

CURRENT



LINE



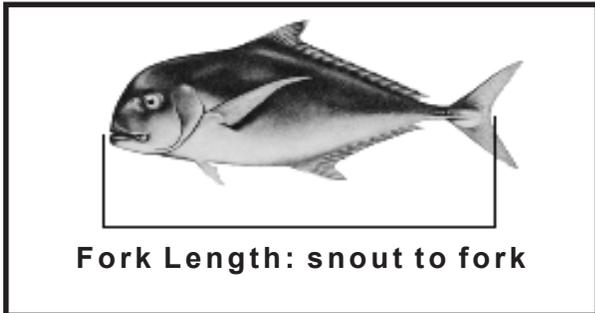
DAR Statewide Project Information Newsletter

Volume 7, Number 1, April 2003

New year brings new fishing regulations

Happy new year fishermen and women! New fishing regulations regarding changes in minimum sizes, seasons and limits went into effect on Dec. 19, 2002. Most changes involved increasing the minimum sizes for certain regulated species. Please see insert for all minimum size changes.

The new rules also change the way fish are measured. Fishers must now measure a fish's fork length, which is the distance from the snout to the fork of the caudal (tail) fin. Previously, minimum sizes applied to a fish's total length, the distance from the snout to the end of the tail.



Fork Length: snout to fork

William Devick, administrator of DLNR's Division of Aquatic Resources (DAR) says that the changes were because previous ones had no biological basis.

"Minimum sizes were increased, for example, based on size at sexual maturity. For these popular shoreline fish, we want to give them a chance to reproduce at least once before they are consumed. This measure should help to rebuild their populations."

Note: We apologize for any confusion that the listed minimum sizes in the December issue caused. The sizes have since changed. Please refer to insert for all other revised minimum sizes.

Weevils may be introduced to eat away salvinia



A square patch of thick green leaves with white, bristly hairs floats on the surface of freshwater lakes and streams. It feeds on nutrients and is nourished by the sun and as a result it grows. In

favorable natural conditions *Salvinia molesta*, an alien aquatic weed species, doubles in size after only 7 to 10 days. In optimal conditions, plant populations have been found to double in size after 2 to 4 days.

The world's most noxious aquatic weed was first discovered in April 1999 in Enchanted Lake, Kailua, canvassing bodies of freshwater and causing destruction. In November of 2002, it was discovered in Lake Wilson, Wahiawa and at one point covered 95 percent of the lake.

As a short-term solution, in late February, the state closed the Lake Wilson State Recreation Area until further notice to set up heavy machinery to remove *Salvinia molesta* from the water. In addition, environmentally-friendly herbicide called Aqua Master was used to treat the lake twice.

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(continued from SALVINIA WEEVIL)

“Aqua Master is completely safe for aquatic life,” said Bill Devick, administrator of the state Division of Aquatic Resources.

Giant salvinia, the common name for the weed, can overgrow and replace native plant species. It prevents light and atmospheric oxygen from entering the water. In addition, decomposing material drops to the bottom, consuming dissolved oxygen needed by fish and other aquatic life.

As *Salvinia molesta* matures their stems spontaneously fall off and new branches grow from those fragments. This process helps the weed to reproduce, withstand periods of stress and low temperature.

One issue that the Division of Aquatic Resources and the Department of Agriculture are working together on is the possibility of introducing weevils that feed on *Salvinia molesta*.

“The weevil *Cyrtobagous salvinae*, a native of South America, has been used with great success to control *Salvinia molesta* in other parts of the world,” said Mike Yamamoto, aquatic biologist for the DAR. “Before this weevil can be introduced to Hawaii, in an attempt to control the outbreak of *S. molesta* here, State officials need to be sure that this weevil will not attack native plants, or other plants of commercial importance here in Hawaii.”

Yamamoto says that the State’s DOA has an excellent record when it comes to the use of bio-control agents.

“They have a protocol, which involves testing the candidate species, in this case, *C. salvinae* with a number of plant species. This may take up to a year. If all goes as planned and the weevil does not harm other plant species, the necessary reports and approvals will have to be obtained before the weevil can be released,” said Yamamoto.

Anglers! Apply for Catfish fishing before April 19

Just a reminder for anglers, Nuuanu Reservoir No. 4 will reopen May 4 for weekend channel catfish fishing.

The deadline for submitting applications is 4p.m. April 19. A drawing will be held to assign each cardholder a fishing date and time and all cardholders will be required to show a valid freshwater gaming license while fishing

Each fishing day at Nuuanu will be divided into two, four-hour fishing periods: a morning session from 7 to 11 a.m. and an afternoon session from noon to 4 p.m.

(continued from CATFISH CARDS)

Fishing will continue on consecutive weekends, Saturdays and Sundays only, until all permitted anglers’ times have been accommodated.

Entry will be strictly limited to those who have been assigned to the specific time slot, which are indicated on the cards, and to supervising adults for minors holding appropriate entry cards.

Anglers must participate during the period they are assigned to fish. There will be no makeup periods or refunds.

Those 8 years old or younger are not required to be licensed, but must be accompanied by a licensed, supervising adult. They may also purchase a license for their own bag limit. Cardholders 15 years old or younger must be accompanied by a supervising adult.

The bag limit is two channel catfish per licensed angler. Any channel catfish 16 inches long or larger must be kept by the angler and be counted toward the bag limit.

For further information, call DLNR’s Division of Aquatic Resources at 587-0100.

