Flame Wrasse Fever

John Hoover

If you go diving or snorkeling in Hawaii, you'll soon hear, or read, that about one in every four fish specis you encounter in Island waters occurs nowhere else in the world. This phenomenon, called endemism, is a result of geographic isolation. Only Easter Island and the Red Sea can boast a comparable percentage of endemic species, and neither has more. The Hawaiian Islands might well be called the endemic fish capital of the world.

Endemic fishes, wherever they occur, are often among the most common and numerous fishes on the reef. Having evolved in their home waters, they are finely tuned to local conditions and well-positioned to outcompete other species. Not all endemics, however, are abundant or easily seen. In Hawaii, one of the more elusive endemics is the Hawaiian flame wrasse (*Cirrhilabrus jordani*). Most divers in the Islands have probably never encountered this spectacular fish. Indeed, one can do hundreds of dives in Hawaiian waters over a period of years and never find one. I wouldn't call it a rare fish, however, as it can be abundant in certain areas — it's just that those places are few and far between.

Flame wrasses are plankton feeders that attain, at most, 4 inches (10 centimeters) in length. They typically live in coral rubble near the bases of slopes or drop-offs, at a depth of about 80 feet (24 meters) or more, in areas where there is some current. But, while this type of habitat is common enough in Hawaii, little of it, in fact, harbors flame wrasses, and in the end, it's hard to predict where these fish will turn up. Like gold, flame wrasses are where you find them. Luckily, they form haremic colonies of a male and numerous females, and are thus fairly easy to spot — if you happen to be in the right place. Furthermore, colonies typically remain in the same vicinity over a period of time, making repeat visits easy. In fact, repeat visits are almost a requirement if you want to photograph these fish successfully.

I caught "flame wrasse fever" in 1993, after seeing a marvelous spread of a red and yellow male in full display in Mike Severns and Pauline Fiene's book, *Molokini Island, Hawaii's Premier Marine Reserve*. Mike and Pauline owned a dive charter business on Maui, and at the time, Mike's photo was probably the only such photo in existence. I was literally stunned when I first saw it. I had seen captive flame wrasses at the Waikiki Aquarium, but this photo of a male displaying in the wild was a total revelation. I absolutely had to have a picture like this to put on the cover of my Hawaii fish ID book, the manuscript of which I had just handed in to the publisher.

With no time to lose, I immediately called Mike Severns Diving. Pauline answered the phone. Could she or Mike, I asked, take me to see and photograph flame wrasses? "No problem," Pauline said, "we dive Molokini every day and can put you right on top of them." Just before we hung up she added "oh…be sure to bring your longest lens." I think she was trying to tell me something.

I lived in Honolulu at the time, so flying to Maui was easy, and the boat ride to Molokini took only 20 minutes or so out of Kihei boat harbor. Molokini is a

volcanic cone rising from the channel between Maui and Kahoolawe Island. It last erupted 148,000 years ago, when sea levels were lower. Today, it is mostly submerged, but its upper portions form a crescent-shaped islet that partially encloses the old crater, now largely filled with lush coral interspersed with sand channels. The outer walls, riddled with undercuts, chutes and caves, drop straight down about 300 feet (90 meters) to the base of the cone. Molokini is one of Hawaii's best dive and snorkel sites, and to top things off, visibility there typically exceeds 150 feet (45 meters). The fact that there were also flame wrasses...well, what more could one want?

We anchored between the two arms of the submerged crater and descended in a group to a sand channel about 80 feet (24 meters) below, which was bounded by reef on both sides. There were six divers, plus our guide, Jennifer. She and Dave, the captain, put us down about 40 feet (12 meters) from a male flame wrasse in full display. We swam over to the reef and watched. He was hovering a foot or two over the substrate, flaring his bright red and yellow dorsal and anal fins for a gaggle of smaller red and pink females. I ogled for a few seconds, then got to work. This was before the days of autofocus. My Minolta X700 was loaded with Fujichrome Velvia 50 film (which I was pushing to ISO 100 to get a little more speed), and I had exactly 36 chances to frame the dancing fish through the tiny Ikelite viewfinder.

Unbelievably, the proud male kept his fins fully flared and didn't swim away or duck into the rubble. We had formed a circle around him at a respectful distance, and were able to watch him for several minutes. For me, it was mostly a question of waiting until he turned broadside, and then trying to focus and shoot before he turned again. I blazed away, being careful not to get other divers in the photo. When the fish flinched, I knew the strobe light had nailed him. Whether or not he would be in focus was another question. He stopped displaying after awhile, and became an ordinary male flame wrasse once again. Even so, I thought I might have gotten a couple of reasonable shots.

Eventually, we moved on to finish the dive at "Land's End," where Molokini's longest arm narrows and slopes down into deep water. I remember clouds of pennant and pyramid butterflyfish, a whitetip reef shark swimming lazily down below, and half a dozen large giant trevally hovering out in the blue. Molokini, a marine preserve, is one of the few dive sites in Hawaii where these large jacks can still be regularly seen.

