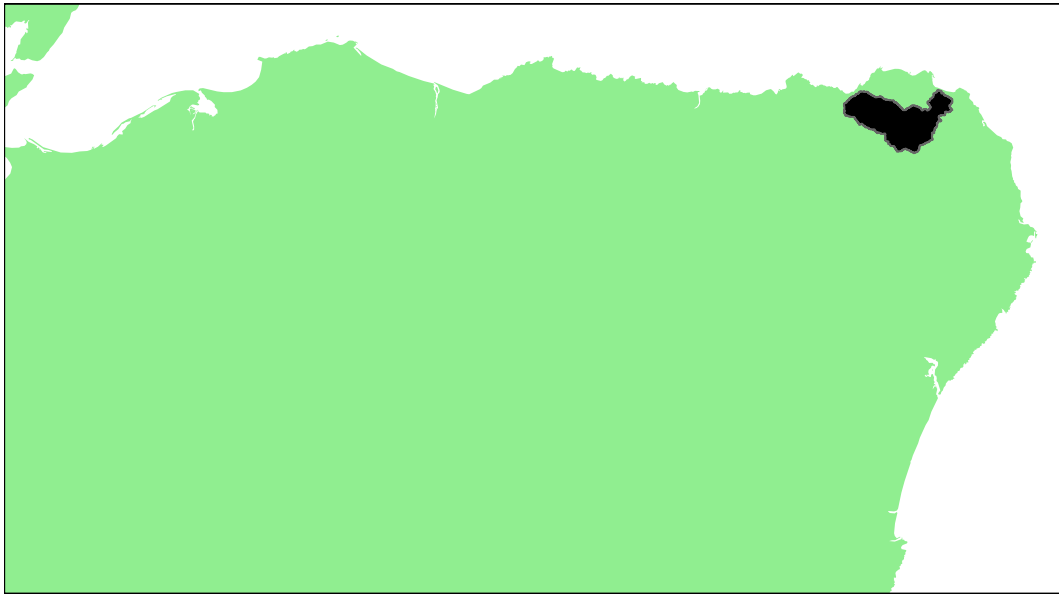# Moray Firth Region

Water of Philorth: Grade 3
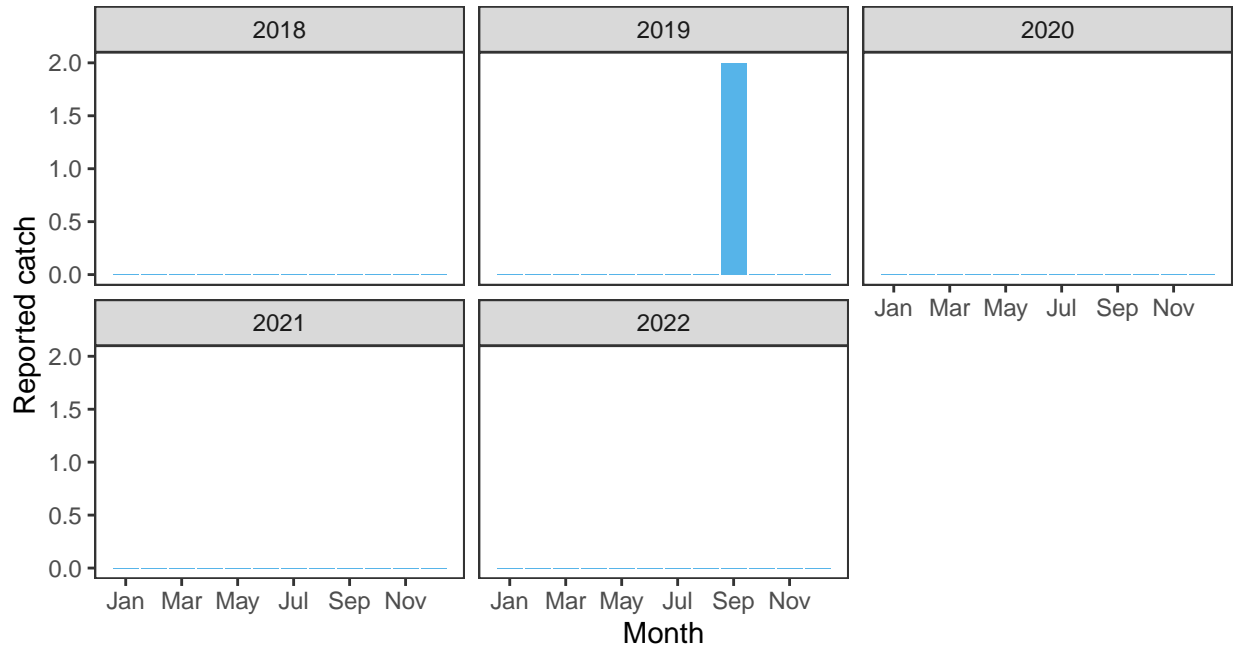

Summary Table

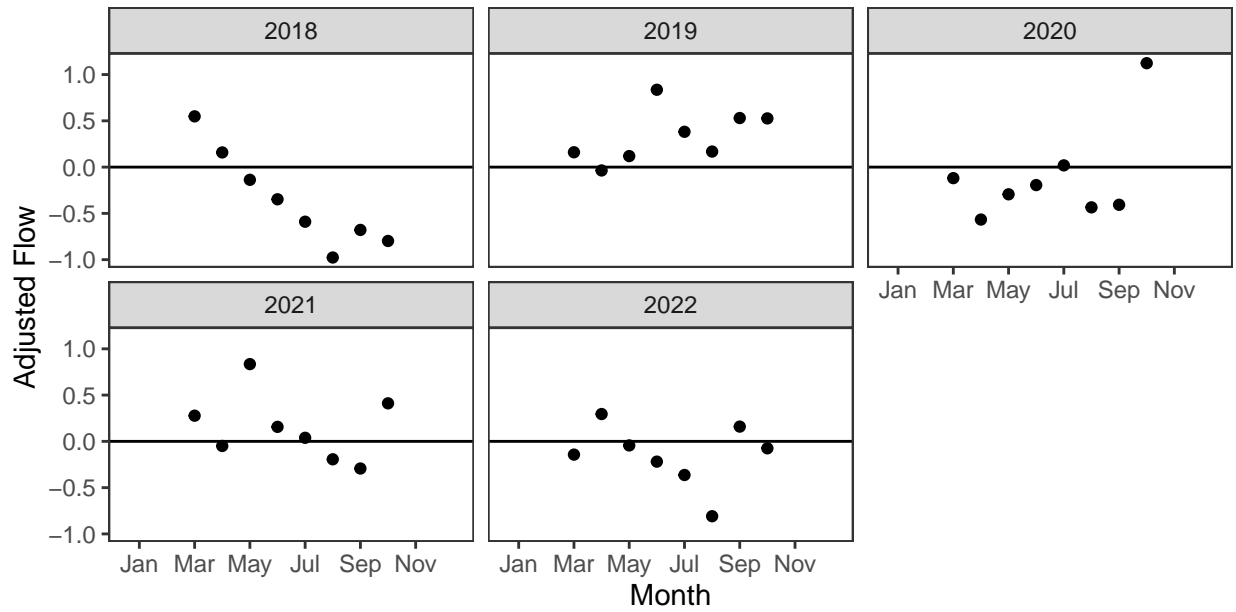| Eggs required (m²)ª | Area (m²)ª | Total egg requirementª | Percentage chance meeting requirement | | | | | | |
			2018	2019	2020	2021	2022	Overall	Grade
3.11	50,000	145,000	0	3.01	2.86	0.32	0	0.01238	3

