


# THE HURRICANE

JUNE 1969

NUMBER TWENTY

A PUBLICATION OF II FIELD FORCE VIETNAM



Saigon's  
Pasteur  
Institute



*Lanyards of Liberty*

# 54th Artillery Group

Approved recently by the Institute of Heraldry, the "Lanyard of Liberty" crest, is a new symbol for this proud, distinguished unit.

The history, mission and motto of the 54th Artillery Group are brightly represented on the crest. Scarlet (the background) and gold (the lanyard, lettering, fleur-de-lis, and leafed V-shaped bamboo stalk) are for artillery. The fleur-de-lis refers to the units historic World War I service in support of French forces at St. Mihiel, Champagne-Marne and Alsace-Lorraine, while the bamboo stalk "V" depicts the Group's Meritorious Unit Commendation for outstanding service in Vietnam.

Mission is portrayed by the mouth of a cannon in the form of a black circular scroll. The center of the crest and the group's motto are similarly mission oriented. In that center is the gunner's lanyard; appropriate for the duty-first 54th Artillery Group.

The Group traces its heritage back to March 26, 1918, where it was organized in France as the Provisional Howitzer Regiment, 30th Separate Brigade, Coast Artillery Corps. Its World War I campaigns were conducted under the designation of the 44th Artillery Regiment.

Following deactivation in 1921, it was reorganized and redesignated the 44th Coast Artillery, the 54th Coast Artillery Regiment, the 152d Coast Artillery Group and the 54th Field Artillery Group. Activated at Fort Bragg, the unit obtained its present designation on June 21, 1958, and on June 2, 1966, the 54th Artillery Group was selected for Vietnam service.

Assigned to the 54th today are the 7th Bn, 8th Arty; 7th Bn, 9th Arty; 2d Bn, 35th Arty; 5th Bn, 42d Arty; 6th Bn, 77th Arty and Headquarters Battery, 54th Artillery Group.

The "Lanyards of Liberty," the guns of the 54th Artillery Group, are helping achieve that liberty in the III Corps Tactical Zone of Vietnam.

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Paul Savanuck, a quiet 23-year old speedy five, approached me a while back with a story and some photographs. He wanted the article printed, he said, because his outfit didn't get much publicity. His story begins on page 16, but Paul will never get to see it. He was killed during recent actions near the DMZ on one of his first assignments as a Stars and Stripes correspondent. This issue is dedicated to his memory.

Saigon's Pasteur Institute (cover photo by Sp/4 Holmes) has been a vital link in the struggle against the many diseases of Vietnam's subtropical climate. See story on page 10.

The rear cover, by Sp/4 Wood, depicts a Cao Dai demon faithfully watching for evil spirits on the steps of a temple in Tay Ninh. A province of exquisite natural and man-made beauty it is, nonetheless, a forested battlefield pockmarked by bomb craters. Sp/5 Arnold Braeske paints an informative picture of progress and problems in Tay Ninh on page four.

The Editor

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PASTEUR CENTER 10



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JUNGLE ARTILLERY 16



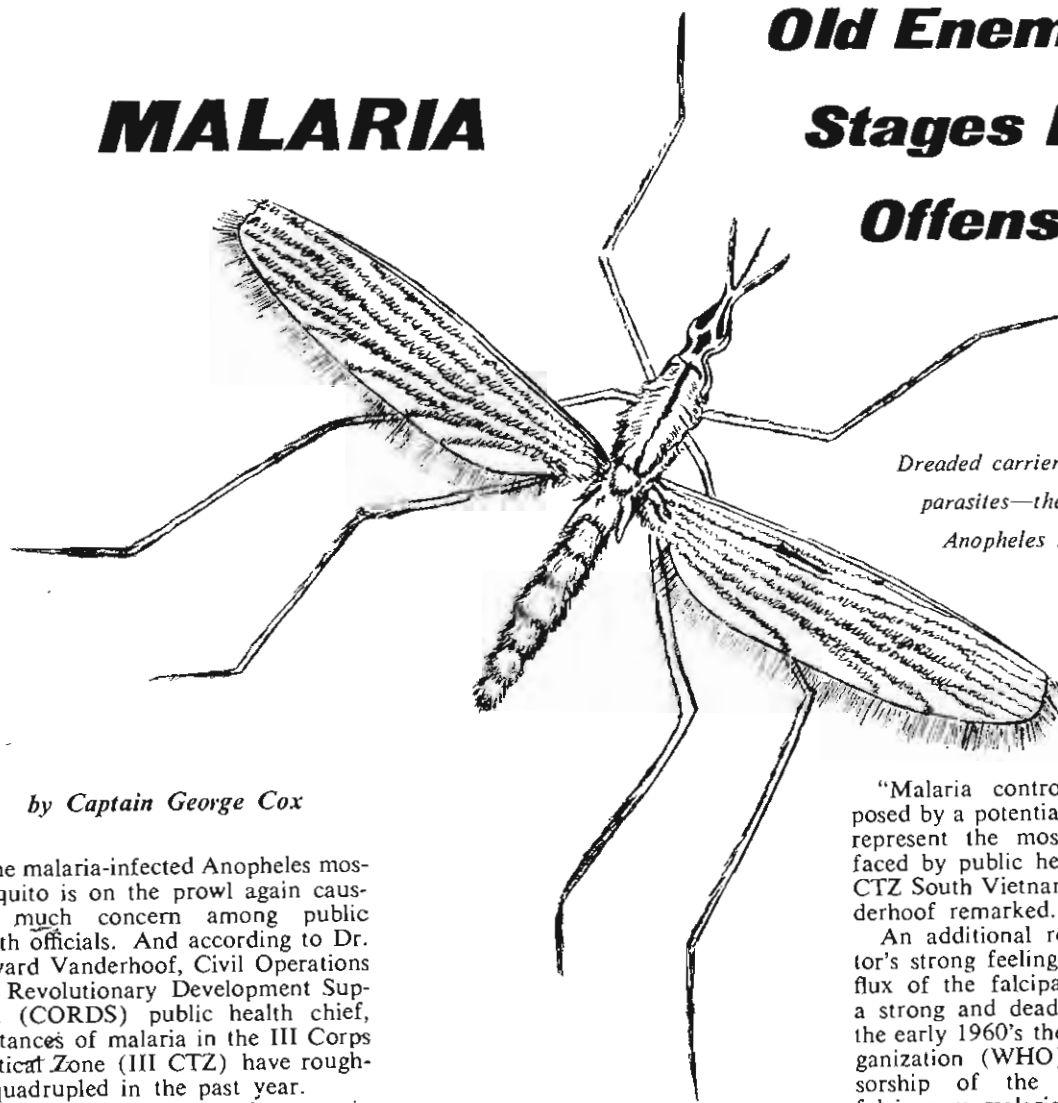
SUPERMARKET 21

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53D SIGNAL BATTALION Photo Support

# MALARIA

## Old Enemy Stages New Offensive



*Dreaded carrier of the malaria  
parasites—the female  
Anopheles mosquito*

by Captain George Cox

The malaria-infected Anopheles mosquito is on the prowl again causing much concern among public health officials. And according to Dr. Edward Vanderhoof, Civil Operations and Revolutionary Development Support (CORDS) public health chief, "instances of malaria in the III Corps Tactical Zone (III CTZ) have roughly quadrupled in the past year.

"Although the largest increase in malaria occurred in Gia Dinh and Long An Provinces, the entire Corps area has been affected. There have been a number of civilian cases in Bien Hoa and even at the National Police Training Center in Vung Tau."

Dr. Vanderhoof emphasized that there was no known way of eliminating malaria altogether, "...but we are able to take sufficient control measures in the form of suppressive drugs and mosquito eradication programs to prevent a major epidemic." To date,

health officials of the Government of Vietnam (GVN), through the use of trained malaria control teams, have been successful in preventing such an epidemic by concentrating on areas with a high density of the disease.

These teams teach the local populace to recognize the symptoms of malaria. They give instructions on the use of drugs, mosquito nets and repellents, and demonstrate ways of destroying mosquito breeding places.

"Malaria control and the threat posed by a potential malaria epidemic, represent the most serious problem faced by public health officials in III CTZ South Vietnam today," Dr. Vanderhoof remarked.

An additional reason for the doctor's strong feelings is the sudden influx of the falciparum type malaria, a strong and deadly variety. During the early 1960's the World Health Organization (WHO), under the sponsorship of the GVN, eliminated falciparum malaria from most of the provinces in South Vietnam.

But falciparum malaria was left unchecked in other countries of Indochina including North Vietnam. "Today there is strong evidence to support the fact that North Vietnamese soldiers are a prime reason for the increase in falciparum. We know it exists in vast amounts in the jungles of Laos and Cambodia along his (the enemy's) primary infiltration route as well as in his homeland," explained Vanderhoof.

"The NVA soldier does not have the preventive protection of chloroquine-primoquine, and dapson," (well-known by allied troops in pill form) and consequently, "when an infected mosquito bites him, he becomes a carrier." In some provinces, tests have indicated as much as 80 per cent of the malaria cases to be falciparum, while vivax, previously the most common, accounted for only 20 per cent.

Malaria has baffled scholars, scientists and the US Army for centuries. Late in the 1900's a team of doctors working with the Corps of Engineers discovered that the female Anopheles mosquito was the carrier of malaria and yellow fever. This discovery and the effective control program that followed enabled the construction of the Panama Canal to proceed. In the Spanish-American War (1898) more soldiers were casualties of malaria than of the enemy. And today in South Vietnam, a significant number of US soldiers have been stricken and 11 have died.

Of the four types of malaria known throughout the world only vivax and falciparum are common here, and both have similar symptoms. The victim feels no reaction for ten to 16 days, then suddenly develops a high fever accompanied by severe chills. Heavy sweating occurs as the fever breaks, 12 to 24 hours later. Diarrhea and backache are also common during this period. Finally, the individual experiences extreme drowsiness and usually falls into a deep sleep. The cycle lasts one or two days and repeats itself until body defenses or drugs arrest the parasitic condition or until the condition arrests the victim.

The vivax patient can be expected to recover in a much shorter period of time than the victim of falciparum; the disease cycle is usually shorter and less intense. However, relapses of a weaker nature than the original vivax seizure are common, whereas the falciparum victim can be back on his feet in a month with no fear of a relapse, if complications do not set in. But complications are numerous and are the major cause of death or permanent health impairment.

Falciparum malaria may invade the victim's brain and cause coma and irrational behavior. Yet other known complications are jaundice in the liver, anemia and Blackwater Fever in the kidneys. In the latter, urination is virtually impossible and a kidney transplant is needed to save the victim's life. Modern medicine will normally prevent death, but first-rate hospitals and medical attention in the far off hamlets and townships of



*Malaria control teams are sent to areas with a high density of the disease*

South Vietnam are about as scarce as transplantable kidneys.

Only the female Anopheles mosquito causes malaria. The male feeds on vegetation, the female on the blood of humans and other animals. She strikes most often at night, injecting her narrow proboscis into the skin drawing blood from one of the two tubes in it. With the other tube she injects saliva containing the malaria parasites which enter the blood stream and begin lurching on vital red blood cells. This saliva injection causes the familiar itchiness following a mosquito bite.

To the naked eye the Anopheles looks like any other mosquito, but there are two visible distinctions from the other primary species of mosquito—the Culex and the Aedes. These are its black-spotted wings and its habit the skin of its victim when striking.

