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STATISTICS OF UNITED STATES CATCHES AND  
EFFORT OF GROUND FISH SPECIES, SHRIMP AND  
HERRING CAUGHT IN THE BERING SEA AND  
N.E. PACIFIC--1980 (Revised)

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STATISTICS OF UNITED STATES CATCHES AND  
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 N.E. PACIFIC--1980 (Revised)

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This document presents the available statistics of the U.S. catches and effort on groundfish, shrimp, and herring in the Bering Sea and Northeastern Pacific Region for 1980. The data are preliminary in nature since the states of Alaska, Washington, Oregon, and California are on different time schedules for the final reporting of their catch statistics. All the states are in the process of upgrading their data reporting systems and should be able to provide data on a more timely basis by next year's INPFC meeting. In the meantime, the 1980 statistics are reported in the following tables:

- Tables 1-3      Bering Sea statistics
- Tables 4-21    Northeast Pacific statistics

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\*National Marine Fisheries Service, Northwest and Alaska Fisheries Center, Seattle, Washington 98112.

Table 1.--Number of vessels, by type, fishing for groundfish, shrimp and herring in the Bering Sea region, by country, 1980.

| Type of vessel | Number of vessels (U.S.A.) |
|----------------|----------------------------|
| Gillnet        | 117                        |
| Longline       | 2                          |
| Trawl          | 19                         |
| Purse seine    | 158                        |
| Other          | 791                        |

Table 2.--Total catch of principal groundfish species, shrimp and herring in the Bering Sea region, by country, in metric tons (round weight), 1980.

| Species                       | Catch  |
|-------------------------------|--------|
| Blackcod                      | 4      |
| Flatfish (other than halibut) | 44     |
| Halibut                       | 430    |
| Pacific cod                   | 5,538  |
| Pacific ocean perch           | -      |
| Pacific pollock               | 122    |
| Other fishes                  | 66     |
| Total groundfish              | 6,171  |
| Shrimp                        | 1,125  |
| Herring                       | 21,382 |

Table 3.--United States fishing effort and catch (metric tons, round weight) of halibut, by area, in the Bering Sea region, 1980.

| Area          | Effort         |       |
|---------------|----------------|-------|
|               | 1000s of skate | Catch |
| West of 170°E | -              | -     |
| 170°E - 180°  | -              | -     |
| 180 - 170°W   | 2.1            | 56    |
| East of 170°W | 4.3            | 122   |
| Aleutian      | 6.2            | 252   |
| Total         | 12.7           | 430   |

Table 4.--Number of vessels, by type, fishing for groundfish, shrimp, and herring in the North Pacific region, by country, 1980.

| Type of vessel | Number of vessels (U.S.A.)* |
|----------------|-----------------------------|
| Gillnet        | 1,763                       |
| Longline       | 830                         |
| Purse seine    | 461                         |
| Trawl          | 1,076                       |
| Pots           | 228                         |
| Other**        | 2,579                       |

\* Absolute total number of vessels is less than total due to some vessels using more than one gear type.

\*\* Includes 551 for troll, 10 for beach seine.

Table 5.--Total catch of principal groundfish species, shrimp and herring in the Northeast Pacific region, by country, in metric tons (round weight), 1980.

| Species                                   | Catch (U.S.A.) |
|---|----------------|
| Blackcod                                  | 8,693          |
| Flatfish (other than halibut)             | 25,290         |
| Halibut                                   | 8,176          |
| Pacific cod                               | 3,450          |
| Pacific hake                              | 1,073          |
| Pacific ocean perch                       | 2,583          |
| Pacific pollock                           | 1,306          |
| Rockfish (other than Pacific ocean perch) | 47,252         |
| Other fishes                              | 4,354          |
| Total groundfish                          | 103,002        |
| Shrimp                                    | 43,210         |
| Herring                                   | 27,843         |

