

a half the wind blew salt spray under the eaves and through the house while we bundled mats and belongings under the three beds. Fortunately the glass in the windows held but don't let anyone tell you that coconuts only bend in hurricanes (see Cover). They snap as well, and their crowns can be severely damaged as was evident when we could leave the house again toward nightfall (Fig. 2). Kitchens were blown down, toilets left standing like monuments in the open air, roofs torn off, and gardens ravished. The villagers said they had never known such a storm.

The next day, while others put the village to rights, the three of us (Saula Vodonaivalu, Dick Phillips, and I) with three "guides" set off for the trail up the ridge beyond the Wainibau River that angles upward toward the crater lake in the middle of the island (Fig. 3). The carpet of leaves, branches, and fallen trees in the forest suggests some possible explanations for forest types here in the cyclone zone to be talked about with Jack Putz. It took 1½ hours to reach the Wainibau, nearly an equal time to cut our way to 325 m and the new palm of which I have a complete series. It resembles *Cyphosperma* in many respects but has a complete prophyll and terminal stigmatic residue on the fruit plus probable differences in endocarp and seed. After such a preface, the finding of the palm was a great relief. On Wednesday the road was blocked part of the way to the air-

port, our transport failed to show, and it was with some relief that we saw a truck approach as we hoofed it well beyond Bouma. Said truck got us to a taxi whence to the airport. . . .

NATALIE W. UHL

Palm Fruits as Fish Food

Information about palm biology is scattered throughout the natural sciences, as anyone doing research can affirm. A case in point is Michael Goulding's new book *The Fishes and the Forest: Explorations in Amazonian Natural History*, University of California Press, Berkeley, 1981.

Goulding studied the ecology of larger fishes of the Amazon and found that many species spend part of the year in flooded forest areas feeding on various fruits and seeds. Fruits of four palms which occur in such areas were found to be part of their diet: jauari (*Astrocaryum jauary*), marajá (*Bactris* sp.), assai (*Euterpe* sp.) and bacaba (*Oenocarpus bacaba*). Fish masticate and ingest the fruit pieces; in some instances whole fruits are swallowed which pass through the digestive system without losing their viability. Thus certain fishes of the Amazon serve as both seed predators and potential dispersal agents of the four palms.

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Notice

Chapters can obtain a list of names of the new members in their areas by writing The Palm Society, Inc., P.O. Box 368, Lawrence, KS 66044.