ª Figures presented are median values

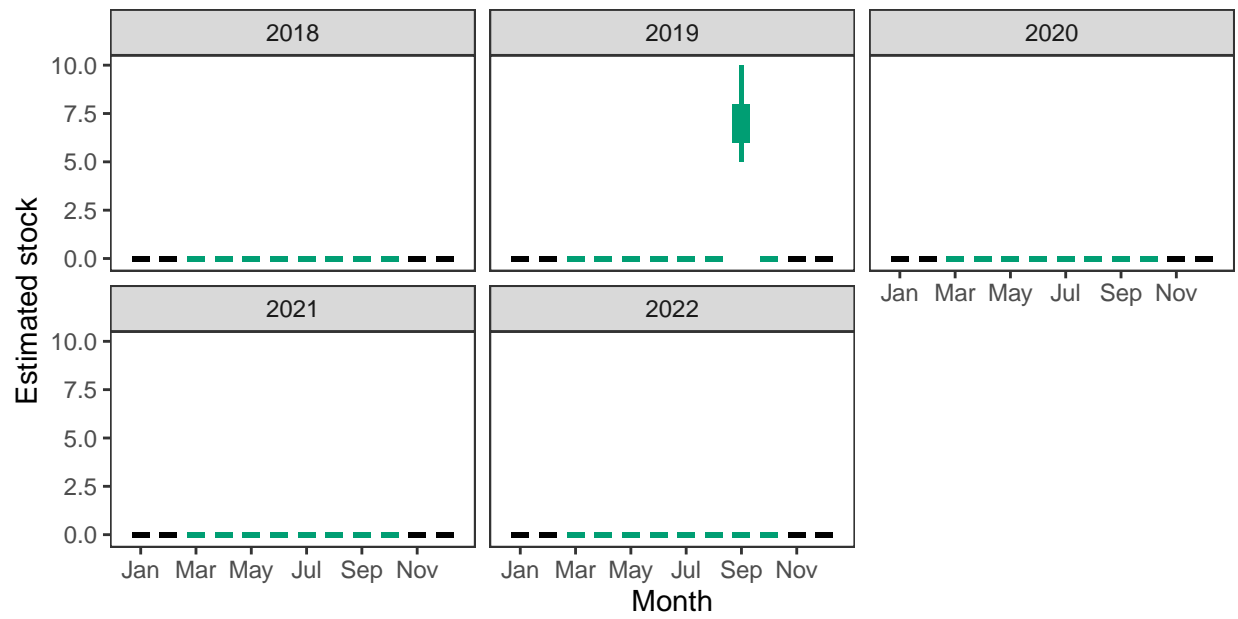# 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black = retained, blue = released)
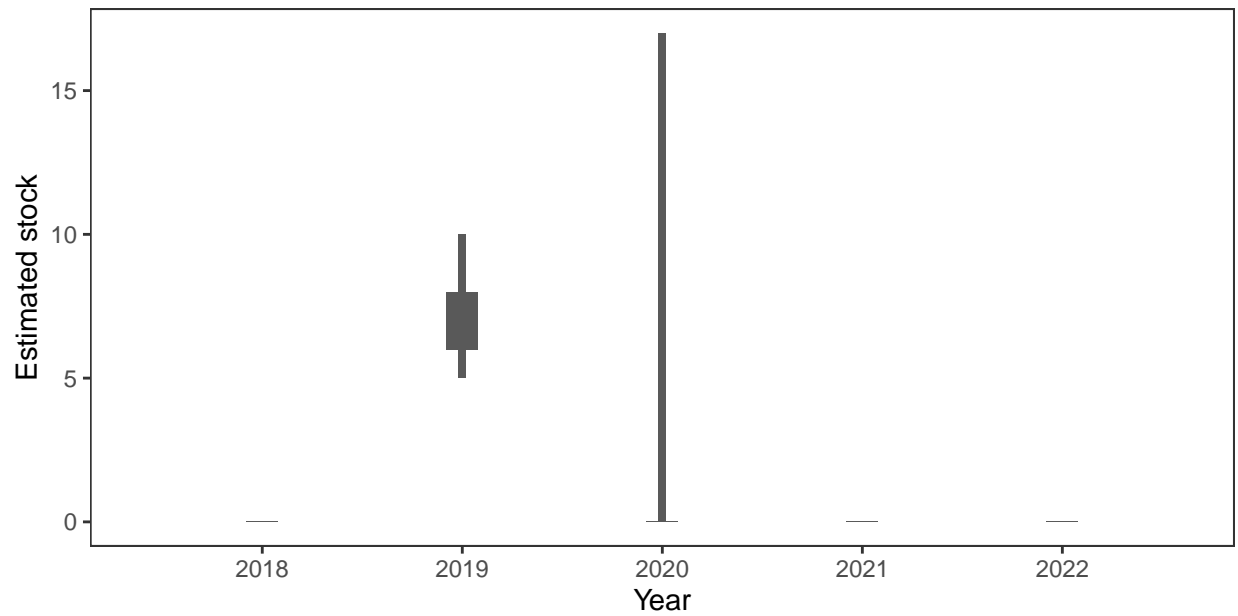