Table 6.--United States fishing effort, by gear and catch (metric tons, round weight) of principal groundfish species (excluding halibut) by area, in the Northeast Pacific region, 1980. (Preliminary)

| Effort/catch        | Shumagin  | Chirikof | Kodiak | Yakutat | Southeastern | Charlotte | Vancouver | Columbia | Eureka | Monterey | Conception | Total   |
|---------------------|-----------|----------|--------|---------|--------------|-----------|-----------|----------|--------|----------|------------|---------|
| Effort              | NA -----> |          |        |         |              |           |           |          |        |          |            |         |
| Longline            |           |          |        |         |              |           |           |          |        |          |            |         |
| Stern trawl (hr)    |           |          |        |         |              |           |           |          |        |          |            |         |
| Troll and handline  |           |          |        |         |              |           |           |          |        |          |            |         |
| CATCH TOTAL         | 75        | 62       | 1,367  | 210     | 2,314        | 741       | 21,207    | 42,011   | 17,202 | 15,685   | 2,133      | 103,002 |
| Black cod           | 2         | 2        | 26     | 191     | 1,442        | 11        | 312       | 3,693    | 1,418  | 1,569    | 27         | 8,696   |
| Flatfish total      | -         | T        | 47     | -       | 94           | 13        | 3,472     | 8,003    | 7,359  | 5,947    | 355        | 25,290  |
| Dover sole          | -         | -        | -      | -       | -            | 8         | 1,189     | 4,359    | 5,137  | 3,123    | 45         | 13,861  |
| English sole        | -         | -        | T      | -       | -            | 1         | 944       | 760      | 812    | 1,264    | 98         | 3,879   |
| Petrale sole        | -         | -        | T      | -       | T            | 1         | 277       | 1,085    | 411    | 592      | 116        | 2,482   |
| Rock sole           | -         | T        | 2      | -       | -            | 2         | 144       | 33       | -      | -        | -          | 181     |
| Other flatfish      | -         | T        | 45     | -       | 94           | 1         | 918       | 1,766    | 999    | 968      | 96         | 4,887   |
| Lingcod             | -         | -        | 2      | 2       | 16           | 14        | 821       | 1,446    | 318    | 834      | 122        | 3,575   |
| Pacific cod         | 71        | 49       | 414    | 5       | 74           | 41        | 2,503     | 293      | T      | -        | -          | 3,450   |
| Pacific hake        | -         | -        | -      | -       | -            | -         | 123       | 257      | 685    | 8        | -          | 1,073   |
| Rockfish total      | -         | -        | 34     | 11      | 148          | 660       | 4,819     | 28,080   | 7,327  | 7,147    | 1,613      | 49,839  |
| Pacific ocean perch | -         | -        | 1      | 0       | 2            | 285       | 615       | 1,673    | 11     | -        | 0          | 2,587   |
| Other rockfish      | -         | -        | 33     | 11      | 146          | 374       | 4,204     | 26,407   | 7,316  | 7,147    | 1,613      | 47,252  |
| Other               | -         | 9        | 361    | 1       | 120          | -         | 3,348     | 227      | 92     | 180      | 16         | 4,354   |
| Industrial          | -         | -        | -      | -       | -            | -         | 5,410     | 12       | -      | -        | -          | 5,422   |
| Pollock             | 1         | 1        | 482    | -       | 419          | 3         | 400       | T        | -      | -        | -          | 1,306   |

T = trace, less than 0.23 t

Table 7.--United States fishing effort and catch (metric tons, round weight) of halibut, by area, in the Northeast Pacific region, 1980.

| Area         | Effort<br>1000s of skate | Catch |
|--------------|--------------------------|-------|
| Shumagin     | 1.2                      | 72    |
| Chirikof     | 1.2                      | 95    |
| Kodiak       | 38.7                     | 3,200 |
| Yakutat      | 48.0                     | 2,841 |
| Southeastern | 39.5                     | 1,954 |
| Charlotte    | -                        | -     |
| Vancouver    | 0.4                      | 10    |
| Columbia     | 0.2                      | 4     |
| Eureka       | -                        | -     |
| Monterey     | -                        | -     |
| Conception   | -                        | -     |
| Total        | 141.8                    | 8,176 |

Table 8.--United States catch<sup>1/</sup> (metric tons, round weight) of shrimp<sup>2/</sup>, by area, in the Northeast Pacific region, 1980.

| Area                    | Catch in mt |
|-------------------------|-------------|
| Shumagin                | 22,466      |
| Chirikof                |             |
| Kodiak                  |             |
| Yakutat                 | 1,610       |
| Southeastern            |             |
| Charlotte               | 125         |
| Vancouver <sup>3/</sup> | 4,526       |
| Columbia                | 11,435      |
| Eureka                  | 2,269       |
| Monterey                | 779         |
| Conception              |             |
| Total                   | 43,210      |

<sup>1/</sup> Detailed information concerning U.S. shrimp catches, effort, and gear are available from the Pacific Marine Fisheries Commission.

