Borneo Jungle Vanishing

Two new analyses of satellite images of Borneo have shown that deforestation in Kalimantan, the Indonesian two-thirds of the island, is progressing at a staggering rate, higher even than a pessimistic projection made by the World Bank 2 years ago.

On page 1000 of this issue, forest biologist Lisa Curran of Yale University in New Haven, Connecticut, and co-authors use Geographic Information Systems and remote-sensing images to map the protected areas of lowland tropical rainforests. “It’s much, much worse” than had been thought, says Curran. Between 1985 and 1999, the images show, most of the 10-kilometer-wide buffer zone around the 2700-square-kilometer Gunung Palung National Park fell prey to logging. Since then, forest within the park itself has been disappearing at a rate of almost 10% per year despite its protected status.

The same hollowing out of supposedly protected areas takes place throughout Kalimantan, as shown by a team led by geographer Douglas Fuller of the University of Miami, Florida. Reporting in this month’s Conservation Biology Fuller documents the disappearance of 3 million hectares of forest across Kalimantan between 1997 and 2002, mostly in “protected areas” such as parks and forest reserves.

Thwarting conservation efforts, say the authors of both papers, is a decision 3 years ago to give local authorities the right to issue logging leases as part of a broader government decentralization. With central control gone, timber cartels have pretty much free rein. “It has exacerbated the situation,” Curran says.

Siberian Tongue Documented

Scholars have discovered a previously unrecorded language spoken by Siberians living along the Chulysh River near Western Mongolia. Known locally as Õs, it has been provisionally termed Middle Chulyym by linguist andophonologist K. David Harrison of Swarthmore College in Pennsylvania. He says it is rooted in Siberian Turkic, which is very different from Slavic languages such as Russian. “We weren’t sure we’d find anyone in the area,” says Harrin-

Thoughtful Monkey Sex

Male marmosets don’t act like animals when it comes to sex. When sniffing out a potential mate, their whole brains, including regions used in decision-making, light up with activity—just as happens with humans, new research shows.

Some scientists believe a full-brain response to sexual stimulation occurs only in humans. But an international team led by Charles Snowdon of the University of Wisconsin, Madison, has now shown that may not be true.

Using New World marmosets—which employ smell much more than sight—the researchers put male monkeys into a magnetic resonance imaging machine and gave them wooden discs to smell that had been impregnated with the scent of either ovulating females or females whose ovaries had been removed. Multiple regions of the monkey brains responded to the olfactory scents, the researchers report in the February issue of the Journal of Magnetic Resonance Imaging.

The males appear to be making cognitive decisions about what they are smelling, says Snowdon, suggesting that they are fussy about whom they breed with. Primatologist Fred Bercovitch of the Center for Reproduction of Endangered Species in San Diego says the study suggests that human-type—that is, discerning—sexual behavior is rooted farther back in evolution than some think.

Harrison with A. Baydashev and his wife, two of the last Õs speakers, who presents his findings at the AAAS meeting in Seattle this week.

Soviet linguists first probed the region’s linguistic patterns during a 1972 expedition, but their records contain no mention of Õs, Harrison says. But he and his colleagues, following allusions to the language contained in Soviet and Russian reports dating as far back as the 1880s, located 426 people who still speak Middle Chulyym. All are members of a hunter-gatherer group that settled in six villages along the river.

University of Connecticut linguist Jonathan David Bobaljik, who studies native languages in Siberia’s Kamchatka region, says the findings suggest that Soviet researchers “lumped native languages together” as part of assimilation efforts that erased and endangered many languages across Siberia. Since the 1950s, census takers have lumped the Middle Chulyym speakers together with the Xakas, a far larger linguistic group.

Harrison now plans to study the language with the aid of a Chulyym native who has figured out how to transliterate it, using the Cyrillic alphabet.