

PALEONTOLOGY WITH PIZZA

The sense of purpose and anticipation recently at the Smithsonian Institution's National Museum of Natural History in Washington, D. C., was tinged with panic: In less than 24 hours the newly reorganized paleontology exhibit would be opened to a public eager to view their favorite dinosaurs in a long-awaited new setting.

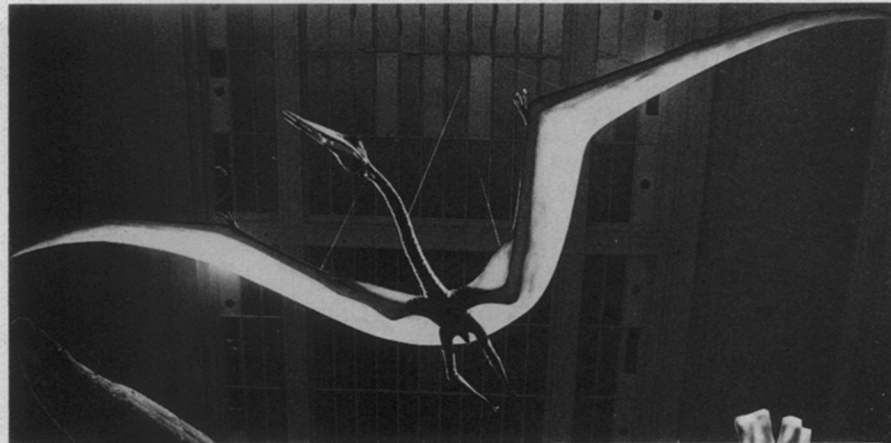
In the few remaining hours, scientists,

construction crews and designers tended to seemingly endless last-minute details. As they laid carpet at the feet of a *Stegosaurus* and applied a final polish to the showcases, workers were dwarfed by the meticulously preserved bones of the earth's former tenants.

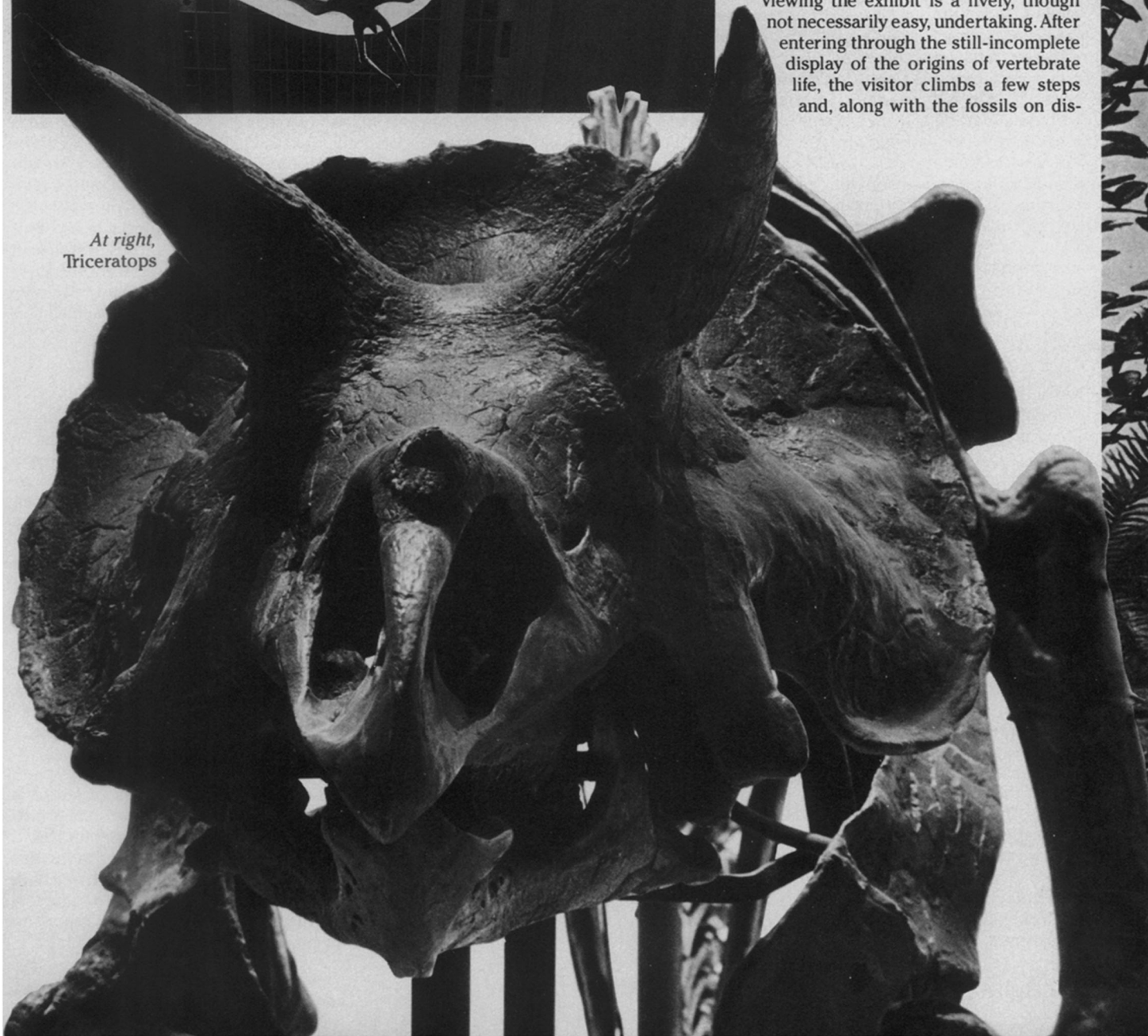
Chances are, when fans of dinosaurs and other ancient forms of vertebrate life visit the museum they will not be disap-

