lative particles, thought it made more sense to reexamine the model and adjust it until it predicted the amount of matter needed. The result was the notion of a lumpy Big Bang, which would have spawned heavy elements in its neutron-rich clumps of particles. These lumps would have vanished after the first 100 seconds of the universe, so they wouldn't affect today's clustering of stars and galaxies. Nor would they have left a trace in the universe's pervasive background of radiation, which appears perfectly smooth in current observations.

Soon after the revised Big Bang was proposed, its original impetus evaporated: Calculations showed that the new model didn't predict the hoped-for closure density either, says Robert Malaney, a theorist at the Canadian Institute for Theoretical Astrophysics. But with the emergence of tentative evidence supporting the model's predictions of primordial beryllium and boron, its prospects may brighten again. "The original motivation is going away at the same time observations are sort of indicating that it happened," says Malaney.

And even if a lumpy Big Bang can't close the universe, it might provide enough mass to solve a smaller missing mass problem, posed by observations showing that more matter than the standard picture allows is exerting its gravitational pull on galaxies and clusters of galaxies. All of which is enough to keep astronomers searching the universe's stock of boron and beryllium for clues to the shape of the Big Bang.

Even if they eventually conclude that all boron and beryllium were generated through ordinary channels, not in an unorthodox Big Bang, Duncan expects that they will learn something valuable from their trouble. "At the very least you are probing [cosmic ray processes] in the early galaxy," he says. But the hope, says Boyd, is that "these measurements will tell us something about what happened a hundred-thousandth of a second after the Big Bang. I find that pretty mind boggling." ■ FAYE FLAM

Fowl feast. *The Arawete prefer to eat toucan and other large game birds but dislike deer.*

Rain Forest Diet: You Are What You Eat

How does an anthropologist identify Indians from different tribes in the Amazon rain forest? One way is to check their menu. If they're eating tapir—and liking it—they're probably from the Mayoruna or Parakana tribes. But if they're eating monkey, you can bet that they're from the Arara tribe.

Such differences in the diet of the tribes that live deep in the lowland rain forests of the Amazon have long stumped anthropologists. The prevailing view has been that the various tribes eat different foods because they live in different parts of the rain forest, and supplies of game and conditions for growing crops vary among those regions. But that's not the whole story, says Katharine Milton of the University of California, Berkeley, an anthropologist and ecologist who has lived with five different tribes over the past 10 years. The areas where she stayed show little variation in the foods available. The tribes' diets differ, Milton says, because the Indians choose to restrict what they eat to only certain of the numerous plants and animals available as a way of isolating themselves from their neighbors. "Diet is a cultural boundary, much like their use of body decoration and (facial) perforation," she explains. "Consumption of certain classes of animals is taken as a badge of a particular group." For example, it is distasteful for a Mayoruna or Parakana to eat certain monkey meat, and these tribes look down on their "not-so-human" neighbors who do so.

Milton, who published her findings in the November issue of the *Transactions of the Royal Society*, found that the tribes' lifestyles are similar: They are hunter-gatherers who also engage in slash-and-burn agriculture. Although they have had some contact with the outside world, they still hunt almost exclusively with traditional weapons and obtain their food by their own means. A survey of their diets found that they eat a wide range of food, including forest animals, such as birds, insects, porcupines and monkeys; wild plants; and cultivated crops, such as corn, manioc, sweet potatoes, and bananas.

Nonetheless, each tribe has distinctly different food preferences. Some of those differences could reflect historical variations in food supply, since none of the tribes lives in precisely the same areas today that they did 100 to 200 years ago. But Milton thinks it more likely that the dietary preferences arose centuries ago as a way for tribes to set themselves apart. Back then there were far larger populations of Indians packed together in the rain forest, giving rise to tribal hostilities as the groups fought one another for territory and food. And the hostilities continued into modern times. Tribal fighting occurred as recently as 1983, and the Mayoruna tried to keep out outsiders, raiding settlers' camps and river boats along the Javari River until the mid-1970s. "These different groups are very jealous of their territory," says Milton, who has observed friction even between two different groups of the same tribe.

Lest we think that such food customs are the remnants of more simple cultures, Milton has a response. At Thanksgiving, her students recorded what their families ate. One student noted that recent Mexican immigrants choked back the bland turkey with hot peppers, while another student's Philippine family served turkey, pumpkin pie—and Philippine dishes. Observes Milton: "Even in a melting pot culture like our own, very often these differences persist. It's a way each group has of reaffirming its identity." ■ ANN GIBBONS