

Summary of the 2006-07 Pacific Herring Commercial Fisheries in San Francisco Bay



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Preliminary Report

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HERRING MANAGEMENT AND RESEARCH TEAM
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REVIEW OF THE 2006-2007 SAN FRANCISCO BAY PACIFIC HERRING FISHERIES

QUOTAS

The total quota for San Francisco Bay was set at 4,502 tons for the 2006-2007 season. This quota is 'option 3' of the three quota options the Department provided the Fish and Game Commission for the 2006-07 season ('option 1' was a 14,505 ton quota, 'option 2' was a 13,171 ton quota). The 4,502 ton quota is based on 7.6 percent of the biomass estimate from spawning ground surveys for the 2004-05 season. The harvest percentage for option 3 was derived by reducing a ten percent quota for the 2004-05 season by the estimated number of age 2 and 3 fish in the 2004-05 season commercial catch. This reduced percentage was an effort to offset the potential increase in catch of younger fish given the reduction in the minimum mesh size allowed in the fishery. This quota option was provided for the 2006-07 season as an alternative to the historically high biomass estimate for the 2005-06 season, and resulting large quota (option 1 above), that industry representatives felt would not provide all three fishing platoons the opportunity to fish (i.e. The large quota may not be met by both odd and even platoons, and the December platoon would not have the opportunity to return to fishing later in the season). The spawning biomass of 145,054 ton biomass estimate for 2005-06 was based on spawning ground surveys conducted from November 2005 through March 2006.

HEOK: The total quota for the herring eggs-on-kelp fishery was 34 tons of herring-eggs-on-kelp, which was converted from 152 tons of whole fish from the total San Francisco Bay quota. Four permittees renewed their HEOK permits this season. Three permittees actively fished this season. All herring-eggs-on-kelp permittees must hold a herring permit (i.e., a regular gill net or a CH gill net), and each permittee's share of the herring quota (from the sac roe fishery) is transferred to the herring-eggs-on-kelp fishery. In 1994, the Fish and Game Commission decided that CH permittees who fish herring-eggs-on-kelp would be allocated a quota equal to the quota formerly received by round haul permittees (i.e., 0.79% of the sac roe quota). For each CH permit this season, this is equivalent to an individual quota of 7.9 tons herring eggs-on-kelp product. Regular gill net permittees transferring to the herring-eggs-on-kelp fishery this season received a quota of 2.4 tons of herring-eggs-on-kelp.

SEASON DATES

GILL NET FISHERY: The opening and closing dates of the gill net seasons are adjusted each year to account for annual changes in the calendar. This season, the DH fishery began at 5 p.m. on Sunday, December 3, 2006 and closed at noon on Friday, December 22, 2006. The Odd or Even gill net fisheries traditionally open on the second of January or at sunset on the first Sunday in January. This season, the opening was set at 5:00 p.m. on Tuesday, January 2, 2007, and the closing was set at noon on Friday, March 9, 2007. Since 1974, the gill net fisheries have been closed each week from noon on Friday until 5:00 p.m. on Sunday. This weekend closure was instituted to reduce conflicts with recreational users of the bay.

HEOK FISHERY: The opening and closing dates for the herring-eggs-on-kelp fishery are not adjusted for holidays or weekends. The herring-eggs-on-kelp season ran from December 1, 2006 to March 31, 2007.

LANDINGS

Overall, approximately 7 percent of the San Francisco Bay gillnet quota was landed, by the three platoons combined, during the 2006-07 commercial herring season (Table 1). The December fishery (DH platoon) landed 4 tons, approximately 0.3 percent of their quota fishing only during December, and did not return to fish again this season. Neither Odd nor Even platoon reached their quota this season. The Even platoon landed 3.2 percent of their quota and the Odd platoon landed 16 percent of their quota. The three gill net fisheries landed a combined total of 292 tons of herring.

A total of 3.9 tons of herring-eggs-on-kelp product has been landed.

