In the light of current rates of tropical forest depletion and the loss of cultural tradition, investigations that record traditional plant use may be of great importance (Bennet 1992; Boom 1987). Studies in Belize have shown that the extraction of indigenous medicinal plants may be one of several economic activities compatible with long-term conservation goals (Balick and Mendelsohn 1992), and can result in the establishment of a forest reserve (Balick, Arvigo, and Romero 1994). In adjacent Guatemala, however, medicinal species and their uses have not been systematically investigated. Although several ethnobotanical studies have been conducted (e.g., Cáceres, Girón, and Freire 1990), the main focus has been on the Guatemalan highlands (e.g., Douglas 1969; Orellana 1987). One investigation was conducted in the tropical lowlands of the Department of Petén: a vegetation analysis coupled with an examination of tree species used by local communities (Mutchnick 1994). The present study arose out of concern by ProPetén, a local branch of Conservation International, that medicinal plants of the San Andrés region of the Department of Petén were largely unrecorded. Although politically part of Guatemala, the Department of Petén is culturally and floristically part of the Maya region of Mesoamerica, and contains the Maya Biosphere Reserve. The aim of the present investigation is to record plant uses by traditional healers in San Andrés.

**STUDY AREA**

The community of San Andrés, with a population estimated at 4000–5000 in 1993 (Norman Schwartz, personal communication), is located on the northwestern shore of Lake Petén-Itzá, Petén, Guatemala (Fig. 1). The climate is seasonal, with a dry season from November to May, and a wet season from June to October, when the majority of the annual rainfall (average 3000 mm) occurs. Mean monthly temperatures range between 22°C and 29°C, with annual maxima of 27–37°C and minima of 17–23°C (SEGEPLAN 1992).
The Department of Petén covers ca. 69,000 sq.km (31.79% of Guatemala) between 16° and 17° north latitude and 89°25 and 91° west longitude and constitutes the southernmost part of the Yucatan tableland, a low limestone plateau of 400 m maximum elevation, and the southern terminus of the Yucatan Peninsula Biotic Province (Goldman 1951). The northernmost 40% of the Department has been designated the Maya Biosphere Reserve (Nations 1992), and San Andrés is situated in the Reserve’s 15 km-wide buffer zone (Fig. 1).

METHODS
San Andrés was chosen as the study site because it appeared to possess more curanderos (healers) than the more traditional village of San José or any other nearby village. Indeed, residents from many distant communities visit the healers in San Andrés for health care. Information about healing practices in San Andrés was gathered through participant observation with traditional healers and conversation with local housewives from June–December 1994. A primary source of information was Feliciano Camal (79 years old) and his wife Demetria Sin (78 years old), both born of Maya-speaking parents and perhaps the last Maya speakers in the largely mestizo community of San Andrés.

Local names, uses, habitat, and growth form of each locally used medicinal plant species were recorded. The data were later reconfirmed by the curandero. Voucher specimens were collected on plant-gathering forays, which never ventured beyond a 5 km radius of San Andrés. Plant specimens were pressed on the same day collected, dried on a portable plant drier over two 75W light bulbs, and deposited with data in the herbarium at Tulane University (NO) and the herbarium of the University of San Carlos, Guatemala City (AGUAT). Maya plant names given by curanderos were transcribed with the help of Julián Tesucún Chán, a coordinator and teacher in the revival of the Maya-Itza language. Plants were identified by the author and distinguished as to their New World or Old World origin (Mabberly 1987; Standley and Steyermark 1946–1976).

GEO-CULTURAL SETTING
San Andrés was established (or possibly reestablished on the site of an older village) by the Spanish shortly after 1700, and inhabited by Indian (Maya) migrants from Petén, Belize, and especially from the state of Campeche in the Yucatan Peninsula. Yucatec Maya may have been the common language, but nowadays only one or two individuals still speak Maya in San Andrés (Schwartz 1990). Immigrants from other departments of Guatemala have increased the population of the Petén from 64,500 in 1973 (Schwartz 1990) to ca. 311,000 in 1990 (Norman Schwartz, pers comm). To distinguish themselves from immigrants, the inhabitants of San Andrés consider themselves peteneros (natives of the Petén), reflecting a strong sense of regional identity.

HEALTH CARE
The health clinic in San Andrés, focusing on preventive medicine, is the first point of contact with modern medicine for many residents. Doctors in communities on the other side of Lake Petén-Itzá are also available for consultation; for more serious illnesses there is a hospital in San Benito. Despite the ease of access to modern medicine, traditional healing still plays a role in the community.

Currently there are seven traditional healers practicing in San Andrés, of whom six belong to the Camal family. None of these healers has an apprentice. In addition, there are traditional midwives in the community. Several types of traditional health care providers have been recognized in the Petén (Villatoro 1982), and all...