<sup>2/</sup> Primarily Pandalus sp. in Alaskan waters and P. jordani elsewhere.

<sup>3/</sup> In U.S. waters only.

Table 9.--United States fishing effort, by gear, and catch (metric tons, round weight) of herring, by area, in the Northeast Pacific region, 1980.

| Area         | Purse seine<br>(Landings) | Gillnet   | Pot and trap<br>(Landings) | Otter and  |            | Catch     |
|--------------|---------------------------|---|----------------------------|------------|------------|-----------|
|              |                           | (Set, drift, and<br>herring gillnets)<br>(Landings) |                            | pair trawl | (Landings) |           |
| Shumagin     | 16                        | -   | -                          | -          | -          | 544.24    |
| Chirikof     | 76                        | 9   | -                          | 3          | -          | 877.97    |
| Kodiak       | 439                       | 699   | -                          | 39         | 835        | 9,413.19  |
| Yakutat      | -                         | -   | -                          | -          | -          | -         |
| Southeastern | 159                       | 354   | -                          | -          | 73         | 6,020.17  |
| Charlotte    | -                         | -   | -                          | -          | -          | -         |
| Vancouver    | 605                       | 1,158   | -                          | NA         | 37         | 3,173.30  |
| Columbia     | 2                         | -   | -                          | -          | 29         | 63.80     |
| Eureka       | NA                        | NA  | -                          | -          | -          | 69.00     |
| Monterey     | NA                        | NA  | -                          | -          | -          | 7,681.00  |
| Conception   | -                         | -   | -                          | -          | -          | -         |
| Total        | 1,297                     | 2,220   | -                          | 42         | 974        | 27,842.67 |

Table 10.--United States catch of herring by INPFC areas, all gears, 1980.

| Area         | Catch in mt |
|--------------|-------------|
| Shumagin     | 544.24      |
| Chirikof     | 877.97      |
| Kodiak       | 9,413.19    |
| Yakutat      | -           |
| Southeastern | 6,020.17    |
| Charlotte    | -           |
| Vancouver    | 3,173.30    |
| Columbia     | 63.80       |
| Eureka       | 69.00       |
| Monterey     | 7,681.00    |
| Conception   | -           |
| Total        | 27,842.67   |

Table 11.--Groundfish landings by INPFC area by gear, 1980.

## Bering I - in metric tons

| Species             | Otter<br>trawl | Shrimp<br>trawl | Long<br>line | Pot+<br>trap | Other<br>gear | Rec.     | Grand<br>total |
|---------------------|----------------|-----------------|--------------|--------------|---------------|----------|----------------|
| English sole        | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Rock sole           | 44             | 0               | 0            | 0            | T             | 0        | 44             |
| Petrale sole        | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Dover sole          | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Rex sole            | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Starry flounder     | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Arrowtooth flounder | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Other flatfish      | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Pacific cod         | 2,259          | 0               | 21           | 0            | 117           | 0        | 2,397          |
| Lingcod             | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Sablefish           | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Pac. ocean perch    | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Other rockfish      | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Misc. species       | 30             | 0               | 0            | 0            | 3             | 0        | 33             |
| Dogfish             | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Hake                | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Pollock             | 101            | 0               | 0            | 0            | 1             | 0        | 102            |
| Animal food         | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Reduction           | <u>0</u>       | <u>0</u>        | <u>0</u>     | <u>0</u>     | <u>0</u>      | <u>0</u> | <u>0</u>       |
| Total               | 2,434          | 0               | 21           | 0            | 121           | 0        | 2,576          |
| Total trawl hours   | NA             |                 |              |              |               |          |                |

T = trace less than 0.23 t



Table 12.--Groundfish landings by INPFC area by gear, 1980.