TABLE 1. Herring quotas and landings, and roe percentage and fish count (as percents of total weight), for San Francisco Bay, 2006-2007 Season.

| FISHERY (# PERMITS MADE LANDINGS / #PERMITS ASSIGNED) | QUOTA (TONS) | LANDINGS (TONS) | OVER QUOTA (+) UNDER QUOTA (-) | ROE (%) | FISH COUNT |
|---|---------------------------------------|--|---|-------------|---------------|
| DH GILL NET (11 OF 124) | 1,322 | 4 | -1318 TONS | 10.8 | 109 |
| EVEN GILL NET (51 OF 141) | 1,503 | 240 | -1263 TONS | 15.7 | 105 |
| ODD GILL NET (45 OF 141) | 1,503 | 48 | -1455 TONS | 16.1 | 106 |
| TOTAL GILL NET | 4,328 | 292 | -4036 (93% UNDER QUOTA) | 15.6 | 105 |
| HERRING-EGGS-ON- KELP (4 ACTIVE) | 34 (= 152.3 TONS WHOLE FISH) | 9.4 (= 42.0 TONS IN WHOLE FISH) | -24.6 TONS (= 109.9 TONS WHOLE FISH) (72% UNDER QUOTA) | NA | NA |
| FRESH FISH PERMITS | 20 | 0 | -20 | NA | NA |
| SF BAY TOTAL | 4,502 | 309 | -4193 TONS | NA | NA |

No Fresh fish permits or SEP permits were issued for the 2006-07 season.

TABLE 2. Quotas and landings in tons for the herring ***gill net sac roe fisheries*** in San Francisco Bay, 1972-73 season through 2006-07 season.

| SEASON | QUOTA (TONS) | LANDINGS (TONS) | SEASON | QUOTA (TONS) | LANDINGS (TONS) |
|---|--------------|-----------------|------------|--------------|-----------------|
| 1972-73 | 1,500 | 436 | 1990-91* | 8,858 | 7,741 |
| 1973-74 | 500 | 1,938 | 1991-92* | 7,134 | 7,417 |
| 1974-75 | 600 | 514 | 1992-93* | 5,175 | 5,151 |
| 1975-76 | 3,000 | 1,719 | 1993-94* | 1,996 | 2,302 |
| 1976-77 | 4,000 | 4,201 | 1994-95* | 4,408 | 4,574 |
| 1977-78 | 5,000 | 4,987 | 1995-96* | 5,524 | 6,165 |
| 1978-79 | 5,000 | 4,115 | 1996-97* | 13,543 | 11,496 |
| 1979-80 | 6,000 | 6,430 | 1997-98* | 9,793 | 1,981 |
| 1980-81 | 7,250 | 5,811 | 1998-99* | 2,739 | 2,817 |
| 1981-82 | 10,000 | 10,415 | 1999-2000* | 5,460 | 3,356 |
| 1982-83 | 10,399 | 9,699 | 2000-01* | 2,499 | 2,991 |
| 1983-84 | 10,399 | 2,828 | 2001-02* | 4,128 | 3,287 |
| 1984-85 | 6,500 | 7,740 | 2002-03* | 3,262 | 2,097 |
| 1985-86 | 7,530 | 7,278 | 2003-04* | 2,020 | 1,540 |
| 1986-87* | 7,470 | 8,098 | 2004-05* | 3,169 | 145 |
| 1987-88* | 8,432 | 8,741 | 2005-06* | 4,328 | 744 |
| 1988-89* | 9,238 | 9,736 | 2006-07* | 4,328 | 292 |
| 1989-90* | 9,057 | 8,962 | | | |
| THIRTY-FIVE YEAR AVERAGE (72-73 TO 06-07): | | | | 5,721 | 4,793 |
| TWENTY-FOUR YEAR AVERAGE POST EL NINO (83-84 TO 06-07): | | | | 6,125 | 4,895 |
| FOURTEEN YEAR AVERAGE POST EL NINO (93-94 TO 06-07): | | | | 4,800 | 3,128 |
| TEN YEAR AVERAGE POST EL NINO (97-98 TO 06-07): | | | | 4,173 | 1,925 |

* Quotas and landings after the 1985-86 season do *not* include HEOK or fresh fish allocation and landings

TABLE 3. Quotas, landings and number of permits for the ***herring-eggs-on-kelp (HEOK)*** fishery in San Francisco Bay, 1989-90 season through 2006-07 season.

