

CURRENT LINE

DAR STATEWIDE PROJECT INFORMATION NEWSLETTER

VOLUME 4, NUMBER 2, July 2000

LICENSES, RULES & REGULATIONS

REMINDERS



Halalu (juvenile akule) Season

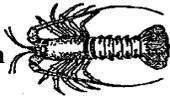
Halalu schools start to come inshore during July. It is **unlawful to take akule under 8-1/2 inches with net during July through October**. Any akule under 8-1/2 inches in total length is considered a halalu or juvenile akule. This regulation was established in 1968 to protect the young akule (halalu) during the peak of their recruitment into the fishery. During the rest of the year (November through June) halalu may be taken by nets with a minimum mesh size of 1-1/2 inches. Adult akule (measuring 8-1/2 inches or more in total length) may be taken all year round by nets with a minimum mesh size of 1-1/2 inches.

Oama (juvenile white weke) Season



Oama schools usually come inshore around this time. There is a **bag limit of 50 oama per person** per day. Oama are juvenile white weke that are under 7 inches in total length.

Spiny Lobster Season Slipper Lobster Season & Kona Crab Season



will be closed between **May 1st thru August 31st**. These animals spawn during this time, so let's give them a chance to breed and multiply.

Moi & Moi-li'i Season will be closed between **June 1st and August 31st**. These animals spawn during the summer months so let's give them a break to help us increase their numbers.

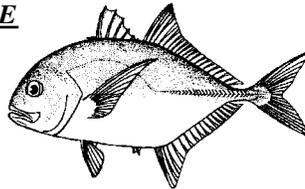
It's summer time and the **Ahi** are running! **Ahi Season**



is open all year round, however, remember that minimum size for sale is 3 pounds.

INSHORE PROJECTS

STATEWIDE ULUA TAGGING PROJECT



Historically, ulua and papio have always been considered an integral part of Hawaii's fishery. Even today, these are considered extremely popular fish among recreational, commercial and subsistence fishermen. The ulua is a highly prized game fish, greatly regarded for its strength and size of which no other shoreline fish can match with its power or fighting capabilities. Some species range up to about 5 feet in length with weights exceeding 100 pounds. It is also highly regarded as a food fish. The meat is very flavorful and can be eaten raw as sashimi, steamed, or pan-fried. All around, many anglers have come to appreciate this truly magnificent fish as a resource.

Fishermen have expressed strong concern on the overall condition of the ulua and papio resources in Hawaii. Historically, there has always been fishing pressure for ulua and papio in these islands. Fishing is an especially important aspect of life in Hawaii providing opportunities to strengthen relationships between family and friends while sharing an activity. Through fishing, we pass on values that promote a sense of respect, stewardship,

and responsibility toward the marine environment and our limited ocean resources.

As a result of strong concern for the ulua and papio resources, Hawaii's fishermen have graciously volunteered to work with the Division of Aquatic Resources in conducting tagging studies on these fish. Through this combined effort, we hope to better monitor and further understand the biology and behavior of these species throughout the island chain from the Island of Hawaii to Kure Atoll. This project intends to target all species in the Family Carangidae known as ulua and papio. Kahala will also be targeted as part of the tagging effort.

Initial efforts for this tagging program were developed with the help of a few members of the Hilo Casting Club. Due to their initiative, members of the Hilo Casting Club and Big Island Casting Club began tagging ulua and papio on the Big Island. Recently we have expanded this tagging effort which now includes 4 commercial bottomfish vessels tagging ulua and kahala in the Northwestern Hawaiian Islands, a charter vessel tagging kahala in Kona, and members of the Kakaako Casting Club tagging ulua and papio on Oahu. These fishermen will participate by tagging, releasing, and recording information on

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each ulua, papio, and kahala that they catch. The success of this program will highly depend upon fishermen's participation in recovering tagged individuals and providing us with the following information:

