



# INTERNATIONAL ANGLER

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## ALOHA Bones! Part II

### Some interesting new facts about Hawaii's bonefish

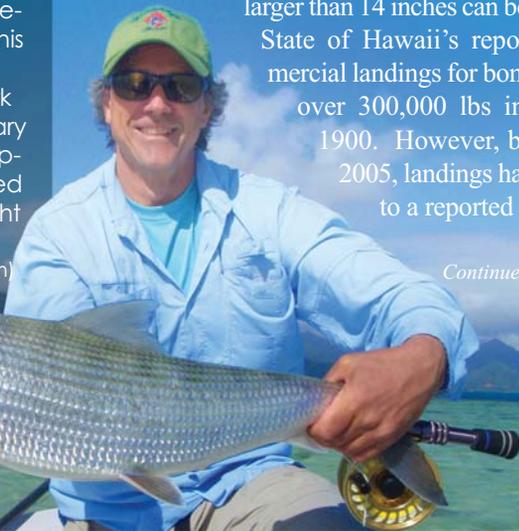
By Kimberlee Harding, Project Coordinator of the O'io Tagging Project

In modern Hawaii, bonefish, locally known as 'Ō'io, have limited economical importance as a recreational species and are only marginally important as a commercial fish. As a result, there are few restrictions on take despite their high cultural and recreational importance up and beyond commerce. In Hawaii the commercial sale of bonefish is legal, there are no recreational harvest limits, and fish

larger than 14 inches can be kept. The State of Hawaii's reported commercial landings for bonefish were over 300,000 lbs in the year 1900. However, by the year 2005, landings had declined to a reported 3,334 lb.

Captain Terry Duffield reports big bonefish like this 12 lb 6 oz specimen caught by angler Mark Hopkins are seen regularly on the Hawaii flats. Captain Terry Duffield guided Hopkins to this fly caught fish.

(www.hawaiibonefishing.com)



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## IGFA Offshore World Championship Rescheduled due to Flu Outbreak

With the rising reports of swine flu in Mexico, and the potential of it turning epidemic in late April, officials of the IGFA Offshore World Championship elected to postpone the annual early May event in Cabo San Lucas to November.

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## IGFA to Attend the Hawaiian International Billfish Tournament



The IGFA will be attending the 50<sup>th</sup> Anniversary of the Hawaiian International Billfish Tournament in Kona, Hawaii to help our trustee, Peter Fithian, celebrate this milestone.

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## WORLD RECORD ACHIEVEMENT GALA TOASTS "THE BEST OF THE BEST"

### Three recipients receive Lifetime Achievement Awards

By Steve Kantner

This year's World Record Achievement Awards (WRAA) banquet, held on April 18th at IGFA Headquarters in Dania Beach, Florida, was among the most well-attended in the event's history. And not without reason. Not only did an unprecedented number of manufacturers and captains compete for honors, but anglers in several categories remained in contention until the end of the qualifying period. Still, when it came to selecting those individuals whose accomplishments stood apart from the rest, the challenge was easily met.

Some history may be in order. For the past six years, the IGFA has recognized members of the fishing community who either caught, or contributed to the capture of the most world records during the preceding qualifying period (which runs from October to October for the sake of record-keeping).

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Photo by Kurt Kawamoto, NOAA.



*A. virgata* is called sharp jaw because of its angular, pointed lower jaw and a bright yellowish, green spot under its pectoral fins.

*A. glossodonta* is commonly referred to as "round jaw."



Unlike the two species found in Florida that are externally indistinguishable, the two species of bonefish in Hawaii can easily be identified in the field. Both Hawaiian bonefish are similar in shape and color, but there are differences in the shape of their lower jaw. *A. glossodonta* is commonly referred to as "round jaw" due to a distinctly round lower jaw. *A. virgata* is called sharp jaw because of its angular, pointed lower jaw. The sharp jaw also possesses a bright yellowish, green spot under its pectoral fins that the round jaw does not have.



#### Aloha Bones, continued from cover

Recreational and subsistence fishing data is currently not recorded in the State of Hawaii, but it is considered to have a large impact on the near-shore fish populations. 'Ō'io have traditionally been a popular food fish in Hawaii since ancient times. Now, lomi style (raw) and fishcake from 'Ō'io are important menu items for many special occasions.

In 1981 most bonefish found worldwide were still classified under one species, *Albula vulpes*; until two researchers in Hawaii discovered this was not the case. Two species of bonefish were found to inhabit Hawaiian waters, and neither was *A. vulpes*. In fact, one species, *Albula virgata* was determined to be native to Hawaii and found nowhere else in the world. The other species, *Albula glossodonta*, can be found in the western Indian Ocean and the south Pacific.

Even though the external field diagnostics were confirmed and published in 1981, most local anglers are still not aware that there are two different species of bonefish in Hawaiian waters. Until now, no ecological study has been performed to examine the interactions or the partitioning between these species. Only the basic life cycle of bonefish has been described, and little is known about movements or behavior in Hawaii. What is known about bonefish is applied to both species and current fishing regulations of bonefish in Hawaii are based upon general life history information found in published literature.

To gain a better understanding of important life history characteristics, the 'Ō'io tagging project was initiated in 2003. Between May 2003 and February 2006 more than 50 recreational anglers, mostly fly fishers tagged

1,147 fish and recaptured 19 of those fish. Most fish were recaptured near the initial tagging site and the average distance traveled was less than five miles. There was one exception when a fish tagged off Hawaii Kai, Oahu was recaptured off Kaunakakai Harbor, Molokai, 609 days after being tagged. This distance is 32 miles over the 3200 ft. deep Kaiwi Channel. Of the 1,147 bonefish tagged, the vast majorities are round jaw (81%). From this small sample size it was determined that round jaw are on average larger than the sharp jaws. Round jaw and sharp jaws are found in different habitats with a very small overlap. Sharp jaws are rarely caught in waters less than six feet deep.

In 2008 the 'Ō'io tagging project restarted through the Oceanic Institute in Waimanalo, Hawaii with the objective of recruiting a larger number of mixed gear fishers in order to examine fishing success by time (e.g., seasonal, tidal, etc.) and location; to determine habitat use and migratory patterns; to estimate population abundance, growth, and mortality; and to determine the status of bonefish stocks. Membership for the 'Ō'io tagging project has risen to over 200 anglers and 329 tags have been reported from May 2008 to April 2009. Eight bonefish recaptures have been reported since May 2008. No original data were available for three of the eight, but efforts are underway to obtain this information. Three of the fish were tagged in 2005, being at large for 1534, 1424, and 1233 days later.



To learn more about the 'Ō'io Tagging Project or how you can help, check out the website at: [www.oceanicinstitute.org/tagging/index.html](http://www.oceanicinstitute.org/tagging/index.html), or contact project coordinator **Kimberlee Harding** at [kharding@oceanicinstitute.org](mailto:kharding@oceanicinstitute.org).



Photo by Dave McCoy

Kimberlee is currently working on her Masters of Science degree at Hawai'i Pacific University, Kāne'ohe, Hawai'i, conducting a diet study to gain species-specific life history characteristics of the Hawaiian bonefish. By comparing abundance, diet, growth, movement, and habitat preferences, important unknown life history characteristics will be revealed. Most of the samples for the project have come from participants of the tagging project Captain "Coach Duff", who has supplied the largest six fish of the study, Captain Mike Hennessy, Captain Dave Hill, Steven Lee and Captain Louie "The Fish" DeNolfo.