

CLIMBING TO SUCCESS ON FROG LEGS

IN 1926, in Japan as a newspaper correspondent, I sat in a Tokyo restaurant unscrambling Japanese characters to see what I'd have to eat. Finally I broke down the hieroglyphic into the word *yoa*. It meant "bullfrog."

When I asked the waiter about it he replied:

"Yes, si', catch 'em plenty bullfrog. Japanese peepul he bling bullfrog thrum 'Nited State long tam ago. Now he lairse 'em julluk chicken!"

The price of a frog dinner was four yen, roughly two dollars in American money. I ordered one, and the waiter soon brought me a platter with two fine big frogs on it, fried to a rich golden brown. In Japan you get the whole frog—not just the legs. The Japanese are not so wasteful as to throw away an animal which carries approximately one-third of the edible meat on the back and forelegs.

For some reason, the bullfrogs interested me. I visited frog farms and looked up some history.

It soon became obvious to me that, if the Japanese had accomplished the domestic production of bullfrogs, Americans should

be able to do the same thing. Somewhere in the back of my head the idea was hatching, that, if anyone in America could produce frogs as we produce other domestic livestock, he'd do so at the risk of becoming a millionaire. I had an idea I might be the fellow to do it. But the time was not yet.

Newspaper work kept frog culture only a dream as far as I was concerned until 1929, when the stock market crash caught me at the completion of a time contract, and it seemed like a waste of time to look for a job while panic was sweeping the country.

The idea of establishing an agricultural farm somewhere in Southern California was still in my head, and I spent most of the winter of 1930 and 1931 hunting a suitable location. I was looking for swamp land, something that is very scarce in this land of seasonal rainfall and semi-aridity. Eventually I practically abandoned the project, but by 1933 two bank failures, collapse of a building and loan firm, and a few similar financial catastrophes wiped out the savings on which I had depended on for a comfortable

old age. The frog farm changed from an interesting hobby to a means of livelihood.

I resumed my search for a swamp more seriously and by a different method. I rented an airplane and struck out. After 50 hours of flying I found just the spot I was looking for. It was a tract of 12 acres. Six acres of it could be rated as arable land by removing enough brush and trees. The rest was undated—lake, marsh, ponds, flowing streams, or jungle.

This property was owned by a local bank. The bankers nearly fell on my neck when they learned I wanted to buy or lease it. I got the land on terms that seemed like grand theft.

Having acquired the property, Mrs. Haig and I moved in with a camping outfit. Fortunately, we had a mosquito-proof tent. At night the place swarmed and sang us to sleep. In about a week I'd moved enough trees and grubbed out enough brush to get a place to put a house. In another 60 days we had a house, and I know it is a good house because I built it myself.

After that there was a well to be driven, poultry houses to be built, a pig pen to be set up, a garden to be made, land to be cleared to get a place to plant taro, ginger, and other marketable crops. Next came the seemingly interminable task of

snatching an agricultural farm out of that six acres of lake, marsh, and jungle.

That took work and money. I had plenty of the former and never quite enough of the latter. Nevertheless, out of it all has come about an 80 per cent realization of an idea hatched in Japan in 1926.

We went a shade into black figures in 1934, well into the black in 1935, and showed a substantial return on the investment of labor and capital in 1936. Some promising profits came definitely in sight for 1937 and many years to come.

The system I have developed is essentially an adaptation of the Japanese and Chinese methods with certain modifications to local conditions. A female bullfrog lays from 10,000 to 30,000 eggs at a spawning. The male fertilizes the eggs externally.

Thus, the system begins with a series of pools fenced against the escape of frogs and the entrance of their numerous natural enemies. There are tadpole pools into which females with the necessary males are introduced during the spring spawning season and removed as soon as spawning is completed. The eggs look like black tapioca spread over the water in a square yard sheet of jelly like slime which attaches to sticks, water

plants, or shoreline. The eggs hatch in about 72 hours to leave the pool swarming with tiny black tadpoles.

In the climate of Southern California frogs mature to adult life in approximately 18 months from the egg, from four to six months of this period being consumed in the growth and transformation of the tadpole, and approximately one year for the growth of the frog from a baby to a 20 or 22 inch bullfrog with a marketable weight of two and a half to three pounds.

Beyond the tadpole stage the problem is primarily one of adequate feeding, keeping frogs of a given size in pools where they are protected against natural enemies and their cannibalistic habits. A big bullfrog will swallow a tadpole or baby frog as readily as a crayfish or a top minnow, but baby frogs cannot swallow each other, nor can adult frogs swallow any living morsel as large as themselves.

Experiments have convinced me that, under a planned and protected system of frog culture, frogs will multiply at such a rate that it becomes impossible to retain and feed more than 20 per cent of the frogs that progress beyond the tadpole stage. For this reason I've been back-feeding about 80 per cent of my baby frogs to the adults. Someday we'll find a way to elimi-

nate this waste, but the man doesn't live today who can authoritatively say how it is to be done.

Every frog I can ever hope to raise is spoken for a year in advance at \$5 a dozen for frogs 20 inches in length or larger delivered alive, or at \$6 a dozen dressed and iced. Domestic production will probably never lower these prices within my lifetime.

Because capital has been and still is a serious problem for me, and because there are still so many experimental angles to frog culture, I didn't make the mistake of putting all my eggs in the frog basket. My first effort after getting a roof over my head was to put in a garden and raise some poultry, a few pigs, and various things that would provide my family with food and knock the props out from under the costs of living.

Next, after getting these things started, I went after the six potential arable acres and planted them to taro, ginger, and water chestnuts. I had a good crop of these plants in 1935 and 1936, and can reasonably expect a good crop this year.

Taro root is the surest crop, consequently the least valuable. Nevertheless, it produces heavily, and if the price ever goes down to \$25 a ton, I'll still be

making money out of it. Ginger at \$175 a ton. Water chestnuts at \$200 a ton, and water lotus root at \$150 a ton. Still we're importing thousands of tons of these products from China annually, with shipments eight to twelve weeks old when they get here, and then a 25 per cent import duty. That is why my limited crop goes to Chinatown in Los Angeles where a dozen commission merchants plead for deliveries I can never hope to make in sufficient volume, beg for the next truckload, and pay for every pound of it in cash.

Several large American food canning firms have already conducted successful experiments with the canning of frog meat. The supply of canned frog meat is limited. If you care to sample it, you'll pay 50 cents for an eight-ounce tin. This phase of the business is obviously capable of enormous expansion. But who's got the frogs? The limited supply of frogs now reaching the markets is steadily being hunted out. An adequate supply can be obtained only from large scale domestic production—something which does **not** now exist.—*John Angus Haig, condensed from Nation's Business.*

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Baldness

MOST persons who still have their hair at the age of forty, need not worry about becoming bald.

There is about one bald-headed woman to something between fifty and one hundred bald-headed men.

In some parts of the Orient a bald-headed man is held in great respect.

People get bald on the top of the scalp because the circulation is sluggish there; they seldom are bald around the ears or the neck where the circulation is active.

Men with plenty of hair can do more physical labor than their bald brothers, says the American Association for the Advancement of Science.—*Fact Digest.*