## Outer Hebrides Region

## River Barvas: Grade 2



## Summary Table

| Eggs required$\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | $\begin{aligned} & \text { Area } \\ & \left(\mathrm{m}^{2}\right)^{\mathrm{a}} \end{aligned}$ | Total egg requirement ${ }^{\text {a }}$ | Percentage chance meeting requirement |  |  |  |  |  | Grade |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2014 | 2015 | 2016 | 2017 | 2018 | Overall |  |
| 2.11 | 278,500 | 588,080 | 94.4 | 83.49 | 69.11 | 87.83 | 0 | 66.97 | 2 |

[^0]
## 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black $=$ retained, blue $=$ released $)$


Monthly flow data


Monthly stock estimates (out of season in black)


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

Annual estimated stock


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

Annual catch as a proportion of stock


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).
2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


Monthly number of spawning females

3. Converting Number of Spawners to Number of Eggs

Egg contents of females


## Monthly number of eggs



Total annual egg numbers


Plot shows 50,70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 194,107 square meters of known salmon habitat in the River Barvas and a further 122,427 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| ---: | ---: |
| 2014 | 94.40 |
| 2015 | 83.49 |
| 2016 | 69.11 |
| 2017 | 87.83 |
| 2018 | - |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## River Carloway: Grade 3



Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |
| 1.95 | 76,100 | 148,730 | 27.56 | 61.42 | 5.37 | 15.53 | 0 | 21.98 | 3 |

[^1]
## 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black $=$ retained, blue $=$ released $)$


Monthly flow data


Monthly stock estimates (out of season in black)


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

Annual estimated stock


Annual catch as a proportion of stock


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).
2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


## Monthly number of spawning females



## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


Monthly number of eggs


Total annual egg numbers


Plot shows 50,70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 46,203 square meters of known salmon habitat in the River Carloway and a further 40,288 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| :---: | ---: |
| 2014 | 27.56 |
| 2015 | 61.42 |
| 2016 | 5.37 |
| 2017 | 15.53 |
| 2018 | - |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## River Blackwater (Lewis): Grade 1



Detailed information on catches is not publicly available for this assessment area

Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement $^{\mathrm{a}}$ | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |  |
| 2.25 | 205,000 | 461,372 | 93.13 | 71.9 | 96.45 | 92.43 | 74.95 | 85.77 | 1 |  |

${ }^{\text {a }}$ Figures presented are median values

## 1. Converting Reported Catches to Numbers of Returning Salmon

Annual estimated stock


Plot shows 50,70 and $90 \%$ of the estimates (wide to narrow bars).
2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


Total annual egg numbers


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 169,404 square meters of known salmon habitat in the River Blackwater (Lewis) and a further 63,528 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| ---: | ---: |
| 2014 | 93.13 |
| 2015 | 71.90 |
| 2016 | 96.45 |
| 2017 | 92.43 |
| 2018 | 74.95 |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## Langavat SAC: Grade 1



Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement $^{\mathrm{a}}$ | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |
| 2.12 | 242,300 | 513,318 | 97.34 | 97.21 | 98.61 | 98.13 | 98.85 | 98.03 | 1 |

[^2]
## 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black $=$ retained, blue $=$ released $)$


Monthly flow data


Monthly stock estimates (out of season in black)


Annual estimated stock


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

Annual catch as a proportion of stock

2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish



## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


## Monthly number of eggs



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## Total annual egg numbers



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 176,964 square meters of known salmon habitat in the Langavat SAC and a further 98,352 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| ---: | ---: |
| 2014 | 97.34 |
| 2015 | 97.21 |
| 2016 | 98.61 |
| 2017 | 98.13 |
| 2018 | 98.85 |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## Loch Morsgail system: Grade 3



Detailed information on catches is not publicly available for this assessment area

Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement ${ }^{\mathrm{a}}$ | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |
| 1.81 | 119,100 | 215,840 | 39.83 | 64.33 | 0 | 87.76 | 0 | 38.38 | 3 |