## Aleutians - in metric tons

| Species             | Otter<br>trawl | Shrimp<br>trawl | Long<br>line | Pot+<br>trap | Other<br>gear | Rec.     | Grand<br>total |
|---------------------|----------------|-----------------|--------------|--------------|---------------|----------|----------------|
| English sole        | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Rock sole           | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Petrable sole       | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Dover sole          | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Rex sole            | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Starry flounder     | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Arrowtooth flounder | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Other flatfish      | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Pacific cod         | 3,141          | 0               | 0            | 0            | 0             | 0        | 3,141          |
| Lingcod             | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Sablefish           | 4              | 0               | 0            | 0            | 0             | 0        | 4              |
| Pac. ocean perch    | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Other rockfish      | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Misc. species       | 30             | 0               | 0            | 0            | 3             | 0        | 33             |
| Dogfish             | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Hake                | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Pollock             | 20             | 0               | 0            | 0            | 0             | 0        | 20             |
| Animal food         | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Reduction           | <u>0</u>       | <u>0</u>        | <u>0</u>     | <u>0</u>     | <u>0</u>      | <u>0</u> | <u>0</u>       |
| Total               | 3,165          | 0               | 0            | 0            | 0             | 0        | 3,165          |
| Total trawl hours   | 1,744          |                 |              |              |               |          |                |

Table 13.--Groundfish landings by INPFC area by gear, 1980.

## Shumagin - in metric tons

| Species             | Otter<br>trawl | Shrimp<br>trawl | Long<br>line | Pot+<br>trap | Other<br>gear | Rec.     | Grand<br>total |
|---------------------|----------------|-----------------|--------------|--------------|---------------|----------|----------------|
| English sole        | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Rock sole           | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Petrale sole        | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Dover sole          | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Rex sole            | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Starry flounder     | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Arrowtooth flounder | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Other flatfish      | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Pacific cod         | 65             | 0               | 5            | 0            | 0             | 0        | 71             |
| Lingcod             | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Sablefish           | 3              | 0               | T            | 0            | 0             | 0        | 3              |
| Pac. ocean perch    | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Other rockfish      | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Misc. species       | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Dogfish             | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Hake                | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Pollock             | 1              | 0               | 0            | 0            | 0             | 0        | 1              |
| Animal food         | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Reduction           | <u>0</u>       | <u>0</u>        | <u>0</u>     | <u>0</u>     | <u>0</u>      | <u>0</u> | <u>0</u>       |
| Total               | 70             | 0               | 6            | 0            | 0             | 0        | 76             |
| Total trawl hours   | 66             |                 |              |              |               |          |                |

T = trace, less than 0.23 t

Table 14.--Groundfish landings by INPFC area by gear, 1980.

## Chirikof - in metric tons

| Species             | Otter<br>trawl | Shrimp<br>trawl | Long<br>line | Pot+<br>trap | Other<br>gear | Rec.     | Grand<br>total |
|---------------------|----------------|-----------------|--------------|--------------|---------------|----------|----------------|
| English sole        | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Rock sole           | T              | 0               | 0            | 0            | 0             | 0        | T              |
| Petrale sole        | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Dover sole          | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Rex sole            | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Starry flounder     | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Arrowtooth flounder | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Other flatfish      | T              | 0               | 0            | 0            | 0             | 0        | T              |
| Pacific cod         | 49             | 0               | T            | 0            | 0             | 0        | 49             |
| Lingcod             | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Sablefish           | 3              | 0               | 0            | 0            | 0             | 0        | 3              |
| Pac. ocean perch    | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Other rockfish      | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Misc. species       | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Dogfish             | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Hake                | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Pollock             | 1              | 0               | 0            | 0            | 0             | 0        | 1              |
| Animal food         | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Reduction           | <u>0</u>       | <u>0</u>        | <u>0</u>     | <u>0</u>     | <u>0</u>      | <u>0</u> | <u>0</u>       |
| Total               | 62             | 0               | T            | 0            | 0             | 0        | 63             |
| Total trawl hours   | NA             |                 |              |              |               |          |                |

T = trace, less than 0.23 t

Table 15.--Groundfish landings by INPFC area by gear, 1980.