Monthly flow data

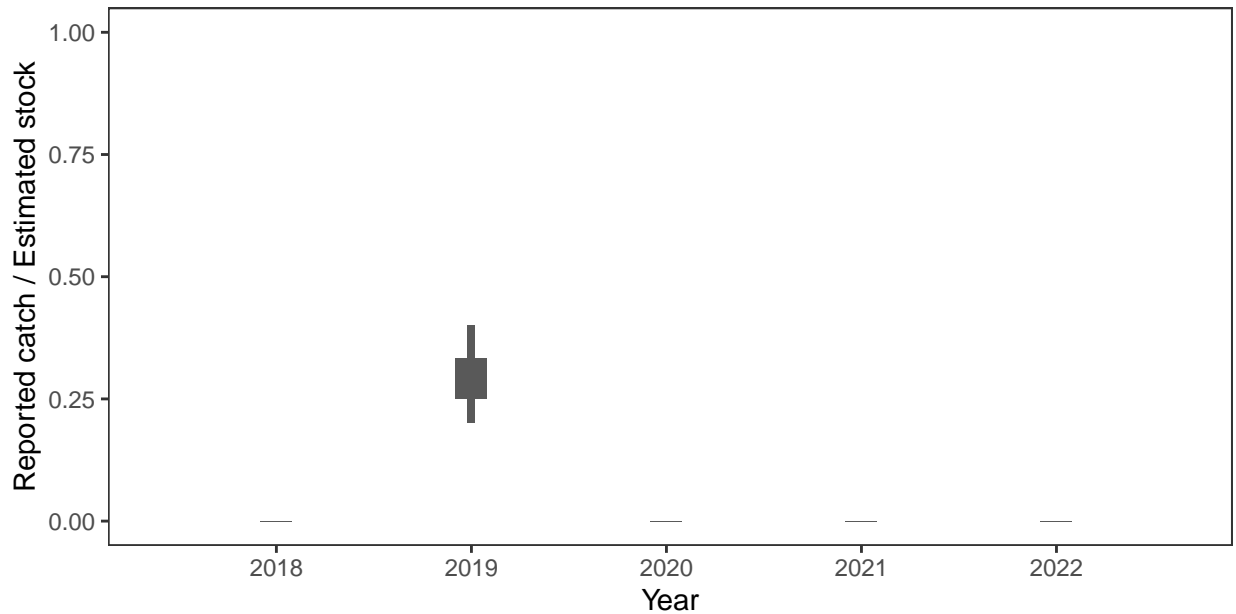## *Monthly stock estimates (out of season in black)*