[^3]
## 1. Converting Reported Catches to Numbers of Returning Salmon

Annual estimated stock


Plot shows 50,70 and $90 \%$ of the estimates (wide to narrow bars).
2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


Total annual egg numbers


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 55,778 square meters of known salmon habitat in the Loch Morsgail system and a further 79,613 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| :---: | ---: |
| 2014 | 39.83 |
| 2015 | 64.33 |
| 2016 | - |
| 2017 | 87.76 |
| 2018 | - |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## Mhor a' Ghlinne Ruaidh and Geisiadar: Grade 3



## Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement $^{\mathrm{a}}$ | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |  |
| 2.16 | 20,100 | 43,500 | 0 | 0 | NA | 0 | 0 | 0 | 3 |  |

${ }^{\text {a }}$ Figures presented are median values

## 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black $=$ retained, blue $=$ released $)$


Monthly flow data


Monthly stock estimates (out of season in black)


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

Annual estimated stock


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

Annual catch as a proportion of stock


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).
2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


Monthly number of spawning females


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


Monthly number of eggs


Total annual egg numbers


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 15,046 square meters of known salmon habitat in the Mhor a' Ghlinne Ruaidh and Geisiadar and a further 7,844 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| :---: | ---: |
| 2014 | - |
| 2015 | - |
| 2016 | NA |
| 2017 | - |
| 2018 | - |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## Forsa River (Lewis): Grade 1



Detailed information on catches is not publicly available for this assessment area

## Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |  |
| 2.37 | 21,800 | 51,760 | 99.56 | 99.41 | 99.06 | 99.78 | 97.59 | 99.08 | 1 |  |

${ }^{\mathrm{a}}$ Figures presented are median values

## 1. Converting Reported Catches to Numbers of Returning Salmon

Annual estimated stock


Plot shows 50,70 and $90 \%$ of the estimates (wide to narrow bars).

## 2. Converting Numbers of Returning Salmon to Numbers of Spawning Females

 Ages of fish

## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


Total annual egg numbers


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 20,403 square meters of known salmon habitat in the Forsa River (Lewis) and a further 4,338 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| ---: | ---: |
| 2014 | 99.56 |
| 2015 | 99.41 |
| 2016 | 99.06 |
| 2017 | 99.78 |
| 2018 | 97.59 |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## Caslabhat and Tamanabhaigh: Grade 2



Detailed information on catches is not publicly available for this assessment area

Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement $^{\mathrm{a}}$ | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |
| 2.31 | 113,700 | 262,634 | 73.81 | 86.76 | 50.41 | 79.97 | 24.73 | 63.14 | 2 |

[^4]
## 1. Converting Reported Catches to Numbers of Returning Salmon

Annual estimated stock

2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


Total annual egg numbers


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

Areas of salmon habitat in square meters

There is an estimated 99,017 square meters of known salmon habitat in the Caslabhat and Tamanabhaigh and a further 30,146 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| ---: | ---: |
| 2014 | 73.81 |
| 2015 | 86.76 |
| 2016 | 50.41 |
| 2017 | 79.97 |
| 2018 | 24.73 |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## Laxdale and Blackwater (Lewis): Grade 3



## Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement $^{\mathrm{a}}$ | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |
| 1.06 | 54,500 | 57,611 | 57.43 | 88.12 | 0 | 60.94 | 84.04 | 58.11 | 3 |

[^5]
## 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black $=$ retained, blue $=$ released $)$


Monthly flow data


Monthly stock estimates (out of season in black)


Annual estimated stock


Annual catch as a proportion of stock

2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish



## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


## Monthly number of eggs



Total annual egg numbers


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

Areas of salmon habitat in square meters
There is an estimated 53,920 square meters of known salmon habitat in the Laxdale and Blackwater (Lewis) and a further 7,990 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| ---: | ---: |
| 2014 | 57.43 |
| 2015 | 88.12 |
| 2016 | - |
| 2017 | 60.94 |
| 2018 | 84.04 |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## River Gress: Grade 3



## Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement $^{\mathrm{a}}$ | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |  |
| 0.85 | 158,500 | 134,622 | 24.94 | 56.9 | 42.09 | 32.57 | 27.32 | 36.76 | 3 |  |

${ }^{\text {a }}$ Figures presented are median values

## 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black $=$ retained, blue $=$ released $)$


Monthly flow data


Monthly stock estimates (out of season in black)


Annual estimated stock


Annual catch as a proportion of stock

2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


## Monthly number of eggs



Total annual egg numbers


Plot shows 50,70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

Areas of salmon habitat in square meters

There is an estimated 94,478 square meters of known salmon habitat in the River Gress and a further 85,628 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| ---: | ---: |
| 2014 | 24.94 |
| 2015 | 56.90 |
| 2016 | 42.09 |
| 2017 | 32.57 |
| 2018 | 27.32 |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## Aline Estate: Grade 3



Detailed information on catches is not publicly available for this assessment area

## Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement $^{\mathrm{a}}$ | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |
| 1.76 | 58,600 | 103,359 | 0 | 0 | 97.18 | 0 | 0 | 19.44 | 3 |
| ${ }^{\text {a }}$ Figen |  |  |  |  |  |  |  |  |  |

[^6]
## 1. Converting Reported Catches to Numbers of Returning Salmon

Annual estimated stock

2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


Total annual egg numbers


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 41,815 square meters of known salmon habitat in the Aline Estate and a further 24,803 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| :---: | ---: |
| 2014 | - |
| 2015 | - |
| 2016 | 97.18 |
| 2017 | - |
| 2018 | - |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## Eishken Estate: Grade 3



Detailed information on catches is not publicly available for this assessment area

## Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg requirement $^{\mathrm{a}}$ | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |  |
| 1.47 | 171,500 | 252,158 | 60.1 | 48.14 | 45.81 | 33.31 | 7.85 | 39.04 | 3 |  |

[^7]
## 1. Converting Reported Catches to Numbers of Returning Salmon

Annual estimated stock

2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


Total annual egg numbers


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 77,305 square meters of known salmon habitat in the Eishken Estate and a further 117,611 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| ---: | ---: |
| 2014 | 60.10 |
| 2015 | 48.14 |
| 2016 | 45.81 |
| 2017 | 33.31 |
| 2018 | 7.85 |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## Soval Estate: Grade 3



Detailed information on catches is not publicly available for this assessment area

## Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement $^{\mathrm{a}}$ | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |
| 1.84 | 193,700 | 357,358 | 55.77 | 68.87 | 0 | 0 | 50.38 | 35 | 3 |
| ${ }^{\text {a }}$ Figen |  |  |  |  |  |  |  |  |  |

[^8]
## 1. Converting Reported Catches to Numbers of Returning Salmon

Annual estimated stock

2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


Total annual egg numbers


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 155,326 square meters of known salmon habitat in the Soval Estate and a further 64,808 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| :---: | ---: |
| 2014 | 55.77 |
| 2015 | 68.87 |
| 2016 | - |
| 2017 | - |
| 2018 | 50.38 |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## River Creed: Grade 1



## Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement $^{\mathrm{a}}$ | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |  |
| 1.96 | 190,500 | 373,322 | 85.25 | 93.28 | 87.28 | 83.3 | 52.07 | 80.24 | 1 |  |

${ }^{\text {a }}$ Figures presented are median values

## 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black $=$ retained, blue $=$ released $)$


Monthly flow data


Monthly stock estimates (out of season in black)


Plot shows 50,70 and $90 \%$ of the estimates (wide to narrow bars).