But the important differences are of arching its tail at a 45° angle to inside. Of approximately 29 known

varieties of the Anopheles mosquito family, nine are capable of nurturing the malaria parasites inside and transferring them to innocent bystanders.

Foremost among preventive measures is the familiar malaria pill. The orange chloroquine-primoquine pill builds body resistance against vivax, while the white dapson "daily" pill takes action to prevent falciparum. Chances of becoming ill are considerably lowered if these pills are taken as prescribed. But mosquito nets, repellents, and insecticides are also effective in lowering exposure to blood-seeking mosquitoes.

Whether or not a serious problem of epidemic proportions occurs during the upcoming monsoon season, when incidents of the disease normally rise, is only conjecture. Health officials though, hopeful that the current trend will be reversed, are still prepared for the worst in case the rate continues to accelerate.





# Tay Ninh Province

## Rice, Religion and Forest Battlefields

by Specialist 5 Arnold Braeske

In many ways Tay Ninh Province resembles a huge, isolated forest battlefield. It is 65 per cent forested, surrounded on three sides by Cambodia, and has two major infiltration routes into Vietnam. The northern half of Tay Ninh (War Zone C) is so thick with trees, and enemy units, that it has been designated a free-fire zone; anything that moves is a target.

This northern region is populated only by Green Beret-advised Vietnamese units, a few scattered U.S. battalions making sweeps through the thick brush, and the ever present Viet Cong. The handful of sandbagged American fire support bases in this area repeatedly have come under human wave ground attacks that have left dozens of enemy dead outside the barbed wire.

Farther south, Americans know Tay Ninh as the site of VC-infested Núi Bà Đen mountain, the scene of bloody ambushes on the Saigon-Tay Ninh truck convey route, and as the province that houses the Boi Loi and Renegade Woods.

Tay Ninh Province, though, is also the home of 307,000 people. Grouped primarily in the south-central region many of these residents abandoned their lands in outlying areas because of dangerous living and working conditions.

Now they farm smaller plots in this pacified area and await the outcome of the war raging around them. Eighty-five per cent of the population live in this area; two-thirds of them are farmers.

Prior to 1700, Tay Ninh was a part of Cambodia and was known as *Rodiemvary*, or "Garden of the Elephants." At the turn of the 18th century it was annexed by Vietnam. In 1871 it was made a province with Tay Ninh City later becoming its capital.

In Tay Ninh's recent history no group has had more political power than the 200,000 Cao Daiists living in



Go Dau Ha townspeople enjoy lunch near an RF compound

the province. Founded in Saigon in 1926, Cao Daiism is a mixture of the teaching of Confucius, Lao Tse, Buddha and Jesus Christ. Some of its lesser religious saints include Trang Trinh, a 16th century Vietnamese poet. Sun Yat-Sen, leader of the 1911 Chinese Revolution, and Victor Hugo, French novelist and poet of the last century.

Tay Ninh became the seat of the Cao Dai religion in 1933 with the construction of the Great Temple at Long Hoa just outside Tay Ninh City. Since that time, the religion has exerted great political influence in Tay Ninh. At one time they had an army numbering 50,000 before it was disbanded by President Diem.

Today, however, the Cao Daiists restrict their activities to religious and charitable works. Scattered throughout the province are 46 Cao Dai temples, ranging from the magnificent building at Long Hoa to small, clapboard temples with the Cao Dai symbol, the all-seeing eye, painted above their doorways.

Among the other religious groups found in Tay Ninh are the Buddhists (55,000), Catholics (24,000), Pro-

testants (450) and Muslim members of the Cham Group (650).

The largest single collection of Catholics in Tay Ninh is near the village of Cao Xa. The 5,000 Catholics there are all refugees who fled North Vietnam in 1956. They were led south by their village priest, Father Du.

Cao Xa, located five miles west of Tay Ninh City, is the single most prosperous, pro-government village in Tay Ninh. Under the direction of Father Du, the residents of Cao Xa, both men and women, guard their village perimeter at night and provide their own military security. For this obstinacy, the village takes occasional mortar fire; the VC though, have ceased ground probes on the village because they met with too much resistance. Cao Xa is much more secure than the rest of the province.

The general condition of the villages and the people of Tay Ninh is illustrated by three villages that were the subject of a government-sponsored Accelerated Pacification Campaign (APC). The campaign, which lasted from November, 1968 until January,



*Vendor preparing papaya, a popular drink*



*Fish and bread along with rice and nuoc man—the standard diet of the provincial folk*



*Selling fish, profitable but aromatic*

## ***Suoi Da was “... a regular shopping center for the VC.”***

1969, was aimed at freeing selected villages from Viet Cong control by providing intense security and civic action.

Suoi Da, located at the base of Nui Ba Den, was “a regular shopping center for the VC” before the APC according to Lieutenant Colonel Neal Brayton, province psychological operations advisor. “The VC just walked in freely and got what they needed. The people feared for their lives. But when security was moved in and the road south to Tay Ninh City was cleared, there was a continuous flurry of traffic back and forth on the road. It hadn’t been a safe road for years.” And during January, “free elections were held in Suoi Da for the first time.

Mo Cong is an isolated lumber-cutting village on the southern edge of War Zone C. It was hardly considered part of the province by some, and had generally been conceded to the VC. The road south to Tay Ninh and the lumber markets had not been

safe to travel. But the Accelerated Pacification Campaign reopened the road and business with the lumber markets boomed again. Fearful of losing their control over the people in Mo Cong, the VC have begun mining the road and mortaring the government outpost in Mo Cong to insure isolation.

Binh Thanh, a village of 8,000 people, is located near the Angel’s Wing, a heavily-used infiltration area, two miles from Cambodia in the extreme southern portion of Tay Ninh. In spite of its precarious location, Binh Thanh has remained strongly anti-communist for years. In an effort to sway the residents of Binh Thanh, a VC battalion moved into the village one day in January hoping that American retaliation would include destroying the village with firepower.

Having foreseen the plan, American

soldiers circled the town on three sides and waited. The VC finally had to leave, giving a psychological victory to the government. Today, not being able to either enter the town easily or to collect taxes there, the VC have taken to mortaring indiscriminately.

These three villages are typical of the Tay Ninh towns on the periphery of the government-controlled region. But most villages have VC shadow officials and feel their influence to some degree. The general policy of the government, however, has been to transplant people from especially dangerous locales—areas where large-size enemy units are operating—to relatively pacified, safer, populated areas. In Khiem Hanh District, for example, there is only one populated village that is not located directly next to one of the two major highways that go through the district.

There are arguments for and against this policy. Although the people are more secure, their means of making a living are impaired, especially if they are farmers.

Rice, Tay Ninh’s main crop, is only grown during the wet season, and reduced lands mean a reduced crop. Peanuts, the off-season crop, are not extremely profitable. Tay Ninh produces one-fourth of Vietnam’s manioc crop, but the market for manioc has dwindled in recent years.

Rubber plantations in Tay Ninh are still employing approximately 3,000 people. The lumber industry however, could blossom and be even more prosperous if War Zone C were secure enough to allow lumbermen to go in and cut the trees.

But government and allied agencies are working on all of these problems. Civil Operations and Revolutionary

Development Support (CORDS) workers in Tay Ninh have been actively trying to interest local people in new farming methods and industries.

Attempts to introduce more protein into the local diet are also being stressed. Rabbit, chicken, fish and hog raising programs are making some initial progress in all four districts. Irrigation projects are operational in limited areas since Tay Ninh could grow crops 12 months a year if there were an adequate water supply. Demonstration farms planted with new types of vegetables have even been initiated to teach local farmers that more than one crop can be grown a year.

Militarily, Tay Ninh Province has seen more action in the past year than during any previous period. Because of this increased enemy activ-

ity, Tay Ninh now has a larger concentration of allied troops than any other province in III Corps, or in Vietnam, for that matter.

In addition to the 1st Brigades of the 25th Infantry Division and the recently arrived 1st Cavalry Division (Airmobile), Tay Ninh also has the 1st Brigade of the Vietnamese 1st Airborne Division. Working with these three units are numerous Civilian Irregular Defense Groups (CIDG) and nearly 8,000 Regional and Popular force soldiers in 160 locations.

Tay Ninh is by no means a pacified province. The flak-vest wearing drivers on the Tay Ninh convoy run continue to be tense and jumpy as they drive through Tay Ninh’s dusty towns—and the children don’t wave to them nearly as much as in other provinces.

But today, for more Tay Ninh people than ever before, there is the option of living in a secured area and the tangible assurance from the Government of Vietnam that the security forces will remain there.

# The Motorized Swamp Buggies



Delta airboats zip over southern marshlands at 40 mph plus!

9TH DIV

## Jet-propelled surfboards zip through marshes and swamps.

by Specialist 5 Mike West

Ever see a motorized surfboard with machine guns? You won't find them in Southern California, but try the Mekong Delta.

The airboats of Company E, 15th Engineer Battalion, 9th Infantry Division have taken to the maze of streams and canals in the delta and have proven their worth on reconnaissance missions and in actual combat.

With flat-bottomed, thin fiberglass hulls and large rear mounted propellers, the versatile airboats travel the many waterways of the delta at speeds up to forty mph. Two men, an operator and a gunner, maneuver the boat along rivers, up canals and over spongy rice paddies searching for VC.

Maneuverability is the key to the success of the airboats. Two vertical "rudders," mounted behind the propeller "fan," control direction by deflecting the stream of air. The operator is able to move the rudders quickly enough to enable him to spin the boat completely around in a rainbow of spray.

Ironically, this unique "swamp buggy" slows up in the water. Since there is no propeller in the water, the Lycoming 180 horsepower aircraft engine propels the craft faster over slick surfaces such as mud or moist rice paddies.

"It is actually easy to operate," said Specialist Four Jim L. Collins. "In fact, I could take someone out and—just by watching me—they could learn to drive it. But it takes a lot of practice and experience to drive it really well."

The crews on the airboats travel light—each boat has either an M-60 machine gun or a .50 caliber machine gun mounted on the bow. The operator and the gunner wear noise-dampening headsets. Communication between the boats is accomplished by field radios.

"How the weight is distributed has

a great effect on the speed of the machine," said Sergeant Thomas B. Reynolds. "Even the difference between the .50 caliber and M-60 machine gun has an effect. Put the '50' on and it slows us down. It also helps a lot if we position the crew, to keep their weight balanced."

Noise is a fact of life in the daily operation of the airboats. But oddly enough, this can be an advantage for the

ing in areas near waterways.

One unit that finds the airboats extremely useful is the long range patrol company of the 9th Division. Their operations usually limited to small numbers of men, are ideally suited to the use of the airboat.

The boats have been used by many to set up in a position overnight to wait for the Viet Cong. A major advantage of this craft for ambush operations



Spot checks keep the 180-horses galloping

9TH DIV

operators. The psychological effect of several loud, churning swamp buggies roaring down a narrow waterway can be demoralizing to the VC.

The primary job of the "swamp cavalry" platoons of the company is reconnaissance. Zipping through the countless streams, canals and rivers of the Delta, the boats pull surprise checks of suspicious sampans and provide flank security for infantry troops operat-

is their ability to leave an area rapidly if contact should prove too much.

Since their introduction into the 9th Division in December, 1967, the fiberglass skiffs have taken part in numerous operations in the delta.

Despite their relatively small size, the swamp cavalry platoons and their airboats are a formidable weapon in the struggle against the elusive Delta Viet Cong.



