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What Next?

# Newsweek

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## Opening The Amazon



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Manchete—Pictorial Parade

*Tug pulls paper-processing plant toward Jari: riches that would fulfill the wildest dreams of El Dorado*

# Opening the Amazon

For three hours, the British lumber merchant had been flying with his Brazilian supplier over the lush green forests of the Amazon, searching out prime stands of timber. By the time his small private plane landed back at the airstrip at Conceição do Araguaia, the Englishman was practically in a state of shock. "My God," he exclaimed to an acquaintance, "they're actually burning mahogany out there! They have so bloody much timber they think nothing of burning mahogany."

The British trader's story underscores both the glittering prospects and potential plight of Brazil's Amazon basin, an area so vast that it could blanket the entire eastern half of the U.S. Aided by sophisticated aerial photographs, huge multinational corporations and the Brazilian Government have begun to search out the riches of the region, and what they are finding would have fulfilled even the wildest dreams of sixteenth-century Spanish conquistadors. But the mining and timber operations spreading throughout the Amazon pose a growing danger as well. Brazilians once said, "What man ruins by day, nature repairs by night." In fact, nature doesn't. For all its riches, the Amazon is one of the most ecologi-

cally frail regions on earth—and the fear is that unrestrained exploitation could turn a bonanza into a barren wasteland.

Still, mining and timber projects of mind-boggling proportion are either under way or in the planning stage and, in the meantime, agribusiness has acquired

enough cattle-grazing land to make the Amazon one of the world's primary beef-producing areas. At the moment, a sophisticated mining enterprise is exploiting the earth's largest known reserve of iron in the mountainous Carajás region. Along the Trombetas River, a tributary just north of the Amazon itself, a consortium of multinationals has joined

Brazil's state mining company in a project to mine and export the world's biggest deposit of high-grade bauxite, the raw material for aluminum.

There are an estimated 10,000 tons of gold in the Serra dos Andorinhas strike, only 125 miles south of the Carajás iron-ore find. In the far western Amazon territory of Rondônia, another group of multinationals is mining a huge reserve of cassiterite, which yields tin when refined. Still other companies probe the Amazon's giant deposits of manganese and graphite, copper and nickel. Finally, the Brazilian Government recently announced a controversial plan to harvest 97 million acres of Amazon timber—the project that causes ecologists the most concern.

Conquering the Amazon's amazing kingdom is difficult—and dangerous. The region is replete with perils no less exotic than the riches

*Treasure hunt: Harsh ordeal for man and nature*  
Ricardo Chaves—Abril Press



they guard. Workers have lost their lives to an exquisite butterfly whose sting can be fatal. Piranha swim unnoticed through the jungle waterways. Malaria and hepatitis are common and so is another enemy of man: himself. The rush for gold has turned miner against miner, often with tragic results (box, page 8). Even getting to the Amazon is no small accomplishment. Roads in the region are often no more than glorified footpaths and the much-heralded Trans-Amazon highway is Latin America's longest-running comedy. Despite its drawbacks, the Amazon has a hypnotic appeal to those who lust for a share of the region's extraordinary abundance. "There are a lot of adventurers looking for ways to make a fortune out there," said a gold dealer in the shoot-'em-up city of Itaituba. "That's the only reason I can think of to spend a year or more out in the jungle without seeing an electric light, a refrigerator or a woman."

### ATTRACTIVE INCENTIVES

All told, at least 60 foreign firms, including Reynolds Aluminum, Bethlehem Steel and one headed by American billionaire Daniel K. Ludwig (page 9) are bidding for shares of the Amazon's wealth. To encourage them, the Brazilian Government has put together an attractive package of incentives. Research done by Brazilian mapping technicians is available free of charge to interested companies. And while Brazilian law requires that a national hold majority interest in any mining project, the state sweetens the package for foreign investors by absorbing the cost of any exploration project with negative results. If the results are positive, the companies are given quick access to a revolving line of credit. Explains Dr. Yvan Barretto de Carvalho, president of CPRM, the government's mineral-research company: "Really, there are no restrictions on capital."