Annual estimated stock


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

Annual catch as a proportion of stock

2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


3. Converting Number of Spawners to Number of Eggs

Egg contents of females


## Monthly number of eggs



Total annual egg numbers


Plot shows 50,70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 171,504 square meters of known salmon habitat in the River Creed and a further 45,022 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| ---: | ---: |
| 2014 | 85.25 |
| 2015 | 93.28 |
| 2016 | 87.28 |
| 2017 | 83.30 |
| 2018 | 52.07 |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## North Harris SAC: Grade 2



Detailed information on catches is not publicly available for this assessment area

## Summary Table

| $\begin{aligned} & \text { Eggs required } \\ & \left(\mathrm{m}^{2}\right)^{\mathrm{a}} \end{aligned}$ | $\begin{aligned} & \text { Area } \\ & \left(\mathrm{m}^{2}\right)^{\mathrm{a}} \end{aligned}$ | Total egg requirement ${ }^{\text {a }}$ | Percentage chance meeting requirement |  |  |  |  |  | Grade |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2014 | 2015 | 2016 | 2017 | 2018 | Overall |  |
| 2.63 | 248,500 | 652,990 | 73.14 | 81.55 | 82.02 | 89.69 | 0 | 65.28 | 2 |

[^9]
## 1. Converting Reported Catches to Numbers of Returning Salmon

Annual estimated stock


Plot shows 50,70 and $90 \%$ of the estimates (wide to narrow bars).
2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


Total annual egg numbers


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

Areas of salmon habitat in square meters

There is an estimated 218,972 square meters of known salmon habitat in the North Harris SAC and a further 63,434 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| ---: | ---: |
| 2014 | 73.14 |
| 2015 | 81.55 |
| 2016 | 82.02 |
| 2017 | 89.69 |
| 2018 | - |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## River Laxdale (Harris): Grade 2



Detailed information on catches is not publicly available for this assessment area

Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement ${ }^{\mathrm{a}}$ | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |  |
| 2.73 | 26,900 | 73,320 | 86.01 | 91.66 | 88.32 | 82.15 | 49.01 | 79.43 | 2 |  |

${ }^{\text {a }}$ Figures presented are median values

## 1. Converting Reported Catches to Numbers of Returning Salmon

Annual estimated stock

2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


Total annual egg numbers


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 27,537 square meters of known salmon habitat in the River Laxdale (Harris) and a further 3,026 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| ---: | ---: |
| 2014 | 86.01 |
| 2015 | 91.66 |
| 2016 | 88.32 |
| 2017 | 82.15 |
| 2018 | 49.01 |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## Loch Steisavat system: Grade 2



Detailed information on catches is not publicly available for this assessment area

Summary Table

| $\begin{aligned} & \text { Eggs required } \\ & \left(\mathrm{m}^{2}\right)^{\mathrm{a}} \end{aligned}$ | $\begin{aligned} & \text { Area } \\ & \left(\mathrm{m}^{2}\right)^{\mathrm{a}} \end{aligned}$ | Total egg requirement ${ }^{a}$ | Percentage chance meeting requirement |  |  |  |  |  | Grade |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2014 | 2015 | 2016 | 2017 | 2018 | Overall |  |
| 2.58 | 39,800 | 102,874 | 52.11 | 82.71 | 81.72 | 39.42 | 91.86 | 69.56 | 2 |

[^10]
## 1. Converting Reported Catches to Numbers of Returning Salmon

Annual estimated stock

2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


Total annual egg numbers


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 37,367 square meters of known salmon habitat in the Loch Steisavat system and a further 7,823 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| ---: | ---: |
| 2014 | 52.11 |
| 2015 | 82.71 |
| 2016 | 81.72 |
| 2017 | 39.42 |
| 2018 | 91.86 |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## East Harris: Grade 3



Detailed information on catches is not publicly available for this assessment area

## Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |
| 0.76 | 138,100 | 104,730 | 7.26 | 2.62 | 5.05 | 5.73 | 0 | 4.13 | 3 |
| a Figura |  |  |  |  |  |  |  |  |  |