1. WHO (name and address of fisherman)
2. TAG NO. (Identification number on the tag)
3. WHEN (date of capture)
4. WHERE (location of capture)
5. WHAT (species type: omilu, kahala, white, papa, etc.)
6. SIZE (fork length - measure from the tip of the mouth to the fork in the tail in inches)

Tag returns are to be reported by phone at 587-0593 or mailed to:

**Ulua Tagging Project
Dept. of Land & Natural Resources
Division of Aquatic Resources
1151 Punchbowl Street, Room 330
Honolulu, Hawaii 96813**

ATTN: Annette Tagawa

The Division will award the angler for each tag returned along with the above-mentioned information. Tag and recovery information will be provided for participating fishermen. General information updates will be available through our Current Line newsletter and our WEB site in the future. As these fish are recovered over time, we hope to gather information that will help us monitor and assess the ulua, papio, and kahala resources in Hawaiian waters.

There is some interesting, but limited information regarding the ulua and papio resources in Hawaiian waters. Although there has only been a few projects, they have revealed some interesting findings:

- The Hawaii Institute of Marine Biology (HIMB) has been tagging reef fish including juvenile papio, in Kaneohe Bay, and most recently off the Waikiki area on the island of Oahu. Recoveries of Kaneohe Bay tagged papio indicate that some will travel great distances. Several have been recovered off the Waianae (lee-

ward) coast of Oahu, some 60+ miles away. One was also reportedly caught off Kona, Hawaii.

- One study showed that omilu tends to frequent a rather confined coastal area on Oahu.
- During a National Marine Fisheries Service (NMFS) cruise, a kahala was tagged and released off of Necker Island and was later recaptured off of Laie Point on the Island of Oahu, some 350 miles away.
- A recent tagging effort of kahala in the Kona area (west side of the Big Island) resulted in fish being recovered in the Milolii and Kumukahi areas on the east side of the island.

Tagging programs where fishermen provide a large portion of the tagging effort, have been around for a number of years. A few have been in existence for nearly 40 years. These programs have proven successful by contributing substantial information to fisheries research and providing the basis toward management strategies for some marine species. Considering the limited budget of many fishery agencies, fishermen participation in tagging programs is an asset in helping fishery managers collect and analyze long-term comprehensive data on fish movement and behavior patterns that would otherwise be difficult to obtain.

We are hoping that DAR's Ulua Tagging Project will be as successful as some of these other tagging programs where local fishermen work in conjunction with fishery management agencies to take action in caring for its fishery resources. Through this combined effort, our objective is to gather information on the following:

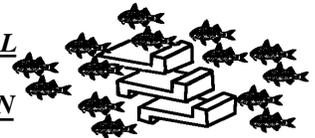
- Size distribution of fish caught and/or released by fishermen,
- Stock distributions based on the numbers of fish tagged and recovered,
- Determine movement/migration and habitat patterns of ulua, papio, and kahala,

- Update growth curve information from length and weight measurements.

Information gathered from this tagging project will allow us to maintain and possibly improve these valuable resources. Management strategies and decisions based on accumulative information can help to improve fishing opportunities and strengthen our resources. The ultimate goal of this project is to promote conservation and management of the resources while providing for the needs of recreational, commercial, and subsistence fishing for the people of Hawaii.

If you have any questions or would like more information regarding DAR's Ulua Tagging Project, please contact Annette Tagawa or Clay Tam on Oahu at (808) 587-0593.

**KUALOA
ARTIFICIAL
REEF
EXPANSION**



In February and March 2000, nearly 1,000 "Z" shaped concrete fish habitats were added to the Kualoa Artificial Reef off Kaaawa, Oahu. Between December 1999 and March 2000 over 1,800 habitats have been added to the Kualoa Reef at a cost of approximately \$350,000. However, the entire cost to build, transport, and add these habitats to the windward side is being paid for by Federal Aid monies. Also in February, Healy Tibbitts Builder, Inc. a private construction company donated a small 60-foot barge and scuttled it at 75 to 90 foot depths at the Kualoa Reef. Their donations of manpower and materials to accomplish this task was estimated to be worth \$28,000.

