

The whaling commission was established thirty-six years ago to ensure the conservation and development of stocks by setting catch quotas and identifying species in need of protection. Its rulings, which have consistently ignored the advice of the alarmed scientific community, are frequently breached by pirate whalers. For seven centuries the whaling industry developed totally uncontrolled, reducing the population of blue and humpback whales to about 6 per cent of their original numbers. The commission has given a measure of protection to nearly all species separately. Last year it declared the Indian Ocean a sanctuary and banned factory-ship whaling, with the exception of that involving mink whales.

Acting independently of the commission, the Community as a whole is now to introduce a licensing system, to take effect after an eighteen-month transition period, banning all whale imports. The one area that will remain exempt from the new regulations is the traditional whaling activity of the Greenland Eskimos, as well as of the other aboriginal peoples of the Community for whom the hunt is an integral part of the local economy and culture.

Thomas Land writes on world affairs from European capitals.

EXCURSUS 3

Leonor Blum on NICARAGUA: TEACHING THE FOUR Rs

A young girl carefully guides the stiff, weatherbeaten hand of an elderly man to form the words "La revolución." The two are seated on stools propped against a huge banana pile in the middle of Managua's large outdoor market.

Between March and August the small Central American country of Nicaragua was transformed into one giant schoolhouse. In markets and slums, in fields and adobe huts, in factories and churches, Nicaraguans old and young were learning the four Rs: reading, 'riting, 'rithmetic, and revolution.

A \$25 million literacy crusade that aims to reach over 50 per cent of the country's population is the most ambitious task Nicaragua's socialist-oriented Sandinista junta has undertaken. Not since the Cuban literacy campaign of 1961, which is being drawn upon heavily as a model, has there been such a mammoth project.

Massive and rapid mobilization efforts were required to get the crusade rolling. A million textbooks were printed, and, in December, 1979, eighty university students went out into the field to conduct a preliminary literacy census. As a result of their findings, the students offered workshops to 1,600 teachers who, in turn, trained others until 180,000 volunteers had been prepared to instruct 800,000 illiterates. In March all schools in Nicaragua were closed for five months and the *brigadistas*, students over the age of thirteen, and their teachers went into the field. Meanwhile, in the cities, adults volunteered to teach in factories and in their neighborhoods.

Why this emphasis on education in a country so close to bankruptcy; whose masses are malnourished and where poor health conditions prevail? Nicaragua, battered in 1972 by an earthquake that demolished its capital city and in 1979 by a revolution that brought down the forty-two-year Somoza dynasty, now faces a foreign debt of \$1.5 billion, an unrelenting flight of capital, 30 per cent



unemployment, 60 per cent inflation, and a 25 per cent drop in agricultural and industrial productivity. "Can Nicaraguans live on the alphabet without the soup?" asks one critic.

For the Sandinistas the literacy campaign is more than a means of teaching the ABCs. They consider it an integrating, nationalistic movement that will persuade the people of the merits of the revolution.

"Literacy raises the political, social, and economic conscience of the people. By becoming literate, a nation becomes aware of its reality," says Dr. Carlos Tünnerman, Nicaragua's well-regarded education minister. "Conscientization," the educational method employed, was used successfully by Paulo Freire in the Brazilian northeast in the early 1960s and then again in Chile under Allende.

Several Nicaraguan politicians, including Alfonso Robelo, one of the junta's two moderates who resigned last April, find fault with the method, claiming that it indoctrinates the people in communism and Marxism. The Catholic Church, on the other hand, supports the literacy effort with enthusiasm, and it is Fernando Cardenal, a Jesuit priest, who heads the crusade.

The campaign's primer, called *The Dawn of the People*, is in fact highly nationalistic, pro-Sandinista, and anti-imperialist, but not distinctly Marxist. Its hero is Augusto Cesar Sandino, the guerrilla rebel who fought the U.S. Marines in the 1920s and early '30s and was killed by the first Somoza. A leading role is assigned to Carlos Fonseca Amador who, in the '60s, created the Sandinista Front that led the revolution to success in 1979. In the less

historical passages the emphasis is on supporting the revolution by "spending little, saving the country's resources, and producing much."

In addition to familiarizing Nicaraguans with the aims of the revolution, the literacy crusade has established closer ties between city and country folk. Sharing their homes with the urban student-teachers, the peasants—75 per cent of them illiterate—were encouraged in better hygiene and eating habits. The urban youngsters, on the other hand, learned the hard facts of rural poverty. In the poorest areas peasants could not even afford to share their meager diet of rice and beans with the guests and some *brigadistas* suffered severe weight loss. The government stepped in quickly and provided the peasants with additional food rations, while worried parents bearing "care packages" spent their weekends traveling to the remotest areas of the country.