[^11]
## 1. Converting Reported Catches to Numbers of Returning Salmon

Annual estimated stock


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).
2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


Total annual egg numbers


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 47,429 square meters of known salmon habitat in the East Harris and a further 109,489 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| ---: | ---: |
| 2014 | 7.26 |
| 2015 | 2.62 |
| 2016 | 5.05 |
| 2017 | 5.73 |
| 2018 | - |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## Laxadale Lochs: Grade 1



Detailed information on catches is not publicly available for this assessment area

## Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement $^{\mathrm{a}}$ | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |
| 0.82 | 25,100 | 20,556 | 89.94 | 77.88 | 93.97 | 76.1 | 84.24 | 84.43 | 1 |
| ${ }^{\text {a }}$ Figen |  |  |  |  |  |  |  |  |  |

[^12]
## 1. Converting Reported Catches to Numbers of Returning Salmon

Annual estimated stock

2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


Total annual egg numbers


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 10,942 square meters of known salmon habitat in the Laxadale Lochs and a further 17,540 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| ---: | ---: |
| 2014 | 89.94 |
| 2015 | 77.88 |
| 2016 | 93.97 |
| 2017 | 76.10 |
| 2018 | 84.24 |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## Scaladale and Vigadale: Grade 3



Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement $^{\mathrm{a}}$ | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |
| 1.06 | 32,700 | 34,676 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |

[^13]
## 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black $=$ retained, blue $=$ released $)$


Monthly flow data


Monthly stock estimates (out of season in black)


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

Annual estimated stock


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

Annual catch as a proportion of stock


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).
2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


Monthly number of spawning females


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


Monthly number of eggs


Total annual egg numbers


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 26,589 square meters of known salmon habitat in the Scaladale and Vigadale and a further 10,598 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| :---: | ---: |
| 2014 | - |
| 2015 | - |
| 2016 | - |
| 2017 | - |
| 2018 | - |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## North Uist Lochs: Grade 2



Detailed information on catches is not publicly available for this assessment area

## Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |
| 0.86 | 50,000 | 42,975 | 90.38 | 90.69 | 58.31 | 38.91 | 54.24 | 66.51 | 2 |

[^14]
## 1. Converting Reported Catches to Numbers of Returning Salmon

Annual estimated stock

2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


Total annual egg numbers


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 26,771 square meters of known salmon habitat in the North Uist Lochs and a further 30,061 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| ---: | ---: |
| 2014 | 90.38 |
| 2015 | 90.69 |
| 2016 | 58.31 |
| 2017 | 38.91 |
| 2018 | 54.24 |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## Abhainn Eig: Grade 3



Detailed information on catches is not publicly available for this assessment area

Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement $^{\mathrm{a}}$ | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |  |
| 0.85 | 5,000 | 4,274 | 73.76 | 0 | 0 | 0 | 79.77 | 30.71 | 3 |  |

[^15]
## 1. Converting Reported Catches to Numbers of Returning Salmon

Annual estimated stock


Plot shows 50,70 and $90 \%$ of the estimates (wide to narrow bars).
2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


Total annual egg numbers


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 2,779 square meters of known salmon habitat in the Abhainn Eig and a further 2,869 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| :---: | ---: |
| 2014 | 73.76 |
| 2015 | - |
| 2016 | - |
| 2017 | - |
| 2018 | 79.77 |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## Kildonan and Loch a' Bharp: Grade 3



Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |
| 1.34 | 60,200 | 80,615 | 76.4 | 73.78 | 4.54 | 44.76 | 45.63 | 49.02 | 3 |

[^16]
## 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black $=$ retained, blue $=$ released $)$


Monthly flow data


Monthly stock estimates (out of season in black)


