

Focus on Fisheries: Those Bright Lights at Night

Each year around this time, you can often see bright lights at night across the waters of Monterey Bay. These lights mark the locations of purse seiners and light boats that target California market squid (*Loligo opalescens*) as part of the state's most valuable fishery.

The squid fishery was started in the 1860s by Chinese immigrants at Monterey, and expanded to Southern California in the early 1900s. The fishery remained relatively small through the early 1980s then grew rapidly as local fish processors cultivated international markets, and local fishermen increased their fishing effort in response to the growing opportunities. By 1996, squid ranked first among California fisheries in tons landed and dockside value, with about \$14.4 million worth of squid landed at California ports in 2005.

There are currently two distinct squid fisheries in California. The Monterey Bay fishery runs from late spring through early fall, with most landings made at Moss Landing and Monterey (accounting for between 10 and 40% of statewide landings in the last five years). The Southern California fishery, concentrated primarily around the Channel Islands, runs from mid fall through late winter, with landings primarily at Ventura, Port Hueneme and San Pedro. Each of the fishery's regions has a local fleet of vessels, skippers, and crew. For the most part, Monterey and San Pedro fishery participants are local residents. In contrast, about one-third of Ventura/Port Hueneme's squid fishermen are local residents, whereas two-thirds live out of state (Washington, in most cases).

Most squid fishing is done by purse seine vessels, which target spawning squid aggregations in shallow, sandy bottom coastal waters. Seiners usually fish at night, assisted by "light boats" equipped with high-intensity lights to attract the squid to the ocean surface where they are more easily caught. Because of squid's high perishability, the catch is delivered to receiving stations as close as possible to the fishing grounds. Most squid caught in Monterey Bay is landed at Moss Landing or Monterey and trucked to packing facilities in Watsonville and Salinas. Much of the squid landed in Southern California is caught by fishermen based in the Monterey area, and trucked to processors based here. The catch is processed, packed and sold in a variety of forms, from 50-pound frozen blocks to one-pound boxes of rings and tentacles. The overseas market for California squid is booming: 82% of the 2001 catch was exported for secondary processing, human consumption and aquaculture feed, with the remainder was domestically for human consumption, pet food, and bait.

Through the mid 1990s, the squid fishery was an open access fishery regulated by the State Legislature. Today, the fishery is managed using a statewide weekend closure, light restrictions, limited access and an annual quota, under the state's the Market Squid Fishery Management Plan, implemented by the Department of Fish and Game.