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

Annual estimated stock

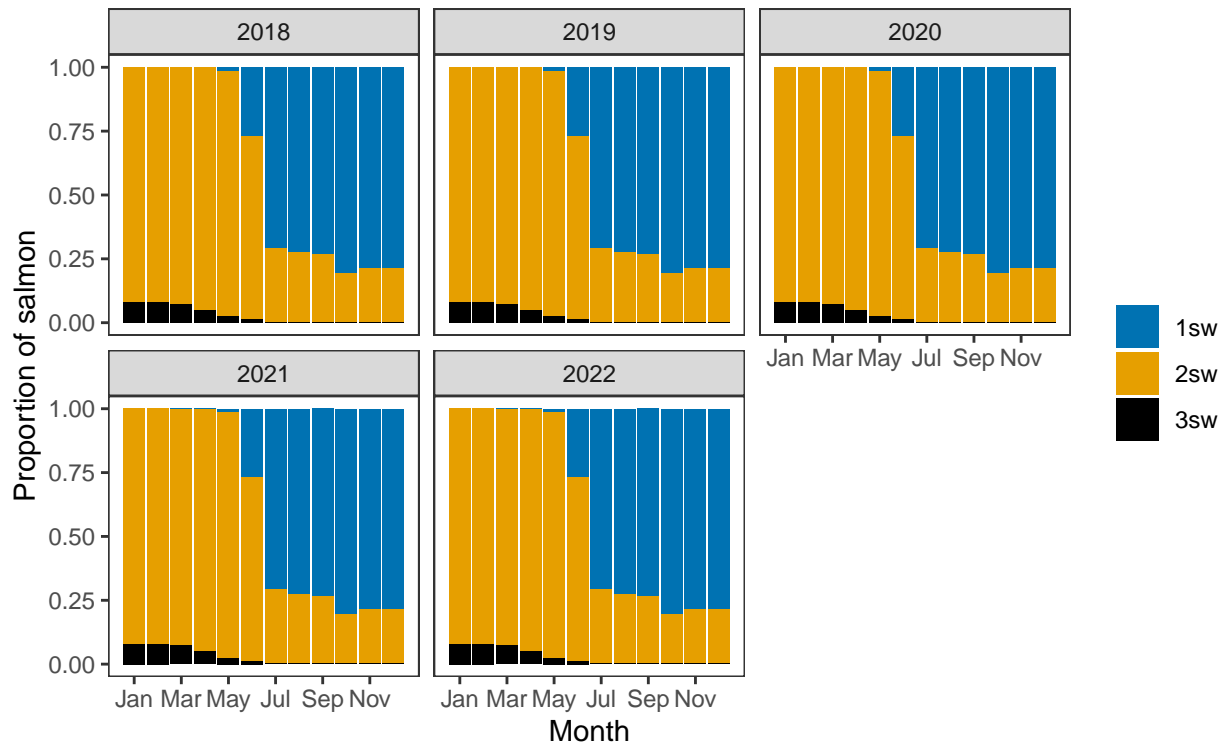Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).
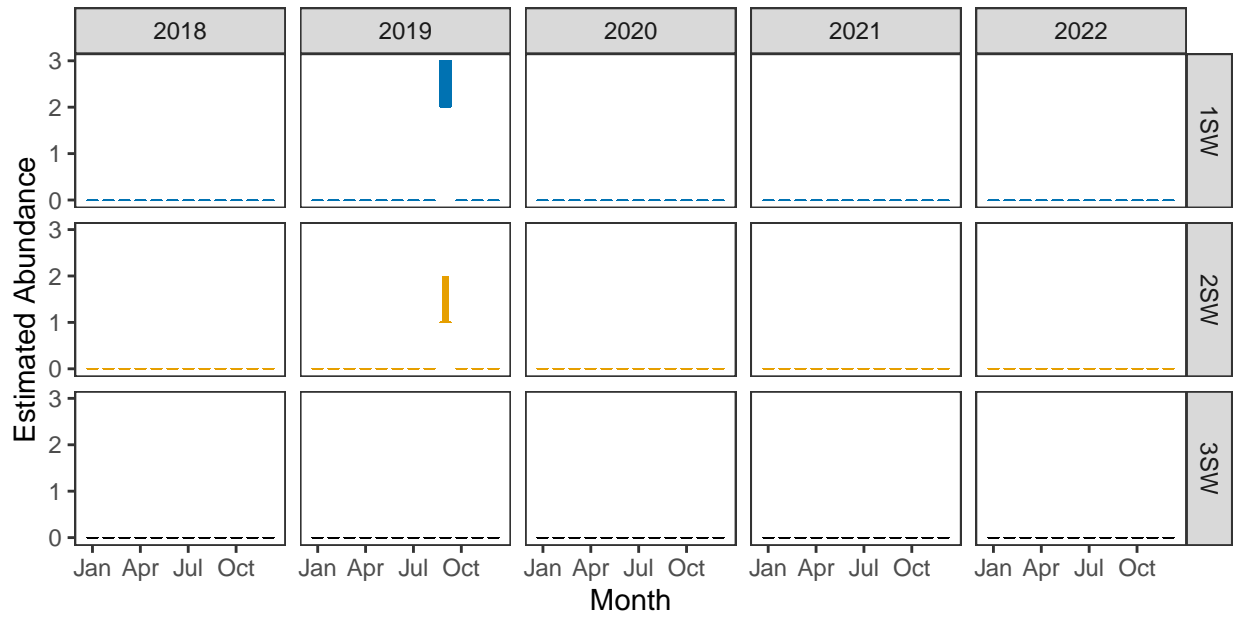
Annual catch as a proportion of stock