Annual estimated stock


Annual catch as a proportion of stock

2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


3. Converting Number of Spawners to Number of Eggs

Egg contents of females


## Monthly number of eggs



Total annual egg numbers


Plot shows 50,70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 51,437 square meters of known salmon habitat in the Kildonan and Loch a' Bharp and a further 16,969 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| :---: | ---: |
| 2014 | 76.40 |
| 2015 | 73.78 |
| 2016 | 4.54 |
| 2017 | 44.76 |
| 2018 | 45.63 |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

Howmore and Loch Bi: Grade 1


## Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement $^{\mathrm{a}}$ | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |  |
| 1.2 | 123,100 | 148,140 | 81.35 | 73 | 89.35 | 89.08 | 68.11 | 80.18 | 1 |  |

${ }^{\text {a }}$ Figures presented are median values

## 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black $=$ retained, blue $=$ released $)$


Monthly flow data


Monthly stock estimates (out of season in black)


Annual estimated stock


Annual catch as a proportion of stock

2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


3. Converting Number of Spawners to Number of Eggs

Egg contents of females


## Monthly number of eggs



Total annual egg numbers


Plot shows 50,70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 80,878 square meters of known salmon habitat in the Howmore and Loch Bi and a further 59,032 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| ---: | ---: |
| 2014 | 81.35 |
| 2015 | 73.00 |
| 2016 | 89.35 |
| 2017 | 89.08 |
| 2018 | 68.11 |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)

## Horisary River: Grade 3



Detailed information on catches is not publicly available for this assessment area

Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement $^{\mathrm{a}}$ | 2014 | 2015 | 2016 | 2017 | 2018 | Overall | Grade |
| 1.1 | 12,100 | 13,269 | 0 | 0 | 76.77 | 79.53 | 92.77 | 49.81 | 3 |

[^17]
## 1. Converting Reported Catches to Numbers of Returning Salmon

Annual estimated stock

2. Converting Numbers of Returning Salmon to Numbers of Spawning Females Ages of fish


## 3. Converting Number of Spawners to Number of Eggs

Egg contents of females


Total annual egg numbers


Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars).

## 4. Egg requirement

## Areas of salmon habitat in square meters

There is an estimated 6,198 square meters of known salmon habitat in the Horisary River and a further 7,590 square meters where salmon may be present.

## Egg requirement


5. Percentage chance that the egg requirement has been reached

| Year | Percentage above |
| :---: | ---: |
| 2014 | - |
| 2015 | - |
| 2016 | 76.77 |
| 2017 | 79.53 |
| 2018 | 92.77 |



Plot shows 50, 70 and $90 \%$ of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and $90 \%$ of the estimated egg requirements (dark to light areas)


[^0]:    ${ }^{\text {a }}$ Figures presented are median values

[^1]:    ${ }^{\text {a }}$ Figures presented are median values

[^2]:    ${ }^{\text {a }}$ Figures presented are median values

[^3]:    ${ }^{\text {a }}$ Figures presented are median values

[^4]:    ${ }^{\text {a }}$ Figures presented are median values

[^5]:    ${ }^{\text {a }}$ Figures presented are median values

[^6]:    ${ }^{\text {a }}$ Figures presented are median values

[^7]:    ${ }^{\text {a }}$ Figures presented are median values

[^8]:    ${ }^{\text {a }}$ Figures presented are median values

[^9]:    ${ }^{\text {a }}$ Figures presented are median values

[^10]:    ${ }^{\text {a }}$ Figures presented are median values

[^11]:    ${ }^{\text {a }}$ Figures presented are median values

[^12]:    ${ }^{\text {a }}$ Figures presented are median values

[^13]:    ${ }^{\text {a }}$ Figures presented are median values

[^14]:    ${ }^{\text {a }}$ Figures presented are median values

[^15]:    ${ }^{\text {a }}$ Figures presented are median values

[^16]:    ${ }^{\text {a }}$ Figures presented are median values

[^17]:    ${ }^{\text {a }}$ Figures presented are median values