# Saigon's Pasteur Institute

## Fighting Disease in the Tropics

by Private First Class Josef Hermann

On the southeastern outskirts of Saigon 125 scientists and technicians are attempting to solve the medical problems inherent to life in a tropical climate. The exterior, park-like tranquility of the Saigon Pasteur Institute belies the fact that it is located in one of the most crowded and strife-torn cities in the world.

The main buildings of the Institute seem to make a perfect setting for a film about the more genteel aspects of life on a French rubber plantation. Their history is interesting.

French colonials who came to Indochina in the late nineteenth century were faced with a double threat to their hold on this their newest colony, native rebels and disease. The colonial government was able to subdue the rebels by use of military might and later a policy of peace and reform. But disease posed a greater problem.

Disease maintained its tight hold over conqueror and subject alike, until the scientific age of research and discovery forced it to yield to the work of dedicated men of medicine.

Louis Pasteur, perhaps the most respected medical scientist at that time, was such a man. Honored by many grateful people and governments, Pasteur was provided with funds to establish the Pasteur Institute of Paris as a place for research and study. Pasteur envisioned that branches of the Institute would spread to the French colonies around the world as symbols of France's concern for her citizens and for humanity.

So, in 1890, Albert Calmette arrived in Indochina to found the Pasteur Institute of Saigon. Calmette, who studied under Pasteur, established the Institute on the grounds of the city's Grall Hospital as a research and vaccine production laboratory.

The benefits of having a medical laboratory in the colony were felt in its very first year of existence when small pox vaccine was produced from research with the native water buffalo. The unusually long monsoon season a year later caused a flood in the Mekong Delta to the west of Saigon. Great numbers of poisonous snakes, escaping ahead of the rising waters, infested the populated areas

around Saigon, inflicting their deadly bites—for which no treatment was available—upon the helpless people.

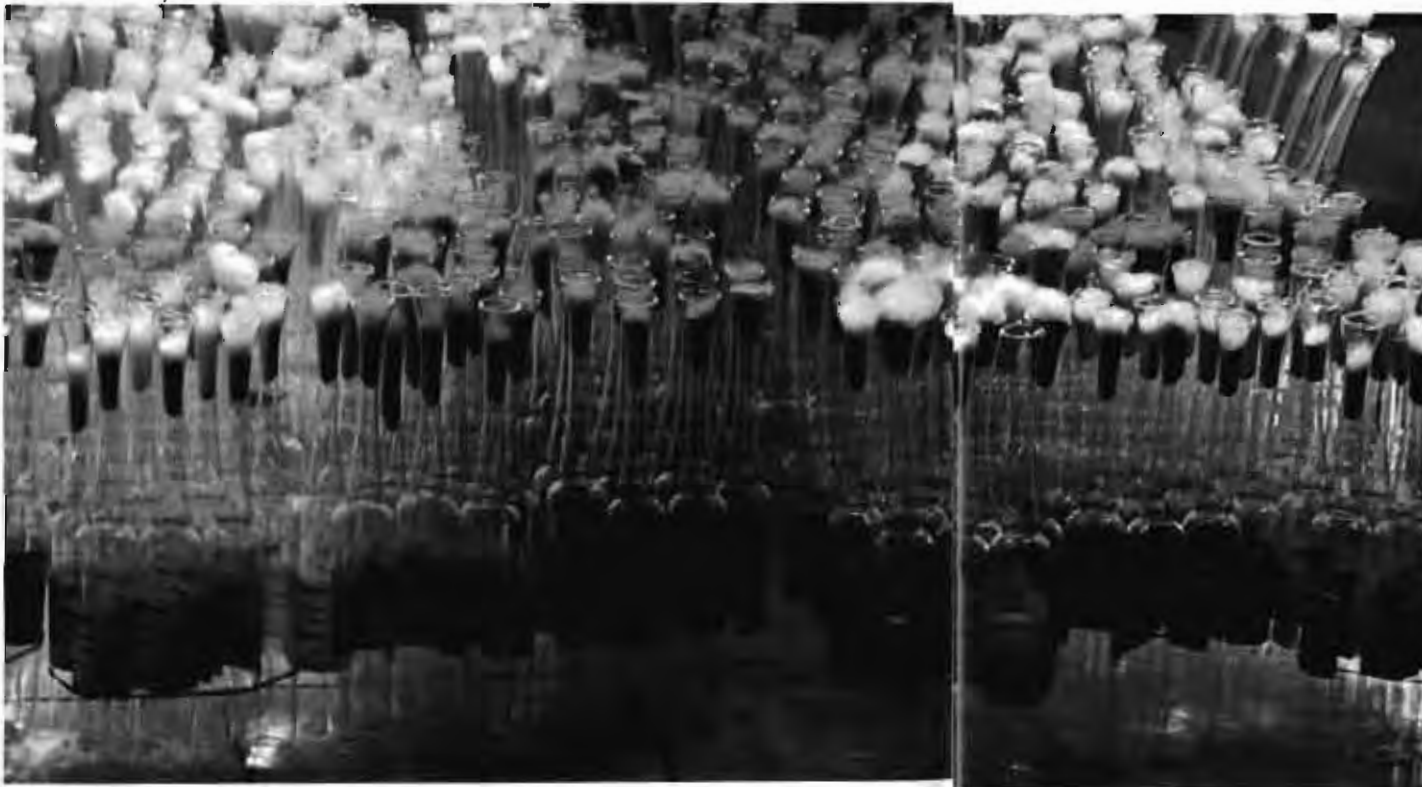
Working quickly, however, the Pasteur Institute's doctors were able to develop an anti-venom by injecting measured amounts of venom into a hog's bloodstream where the blood built up antigens to the foreign matter. Blood extracted from the animal was then refined and injected into

people bitten by snakes saving numerous lives. However, the Institute's greatest early achievement resulted from a Bubonic Plague epidemic which, in 1894, claimed many lives in Hong Kong but had not yet spread to Indochina.

Bubonic Plague was an old and well-documented disease. Its symptoms and effects were known, but its cause remained a mystery until Dr. Alex-

*Volumetric apparatus  
are used for  
exact measurements  
—a must in micro-  
biological work*

*Test samples provide fuel for the Institute's research*



ander Yersin travelled from the Saigon Institute to Hong Kong and brought back plague specimen materials from which he was able to isolate the plague germ, later called *pasterrella pestis*.

Then, in 1895, a branch Institute was established in Nha Trang to carry out all research involving animals, a task which it still performs today. Transferred to Nha Trang, Dr. Yersin continued his work on plague until he was able to perfect the first inoculant against human plague.

The Saigon Pasteur Institute remained on the grounds of the Grall Hospital until 1924, when it moved into the buildings of a former Christian Brothers school on the other side of the city. A construction program completed in 1926, resulted in a building complex forming three sides of a rectangle bordered by Rue Pasteur on the outside. In a final expansion move, Dalat, 150 miles north of Saigon, was chosen as the site of the third Pasteur Institute in 1936.

In the years that followed, the Pasteur Institute's activities were closely tied to the ups and downs of France's position in world politics.

The Institute's directory remained in French hands until 1957, when it was taken over by the three year old South Vietnamese government. Presently it is organized as a public institution receiving a 16 million piaster yearly grant from the government, which is further supplemented by an agreement to sell all its vaccine to the Department of Health.

Due to increased American involvement in South Vietnam a new role as an "assay office" for the United States

Agency for International Development (USAID) projects, has been thrust upon the Pasteur Institute. According to Dr. Nguyen-Van Liem, USAID advisor to the Institute, once USAID decides to support a Vietnamese industry it sends samples of the raw materials or by-products to the Institute for chemical evaluation.

Such projects range from breweries and distilleries to soya oil and *monosodium glutamate* producing factories. In fact, residue products of *monosodium glutamate* were found to have a substantial protein content and could possibly be used as animal feed. This residue, mixed with fish, is now undergoing extensive feed testing with hogs and chickens on a farm near Tan Son Nhut Air Base.

Part of this increased workload is handled by the *Laboratoire de La Peste*, established on the southeast corner of the Institute's grounds in 1964, as a cooperative venture with a Walter Reed Army Hospital research team. One of the most complete parasitology laboratories in the world is housed in this modern facility. Here, work is being done on the age-old problems of malaria and plague newly aggravated by the unsettling factors of fighting a war among a civilian population.

Another current research project underway, involves cross-breeding several strains of anopheles mosquitoes to determine if the resulting hybrid has an increased or decreased resistance to anti-malarial drugs.

One experiment closer to yielding results involves the trapping of live rats in various parts of the country.

The bubonic plague germs trans-

mitted through the spleens of the trapped rats are surgically removed and sent to the laboratory for analysis. If the laboratory finds the spleen to be plague-infected it alerts the sanitation agencies in the area the rat came from, to step up its pest control program. In this way the plague cycle is broken before it can spread to humans.

The *Laboratoire de La Peste* also has a complete collection of snakes and insects which are found in Vietnam. A glass tray about one foot square holds a mosquito collection which looks more like a pin collection, so small are the mosquitoes on the pin heads. The snake collection has several Krait, a black snake with white markings, (see page 31) which the American soldiers call "two steps" because "that's all you can take after you get bitten."

Still another function served by the Pasteur Institute is that of a pure food and drug agency. Since the war time economy of South Vietnam has created a shortage in certain food and luxury items, this function is a most important one as well.

The paralyzing effects of mixing petroleum oils with cooking oil are well known, yet a short time ago in a province north of Saigon, toxic fish were deliberately sold to unwary customers. That cheap Seagrams Seven or Johnny Walker Red which the American soldier bought in Saigon's Cholon district may have been diluted with tea if he was lucky, with wood alcohol if he was not.

The Institute serves a function in these cases also. Samples from cases such as these are brought to the Institute's *Laboratoire des Fraudes*, where they are analyzed and documented as expert-witness evidence for prosecution by the Department of Justice.

The war's demands upon the Institute have not restricted themselves to the field of medicine. Skilled manpower has been diverted for military service from the Institute, noticeable by the many young women technicians working at the Institute.

However, many positions still remain waiting for qualified personnel. "It is our hope," stated Dr. Liem, "that more American scientists will come here in a cooperative study arrangement similar to the Walter Reed Hospital participation in the *Institute de La Peste*."

Such an arrangement would no doubt benefit both Americans and Vietnamese alike.

Albert Calmette, founded Institute in 1890



## She Could Be the Girl Next Door

### Perky lasses add zesty spark to Vietnam

by Lieutenant Tom Sileo

Cindy Broyles, blonde, well tanned and fidgeting with her cigarette, sat back and said smiling, "You know, we're the only people in Vietnam who have fun jobs. We have fun every day."

The "we" refers to the 24 Red Cross "Doughnut Dollies" working in the III Corps area as part of the Red Cross's Supplemental Recreational Activities Overseas (SRAO) program. The program itself began in Vietnam in 1965 at the request of Gen W. C. Westmoreland and by an agreement between the Department of Defense and the American National Red Cross.

SRAO's job, according to Miss Quinn Smith, its affable director officed at

Oklahoma's Darlene Sellers hostesses on early morning "guessing game."

MACV Headquarters in Saigon, is "to assist the military with morale programs for members of the armed forces serving in overseas areas." And the girls, through planned and self-directed recreation are accomplishing their mission.

The SRAO girls are quite special. They come from Maine to Hawaii and each is a single college graduate between 21 and 25. Before accepted for service in Vietnam, they are interviewed by their nearest Red Cross office.