For the second dive, Jennifer suggested that I go back down to the wrasse colony alone. She thought I might have a better chance without other divers around. Mike, she said, tended to dive solo when trying to photograph these skittish fish. It sounded good to me, and when I reached the sand channel I could see the male still displaying his heart out over the adjacent reef. This time, however, whenever I got within shooting distance, he invariably turned and swam away. I could only get tail shots. I remember hearing someone once refer to the flame wrasse as the "aloha fish" — "aloha," in this case, meaning "goodbye" — and now I knew why. Obviously, I had enjoyed beginner's luck on the first dive.

I had the film developed upon returning to Honolulu and was elated to see that one of my shots had come out pretty well. Although a bit small in the frame, the fish was well-posed and sharp, and the background of blue water and reef came through nicely. I rushed the slide over to my publisher, who agreed to put it on the cover. He was as pleased as I was.

Later, I called Pauline to thank her. I told her I had gotten a decent shot and that it would be on the front cover of the book. She seemed surprised. I asked why, and she explained that it had taken Mike many dives to

get the picture in their book. Mike is a superb fish photographer, so, of course, success went straight to my head. Privately, I congratulated myself to no end.

It wasn't until some years later that I realized I had enjoyed an unfair advantage that day — I had been diving with a group! Remember that on my second dive, when I went down alone, the displaying wrasse always turned and swam away, but on the first dive, when the other divers surrounded it, it didn't swim away. What could be more obvious? The fish had been penned in by divers and had nowhere to go. It kept turning this way and that in an attempt to flee, and I kept taking pictures until one of them turned out.

Many years passed before I saw another flame wrasse — they didn't live where I usually dived. Sometime in the late 1990s, Erik Stein, of Extended Horizons Scuba Tours, on Maui, told me there were some colonies in front of the Sheraton Hotel at Kaanapali. He kindly took me there in his boat, but I was unable to get anywhere near the fish. Even if I had, nothing was happening — the males were not displaying. In 2008, however, a fish-photographer friend told me there were flame wrasses at a certain beach park on the Kona side of the Island of Hawaii. It was an easy shore dive, he said. (Hawaii Island is popularly known as the "Big Island," because it is as large as all the other Hawaiian Islands put together, and "Kona" refers to the leeward side, where diving conditions are best.) I arranged to meet him there and, sure enough, on a slope of mixed coral and rubble at 80 feet (24 meters) we found several colonies of flame wrasses.

The males of adjacent colonies were flaring their fins, primarily at each other, it seemed, signaling "this is my territory and these are my females." Should a female wander into another male's territory, the harem master would display to keep her in line. Sometimes, the males performed head or tail stands for emphasis. Some females, I noticed, had a display of their own, in which a the color in a double row of light spots along their backs intensified briefly. I had no idea what this signified. Although I tried for shots of the female display, I had only marginal success. The females stayed close to the bottom and were even more skittish than the males.

I returned to the spot many times. Sometimes the fish were just feeding and no one was displaying; sometimes the males were displaying, but would not allow me to get close. But one time, everything came together and I was able to get a displaying male and several females in the same picture — the ultimate flame wrasse shot...or so I thought. As I became more familiar with the full range of their behaviors, however, I realized it wasn't the ultimate shot at all.

If you watch flame wrasses a lot, you eventually find that when a displaying male really wants to make a statement, he flashes a pair of converging magenta-white lines along the sides of his body. This "flash" lasts only a few seconds and you never know when he's going to do it. Clearly, capturing a male at peak display would be the ultimate shot.

To make a long story short, I was finally lucky and found a male at the 80-foot (24 meter) drop-off that was flashing a lot. Perhaps, he was so intent on what he was doing he didn't notice me, or maybe he was just used to me by then, but I was able to slowly creep up to him, wait for the flash and transfix him into pixels for posterity.

So, is this the ultimate flame wrasse shot? Probably not. As I write this, it occurred to me that nailing a spawning male and female at the moment of gamete release might be even better. I'm not sure if anyone has witnessed flame wrasses spawning, or if anyone knows when and how they do it. Is the male courtship and spawning display the same as the territorial display I had photographed? And, would the female be displaying, as well? Would they both display simultaneously? Obviously, I'm not finished with these fish. As the poet Wallace Stevens wrote, "It can never be satisfied, the mind, never." To which one might add, "It is never finished, the diving, ever."

I returned to the 80-foot (24 meter) slope last week to watch them some more, but the wrasses were gone. The quest continues.

About the Author
John Hoover lives with his wife in Volcano, Hawaii. An active writer, diver and photographer, John has published seven books on Hawaii's undersea life. *Hawaii's Fishes, a Guide for Snorkelers and Divers*, featuring a male flame wrasse on the cover, is in its second edition and has sold over 100,000 copies, and *Hawaii's Sea Creatures* is the de facto standard guide to Hawaii's marine invertebrates. In 2008, John published *The Ultimate Guide to Hawaiian Reef Fishes, Sea Turtles, Dolphins, Whales, and Seals*. Visit John's web site, at www.hawaiisfishes.com