

# 資源評価調査委託事業（ハタハタ）

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## 目 的

我が国周辺水域の資源評価対象種のうち青森県日本海海域のハタハタを対象に、資源評価を行うための基礎データを収集する。

## 材料と方法

### 1. 漁獲量及び漁獲金額調査

青森県日本海沿岸でハタハタの主要な水揚げ港となっている小泊、下前、十三、鯨ヶ沢、風合瀬、深浦、大間越の各漁協、新深浦町漁協本所、舳作支所、岩崎支所（沢辺事業所を含む）の計 10 ヲ所（以下、漁協という。）から、集計した水揚げデータを入手し、整理した。

### 2. 魚体測定調査

平成 24 年 12 月 7 日、8 日、11 日、13 日に新深浦町漁協岩崎支所、7 日、10 日、11 日、12 日に鯨ヶ沢漁協に水揚げされた銘柄仕分け前の定置網漁獲物を確保し、標準体長、性別、体重等を測定した。

体長別漁獲尾数の算出は、漁獲量データを北部（小泊、下前、鯨ヶ沢、新深浦町漁協本所の全漁法）、南部（風合瀬、深浦、舳作支所、岩崎支所、大間越漁協の全漁法）の 2 つに区分けし、北部海域を鯨ヶ沢漁協の定置網漁獲物、南部海域を岩崎支所の定置網漁獲物から求めた日別の体長組成により引き延ばして求めた。なお、測定データの欠測期間については、表 1 のとおり直近の測定データで補完した。

表 1 測定データ欠測期間の補完方法

| 北部<br>海域 | 漁獲日     | 1日～8日     | 9日        | 10日     | 11日        | 12日以降    |       |
|----------|---------|-----------|-----------|---------|------------|----------|-------|
| 使用データ    | 8日の測定結果 | 8、10日の平均値 | 当日の測定結果   | 当日の測定結果 | 12日の測定結果   |          |       |
| 南部<br>海域 | 漁獲日     | 1日～8日     | 9日        | 10日     | 11日        | 12日      | 13日以降 |
| 使用データ    | 8日の測定結果 | 当日の測定結果   | 9、11日の平均値 | 当日の測定結果 | 11、13日の平均値 | 13日の測定結果 |       |

### 3. 漁場一斉調査

平成 24 年 4 月～平成 25 年 3 月にかけて、青森県日本海沖合の水深 100m～300m において、試験船青鵬丸のオッタートロール網によりハタハタの分布、加入状況を調査した（図 1）。漁獲されたハタハタは原則全数を持ち帰り、全長、標準体長、体重、性別を測定し、体長組成を元に年齢を推定した。一度に大量に漁獲された場合はランダムに 100 尾程度を持ち帰り測定し、残りは船上で尾数と重量を測定した。

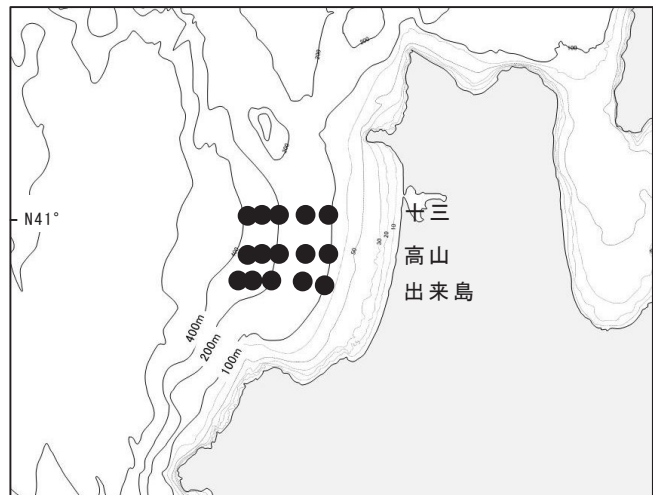


図 1 ハタハタ調査地点

## 結果と考察

### 1. 漁獲量調査

青森県におけるハタハタの漁獲量の推移を図2および付表1に、漁協別、月別、漁法別の漁獲量および漁獲金額をそれぞれ表2-1～2-3、表3-1～3-3に示した。また、新深浦町漁協岩崎支所の11月下旬～1月上旬までのハタハタ日別漁獲量を付表2に示した。

ハタハタの漁獲量は、平成20年に33年ぶりに1,362トンと1,000トンを超える漁獲量となったが、以後減少が続き、平成24年は209トンであった(図2)。平成24年の漁獲量を漁協別にみると、新深浦町漁協岩崎支所が最も多く68トン、次いで鯨ヶ沢漁協が64トンであり、これら2漁協・支所で全体の64%を占めていた(表2-1)。月別では12月に漁獲が集中し、全体の98%を占め、漁業種類では定置網が最も多く、全体の97%であった(表2-2、2-3)。平成24年の漁獲金額は5,536万円で、平成23年を下回った(表3-1)。沿岸における初漁日は12月2日であった(付表2)。

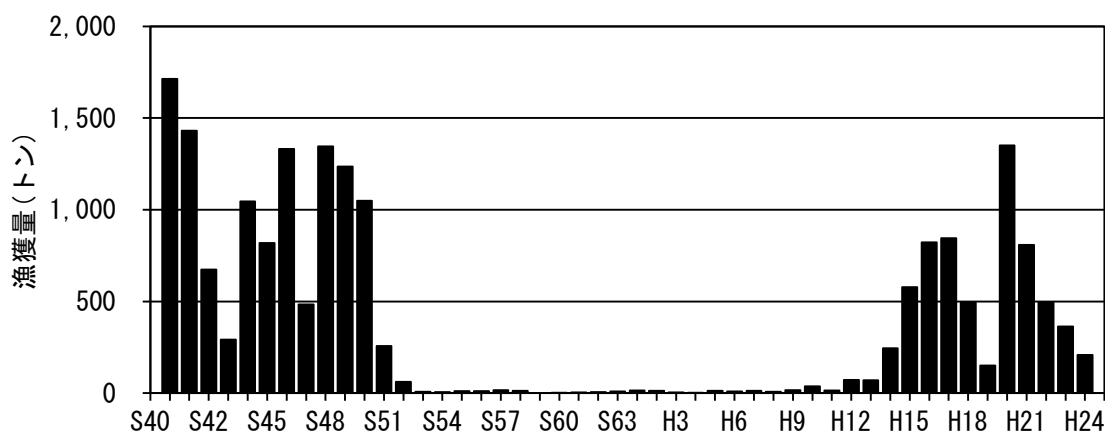


図2 青森県のハタハタ漁獲量の推移(水総研調べ)

表2-1 漁協別漁獲量(単位:トン)

| 漁協名    | H10 | H11 | H12 | H13 | H14 | H15 | H16 | H17 | H18 | H19 | H20   | H21 | H22 | H23 | H24 |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|-----|-----|-----|
| 小泊     | 0   | 0   | 0   | 0   | 0   | 5   | 3   | 0   | 0   | 0   | 0     | 0   | 0   | 0   | 0   |
| 下前     | 0   | 0   | 0   | 0   | 0   | 5   | 21  | 0   | 0   | 2   | 15    | 1   | 0   | 2   | 0   |
| 鯨ヶ沢    | 2   | 0   | 10  | 10  | 47  | 132 | 300 | 378 | 240 | 69  | 902   | 439 | 218 | 181 | 64  |
| 新深浦町本所 | 0   | 0   | 0   | 5   | 1   | 192 | 71  | 170 | 6   | 7   | 113   | 140 | 80  | 62  | 50  |
| 風合瀬    | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0   | 0   | 0   |
| 深浦     | 2   | 2   | 15  | 14  | 10  | 52  | 37  | 34  | 14  | 11  | 19    | 31  | 8   | 16  | 3   |
| 新深浦町船作 | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 0   | 0   | 0   | 0     | 0   | 0   | 0   | 0   |
| 新深浦町沢辺 | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 63    | 22  | 33  | 25  | 18  |
| 新深浦町岩崎 | 33  | 13  | 48  | 41  | 187 | 193 | 389 | 263 | 233 | 55  | 245   | 181 | 150 | 74  | 68  |
| 大間越    | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 4     | 6   | 5   | 5   | 5   |
| 総計     | 37  | 15  | 73  | 70  | 245 | 574 | 818 | 844 | 492 | 145 | 1,362 | 819 | 494 | 364 | 209 |

表2-2 月別漁獲量(単位:トン)

| 月  | H10 | H11 | H12 | H13 | H14 | H15 | H16 | H17 | H18 | H19 | H20   | H21 | H22 | H23 | H24 |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|-----|-----|-----|
| 1  | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 4   | 0   | 0   | 0     | 1   | 1   | 0   | 0   |
| 2  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 3   | 0     | 2   | 1   | 0   | 1   |
| 3  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 1   | 0   | 0     | 1   | 0   | 0   | 1   |
| 4  | 0   | 0   | 0   | 3   | 0   | 0   | 2   | 1   | 2   | 1   | 14    | 22  | 0   | 0   | 0   |
| 5  | 0   | 0   | 2   | 5   | 1   | 3   | 0   | 11  | 1   | 0   | 3     | 1   | 2   | 0   | 0   |
| 6  | 0   | 0   | 0   | 3   | 0   | 0   | 0   | 5   | 0   | 0   | 1     | 0   | 0   | 0   | 0   |
| 9  | 0   | 0   | 0   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0     | 0   | 0   | 0   | 0   |
| 10 | 1   | 1   | 1   | 2   | 0   | 1   | 0   | 1   | 0   | 1   | 0     | 0   | 0   | 0   | 0   |
| 11 | 0   | 1   | 17  | 1   | 56  | 12  | 4   | 3   | 11  | 8   | 0     | 0   | 1   | 1   | 1   |
| 12 | 35  | 14  | 52  | 55  | 187 | 563 | 815 | 818 | 477 | 132 | 1,343 | 791 | 489 | 363 | 205 |
| 総計 | 37  | 15  | 73  | 70  | 245 | 579 | 821 | 844 | 492 | 145 | 1,362 | 819 | 494 | 364 | 209 |