Checks are made into their educational backgrounds, their likes and dislikes and their reasons for wanting to become SRAO volunteers. Once selected to serve the normal one year tour of duty, the girls are given a two week orientation on Vietnam and recreational programs in Washington, D.C.

Once in country, the girls receive another orientation in Saigon where they are shown the "big picture" of SRAO, Vietnam. Then it's off to work.

In South Vietnam there are 110 girls working at 17 locations from Phu Bai to Dong Tam. At each office, a military unit serves as sponsor to lend a helpful hand and keep an eye on the girls' welfare. In III Corps the girls work from Long Binh, Cu Chi, Lai Khe and Bien Hoa offices and are sponsored by II Field Force, 25th Infantry Division, the 1st Infantry Division and the 20th Engineer Brigade respectively. Each III Corps office has six girls supervised by a unit director.

The most commonly asked question of the girls is "Why did you come here?" and the answers naturally vary. Doreen "Smiley" Miley, unit director of the girls at Long Binh, came because it gave her "a chance to be patriotic, to gain some self-confidence and to mature." The University of Alabama graduate also added, "I love to travel and this is a golden opportunity to see things and meet people. And believe me, I've met quite a few interesting people!"

Another girl, Karen Melgaard, unit director at Cu Chi, has a brother who was a medic with the 101st Airborne. She came to Vietnam because "While I was teaching sixth grade in Berkeley, California, the war upset me. I began thinking, 'What are the people at home doing for the troops here?' I thought that the presence of women could help, so here I am."

An ex-probation officer in San Bernardino Valley, California, Cindy Broyles, now at Cu Chi, didn't want to settle down and was curious as to what was happening here. She has, as do almost all the SRAO girls, an unquenchable thirst for adventure and a serious concern for people. So now she works in a gray wooden building at Cu Chi, the door of which is adorned with a glowing psychedelic daisy. The walls are draped with quotations from Peanuts.

Both permanent recreation centers and clubmobile service is given by SRAO to military personnel where security permits. And security permits the "Morale Molls" to travel extensively. From their choppers and jeeps, the girls cover an average of 30,000 miles monthly and see approximately 60,000 men a week.

While no official office hours are kept, the girls' day usually begins at 9 a.m.



*Darlene and Pat Coulston relax between stops—HICTZ "Dollies"*



*average 30,000 miles monthly*



*The girls (above, top and bottom) enjoy the social aspects of their job best*

with the first "run". Stopping at various units for an hour at a time, they supervise games, serve chow, distribute "short-timer" calendars, chat with the men, read to hospitalized GIs and act as morale boosters in general.

"Just seeing a living, breathing American female makes it a little nicer for the guys out there digging foxholes," according to Smiley. "And we work with men from all types of units big and small."

But the job isn't always easy. The initial G.I. reaction when a pair of American Red Cross girls come into a mess hall with a bag of props is often one of skepticism. At times, due to a lack of interest, a changeover of personnel or a lack of publicity the groups

of soldiers that turn out for their visits are small, but it doesn't dampen the girls' enthusiasm. Most of the volunteers are good leaders and strong-willed enough to accept the challenge of their job. Resignations are almost "nil" even though the contract which the girls sign is more morally than legally binding.

Working in pairs and changing home bases every three or four months, the girls, usually self-conscious and apprehensive at first, end up whistling and shouting back at fun-loving soldiers. Most feel that being in Vietnam changes them in some ways. Tolerance and a sense of humor become predominant attributes but, strange as it may seem, no pronounced political convictions are

formed. They come to help the troops, not to debate the war.

Maine's gift to the SRAO unit at Bien Hoa is 22-year old Linda Bail of South Portland. Linda, one of Bien Hoa's "Koolaid Kids", has only been in Vietnam a few months but is proud to be here. The former congressional case worker smiled as she spoke of her fellow workers. "Of course we girls have to combat the man-hunting reputation some men give us. The fact is that not many of us get married to men we meet here at all. One thing is certain, however, and that is that almost all the SRAO girls are idealistic and have a sense of adventure."

One year does not make a career, but it does make for a number of memories

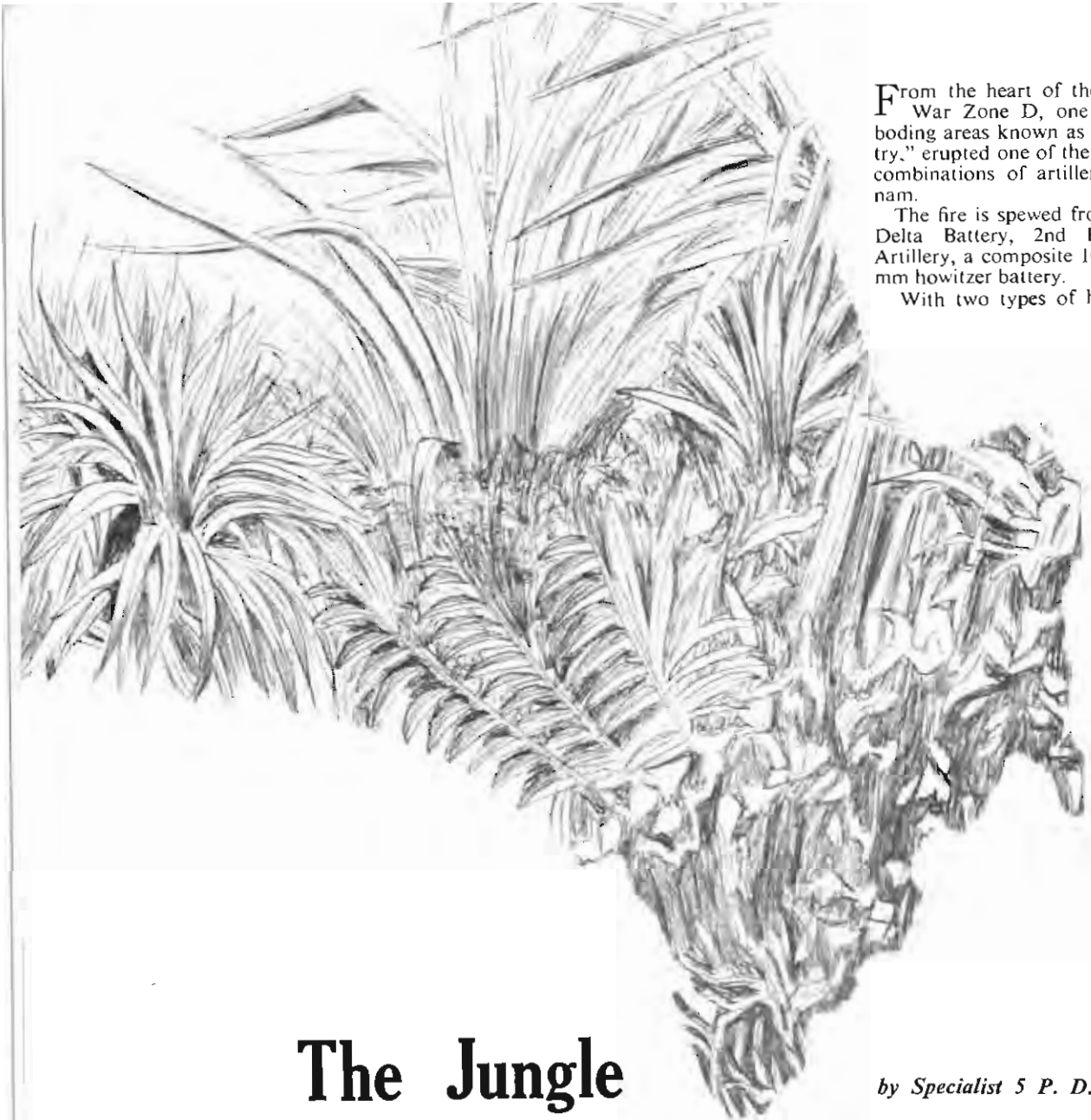
—some good, some unpleasant. Once Karen Melgaard, having made an inadvertent error in scoring during a GI team competition at an Army hospital, entered the hospital the next day to the chant of "Here comes the cheater." Since then she has been known affectionately as the "Cu Chi Cheat."

"Misty" Lettieri, a pretty 23-year old brunette from New York City, lists last Christmas among her fondest memories. Working out of Long Binh, "Misty" spent Christmas with the 199th Light Infantry Brigade. "We sang Christmas carols near a bunker and around a dead, brown Christmas tree decorated with grenade pins, paper scraps and beer and soda can flip-tops."

The 1st Infantry Division has also

provided some memories for Ann Spillane's girls at Lai Khe. One girl was asked by a GI to buy and send a doll to his daughter for her birthday. She did so and came back—bubbling over—to tell the soldier that the doll was mailed and would arrive in time. But he had been killed in action that same day.

The year or more which the "Donut Dollies" spend in Vietnam is as unique for them as is the time for the troopers whose morale they try to spice up. So, the next time you hear a soldier ask, "How come no donuts?" or "What are you doing in a place like this?" he's probably talking to a Red Cross volunteer trying to add a zesty spark to life in the foxhole.



From the heart of the hot jungle of War Zone D, one of those foreboding areas known as "Charlie Country," erupted one of the most explosive combinations of artillery fire in Vietnam.

The fire is spewed from the tubes of Delta Battery, 2nd Battalion, 13th Artillery, a composite 105 mm and 155 mm howitzer battery.

With two types of howitzers, Delta

# The Jungle Battery

*Support for  
the Mobile Strike Force*

*by Specialist 5 P. D. Savanuck*

Battery packs a double punch—the high explosive power of the 155 mm projectile, to penetrate the thick jungle canopy, and the immediate response and perimeter defense of the 105.

Delta Battery is committed to the direct support of the 3rd Mobile Strike Force (MIKE), a joint U.S.—Vietnamese Special Forces command, and wherever the trouble-shooting MIKE Force goes, so goes its "jungle battery."

"The fact that this battery moves into what amounts to little more than clearings in the jungle, is a testimony to the adaptability of this unit to any combat situation," according to battery commander Captain Joseph Lander.

This custom-tailored composite battery evolved from the experience of the 23rd Artillery Group and the 3rd Mobile Strike Force in Tay Ninh Province. There, the 23rd Group supplied direct

coverage for the MIKE Force in the form of a 155 mm howitzer platoon deployed in the vicinity of an operation.

Formerly, the MIKE Force had to depend upon random 175 mm and 8-inch support. But with 155-tubes and a 23rd Group forward observer following the ground troops' every move, they got quicker, more accurate fire.

It was decided that the MIKE Force should have a traveling companion for



*The battery sweeps into  
a new position.*

*A 155 mm air burst blasts  
the enemy a few hundred  
meters from  
the howitzer's position*







Water detail resupplies the outfit using old powder cans

SAVANUCK

operations in War Zone D, the eastern sector of III Corps Tactical Zone. To the three high explosive 155 mm howitzers, three 105 mm howitzers were added to provide the rapid, continuous fire needed for the defense of the battery and the MIKE Force base of operations against close-in ground attacks. "Beehive" and "Killer Junior," perimeter defense ammunition peculiar to the 105, have prevented many isolated fire support bases from being overrun.

In effect, to capitalize on the separate advantages of both calibers for jungle operations, the 23rd Group created this completely integrated composite battery.

To Major Jerry Lollar, deputy commander for operations, 3rd Mobile Strike Force, the composite battery means "Flexibility—with the 155's we get long-range fire power; with the 105's we get immediate response."

