Species Fact Sheet:
Northern rock sole

*MSC certified May 2010

- **Latin Name:** *Lepidopsetta polyxystra*

- **Market/vernacular names:** sole, flounder, rock flounder, twolined flounder, whitebellied flounder

- **Location:** Bering Sea/Aleutian Islands (BSAI) and the Gulf of Alaska (GOA). Northern rock sole are distributed primarily on the Eastern Bering Sea continental shelf and in much lesser amounts in the Aleutian Islands region.

- **Fishing Gear:** Bering Sea flatfish gear. This modified gear principally uses sweeps raised off the seafloor by bobbins spaced at 30 meter intervals to herd flatfish into relatively small nets where the fish are captured. Research by NMFS scientists has shown that use of elevated sweeps dramatically reduces effects of fishing on seafloor habitat and associated species such as crab and structure-forming animals called epifauna. This gear will be required for all BSAI flatfish fishing in 2011, and is currently being used voluntarily in the GOA.

- **Season:** January 20 - December 31. The northern rock sole fishery is targeted primarily by trawl catcher processors in the first three to four months of the year. Headed and gutted (H&G) fish with roe-in are produced for the Japanese market from January 20 through early March. After late April, northern rock sole is primarily a bycatch product from the other flatfish fisheries.

- **Catch/TAC:** BSAI 2014 catch = 51,946 metric tons / 2015 TAC = 55,000 metric tons.
  GOA 2014 catch of shallow water flatfish = 4,747 metric tons / 2015 TAC = 32,027 metric tons.
  *In the GOA, northern rock sole are managed as part of the shallow water flatfish complex

- **Products:** H&G, H&G with roe-in, whole round

- **Size:** Length to 69 cm. (General H&G size: 150-500 grams)

- **General Information:** Alaska accounts for majority of the worldwide harvest of northern rock sole, catching over 48,649 mt in 2009. Rock sole is mainly harvested in January through March when females are bearing eggs, as the H&G fish with roe-in are valued in Japan. Northern rock sole is harvested mostly by catcher processors in the BSAI ranging in size from 110 to 295 feet, and by combinations of catcher vessels and catcher processors in the GOA. Catcher processors harvest multiple species, conduct primary processing aboard the vessel, and freeze their products on board. Catcher vessels exclusively deliver to shoreside processors or other vessels.

- **Management:** In 1976, the U.S. established management for northern rock sole stocks out to 200 miles. Federal fishery management plans, adopted through an open and transparent public process and based on sound science, govern the harvest of northern rock sole. The plans have been amended numerous times to achieve continuous improvement in the performance of the fishery. Fishery managers and scientists follow a precautionary, ecosystem-based approach.

- **Improvements:** Industry participants have worked with NMFS scientists to develop Bering Sea flatfish gear. Research by NMFS scientists has shown that use of this gear, which incorporates elevated sweeps, dramatically reduces effects of fishing on seafloor habitat and associated species such as crab and structure-forming animals called epifauna. Research showed that gear modification resulted in a substantial decrease of the trawl sweep contact with seabed and was effective in reducing trawl sweep impact effects to basketstars, sea whips, sponges, and siphons. Additionally, using the modified sweeps reduced estimates of mortality for C. bairdi and C. opilio crabs from 5 percent with conventional sweeps to nearly zero for the modified sweeps.