表2-3 漁法別漁獲量(単位:トン)

| 漁法名   | H10 | H11 | H12 | H13 | H14 | H15 | H16 | H17 | H18 | H19 | H20   | H21 | H22 | H23 | H24 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|-----|-----|-----|
| 沖合底曳網 | 3   | 2   | 24  | 16  | 11  | 68  | 39  | 46  | 18  | 14  | 28    | 33  | 13  | 29  | 4   |
| 刺網    | 8   | 6   | 9   | 16  | 19  | 54  | 71  | 15  | 13  | 6   | 29    | 7   | 9   | 69  | 3   |
| 定置網   | 27  | 7   | 39  | 35  | 209 | 264 | 640 | 610 | 453 | 116 | 1,182 | 639 | 393 | 266 | 202 |
| 底建網   | 0   | 0   | 0   | 3   | 1   | 192 | 71  | 163 | 6   | 7   | 114   | 137 | 76  | 0   | 0   |
| その他   | 0   | 0   | 0   | 0   | 6   | 1   | 2   | 9   | 3   | 1   | 8     | 3   | 2   | 1   | 0   |
| 総計    | 37  | 15  | 73  | 70  | 245 | 579 | 821 | 844 | 492 | 145 | 1,362 | 819 | 494 | 364 | 209 |

表 3-1 漁協別漁獲金額（単位：千円）

| 漁協名    | H10    | H11    | H12    | H13    | H14    | H15     | H16     | H17     | H18     | H19    | H20     | H21    | H22    | H23    | H24    |
|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|--------|---------|--------|--------|--------|--------|
| 小泊     | 0      | 0      | 0      | 0      | 0      | 928     | 481     | 0       | 0       | 0      | 0       | 0      | 0      | 0      | 0      |
| 下前     | 0      | 0      | 0      | 0      | 0      | 1,348   | 2,770   | 68      | 0       | 231    | 1,725   | 156    | 9      | 237    | 10     |
| 鯉ヶ沢    | 3,910  | 345    | 16,133 | 10,111 | 19,532 | 46,024  | 94,769  | 81,416  | 74,101  | 9,679  | 81,389  | 40,103 | 35,790 | 37,483 | 18,352 |
| 新深浦町本所 | 469    | 64     | 243    | 3,539  | 299    | 42,392  | 11,151  | 24,734  | 1,462   | 926    | 10,166  | 6,669  | 12,163 | 7,698  | 11,310 |
| 風合瀬    | 0      | 0      | 0      | 0      | 0      | 0       | 0       | 0       | 0       | 0      | 0       | 0      | 0      | 0      | 0      |
| 深浦     | 4,116  | 3,981  | 26,135 | 13,305 | 6,888  | 21,068  | 12,056  | 10,088  | 5,856   | 4,412  | 2,005   | 4,812  | 3,003  | 6,299  | 1,194  |
| 新深浦町船作 | 0      | 0      | 0      | 0      | 0      | 0       | 270     | 0       | 0       | 0      | 0       | 0      | 0      | 0      | 0      |
| 新深浦町沢辺 | 0      | 0      | 0      | 0      | 0      | 0       | 0       | 0       | 0       | 0      | 12,471  | 3,038  | 5,441  | 4,269  | 3,732  |
| 新深浦町岩崎 | 27,979 | 10,911 | 26,756 | 28,001 | 42,649 | 54,515  | 79,979  | 56,764  | 73,813  | 14,209 | 42,746  | 30,948 | 30,332 | 16,565 | 18,891 |
| 大間越    | 0      | 0      | 0      | 0      | 0      | 0       | 0       | 0       | 0       | 0      | 809     | 1,187  | 904    | 1,142  | 1,870  |
| 総計     | 36,473 | 15,301 | 69,267 | 54,955 | 69,368 | 166,275 | 201,475 | 173,070 | 155,232 | 29,457 | 151,312 | 86,913 | 87,643 | 73,693 | 55,360 |

表 3-2 月別漁獲金額（単位：千円）

| 月  | H10    | H11    | H12    | H13    | H14    | H15     | H16     | H17     | H18     | H19    | H20     | H21    | H22    | H23    | H24    |
|----|--------|--------|--------|--------|--------|---------|---------|---------|---------|--------|---------|--------|--------|--------|--------|
| 1  | 1,731  | 5      | 260    | 94     | 28     | 6       | 245     | 2,063   | 115     | 93     | 23      | 347    | 379    | 9      | 57     |
| 2  | 0      | 2      | 33     | 74     | 206    | 3       | 0       | 1       | 81      | 1,139  | 88      | 490    | 129    | 23     | 383    |
| 3  | 11     | 3      | 5      | 9      | 17     | 24      | 1       | 294     | 196     | 130    | 78      | 217    | 27     | 43     | 310    |
| 4  | 243    | 94     | 254    | 1,120  | 69     | 78      | 382     | 55      | 417     | 313    | 1,480   | 2,631  | 79     | 0      | 77     |
| 5  | 243    | 155    | 1,227  | 3,272  | 1,214  | 482     | 12      | 1,369   | 185     | 12     | 338     | 108    | 364    | 0      | 3      |
| 6  | 5      | 180    | 46     | 3,549  | 9      | 15      | 2       | 567     | 2       | 0      | 83      | 4      | 1      | 0      | 0      |
| 9  | 56     | 0      | 0      | 829    | 2      | 116     | 0       | 16      | 0       | 0      | 18      | 0      | 0      | 0      | 0      |
| 10 | 1,580  | 1,061  | 2,682  | 3,425  | 477    | 852     | 11      | 932     | 31      | 403    | 342     | 175    | 264    | 13     | 2      |
| 11 | 660    | 1,574  | 31,728 | 2,200  | 24,114 | 6,387   | 2,323   | 3,350   | 5,219   | 2,078  | 120     | 147    | 780    | 508    | 401    |
| 12 | 31,944 | 12,227 | 33,032 | 40,383 | 43,232 | 158,313 | 198,499 | 164,422 | 148,986 | 25,289 | 148,742 | 82,794 | 85,620 | 73,097 | 54,128 |
| 総計 | 36,473 | 15,301 | 69,267 | 54,955 | 69,368 | 166,275 | 201,475 | 173,070 | 155,232 | 29,457 | 151,312 | 86,913 | 87,643 | 73,693 | 55,360 |

表 3-3 漁法別漁獲金額（単位：千円）

| 漁法名   | H10    | H11    | H12    | H13    | H14    | H15     | H16     | H17     | H18     | H19    | H20     | H21    | H22    | H23    | H24    |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|--------|---------|--------|--------|--------|--------|
| 沖合底曳網 | 5,147  | 4,213  | 40,621 | 15,466 | 8,721  | 26,923  | 12,642  | 15,503  | 7,665   | 4,681  | 3,015   | 4,854  | 4,975  | 10,837 | 1,439  |
| 刺網    | 8,768  | 5,605  | 7,360  | 13,235 | 14,822 | 24,744  | 20,035  | 4,987   | 5,505   | 2,620  | 5,197   | 2,085  | 2,765  | 10,145 | 1,590  |
| 定置網   | 22,075 | 5,420  | 21,029 | 24,184 | 44,825 | 71,738  | 157,457 | 127,027 | 139,931 | 20,759 | 131,214 | 73,248 | 68,607 | 52,660 | 52,284 |
| 底建網   | 483    | 64     | 258    | 2,070  | 273    | 42,388  | 11,086  | 23,612  | 1,462   | 1,116  | 10,175  | 6,259  | 10,872 | 0      | 47     |
| その他   | 0      | 0      | 0      | 0      | 726    | 482     | 255     | 1,941   | 669     | 281    | 1,712   | 467    | 424    | 51     | 0      |
| 総計    | 36,473 | 15,301 | 69,267 | 54,955 | 69,368 | 166,275 | 201,475 | 173,070 | 155,232 | 29,457 | 151,312 | 86,913 | 87,643 | 73,693 | 55,360 |

2. 魚体測定調査

漁獲物の体長組成（付表 3）と漁獲量データ（付表 4）を元に日本海側全体の雌雄別体長別漁獲尾数を推定し、平成 22 年以降と比較した（図 3）。平成 24 年は雄で体長 13 cm および 15~16 cm、雌では 15 cm および 18 cm が漁獲の主体であり、雄の 18 cm 以上、雌の 20 cm 以上の中・大型魚は少なかった。また、雌雄の漁獲割合を比較すると、雌の割合が非常に低く、例年であれば卵塊が産み付けられている藻場においても卵塊数が非常に少なかったことから、雌の接岸量自体が少なかったと考えられた。