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

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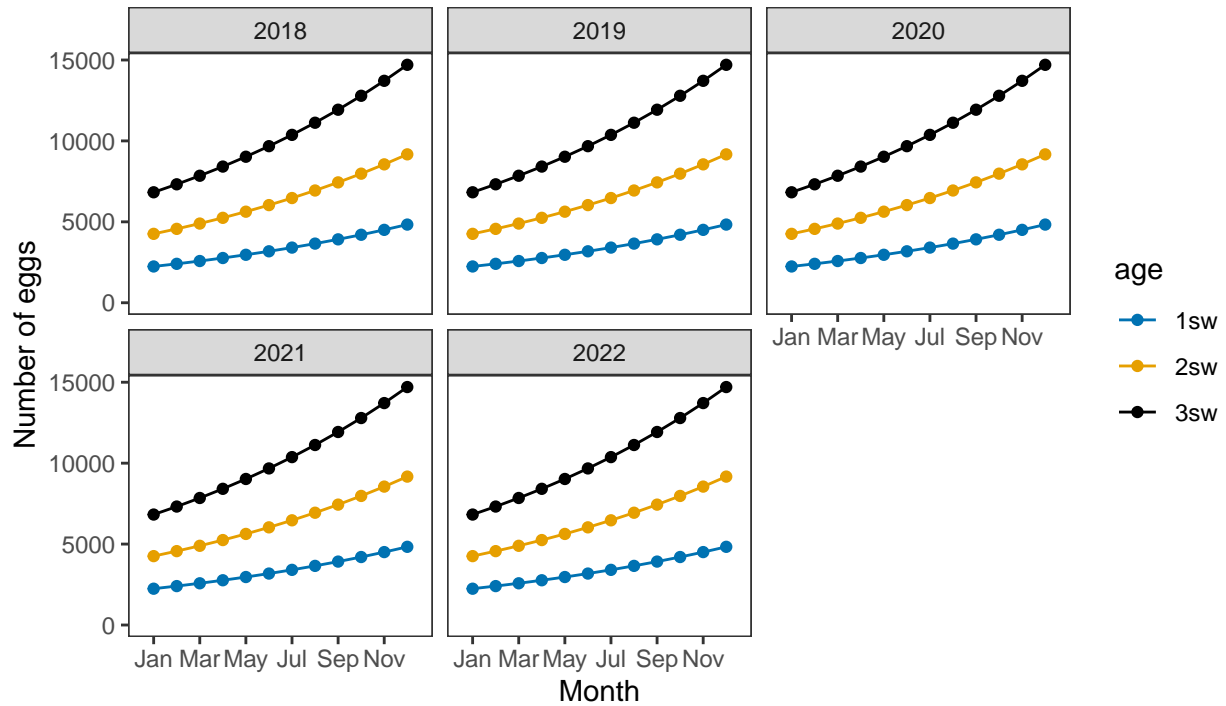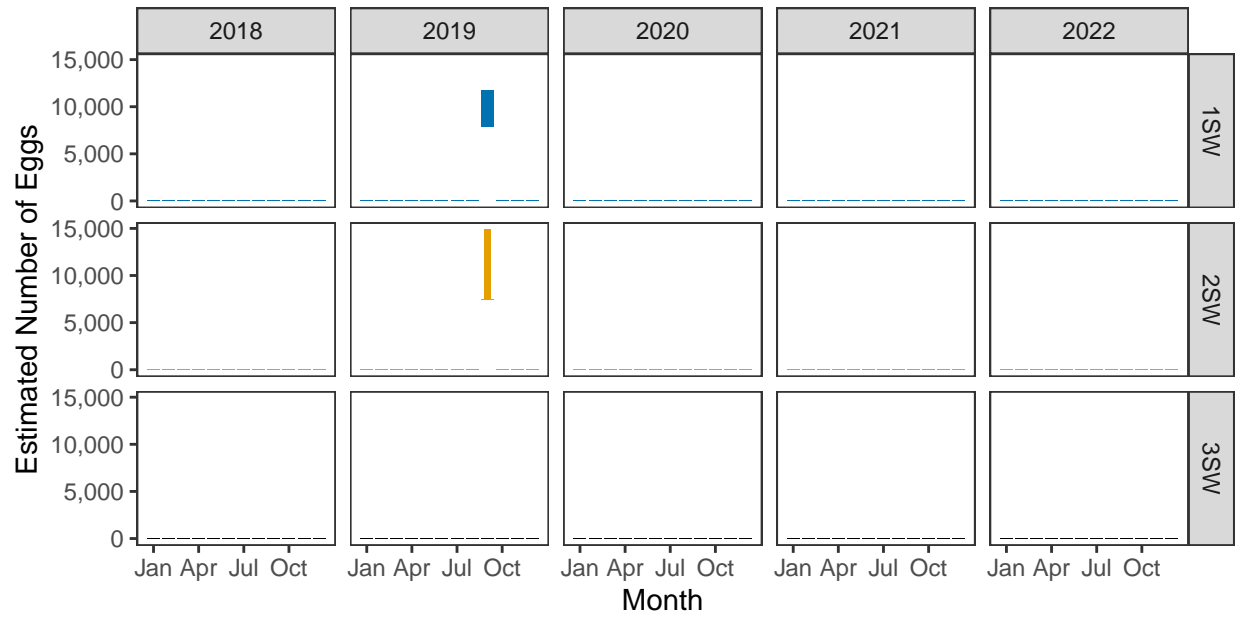
Ages of fish