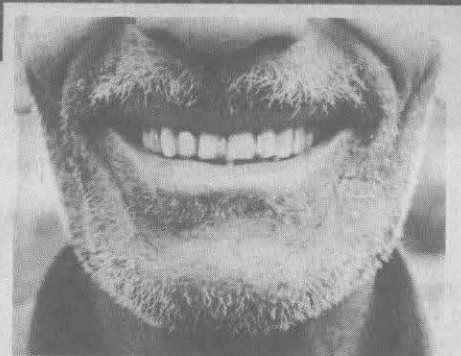
Of all the Amazon mining operations, the one farthest along is the Trombetas bauxite project, which has been financed by the Brazilian Government, Reynolds Aluminum and other private firms from Canada, the Netherlands, Spain and Norway. Currently, Brazil is an importer of bauxite, but the \$350 million Trombetas facility will immediately make it one of the world's largest exporters. The ore will be shipped 700 miles down the Amazon to a port facility being built near yet another bauxite reserve—owned by Alcoa and the mysterious Ludwig.

Predictably, the 81-year-old Ludwig is remaining silent on how he intends to handle his share. However, an American banker who recently visited his installation at Jari said Ludwig may not only build a refining plant at that point but construct a hydroelectric dam upriver as well. The dam would supply power for an aluminum-processing plant and the widely publicized floating paper mill that Ludwig had built in



Celio Apolinario—Abril Press

*Mountain of iron, prospector's stubbly smile: A lust for wealth*

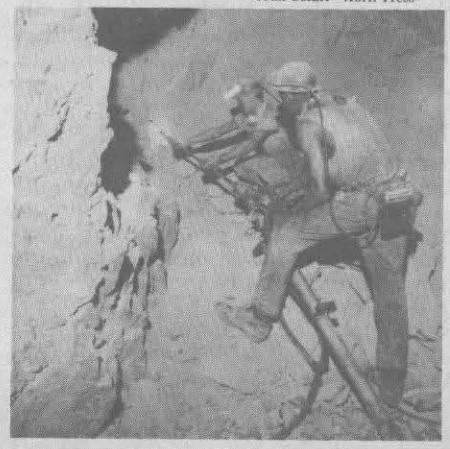


Jean Solari—Abril Press

Japan and towed to the Jari site last year.

Although the mining and timber projects are ambitious, perhaps the most impressive undertakings have come in the field of agribusiness. Cattle ranching is the Amazon's top growth industry and, in fact, Brazil now has more livestock grazing on its terrain than any nation other than the U.S. and the Soviet Union. Economic experts say Brazil hopes to replace Argentina as Latin America's leading meat exporter by the mid-1980s—an especially desirable goal considering that beef prices are expected to continue their worldwide stampede.

Among the firms grabbing at the tax breaks offered to cattle ranchers is Volkswagen, the most profitable company in Brazil and operator of a 350,000-acre live-



*Working the claim, striking a vein: A rape of the land?*

Ricardo Chaves—Abril Press





Editora Abril

Amazon prospecting camp: The risks are certain, the rewards are not

# BRAZIL'S WILD WEST

Their backs polished by sweat and sunlight, the two prospectors stood ankle-deep in the river searching for gold. By now, their movements were precise and predictable. Shovel, sift. Shovel, sift. Only occasionally did they break the rhythm to swat at a mosquito. As they worked, the partners were serenaded by sentimental country music blaring from a cassette recorder. The scene was tranquil, but deceiving. In the Amazon, a prospector's life can be easily disrupted by the whims of the jungle and the treachery of his competitors. Near the tape machine on the riverbank, the men had placed two essential tools of their trade—a knife and a gun.

Death is a fact of life for Amazon miners. Wooden crosses jut up from jungle graves, and it is certain that countless miners who have died looking for *bambúrrio*—"the big strike"—never received a decent burial. Lives are lost to tropical diseases, the deadly piranha and a fish known as the *candirú* that enters body orifices and inflicts so much pain that victims sometimes kill themselves to escape the anguish. But nature is not always the biggest threat. "There isn't a month that goes by without three or four guys being shot or stabbed here," reported one miner. "Somebody goes away to sell gold and

when he comes back another guy is working his claim. There's only one way to settle something like that."

