Dusted with spores from others in the cluster, *Coprinellus disseminatus* mushrooms shelter an ant.

The first GEOGRAPHIC article by writer, photographer, and biologist Mark W. Moffett, "Marauders of the Jungle Floor," was published in August 1986.

Gorgeous Fungus Nature photography often features gaudy species that make an easy impression. The challenge is to get people to fall in love with the quiet and the unexpected—such as the beautiful lines of a simple white mushroom. At the Tiputini Biodiversity Station in Ecuador, I took more than a hundred images of fungi that exploded from the landscape during the downpours that consumed the first three days of my visit.

As a canopy biologist, I think a lot about the architecture of trees, their leaves and branching patterns. Mushrooms intrigue me in the same way. They are the reproductive organs of larger fungal growths underground, mostly hidden from view: hair-thin hyphae that spread into a microscopic latticework to infiltrate and feed on soil, plant and animal matter, and even rock. The overall weight of some of these latticeworks exceeds that of a blue whale; a few may even be older than the oldest bristlecone pines.

Rising from the hyphal mats by means of fluid pressure in their tissues, mushrooms are fleeting. Many appear, expand, and die in just days. Microscopic spores develop on gills beneath the caps, protected from rain. The gills fling the spores into the air currents below, which divert them away from the caps, like wind beneath an airplane wing. Severed from their parents, the spores can establish far-flung colonies—and start all over again.

Mantids See more photos by Mark Moffett at **ngm.com/0601/feature7**.

A species of *Marasmius* (above)—one of nearly 200 of this genus reported in South America—is ideally suited to life on the forest floor. Drying out during the day as the leaf litter loses moisture, it revives with nighttime condensation or the sprinkling of rain. *Leucocoprinus birnbaumii* (below), toxic if ingested, is widespread in the tropics.

This unidentified fungus growing on a stick is "either a species of *Hemimycena* or *Mycena*," says expert Dennis Desjardin, professor of mycology at San Francisco State University. The pale coloration and lacy gills are similar in both genera.

Tiny *Marasmius leucorotalis* (above) seem to float atop threadlike stems. These mushrooms play an important part in the decomposition of the forest floor; their generic name means "to wither." Bristling clusters of cup fungi (below) are young *Cookeina tricholoma*. When mature, spores are shot from the cups by microscopic cannon called asci.