CHAPTER FOURTEEN

Ecologically Enigmatic Lemurs:
The Sifakas of the Eastern Forests (*Propithecus candidus, P. diadema, P. edwardsi, P. perrieri, and P. tattersalli*)

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INTRODUCTION

The sifakas of Madagascar’s eastern forests are some of the most visually distinctive members of eastern lemur communities, by virtue of their unique and often brightly colored pelage combined with their large body size, upright posture, and long, powerful legs. Many serious authors have interrupted their scientific writing to comment on their striking physical beauty; for example: “They are certainly the most beautiful lemurs of Madagascar” (Petter et al., 1977: 344). However, these sifakas’ ecology is equally distinctive and enigmatic relative to other lemur groups, a fact that escaped notice until the last few decades. As noted by many authors
eastern sifakas, particularly rainforest taxa) are much harder to observe than western sifakas, due to lower population density and denser habitat. As might be expected, the earliest in-depth studies of western sifakas (e.g., Jolly, 1966; Richard, 1978) significantly predated similar studies of eastern sifakas (e.g., Wright, 1987).

While eastern sifakas were last chronologically, they certainly are not least in terms of uniqueness among Malagasy lemurs. In terms of diet, eastern sifakas are relatively catholic: not as dedicated to reproductive parts (flowers/fruits/seeds) as *Eulemur*, nor as dedicated to folivory as *Avahi*, *Lepilemur*, or *Indri*. Their social groups are neither as large as the gregarious *Eulemur* and *Hapalemur*, nor as small as the mostly solitary *Avahi*, *Lepilemur*, and other nocturnals. In fact, several aspects of their ecology and life history do not fit neatly into established categories. They have gradually become much better studied, yet the functional significance of, and interrelationships between, these basic elements of their ecology remain poorly understood.

**TAXA AND DISTRIBUTION**

Originally, two species of sifaka were recognized in Madagascar: *P. verreauxi* occupying the dry southern and western forests, and *P. diadema* occupying the eastern rainforests (Tattersall, 1982). Simons (1988) described a third species, *P. tattersalli* from Daraina in the far north, which appears to be most closely related to *P. verreauxi* (possibly the sister taxon of the subspecies *P. v. coquereli*; Pastorini et al., 2001; Rumpler et al., 2004).

Within *P. diadema*, four subspecies have been traditionally recognized: *perrieri*, *candidus*, *diadema*, and *edwardsi*. These four “types” of diademed sifaka are allopatric, distributed along a north–south gradient, and easily distinguished by virtue of their distinct and colorful pelages. *P. d. perrieri*, the northernmost taxon, has the smallest distribution, being restricted to the Analamera Special Reserve and small forest fragments to the west. *P. d. candidus* has a slightly larger range, from the Marojejy massif in the north to the Antainambalana river in the south. *P. d. diadema* extends from the Antainambalana river in the north to the Onive river in the south; populations in the southwestern part of this range (between the Mangoro and Onive rivers) are morphologically different, and may be taxonomically distinct from *P. d. diadema* (CBSG, 2002; Glander and Irwin, unpublished data). Finally, *P. d. edwardsi* is found from the Onive river in the north to the Manampatana river in the south.

A fifth “type,” *P. d. holomelas*, had been recognized historically based on collection information, but has been subsumed (Tattersall, 1986) into *P. d. edwardsi*, as these two forms appear to have been sympatric. However, the extirpation of populations from areas thought to be inhabited by this variant means that we might well have lost a fifth taxon in historic times.