

## Conservation:

## Wildlife and the War in Vietnam

by Frederick A. Ulmer, Jr., Curator of Mammals

War is invariably a terrible catastrophe and we have all read about the incredible suffering of the unfortunate people of Vietnam. But we have heard comparatively little about its effects on the wildlife of that devastated land.

To begin with, this war has been fought not only in the cities but in the wildest jungles of that once beautiful land, for it is a guerilla war. The Ho Chi Minh Trail, running through some of the world's wildest jungles, has been pounded to rubble by repeated bombings. Here is what one journalist said about it. "At certain points, it is impossible to walk on the sides of the roads. You sink up to your knees in an impalpable dust, the earth having become dust under the impact of the bombs and incendiary weapons. When the monsoon comes, that dust turns to mud and slides on to the roads. Nothing lives in this dust, not even crickets. Only man is resisting it."

In their determination to expose the hidden enemy, U. S. forces have devastated 32 million acres of Indochina and turned the landscape into a moonscape, causing physical scars that will not disappear for generations. Our forces have used 13 million tons of high explosives in the Vietnams, Cambodia, and Laos since 1965. This amounts to the power of 450 Hiroshima-type atomic bombs, 142 pounds of explosives per acre of land, and 584 pounds for every man, woman, and child. Craters pock every area of South Vietnam—forests, swamps, fields, paddies, and roadsides. It is estimated that there are 21 million craters, and craters mean permanent damage. There are still areas in Europe and the Middle East where craters from World War I are devoid of vegetation.

The forest industry is a wreck, due to defoliation and bombardment by high explosives. Most of the trees contain metal fragments and cannot be cut down without breaking saw blades. Near Saigon once stood a beautiful jungle known as the "Hobo Woods" and it was a favorite Viet Cong hideout. U. S. forces brought in 25-ton bulldozers equipped with 2-ton blades that sliced through forest giants at the rate of 200 acres a day. In a couple of months all 12,000 acres of the Hobo Woods were only a memory.

But defoliation by herbicides has done the most ecological damage. Chemicals called "Orange," "Blue," and "White" were used, starting in 1962. In 1968 alone more than two million acres were sprayed. A huge

outcry arose against this environmental destruction and the Army promised to curtail it, but later admitted that it was still using this chemical warfare. "Orange" has been proven to cause a high rate of birth defects in laboratory animals. What it has done to the wildlife of Vietnam is anyone's guess. The greatest danger is to leaf-eating animals like the douc and snub-nosed langurs, two very rare mammals found only in Indochina, and the concolor gibbon, another rare primate. It is even possible that these mammals may become extinct because of it. The hairy Sumatran rhinoceros and the one-horned Javan rhinoceros were already on the verge of extinction in Indochina before hostilities broke out, and these species may now be gone. Large mammals no longer have a chance in this area where so many guns are in the possession of the populace, and the destruction of wildlife will continue long after the war is over.

Even our G. I.'s have been guilty of killing wildlife. One photograph published not long ago showed two Marines carrying a dead tiger into camp that they had killed on a "day's recreation." I have talked with helicopter pilots who admitted that their machine gunners fired on herds of water buffalo and even at roosting flocks of water birds, just for gunnery practice! But the news item that really sickened me was "Copters Kill Elephants." It went on to say that "U. S. helicopter gunships used rockets to kill three arms-laden elephants near a fire base in the central highlands." This was in 1971, but I had an even earlier report of elephant casualties in 1962—one elephant killed and three others wounded.

Some men in Vietnam have a real appreciation for wildlife. A sniper killed Army Brig. Gen. William Ross Bond on April 1, 1970. In a letter written earlier to his wife, he wrote, "I assisted in opening a new, small firebase to the north of my area and I am intrigued with the beauty of the place. The jungle is greenclad and the mountains stand behind it toward Dalat some 300 to 400 feet high and rolling, gently coming down to a beautifully winding river 400 feet wide. Absolutely wild. Elephant herds can be seen occasionally and great purple-winged jungle birds rise when a helicopter beats the air. Wild pig and boar can be seen on occasion and the monkeys and fish abound. . . . It's a primeval place. Very beautiful."

I wonder if it still is so beautiful?

