2017 Togiak Herring Season Summary

The following is a summary of the 2017 herring sac roe and spawn-on-kelp fisheries in the Togiak District, Bristol Bay. Herring are harvested for sac roe using gillnets and purse seines, while herring spawn on wild kelp is harvested by hand. In July, a food and bait fishery occurs near Dutch Harbor primarily on the Togiak herring stock with the allocation based on the forecasted biomass of Togiak herring. The Dutch Harbor fishery is summarized separately. All data in this summary are preliminary.

**Stock Assessment**

**Biomass Estimation**

Togiak District aerial surveys began April 17, 2017 after fish were reported in the district by a local pilot on April 15. Department staff did not observe any fish in the district on April 17. Staff flew additional flights on April 21 and April 24 without observing fish. Fish were reportedly observed by an industry spotter pilot on April 24 in the evening. The department kept in contact with spotter pilots on the grounds and waited until April 28 to fly the next survey. Staff observed 55,000 tons of herring on the grounds on April 28 and opened the fishery at 6:00 p.m. that evening. Weather prevented staff from doing surveys as frequently as they would have liked and also reduced the effectiveness of the surveys that were done. The peak biomass survey with 65,574 tons occurred on May 9, after the purse seine fishery was completed. The May 9 survey was also the peak spawn survey with 8.1 miles of spawn documented. The final survey was flown on May 15; by then the herring biomass was only 8,196 tons, most of which was found in the eastern portion of the district while only a small amount of spawn was seen in the western portion of the district near Hagemeister Spit.

**Age Composition**

Over the course of the fishery the department sampled 5,200 herring from the harvest in order to: 1) determine the age composition of the harvest, 2) estimate the age composition of the biomass, 3) determine the size at age of herring in this year’s spawning biomass and 4) provide data for
next year’s forecast. At this time approximately 34% of the herring samples have been aged. From this preliminary data it appears that 37% of the herring in this year’s harvest were age-7 or younger, 42% were age-8 or age-9 and 21% were age-10 or older. The mean weight of herring in this year’s gillnet harvest was 435g and the purse seine harvest was 366g. The department would like to thank processors for allowing us to collect herring samples from their 2017 commercial harvest. The biological data collected in our herring sampling program allows the department to produce biomass estimates which are the basis of sustainable management.

**COMMERCIAL FISHERY**

Togiak District herring fisheries are managed in accordance with the **BRISTOL BAY HERRING MANAGEMENT PLAN (5 AAC 27.865)**, which specifies a maximum allowable exploitation rate of 20% and allocates the harvestable surplus among all the fisheries harvesting the Togiak herring stock. The 2017 preseason biomass forecast was 130,852 tons. The projected harvest guideline for each fishery was as follows: 1,500 tons of herring equivalent or 350,000 lbs. of product for the spawn-on-kelp fishery, 1,727 tons for the Dutch Harbor food and bait fishery, and the remaining 22,943 tons for the sac roe fishery. The management plan further specifies that the department will manage the sac roe fishery so that 70% of the harvest is taken by purse seine (16,060 tons in 2017) and 30% of the harvest is taken by gillnet (6,883 tons in 2017).

The **BRISTOL BAY HERRING MANAGEMENT PLAN** and other regulations direct the department to conduct an orderly, manageable fishery and strive for the highest level of product quality with a minimum of waste. In recent years, the seine fleet has been comprised of processor-organized cooperatives. For the 2017 season, management staff allowed long duration seine openings over a large area of the district and let processors limit harvest for their individual fleets based on processing capacity.

Department staff polled processing companies prior to the 2017 season to assess processing capacity and to inquire about additional concerns or issues. The poll indicated that four companies intended to participate in the 2017 Togiak herring fishery. Three companies indicated they planned to buy both gillnet and purse seine fish and one company planned to buy only purse seine fish. The processing capacity for 2017 was estimated to be 2,150 tons per day.

