

YOUNG HAN CHOO, right, consul general of the Republic of Korea, signs a contract for 1,000 square feet of space at the International Trade Fair to be held at Portland next June 10-24 as part of the Oregon Centennial. With him is Floyd Maxwell, managing director of the centennial.

California Catfish Anglers May Soon Benefit From New Discoveries In Rearing Fish

United Press International
SACRAMENTO (UPI) — The California catfish angler of the future may benefit from an invention just announced by the State Fish and Game Department—an artificial means of spawning channel catfish.

A department spokesman credited the ingenuity of Fisheries Manager Earl Mitchell of the Central Valleys Warmwater Fish Hatchery at Elk Grove, near Sacramento, for the invention.

It is the first time in California that the fish has been artificially spawned.

Mitchell, a veteran of fish and game service, developed a device which takes part of the place of a male catfish in the hatching process of catfish eggs.

The device "fans" floating catfish eggs until they are hatched in much the same way that the father fish does after the eggs are laid by the mother.

Mitchell pointed out that catfish eggs must be kept in motion until they are hatched. This normally is done by the father fish with his tail.

But there's one fallacy in the natural way of doing it. Father catfish get hungry quite often.

He already has chased the mother catfish out of the area, Mitchell said, "because he doesn't want her around when he gets hungry, since she generally takes a dim view of his idea of a meal—newly laid catfish eggs."

"Mitchell's device replaces the father catfish's tail most efficiently," the department said, "and has the added, and most important, advantage of never developing hunger pangs."

Fish used for the first major spawning experiment were trapped in the Sacramento River, the Honcut Slough Area of the Feather River and the Sutter Bypass. Most of them were 4-year-olds.

Then they were paired off and placed in 14 specially-built pens in the Central Valleys hatchery. Each pen contained a length of tile two feet long by 1 1/2 inches in diameter where the spawning took place.

The eggs, spawned in a congealed mass, stick to the tile.

Mitchell said that "hungry and disturbed" father catfish had to be chased away before hatchery workers could remove the eggs by hand and take them to the artificial incubator.

A total of about 130,000 eggs were taken to the incubator.

And then began the baby sitting. The small fry fish were placed in standard hatchery troughs, covered to protect them from the sun. They remained there until they grew big enough to be replanted in a stream.

The department said catfish fry have much heavier appetites than trout—and had to be fed almost hourly.

This normally would have called for night work. But hatchery attendants froze chunks of liver around cork floats and placed the floats in the troughs late in the evening. This provided midnight snacks for the hungry fish.

The experiment exceeded department hopes, according to a spokesman. The original plan called for production of about 100,000 eggs but the output totaled 130,000.

"From this number," the department said, "we hope to grow sufficient fingerlings to plant experimentally, in suitable waters throughout the state."

The planting already has started. One region accepted a consignment of 21,000 of the fingerlings for planting in Big Bear Lake.

Other regions will get shipments as soon as the fish are large enough to be planted because the Central Valleys Hatchery does not have facilities to hold the fish beyond the fingerling stage.

Here's a bit of background on California's catfish. The species now in California came originally from the Middle West and Atlantic seaboard and were introduced into warm to moderate water.

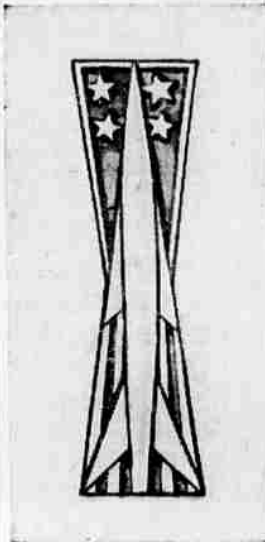
The Fish and Game Department describes them as "excellent eating" if properly prepared and says they are "comparatively easy" to catch on "a variety of baits."

The catfish spawn in late spring or early summer and the channel catfish live for the most part in the channels of large streams. The Colorado and Sacramento rivers are its principal California habitats.

Sometimes, the channel catfish grow to 35 pounds but the average size is much smaller.

EDITOR'S NOTE

CHICAGO (UPI)—The Encyclopedia Britannica reports that the admission of Alaska as the 49th state means that 104 of its articles must be revised to conform with this latest development.



MISSILEMAN — Just approved by the Air Force is this distinctive new insignia for the men who will man its growing missile squadrons. The emblem, a small silver badge which will be worn on the left breast pocket, depicts a missile rising vertically to penetrate a cluster of four small stars. The Air Force hoped to begin distributing the insignia to qualifying members August 1.

Sailors Take The Long Way Home

BELFIELD, N. D. (UPI) — Two former sailors finally got home from the Navy, but they chose the long and the hard way of doing it.

The pair, Patrick Hecker and Elliot Linbo, both 22, arrived at their homes here after riding bicycles on a month-long journey from their discharge point in San Francisco.

Hecker and Linbo said they decided to make the trip by bike so they could get a closer look at the country. They slept on the ground all but four nights and ate their meals in restaurants.

They had their bikes overhauled twice and took a side trip to Vancouver, British Columbia, to visit relatives.

They rode European bikes equipped with gear shifts to help them pedal up the mountains.

Production Of Milk In State Falls

The number of milk cows on Oregon farms has dropped to the lowest point on record and milk production continues a downward trend, reports Oregon State College extension service.

Oregon has 175,000 milk cows this summer, a 2 1/2 per cent drop from last year and the smallest number in 23 years of record, according to Stephen C. Marks, OSC agricultural economist. The report is based on a mid-summer inventory by the state crop reporting service.

Milk production in Oregon last month dropped two million pounds below the same month a year ago, Marks said.

Hot weather throughout most of Oregon during the past month has also lowered milk production, says Don E. Anderson, OSC dairy specialist.

When temperatures are 80 degrees or higher, farmers are advised to provide animals with shade and make sure fresh drinking water is near.

Pasture production has also dipped sharply during the hot wea-

ther. Supplemental feed, especially grain, is now necessary, Anderson states. He adds that a good fly-control program to ease irritation of cows might easily boost a cow's daily production by two or three pounds.

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