4

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

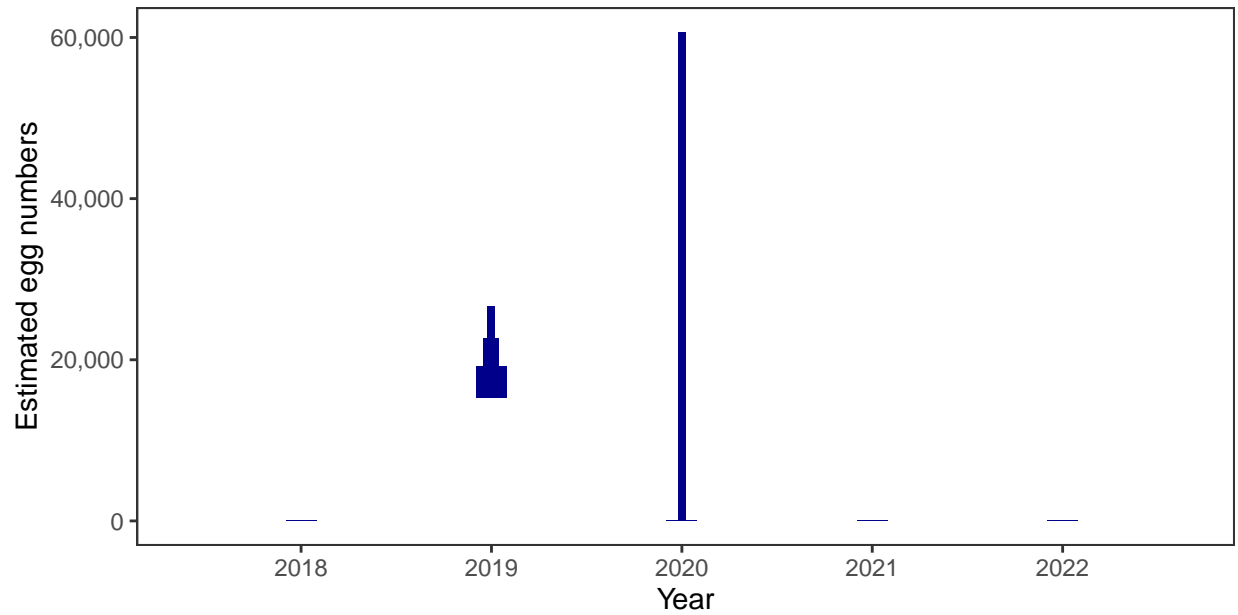*Egg contents of females*

Monthly number of eggs

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

Total annual egg numbers

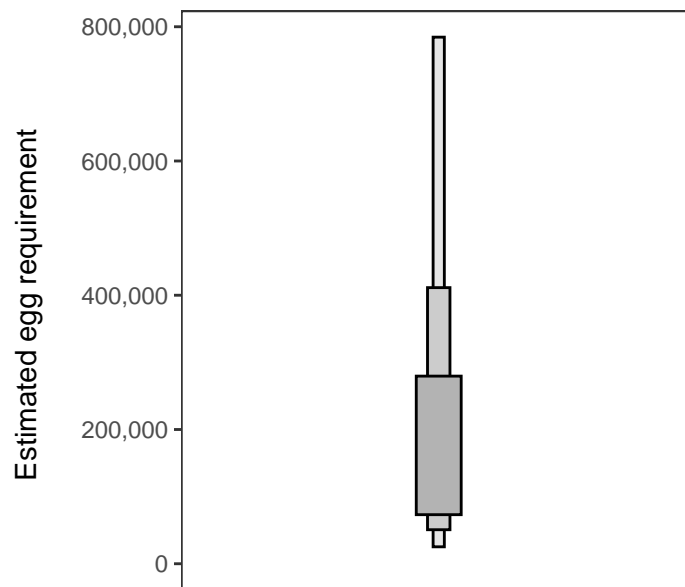Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	-