**Purse Seine**

The Togiak purse seine fishery opened at 6:00 p.m. on April 28 until further notice. The harvest was minimal on April 28 as herring were still not of commercially viable quality. By the afternoon of April 29, fishermen were able to find commercial quality fish and harvest began in earnest. The harvest for April 28 and 29 was 2,280 tons with another 3,375 tons reported harvested for April 30. The 3,375 tons on April 30 was the peak harvest. Harvest continued at a steady pace with slowdowns due to weather on May 3 and May 5. The May 5 harvest of 445 tons was the smallest harvest for the season. The season ended on May 6 when 1,830 tons were harvested. The department reallocated 525 tons of the unharvested spawn on kelp quota to the purse seine fishery; this represents 70 percent of the 750 tons that can be reallocated. However 500 tons was subtracted from the quota due to documented deadloss. This made the allowable harvest 16,085 tons of herring. Weather on May 6 was poor in the morning but expected to improve as the day progressed. Managers asked processors for updates on the harvest every two hours beginning at 11:30 a.m. The goal was to give industry enough opportunity to harvest the quota but not go significantly over. Fishing remained slow throughout the day on May 6, with
harvest increasing slightly by the 5:30 p.m. update. Early reports at 7:00 p.m. indicated fishing was much improved and all companies were taking fish. The department announced at 7:30 p.m. that the fishery would close at 8:30 p.m. and that fish needed to be completely pumped from all sets by 11:30 p.m. The department was concerned that fishermen might make sets and hold them for several hours while additional tenders were made available. This could potentially cause harvest to exceed the quota. After receiving catch reports on the morning of May 7 the department determined that 1,830 tons of herring had been harvested on May 6. This left 110 tons of fish available under the quota. The department did not feel they could have an orderly fishery that would harvest such a limited amount and decide to keep the purse seine fishery closed, ending the 2017 Togiak purse seine fishery. The cumulative harvest was 15,975 tons, equal to 99.3% of the 16,085 ton quota. Purse seine participation was documented at 19 vessels, up from 17 in 2016.

**Gillnet**

The Togiak gillnet fishery opened at 6:00 p.m. April 28 until further notice. The first gillnet harvest was reported May 1; the daily harvest is confidential because only two processors participated early in the fishery. Preseason, the department determined that three companies would buy gillnet herring; one of the companies, however, would only buy gillnet herring after the purse seine fishery closed. Up to 11 permit holders participated in the gillnet fishery concurrently with the purse seine fishery, four additional permit holders began fishing after the purse seine fishery closed. Weather was a significant factor affecting the gillnet fishery. No harvest was reported May 5-7 due to strong winds limiting fishing. The final gillnet harvest is 1,428 tons of the 6,883 ton quota. 15 vessels participated in the herring gillnet fishery in 2017, up from 3 in 2016.

**Spawn on Kelp**

No companies registered to buy herring spawn-on-kelp in 2017, therefore there were no openings and no commercial harvest.

**EXPLOITATION**

The 2017 Togiak herring fisheries were managed for a maximum exploitation rate of 20% of the preseason biomass estimate. The purse seine harvest was 15,975 tons the average roe content was 11% and the average reported weight was 408 grams. The gillnet harvest was 1,428 tons of 12% roe content and 415 gram average weight herring. The combined harvest equals 17,403 tons of 409 gram 11% roe content herring. The Dutch Harbor food and bait fishery has not occurred at this time. If the Dutch Harbor fishery harvest is equal to the quota of 1,727 tons, then the total harvest for 2017 would be estimated at 19,130 tons. Based on the preseason biomass estimate of 130,852 tons, the 2017 exploitation rate would be approximately 15%.

**EXVESSEL VALUE**

The projected exvessel value of the 2017 Togiak herring fishery is approximately $1.74 million. This is based on an advance price estimate of $100 per ton and does not include any postseason adjustments.