| SEASON | QUOTA (TONS) | TOTAL LANDINGS (TONS) | PERCENT OF QUOTA LANDED | NUMBER OF PERMITS |
|-----------------|--------------|-----------------------|-------------------------|-------------------|
| 1989-90 | 110.0 | 107.1 | 97.4 | 8 |
| 1990-91 | 144.0 | 47.0 | 32.6 | 10 |
| 1991-92 | 114.0 | 84.2 | 73.8 | 10 |
| 1992-93 | 84.5 | 47.4 | 56.1 | 10 |
| 1993-94 | 35.1 | 35.0 | 99.7 | 10 |
| 1994-95 | 85.0 | 13.1 | 15.4 | 10 |
| 1995-96 | 106.5 | 106.8 | 100+ | 10 |
| 1996-97 | 286.0 | 185.7 | 64.9 | 11 |
| 1997-98 | 209.0 | 36.4 | 17.4 | 11 |
| 1998-99 | 54.4 | 31.7 | 58.3 | 11 |
| 1999-2000 | 99.2 | 31 | 31.3 | 11 |
| 2000-01 | 49.3 | 27.2 | 55.2 | 11 |
| 2001-02 | 73.2 | 45.3 | 62.0 | 10 |
| 2002-03 | 57.6 | 53.3 | 92.5 | 10 |
| 2003-04 | 38.9 | 6.3 | 71.0 | 10 |
| 2004-05 | 55.7 | 0 | 0 | 10 |
| 2005-06 | 34 | 0 | 0 | 4 |
| 2006-07 | 34 | 9.4 | 27.6 | 4 |
| AVERAGE (18YRS) | 92.8 | 48.2 | 50.3 | 10 |
| AVERAGE (5 YRS) | 44.0 | 13.8 | 38.2 | 8 |

REVIEW OF EACH FISHERY

DH (DECEMBER)GILL NET PLATOON:

The DH herring gill net fishery opened on Sunday, December 3, 2006 at 5 p.m. By the closure of the DH platoon at noon on Friday, December 22, a little over 4 tons of herring had been landed. Regulations provide an opportunity for the DH platoon to re-open after both January platoons have reached their quota. However, the DH platoon never re-opened since neither Odd nor Even platoon reached their quota. The DH platoon fished for 17 days during the 2006-07 season, and approximately 68 percent of the permits were not fished.

TABLE 4. Season landings for the DH gill net platoon.

| Date | Pounds | Tons | # Receipts | Tons/Receipt | Fish Count | Roe Count |
|--------------|--------------|-------------|------------|--------------|------------|--------------|
| 12/18/2006 | 8,243 | 4.12 | 11 | 0.37 | 109 | 10.83 |
| Total | 8,243 | 4.12 | 11 | 0.37 | 109 | 10.83 |

| | |
|--------------------------|---|
| DH Landings | Effort: (based on boats declared by permit) |
| Quota: 1322 | 6 Boats used in the DH Platoon |
| Catch: 4.12 | 11 Permits fished in the DH Platoon |
| Under Quota: 1318 | 124 Permits assigned to the DH Platoon |
| | Approximately 91% of the DH permits were not fished this season. |

ODD AND EVEN GILL NET PLATOONS:

The Odd and Even fishery is divided into two separate platoons grouped by permit numbers that are odd and even. Platoons rotate fishing weeks with the first platoon designated by whether the season year is odd or even, therefore for the 2006-07 season, the EVEN platoon was designated to fish first.

EVEN GILL NET FISHERY

The Even platoon opened on Tuesday, January 2, 2007, at 5:00 p.m. and made the bulk of their landings during the second two even fishing weeks in January. Total average roe percentage for the Even platoon landings was 15.7 percent. The Even platoon did not reach their quota. Sixty four percent of the permits assigned to this platoon were not used this season.

TABLE 5. Daily landings for the Even gill net platoon.

| Date | Pounds | Tons | # Receipts | Tons/Receipt | Fish Count | Roe Count |
|--------------|----------------|---------------|------------|--------------|------------|--------------|
| 1/15/2007 | 134,321 | 67.16 | 41 | 1.64 | 104 | 14.91 |
| 1/16/2007 | 53,013 | 26.51 | 41 | 0.65 | 106 | 15.31 |
| 1/29/2007 | 131,046 | 65.52 | 43 | 1.52 | 105 | 16.18 |
| 1/30/2007 | 154,371 | 77.19 | 39 | 1.98 | 106 | 16.48 |
| 1/31/2007 | 6,375 | 3.19 | 4 | 0.80 | 108 | 15.25 |
| Total | 479,126 | 239.56 | 168 | 1.43 | 105 | 15.71 |

| | |
|---------------------------|---|
| Even Landings | Effort: (based on boats active) |
| Quota: 1,503 | 25 Boats used in the Even Platoon |
| Catch: 240 | 51 Permits fished in the Even Platoon |
| Under Quota: 1,263 | 141 Permits assigned to the Even Platoon |
| | 64% of the Even permits were not fished this season. |

