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PHOTO: LUC SEA GRANT EXTENSION

The Humboldt County Export Economy: FISHERIES, FISH PROCESSING & AQUACULTURE

Prosperity! was developed with the direction of over 300 business and community people. It's about growing and sustaining our community—our people, our businesses, our environment, our lifestyle. It's about competing—and winning—in an extremely competitive global marketplace. It's the North Coast strategy for economic development. And it's working.

The export industries of Humboldt County grew wages 11.2% in the last two years... that's faster than the whole economy, and that's the point. These industries *drive* the local economy...and *thrive* on the quality of life that we all cherish.

Although the docks of Humboldt Bay—like those all along the West Coast—have changed dramatically since the boom times of more populous fisheries and little or no regulation, the county's vital industries of fishing and aquaculture still employ about 400 people, some of them second- and third-generation fishermen. Hundreds of other jobs throughout the county depend on the millions of dollars in revenue these men and women generate.

Around 200 commercial vessels based in Eureka work the cold Pacific waters, while hundreds more from other West Coast ports use the Bay's facilities during the year. Fish landings on the entire North Coast in 2004 exceeded 38 million pounds for a market value of roughly \$36 million, according to the California Department of Fish and Game. Groundfish, tuna, salmon and other fish species remain part of the annual haul, but Dungeness crab—for which Humboldt is famous far and wide—represents nearly half of the area's catch. Humboldt Bay is also California's largest producer of oysters, with local farmers harvesting around 75,000 gallons each year.

For years, Humboldt's dedicated fishermen worked in near anonymity among their fellow citizens, but that should change with the opening of the City of Eureka's new Fisherman's Terminal, a bold statement of community support. The project's 420-foot dock, four jib cranes and 16,000-square-foot work area at the foot of C Street in Old Town will support 25 to 50 new long-term jobs, according to the Headwaters Fund, which provided \$200,000 in grant money that leveraged millions in additional government funding for construction. Equally as important, a public viewing area, café and retail counter will place the fishing industry closer to the heart of Old Town—and the hearts and minds of local residents and tourists.

"Anything that's going to prevent the loss of commercial fishing, people in the industry will support it," says Pete Leipzig, executive director of the Eureka-based Fishermen's Marketing Association, which represents the West Coast trawler fleet. ►

Fishermen everywhere are still dealing with the aftermath of a huge industry buildup in the 1970s that led to overfishing, tightening regulation and industry decline.

Today, federal management plans govern the traditional North Coast fisheries of groundfish, salmon and tuna, while California manages Dungeness crab. The state tends to favor passive regulations, such as the size and sex of crab taken, but the federal government uses more active (and controversial) measures such as trip limits and quotas, Leipzig explains. "Quotas can get very complicated," he says.

All portions of the groundfish fishery, including more than 80 different species that live on or near the ocean floor, are constrained by the need to rebuild species declared "overfished." A 2003 federal buyback program helped by taking 91 vessels, representing almost half of the annual catch, out of the West Coast trawler fleet, including more than a dozen vessels from the Eureka area. Still, a rehabilitated fishery could be decades away.

One silver lining in recent years has been a substantial reduction in bycatch, or wasted incidental catch, due to a restructuring of groundfish trip limits. A future system of individual fishing quotas could offer more incentives for conservative harvest levels and further reduce bycatch, advocates say. The controversial system would grant individual permit holders the rights to a certain percentage of a fishery's overall quota that could then be leased or sold. "For the most part, fishermen are in favor of moving in this direction," Leipzig says.

Salmon fishing on the North Coast, dependent largely on the Klamath River, is similarly constrained by the year-to-year condition of the fishery. The poor state of the fishery in 2006 prompted a federal moratorium on commercial salmon fishing off the Humboldt coast. The decision has

been difficult for local salmon fishermen, most of whom have to supplement their business by setting crab pots during the winter and spring, even during a good salmon year.

A healthier tuna fishery, however, is "sort of a bright spot in the industry," says Bill Carvalho, owner of McKinleyville-based Carvalho Fisheries, which has exported freshly caught tuna to Spain since 1998. The company, which employs about 20 people in Northern California and Oregon, also handpicks select tuna for canning under its eco-friendly Wild Planet brand, launched two years ago to bring low-mercury, premium albacore tuna and wild king salmon to consumers who support sustainable fisheries. "It's a way we can

distinguish ourselves in the marketplace," Carvalho says. To cut costs, the company bypasses distributors for its Wild Planet products, instead shipping directly from its contract processor in Washington or its local inventory to more than 100 retailers nationwide.