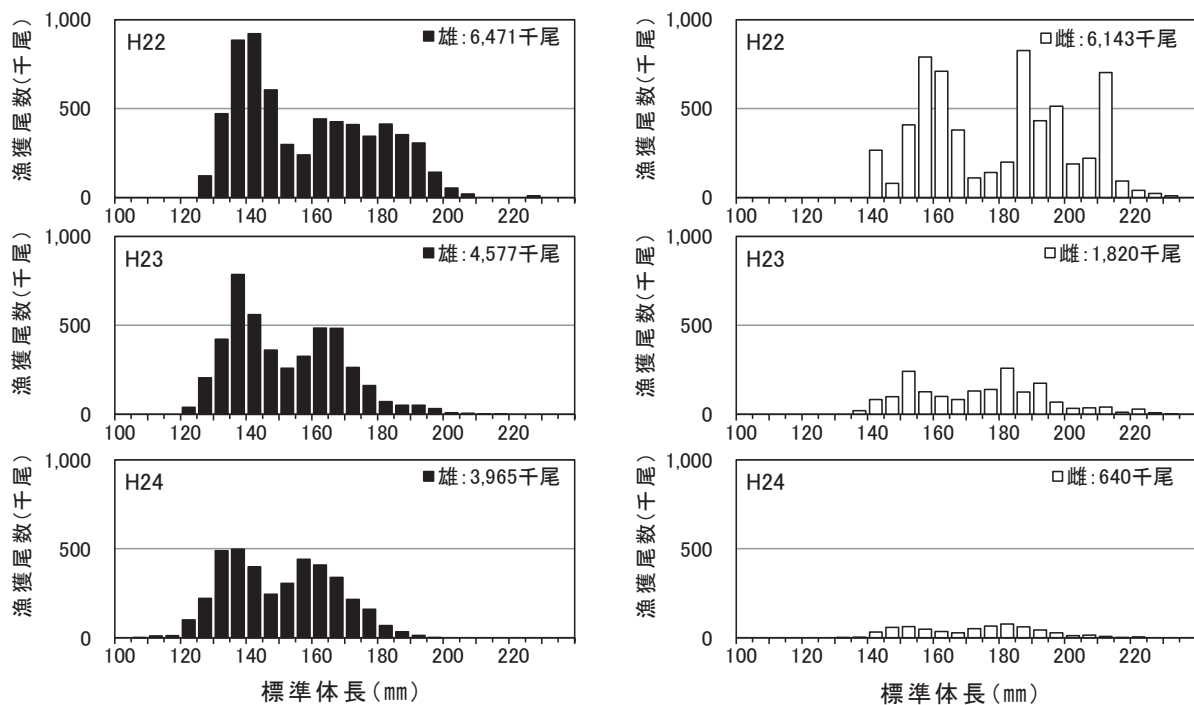


図 3 漁獲物の体長組成（推定漁獲尾数）

### 3. 漁場一斉調査

平成 24 年 4～7 月の体長組成から 6 cm 未満を 0 歳魚、6 cm 以上 12 cm 未満を 1 歳魚、12 cm 以上を 2 歳魚以上とした(図 4)。

操業別の入網結果を付表 5 に示す。また、平成 21～24 年の 5～7 月において、0 歳魚が 1 尾以上入網した操業を抜き出して求めた 100m～300m の水深帯別分布密度を図 5 に示す。

0 歳魚の分布密度は、すべての水深において平成 24 年級群が最も高かった。ハタハタ日本海北部系群の資源評価<sup>1)</sup>によると平成 21、22 年級群の豊度はいずれも中程度<sup>1) 2)</sup>、平成 23 年級群の豊度は高い<sup>3)</sup>と推定されていることから、いずれの水深においてもこれらの年を大きく上回る密度であった平成 24 年級群の豊度は非常に高いと思われた。

秋田県海域においては水深 200m 以深での稚魚分布密度が年級群豊度を反映すると考えられている<sup>2)</sup>が、本県沖合においてこの関係は明らかではない。豊度が高いと推定された平成 23 年級群<sup>3)</sup>は、平成 25 年漁期から本格的に漁獲加入してくるため、今後は漁獲状況と稚魚分布密度との関係を検証し、年級群豊度の評価方法を検討していく。

平成 24 年 10～12 月の本県沖合水深 250m、300m 帯におけるハタハタの体長組成を図 6 に示した。なお、100m、200m については採捕尾数が少なかったため省略した(付表 5)。月別にみると雄は 10 月に 13cm、11 月に 13、15 cm、12 月には 13 cm が主体、雌では 10 月に 15、18 cm、11 月に 17 cm、12 月には 15 cm を主体とした分布が見られ、平成 24 年漁期に接岸した魚体サイズと同様の傾向であった(図 3、6)。