ODD GILL NET FISHERY

The Odd platoon opened on Sunday January 7, 2007, at 5:00 p.m. The odd platoon made landings during

each of their fishing weeks through February, and made most of their landings during the last fishing week of February. The average roe count for all Odd platoon landings was 16.05 percent. Sixty-eight percent of the permits assigned to this platoon were not used this season.

TABLE 6. Daily landings for the Odd gill net platoon.

| Date | Pounds | Tons | # Receipts | Tons/Receipt | Fish Count | Roe Count |
|--------------|---------------|--------------|------------|--------------|------------|--------------|
| 1/10/2007 | 423 | 0.21 | 2 | 0.11 | 104 | 14.50 |
| 1/11/2007 | 928 | 0.46 | 2 | 0.23 | 105 | 15.70 |
| 1/12/2007 | 1,377 | 0.69 | 6 | 0.11 | 107 | 15.87 |
| 1/25/2007 | 1,871 | 0.94 | 2 | 0.47 | 105 | 14.25 |
| 1/26/2007 | 4,087 | 2.04 | 11 | 0.19 | 108 | 14.35 |
| 2/5/2007 | 4,641 | 2.32 | 17 | 0.14 | 106 | 16.45 |
| 2/6/2007 | 532 | 0.27 | 2 | 0.13 | 106 | 17.00 |
| 2/19/2007 | 24,066 | 12.03 | 16 | 0.75 | 105 | 17.48 |
| 2/20/2007 | 58,219 | 29.11 | 33 | 0.88 | 105 | 15.92 |
| Total | 96,144 | 48.07 | 91 | 0.53 | 106 | 16.05 |

| | |
|--------------------------|--|
| Odd Landings | Effort: (based on boats active) |
| Quota: 1,503 | 26 Boats used in the Odd Platoon |
| Catch: 48 | 45 Permits fished in the Odd Platoon |
| Under Quota: 1455 | 141 Permits assigned to the Odd Platoon |
| | 68% of the Odd permits were not fished this season. |

SPECIAL EDUCATION PERMITS

No Special Education Permit was issued to the City of Oakland Maritime Training Program for the 2006-07 season.

HERRING EGGS ON KELP (HEOK) FISHERY

Four permittees renewed their herring eggs on kelp permits for the 2006-07 season. The season opened on December 1st, 2006 and will close on March 31st, 2007. Three of the four permittees have suspended kelp this season and 9.4 tons of HEOK product have been landed. The market price for HEOK product has dropped substantially over the past several seasons along with demand for HEOK product in Japan.

TABLE 7. Average roe count (as percent of total weight) in the San Francisco Bay gill net fisheries, 1983-84 season (23 year average) through 2006-07 season.