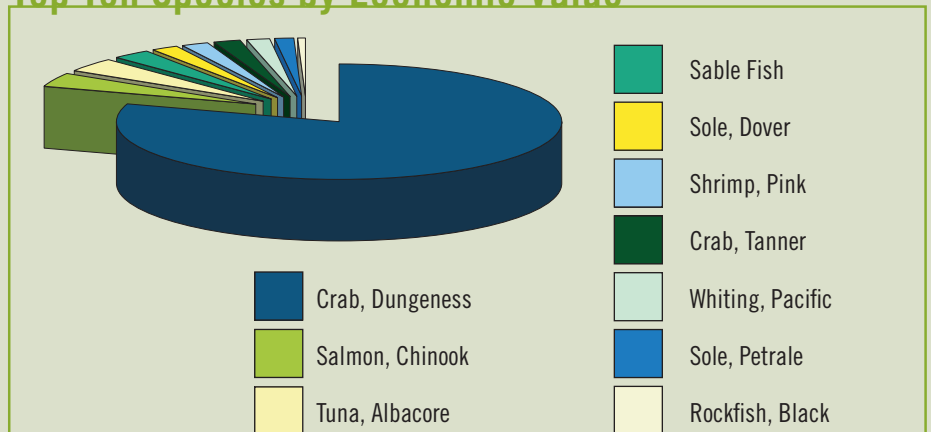
But the all-important Dungeness crab remains Carvalho's primary product, which the company ships both live, mainly to San Francisco and Los Angeles, and frozen by way of its Washington processor to distributors across the country. For other fishermen and processors, crab is the mainstay of the local industry. Despite having been fully exploited for decades, the crab fishery has so far remained stable with only limited management. But as ►

Humboldt Bay Oyster Production by Weight

SPECIES	2001	2002	2003	2004
PACIFIC OYSTER	547,851	687,527	700,000	559,505
KUMOMOTO OYSTER	9,261	19,260	20,000	41,750

Source: California Dept. of Fish and Game Regional Marine Aquaculture Report

Top Ten Species by Economic Value



Source: California Dept. of Fish and Game 2004 Landing Report

the industry well knows, no fishery is inexhaustible. According to a 2005 report by Humboldt State University researchers David Hankin and Steven Hackett, co-authored with Christopher Dewees of UC-Davis, the present focus on Dungeness crab and an increased fishing effort in the future will “likely create new biological conservation concerns” for the fishery.

The 2005-06 crab season was one of ups and downs. After the season got off to a rough start—including costly delays, a pricing dispute and even a brief strike—few expected it to be a success, though in the end the harvest was on par with the previous two outstanding seasons. Also, in

a last-minute victory for the local industry, lawmakers in Sacramento extended a provision that will keep the Dungeness crab fishery exclusive to California fishermen for another five years.

Even so, there’s no shortage of competition on the water. Heavy reliance on the crab fishery with no limits on traps has resulted in a “gear arms race with no end in sight,” says Dave Bitts, a commercial salmon and crab fisherman and secretary of the Humboldt Fisherman’s Marketing Association. As more fishermen put more traps in place, the return on investment declines until, one day, fishing isn’t profitable for anyone. The current system

also tends to concentrate the catch at the beginning of the season, which minimizes the fisherman’s revenue. As a result, most local fishermen would like to see a trap limit imposed, Bitts says.

Buying much of the crab—and much of everything else caught locally—is Humboldt County’s major remaining processor: Pacific Choice Seafood, part of the Pacific Seafood Group of Clackamas, Ore. In its 50,000-square-foot plant on the Eureka waterfront, Pacific Choice processes more than 20 million pounds of finished product annually, according to the company, supplying fresh and frozen seafood markets throughout the country. The company is also the local industry’s largest employer, providing around 170 jobs. Although the county does have other buyers, such as Carvalho and Caito Fisheries, who transport fish to facilities elsewhere, fishermen wish they had more local processors to bid for their catch, Leipzig says. But, he admits, “It’s a tough business to get into.”

Bill Carvalho knows that all too well. A few years ago he had to close a processing facility in Crescent City that employed 150 people. Trucking limitations in the region, the distance from a major population center and high workers’ compensation costs were among the reasons, but also the difficulty of competing against established, more efficient processors with off-season activity to sustain their business, Carvalho says.

He hopes to use some space in the new Eureka Fisherman’s Terminal for limited processing, as well as live crab sales to the local market. The new facility may also create opportunities for entrepreneurial fishermen to sell some of their salmon, tuna and crab directly to the public at prices higher than what processors pay. ►

Fisheries, Fish Processing & Aquaculture Goals

GOAL 1: EVOLVE AND APPLY BEST PRACTICES IN FISHERIES, MARINE CULTURE AND AQUACULTURE MANAGEMENT BASED ON GOOD SCIENCE.

- Strategy 1A: Increase availability of and funding to research projects specific to local fisheries and aquaculture.
- Strategy 1B: Pro-actively address regulatory complexity and its cost to industry and the environment.
- Strategy 1C: Develop marine and seafood science institute for research, public education and tourism on Humboldt Bay.

GOAL 2: ADD VALUE TO FISH AND AQUACULTURE PRODUCTS BEFORE THEY LEAVE HUMBOLDT COUNTY.