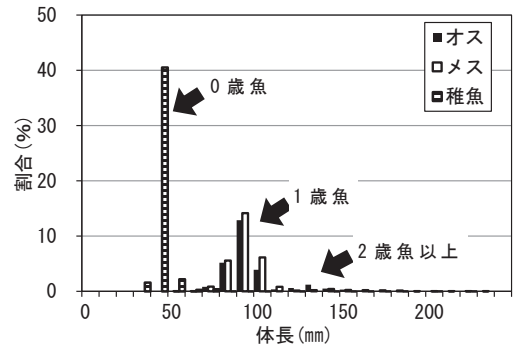


図 4 4 月～7 月におけるハタハタ体長組成

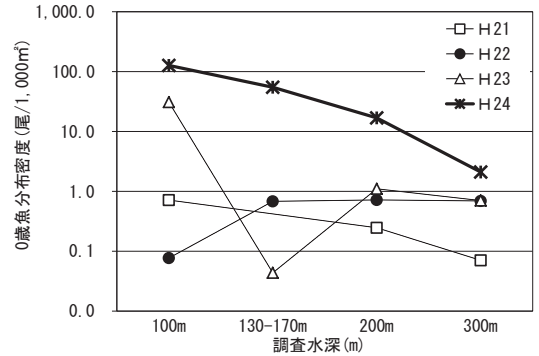


図 5 5 月～7 月におけるハタハタ 0 歳魚分布密度

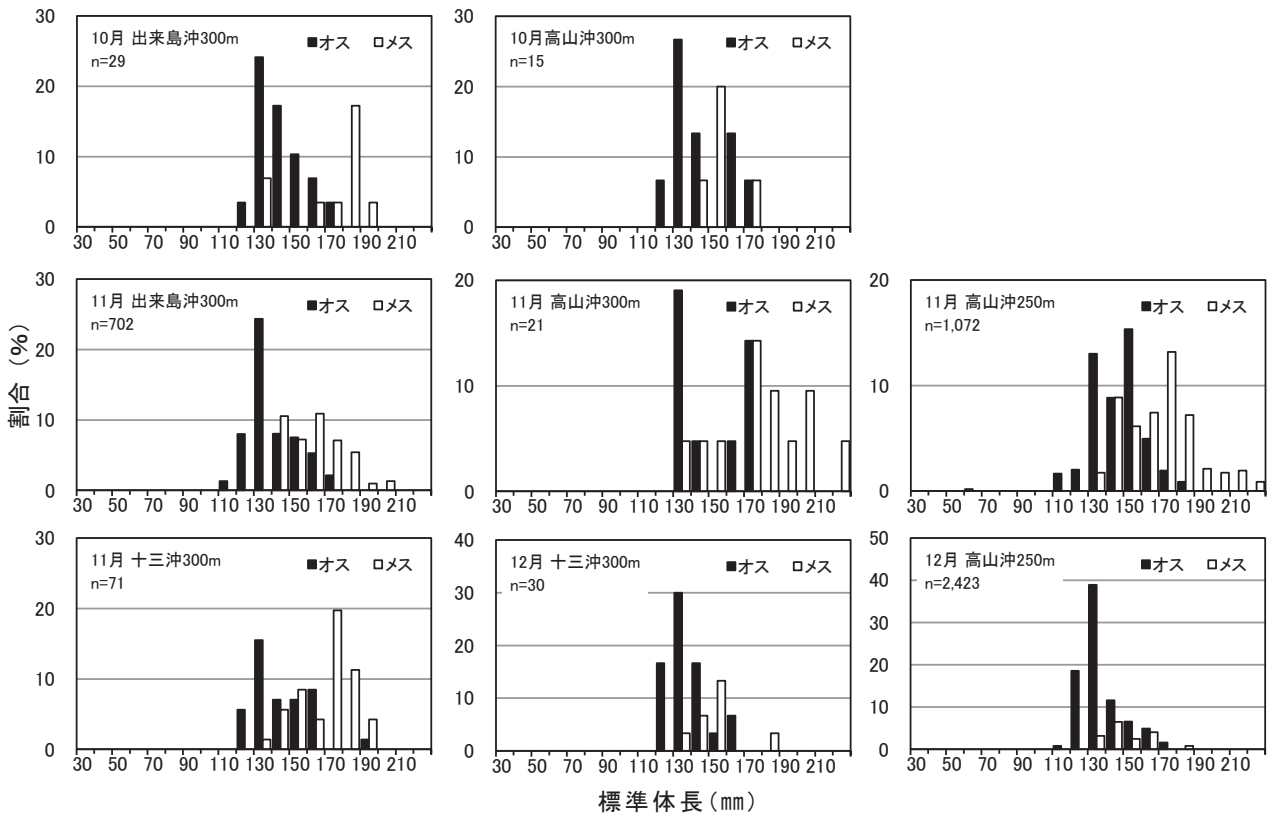


図 6 10～12 月における青森県日本海沖のハタハタ体長組成

## 文 献

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付表 1 青森県内のハタハタ漁獲量

単位：トン

| 和暦  | 西暦   | 市町村別(表記は旧町村名) |     |      |     | 合 計   | 漁具、漁法別 |        |
|-----|------|---------------|-----|------|-----|-------|--------|--------|
|     |      | 岩崎村           | 深浦町 | 鱒ヶ沢町 | 小泊村 |       | 刺網・定置網 | 沖合底びき網 |
| S40 | 1965 | 1,278         | 109 | 324  | -   | 1,711 | 1,709  | 4      |
| S41 | 1966 | 1,369         | 34  | 28   | -   | 1,431 | 1,398  | 33     |
| S42 | 1967 | 570           | 93  | 11   | -   | 674   | 653    | 21     |
| S43 | 1968 | 244           | 38  | 10   | -   | 292   | 254    | 38     |
| S44 | 1969 | 785           | 104 | 156  | -   | 1,045 | 944    | 101    |
| S45 | 1970 | 532           | 17  | 269  | -   | 818   | 801    | 17     |
| S46 | 1971 | 1,096         | 31  | 204  | -   | 1,331 | 1,326  | 5      |
| S47 | 1972 | 382           | 46  | 55   | -   | 483   | 452    | 31     |
| S48 | 1973 | 1,057         | 79  | 210  | -   | 1,346 | 1,346  | 0      |
| S49 | 1974 | 773           | 314 | 148  | -   | 1,235 | 1,220  | 16     |
| S50 | 1975 | 397           | 107 | 545  | -   | 1,049 | 703    | 346    |
| S51 | 1976 | 69            | 30  | 158  | -   | 257   | 211    | 46     |
| S52 | 1977 | 21            | 23  | 17   | -   | 61    | 22     | 39     |
| S53 | 1978 | 0             | 2   | 6    | -   | 8     | 6      | 2      |
| S54 | 1979 | -             | 2   | 3    | -   | 5     | 1      | 4      |
| S55 | 1980 | -             | 3   | 8    | -   | 11    | 3      | 8      |
| S56 | 1981 | 2             | 3   | 6    | -   | 11    | 6      | 5      |
| S57 | 1982 | -             | 5   | 12   | -   | 17    | 9      | 8      |
| S58 | 1983 | -             | 4   | 9    | -   | 13    | 0      | 13     |
| S59 | 1984 | -             | 0   | 0    | -   | 0     | 0      | 0      |
| S60 | 1985 | -             | 1   | 2    | -   | 3     | 0      | 3      |
| S61 | 1986 | -             | 2   | 2    | -   | 4     | 2      | 2      |
| S62 | 1987 | -             | 1   | 5    | -   | 6     | 2      | 4      |
| S63 | 1988 | 0             | 2   | 7    | -   | 9     | 2      | 7      |
| H1  | 1989 | 0             | 2   | 13   | -   | 15    | 4      | 11     |
| H2  | 1990 | 0             | 3   | 9    | -   | 12    | 4      | 8      |
| H3  | 1991 | 0             | 1   | 3    | -   | 4     | 0      | 4      |
| H4  | 1992 | 0             | 1   | 2    | -   | 3     | 1      | 2      |
| H5  | 1993 | -             | 7   | 6    | -   | 13    | 8      | 5      |
| H6  | 1994 | 1             | 5   | 3    | -   | 9     | 2      | 7      |
| H7  | 1995 | 2             | 7   | 4    | -   | 12    | 3      | 9      |
| H8  | 1996 | 1             | 5   | 1    | -   | 7     | 1      | 6      |
| H9  | 1997 | 5             | 9   | 3    | 0   | 17    | 7      | 10     |
| H10 | 1998 | 33            | 2   | 2    | 0   | 37    | 35     | 2      |
| H11 | 1999 | 13            | 2   | 0    | 0   | 15    | 13     | 2      |
| H12 | 2000 | 48            | 15  | 10   | 0   | 73    | 49     | 24     |
| H13 | 2001 | 41            | 19  | 10   | 0   | 70    | 54     | 16     |
| H14 | 2002 | 187           | 11  | 47   | 0   | 245   | 235    | 11     |
| H15 | 2003 | 193           | 243 | 132  | 10  | 579   | 510    | 68     |
| H16 | 2004 | 389           | 109 | 300  | 24  | 822   | 783    | 39     |
| H17 | 2005 | 263           | 203 | 378  | 0   | 844   | 798    | 46     |
| H18 | 2006 | 233           | 20  | 240  | 0   | 493   | 474    | 18     |
| H19 | 2007 | 55            | 19  | 74   | 0   | 149   | 136    | 15     |
| H20 | 2008 | 312           | 132 | 902  | 17  | 1,363 | 1,322  | 28     |
| H21 | 2009 | 208           | 170 | 439  | 1   | 818   | 776    | 33     |
| H22 | 2010 | 188           | 88  | 218  | 0   | 494   | 481    | 13     |
| H23 | 2011 | 103           | 78  | 181  | 2   | 364   | 335    | 29     |
| H24 | 2012 | 91            | 53  | 64   | 0   | 209   | 205    | 4      |

付表 2 新深浦町漁協岩崎支所の日別漁獲量

(単位 : kg)

| 月   | 日  | H13    | H14     | H15     | H16     | H17     | H18     | H19    | H20     | H21     | H22     | H23    | H24    |
|-----|----|--------|---------|---------|---------|---------|---------|--------|---------|---------|---------|--------|--------|
| 11月 | 25 | 0      | 0       | 0       | 0       | 0       | 0       | 0      | 0       | 0       | 0       | 0      | 0      |
|     | 26 | 0      | 0       | 0       | 0       | 0       | 0       | 0      | 0       | 0       | 0       | 0      | 0      |
|     | 27 | 0      | 0       | 0       | 0       | 0       | 0       | 0      | 0       | 0       | 0       | 0      | 0      |
|     | 28 | 0      | 51      | 0       | 0       | 0       | 0       | 0      | 0       | 0       | 0       | 0      | 0      |
|     | 29 | 0      | 26,749  | 0       | 124     | 0       | 0       | 233    | 0       | 0       | 0       | 0      | 0      |
|     | 30 | 0      | 20,556  | 0       | 2,482   | 0       | 0       | 4,899  | 0       | 0       | 0       | 0      | 0      |
| 12月 | 1  | 0      | 37,260  | 0       | 1,773   | 0       | 0       | 7,839  | 956     | 0       | 0       | 0      | 0      |
|     | 2  | 0      | 0       | 0       | 140     | 21      | 0       | 2,748  | 14,551  | 0       | 0       | 0      | 3      |
|     | 3  | 0      | 14,143  | 0       | 35      | 5       | 0       | 8,343  | 17,697  | 0       | 0       | 0      | 0      |
|     | 4  | 0      | 31,125  | 0       | 57      | 0       | 0       | 7,778  | 23,060  | 4       | 0       | 0      | 0      |
|     | 5  | 0      | 32,292  | 0       | 17      | 0       | 410     | 1,069  | 15,972  | 284     | 0       | 0      | 0      |
|     | 6  | 0      | 8,744   | 0       | 756     | 136     | 1,010   | 469    | 9,237   | 0       | 475     | 0      | 15     |
|     | 7  | 0      | 10,486  | 0       | 6,301   | 670     | 1,020   | 10,051 | 18,033  | 338     | 3,976   | 0      | 0      |
|     | 8  | 0      | 963     | 52      | 9,558   | 1,840   | 17,852  | 3,515  | 30,547  | 26,636  | 1,287   | 0      | 12,604 |
|     | 9  | 0      | 448     | 1,905   | 36,079  | 1,987   | 61,780  | 3,842  | 0       | 44,471  | 1,060   | 0      | 11,113 |
|     | 10 | 308    | 515     | 36,331  | 21,752  | 6       | 28,410  | 288    | 7,306   | 30,374  | 194     | 0      | 0      |
|     | 11 | 351    | 4       | 34,018  | 18,071  | 80      | 15,120  | 2,496  | 33,221  | 31,068  | 319     | 0      | 20,131 |
|     | 12 | 1,735  | 20      | 27,525  | 32,611  | 19,423  | 39,159  | 367    | 0       | 14,654  | 0       | 0      | 12,260 |
|     | 13 | 2,285  | 393     | 8,361   | 27,589  | 2,029   | 8,267   | 40     | 27,215  | 21,546  | 35,623  | 13     | 3,500  |
|     | 14 | 3      | 0       | 18,145  | 46,720  | 18,497  | 35,724  | 6      | 29,662  | 12,713  | 39,584  | 2,973  | 669    |
|     | 15 | 0      | 61      | 19,655  | 31,848  | 52,565  | 10,642  | 4      | 14,769  | 77      | 28,797  | 2,205  | 3,360  |
|     | 16 | 0      | 775     | 14,937  | 12,756  | 33,855  | 5,049   | 12     | 12,032  | 776     | 16,130  | 2,277  | 2,789  |
|     | 17 | 22,516 | 107     | 15,315  | 6,284   | 11,109  | 1,374   | 0      | 11,317  | 6,461   | 16,715  | 9,684  | 350    |
|     | 18 | 9,977  | 426     | 3,778   | 33,174  | 4,847   | 781     | 1      | 3,611   | 5,712   | 13,544  | 19,890 | 885    |
|     | 19 | 2,629  | 62      | 656     | 20,090  | 13,948  | 2,082   | 4      | 1,207   | 0       | 7,402   | 22,519 | 76     |
|     | 20 | 727    | 852     | 548     | 8,015   | 39,637  | 2,115   | 167    | 1,991   | 401     | 10,829  | 12,027 | 36     |
|     | 21 | 643    | 0       | 694     | 520     | 28,357  | 352     | 145    | 603     | 2,653   | 716     | 18,734 | 12     |
|     | 22 | 0      | 940     | 60      | 12      | 11,014  | 104     | 14     | 9,971   | 69      | 3,886   | 4,430  | 472    |
|     | 23 | 171    | 291     | 307     | 7,685   | 4,079   | 506     | 156    | 7,541   | 2,832   | 178     | 0      | 0      |
|     | 24 | 21     | 135     | 6,920   | 25,295  | 4,673   | 102     | 199    | 3,729   | 297     | 0       | 0      | 6      |
|     | 25 | 30     | 67      | 3,823   | 21,779  | 4,975   | 699     | 192    | 131     | 82      | 0       | 2,223  | 0      |
|     | 26 | 27     | 0       | 9       | 12,473  | 166     | 57      | 110    | 0       | 132     | 0       | 764    | 0      |
|     | 27 | 15     | 0       | 84      | 975     | 352     | 0       | 132    | 0       | 46      | 20      | 20     | 0      |
|     | 28 | 0      | 0       | 31      | 926     | 929     | 0       | 4      | 1,188   | 484     | 281     | 642    | 0      |
|     | 29 | 0      | 0       | 74      | 1,722   | 2,471   | 0       | 41     | 2,935   | 2       | 159     | 0      | 0      |
|     | 30 | 0      | 0       | 43      | 1,299   | 1,038   | 64      | 0      | 9,619   | 5       | 42      | 0      | 0      |
|     | 31 | 0      | 0       | 0       | 0       | 0       | 0       | 0      | 0       | 0       | 0       | 0      | 0      |
| 1月  | 1  |        |         | 0       | 0       | 0       | 0       | 0      | 0       | 0       | 0       | 0      | 0      |
|     | 2  |        |         | 0       | 0       | 0       | 0       | 0      | 0       | 0       | 0       | 0      | 0      |
|     | 3  |        |         | 0       | 0       | 0       | 0       | 0      | 0       | 0       | 0       | 0      | 0      |
|     | 4  |        |         | 3       | 0       | 0       | 158     | 0      | 101     | 158     | 36      | 0      | 0      |
|     | 5  |        |         | 0       | 37      | 0       | 0       | 0      | 39      | 368     | 0       | 0      | 0      |
|     | 6  |        |         | 0       | 139     | 49      | 0       | 0      | 4       | 80      | 0       | 0      | 0      |
|     | 7  |        |         | 0       | 463     | 38      | 0       | 0      | 23      | 208     | 7       | 0      | 0      |
|     | 8  |        |         | 0       | 0       | 0       | 0       | 0      | 0       | 97      | 0       | 0      | 0      |
|     | 9  |        |         | 0       | 128     | 22      | 0       | 0      | 0       | 0       | 0       | 0      | 0      |
|     | 10 |        |         | 0       | 64      | 6       | 0       | 0      | 0       | 68      | 0       | 0      | 0      |
|     | 11 |        |         | 0       | 132     | 0       | 0       | 0      | 0       | 18      | 6       | 0      | 0      |
|     | 12 |        |         | 0       | 337     | 0       | 0       | 0      | 0       | 20      | 0       | 0      | 0      |
|     | 13 |        |         | 0       | 648     | 0       | 0       | 0      | 0       | 4       | 0       | 0      | 0      |
|     | 14 |        |         | 0       | 1,167   | 0       | 0       | 0      | 0       | 0       | 0       | 0      | 0      |
|     | 15 |        |         | 0       | 189     | 0       | 0       | 0      | 0       | 0       | 0       | 0      | 0      |
|     | 16 |        |         | 0       | 436     | 0       | 0       | 0      | 0       | 0       | 0       | 0      | 0      |
|     | 17 |        |         | 0       | 93      | 0       | 0       | 0      | 0       | 0       | 0       | 0      | 0      |
|     | 18 |        |         | 0       | 50      | 0       | 0       | 0      | 0       | 0       | 0       | 0      | 0      |
|     | 19 |        |         | 0       | 5       | 0       | 0       | 0      | 0       | 0       | 0       | 0      | 0      |
|     | 20 |        |         | 0       | 0       | 0       | 0       | 0      | 0       | 0       | 0       | 0      | 0      |
| 合計  |    | 41,439 | 187,462 | 193,271 | 392,801 | 258,822 | 232,835 | 55,164 | 308,267 | 203,137 | 181,264 | 98,401 | 68,281 |