An outlaw ethic rules the camps. At one site in the Amazon heartland there were 1,000 miners, 23 prostitutes, countless weapons—and two police officers. "Personally," said one of the lawmen, "I don't like the odds." An abundance of *cachaça*, a sugar-cane liquor, makes the policeman's job even tougher. Exhausted after working dusk to dawn on their claims, miners spend their nights in ramshackle "cabarets"—often with violent results. Recently, a miner killed a policeman, wounded another and fled into the jungle. Authorities didn't even both-

er to give chase. The cost of hunting down the killer would have left the community bankrupt. In the jungle, said one Amazon expert, "the strongest prevail and the rest can go to hell." Even if a prospector avoids a fatal showdown with his competitors, he still must overcome some of the world's most uninviting countryside. "They survive on a diet of hearts of palm, manioc root, fish and jungle boar," marveled Lafayette de Souza Rocha, a gold assayer in the town of Itaituba.

## DRINKS FOR THE HOUSE

For those who dream of striking it rich, poverty is the most likely reward. Only a few of the estimated 30,000 prospectors working in the Amazon will find the kind of deposits that bring spectacular wealth—and even then a miner can lose his fortune to another jungle menace: the grubstaker. After discovering a potential lode, a miner must make arrangements with a grubstaker to open an airstrip near the claim and bring in a mining crew. Sporting cartoon-character names like Joe Parrot and John Cow, the grubstakers have found ways to siphon off so much of the profit that prospectors bitterly refer to them as "owners." Gripped miner José Epifanio Ferreira: "There are two things I've never seen. The first is a poor owner and the second is a rich miner."

The small amounts of gold that most prospectors find pay for little more than basic needs and an occasional furlough to Itaituba. "A lot of those poor suckers live their whole lives in the same cycle," sympathized Rocha. "A year in the jungle, a two-week spree in town." Many find the lure of Itaituba irresistible. One miner recently marched into a bar waving a fistful of bills, bought drinks for the house and ended the evening by stumbling down to the river's edge and burying what was left of his cash. "If you want my money," he ranted to his entourage, "you can get down on your knees and dig for it just like I did."

Though a prospector has scant hope of leaving the Amazon with great wealth, fortune hunters continue flocking to the jungle. Many are young men from poor backgrounds who are searching desperately for a better life. Vowed one 24-year-old prospector: "I'm going to have a fleet of planes and a bunch of miners working for me in five years. Come back and look me up." While he spoke, the would-be Midas fingered a gold nugget of the type many prospectors wear around their necks for good luck. Thousands are destined to spend a lifetime learning that, in the Amazon, there is not enough good luck to go around.

—FRED BRUNING with LARRY ROHTER in Itaituba

Main street: 'A year in the jungle, two weeks in town'

Pascal Villiers Le Moy—Photo Trends



stock operation. First VW shaved the stubborn jungle beard off its super-spread to expose a smooth face of pasture land and then joined several other corporations in building a modern meat-processing plant. Much of the beef produced in the Amazon will be exported to Germany, VW says—but only after the lucrative Brazilian market has been satisfied.

### ABANDONED GOALS

Still, the Amazon presents compelling economic and ecological problems. The cost of harvesting its riches is often overwhelming; U.S. Steel Corp., for example, invested \$50 million on the Carajás project before pulling out in late 1977—without an ounce of iron ore. "The investment numbers were just becoming astronomical," recalls senior vice president Donald Rollins.

Even if foreign firms are prepared to make the huge front-end investment, the law requiring a 51 per cent interest by Brazilian nationals can blow potential deals. Equally important, the cost of setting up shop in the jungle tends to balloon the total investment even before production begins. "There's just no infrastructure," says Alan Popp, general manager of natural-resource development for Reynolds Aluminum. "You have to build towns, install telephones, houses, churches, movie theaters. You have to bring in every ton of concrete and every pound of steel."

The Brazilian Government has also contributed to the problem. Five years ago, the military regime opened up the Trans-Amazon highway—a 1,600-mile road that was supposed to usher in the new age of mineral development and pave the way to settlement of 5 million Brazilian peasants in the region. But the government abandoned the settlement



Claus Meyer—Black Star

Processing rubber: Amazing abundance

goal only a year later—and apparently, the Trans-Am as well. Now, the highway—actually, two lanes of dirt road—is largely neglected, with the jungle growing over it and rivers flooding frequently, rendering it impassable. The Trans-Am, says a prominent newspaper in São Paulo, has become "the most useless highway on the face of the earth."

