

Dino Art Notes

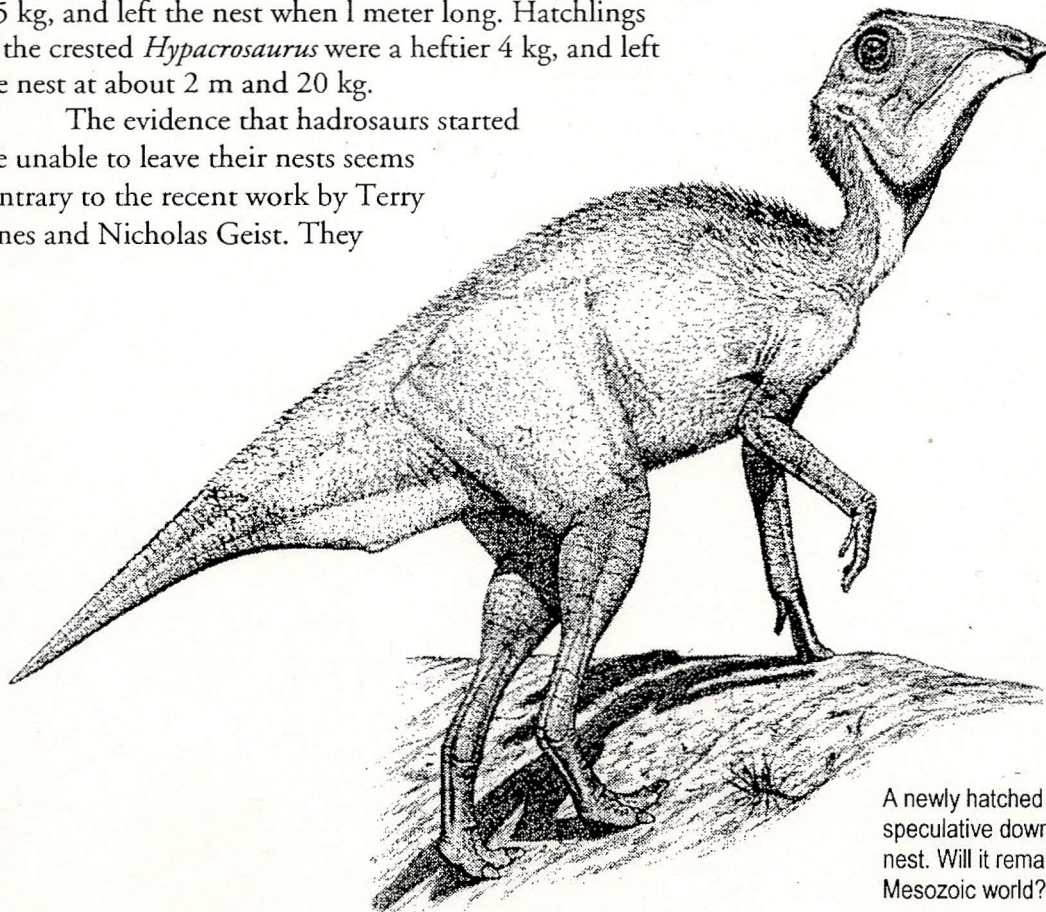
More on Baby Dinosaurs

by Gregory S. Paul

In the Summer 1996 *Dinosaur Report* I discussed the possible nesting habits of dinosaurs from an artistic perspective. During the annual meeting of the Society of Vertebrate Paleontology, held last October in New York, John Horner presented interesting new information on the subject. He thin-sectioned the leg bones of baby hadrosaurs, and concluded that the long shafts of the fast growing bones were too poorly ossified to withstand the stresses associated with regular exercise. If so, then the hadrosaur chicks were nestbound and altricial. This view is compatible with the substantial size disparity between eggs and hatchlings on the one hand, and partly grown juveniles found in or near the nests on the other. *Maiasaura* hatchlings weighed only 1.5 kg, and left the nest when 1 meter long. Hatchlings of the crested *Hypacrosaurus* were a heftier 4 kg, and left the nest at about 2 m and 20 kg.

The evidence that hadrosaurs started life unable to leave their nests seems contrary to the recent work by Terry Jones and Nicholas Geist. They

argued that the dino-chicks' hips were well formed and able to support a free roaming life style, like that of "precocial" ostrich young which leave the nest soon after hatching. In addition, birds that rear their young in ground nests tend to do so in isolated locations—remote islands and deserts—where predators will not get into the nests and eat the helpless babies. Perhaps hadrosaur chicks were actually "semi-altricial." In this view they may have spent most of the time in the nest, not doing much aside from stuffing themselves with all the food their parents provided so they would grow as fast as possible. They also enjoyed the protection of the grown ups, but when a predator got past the adults the babies had just enough locomotor ability to bail out of the nest until things calmed down.



A newly hatched *Hypacrosaurus*, adorned with a speculative downy insulation, stands on the rim of its nest. Will it remain in the nest, or begin to explore its Mesozoic world? (illustration: © 1996 Gregory S. Paul)