付表3 漁獲物の体長組成

| 体長mm      | H24                        |    |       |    |        |    |                             |   |       |    |        |    |        |    |        |    |
|-----------|----------------------------|----|-------|----|--------|----|-----------------------------|---|-------|----|--------|----|--------|----|--------|----|
|           | 岩崎支所(南部)<br>定置網<br>(銘柄未選別) |    |       |    |        |    | 鯉ヶ沢漁協(北部)<br>定置網<br>(銘柄未選別) |   |       |    |        |    |        |    |        |    |
|           | 12月7日                      |    | 12月8日 |    | 12月11日 |    | 12月13日                      |   | 12月7日 |    | 12月10日 |    | 12月11日 |    | 12月12日 |    |
|           | 雄                          | 雌  | 雄     | 雌  | 雄      | 雌  | 雄                           | 雌 | 雄     | 雌  | 雄      | 雌  | 雄      | 雌  | 雄      | 雌  |
| 105≦～<110 |                            |    |       |    |        |    |                             |   | 1     |    |        |    |        |    |        |    |
| 110≦～<115 |                            |    |       |    |        |    |                             |   | 1     | 3  |        | 2  |        |    |        |    |
| 115≦～<120 |                            |    | 1     |    |        |    |                             |   | 2     |    | 5      |    |        |    |        |    |
| 120≦～<125 | 3                          |    |       |    | 7      |    | 8                           |   | 12    | 9  |        | 12 |        |    | 5      |    |
| 125≦～<130 | 8                          |    | 3     |    | 9      |    | 13                          |   | 23    | 21 |        | 27 |        |    | 15     |    |
| 130≦～<135 | 10                         |    | 9     |    | 14     | 1  | 27                          |   | 58    | 58 |        | 27 |        |    | 43     |    |
| 135≦～<140 | 23                         |    | 14    |    | 20     |    | 20                          |   | 83    | 47 | 1      | 31 | 1      |    | 26     |    |
| 140≦～<145 | 12                         | 2  | 19    | 1  | 13     |    | 26                          |   | 65    | 8  | 52     | 4  | 14     | 4  | 15     |    |
| 145≦～<150 | 7                          | 1  | 6     | 5  | 23     |    | 22                          |   | 39    | 8  | 16     | 8  | 6      | 11 | 12     | 1  |
| 150≦～<155 | 8                          | 3  | 11    | 7  | 30     |    | 55                          |   | 39    | 8  | 16     | 4  | 9      | 11 | 9      | 2  |
| 155≦～<160 | 14                         | 1  | 11    | 5  | 63     | 1  | 71                          |   | 37    | 8  | 17     | 3  | 10     | 4  | 19     | 3  |
| 160≦～<165 | 8                          | 6  | 11    | 2  | 60     |    | 71                          | 1 | 29    | 7  | 18     | 2  | 14     | 2  | 17     |    |
| 165≦～<170 | 12                         | 4  | 6     | 1  | 48     | 1  | 57                          | 1 | 31    | 1  | 8      | 3  | 12     | 6  | 15     |    |
| 170≦～<175 | 2                          | 9  | 3     | 7  | 27     |    | 39                          |   | 27    | 5  | 6      | 5  | 3      | 1  | 12     |    |
| 175≦～<180 | 5                          | 11 | 5     | 5  | 31     | 5  | 23                          | 2 | 8     | 2  | 3      | 3  | 6      | 6  | 6      | 1  |
| 180≦～<185 | 2                          | 12 | 4     | 7  | 13     | 2  | 11                          |   | 4     | 4  | 2      | 10 | 2      | 7  | 1      |    |
| 185≦～<190 |                            | 11 | 1     | 7  | 4      | 2  | 9                           |   | 1     | 1  | 2      |    | 12     | 2  | 1      |    |
| 190≦～<195 |                            | 4  | 1     | 8  | 4      | 1  | 0                           | 1 |       |    | 2      |    | 4      | 1  | 2      |    |
| 195≦～<200 |                            | 4  |       | 2  |        | 1  | 1                           |   |       | 2  | 3      |    | 4      |    |        |    |
| 200≦～<205 |                            | 3  |       | 2  |        |    |                             |   |       |    |        |    | 1      |    |        |    |
| 205≦～<210 |                            | 1  |       | 2  |        |    |                             |   |       |    | 2      |    | 1      |    |        | 1  |
| 210≦～<215 |                            |    |       | 2  |        |    |                             |   |       |    | 1      |    | 1      |    |        |    |
| 215≦～<220 |                            |    |       |    |        |    |                             |   |       |    |        |    | 1      |    |        |    |
| 220≦～<225 |                            | 1  |       |    |        |    |                             |   |       |    |        |    | 2      |    |        |    |
| 225≦～<230 |                            |    |       |    |        |    |                             |   |       |    |        |    |        |    |        |    |
| 230≦～<235 |                            |    |       |    |        |    |                             |   |       |    |        |    |        |    |        |    |
| 235≦～<240 |                            |    |       |    |        |    |                             |   |       |    |        |    |        |    |        |    |
| 計         | 114                        | 73 | 105   | 63 | 366    | 14 | 453                         | 5 | 460   | 54 | 278    | 51 | 180    | 79 | 198    | 11 |

