

The Horrible Fury of Nature

After an island in the Union of Comorres lost 73 percent of its forests between 1971 and 1986, its water supply almost dried up. While in 1925, there were 45 permanent rivers on the island, by 1992, there were only 11.

"It happens at less extreme levels at lots of places," said Dr. Anne Ehrlich, a biologist at Stanford University in California. "It's quite predictable. Any time you deforest a mountainous area or farm it up to the top, unless you do it very carefully using terracing, you're going to end up



Photo courtesy of Emlyn Addison

with a destroyed ecosystem, an impoverished situation and the water sources will pretty much disappear."

The great Aldo Leopold, a forester turned ecologist, explained in an essay how the loss of mountain forests changed the climate in Spain:

"She was once the most powerful nation on the face of the earth. The fertility of her fields was second to none; her people were prosperous. But in her green for gain, the mountain forests were destroyed, just as ours are being destroyed today. And now this same Spain lies blistering under the heat of the tropical desert."

Today in Israel, there are few trees. "In most countries people are born to forests, and forests are given to them by nature. But here in this country . . . if you see a tree, it was planted by somebody," said Moshe Rivlin, world chairman of the Jewish National Fund. But it wasn't always this way. Aldo Leopold wrote: "The Bible is full of evidence that the mountains of the Holy Land in the time of the prophets supported real forests; the range was abundant and excellent; many living streams found their source in the higher lands. Great forest fires swept the mountains unchecked. Grazing was the principal industry and doubtless the range was at least locally overgrazed, just as is happening today in the Southwest."

The Greek philosopher Plato, who was born in Athens somewhere around 428 BC, told about the soil erosion that occurred in the uplands after deforestation: "What now remains compared with what then existed is like the skeleton of a sick man, all the fat and soft earth having wasted away, and only the bare framework of the land being left."

The philosopher Theophrastus, who was born 372 BC and studied in Athens under Aristotle, wrote that after the trees were cut down around Philippi, the waters dried up and the weather became warmer.

Climate change has left Iraq treeless other than a few shrubs along the Tigris and Euphrates rivers and forests in the mountains in the Northeast region. But in ancient times there were forests. John Perlin said in A Forest Journey: The Role of Wood in the Development of Civilization: "That such vast tracts of timber grew near southern Mesopotamia might seem a flight of fancy considering the present barren condition of the land, but before the intrusion of civilizations, an almost unbroken forest flourished in the hills and mountains surrounding the Fertile Crescent." He says the trees were cut to build cities and ships.

One hundred years ago, 35 percent of Ethiopia was covered with trees. Today, that figure is only 4 percent and the country has suffered several decades of drought.

Dr. Norman Myers, an environmentalist at Duke University who holds visiting professorships at Harvard, Cornell, Stanford and Berkeley, said in the city of Davao, in the Philippines, there was once such dependable rainfall that there was no need for waterworks. But a lot of forest land was slashed to make coffee

plantations in the 1960s, he said, adding that "today there is an extended drought each year, to the extent that the coconut plantations are drying out."

He said when forests were destroyed to plant crops in the southern half of the Ivory Coast, evapotranspiration rates reduced from 60 percent - a level typical of forests - to 35 percent - a level typical of savanna.

It's a foolish civilization that wages war with nature.