

A Palm for the Masses

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As I sat in church on Palm Sunday last year, I wondered about the leaf I was waving. *Is it a real palm, or another plant resembling a palm? Where was it grown? How did it get to Chapel Hill?* When I returned to the UNC Herbarium on Monday morning, I placed my frond in a plant press and did a little research. I discovered that my Palm Sunday frond is an interesting intersection of Christianity, commerce, and conservation.

Palm Sunday is celebrated on the Sunday before Easter and commemorates Jesus' arrival in Jerusalem for Passover: "The next day the great crowd that had come for the Feast heard that Jesus was on his way to Jerusalem. They took palm branches and went out to meet him, shouting, 'Hosanna!'" (John 12: 12–13). John uses the word "phoenix" for the branches; the scientific name for the date palm is *Phoenix dactylifera*. Many Christian churches celebrate the day by distributing palm fronds or tree branches to congregants. Christian communities use whatever "branches" are available nearby and in season: olive in Mediterranean countries, pussy willows in northern Europe, cycad fronds in Australia. In Louisiana in the 1970s, we used fronds from our native palm *Sabal minor*, dwarf palmetto. Research revealed that my Chapel Hill church distributes *xaté* fronds.

Xaté (pronounced "sha-tay") are leaves from several species of palms in the genus *Chamaedorea* in the Palm Family (Arecaceae). *Chamaedorea* includes about 100 species of small, dioecious understory palms restricted to neotropical rain and cloud forests from Mexico to northern Bolivia. *Chamaedorea* is most diverse in the wet mountain forests of south Mexico and adjacent Guatemala at elevations of 800–1000 meters. The most commonly collected *xaté* are *Chamaedorea elegans* ("*xaté hembra*"), *C. oblongata* ("*xaté macho*"), and *C. ernesti-augustii* ("*fishtail*"). *Xatéros*, the people who collect *xaté*, harvest the fronds from the wild in montane forests of Mexico, Guatemala and Belize.

It is here that commerce and conservation join the story of my Palm Sunday frond. The U.S. typically buys \$4.5 million worth of *xaté* annually. But only about 10% of those fronds are for Palm Sunday; the vast majority are used by florists for arrangements. Most of the money paid for *xaté* goes to middlemen and exporters, not to the *xatéros*. Also, since payment is based on volume, *xatéros* are motivated to gather a large number of fronds

without regard to quality; so the plants are totally defoliated and left to die while up to half of the collected fronds are discarded because of poor quality. According to the Belize Botanic Garden, *xaté* in general, but *Chamaedorea ernesti-augustii* in particular, has been over-collected in Guatemala, so now *xatéros* cross into Belize.

It is not only palms that suffer: unscrupulous *xatéros* have looted artifacts from Mayan sites and poached scarlet macaws for the illegal pet trade.

The good news is that conservation organizations and churches have recognized this problem and are working to create an economically fair and environmentally sound *xaté* industry. Eco-Palms is a cooperative effort between Lutheran World Relief, the North American Commission for Environmental Cooperation, the University of Minnesota Center for Integrated Natural Resources & Agricultural Management, and small villages in Central America to ensure that palms are harvested sustainably and that *xatéros* earn fair income. When harvesting Eco-Palms, *xatéros* are paid by quality, rather than quantity. The palms are brought back to village cooperatives to be sorted and packaged. Co-op members process the palms instead of selling the palms to middlemen, so more money stays in the community.

"When done in a socially and environmentally just way, palm-gathering protects rather than depletes natural forests," explains Eco-Palms. "Steady markets for palm branches prevent the forest from being destroyed for other uses. Eco-palms protect the biodiversity of the region and maintain and improve the local communities' standard of living." In 2005, about 20 American churches purchased 5,000 Eco-Palm fronds, and that number grew to over 1,400 churches buying 364,000 fronds in 2007. I was pleased to learn that my church purchased our 400 Palm Sunday *xaté* from Eco-Palm in 2010.

I am glad to know that my Palm Sunday frond is "greener" than it used to be, and I'm inspired to visit the mountain cloud forests in Guatemala where *Chamaedorea* grows wild. However, I'm also intrigued with "going local and going native" for Palm Sunday. As native palms are not found in Piedmont woodlands, what would I use? I'm interested to hear your ideas!