付表4 漁協別日別漁獲量

|     | H24年12月の日別漁獲量 |    |        |        |     |     |    |        |        |       |         |        | 単位: kg  |       |    |   |
|-----|---------------|----|--------|--------|-----|-----|----|--------|--------|-------|---------|--------|---------|-------|----|---|
|     | 北部            |    |        |        | 南部  |     |    |        |        |       |         |        | 北部計     | 南部計   | 総計 |   |
|     | 小泊            | 下前 | 鯉ヶ沢    | 大戸瀬    | 風合瀬 | 深浦  | 船作 | 沢辺     | 岩崎     | 大間越   |         |        |         |       |    |   |
| 1日  | 0             | 0  | 0      | 0      | 0   | 0   | 0  | 0      | 0      | 0     | 0       | 0      | 0       | 0     | 0  | 0 |
| 2日  | 0             | 0  | 123    | 0      | 0   | 99  | 0  | 0      | 3      | 0     | 0       | 123    | 102     | 225   |    |   |
| 3日  | 0             | 0  | 0      | 0      | 0   | 122 | 0  | 0      | 0      | 0     | 0       | 0      | 122     | 122   |    |   |
| 4日  | 0             | 0  | 16     | 0      | 0   | 0   | 0  | 0      | 0      | 0     | 0       | 16     | 0       | 16    |    |   |
| 5日  | 0             | 0  | 0      | 0      | 0   | 0   | 0  | 0      | 0      | 0     | 0       | 0      | 0       | 0     |    |   |
| 6日  | 0             | 0  | 528    | 3,067  | 0   | 0   | 0  | 0      | 15     | 0     | 0       | 3,595  | 15      | 3,610 |    |   |
| 7日  | 0             | 0  | 0      | 4,145  | 0   | 0   | 0  | 0      | 0      | 0     | 0       | 4,145  | 0       | 4,145 |    |   |
| 8日  | 0             | 0  | 13,777 | 0      | 0   | 0   | 0  | 377    | 12,604 | 279   | 13,777  | 13,260 | 27,037  |       |    |   |
| 9日  | 0             | 0  | 11,377 | 15,965 | 0   | 0   | 0  | 4,164  | 11,113 | 1,353 | 27,342  | 16,630 | 43,972  |       |    |   |
| 10日 | 0             | 0  | 11,465 | 14,803 | 0   | 0   | 0  | 4,523  | 0      | 1,071 | 26,268  | 5,594  | 31,862  |       |    |   |
| 11日 | 0             | 0  | 8,561  | 3,986  | 0   | 0   | 0  | 2,905  | 20,131 | 1,164 | 12,547  | 24,200 | 36,747  |       |    |   |
| 12日 | 0             | 0  | 6,876  | 1,925  | 0   | 0   | 0  | 3,867  | 12,260 | 861   | 8,801   | 16,988 | 25,789  |       |    |   |
| 13日 | 0             | 0  | 6,525  | 3,941  | 0   | 0   | 0  | 1,559  | 3,500  | 0     | 10,466  | 5,059  | 15,525  |       |    |   |
| 14日 | 0             | 0  | 2,236  | 1,371  | 0   | 0   | 0  | 304    | 669    | 0     | 3,608   | 973    | 4,580   |       |    |   |
| 15日 | 0             | 0  | 801    | 0      | 0   | 3   | 0  | 67     | 3,360  | 138   | 801     | 3,568  | 4,369   |       |    |   |
| 16日 | 0             | 0  | 509    | 599    | 0   | 0   | 0  | 38     | 2,789  | 0     | 1,108   | 2,827  | 3,935   |       |    |   |
| 17日 | 0             | 0  | 584    | 165    | 0   | 10  | 0  | 2      | 350    | 0     | 749     | 362    | 1,111   |       |    |   |
| 18日 | 0             | 0  | 84     | 41     | 0   | 0   | 0  | 9      | 885    | 0     | 125     | 895    | 1,020   |       |    |   |
| 19日 | 0             | 0  | 0      | 16     | 0   | 0   | 0  | 0      | 76     | 0     | 16      | 76     | 92      |       |    |   |
| 20日 | 0             | 0  | 0      | 0      | 0   | 0   | 0  | 13     | 36     | 0     | 0       | 49     | 49      |       |    |   |
| 21日 | 0             | 0  | 184    | 0      | 0   | 6   | 0  | 0      | 12     | 0     | 184     | 18     | 202     |       |    |   |
| 22日 | 0             | 0  | 8      | 0      | 0   | 7   | 0  | 0      | 472    | 0     | 8       | 479    | 487     |       |    |   |
| 23日 | 0             | 0  | 0      | 0      | 0   | 0   | 0  | 10     | 0      | 0     | 0       | 10     | 10      |       |    |   |
| 24日 | 0             | 0  | 0      | 0      | 0   | 2   | 0  | 0      | 6      | 0     | 0       | 8      | 8       |       |    |   |
| 25日 | 0             | 0  | 0      | 0      | 0   | 0   | 0  | 4      | 0      | 0     | 0       | 4      | 4       |       |    |   |
| 26日 | 0             | 0  | 0      | 0      | 0   | 0   | 0  | 0      | 0      | 0     | 0       | 0      | 0       |       |    |   |
| 27日 | 0             | 0  | 0      | 0      | 0   | 0   | 0  | 0      | 0      | 0     | 0       | 0      | 0       |       |    |   |
| 28日 | 0             | 0  | 0      | 0      | 0   | 0   | 0  | 0      | 0      | 0     | 0       | 0      | 0       |       |    |   |
| 29日 | 0             | 0  | 43     | 0      | 0   | 0   | 0  | 0      | 0      | 0     | 43      | 0      | 43      |       |    |   |
| 30日 | 0             | 0  | 16     | 0      | 0   | 0   | 0  | 0      | 0      | 0     | 16      | 0      | 16      |       |    |   |
| 31日 | 0             | 0  | 0      | 0      | 0   | 0   | 0  | 0      | 0      | 0     | 0       | 0      | 0       |       |    |   |
| 計   | 0             | 0  | 63,712 | 50,025 | 0   | 249 | 0  | 17,840 | 68,281 | 4,866 | 113,738 | 91,236 | 204,973 |       |    |   |



付表5 オッタートロールによる漁場一斉調査結果 (平成 24 年度)

