

Bush Babies in Beckman

John Allman's maxi-eyed, mini-sized companion is an African Galago, or bush baby, who happily substitutes the interior of a tin can for a nest in a hollow tree trunk. The bush baby is a primate, and Allman's interest in this mammalian order goes back at least as far as his high school days. He did both his undergraduate and graduate work in anthropology (BA '65, University of Virginia; AM '68, PhD '70, University of Chicago). He then went to the University of Wisconsin where he did studies on the evolution of the primate brain and the cortical basis of visual perception.

Allman came to Caltech last fall as an assistant professor of biology, bringing a pair of prized possessions with him—his pet monkey and a 135-year-old, cut-velvet-upholstered Victorian sofa. This family heirloom may seem a bit incongruous in his office in the ultramodern Beckman Laboratories of Behavioral Biology, but—with a pillow and a blanket—it's handy for a man who sits up nights with bush babies.

Like monkeys, apes, and man, Galagos are members of the mammalian order of primates, but they occupy one of the lowest rungs on the ladder in terms of complexity of brain organization. To John Allman this relative cerebral simplicity is one of their most valuable attributes for his research into the functions and evolution of the primate visual system. Fringe benefits include their size (an adult weighs about half



a pound), equable dispositions (some are feistier than others, but they are all basically harmless), simple diets (cat chow and bananas for the most part, with a little raw meat for those who like it), and general hardihood.

The nocturnal bush babies breed readily in captivity, usually having two gestation periods a year and often producing twins. Allman would like to capitalize on this trait to enlarge Caltech's stock, which numbers 48 at the moment. It is expensive and difficult to import the increasingly rare animals because their natural habitat—and that of many other non-human primates—is being wiped

out. In a relentless spiral, the economic development of many of the countries in which jungle animals are found has led to human overpopulation, with concurrent destruction of the forests for timbering operations and the creation of farmlands. It has also inevitably led to the near-extinction of some species.

Allman is particularly interested in primates because his studies indicate that the visual system of their brains is distinctive when compared to that of other mammals. His research on the nature of these differences could lead to an improved understanding of the neuroanatomical bases of behavior. □



It's Not As Easy As It Looks

Not many animals can turn a door frame into a jungle gym, but it's easy for the tiny, agile Galago, or bush baby. He finds as many footholds there as on the tree trunks of his native habitat in the equatorial forests of Africa, and his initial five-foot jump from the floor is only about a third of his range.