But perhaps the biggest concern in the Amazon is the vast timberland Brazil wants to harvest and export as a panacea for its mushrooming foreign-trade deficit and staggering foreign debt—now at \$41

billion. "A few years from now," says a confident government official, "the riches of the Amazon forest are going to be for Brazil what oil is for the Arabs today." But to get there from here, Brazil has permitted widespread and largely uncontrolled deforestation. By some estimates, as much as 20 per cent of the Amazon timber has already been cut by independent operators, with little or nothing done to replace it. That, in turn, has left huge areas that look "like a piece of Swiss cheese," as one pilot puts it. The problem is that beneath the heavy tropical forest cover lies a thin layer of topsoil; cleared and neglected, it is quickly leached of nutrients by tropical rains, leaving a desert-like wasteland during the dry season.

### 'CROSSROADS IN HISTORY'

There are some signs that Brazil is learning from its past mistakes—and it seems to be turning to the enigmatic Daniel Ludwig to show the way. Among his vast Amazon holdings, Ludwig owns forest lands the size of the state of Maryland to feed his celebrated floating paper mill. But what Ludwig cuts, he quickly replaces, and ecologists, many originally skeptical of his operation, are now convinced that he may well be showing Brazil how to manage its timber resources—worth a staggering \$1 trillion at current prices.

But whether prudence will prevail in the Amazon is still an open question. "The Amazon is at a crossroads in its history," says Paulo Nogueira Neto, Brazil's special secretary for the environment. "The next four or five years will tell the story." That tale could have a happy ending—or it could prove a horror story of ecological disaster as awesome as the Amazon itself.

—TOM NICHOLSON with LARRY ROHTER in the Amazon

## A BILLION-DOLLAR GAMBLE

**D**aniel K. Ludwig is reputedly America's sole surviving billionaire. His globe-girdling empire—embracing everything from supertankers to hotels, oil and gas exploration and real estate—stretches across 21 countries on six continents. And according to the legend, it all began with a \$25 investment he made in a pleasure boat more than 70 years ago.

Now, at an age when most rich men are content to stay home and watch their money grow, Ludwig, 81, has gambled on what may be the biggest investment of his career—a multimillion-dollar scheme to create a huge agro-industrial complex in the heart of the Amazon. His Jari Forestry and Ranching Co., situated along a remote tributary of the Amazon 250 miles from the nearest big town, has acquired 1.1 million acres of jungle to exploit for food, minerals and wood pulp.

Already, thousands of acres have been cleared and planted with fast-growing

imported trees. Ludwig ordered a \$250 million prefabricated cellulose plant—his "floating paper mill"—to be hauled 15,000 miles by barge from Japan. He has planted 12,500 acres with high-yield rice, and bought 15,000 head of cattle and buffalo, the nucleus of a herd that he hopes will grow to 150,000. He also has plans for a hydroelectric scheme to power a chain of plants producing caustic soda, chlorine, sulfuric acid and refined bauxite. "Jari is his billion-dollar toy and he's prepared to do what's needed to make it work," said a U.S. banker who recently visited the complex.

Like his old pal and fellow billionaire, the late Howard Hughes, Ludwig

is something of a recluse. But he frequently slogs through jungle mud to take a firsthand look at his \$650 million pet project. The vast stretches of the Amazon are littered with the detritus of overambitious schemes, and Jari is operating at a heavy loss. The \$285 million it spent on imports of heavy equipment and services in the first half of 1978 accounted for

nearly half of Brazil's balance-of-trade deficit during that period. There are also well-founded reports that Ludwig is trying to sell some of his assets to make his Amazon dream come true. "Ludwig is gambling that prices of food and paper are going to rise dramatically in the next ten years, and that there's going to be a serious worldwide shortage," said the banker. "Jari is a poker game with billion-dollar stakes."

Ludwig: Still dreaming

Bob Brown