"In reality, what has been created is a miniature infantry division—our own task force capability. With the artillery, we are independent, moving anywhere,

needing little more than logistical support."

Besides the tactical deviation from the "conventional" role of the artillery, there are other features which make Delta Battery unique.

The 105 mm bunkers and parapets have been built much sturdier than ever before in Vietnam because the blasts from the 155's collapsed the standard 105-constructions at first.

Because the two caliber guns come from different battalions, the battery benefits from the logistical support of two battalions instead of one. Also, there are no duplications in the battery's chain of command. From the commander to the chief of firing battery, there is only one man in each position of responsibility with the authority evenly distributed between the two participating units.

But perhaps the most distinguishing factor about Delta Battery is that the men manning the 155's are New Hampshire National Guardsmen from the 3rd Battalion, 197th Artillery and the

men on the 105's are regular army cannoners from the 2nd Battalion, 13th Artillery.

Odd as this combination may seem, Guardsman Sergeant First Class Romeo Dupont, chief of firing battery, sees nothing but "one army unit meshed together for a common purpose."

This assessment has been echoed by such dignitaries as General Ralph E. Haines, Jr., Commanding General, U.S. Army, Pacific, who made a stop at Delta Battery during his recent Vietnam tour.

The sign set out at every battery location reads:

D BTRY  
2D BN, 13th ARTY  
23D ARTY GP

THE US ARMY'S ONLY  
JUNGLE BATTERY

DON'T LOOK FOR IT ON A  
TO & E  
IT'S NOT THERE, IT'S HERE



WILLIAMS



REINIGS

## From marketplace.... to....

Even in this land of contrasts, a passerby can hardly believe his eyes when he sees 42 Chu Manh Trinh, Saigon.

Here is Vietnam's answer to the state-side A & P, Nguyen Du Supermarket, unique in Vietnam.

An average of 4,000 Vietnamese do their grocery shopping here daily. Complete with U.S. imported shopping carts, soothing music and air-conditioning, Nguyen Du Supermarket is as different from the common street market as filet mignon is from dog food. And, encouragingly, it's one of Saigon's biggest hits with the people.

The supermarket is actually a pilot project of the GVN to raise the marketing standards in Vietnam and to stimulate small Vietnamese businessmen to go into the modern supermarket business.

Only government employees, ARVN soldiers and their families and a few fixed income families can shop at Nguyen Du. Membership cards, allowing one visit per day, are issued and punched as the customer enters the store.

Moving from the street into the supermarket is like going from one world to another. Inside, the customer can read

the colorful and instructional posters adorning the walls. And, he can relax in the only air-conditioned Vietnamese run store in Vietnam.

Choosing from the stock of 1000 different items, 30 per cent of which are locally produced, is a welcomed pleasure and a marked change from the rather limited stock of the street market. There's no haggling over prices, no high pressure salesman and, most important, no doubt as to the quality of the merchandise purchased.

Laid out like the big American supermarket, Nguyen Du market's aisles display everything from Campbell's soup to duck eggs, from tuna fish to oxtail, from the traditional *nuoc mam* to colorful chinaware.

Large freezers keep meat and other perishables frozen so that they can be packed and sold fresh. Refrigerated "reefer" trucks transport the various meats from the docks and Saigon's slaughter-house direct to the store where employees cut, weigh, wrap and price it.

Opened in Oct., 1967, the store is government run and self-sufficient. It operates on its profits, yet its prices are low.

## Nguyen Du Supermarket

A Unique experience for  
Vietnamese shoppers

by Lieutenant Tom Sileo

## Aisles display everything from soup to duck eggs

Mr. Tran Thien An, a Warrant Officer in the South Vietnamese Army, and the store's supervisor explained, "The store is operated on the proven volume-selling theory. Selling in quantity means reduction in price yet a profit to the store. A pound can of mackerel in sauce, for example, costs only 45 piasters, but only because we sell a large number of cans a day."

The daily sales volume of the store is approximately \$10,000 while the yearly sales are in the vicinity of \$3,000,000. The average shopper spends about 325 piasters a visit. No luxury items are stocked; and most items are sold on a self service basis.

Cleanliness and courtesy are trademarks of Nguyen Du. Blue-uniformed checkout girls, some of the store's 80 employees, man the eight cash registers and pack what the customer buys in brown paper bags.

If the customer has any suggestions he can drop them in a box provided, perhaps after having a refreshing drink of ice water from the USAID donated water fountain.

The crowds of shoppers are usually well dressed and always well behaved; the security guard has a boring job. But even with all this, the store isn't the only unusual thing about this venture. Its supervisor is an oddity also.

Mr. Tran Thien An is a one man dynamo. He supervises all aspects of the store's operation, makes health inspections and gives advice and help to each of the 42 smaller and privately owned "superettes", the outgrowth of the Nguyen Du Supermarket. Mr. An, who holds a master of science degree in retailing from New York University is the only man in South Vietnam who has an American degree in retailing.

"It takes time to get the necessary equipment to set up a store, but the lack of qualified personnel is our biggest problem," admits An. "But, we have managed to get 42 'Superettes' opened and that's not bad progress."

Obviously he has solved some of the major problems. Though merchandising is extremely difficult in Vietnam, An has managed to obtain 1,000 items with which to stock the store. He has imported prime inspected meats from the U.S., Denmark, Japan and South America. One of the reasons for the popularity of the Nguyen Du Supermarket in fact, is that it has items which are impossible to obtain at the street market.

Trying to improve the store's efficiency, An has had students from Dalat University's School of Politics and

Management do surveys on customer buying habits, types of customers, good and poor selling items and price fluctuation. He has set aside Sunday for the employees to shop and has the store operating six days a week.

"The main purpose of this entire experiment is not to take business away from the Vietnamese businessman. It's not to governmentize or monopolize the market. On the contrary, it's an example, to show these businessmen that a modern, clean, efficiently run supermarket will work and is better for everyone. We are trying to entice him into going into this type of business. Vietnam needs stores like this," emphasized An.

Apparently the experiment is working. Plans to open another large supermarket in the near future are drawn and the rise in requests from people wanting to open "superettes" is a healthy sign.

Besides the initial outlay of money involved to set up a superette, the only other requirement is that the owner be Vietnamese. Once the new owner has opened his store he is given technical and practical assistance by the Supermarket Administration and Development Committee, a fairly new government organization. The committee then sets up standards for the new store to insure that it is well run and sanitary.

Vietnam is a land of contrasts. And, perhaps the most marked contrast is between the new, modern supermarket and the common street market. But change is also a characteristic of the country and changes, attributable to the new supermarket trend, are already noticeable.

"We are creating a team shopping idea among the people," said An. "Already men and women are shopping together. Entire families shop together. They really enjoy the atmosphere, cleanliness and efficiency of the store."

Another innovation is that an increasing number of men are doing the shopping. "Men, who would never think of shopping at the street market, are shopping here even during their lunch hour," added An.

"This experiment will change the Vietnamese conditions of marketing," concluded an optimistic An. "Meat and produce will be of the quality it should be. Prices will be kept low."

In a land where change is sometimes not readily accepted, the new supermarket idea has caught hold. A most hearty and encouraging welcome has been extended it by the Vietnamese. As one of its innovators commented, "It's a good thing, progress, for our people."

*The new look of the city marketplace?*





# Michelin Rubber Plantation

by Specialist 5 Arnold Braeske

The words "Michelin Rubber Plantation" have an ominous ring to U.S. soldiers fighting in the III Corps Tactical Zone (IICTZ). Like the notorious places 10 miles away Ho Bo Woods, War Zone "C," the Iron Triangle—the Michelin Rubber Plantation has also exploded with vicious fighting.

"The Michelin" has led a life other than that of a battlefield, however. It has been a crucial area of Vietnam's economy, and is one of the more famous, French-owned rubber plantations of the "Indo-China" era.

The 35 square miles of rubber trees that make up the plantation are located at Dau Tieng, 45 miles northwest of Saigon. This wooded area, halfway between Cu Chi and Tay Ninh, has been a favorite route of heavy North Vietnamese Army (NVA) infiltration from Cambodia and an area of a deeply imbedded VC infrastructure.

In 1925, however, when the colonial government conceded the plantation area to the Michelin Company of Plantations and Pneumatics (Tires) of France, the region was little more than a thick woods teeming with wild animals.

Throughout the late 1920's, Tonkinese people, contracted by Michelin from North Vietnam, cleared the brush off the land that now forms the plantation. The *Michelin Société* (French for "company") then built a large rubber processing factory on



the bank of the 50-foot wide Saigon River in what is now the tense village of Dau Tieng.

Scattered throughout the rubber, 24 nearly identical villages—each complete with schoolhouse, pagoda and Catholic church—were constructed to house the workers in the plantation. And a 300-bed hospital was built inside the plantation in 1930.

In what is now the 3rd Brigade, 25th Infantry Division headquarters

at Dau Tieng, the *Michelin Société* built 22 yellow and red, two-story buildings to serve as offices and houses for the French managerial staff. Some of the buildings, classified more properly as mansions, are today surrounded by U.S. tents and temporary buildings of the 3rd Brigade. In the brigade area are also the two swimming pools and the aircraft landing strip built by the French.

At its peak, this immense planta-



tion had a staff of 25 Frenchmen living at Dau Tieng and employed 4,500 Vietnamese rubber workers. Three company planes then shuttled between Saigon, Dau Tieng and Michelin's other plantation at Thuan Loi conducting business. In its prime, the Dau Tieng plantation was producing 7,000 tons of pure latex rubber a year.

For the French employees then at Dau Tieng, the social life offered

by fellow Frenchmen on nearby plantations, or Saigon, an hour away by automobile, was a pleasant one. But these peaceful boom years ended with World War II. At that time, the French left Vietnam and a Japanese battalion was stationed in the Michelin Plantation for the duration of the war.

When the French returned to Dau Tieng in December, 1945, they brought security troops with them.

## French-owned symbol of pre-war elegance

For the next eleven years, security in the plantation area was provided by a strange assortment of military units.

In 1947, an armored squadron of the 2nd Moroccan Spahis, outfitted with halftracks and scout cars, prowled through the plantation. Then in 1950, the 9th Regiment of Tirailleurs, composed of Vietnamese and Algerian riflemen, were assigned to control local Viet Minh activity. They were aided by a unit called Commando "46-P," a group of 150 Cambodian counter guerrillas.

The last major French unit to camp on the current site of the U.S. 3rd Brigade headquarters was the famous 13th Half Brigade of the French Foreign Legion. Two battalions of the 13th Half Brigade stayed at Dau Tieng from 1951 until January of 1954, when they left for Dien Bien Phu. At Dien Bien Phu, the 13th was the unit that fixed bayonets and charged the Viet Minh when their own ammunition was used up.

The departure of the last French-backed troops from the Michelin came in 1956. From that time till the present, life in the Michelin Plantation has been marked by reduced rubber output and increased VC-NVA and allied ground fighting.

The plantation today is listless and idle compared to its prime years.

Of the nearly 5,000 employees the plantation once had, today only 1,200 remain employed there. Of the



French staff, only five are left in Vietnam, all living in Saigon. For reasons of security the French have not gone into the rubber rows of the plantation since 1965, but once a week the French manager of the plantation visits Dau Tieng by plane to discuss business with his Vietnamese manager.

Today, the hospital in the plantation and most of the villages have been abandoned. The majority of the 2,000 people living in the plantation in early 1969 were clustered at its southern end, near Dau Tieng, to avoid harassment and taxation by enemy soldiers.