| SEASON | DECEMBER GILL NET PLATOON | 1ST JANUARY GILL NET PLATOON | 2ND JANUARY GILL NET PLATOON |
|----------------|---------------------------------|------------------------------------|------------------------------------|
| 1983-84 | 13.5 | 13.1 ODD | 13.4 EVEN |
| 1984-85 | 10.1 | 10.8 EVEN | 13.4 ODD |
| 1985-86 | 11.2 | 11.9 ODD | 13.4 EVEN |
| 1986-87 | 10.9 | 11.4 EVEN | 12.7 ODD |
| 1987-88 | 11.9 | 13.5 ODD | 15.0 EVEN |
| 1988-89 | 9.7 | 11.6 EVEN | 13.1 ODD |
| 1989-90 | 11.6 | 13.0 ODD | 14.3 EVEN |
| 1990-91 | 11.7 | 13.4 ODD | 15.8 ODD |
| 1991-92 | 11.7 | 11.7 EVEN | 15.5 ODD |
| 1992-93 | 9.7 | 14.0 EVEN | 14.8 ODD |
| 1993-94 | 10.2 | 11.5 ODD | 13.3 EVEN |
| 1994-95 | 11.1 | 13.8 EVEN | 12.0 ODD |
| 1995-96 | 12.0 | 14.4 ODD | 14.6 EVEN |
| 1996-97 | 10.3 | 14.1 EVEN | 13.9 ODD |
| 1997-98 | 14.1 | 14.9 ODD | NO LANDINGS |
| 1998-99 | 13.4 | 14.8 EVEN | 17.2 ODD |
| 1999-2000 | 12.1 | 13.3 ODD | 15.6 EVEN |
| 2000-01 | 12.2 | 14.5 EVEN | 13.6 ODD |
| 2001-02 | 15.0 | 14.6 ODD | 17.5 EVEN |
| 2002-03 | 11.2 | 15.0 EVEN | 15.8 ODD |
| 2003-04 | 14.3 | 11.9 ODD | 14.5 EVEN |
| 2004-05 | NO LANDINGS | 15.8 EVEN | 16.8 ODD |
| 2005-06 | NO LANDINGS | 14.2 ODD | 13.9 EVEN |
| 2006-07 | 10.8 | 15.7 EVEN | 16.1 ODD |
| AVERAGE | 11.8 | 13.5 | 14.0 |

SUMMARY OF FISHING DAYS IN 2006-07 FOR THE S.F. BAY GILL NET FISHERY

DH platoon 2006:

- Opened December 3rd at 5 PM
- Fished December 3rd – 22nd at noon.
- Four tons were landed by the DH platoon
- There were **18** DH fishing days in 2006-07 season

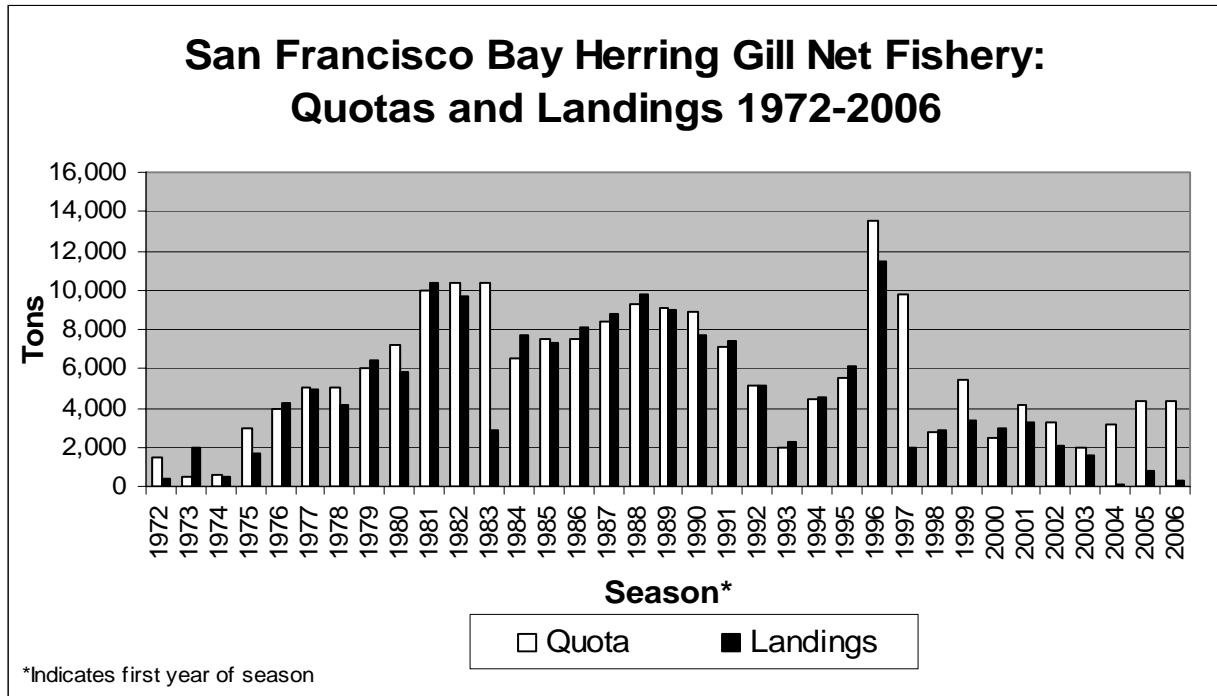
ODD platoon 2007

- Opened Sunday, January 7th at 5 PM
- Fished January 7-12, 21-26, February 4-9, 18-23, and March 4-9
- Quota was not reached this season; 48 tons landed.
- There were **30** Odd fishing days in January, February, and March

