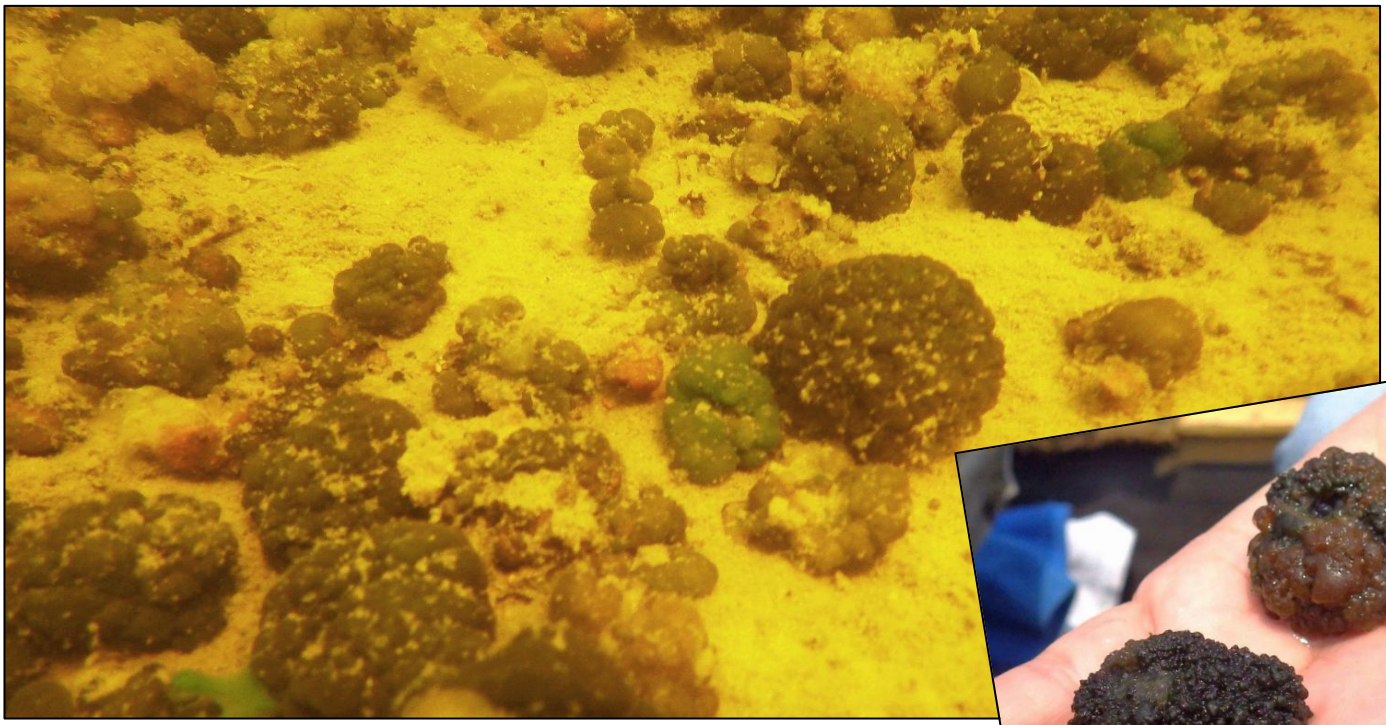
AGATIZED ALGAE

NAME: *new, undescribed species*
AGE: Jurassic Period, 165 million years
UNIT: Curtis Formation
SITE: Emery County, Utah

These have to be some of the strangest, most unique fossils you will ever encounter! Weird and beautiful, these specimens were originally algal and bacterial colonies that formed knobby, spheroidal nodules on the floor of a shallow sea during Jurassic time, about 165 million years ago. See the photos below of similar forms that we discovered on the bottom of a Canadian lake a few years ago

These fossils were formed when rapidly-accumulating sediment buried the living algae/bacteria colonies, which subsequently died and dissolved away. This created a cavity in the sediments that was then replaced by multicolored quartz. As the layers piled up, pressure crushed and distorted most of the original shapes, collapsing their tops downward. On rare occasions, the colonies are preserved as intact algal nodules, more accurately reflecting the original organism.

We discovered this site far out in the desert of central Utah while exploring slot canyons in the San Rafael Swell. Vern found some small pieces in the bottom of the canyon washout. Initially we thought it might be dinosaur coprolite. After three days we were able to trace it nearly a mile away to the top of a butte where further research revealed the fact they were not coprolite at all – but something much rarer and more interesting!



above: *The ground atop this butte is littered with agatized algae.*
below: *Very rare modern colonies thriving on the floor of an Ontario lake.*