- Strategy 2A: Develop local products and marketing channels for reaching the CA, Nevada, Arizona and West Coast markets.
- Strategy 2B: Develop niche market products for gourmet and farmer’s market outlets locally and regionally.
- Strategy 2C: Develop a local forum to build harvester and processor cohesion and ability to bring products to market when market is ripe.

GOAL 3: ENHANCE AND PRESERVE INFRASTRUCTURE NECESSARY TO FISHING AND AQUACULTURE.

- Strategy 3A: Improve transportation in, out and around the County.
- Strategy 3B: Improve port and bay facilities for fishing, fish processing and aquaculture industry usage & expansion.
- Strategy 3C: Achieve and maintain zoning essential to water-dependent businesses.

Developed by Fisheries industry leaders in their Prosperity! industry cluster work-plan.

HIGHLIGHTS

Source: Dennis Mullins, EDD:
www.labormarketinfo.edd.ca.gov

In 2005 there were 67 establishments within the Fishing & Aquaculture cluster. This number decreased by 5.6% from 2003, while the number of employees has dropped by 27%. During this period, total wages fell by 11.4% to almost \$8 million. Average wages rose by 21.7% to \$25,234 per person. The Fishing & Aquaculture cluster represents 1% of the total economy and 2% of the base economy in Humboldt County.



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As for shellfish, the natural environment and high water quality of Humboldt Bay is ideal for aquaculture, particularly the cultivation of oysters. The Bay's Harbor Revitalization Plan even identifies aquaculture as a growth industry. Greg Dale, Southwest operations manager for Coast Seafoods, the Bay's largest oyster producer, agrees that there could be growth. "This industry should be thriving here," he says. "In Washington in a bay of this size, there are 10 or 15 farms." Instead, in Humboldt Bay, where no fewer than nine federal, state and local agencies directly or indirectly oversee aquaculture, only a handful of companies harvest shellfish.

As the largest, Coast was the first target for a new permit mandate from the U.S. Army Corps of Engineers, the California Coastal Commission and other agencies—a costly process that lasted a decade until its conclusion in May of this year. The company, headquartered in Bellevue, Wash., harvests primarily Pacific oysters in Humboldt Bay that it ships by truck to a plant in Washington. It also grows premium Kumamoto oysters, which are processed in Eureka and sent whole to thriving markets in Seattle and San Francisco. Although Coast has been in Eureka since the 1950s, the recent regulatory burden reduced its local area in production by two-thirds to about 300 acres. Likewise, employment in Eureka decreased to about 30 jobs, Dale says, and the company made additional cutbacks in infrastructure, including the cancellation of plans for a new \$3.5 million building in 1995. But with so much invested in the area and its water quality, Coast couldn't simply walk away. Now, under its

new permit, the company begins a fresh chapter in its history on Humboldt Bay.

Meanwhile, smaller growers like Scott Sterner, owner of North Bay Shellfish, are waiting to see what the outcome of Coast's regulatory odyssey will mean for them. Sterner harvests oysters from a small parcel in Humboldt Bay and also grows mussels in the Mad River Slough. With the help of one part-time employee, he sells all of his oysters at farmer's markets and to local restaurants. While he expects he will need some kind of federal permit in the future, he is unsure if the Corps of Engineers will expect as much from smaller operations. "That's the scary thing," he says. "If they do require an expensive process, that would basically wipe out the small mom-and-pop business."

Sterner and Dale both hold out hope for future aquaculture growth in the Bay, where there is ample room for more shellfish farming in an environmentally sensitive manner, Dale believes. "I want this industry to grow here," he says. "I think this is a good fit for our bay."

In April, another local grower, Kuiper Mariculture, received a permit from the Harbor, Recreation and Conservation District to build a shellfish processing facility on the Samoa Peninsula. Though still early in the planning stages, the project could be the start of something big for an industry that, most observers agree, is well-suited to Humboldt Bay. Indeed, for Humboldt aquaculture the tide may have turned at last. ■

Fisheries Assets & Opportunities

ASSETS

- Several healthy stocked fisheries Crab (Dungeness), Wild Salmon, Albacore Tuna, Pacific Oysters
- Good water quality—healthy bay and waste treatment
- Potential for expansion Mussels, Clams, Seaweed products, Whole food markets
- Docking facilities and ice available
- Supportive agencies (RREDC, City of Eureka, Harbor District, County Board of Supervisors, etc.)... supportive community and business environment... locals buy local sea food, etc., especially compared to other locales
- Enterprise Zone (tax and hiring credits)

OPPORTUNITIES

- Fields Landing seed production, etc. Water needs to be certified for consumption
- Simpson and Pacific Lumber Docks for marine enhancement White seabass cultivation/stocking
- Boardwalk developments
- Entrepreneur expansion for value-added products
- Canning

Developed by dairy industry representatives through the Prosperity! process.