pointed. The exhibit succeeds in blending drama, mystery and scrupulous attention to scientific detail. And if the effect is a bit hectic at times, perhaps that is part of the master design. In a marked and deliberate departure from the way dinosaurs and other early animals traditionally are displayed, the Smithsonian exhibit attempts to convey a sense of the diversity of life. Innocuous, mouse-like mammals co-exist with *Stegosaurus*. Plants that flourished when specific dinosaurs lived are shown next to the appropriate fossils. Mistakes made in previous exhibits, such as placing dinosaurs and grassy plants in the same setting and time, are corrected. According to a colorful column showing when various life forms appeared in geologic time, grassy plants emerged about 20 million years ago, a scant 10 million years before man made his evolutionary debut.

Viewing the exhibit is a lively, though not necessarily easy, undertaking. After entering through the still-incomplete display of the origins of vertebrate life, the visitor climbs a few steps and, along with the fossils on dis-



At right,
Triceratops





The reorganized exhibit at the Smithsonian is an informative romp through the history of life

BY CHERYL SIMON

play, makes a metaphoric transition from water to land. At the end of the main room, past a reconstruction of *Diplodocus*, a plant-eater whose 90-foot skeleton stretches nearly to the end of the chamber, another staircase elevates visitors to the realm of flight. Gliding animals boast their own display near sample bones of pterosaurs, flying reptiles that first may have appeared 200 million years ago.

Over the entire assemblage a newly constructed model of the largest known flying reptile, a pterosaur named *Quetzalcoatlus northropi*, is suspended mid-soar. When viewed from the lower level, the animal, whose wings span 40 feet, appears to be in search of dinner. Past the flight display, however, a ramp leading to the next level places the viewer even with the animal's baleful, somewhat malevolent gaze. This effective touch evokes visions of what it might have been like to have these creatures soaring overhead.

Such impressions are just what planners of the exhibition have in mind. "What we're trying to do is bring [the animals] alive," said Ian Macintyre, chairman of the working committee. "What did they feed on? What fed on them? How did they survive?" Although Macintyre knows that "dinosaurs are still the drawing card," special effort was made to demonstrate that various communities of reptiles, dinosaurs and early mammals interacted. Displayed near the dinosaurs are several therapsids, mammal-like reptiles that dominated the terrestrial animal world for 125 million years before the dinosaurs arrived, and that gave rise to the first mammals (SN: 6/20/81, p. 389). Unlike the dinosaurs, the therapsids evolved to smaller and smaller forms.

The pterosaur is not the only addition to the exhibit. *Antrodemus*, a fierce flesh-eater, is beautifully reconstructed; a baby duckbill dinosaur, *Maisaura*, is exhibited next to a clutch of dinosaur eggs. Nicholas Hotton, a specialist in fossil amphibians and reptiles, explained that in order to show a complete story in the fossil hall, a museum must make casts, and buy and trade fossils. "What you're trying to show is an abstract theory," he said. Though Hotton concedes that "we've been remarkably successful in the approach that was chosen," he moves against an energetic tide toward exhibits that integrate different forms of life. Individual specimens presented thoughtfully, he says, are perfectly capable of telling their own stories. And liveliness, one of the outstanding attributes of the new exhibit, does not depend intrinsically on the approach, Hotton says, but "on the pizzazz of the people putting it [the exhibit] together." □



A new model of *Quetzalcoatlus*, a flying reptile whose wings may have spanned more than 50 feet, careers over the exhibit hall (far left, top). Above, fierce *Tyrannosaurus rex* stars on a column, painted by artist John Gurche, showing evolution through geologic time. Final touches for *Quetzalcoatlus* (at right).

Photos: Chip Clark/Smithsonian