## Kodiak - in metric tons

| Species             | Otter<br>trawl | Shrimp<br>trawl | Long<br>line | Pot+<br>trap | Other<br>gear | Rec.     | Grand<br>total |
|---------------------|----------------|-----------------|--------------|--------------|---------------|----------|----------------|
| English sole        | T              | 0               | 0            | 0            | 0             | 0        | T              |
| Rock sole           | 2              | 0               | 0            | 0            | 0             | 0        | 2              |
| Petrale sole        | T              | 0               | 0            | 0            | 0             | 0        | T              |
| Dover sole          | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Rex sole            | T              | 0               | 0            | 0            | 0             | 0        | T              |
| Starry flounder     | 5              | 0               | 0            | 0            | 0             | 0        | 5              |
| Arrowtooth flounder | 0              | 0               | T            | 0            | 0             | 0        | T              |
| Other flatfish      | 40             | 0               | 0            | 0            | 0             | 0        | 40             |
| Pacific cod         | 392            | 0               | 6            | 0            | 16            | 0        | 414            |
| Lingcod             | T              | 0               | 2            | 0            | 0             | 0        | 2              |
| Sablefish           | 20             | 0               | 17           | 0            | 0             | 0        | 37             |
| Pac. ocean perch    | 1              | 0               | 0            | 0            | 0             | 0        | 1              |
| Other rockfish      | 1              | 0               | 13           | 0            | 0             | 18       | 33             |
| Misc. species       | 346            | 0               | 12           | 0            | 3             | 0        | 361            |
| Dogfish             | 0              | 0               | T            | 0            | 0             | 0        | T              |
| Hake                | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Pollock             | 467            | 0               | 0            | 0            | 15            | 0        | 482            |
| Animal food         | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Reduction           | <u>0</u>       | <u>0</u>        | <u>0</u>     | <u>0</u>     | <u>0</u>      | <u>0</u> | <u>0</u>       |
| Total               | 1,276          | 0               | 50           | 0            | 34            | 18       | 1,378          |
| Total trawl hours   | NA             |                 |              |              |               |          |                |

T = trace, less than 0.23 t

Table 16.--Groundfish landings by INPFC area by gear, 1980.

Yakutat - in metric tons

| Species             | Otter<br>trawl | Shrimp<br>trawl | Long<br>line | Pot+<br>trap | Other<br>gear | Rec.     | Grand<br>total |
|---------------------|----------------|-----------------|--------------|--------------|---------------|----------|----------------|
| English sole        | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Rock sole           | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Petrale sole        | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Dover sole          | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Rex sole            | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Starry flounder     | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Arrowtooth flounder | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Other flatfish      | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Pacific cod         | 0              | 0               | 5            | 0            | 0             | 0        | 5              |
| Lingcod             | 0              | 0               | 1            | 0            | 1             | 0        | 2              |
| Sablefish           | 0              | 0               | 210          | 63           | 0             | 0        | 273            |
| Pac. ocean perch    | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Other rockfish      | 0              | 0               | 10           | 0            | 1             | 0        | 11             |
| Misc. species       | 0              | 0               | 1            | 0            | 0             | 0        | 1              |
| Dogfish             | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Hake                | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Pollock             | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Animal food         | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Reduction           | <u>0</u>       | <u>0</u>        | <u>0</u>     | <u>0</u>     | <u>0</u>      | <u>0</u> | <u>0</u>       |
| Total               | 0              | 0               | 227          | 63           | 2             | 0        | 292            |
| Total trawl hours   | 0              |                 |              |              |               |          |                |

Table 17.--Groundfish landings by INPFC area by gear, 1980.

## Southeast - in metric tons

| Species             | Otter<br>trawl | Shrimp<br>trawl | Long<br>line | Pot+<br>trap | Other<br>gear | Rec.     | Grand<br>total |
|---------------------|----------------|-----------------|--------------|--------------|---------------|----------|----------------|
| English sole        | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Rock sole           | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Petrale sole        | 0              | 0               | 0            | 0            | T             | 0        | T              |
| Dover sole          | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Rex sole            | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Starry flounder     | 93             | 0               | 0            | T            | 0             | 0        | 93             |
| Arrowtooth flounder | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Other flatfish      | T              | 0               | T            | 0            | T             | 0        | 1              |
| Pacific cod         | 4              | 0               | 29           | 0            | 41            | 0        | 74             |
| Lingcod             | 0              | 0               | 4            | 0            | 12            | 0        | 16             |
| Sablefish           | 0              | 0               | 1,984        | 76           | 0             | 0        | 2,060          |
| Pac. ocean perch    | 1              | 0               | 0            | 0            | 1             | 0        | 2              |
| Other rockfish      | T              | 0               | 98           | 0            | 29            | 19       | 146            |
| Misc. species       | 110            | 0               | 1            | T            | 9             | 0        | 120            |
| Dogfish             | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Hake                | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Pollock             | 419            | 0               | 0            | 0            | 0             | 0        | 419            |
| Animal food         | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Reduction           | <u>0</u>       | <u>0</u>        | <u>0</u>     | <u>0</u>     | <u>0</u>      | <u>0</u> | <u>0</u>       |
| Total               | 627            | 0               | 2,117        | 77           | 92            | 19       | 2,932          |
| Total trawl hours   | 34             |                 |              |              |               |          |                |

T = trace, less than 0.23 t

Table 19.--Groundfish landings by INPFC area by gear, 1980.

