

Jungle gone in 30 years

by Sharon and Rudy Haugeneder

A deadly one-million square mile smoke plume locked over the Amazon basin is threatening the planet, warn international scientists.

The ever-thickening cloud is the result of Brazil's ongoing destruction of the Amazon rain forest.

Dr. Charles Wood director of NASA's space shuttle earth observations project, says the smoke plume is preventing huge

amounts of moisture that normally feed the rest of the world from re-entering the atmosphere.

Satellite and space shuttle photographs show the massive smoke cloud is locked into a stationary position by the Andes Mountains.

The smoke plume that would stretch from the Appalachians to the Rockies if over North America, prevents the formation of rain-producing cumulus clouds, says Wood. This reduces rainfall dangerously because the heat can't escape.

"The mountains act as a smoke break that hold vast quantities of smoke over the Brazilian region, posing a health risk due to chemicals made airborne by the fires."

Photographs taken from space by shuttle astronauts show the Amazon rain forest, home to at least half the world's plant and animal species, is burning at the rate of one football field per second.

And scientific calculations using the 1987 rate of jungle destruction, shows a "tripling of the amount of area burnt within 13 years.

It could be even faster. Satellite surveillance shows the Brazilians have stepped up the burning pace in recent months.

Despite growing international pressure to halt Amazon destruction, Brazil has increased the rate of deforestation over the past decade.

Satellite surveillance illustrates the extent of the destruction. A September 1987 space photograph of Brazil's Rondonia region shows 2700 fires burning.

Dr. Manuel Perez, a Brazilian climatologist says preliminary research data show significant climate changes in his country.

About one-third of the region's rainfall has already been affected, he said. Continued deforestation could result in a 60 per cent decline.

Dr. Michael Matson, director of the National Oceanic and Atmospheric Administration in the U.S., confirms the findings.

"What we are seeing is climatic devastation and disruption," he says. "The impact globally, well, I won't say, only that it isn't good news."

Canadian environmentalist Dr. David Suzuki goes further. He

warns the entire jungle will be gone within 30 years.

"The world is changing catastrophically and probably irreversibly," he says. "The support systems for all life — the atmosphere, oceans, soils, forests — are being damaged with cataclysmic speed."

Brazilian environmental scientist Dr. Carlos Nobre predicts the Amazon will turn "into a giant swamp" unless the destruction is halted immediately.

"The future survival of the rain forest is imperative."

Duke University researchers in North Carolina say Amazon destruction is creating havoc with the world's carbon dioxide budget. Their research on how increased carbon dioxide in the atmosphere affects plant growth

spells serious trouble for the world's agriculture industry. About the only crops that thrive on increased carbon dioxide are those classed as C4 — weeds.

Dr. Bert Drake of the Smithsonian Institute in Washington, D.C., says plants are being subjected to something they've never known before. "We don't know if plants will be able to adjust in the long run," he warns.

The affects of Amazon rain forest destruction are so serious that Dr. Kenneth Burgman, with the National Academy of Sciences in Washington, is setting up a directory of scientific research on the Amazon. "Irresponsible and dangerous burnings such as the Amazon are putting all humanity on the line," he says. "But we go ahead and do it anyway."

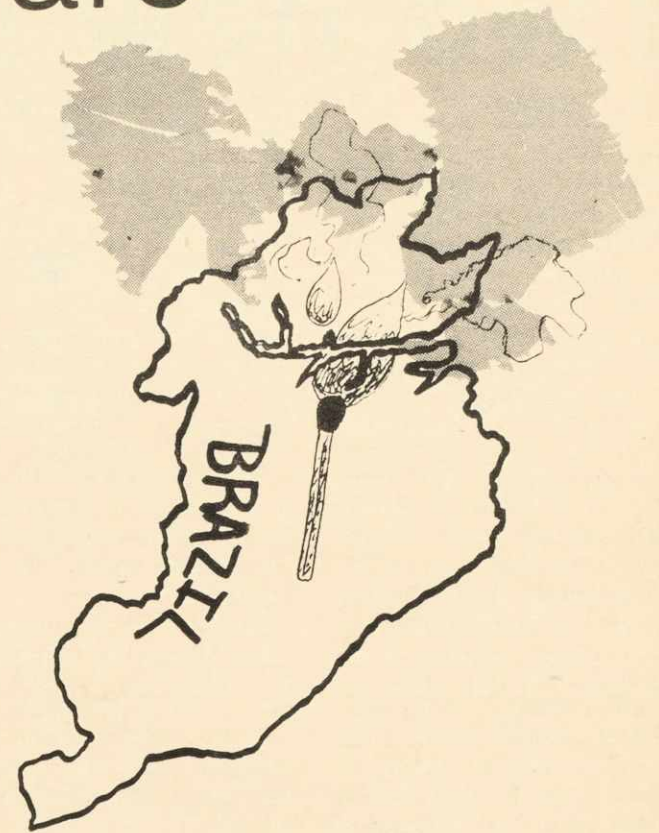
Even without the global implications, continued Amazon rain forest destruction has dangerous consequences for Brazil itself.

NASA's Wood says satellite surveillance shows rain forest burning has caused serious erosion of the Amazon's watersheds reducing their life expectancy by as much as 35 per cent.

The erosion has also affected the mighty 6289 kilometre Amazon River which pours 8 trillion gallons of water into the Atlantic Ocean every day — enough to furnish about 20 times the total industrial, farming, and power needs of the United States.

Wood says the river is now so badly silted that space shuttle photographs clearly show muddied water 2.4 km into the Atlantic — about twice as far as normal.

The siltation caused by the destruction will gradually result in huge sand bars that could threaten ocean shipping heading toward Brazil's interior sea ports, he says.



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