

The author (nearest camera) with Forestry Officer Lucien Bernier release the fingerlings after briefly immersing the plastic bags containing them in the lake waters to equalize the temperatures.

# American Game Fish For New Caledonia

*On July 26, nineteen largemouth black bass fingerlings arrived in New Caledonia by air from Honolulu, and were released the same day in Yaté Lake. This introduction of this well-known American freshwater game fish was arranged by the South Pacific Commission at the request of the Forestry Department of New Caledonia.*

By LOUIS DEVAMBEZ\*

RIVERS and lakes in the various South Pacific territories are generally poor in indigenous fish, and especially in game species. With the introduction of *Tilapia mossambica* in many islands, a population of small fish was created in rivers and lakes. These tilapia consume large quantities of plants and plankton hitherto wasted, turning them into protein which can be used by man.

However, in the absence of predators other than man, herons and kingfishers, the tilapia are breeding practically unchecked, and vast quantities of them are thus not utilized. The choice of a suitable species of fish that would prey on

the tilapia and provide food and sport for man has been debated for some time in several territories.

In one instance at least, a choice has been made. Yaté Lake, in New Caledonia, which is over 9300 acres in area, was stocked a few years ago with tilapia, which now provide food and recreation for many pole-and-line fishermen. The fishing pressure, however, is not sufficient to make any noticeable inroads on this prolific species, and after a careful study of the problem, the territorial Forestry Department decided to introduce some largemouth black bass (*Micropterus salmoides*).

This particular freshwater species was chosen for a number of reasons. First of all, it occurs widely in the United

States and Canada, and its ecology has been long studied under a variety of conditions. Thus, while the introduction of a species to a new environment is always—to use a well-worn phrase—fraught with difficulties, in this case unknown factors were at least reduced to a minimum.

The qualities of the largemouth black bass as a game fish are at least as well known as its ecology, and have repeatedly been highly praised in the many magazines devoted to angling in North America. It is also often mentioned that the black bass is quite worthy of appearing on the family table.

Other characteristics of the largemouth bass are comparatively prolific breeding  
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Left to right: Part of Yaté Lake, seen from the Plaine du Lac Forestry Station. Forestry Officer Lucien Bernier carrying one of the fish containers down to the lake. Forestry Assistant Gilbert displays a plastic bag of fingerlings.





Three trainee infant welfare nurses, and a local mother, preparing bottles and feeding babies. Papua and New Guinea.

reduce the toll of malaria, which, with its enervating effect on the population, is undoubtedly one of the chief factors hindering development.

The medical authorities have been greatly encouraged by the successful campaign against yaws undertaken by WHO. Previously yaws was a widespread, crippling disease, but it has, for the time being, almost completely disappeared. It is hoped that it will not be long before similar campaigns can be launched to deal with tuberculosis, leprosy and hookworm.

Health education is clearly also of fundamental importance here, and this is one of the fields in which the active assistance of the Commission is being given. Attention is also being paid to an improved training scheme for the medical assistants who work out in the villages, not only treating the sick but also endeavouring to improve the health and sanitary state of the people.

#### Long-term Prospects Encouraging

From the long-term point of view the outlook gives plenty of cause for optimism. In those areas where economic, social and educational levels have been satisfactorily achieved, a similarly satisfactory level of public health has been arrived at, too, and there is no reason why this should not apply to the whole of Melanesia in the near future.

In the meantime, as the Dutch have demonstrated in their part of New Guinea, the application of mass preventive measures, expensive in personnel and money though they may be, can at least hold the more serious threats to health at bay until the social situation improves sufficiently to ensure a permanent improvement.

culosis is known and under treatment. Similarly, there is an intensive drive to clear malaria, at least from the coastal areas. In one part, where the people are relatively inaccessible, anti-malarial drugs are being put in the salt, in the same way that iodine is put in the salt in Switzerland to prevent goitre. It will be interesting to follow the success of this method.

Netherlands New Guinea has been pioneering new methods of dealing with the great loss of life that occurs among mothers and babies. Young girls are trained in child welfare methods and visit the homes in the settled areas. In the less-accessible areas the Dutch health authorities are trying a novel method. They are calling in the traditional village midwives and giving them a short practical course in the elements of obstetrical

hygiene. Already figures seem to show that lives are being saved.

#### Problems In The Solomons

At Honiara, I was able, thanks to the kind co-operation of the Chief Medical Officer, Dr. J. Macgregor, to study the existing social and economic background upon which the future public health service has to be built.

The great difficulty is that most of the population is sparsely scattered, communications are difficult and financial resources limited. These, together with the low level of overall education, make public health measures difficult to apply, and it is felt that little permanent progress can be made until these matters improve. In the meantime an attempt will be made, with the help of WHO, to

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(for a predator at least), adaptability to high temperatures, and quick growth. Under conditions comparable with those existing in New Caledonia, they are known to reach a weight of twelve pounds.

#### Commission Assistance Requested

Once the choice of the fish was made, the assistance of the South Pacific Commission was requested, and the Office for the Development of Tourism in New Caledonia offered to cover part of the costs of introduction.

After the usual preliminary correspondence, which began early this year, firm arrangements were made with the Fish and Game Division, Department of Agriculture and Conservation of the State of Hawaii. Direct air communications with Honolulu were an important factor in the success of the introduction.

On July 26 last, nineteen black bass

fingerlings arrived in New Caledonia. They were released the same day in a fish and game reserve which includes part of the Yaté Lake and the basins of two rivers flowing into it. They will find there some excellent spawning grounds, food and shelter, and it is hoped that they will stock the whole of the lake.

Further consignments will be obtained to strengthen this first introduction, and within the next few years Yaté Lake may well become a centre of attraction for amateur fishermen and tourists.

#### LPTC Trainees Make Steady Progress

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Islands teachers are waiting for editorial attention; and the need has been expressed for an atlas for Melanesian schools. There is a strong demand for these books, and the Editorial Officer is anxious to get to grips with them.

At the time of writing, the next book publication will be a "how-to-do-it" book on house-building for the Solomons. The

text and illustrations have been supplied by the District Commissioner of the Central District, and the book will be titled *The Ysabel Building Unit*, from its island of origin.

Another good school book on which work is just commencing is a first Number work-book, designed by one of the Sisters of the Roman Catholic Mission in the Solomons. Originally intended for just the Sister's own school, the Centre has taken over the publication and will print a sufficient number to bring the price down to 1/6 a copy. There is a great need for this type of book, adapted to local surroundings, and we feel that the price is low enough for each child to have his own copy.

From this report it is hoped that the reader will gain a fair idea of the scope, variety and volume of the work being done by the Centre, of the realistic training afforded to the trainees, and of the contribution which such a literature production centre can make in a community.