## Charlotte - in metric tons

| Species             | Otter<br>trawl | Shrimp<br>trawl | Long<br>line | Pot+<br>trap | Other<br>gear | Rec.     | Grand<br>total |
|---------------------|----------------|-----------------|--------------|--------------|---------------|----------|----------------|
| English sole        | 1              | 0               | 0            | 0            | 0             | 0        | 1              |
| Rock sole           | 2              | 0               | 0            | 0            | 0             | 0        | 2              |
| Petrале sole        | 1              | 0               | 0            | 0            | 0             | 0        | 1              |
| Dover sole          | 8              | 0               | 0            | 0            | 0             | 0        | 8              |
| Rex sole            | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Starry flounder     | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Arrowtooth flounder | 1              | 0               | 0            | 0            | 0             | 0        | 1              |
| Other flatfish      | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Pacific cod         | 41             | 0               | 0            | 0            | 0             | 0        | 41             |
| Lingcod             | 14             | 0               | 0            | 0            | 0             | 0        | 14             |
| Sablefish           | 5              | 0               | 5            | 0            | 0             | 0        | 11             |
| Pac. ocean perch    | 285            | 0               | 0            | 0            | 0             | 0        | 285            |
| Other rockfish      | 375            | 0               | 0            | 0            | 0             | 0        | 375            |
| Misc. species       | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Dogfish             | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Hake                | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Pollock             | 3              | 0               | 0            | 0            | 0             | 0        | 3              |
| Animal food         | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Reduction           | <u>0</u>       | <u>0</u>        | <u>0</u>     | <u>0</u>     | <u>0</u>      | <u>0</u> | <u>0</u>       |
| Total               | 735            | 0               | 5            | 0            | 0             | 0        | 741            |
| Total trawl hours   | 1,291          |                 |              |              |               |          |                |

Table 19.--Groundfish landings by INPFC area by gear, 1980.

## Vancouver - in metric tons

| Species             | Otter<br>trawl | Shrimp<br>trawl | Long<br>line | Pot+<br>trap | Other<br>gear | Rec.     | Grand<br>total |
|---------------------|----------------|-----------------|--------------|--------------|---------------|----------|----------------|
| English sole        | 941            | T               | T            | 0            | 2             | 0        | 944            |
| Rock sole           | 140            | 0               | T            | T            | 3             | 0        | 144            |
| Petrale sole        | 277            | 1               | T            | 0            | T             | 0        | 277            |
| Dover sole          | 1,181          | 9               | 0            | 0            | T             | 0        | 1,189          |
| Rex sole            | 40             | 2               | 0            | 0            | 0             | 0        | 43             |
| Starry flounder     | 514            | 0               | 0            | 0            | 1             | 0        | 515            |
| Arrowtooth flounder | 216            | 0               | 0            | 0            | 0             | 0        | 216            |
| Other flatfish      | 137            | 6               | 0            | 0            | 1             | 0        | 144            |
| Pacific cod         | 2,324          | 4               | 9            | T            | 167           | 0        | 2,503          |
| Lingcod             | 682            | 15              | 5            | 0            | 118           | 0        | 821            |
| Sablefish           | 188            | 9               | 108          | 5            | 2             | 0        | 312            |
| Pac. ocean perch    | 613            | 1               | 0            | 0            | 0             | 0        | 615            |
| Other rockfish      | 3,778          | 290             | 38           | T            | 97            | 0        | 4,204          |
| Misc. species       | 182            | 0               | 5            | T            | 82            | 0        | 269            |
| Dogfish             | 764            | 0               | 1,501        | 0            | 814           | 0        | 3,079          |
| Hake                | 123            | 0               | 0            | 0            | 0             | 0        | 123            |
| Pollock             | 400            | 0               | 0            | 0            | T             | 0        | 400            |
| Animal food         | 1,165          | 0               | 0            | 0            | 0             | 0        | 1,165          |
| Reduction           | <u>4,219</u>   | <u>0</u>        | <u>18</u>    | <u>0</u>     | <u>8</u>      | <u>0</u> | <u>4,245</u>   |
| Total               | 17,884         | 338             | 1,684        | 6            | 1,295         | 0        | 21,207         |
| Total trawl hours   | 44,774         |                 |              |              |               |          |                |

T = trace, less than 0.23 t



Table 20.--Groundfish landings by INPFC area by gear, 1980.