| 月日                        | 4/12   | 4/12   | 4/12   | 4/23   | 4/23   | 4/23   | 4/24   | 4/24   | 4/24   | 4/25   | 4/25   | 4/25   | 4/26   | 4/26   | 5/10   | 5/10   | 5/10   | 5/14   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 調査海域                      | 出来島    | 出来島    | 出来島    | 高山     | 高山     | 高山     | 十三     | 十三     | 十三     | 十三     | 高山     | 出来島    | 高山     | 出来島    | 十三     | 十三     | 十三     | 出来島    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 水深(m)                     | 100    | 200    | 300    | 100    | 200    | 300    | 100    | 200    | 300    | 120    | 120    | 120    | 250    | 250    | 80     | 200    | 300    | 100    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 標準体長(cm)                  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7.5                       | 121    | 50     | 24     | 74     | 74     | 4      | 1      | 12     | 16     | 2      |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8.0                       | 255    | 187    | 1      | 237    | 150    | 4      | 1      | 23     | 66     | 6      |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8.5                       | 316    | 462    | 4      | 530    | 781    | 1      | 89     | 4      | 159    | 251    | 13     | 58     | 14     | 205    | 814    | 1      |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.0                       | 393    | 535    | 1      | 872    | 1,128  | 12     | 398    | 5      | 230    | 531    | 26     | 91     | 41     | 1      | 1,128  | 3,477  | 7      | 5      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.5                       | 219    | 432    | 3      | 462    | 868    | 15     | 1,287  | 19     | 358    | 465    | 29     | 107    | 104    | 1      | 6,758  | 32     | 32     | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10.0                      | 74     | 432    | 1      | 220    | 529    | 11     | 1,200  | 18     | 262    | 236    | 25     | 89     | 75     | 2,464  | 31     | 25     | 31     | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10.5                      | 22     | 207    | 1      | 114    | 2      | 2      | 798    | 11     | 81     | 69     | 3      | 53     | 43     | 512    | 14     | 31     | 31     | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10.5                      | 67     | 10     |        | 38     | 4      | 4      | 181    | 7      | 25     | 17     | 3      | 30     | 16     | 512    | 14     | 31     | 31     | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11.0                      | 10     |        |        |        |        |        | 89     | 1      |        |        |        |        |        | 206    | 2      | 2      | 2      | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11.5                      | 43     | 1      |        |        |        |        |        | 2      |        |        |        |        |        | 101    | 2      | 2      | 2      | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12.0                      | 31     | 1      |        | 38     | 3      | 3      | 88     | 5      |        |        |        | 5      | 4      | 1      | 1      | 1      | 1      | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12.5                      | 31     | 6      |        |        | 2      | 2      | 90     | 9      |        |        |        | 16     | 8      |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13.0                      | 33     | 9      |        |        | 2      | 2      | 44     | 6      |        |        |        | 16     | 11     |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13.5                      | 63     | 7      |        |        | 2      | 2      | 177    | 8      |        |        |        | 13     | 10     |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14.0                      | 95     | 12     |        |        | 2      | 2      | 45     | 2      |        |        |        | 14     | 11     |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14.5                      | 94     | 16     |        | 37     | 10     | 10     |        | 4      |        |        |        | 5      | 12     |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15.0                      | 55     | 16     |        | 1      | 5      | 5      | 44     | 6      |        |        |        | 14     | 4      |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15.5                      | 22     | 6      |        |        | 2      | 2      |        |        |        |        |        | 7      | 2      |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16.0                      | 10     | 3      |        |        | 5      | 5      |        |        |        |        |        |        | 2      |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16.5                      | 1      | 5      |        |        | 2      | 2      |        | 2      |        |        |        |        | 4      |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17.0                      | 10     | 2      |        |        | 2      | 2      |        | 3      |        |        |        |        |        |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17.5                      | 12     | 5      |        |        | 3      | 3      |        |        |        |        |        |        |        |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18.0                      |        | 1      |        |        | 2      | 2      |        |        |        |        |        |        |        |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18.5                      | 10     |        |        |        | 2      | 2      |        |        | 1      |        |        |        |        |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18.5                      |        |        |        |        |        |        |        |        | 1      |        |        |        |        |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19.0                      | 1      | 1      |        |        |        |        |        |        |        |        |        | 2      |        |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 25     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 計                         | 1,401  | 2,459  | 101    | 2,418  | 3,755  | 124    | 1      | 4,529  | 116    | 1,162  | 1,684  | 100    | 527    | 377    | 2      | 20,478 | 126    | 3,477  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 曳網面積(m <sup>2</sup> )     | 35,319 | 43,852 | 48,188 | 31,286 | 50,388 | 51,877 | 39,651 | 36,995 | 45,191 | 35,974 | 32,148 | 30,031 | 60,168 | 39,640 | 39,698 | 36,719 | 71,502 | 41,765 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 密度(尾/1000m <sup>2</sup> ) | 39.67  | 56.07  | 2.10   | 77.29  | 74.52  | 2.39   | 0.03   | 122.42 | 2.57   | 32.30  | 52.38  | 3.33   | 8.76   | 9.51   | 0.05   | 557.70 | 1.76   | 83.24  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 標準体長(cm)                  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7.5                       | 53     | 1      |        | 100    | 21     | 8      |        | 19     |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8.0                       | 485    |        |        | 152    | 86     | 25     |        | 110    |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8.5                       | 1,671  | 1      |        | 555    | 225    | 87     | 2      | 185    | 3      | 33     | 50     |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.0                       | 2,647  | 7      |        | 1,213  | 225    | 87     | 6      | 565    | 7      | 121    | 1      | 225    |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.5                       | 2,978  | 9      |        | 3,081  | 403    | 171    | 6      | 1,107  | 1      | 9      | 361    | 790    |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10.0                      | 1,737  | 8      |        | 2,845  | 497    | 187    | 3      | 993    |        | 18     | 1      | 570    | 4      | 957    |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10.5                      | 759    | 7      |        | 1,523  | 397    | 95     | 2      | 466    |        | 11     |        | 607    | 2      | 933    |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11.0                      | 381    | 2      |        | 560    | 206    | 35     | 1      | 206    |        | 3      |        | 412    | 2      | 608    |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11.5                      | 1      | 1      |        | 54     | 52     | 35     |        | 58     |        | 1      |        | 177    | 2      | 146    |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12.0                      |        |        |        | 51     | 18     |        |        |        |        |        |        | 35     |        | 1      |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12.5                      |        |        |        |        | 14     |        |        |        |        | 1      |        | 12     |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13.0                      |        |        |        |        | 1      |        |        |        |        |        | 1      | 11     |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13.5                      |        |        |        |        |        |        |        |        |        |        |        |        | 1      |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14.0                      | 54     | 4      |        |        | 6      |        |        | 1      |        |        |        |        |        | 1      |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14.5                      |        |        |        |        | 1      |        |        |        |        |        |        |        |        |        | 4      | 17     |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15.0                      |        |        |        |        | 7      |        |        |        |        |        |        |        |        |        |        |        |        | 2      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15.5                      |        |        |        |        |        |        |        |        |        | 1      |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 2      |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21.5                      |        |        |        |        |        |        |        |        |        |        |        | 1      |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 計                         | 10,821 | 60     | 2      | 10,137 | 1,935  | 608    | 14     | 4      | 3,708  | 4      | 57     | 1,604  | 2,340  | 18     | 3,727  | 8,980  | 420    | 32     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 曳網面積(m <sup>2</sup> )     | 45,849 | 56,263 | 31,854 | 42,647 | 50,983 | 50,745 | 25,279 | 60,470 | 58,197 | 54,683 | 61,045 | 32,327 | 50,525 | 59,332 | 52,689 | 36,089 | 24,775 | 20,417 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 密度(尾/1000m <sup>2</sup> ) | 236.02 | 1.07   | 0.06   | 237.70 | 37.96  | 11.98  | 0.55   | 0.07   | 63.71  | 0.07   | 0.93   | 49.62  | 46.31  | 0.30   | 70.74  | 248.82 | 16.95  | 1.57   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

付表5 つづき オッタートロールによる漁場一斉調査結果（平成24年度）

| 月日                        | 6/15   | 6/15   | 6/15   | 6/18   | 6/18   | 6/18   | 6/25   | 6/25   | 6/25   | 6/26   | 6/26   | 6/27   | 6/27   | 6/27   | 6/28   | 6/28   | 6/28   | 7/17   |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 調査海域                      | 高山     | 高山     | 高山     | 十三     | 十三     | 十三     | 出来島    | 出来島    | 出来島    | 高山     | 高山     | 十三     | 十三     | 十三     | 高山     | 高山     | 高山     | 出来島    |
| 水深(m)                     | 100    | 200    | 300    | 100    | 200    | 300    | 100    | 200    | 300    | 100    | 200    | 100    | 200    | 300    | 100    | 150    | 300    | 100    |
| 標準体長(cm)                  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 1.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 1.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 2.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 2.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 3.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 3.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 4.0                       | 1      | 26     | 20     | 9      | 1,017  | 9      | 3,502  | 433    |        | 152    |        | 180    | 1      |        |        |        |        | 8      |
| 4.5                       | 196    | 15     | 17     | 12     | 704    | 14     | 4,221  | 579    |        | 4,596  | 577    | 3,341  | 9      | 17     | 4,790  |        |        | 60     |
| 5.0                       | 29     | 3      | 2      | 3      | 58     | 8      | 240    | 199    |        | 10,138 | 1,090  | 1,174  | 45     | 38     | 7,196  | 2      |        | 268    |
| 5.5                       | 3      | 2      |        |        |        |        |        | 14     |        | 463    | 475    | 2      | 45     | 6      | 514    | 2      |        | 168    |
| 6.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 6.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 7.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 7.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 8.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 8.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 9.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 9.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 10.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 10.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 11.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 11.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 12.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 12.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 13.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 13.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 14.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 14.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 15.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 15.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 16.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 16.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 17.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 17.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 18.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 18.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 19.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 19.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 20.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 20.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 21.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 21.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 22.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 22.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 23.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 計                         | 229    | 43     | 48     | 21     | 1,819  | 31     | 7,969  | 1,276  | 0      | 15,349 | 2,257  | 4,696  | 103    | 61     | 12,500 | 4      | 525    | 0      |
| 曳網面積(m <sup>2</sup> )     | 24,967 | 14,420 | 57,380 | 46,928 | 56,503 | 40,799 | 33,175 | 48,232 | 17,851 | 27,621 | 56,916 | 36,979 | 46,253 | 45,218 | 32,633 | 42,691 | 22,612 | 46,037 |
| 密度(尾/1000m <sup>2</sup> ) | 9.17   | 2.98   | 0.84   | 0.45   | 32.19  | 0.76   | 240.21 | 26.45  | -      | 555.71 | 39.66  | 126.99 | 2.23   | 1.35   | 383.05 | 0.09   | 23.22  | -      |

| 月日                        | 7/17   | 7/17   | 7/18   | 7/18   | 7/18   | 7/19   | 7/19   | 7/19   | 7/20   | 7/20   | 7/20   | 9/5    | 9/5    | 9/5    | 9/6    | 9/6    | 9/6    | 10/25  |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 調査海域                      | 出来島    | 出来島    | 高山     | 高山     | 高山     | 十三     | 十三     | 十三     | 十三     | 高山     | 出来島    | 十三     | 十三     | 十三     | 高山     | 高山     | 高山     | 高山     |
| 水深(m)                     | 200    | 300    | 100    | 200    | 300    | 100    | 200    | 300    | 120    | 120    | 120    | 100    | 200    | 300    | 100    | 200    | 300    | 300    |
| 標準体長(cm)                  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 1.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 1.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 2.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 2.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 3.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 3.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 4.0                       | 1      | 2      |        | 5      |        |        | 14     |        |        | 8      | 3      |        |        |        |        |        |        |        |
| 4.5                       | 8      | 10     |        | 49     | 5      | 1      | 277    | 2      | 2      | 61     | 38     |        |        |        |        |        |        |        |
| 5.0                       | 7      | 2      | 1      | 84     | 3      | 2      | 423    | 1      | 1      | 39     | 19     |        |        |        |        |        |        |        |
| 5.5                       |        | 1      |        | 3      |        | 1      | 60     |        |        | 1      |        |        |        |        |        |        |        |        |
| 6.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 6.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 7.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 7.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 8.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 8.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 9.0                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 9.5                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 10.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 10.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 11.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 11.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 12.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 12.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 13.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 13.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 14.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 14.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 15.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 15.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 16.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 16.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 17.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 17.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 18.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 18.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 19.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 19.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 20.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 20.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 21.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 21.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 22.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 22.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 23.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 計                         | 16     | 20     | 1      | 141    | 9      | 4      | 775    | 3      | 3      | 109    | 60     | 0      | 0      | 3      | 0      | 0      | 0      | 15     |
| 曳網面積(m <sup>2</sup> )     | 42,580 | 46,974 | 26,659 | 35,633 | 54,395 | 26,541 | 39,515 | 51,939 | 29,517 | 36,703 | 21,985 | 33,308 | 47,655 | 51,943 | 34,940 | 48,440 | 52,525 | 42,800 |
| 密度(尾/1000m <sup>2</sup> ) | 0.38   | 0.43   | 0.04   | 3.96   | 0.17   | 0.15   | 19.61  | 0.06   | 0.10   | 2.97   | 2.73   | -      | -      | 0.06   | -      | -      | -      | 0.35   |