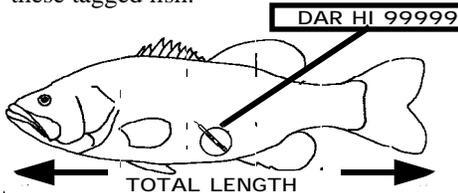
In May, the Division received a donation of tug and barge services worth \$32,000 in in-kind matching from North Pacific Construction, Inc. for their assistance in transporting and deploying approximately 1,400 tons of concrete material in a designated area at the Maunalua Bay Artificial Reef. The contaminant-free concrete material were formally landing

piers at the Arizona Memorial Visitors Center in Pearl Harbor. North Pacific Construction, Inc. also donated their services to add a small finger pier from Honolulu Harbor to the Maunalua Bay Artificial Reef in June worth thousands in in-kind matching.

FRESHWATER FISHING

ATTENTION WAHIAWA FISHERMEN!

Division personnel have been tagging largemouth and smallmouth bass, tucunare (peacock bass), oscar, and bluegill sunfish in the Wahiawa Public fishing Area (also known as "Lake Wilson") over the past year. Your assistance is needed in helping us to collect data on these tagged fish.



The tags are located on the left side of the fish, either below the dorsal fin, on the side of the fish, or near the base of the anal fin. The data collected will be used to determine growth rates and population sizes of the different species in the Wahiawa Public Fishing Area.

If you catch one of these tagged fish, we would like you to record the following information:

1. TAG NO. (Identification number on the tag)
2. TAG COLOR (color of tag)
3. WHEN (date of capture)
4. WHERE (location of capture if possible, e.g. Boy Scout Island, Kemoo Island, etc.)
5. WHAT (species type: bluegill, tucunare, etc.)
6. SIZE (total length - measure from the tip of the mouth to the end of the tail in inches)
7. WEIGHT (pounds/ounces)

Please call **Glenn Higashi of the Division of Aquatic Resources at 587-0112**

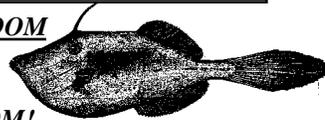
to report all tag recovery information or you can send the information to:

**DLNR - Division of Aquatic Resources
1151 Punchbowl Street, Room 330
Honolulu, Hawaii 96813
Attn: Glenn Higashi**

Data logs for recording information on tagged fish are available through the DAR office in Honolulu. For more information, please contact Glenn Higashi at 587-0112.

X-FILE OCCURRENCES

MAKE ROOM FOR A BLOOM OF BROOM!



Earlier this year, those of you fishing or diving along the shoreline may have noticed an unusually high number of fish known as "broomtail filefish" or "broomtail hage", *Aluterus scriptus*. This fish is easy to identify by the long whiskbroom-like tail and the olive brown to bluish gray body covered with short irregular lines and spots of sky blue. It is unusual to see such a large number or "bloom" of this species. They are usually solitary fish or found in pairs, often in open water. The broomtail filefish is found throughout the Western and Eastern Atlantic, Indian, and Eastern Pacific Oceans.

Reports on this particular fish bloom have ranged from Penguin Banks to Nihoa, reported at depths from 1 to 100 fathoms. They are normally found in depths of 6 to 240 feet (1 to 40 fathoms). Bottomfishermen have reported the broomtail hage stealing their bait and palu near the surface along side their boats. Trappers and divers have also caught and seen large numbers of this fish during their operations. Recent commercial landings reveal approximately 3,000 pounds caught in March and roughly 5,000 pounds landed in April.

Blooms such as these are hard to explain, but there are a few theories that scientists have considered. Once such theory is the absence of natural predators that may keep the species in check. Another is the over-abundance of a food source that

may cause a particular species to flourish. Other influences are water currents and temperatures, possibly La Niña, El Niño, or a combination of things. Whatever it is, the conditions have to be just right.

