

Eggs, Nests, and Dinosaur Behavior: Evidence from the Morrison Formation, Colorado Plateau

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The oldest definitive North American dinosaur eggs are from the Morrison Formation of the Colorado Plateau region and Colorado Front Range. While generic theropod eggshell fragments are known, no thick sauropod eggshell has ever been reported from the Morrison, leading to speculation of live birth in sauropod dinosaurs. Eggshells, nests, and baby dinosaurs identified as the small ornithomimid *Dryosaurus* are our best documented records pertaining to dinosaur reproductive behavior in the Jurassic. As opposed to the gregarious nesting behaviors of hadrosaurids, so well-documented in the extensive nesting sites of Montana and Alberta, *Dryosaurus* nesting sites have all been isolated nests. The isolated *Dryosaurus* nests are associated with eggshell and baby bones scatters that only extend for a few meters laterally at most. The abundance of material suggest strongly of nesting site fidelity. Baby *dryosaurus* bones at these sites suggest that the young may have been precocial following the adults away from the nest. The occurrence of a larger size class of bones suggests that yearlings following the adults back to the original nesting sites are not surviving, perhaps due to an absence of food in the vicinity of the nests. The presence of the remains of small terrestrial crocodylians suggest they predated *Dryosaurus* nests and were occasionally killed by angry adult *Dryosaurus*. All of these hypotheses provide a rich foundation for future research.