Only a third of the plantation is actually worked for rubber today. The balance of the plantation's rubber rows crowded by undergrowth,

are untapped.

The town of Dau Tieng itself, runs at a turtle's pace. A few employees busy themselves maintaining equipment and cleaning tanks and vats while mechanics work on the engines of old, square-hooded Citroen trucks, and Peugeots.

In the 3rd Brigade basecamp, the yellow, red-tile-roofed buildings that Michelin built in the 1920's show the spattermarks of hundreds of incoming rockets and mortar rounds, many of them launched from the plantation itself.

This present condition of the Michelin Plantation at Dau Tieng is the result of 25 years of war. What will become of it in the future will be determined by the three parties that affect it strongly—VC-NVA troops,

#### *Plantation well near Dau Tieng*

the French, and allied military forces. All are concerned for its preservation, but for differing reasons.

The VC-NVA use the plantation as a sanctuary and the entire region around it for an infiltration route from Cambodia to Saigon. Although the enemy knows that by his very presence in the plantation he turns it into a battlefield, the VC-NVA do not want the Michelin destroyed. Working on the assumption that they will win the war, they view it as a future money maker.

The French people in the Michelin Society view the plantation with both a financial and sentimental eye. Although these 35 square miles consti-

CLEVELAND

*Vietnamese infantrymen on patrol in the plantation—potential economic power, current tense battlefield*



CLEVELAND





French fortification at Michelin (1952)

tute only a fraction of the holdings of the International Group of Michelin and could easily be liquidated, the Society has continued to operate the plantation at a financial loss since 1963. All of the money made from the plantation is reinvested in Vietnam, some of it in the bicycle tire factory which Michelin runs in Saigon. Financially, the French managers are hoping for better times.

Most of the Michelin Society employees in Saigon have another bond with the plantation, one that has nothing to do with finances. It could best be described as an emotional tie. Dennis Breuchard, the manager of the Michelin Plantation, has been with the plantation since 1946. Though he has not been inside it since 1965, his attachment to it is still there.

"The feeling they have for the land is strong," said one U.S. officer. "A farmer would understand it."

The U.S. position regarding the Michelin Plantation is generally sympathetic toward preserving the rubber. U.S. officials are aware of the financial value of rubber to Vietnam (at one time its leading export) and of the eight years involved in raising a rubber tree.

Nevertheless, U.S. units have run into bloody contact nearly every time they have swept the plantation. U.S. commanders have occasionally come across strolling groups of five or six



North Vietnamese workers contracted by Michelin built defense against the Viet Minh in early 50's

Viet Cong so confident in their sanctuary that they were without weapons.

So, to combat the enemy's feeling of security in the plantation, American units have requested and received permission to destroy bunker systems by air, and to clear limited fields of fire with Rome plows. However, much of the fighting continues to be bloody,



dug-in firefighting among the rubber rows.

The difficulties of the Michelin Rubber Plantation have been difficulties suffered due to the war. Progress during war isn't easy. But regardless of these setbacks and the semi-dormant state it is in today, the Michelin remains one of Vietnam's brightest natural resources.

# Reptiles of South Vietnam

## Fact and Fantasy of the Tropical Vipers

by Captain John Miller

The average GI can take rockets and mortars in stride. He can even tolerate "Charlie's" not-so-accurate sniping. But toss a snake into the picture and immediately you've got some mighty upset soldiers.

A young trooper was riding atop a tank when his commander, traveling along behind, spotted a Green Bamboo snake hanging out of the branches overhead. Calling to the man to keep perfectly still, the CO fired at the snake—and missed. But he was more successful with his second shot, cleanly blowing off the reptile's head.

This story reflects a recurrent bad dream among jungle fighters. Constantly, questions about snakes keep soldiers worried. What of the "cigarette snake," after whose bite you have time only for a smoke? And what about the "hundred step" snake that everyone has heard of? Are these snakes as poisonous as they are reputed to be?

Major Herschel H. Flowers, the 44th Medical Brigade's snake expert, has helped dispel some of the persistent superstitions about snakes in Vietnam. A member of the brigade's 20th Preventive Medicine Unit at Bien Hoa, Major Flowers specializes in herpetology, the study of snakes. He previously served in Costa Rica where he developed two anti-venoms which can be used to treat the bites of every poisonous snake in that country. Says Major Flowers of his occupation, "Everybody has his bag. Mine just happens to be filled with snakes."

Naturally, snakebites aren't any fun as Major Flowers knows. Bitten by an Indian Cobra, he described the sensation as "having liquid fire under your skin."

Actually those familiar with snakes realize that most likely the only results of a snakebite will be "a long convalescence and a lot of trouble." But they are acutely aware of the differences between poisonous and harm-

less snakes.

The key to identifying a poisonous snake, according to Major Flowers, lies in the presence or absence of poisonous fangs. "If the reptile has fangs, then it's poisonous. It's as simple as that." But since most of us don't intend to get quite that close to a snake to check him out, the safest policy is to understand and recognize snakes and then to carefully avoid the poisonous ones.

Major Flowers identifies two general types of poisonous snakes in Vietnam. First is the pit viper group, so-called because of their broad, triangular heads and the characteristic pit between the nostrils. Their fangs are moveable, or hinged, and fold along the roof of the mouth when not in use.

These snakes are similar in this respect to their American relatives, the rattlesnakes and the Copperhead. The fangs of the other group, the elapids, are shorter and remain in a fixed position toward the front of the mouth. These snakes, which include the cobras, must hang on to their victims in order to inject their poison.

The common pit vipers in Vietnam are only two in number. They include the Bamboo Snake, or "Green Snake" Viper, and the Malayan Pit Viper. In fact, these two species account for nearly all the poisonous snakebites among military personnel in Vietnam.

The Bamboo Snake more feared than the others, is one of several tree-dwelling green snakes. Typical stories about this snake concern his supposed habit of dropping out of trees to bite people.

All in all the Bamboo Snake has a fearful reputation, but most of it is only superstition. Found throughout the lowlands of Vietnam, and particularly in the jungle areas, this snake is responsible for many of the injuries to U.S. servicemen, but its bite is rarely fatal. In reality, it scares more people than it harms. It really doesn't drop

from trees either.

The other common pit viper, the Malayan Pit Viper, is a ground dwelling snake found throughout the Vietnamese lowlands and especially around rubber plantations. This snake reaches a length of from two to three feet, has an irregularly-patterned brown coloration and is somewhat similar to the American Copperhead. While more venomous than the Bamboo Snake, the Malayan Pit Viper presents little or no danger to a well-clothed soldier wearing boots.

Similar to the pit vipers with their long erect fangs, is the Russell's Viper. Widely known, this snake is thought to be responsible for more deaths than any other snake in the world. Growing to a length of five or more feet, the Russell's Viper is characterized by dark brown circular spots on a light tan background. Fortunately, however, there are no substantiated reports of this snake in Vietnam and its presence here is highly questionable.

But there's no question about the Vietnam presence of the Elapid family of snakes. These fixed-fang reptiles include the cobras and kraits.

The first of these reptiles is the common Asian Cobra, a snake whose most distinctive characteristic is his ability to flatten and widen its neck to form a characteristic hood. All members of this species are dangerously venomous, though effective anti-venoms exist so that fatalities in promptly-treated cases are few.

In color, the Asian Cobra varies from brown to olive drab (OD) green to black, and averages four to five feet in length. In some cases it may reach seven feet. Recently, a specimen nearly seven feet in length was caught at Long Binh Post. Contrary to popular belief, however, the cobra is not a particularly aggressive snake, and prefers, if opportunity permits, to beat a hasty retreat from humans. All things considered, though, this snake



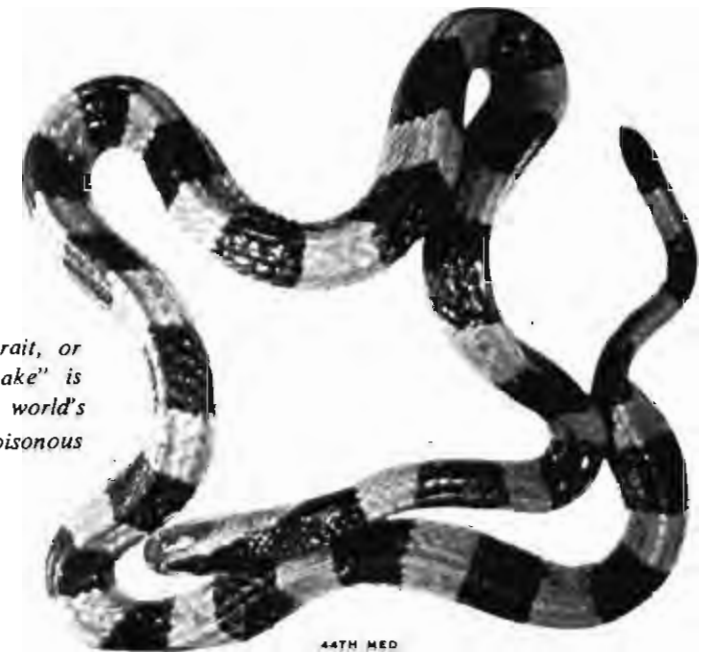
*Chinese Cobra—  
the hooded dragon*



*Malayan Pit Viper  
is found  
in the lowlands*

44TH MED

*Venom of the Banded Krait, or  
"Cigarette snake" is  
among the world's  
most poisonous*



44TH MED

*A Chinese Green Tree  
Viper (Bamboo snake)  
lurks in the jungle  
foliage awaiting his prey*



44TH MED



and its krait cousins are better left alone.

There are three types of kraits in Vietnam, all of which can be identified by their banded markings. The snake itself is usually black or brown and banded along its entire body by yellow or white markings. In length it ranges from three to five feet, but on occasion reaches six feet. This is the "cigarette snake," so-called because of the common superstition that once bitten by this reptile, a person has time for only one cigarette. Actually, though the venom of the krait is among the most toxic in the

world, it has an extremely slow reaction time.

In contrast to cobra venom which is rapidly absorbed, krait bite symptoms appear only slowly and build in intensity. For example, in one case involving an American soldier here in Vietnam, the victim entered the hospital nine hours after the bite without exhibiting serious symptoms!

Later, however, the severity of the symptoms progressed to a critical

state. Antiserum was administered and recovery was complete, but without treatment, most bites do prove fatal.

Related also to the kraits and cobras, though considerably more rare, is the Asian Coral Snake. Red with black longitudinal stripes and cross-bands, the Asian Coral is small and rather timid, and generally does not present problems. But their bite is potent, and they should definitely not be handled.

Finally, there is the King Cobra. Seldom seen, but definitely a frightening and impressive sight, the King Cobra, is the largest poisonous snake in the world. This reptile sometimes attains a length exceeding 18 feet.

With its gigantic size and potent venom, almost all bites by this snake are fatal. But fortunately it is seldom encountered by U.S. military personnel and there are no recorded King Cobra bites in Vietnam.

An important thing to remember about nearly all the snakes found in Vietnam is that generally they are as frightened of people as people are of them. Few are aggressive, and some, including the Asian Cobra, are considered to be actually docile by professional snake handlers like Major Flowers.

The cobra only spreads its hood when extremely provoked and, like

the other snakes in the area, will generally leave people alone, unless stepped on.

