

Ask any sailor if he remembers these heavy white canvas hammocks and he'll tell you they're sturdy, hold up well and cost a lot less money than commercial ones. Just think how relaxing they can be in your back yard, on camping trips, etc. Brand new. A full 36x74". Brass grommets. Complete with all ropes and clues. A great value for the sum-

MARINE JUNGLE HAMMOCK



This is the answer to having to pack along tent and sleeping bag on hunting or camping trips. Lightweight canvas (made for the South Pacific), it has a $4\times7.3/4$ foot waterproof canopy, finemesh netting that zips from inside. Makes for fine outdoor sleeping, \$14.95

Please include your Science News

- Check One -

Check or money

order herewith

ARMS & WEAPONS, Dept. \$N6-10 887 Second Avenue, N.Y. 10017
Navy Hammocks @ \$9.95 (Add 95¢ post.) Marine Jungle Hammocks @ \$14.95

© C-D. 1967

Enclosed check or m.o. for \$

NAME

mer. \$9.95 each.

ADDRESS

CITY

STATE ZIP

ATTACH LABEL HERE To change your address please give 3 weeks notice.

Mail to Subscription Department

SCIENCE NEWS

Washington, D.C. 20036

1719 N Street, N.W.

If you change your address.

Or have any questions about your subscription.

label to insure prompt service.	If you have any question about your subscription please clip this form with label to your letter.
If you wish to subscribe to Science News or to extend your present	Effective date of change of address
subscription also fill in the form to the right and check the following.	New address label: Name
	Local address
	Town or City
— Check One —	
1 year 2 years 3 years \$6.50 \$11.50 \$16.50	State and Zip Code
\$0.50	Maril to Carle and the Description of

Marine Lab in East Africa

Tropical station to serve the world's scientists.

Kanduchi, a picturesque, palm-lined Tanzanian fishing village, will soon be the site of a first class marine biology laboratory, the only one of its kind on the 4,000 mile east coast of Africa.

Until now, there has been no laboratory suited to the systematic study of marine life from the Israeli station of Eilat on the Gulf of Aqaba all the way down to the French station at Nosy Bé, Madagascar. As a result, whole areas of marine ecology, taxonomy and animal behavior remain practically unstudied.

The new station is the work of Prof. Ivor Griffiths of the department of zoology, University College, Dar-es-Salaam, the Tanzanian campus of the University of East Africa. Prof. Griffiths came to East Africa three years ago on loan from University College, London. Although a histochemist by training, he realized that Tanzania's greatest need in biological research was for knowledge on which to base a modern fishing industry.

One of his first steps was a cruise aboard a Japanese tuna boat in Tanzania's coastal waters. Griffiths found that the Japanese were catching fine tuna in the teeming tropical waters off the coast of Tanzania, taking them back to Japan to be canned, and often returning them to Dar-es-Salaam to be sold.

Meanwhile, Tanzania itself had no fishing industry to speak of and spent valuable foreign exchange to reimport one of its own products.

A 15-minute drive from the brand new campus at Dar-es-Salaam, Griffiths found the ideal spot for his new laboratory: Three islands that lie off a muddy beach—unusual here, but essential for studies of tidewater life. Nearby lies a magnificent coral reef, some of whose species are unique in the world.

Griffiths realized that it would not be enough to train university graduates in marine biology. In Tanzania as in all of East Africa, the crying need is not so much for graduates---who are returning in increasing numbers from scholarships abroad—but for trained technicians corresponding to American

Bill

6-10-67



Tanzanian mangrove swamp at site of the new Kanduchi laboratory.

junior college graduates. To most expatriate professors in Africa, technician training is an unpleasant task forced on them by the government. Griffiths looks at it differently. "To an African," he says, "our modern university represents the height of fabulous luxury in a country of extremely limited funds. It is therefore not enough that the university earn its living; it must be very obvious that it is earning its living."

Griffiths therefore made certain that the new Institute of Fisheries would be large enough to accommodate a yearly class of 25 diplomate technicians in addition to the regular B.A. candidates. Diploma students will enter at the level of the British Higher or Regular School Certificate. These are roughly equivalent to the American high school diploma. Diploma students will use the university library, hear lectures at the university, and in general be encouraged to mix with the regular students.

The two-year course will cover such basic subjects as taxonomy, ecology, geomorphology, animal behavior and economics, in addition to practical training in seamanship, fishing techniques and office management. Graduates will normally be hired as field officers of the Fisheries Division of the Tanzanian Ministry of Agriculture, Forests and Wildlife. Eventually, Griffiths hopes to attract students from all over Africa, and from overseas as well. In addition, he hopes to arrange a sys-

tem of secondments—visiting professorships or research fellowships—which will enable British and American scientists to use the facilities of the station to pursue their own research.

The new station at Kanduchi thus fills three important purposes at once.

- It provides world biology with its first good marine biology station on the tropical Western rim of the Indian Ocean.
- It provides the new nation of Tanzania with an important teaching laboratory for vitally needed biologists and fishery technicians.
- It will provide basic information on which to base a fishing industry to supplement Tanzania's economy.

An older station at Bagamoyo attempts to teach improved fishing methods to uneducated fishermen along the Tanzanian coast. Bagomoyo was an important transfer point in the route of the old slave trade. Its name means "Lay down your heart," Griffiths says, "because once you had reached there. there was no hope for you." The Baga-moyo station has already designed a fishing boat to replace the narrow catamaran used by Tanzanians. The new boat, a modification of an Arab model. is designed to be manufactured locally. The Government hopes that fishing methods will improve by the "demonstration effect"-one fisherman learning from his more successful colleague. Charles Weiss



