



THE POLLOCK CONSERVATION COOPERATIVE

A PRIVATE SECTOR INITIATIVE PROMOTING CONSERVATION OF MARINE RESOURCES

The Pollock Conservation Cooperative (PCC) is a private sector initiative by the Bering Sea pollock catcher/processor fleet to further improve conservation and utilization of marine resources. Member companies of the At-sea Processors Association (APA), which operate Alaska pollock catcher/processors, formed the cooperative beginning with the 1999 fishing year. The PCC has achieved important conservation goals. In fact, in 2006 the PCC received the first annual *Stewardship and Sustainability Award* from NOAA, the federal science agency that manages U.S. marine resources.

APA/PCC members allocate among themselves the overall quota of pollock available to the catcher/processor sector. By apportioning the allowable harvest among eligible fishery participants, the cooperative eliminates a race among fishers who would otherwise be seeking to maximize their individual share of the harvest. The race for fish can result in wasteful fishing practices. An orderly harvesting arrangement provides opportunities for fishers to maximize the amount of food produced per pound of fish harvested and to better avoid the incidental harvest of non-target species, sometimes called bycatch.

The PCC is a harvest-only agreement among fishers. Cooperative members cannot coordinate processing, marketing or sales activities. They simply divide up a harvest quota that the government has set aside for their sector of the pollock industry. Ending the race for fish also helps resolve the problem of overcapitalization. Under the race for fish format, harvesting and processing capacity is continually added, enabling fishers to take the available harvest faster. The result is excess capacity beyond what is needed to catch and process fish in a rational manner over the course of a fishing season. There is no economic return for investing capital to catch fish faster since the amount of fish available to be harvested remains relatively constant. Overcapitalization, which is a root problem in many open access fisheries, is wasteful, inefficient and economically destabilizing.

The PCC represents a commitment among participants in the Bering Sea pollock fishery to improve upon one of the best managed, and largest, fisheries in the world. By weight, pollock landings account for approximately one-third of *all* U.S. fish harvests. Catcher/processors harvesting pollock produce fillet products used for fish and chips, frozen fish dinners, and fish sandwiches. Pollock is also processed into *surimi*, a minced fish product used to make imitation crab products. A significant portion of *surimi* is exported to Asian markets, principally Japan. Also, exported to Japan is pollock roe, which is available during the winter fishery. Fish meal and fish oil are also produced from inedible portions of the fish.



Legal Framework for the PCC

The PCC was not formed under any specific legislative authority. The cooperative is viable because the federal government limits participation in the fishery and regulates output by setting an allowable catch level for the fishery. The PCC is simply a private contractual agreement among eligible companies apportioning individual shares of the catcher/processor sector's allocation. The Department of Justice's Antitrust Division issued a "business review letter" regarding formation of the PCC that stated in part, *"To the extent that the proposed agreement allows for more efficient processing that increases the usable yield (output) of the processed Alaskan Pollock and/or reduces the inadvertent catching of other fish species whose preservation is also a matter of regulatory concern, it could have pro-competitive effects."*

The PCC operates within the existing federal fishery management structure. Federal fishery managers and scientists establish annually a safe harvest level for Bering Sea pollock. Federal regulations divide the pollock quota among three sectors—inshore, catcher/processor, and mothership sectors. After setting aside a portion of the pollock total allowable catch (TAC) for the Community Development Quota (CDQ) program and for bycatch needs in the non-pollock groundfish fisheries, 40 percent of the remaining Bering Sea pollock TAC is allocated to the catcher/processor sector.

Improving Utilization of Fishery Resources

Since the pollock co-op formed in 1999, catcher/processors are producing about 50 percent more products per pound of fish harvested than in the last year of operations under the race for fish. When racing to catch fish the incentive was to catch as large a share as possible of the available common resource. At times, fishing operations sacrificed deriving the maximum yield from the catch in exchange for catching and processing as much fish as possible as quickly as possible. By apportioning the harvest among the participants, and stopping the race for fish, the cooperative, appropriately, creates the incentive to utilize fully and maximize the value of their individual allotments.

Improvements in yield have resulted, in part, from optimizing fishing operations, including slowing down harvesting to be more size selective. Larger-sized fish provide higher yields. Under the race for fish, individuals who slowed the pace of their own fishing operations forfeited harvest opportunities to those who continued racing full speed for the common quota. Under the co-op, fishers are no longer penalized for taking time to locate larger-sized fish.

Important improvements in utilization are also realized by rationalizing processing operations and placing the processing focus on enhanced recovery and not speed. The cooperative allows for more labor intensive activities that increase yields and matches up harvesting and processing activities so that processing operations, including producing fish meal from inedible portion of the fish, can keep pace with catch amounts. And the co-op creates an incentive to invest in processing equipment specifically designed to yield more food products from each pound of fish harvested.