付表5 つづき オッタートロールによる漁場一斉調査結果（平成24年度）

| 月日                        | 10/25  | 10/25  | 11/19  | 11/19  | 11/19  | 11/22  | 11/22  | 11/22  | 11/26  | 11/26  | 11/26  | 11/30  | 11/30  | 11/30  | 12/3   | 12/3   | 12/25  | 1/9    |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 調査海域                      | 出来島    | 出来島    | 十三     | 高山     | 出来島    | 十三     | 十三     | 高山     | 出来島    | 出来島    | 出来島    | 高山     | 高山     | 高山     | 十三     | 高山     | 十三     | 十三     |
| 水深(m)                     | 200    | 300    | 300    | 250    | 100    | 80     | 100    | 100    | 100    | 200    | 300    | 100    | 250    | 300    | 300    | 250    | 80     | 300    |
| 標準体長(cm)                  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 0歳魚                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 1歳魚                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 標準体長と採捕尾数(尾)              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 2歳魚以上                     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 計                         | 0      | 29     | 71     | 47     | 0      | 0      | 0      | 0      | 0      | 0      | 702    | 0      | 978    | 21     | 30     | 2,423  | 0      | 17     |
| 曳網面積(m <sup>2</sup> )     | 40,375 | 59,589 | 48,062 | 57,431 | 26,373 | 45,486 | 42,716 | 27,019 | 40,136 | 47,765 | 41,941 | 31,778 | 44,047 | 33,501 | 50,582 | 45,813 | 28,453 | 65,729 |
| 密度(尾/1000m <sup>2</sup> ) | -      | 0.49   | 1.48   | 0.82   | -      | -      | -      | -      | -      | -      | 16.74  | -      | 22.20  | 0.63   | 0.59   | 52.89  | -      | 0.26   |

| 月日                        | 1/16   | 1/16   | 1/16   | 1/17   | 1/21   | 1/21   | 1/21   | 1/22   | 1/22   | 1/22   | 1/23   | 1/23   | 1/23   | 1/24   | 1/24   | 1/24   | 1/28   | 1/28   |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 調査海域                      | 出来島    | 出来島    | 出来島    | 高山     | 十三     | 高山     | 高山     | 十三     | 十三     | 十三     | 出来島    | 出来島    | 出来島    | 高山     | 高山     | 高山     | 十三     | 十三     |
| 水深(m)                     | 100    | 250    | 300    | 250    | 300    | 100    | 300    | 65     | 80     | 100    | 120    | 200    | 300    | 120    | 250    | 300    | 130    | 200    |
| 標準体長(cm)                  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 0歳魚                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 1歳魚                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 標準体長と採捕尾数(尾)              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 2歳魚以上                     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 計                         | 0      | 10     | 111    | 29     | 101    | 0      | 135    | 0      | 0      | 0      | 0      | 1      | 235    | 0      | 5      | 7      | 0      | 0      |
| 曳網面積(m <sup>2</sup> )     | 36,466 | 44,766 | 54,089 | 48,798 | 45,113 | 41,525 | 60,082 | 39,102 | 41,287 | 36,008 | 35,613 | 50,096 | 64,090 | 26,293 | 48,287 | 61,671 | 48,483 | 37,149 |
| 密度(尾/1000m <sup>2</sup> ) | -      | 0.22   | 2.05   | 0.59   | 2.24   | -      | 2.25   | -      | -      | -      | -      | 0.02   | 3.67   | -      | 0.10   | 0.11   | -      | -      |

付表 5 つづき オッタートロールによる漁場一斉調査結果（平成 24 年度）

| 月日                        | 1/28   | 1/31   | 1/31   | 1/31   | 2/1    | 2/1    | 2/15   | 2/15   | 2/18   | 2/18   | 2/18   | 2/27   | 2/27   | 2/27   | 3/13   | 3/13   | 3/13   |    |   |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----|---|
| 調査海域                      | 十三     | 出来島    | 出来島    | 出来島    | 高山     | 高山     | 十三     | 十三     | 出来島    | 出来島    | 出来島    | 高山     | 高山     | 高山     | 高山     | 高山     | 高山     |    |   |
| 水深(m)                     | 300    | 120    | 200    | 300    | 250    | 300    | 200    | 300    | 120    | 200    | 300    | 100    | 200    | 300    | 100    | 200    | 300    |    |   |
| 標準体長(cm)                  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |    |   |
| 0 歳魚                      | 1.0    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |    |   |
|                           | 1.5    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |    |   |
|                           | 2.0    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |    |   |
|                           | 2.5    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |    |   |
|                           | 3.0    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |    |   |
|                           | 3.5    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |    |   |
|                           | 4.0    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |    |   |
|                           | 4.5    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |    |   |
|                           | 5.0    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 1  |   |
|                           | 5.5    |        |        |        |        |        |        |        |        |        | 1      |        |        |        |        |        |        |    |   |
| 1 歳魚                      | 6.0    |        |        | 2      |        | 1      |        | 1      |        | 2      | 1      |        | 6      | 15     |        |        |        | 4  |   |
|                           | 6.5    |        |        | 1      |        |        |        | 1      |        | 11     | 2      |        | 36     | 19     |        |        |        | 4  |   |
|                           | 7.0    | 1      |        | 2      |        |        |        |        |        | 166    | 4      |        | 44     | 48     |        |        |        | 6  |   |
|                           | 7.5    |        |        |        |        | 1      |        | 2      |        | 32     |        |        | 52     | 32     |        |        |        | 15 |   |
|                           | 8.0    |        |        |        |        |        |        |        |        | 8      | 1      |        | 30     | 15     |        | 2      |        | 7  |   |
|                           | 8.5    |        |        |        |        |        |        | 1      |        | 3      |        |        | 8      | 4      |        | 1      |        | 7  |   |
|                           | 9.0    |        |        |        |        |        |        |        |        | 1      |        |        |        | 2      |        |        |        | 4  |   |
|                           | 9.5    |        |        |        |        |        |        |        |        | 1      |        |        |        | 1      |        |        |        | 5  |   |
|                           | 10.0   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 3  |   |
|                           | 10.5   |        |        |        |        |        |        |        |        |        | 1      |        | 4      | 3      |        |        |        | 3  |   |
| 標準体長と採捕尾数(尾)              | 11.0   |        |        |        |        |        |        |        |        | 6      | 1      |        |        | 7      |        |        |        | 2  |   |
|                           | 11.5   |        |        |        |        |        |        |        |        | 5      |        |        | 2      | 6      |        |        |        | 4  |   |
|                           | 12.0   |        |        |        | 2      |        |        |        |        | 6      | 1      |        | 10     | 8      |        |        |        | 7  |   |
|                           | 12.5   |        |        |        |        |        |        |        |        | 14     |        |        | 12     | 20     |        |        |        | 9  |   |
|                           | 13.0   |        |        |        | 1      |        |        | 1      |        | 12     | 4      |        | 8      | 18     |        | 1      |        | 11 |   |
|                           | 13.5   |        |        |        |        |        |        |        |        | 3      |        |        | 4      | 20     |        |        |        | 12 |   |
|                           | 14.0   |        |        |        | 1      |        |        |        |        | 12     | 1      |        |        | 10     |        |        |        | 10 |   |
|                           | 14.5   |        |        |        |        |        |        |        |        | 3      | 1      |        | 4      | 6      |        |        |        | 8  |   |
|                           | 15.0   |        |        |        |        |        |        |        |        | 2      | 2      |        | 6      | 7      |        |        |        | 10 |   |
|                           | 15.5   |        |        |        |        |        |        |        |        |        | 1      |        |        |        |        |        |        | 7  |   |
| 2 歳魚以上                    | 16.0   |        |        |        | 1      |        |        |        |        |        |        |        |        | 3      |        |        |        | 4  |   |
|                           | 16.5   |        |        |        | 1      |        |        |        |        |        |        |        |        | 1      |        |        |        | 4  |   |
|                           | 17.0   |        |        |        |        |        |        |        |        |        |        |        |        | 1      |        |        |        | 7  |   |
|                           | 17.5   |        |        |        |        |        |        |        |        |        |        |        |        |        | 1      |        |        | 9  |   |
|                           | 18.0   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 4  |   |
|                           | 18.5   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 2  |   |
|                           | 19.0   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 1  |   |
|                           | 19.5   |        |        |        |        |        |        |        |        |        |        | 1      |        |        |        |        |        | 1  |   |
|                           | 20.0   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |    |   |
|                           | 20.5   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |    | 1 |
| 21.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |    |   |
| 21.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |    |   |
| 22.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |    | 1 |
| 22.5                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |    | 1 |
| 23.0                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |    |   |
| 計                         | 1      | 0      | 0      | 7      | 4      | 2      | 5      | 4      | 0      | 289    | 25     | 0      | 226    | 247    | 0      | 4      | 173    |    |   |
| 曳網面積(m <sup>2</sup> )     | 52,923 | 36,909 | 47,088 | 67,998 | 55,253 | 55,633 | 43,154 | 60,457 | 33,929 | 39,512 | 43,252 | 37,152 | 35,504 | 43,802 | 36,960 | 35,842 | 48,011 |    |   |
| 密度(尾/1000m <sup>2</sup> ) | 0.02   | -      | -      | 0.10   | 0.07   | 0.04   | 0.12   | 0.07   | -      | 7.31   | 0.58   | -      | 6.37   | 5.64   | -      | 0.11   | 3.60   |    |   |