Many of us can recall other fish blooms that have happened in Hawaii in past years. Many can remember the last bloom of the orange-tailed filefish, *Peruvarogor spilosoma*. In that particular year, ahi and other predators were gorging themselves on this filefish which was found in abundance throughout the main Hawaiian Islands. Another year, a bloom of aweoweo, *Priacanthus* spp. occurred. These could be caught throughout the islands in nearshore waters where the water literally turned red with the run of aweoweo. Other fish blooms have included puffer fish or balloon fish. Occurrences of these blooms seem to happen every 5 to 10 years or so.

Hawaiians believed that these fish blooms were omens prophesizing the future death of royalty or an alii. One can only guess as to what this bloom of broomtail filefish means...? So far, this is the first record in modern Hawaii of such a bloom of broomtail filefish.

If you happen to catch one, give it a taste test - you will be surprised. Once filleted and skinned, the meat is white, firm and mild tasting. The fish can be steamed, fried, or prepared your favorite way.

OFFSHORE FISHERIES

FAD PROJECT

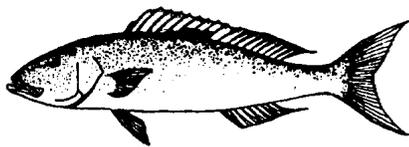
Here is the most recent update of missing FADs:

MISSING FADs (as of June 5, 2000):

<u>FAD</u>	<u>Location</u>	<u>Island</u>
B	Milolii	Hawai'i
G	Pepeekeo	Hawai'i
R	Makaha	O'ahu
J	Waialeale	O'ahu

For current locations and/or more information, contact Warren Cortez at 848-2939. Also, if you know of any FADs that broke loose, see any light out or have any other comments, please give Warren a call.

FISH FACTS



Aprion virescens
(Gray Snapper, Uku)

SIZES

Length: up to 3 feet or more in length. Maximum length recorded at around 44 inches.

Weight: up to about 40 pounds; average weight about 10 to 12 pounds

BREEDING

Sexual Maturity: both males and females generally reach spawning condition between 24 to 30 inches.

Spawning: spawning generally occurs during June.

LIFESTYLE

Habitat: inhabits inshore reef areas from the surface down to a depth of 80 fathoms.

Diet: Feeds mainly on fishes, but also shrimp, crabs, cephalopods, and plankton organisms

Life Span: unknown

Distribution: Indopacific: from East Africa through Southeast Asia to Southern Japan and Hawaii, and southward to Australia.

RELATED SPECIES

The uku is a member of the Snapper Fish Family which includes other commercially important species such as onaga and ehū. This is the only Hawaiian snapper that may be caught at or near the surface with lures. It is considered an excellent food and game fish. However, because of its nearshore feeding habits, this species has been implicated in a small handful of ciguatera attacks.

The following table will give you an idea of how fast these fish grow and how old they are. Please note that these are just ballpark figures and meant only to give you a general idea on the relationship of length, weight, and age.

<i>Length, Weight and Age of Uku</i>		
Fork Length (inches)	Weight (pounds)	Age (years)
12	0.8	1
16	2	1.5
20	4.2	2
24	7.7	2.6
28	12.7	3.3
32	20	4
36	29	5.3

The Department of Land and Natural Resources receives financial support under the Federal Aid in Sport Fish Restoration and other federal programs. Under Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and the laws of the State of Hawaii, the U.S. Department of the Interior and the State of Hawaii prohibit discrimination on the basis of race, color, religion, sex, national origin, age, and disability. If you believe that you have been discriminated against in any program, activity or facility, or if you desire information, please write to: Affirmative Action Officer, Personnel Office, Department of Land and Natural Resources, 1151 Punchbowl Street, Rm. 231, Honolulu, HI 96813, or the U.S. Fish & Wildlife Service, Office for Human Resources, 1849 C Street NW, Room 3058, Washington, D. C. 20240.