There are, however, certain *don't's* that must be observed in dealing with snakes in Vietnam: *don't* handle them, *don't* put unprotected hands and feet into areas where snakes are likely to be found, and *don't* tease or molest them.

Despite all the stories, rumors and superstition that abound concerning snakes, there have been only a few deaths of U.S. personnel in Vietnam from them, and the risks, in general, to a careful person are not very great.

Persons unacquainted with snakes frequently have the fear of dying after being bitten. Quite frequently, shock is a very important factor, and it is possible to go into shock from the bite of a harmless snake, through fear.

Then there is the reaction of the professional snake handler. "A pro-

fessional handler," according to Flowers, "realizes that when he takes a bite he's got an emergency, but he doesn't panic. He doesn't worry much about dying . . . but rather thinks about all the time and trouble it's going to involve getting well."

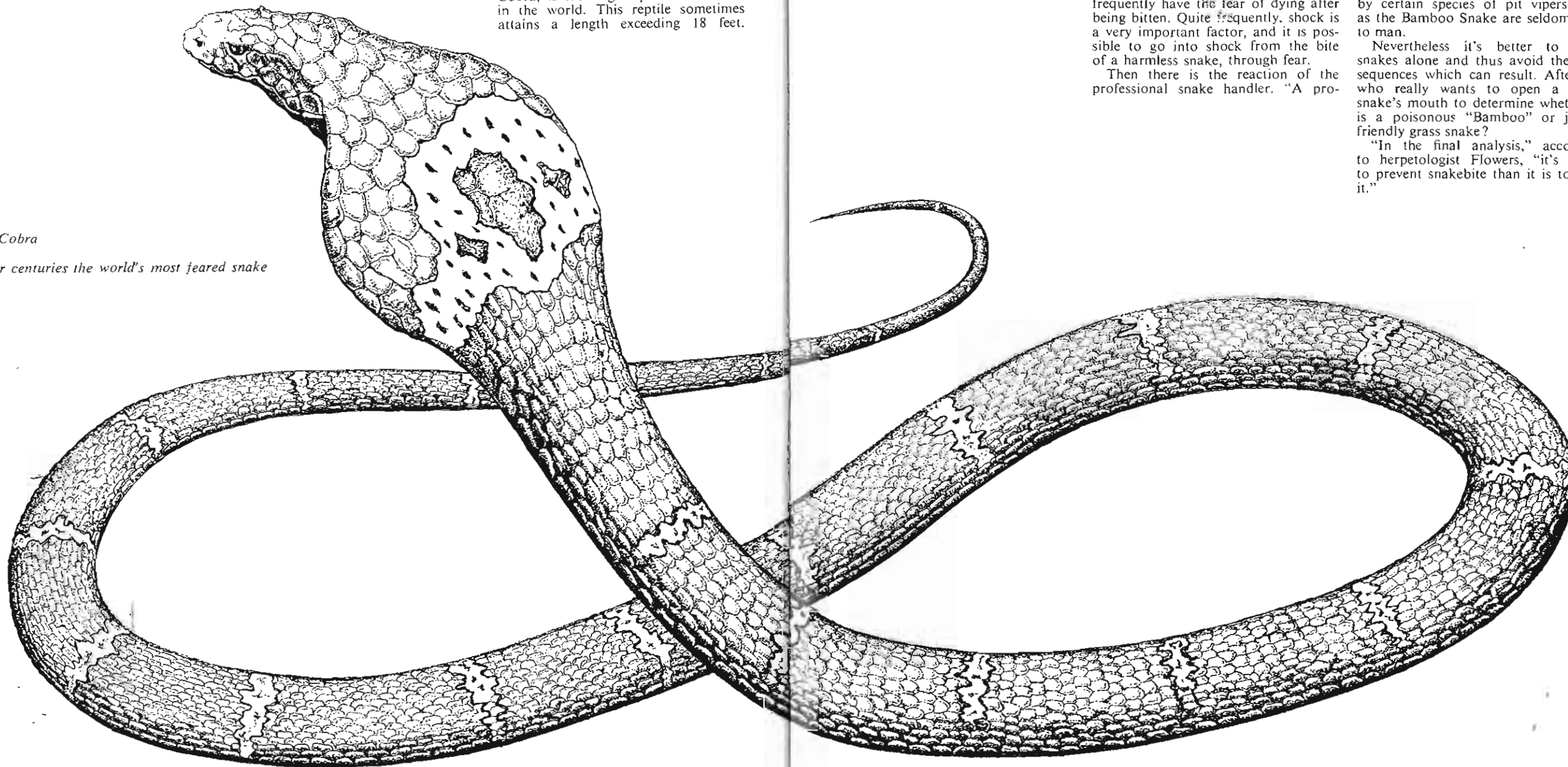
Aside from the improbability that a person will be bitten by a poisonous snake, the low death rate can be attributed to several other factors. Effective treatment, including potent anti-venoms and the fact that a dangerously venomous snake such as the cobra does not always deliver a lethal injection of venom with its bite are two factors in a victim's favor. Also, bites by certain species of pit vipers such as the Bamboo Snake are seldom fatal to man.

Nevertheless it's better to leave snakes alone and thus avoid the consequences which can result. After all, who really wants to open a green snake's mouth to determine whether it is a poisonous "Bamboo" or just a friendly grass snake?

"In the final analysis," according to herpetologist Flowers, "it's easier to prevent snakebite than it is to cure it."

*The Cobra*

*for centuries the world's most feared snake*



While the clamor of heavy artillery and rumbling of tanks serve as constant reminders of military war, the men active in "psychological warfare" are intent on winning the hearts and minds of the Vietnamese people without military force.

The men in the Psychological Operation section of Civil Operations and Revolutionary Development Support in III Corps (CORDS-Psyops) realize that slamming the door in the face of communism does not necessarily guarantee a peaceful South Vietnam. It is equally important to strengthen the Government of Vietnam's capacity to block any future communist threat.

A well-informed public is essential

centrally located Catholic church. So entertainment is easily accessible to all members of the community.

The evening television programs, broadcast between seven and 11 o'clock, turn the viewing site at Ngo Phuc into a hub of activity; and the television, perched on top of a green-painted, wooden stand, is the nucleus of the villagers' attention.

After the authorized sites are established like the one at Ngo Phuc, and made ready for operation, receivers and equipment are installed. Since 80 per cent of the sites are outdoor facilities, the equipment must be a sturdy variety. For this reason, R.C.A. and Satchell Carlson educational

Weather conditions also determine the size of the viewing audience. In the coastal city of Ham Tan, 60 miles east of Saigon, the crowd grows smaller when gusts of wind blow in from the South China Sea. In contrast, the inhabitants of inland areas enjoy consistently warm evenings, and large viewing audiences are common.

The viewing tastes of the people also determine the effectiveness of TV. The rural audiences do not share the same interest as their more urbanized neighbors. Mr. Arthur McTaggart, Psyops advisor in Binh Tuy, explains that "although peasants watch the dance bands on Saigon's THVN they are really waiting for something that appeals to them to come on." That wait ends on Friday nights when an extremely popular program, called *Cai Luong*, is broadcast over THVN. *Cai Luong* is a melodrama depicting the age-old conflict between good and evil. The drama show attracts a large audience, and some villagers take advantage of the situation and set up concession stands where soft drinks and snacks are sold.

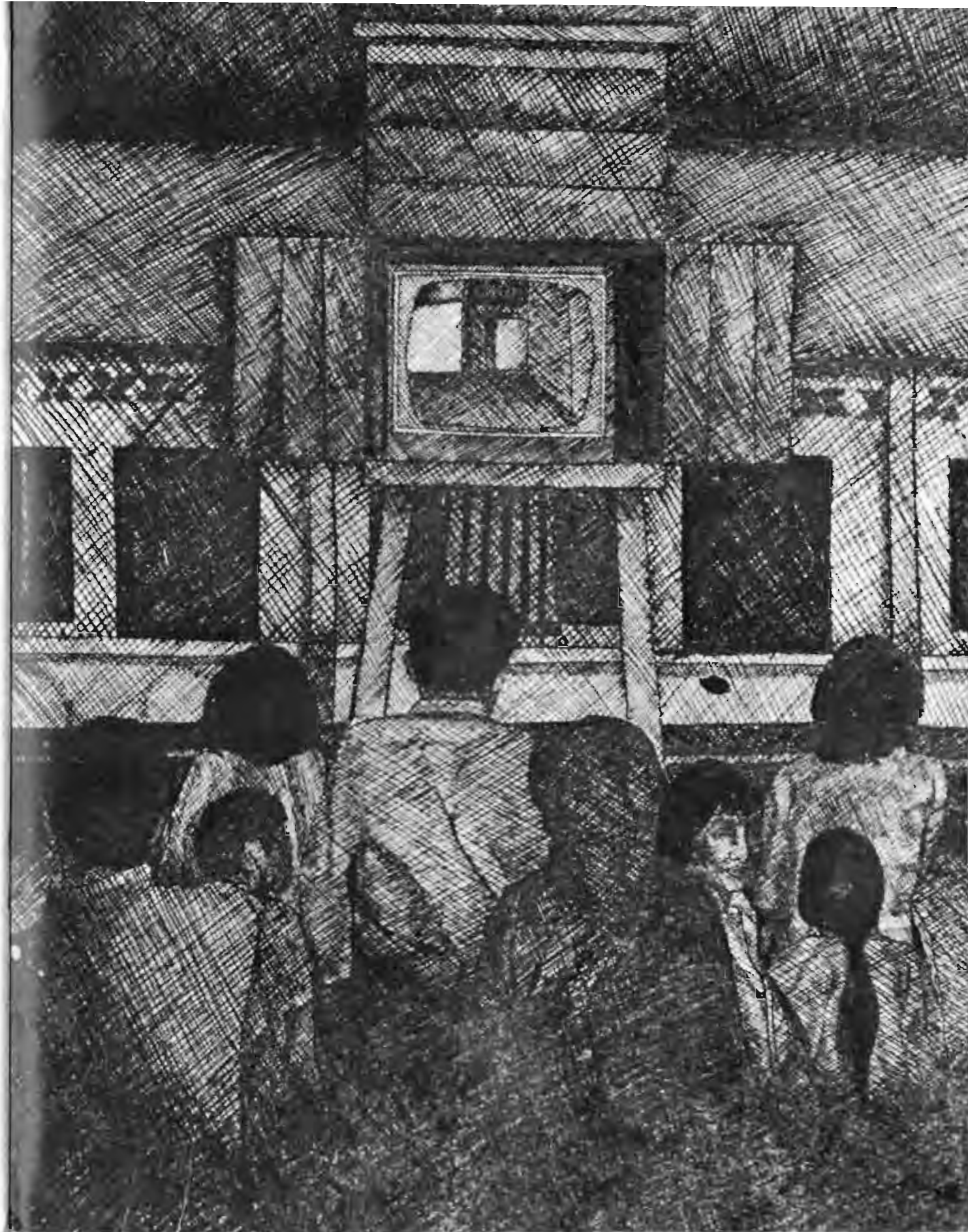
Entertainment, however, is not the main concern of Psyops and the VIS. The conveyance of government information is still of primary importance and during a 30-minute intermission, which breaks up the four hour *Cai Luong* presentation, a news program is broadcast over THVN. Since the popular drama show attracts the viewing audience, the news program is called the "freight show" and is "carried" by the *Cai Luong*.