EVEN platoon 2007:

- Opened Tuesday, January 2nd at 5 PM
- Fished January 2-5, 14-19, January 28-February 2, February 11-16 and February 25 – March 2
- Quota was not reached this season; 240 tons landed.
- There were **30** Even fishing days in January, February, and March

FIGURE 1. San Francisco Bay Gill Net Fishery Quotas and Landings, 1972-73 to 2006-07 seasons.



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FIGURE 2. San Francisco Bay Commercial Gill Net Catch at Length – 2005-06 and 2006-07 season comparison.

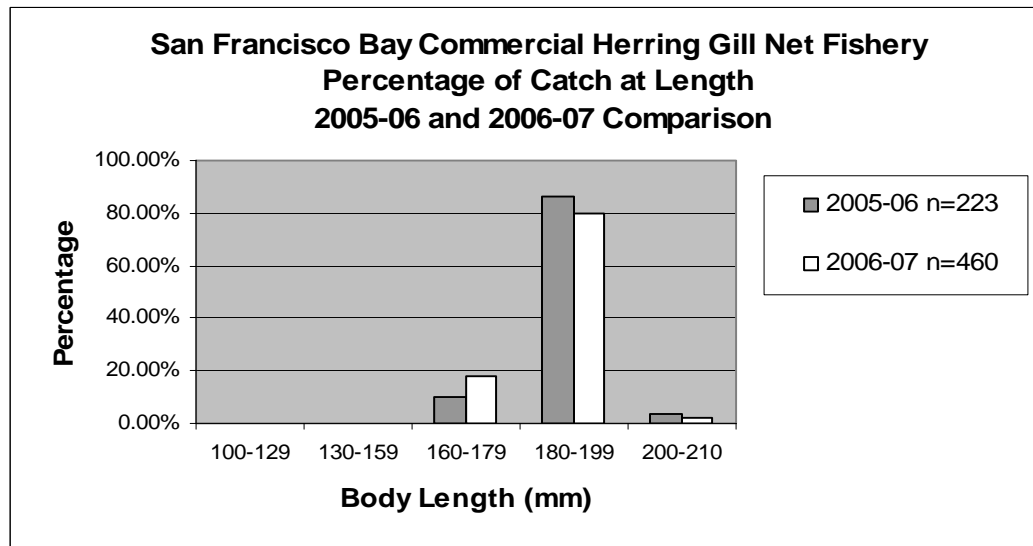


TABLE 8. San Francisco Bay Commercial Gill Net Catch Mature Fish Only – 2005-06 and 2006-07 season comparison

| Season | n | | Percentage | Average Length | Average Weight |
|---------|-----|---------|------------|----------------|----------------|
| 2005-06 | 205 | Males | 37 | 189 | 95.6 |
| | | Females | 63 | 188 | 97.4 |
| 2006-07 | 348 | Males | 36 | 186 | 89.6 |
| | | Females | 64 | 187 | 92.3 |

Proposed Regulatory Changes for the 2007-08 Season:

Department Proposals:

- Require the \$50 payment for temporary substitutes and boat transfer by made at the time of request (existing language requires payment within 5 days of written approval of substitute or transfer).
- Strike language referring to "issuance date".

Director's Herring Advisory Committee Proposals:

- John Doe Crew license
- Reduction in out-of-state license fee
- Placement of permits in use on vessel in vessel owner's name
- Remove 10 p.m. offloading restriction
- Change noon closure on Friday to 7 a.m. on Saturday
- Change regulation to allow vessel to no more than three miles from net.

Season Dates:

San Francisco Bay Potential Dates:

December Fishery – Open: December 2, 2007 at 5 p.m.; Close: December 21, 2007 at noon.

January Platoons:

Odd Platoon – Open: Wednesday, January 2, 2008 at 5 p.m. or Sunday, January 6, at 5 p.m.?

Even Platoon – Open: Week following opening of odd platoon.

Fishery Closure: March 7, 14, 21 or 28? (all Fridays in March)