**License, Rules and Regulations
Open Season:**

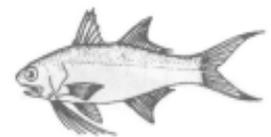
Mullet Season (for 'ama'ama or striped mullet) is now **open** as of April 1st and will run until November 30th.



From November to June halau (juvenile akule measuring under 8-1/2 inches in total length) may be taken with nets.

***See January 2003 edition of the Hawaii fishing regulations for further information regarding akule nets.**

Moi Season will open September 1st and will run till May 31st. Remember that minimum size for home consumption or sale is 11 inches, fork length.



Closed Season:

**Spiny Lobster Season
Slipper Lobster Season
& Kona Crab Season** will be closed April 31st.





Hawai`is Fishing Agregation Devices Today

To date there are 55 FADS throughout the state of Hawai`i: 18 are in the waters surrounding the Big Island, 14 are in O`ahu, 14 are in Maui County (which include Lana`i, Moloka`i, and Kaho`olawe) and 9 are in Kaua`i.

Most recently, there have been only two buoys missing. Pretty good, considering the likelihood of this occurrence. Buoys generally stray from their initial anchored spot because of the wear and tear of the ocean waves and when lost can take a very long time to replace.

FAD Specialist, Warren Cortez, runs the FAD station located at Sand Island. He receives calls from fisherman across the globe asking for advice on FADS. Most recently Australia, Fuji, the Marshall Islands, and the Caribbean

have called.

"Our program is the longest running and probably the best as far as efficiency," says Cortez of the state`s program. It is because of reasons such as these that Hawai`i has become one of the leaders` in FAD systems.

Most countries that implement a FAD program work more like a co-op, fisherman pay for the use of the FAD's. In Hawai`i, however, the program is statewide. It operates on funding from the state and because of its success, has continued to exist.

"People usually inquire about costs and materials, they are either starting or have just begun and we`ve been doing this for so long that we`ve developed a pretty good system," said Cortez. He says that the design of the current buoy is good, he only sees room for improvement in hardware (such as the top chain and rope). All in all, he calls the buoys the best we can have at the best cost.

With a modest budget, generous feedback from Hawai`i`s fishermen and women, and experienced FAD managers, the statewide FAD system continues to operate smoothly.

Island	FAD	Location	# of Months on station	Trolling			Tuna Handline		
				Lbs.	# Trips	Lbs./Trip	Lbs.	#Trips	Lbs./Trip
Hawai`i	D	Kumukahi	12.0	24,958	126	198.1	85,372	88	970.1
	ZZ	Waima Pt.	12.0	1,880	31	60.6	---	---	---
			11	9,487	104	93	18,901	45	299
O`ahu	S	Pokai Bay	12.0	48,815	569	85.8	768	15	51.2
	P	Penguin Banks	9.9	2,890	35	82.6	---	---	---
			11	17,807	202	88	2,716	19	98
MauiCounty	JJ	Kamohio	12.0	32,597	160	203.7	2,169	11	197.2
	NL	Nu`u	10.5	1,369	12	114.1	---	---	---
			11	8,203	104	90	---	---	---
Kauai	CK	Makahu`ena Pt.	10.7	16,555	182	91	2,775	11	252.3
	BB	Moloa`a	4.3	467	6	77.8	---	---	---
			9.7	5,622	72.2	83.7	5,266	16.25	278

Table 1.1 FAD CATCHES BY ISLAND, FAD AND FISHING TRIP COUNT CALENDAR YEAR 2001, State of Hawaii

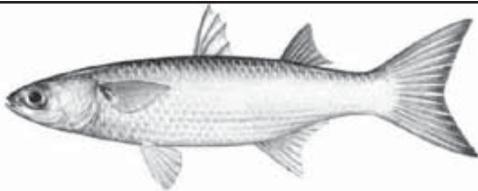
**Due to low level of fisherman reporting and to preserve confidentiality, data for other fishing methods are not listed.

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RETURN SERVICE REQUESTED

DIVISION OF AQUATIC RESOURCES
DEPT. OF LAND & NATURAL RESOURCES
1151 PUNCHBOWL STREET, RM. 330
HONOLULU, HAWAII 96813

Fish Facts: *Mugil cephalus* (Mullet, 'Ama'ama, Pua)



DESCRIPTION

Body silver with grayish-green above changing to white below, reddish tinge around mouth and gills. The young are silvery pelagic fishes that may be taken at a night light well offshore in spring.

SIZES

Length: Between 12-24 inches, up to 2 feet however there has been one reported at 3 feet.
Weight: Generally up to 5 pounds.

BREEDING

Spawning: December through February. Females spawn 5 to 7 million eggs.
Sexual maturity: 7 to 8 years.

LIFESTYLE

Habitat: Occurs in coastal waters of the tropical and subtropical zones of all seas. Does not occur along open coasts. Lives in calm waters close to shore, around mouths of streams and inlets, and brackish bays and harbors.
Diet: Diurnal; fine algae and small plants, especially along bottom.

FISHING INFORMATION

Schooling: Often seen in small schools and are prone to leap free of the surface.
Fishing methods: Generally taken with nets; difficult to catch with pole and line, but will take a hook baited with thin seaweed or bread.

*Mullet was one of the most important food fishes in old Hawaii and as a result were given many names including: Pu-a 'ama, 'O-'o-la, Kahala, and 'A-na-e. The names represented different stages of life from baby to adult.

This publication is a result of research funded by the National Oceanic and Atmospheric Administration, Coastal Ocean Program, under awards NA870A0381, NA960P0187, NA060A0388, and NA160A1449 to the University of Hawaii for the Hawaii Coral Reef Initiative Research Program.

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