The literacy campaign has depended largely on gifts from many countries and international organizations. UNESCO and the Organization of American States provided funds to train teachers, the U.N. Development Program gave the *brigadistas* essential medical supplies to take into the field, Sweden's fifty thousand lamps permitted the campaign to be carried on into the night, and there were additional funds from the World Council of Churches and Holland and West Germany.

Spanish-speaking countries supplied teachers: Cuba sent 1,200, Spain 70, Costa Rica 40, and the Dominican Republic 39. The Cuban presence immediately caused a furor in the Western world, and also among Nicaraguans who did not wish to be drawn into cold war politics. The government did not want to forgo Cuban assistance, and it responded by reducing the visibility of the Cubans, sending the Castroite teachers to instruct peasants in the most remote areas.

Now that the initial and most sensational phase of the literacy campaign has been successfully completed, Nicaraguans face the difficult task of maintaining enthusiasm for the program and continuing the education process on a shoestring budget. Teachers must be trained to instruct the now swollen student population, and existing programs must be revamped to become socially and politically meaningful. There is need for additional technical and rural schools and for an alteration in university programs so that fewer lawyers and more agronomists will be graduated. And all of this must be accomplished without permitting the program to become radically leftist, for so far most of Nicaragua's financial support has come from the Western world.

Leonor Blum, born in Latin America, is a student at the Johns Hopkins School for Advanced International Studies and a freelance writer specializing in Latin America.

EXCURSUS 4

Fred Pierce on THE IDEAL HOT-WEATHER DRINK

People are dying all over the drought-stricken, arid regions of the world. In Somalia alone the figure has recently reached into the hundreds of thousands. Dr. Reuven Yagil of Israel, a veterinarian-physiologist at Ben-Gurion University's Center for Health Sciences, specializes in camels and believes that this animal could supply

one of the answers in alleviating the crisis.

Said Dr. Yagil: "We came to the conclusion that these animals—which are superbly adapted to the desert, which can survive weeks without drinking water, which can change every physiological mechanism in the body to survive the lack of water and the lack of good vegetation—could be used in the areas of the world where people are dying today.

"All mammals except the camel, when exposed to heat, lack of water, and lack of good fodder have a decline in milk production." Thus, precisely when the young animal needs more water and food, the mother provides less.

"We examined the camels," Dr. Yagil continued. "We kept them without water for two weeks, while continuing to milk them, then let them drink as much as they wanted for one hour. Normally camels will produce milk that has about 90 per cent water with 4.5 per cent fat. These camels, kept without drinking water and before they have drunk, had 91 per cent water in their milk and 1 per cent fat, with an increased salt content as well. If we had to sit down and design what we would want to give a child living in an area that's hot and short of water, we would need a food that contained a lot of water, a lot of salt, little fat, and good nutritional value."

Dr. Yagil found that his animals produced a minimum of six liters of milk a day and sometimes more than ten liters per day. He's sure that they could do even better, but he wasn't milking them so as to produce a maximum amount. How does a cow compare under similarly harsh conditions? "It takes about three cows to produce one liter of milk."

There are far-reaching implications in these findings. One camel could keep a number of families alive, and "a herd of camels could keep quite a lot of people alive, not only for nutrition but also for water," says Dr. Yagil. The following figures help one understand the changes the mother camel must withstand to produce milk without water intake. "Our camels weigh about 600 kilos and lost a third of their body weight, which means they lost 200 kilos—or liters—of water. They drank this back in three minutes." Dr. Yagil allows them more time for their biweekly drinks, though. "We give them an hour for belching a little bit and standing around and chatting."

Total domestication is the next step. "Now, we must use the same knowledge that was used in classical dairying. One must look for the best cow and the best bull and then check a group of the young, finding the mothers that give a lot of milk and using those for reproduction. Eventually we will raise a special breed."

Camel milk tastes watery and sweet, never salty, even when its salt content is increased in the heat. Most people find that it's very good. However, according to the bedouins, "Allah said that the camel won't supply butter," and, in fact, it can't be used for making either cheese or butter. There are also stories that camel milk can prevent baldness and aid virility. While these claims are as yet unconfirmed, they could greatly increase demand.

A large conference on camel milk was held in Sudan last July, but Dr. Yagil could not attend since he's from Israel. He corresponds with the Sudanese, though, through a group in Sweden. This month Dr. Yagil traveled to Hungary to present his results before an international conference of physiologists. His work is receiving international attention, and his findings have been accepted by the most prestigious scientific journal on milk, the *Journal of Dairy Research*.

Fred Pierce's report is made available by the Department of Public Affairs, Ben Gurion University of the Negev.