## Columbia - in metric tons

| Species             | Otter<br>trawl | Shrimp<br>trawl | Long<br>line | Pot+<br>trap | Other<br>gear | Rec.     | Grand<br>total |
|---------------------|----------------|-----------------|--------------|--------------|---------------|----------|----------------|
| English sole        | 758            | 2               | 0            | 0            | 0             | 0        | 760            |
| Rock sole           | 20             | 13              | 0            | 0            | 0             | 0        | 33             |
| Petrable sole       | 1,079          | 6               | T            | 0            | T             | 0        | 1,085          |
| Dover sole          | 4,282          | 76              | T            | T            | 0             | 0        | 4,359          |
| Rex sole            | 635            | 8               | 0            | 0            | 0             | 0        | 644            |
| Starry flounder     | 244            | 1               | 0            | 0            | T             | 1        | 246            |
| Arrowtooth flounder | 337            | T               | 0            | 0            | 0             | 0        | 337            |
| Other flatfish      | 533            | 5               | T            | 0            | 0             | 0        | 539            |
| Pacific cod         | 289            | 2               | 2            | 0            | T             | 0        | 293            |
| Lingcod             | 1,199          | 75              | 9            | 0            | 55            | 108      | 1,446          |
| Sablefish           | 1,156          | 61              | 803          | 1,624        | 49            | 0        | 3,693          |
| Pac. ocean perch    | 1,627          | 44              | 1            | 0            | 0             | 0        | 1,673          |
| Other rockfish      | 15,757         | 1,405           | 80           | 4            | 8,924         | 237      | 26,407         |
| Misc. species       | 81             | T               | 1            | 1            | T             | 14       | 97             |
| Dogfish             | 86             | 0               | 4            | 0            | 40            | 0        | 130            |
| Hake                | 257            | 0               | 0            | 0            | 0             | 0        | 257            |
| Pollock             | T              | 0               | 0            | 0            | 0             | 0        | T              |
| Animal food         | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Reduction           | <u>11</u>      | <u>0</u>        | <u>TO</u>    | <u>0</u>     | <u>0</u>      | <u>0</u> | <u>12</u>      |
| Total               | 28,354         | 1,699           | 901          | 1,629        | 9,068         | 359      | 42,010         |
| Total trawl hours   | 58,870         |                 |              |              |               |          |                |

T = trace, less than 0.23 t

Table 21.--Groundfish landings by INPFC area by gear, 1980.

## Eureka - in metric tons

| Species             | Otter<br>trawl | Shrimp<br>trawl | Long<br>line | Pot+<br>trap | Other<br>gear | Rec.     | Grand<br>total |
|---------------------|----------------|-----------------|--------------|--------------|---------------|----------|----------------|
| English sole        | 812            | 0               | 0            | 0            | 0             | 0        | 812            |
| Rock sole           | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Petrале sole        | 411            | 0               | 0            | 0            | 0             | 0        | 411            |
| Dover sole          | 5,136          | 1               | 0            | 0            | 0             | 0        | 5,137          |
| Rex sole            | 479            | 0               | 0            | 0            | 0             | 0        | 479            |
| Starry flounder     | 79             | 0               | 0            | 0            | 0             | 0        | 79             |
| Arrowtooth flounder | 11             | 0               | 0            | 0            | 0             | 0        | 11             |
| Other flatfish      | 430            | T               | 0            | 0            | 0             | 0        | 430            |
| Pacific cod         | T              | 0               | 0            | 0            | 0             | 0        | T              |
| Lingcod             | 287            | 1               | T            | 0            | 16            | 14       | 318            |
| Sablefish           | 1,408          | 1               | 6            | 3            | T             | 0        | 1,418          |
| Pac. ocean perch    | 11             | 0               | 0            | 0            | 0             | 0        | 11             |
| Other rockfish      | 3,304          | 104             | 1            | T            | 3,801         | 106      | 7,316          |
| Misc. species       | 90             | 0               | T            | 0            | 0             | 2        | 92             |
| Dogfish             | 0              | 0               | T            | 0            | 0             | 0        | T              |
| Hake                | 37             | 0               | 0            | 0            | 648           | 0        | 685            |
| Pollock             | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Animal food         | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Reduction           | <u>0</u>       | <u>0</u>        | <u>0</u>     | <u>0</u>     | <u>0</u>      | <u>0</u> | <u>12</u>      |
| Total               | 12,496         | 107             | 9            | 3            | 4,465         | 122      | 17,202         |
| Total trawl hours   | 5,911          |                 |              |              |               |          |                |

