



**OregonLive.com**  
Everything Oregon

## Tiny Hawaiian fish signal large things in Oregon

Published: Monday, December 27, 2010, 9:04 PM



By **The Oregonian Editorial Board**



[View full size](#)

Photo courtesy W. J. Walsh/PLoS ONE

Yellow tang, a prized aquarium fish, thrive off Hawaii's coast. Their reproduction far from protected reserves underscores the success of reserves as productive nurseries.

It's hard to imagine that a popular aquarium fish thriving off Hawaii could be consequential here, in Oregon, where coastal fish stocks have declined in recent decades. But the yellow tang may well matter here, and that is a good thing.

An **Oregon State University** researcher, **Mark Christie**, and his colleagues discovered that yellow tang living in protected areas off Hawaii's Kona Coast were the parents of yellow tang living well more than 100 miles away in unprotected waters. It turns out the larvae of the adults in protected areas drifted northward with currents, reseeding unprotected parts of the ocean with the treasured yellow tang. While computers

had predicted the promise of marine sanctuaries, Christie and crew for the first time made it real, by finding and definitively identifying the tang's offspring.

Now Oregon considers creating three marine reserves off its coast for the protection of fish: at Cape Falcon, south of Cannon Beach; at Cascade Head, near Lincoln City, and at Cape Perpetua, near Yachats. These sites would, if the Legislature approves them in 2011, join two already established reserves: Redfish Rocks, near Port Orford, and Otter Rocks, near Depoe Bay. Together, they'd form an archipelago of no-fishing zones intended to replenish a variety of groundfish, among them rockfish, at the core of Oregon's historic coastal fishery.

We have no yellow tang. And Christie's study should be taken for what it is: a snapshot of the habits of one fish living in a one reef system far from here in far different waters. But his finding bolsters the argument for sanctuaries worldwide: By helping fish within a protected area multiply, reserves act as a nursery multiplying a species' number elsewhere as well.

For that among other reasons the Legislature should create the new marine reserves, joining less restrictive protected areas to become a 3-mile-wide ribbon along Oregon's 360-mile coast -- bringing oversight and potentially renewed vitality to about 10 percent of Oregon's territorial sea.

But complications loom. The Oregon groundfishery has become a hotbed of contention.

Some fishing groups have railed against groundfish catch quotas aimed for implementation in 2011. As legislators decide on marine reserves, however, the productivity of the groundfishery itself must remain in the forefront.

Meanwhile, new research from the **Pacific Northwest National Laboratory's Marine Sciences Lab**, in Sequim, Wash., examines the compatibility of marine life with wave energy generation -- the next Big Oregon Thing for renewable energy prospecting. The key question is whether the navigation abilities of migratory species, among them salmon, are hobbled by electromagnetic fields emitted by wave power generators and power cables. As we tap the natural resource of the sea, this investigation must help shape our decisions on green energy development.

But right now, the fish off Oregon need our help. We need to protect the vitality and variety of marine life, as well as the present and future Oregonians who would harvest, market and build a life around them.

While they're not the yellow tang, the tang carry a message for them.

© 2010 OregonLive.com. All rights reserved.