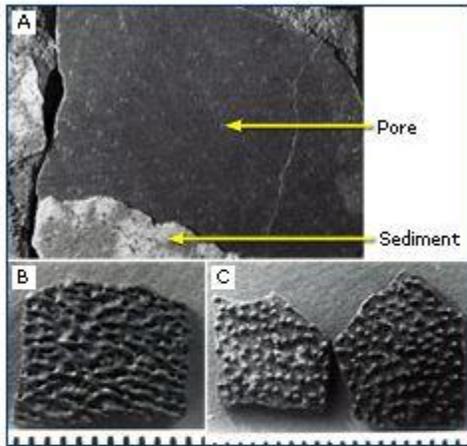


Pic by Tony Martin, Ph.D.

### **How to spot a real egg:**

The best and only true sign you have an actual egg is eggshell actually being present. Eggs come in many shapes from a semi-rounded, elongated oval to a perfect sphere and many others. Shape is not a good indicator of an egg. It is useful but only when combined with other details. Eggshell often has surface ornamentation that gives it a unique texture which can be seen by the naked eye

or with a hand lens. There are many such ornamentations and they are used to help distinguish one egg type from another. On the surface look for little bumps, ridges with valleys, river channels, and similar textures. Individual fragments of eggshell are rather common in some geologic formations so be on the lookout for a larger grouping of eggshell.



**Figure 5.** Examples of different eggshell textures: **A.** Eggshell with a smooth outer surface (from *Troodon*), Specimen UCM 378; **B.** Eggshell with ridges (probably hadrosaurian), Specimen UCM 346-2-5; **C.** Eggshell with nodes (unidentified egg-layer), Specimen UCM 346-4. All eggshell fragments are from the Late Cretaceous of Montana.

From University of California Museum of Paleontology

Also read:

<http://www.thefossilforum.com/index.php?/topic/59654-dinosaur-eggs-lowell-carhart-guide/>

### **Examples of real eggshell:**

Example of eggshell fragments:



An eggshell fragment from *Maiasaura*, which is the oogenus *Spheroolithus* oosp. Pic by W. Freimuth.

Examples of real eggs:



A clutch of *Troodon formosus* eggs, which are the oospecies *Prismatoolithus levis*. Pic from Museum of the Rockies

### **Do I have embryos inside this egg?**

Most likely no. Embryonic remains are extremely rare within eggs, and you add that with the rarity of eggs to start and it is a remote possibility. No fossilized yolks have been found and since they are soft tissue, it is near impossible for any to fossilize.

### **I still think this is an egg!**

If you still think you have an actual egg, then please start a thread. Take close detailed pictures with something for scale such as a ruler and provide all the information you can about it--like where it was found. Good pictures will help greatly with a proper and correct ID.

Below is an example of how to best photograph an egg or eggshell. There is clear lighting, a background which is clearly different than the eggshell in question and a scale bar. Lights can be as simple as a desk lamp; a scale bar can just be a ruler and the background can be very simple, in the example just a paper towel.



Megaloolithus egg. Pic from Montana State University, taken by P. Germano

**If you would like to learn much more on eggs, here is the advanced egg guide which goes in depth.** Also, see the advanced guide for sources.

<http://www.thefossilforum.com/index.php?/topic/92371-advanced-dinosaur-egg-guide/>

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