Avoiding Incidental Catch of Non-Pollock Species

Pollock aggregate in enormous schools and are harvested using “midwater” trawl nets that are not dragged along the ocean floor. As a result, the pollock fishery is a very “clean” fishery, that is, non-pollock species account for about 1% of the catch. Since the inception of the PCC, the fleet has retained and used about 99.5% of fish harvested. Worldwide, fishers retain only about 25% of their catch.

Even with this enviable conservation record, the PCC continues to work on reducing the incidental catch of non-pollock species. The PCC contracts with a private sector firm, Sea State, Inc., to monitor incidental catch. PCC member companies have waived confidentiality privileges, enabling Sea State to download proprietary catch data submitted to NOAA Fisheries on a real time basis. Sea State reviews this data and advises vessel operators of bycatch “hotspots” to avoid. Harvest cooperative members cease fishing in an area if bycatch is encountered and move to other fishing grounds. Under the race for fish, the responsible fisher often forfeited fishing opportunities if he took the time to act responsibly by relocating fishing activities.

Monitoring and Enforcement

There is extensive monitoring and strict enforcement of the North Pacific groundfish fisheries off Alaska. The U.S. Coast Guard and NOAA Fisheries enforcement agents patrol the fishing grounds and regularly board vessels for inspection. In addition, all pollock catcher/processors carry two federal fishery observers onboard at all times. Virtually all hauls by pollock catcher/processors are observed. Observers determine amounts of catch and bycatch and engage in fishery dependent research activities. To determine catch amounts, all PCC vessels are equipped with “flow scales” that weigh all fish brought onboard. The catcher/processor fleet also employs Vessel Monitoring System (VMS) technology. VMS units transmit the vessels’ location to satellites, and NOAA Fisheries receives that data.

NOAA Fisheries monitors the catcher/processor sector to ensure that the fleet does not exceed its allotted quota. Using observer catch reports, Sea State monitors pollock harvests on a company-by-company basis to ensure that individual PCC members do not exceed their quota. The PCC fleet has never exceeded its sectoral allocation.

Addressing Overcapitalization and Restoring Economic Stability

The PCC has rationalized the catcher/processor sector and helped restore economic stability to this important component of the fishing industry. During the 1990s, the Bering Sea pollock fishery was overcapitalized significantly as fishers and processors continued to increase capacity in an effort to obtain the largest possible share of the available annual quota. Fishery managers failed to stop the race for fish and address the problem of overcapitalization. The result was chronic economic

inefficiencies, numerous bankruptcies, layoffs and severe economic dislocation for fishers and processors.

The harvest cooperative allows fishers and processors to match harvesting and processing capacity to the percentage of the harvest available to each of the participants. In 2000, Alaska Trawl Fisheries, which operated the *F/T Endurance*, one of the 20 vessels qualified under the American Fisheries Act (AFA) to participate in the catcher/processor sector, sold its share of the pollock quota to the other PCC members and forfeited the vessel's right to fish in the U.S. Of the remaining 19 eligible pollock catcher/processors, only 15 or 16 vessels participate in the pollock fishery in a given year. To avoid a "spillover" of effort to other fisheries, the AFA curtails fishing opportunities for the pollock fleet. By and large, the less efficient vessels remain at the dock.

The Rational Pace of Fishing Has Ecosystem-Wide Benefits

Throughout the 1990s, the race to catch the available pollock quota resulted in shorter, more frenetic fishing seasons. The cooperative reversed that decline. In 1998, the pollock fishing season lasted less than 100 days. Since that time, the fleet has taken twice as long to catch its quota. Fishing effort is spread out over time as vessels make fewer tows per day and limit the amount of pollock harvested per tow. The rational pace of fishing complements management actions to spread fishing out temporally and spatially to ensure that fishing activities do not compete with Steller sea lions that might be foraging for pollock.

Self-Assessments to Fund Marine Research Programs

Cooperative fishing has also led to cooperative funding of marine research. The PCC is contributing more than \$1.5 million annually to fund marine research at universities, including the PCC Research Center at the University of Alaska/Fairbanks School of Fisheries and Ocean Sciences. Current PCC Research Center priorities include increasing understanding of natural changes in the Bering Sea ecosystem, examining factors that could explain declines of Steller sea lion populations and improving fish stock assessment models. PCC members also support marine mammal research being conducted by a consortium of Northwest and Alaska universities.

For additional information about the PCC, including a copy of its annual report to the North Pacific Fishery Management Council, see APA's website www.atsea.org. You can also contact Jim Gilmore, Director of Public Affairs for the At-sea Processors Association, at ph. 202/661-3975 or jgilmore@atsea.org.