



## Nutty solution

**T**wo thousand years ago the great Maya civilization of Central America largely ran on highly nutritious nuts from a rainforest tree. The Maya nut formed much of the people's staple diet, and they planted millions of the trees that bore it in forest gardens, along with other food-producing trees like avocados and cacao.

Maya nut trees remain the tallest in the forest, often towering over the ruins of the ancient civilization. But at some stage after the society collapsed, people largely forgot about the nuts which fell each year to carpet the forest floor, at best resorting to them only at times of famine. Instead they chopped down the trees to make room for corn fields, which produced far less food in the same space.

But now the nuts are finally making a comeback among the Mayan's modern descendents, giving them both food and relative prosperity, while the forest is conserved.

It began when an American biologist, Erika Vohman, was working with a local man to gather the nuts for parrots and monkeys at an animal rescue organization in Guatemala. He told her his ancestors had eaten them and made her a 'delicious' nut soup. When she got home she learned that they contain more protein and other nutrients than corn, wheat or rice, and 'became convinced that I should go back and tell the people who live in the forest about what they were missing'.

She started five years ago in a village called La Benedicición, full of refugees who had no food or crops. Once she had taught them about the nuts, they lived on them for months. All the families there still eat them, and they have planted new trees and have trained people from other villages – mainly women – in how to make use of the resource.

Most of the unlogged trees are in the most remote areas where people are hungriest. The trees produce nuts so abundantly that, in two weeks, a family can easily gather enough to survive on for a year. 'The women are thunderstruck to discover that they can eat stuff that they have always just walked over,' says Vohman. 'They collect the nuts for using as they are, or dry and grind them into flour. In some areas they now make and sell Maya nut products like cookies.'

She reckons that people from more than 400 villages in Guatemala, El Salvador, Honduras, Nicaragua and Mexico have been reintroduced to the nut – but finds it 'hard to keep track' as villagers are now spreading their knowledge spontaneously to others. Many have been able to set up small businesses, earning cash to relieve their poverty.

The tree needs no pesticides or fertilizers, and provides food for livestock like goats and cattle. And as people learn of its value, they do not cut it down, thus preventing deforestation and protecting soil and water.

'Hopefully,' says Vohman – who won the 2006 St Andrew's Prize to expand her work – 'we have rediscovered the Maya nut tree just in time.'

## Truly Wild Forest Biodiversity

### Acrobatic ants

Tiny wingless ants – first found in 2004 in the Amazonian flooded forests near Iquitos – can save themselves from a fall from the rainforest canopy by executing a 180-degree mid-air turn, landing on the trunk, safely above the forest floor. It is thought the ants – which can grow up to a centimetre long – use visual cues and leg movements to perform their death-defying spins.



Steve Yanovick

### Ginkgo

It's a living fossil, this deciduous Chinese tree with unique fan-shaped leaves; its ancestors thrived in temperate areas 270 million years ago. It is now cultivated widely in Asia for its seeds, valued for food and medicine. Its beauty and hardy constitution – four survived the Hiroshima bomb – makes it popular in cities too.



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### Tree kangaroo

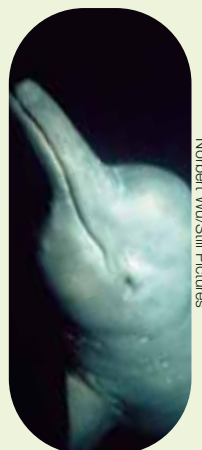
Over 50 species of tree-dwelling kangaroo live in the rainforests of New Guinea and Queensland, Australia. Like their grounded cousins, they have strong hind legs. But these are attached to short, rounded bodies, longer claws, rubbery soles, and independently moving back feet – which help them climb, leap from tree to tree, and jump to the ground without getting hurt.



Martin Heney/Sill Pictures

### River dolphin

One of the great sights of Amazonia, it swims among the trees of the flooded forests during the wet season, feeding on small fish and crabs. Some legends hold that the pink to greyish *boto*, as it is also called, embodies the spirits of the drowned, giving it some protection from hunters. Still, it is vulnerable to threats like mercury poisoning from gold mining.



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