Landings for all gear, other than otter trawl, not available for California  
 Total trawl hours do not include California effort  
 T = trace, less than 0.23 t

Table 22.--Groundfish landings by INPFC area by gear, 1980.

| Monterey - in metric tons |                |                 |              |              |               |          |                |
|---------------------------|----------------|-----------------|--------------|--------------|---------------|----------|----------------|
| Species                   | Otter<br>trawl | Shrimp<br>trawl | Long<br>line | Pot+<br>trap | Other<br>gear | Rec.     | Grand<br>total |
| English sole              | 1,264          | 0               | 0            | 0            | 0             | 0        | 1,264          |
| Rock sole                 | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Petrale sole              | 592            | 0               | 0            | 0            | 0             | 0        | 592            |
| Dover sole                | 3,123          | 0               | 0            | 0            | 0             | 0        | 3,123          |
| Rex sole                  | 319            | 0               | 0            | 0            | 0             | 0        | 319            |
| Starry flounder           | 214            | 0               | 0            | 0            | 0             | 0        | 214            |
| Arrowtooth flounder       | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Other flatfish            | 435            | 0               | 0            | 0            | 0             | 0        | 435            |
| Pacific cod               | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Lingcod                   | 834            | 0               | 0            | 0            | 0             | 0        | 834            |
| Sablefish                 | 1,569          | 0               | 0            | 0            | 0             | 0        | 1,569          |
| Pac. ocean perch          | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Other rockfish            | 7,143          | 4               | 0            | 0            | 0             | 0        | 7,147          |
| Misc. species             | 180            | 0               | 0            | 0            | 0             | 0        | 180            |
| Dogfish                   | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Hake                      | 8              | 0               | 0            | 0            | 0             | 0        | 8              |
| Pollock                   | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Animal food               | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Reduction                 | <u>0</u>       | <u>0</u>        | <u>0</u>     | <u>0</u>     | <u>0</u>      | <u>0</u> | <u>0</u>       |
| Total                     | 14,774         | 4               | 0            | 0            | 0             | 0        | 14,781         |
| Total trawl hours         | NA             |                 |              |              |               |          |                |

Landings for all gear, other than otter trawl, not available for California

Table 23.--Groundfish landings by INPFC area by gear, 1980.

Conception - in metric tons

| Species             | Otter<br>trawl | Shrimp<br>trawl | Long<br>line | Pot+<br>trap | Other<br>gear | Rec.     | Grand<br>total |
|---------------------|----------------|-----------------|--------------|--------------|---------------|----------|----------------|
| English sole        | 98             | 0               | 0            | 0            | 0             | 0        | 98             |
| Rock sole           | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Petrable sole       | 116            | 0               | 0            | 0            | 0             | 0        | 116            |
| Dover sole          | 45             | 0               | 0            | 0            | 0             | 0        | 45             |
| Rex sole            | 56             | 0               | 0            | 0            | 0             | 0        | 56             |
| Starry flounder     | 3              | 0               | 0            | 0            | 0             | 0        | 3              |
| Arrowtooth flounder | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Other flatfish      | 37             | 0               | 0            | 0            | 0             | 0        | 37             |
| Pacific cod         | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Lingcod             | 122            | 0               | 0            | 0            | 0             | 0        | 122            |
| Sablefish           | 27             | 0               | 0            | 0            | 0             | 0        | 27             |
| Pac. ocean perch    | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Other rockfish      | 1,613          | 0               | 0            | 0            | 0             | 0        | 1,613          |
| Misc. species       | 16             | 0               | 0            | 0            | 0             | 0        | 16             |
| Dogfish             | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Hake                | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Pollock             | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Animal food         | 0              | 0               | 0            | 0            | 0             | 0        | 0              |
| Reduction           | <u>0</u>       | <u>0</u>        | <u>0</u>     | <u>0</u>     | <u>0</u>      | <u>0</u> | <u>0</u>       |
| Total               | 4,703          | 0               | 0            | 0            | 0             | 0        | 4,703          |
| Total trawl hours   | NA             |                 |              |              |               |          |                |

Landings for all gear, other than otter trawl, not available for California