In addition to television sets, other methods are used by the VIS as sources of information. In insecure areas, radios take the place of televisions and are actually preferred by some authorities. Mr. McTaggart warned, "The concentration of a TV audience in one small area is a tempting target for VC terrorists. Amplified radio, on the other hand can broadcast the same information to a dispersed crowd."

Reading rooms, already established in many areas, cap off the joint effort to improve communications in Vietnam. In these rooms, hundreds of pamphlets are made available to the public. The pamphlets convey a wide variety of information, ranging from government affairs to international relations. The material in the small libraries reinforces the information conveyed through TV and radio broadcasts.

Collectively, the various news media are making the Vietnamese a better informed public—a public prepared to taken an active role in a free Democratic government.

*One viewing site per village of 6,000 the GVN goal.*



## The Marketplace

### *Rice, onions, cabbage, and television?*

*by Specialist 4 Ken Heinrichs*

for the successful function of a democracy. "Without a strong communication link between the government and the people, a national pride in a free democracy cannot be achieved in South Vietnam," explained Major E. M. Moore, operations officer of CORDS-Psyops.

To assist Vietnam's Ministry of Information in establishing a "link" between the government and the people, the Joint U.S. Public Affairs Office (JUSPAO) has introduced the most effective communications unit to date—the television set.

While JUSPAO supplies the TV's, the responsibility of coordinating with province officials and distributing the sets throughout the broadcasting coverage area belongs to Psyops and the Vietnamese Information Service (VIS).

Certain factors determine the distribution of the TV sets. One criterion is that the set must draw an audience of at least 200 people. Because of this, only one viewing site is established in an area of 6,000 inhabitants.

The viewing sites must also meet certain specifications. To attract a maximum number of viewers, the facilities are kept clean and made as comfortable as possible.

Located 18 miles northeast of Saigon, the viewing site in Ngo Phuc hamlet is typical of the government controlled facilities. The site is adjacent to a

monitor televisions are used. These sets are more durable than plastic-framed commercial TV's for indoor viewing.

In addition to the television sets, small generators and external amplifiers are installed. While the 23-inch TV screens can provide an audience of 200 people with an adequate visual picture, the audio portion of the television broadcasts must be boosted through the use of amplifiers.

To accommodate a large viewing audience, the televisions are elevated on eight-foot tall stands. While many of them are wooden structures, the stands in less secure areas are made of reinforced concrete. In war-town Tay Ninh Province, for example, 11 concrete stands have been constructed, each costing \$240.00.

As more televisions are installed throughout Vietnam, even peasants in remote hamlets are becoming aware of a strong governing force and the security it engenders. This is an improvement over "pre-TV" days when the average villager's conception of a government extended no further than his village chief.

The effectiveness of television as a source of information is dependent upon a variety of factors. An excess of privately owned TV's in certain area, for example, reduces the size of the viewing audience at the government TV sites.



## ANH AND THE NOSEY NEIGHBOR

Anh lived in a small, happy village with her blacksmith father, housewife mother, three sisters and four brothers. In the house next door lived a widow lady whose name was Mrs. Ex. No one in town liked Mrs. Ex because when the children played outdoors, she would scold them for being so noisy

Mrs. Ex used to spend a lot of time at Anh's house telling Anh's mother all the gossip and giving advice about how to cook and bake or sew. Through all this, Anh's mother remained very polite,

Anh asked her mother why she treated Mrs. Ex so kindly when no one in town liked the woman.

Anh's mother smiled and answered, "Everyone has faults and weak points; no one is perfect.

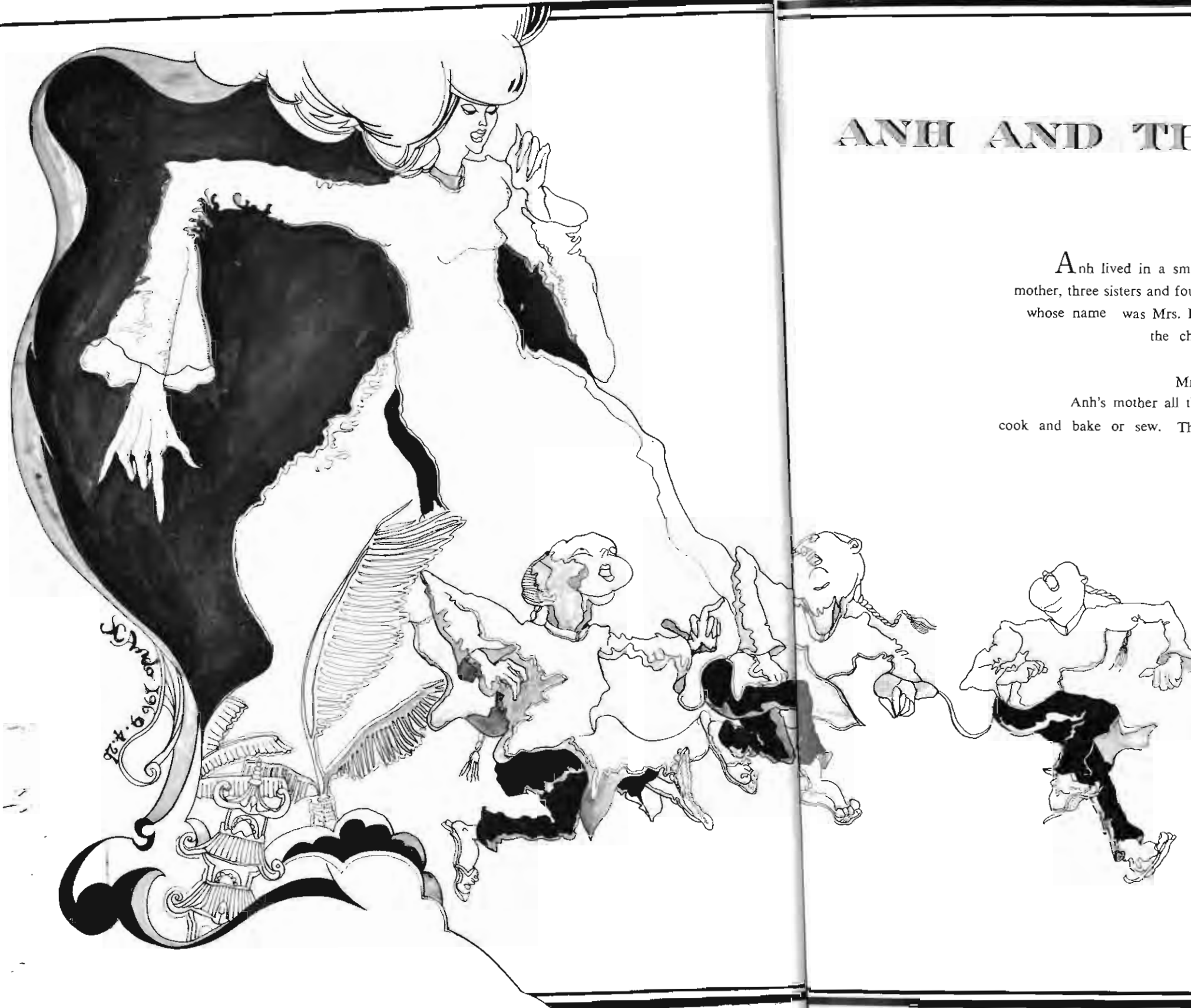
She is a very considerate person."

When Mrs. Ex died and her will was read, the townspeople were greatly surprised.

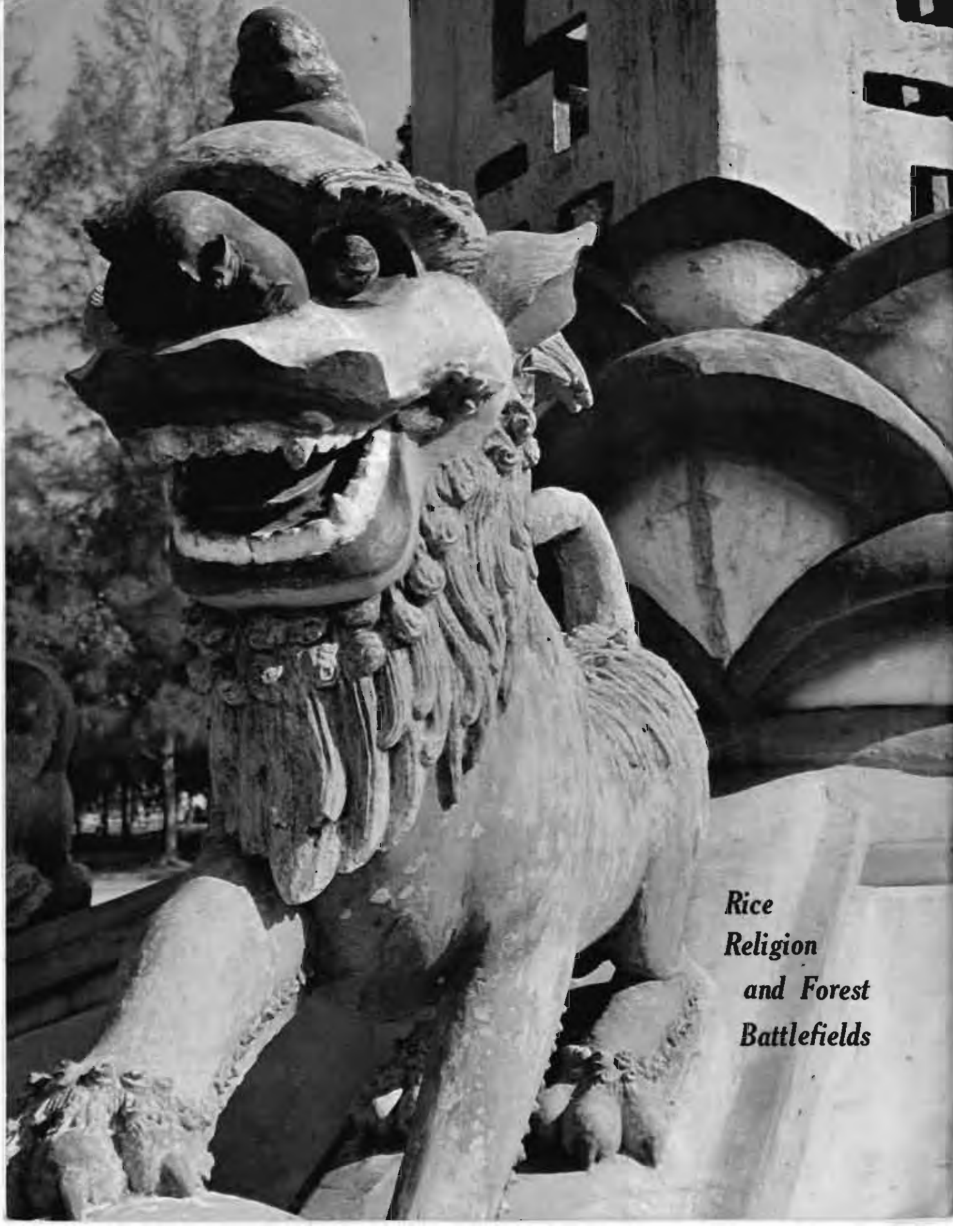
Mrs. Ex had left a large sum of money which had been donated to many good causes.

In the will, Mrs. Ex also said that she had been aware of the ill feelings against her by all the villagers, save one her dearest friend, to whom she left all her blessings.

This person was Anh's mother. Anh never forgot her mother's words of wisdom.







*Rice  
Religion  
and Forest  
Battlefields*