2019	3.01
2020	2.86
2021	0.32
2022	-

4. Egg requirement

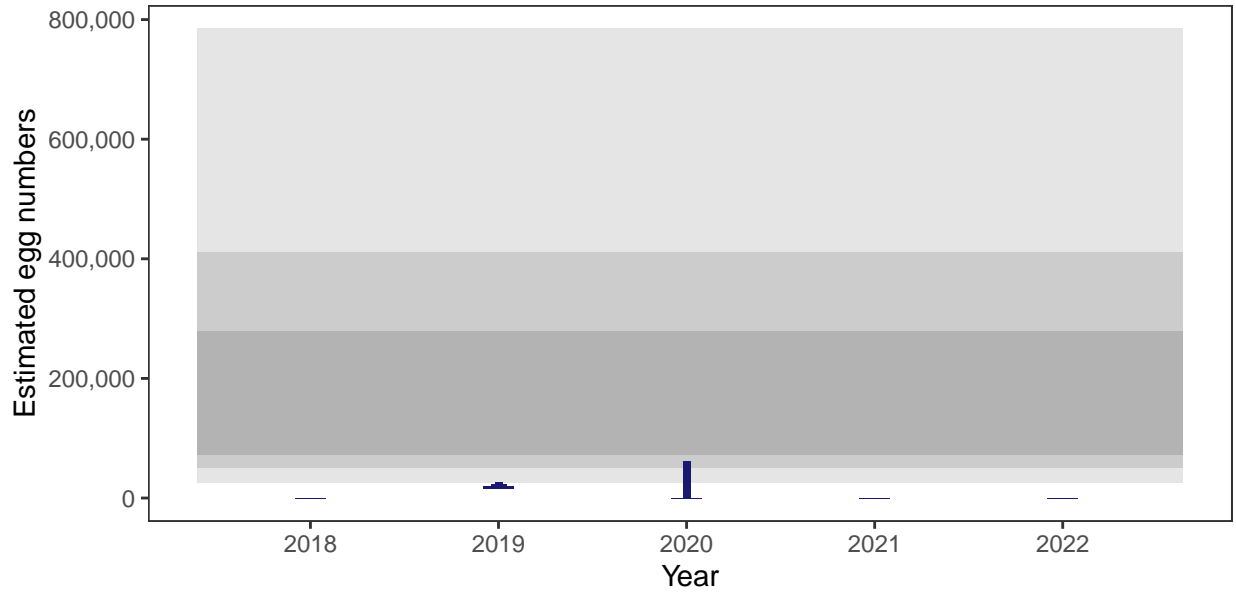### *Areas of salmon habitat in square meters*

There is an estimated 21,931 square meters of known salmon habitat in the Water of Philorth and a further 68,248 square meters where salmon may be present.
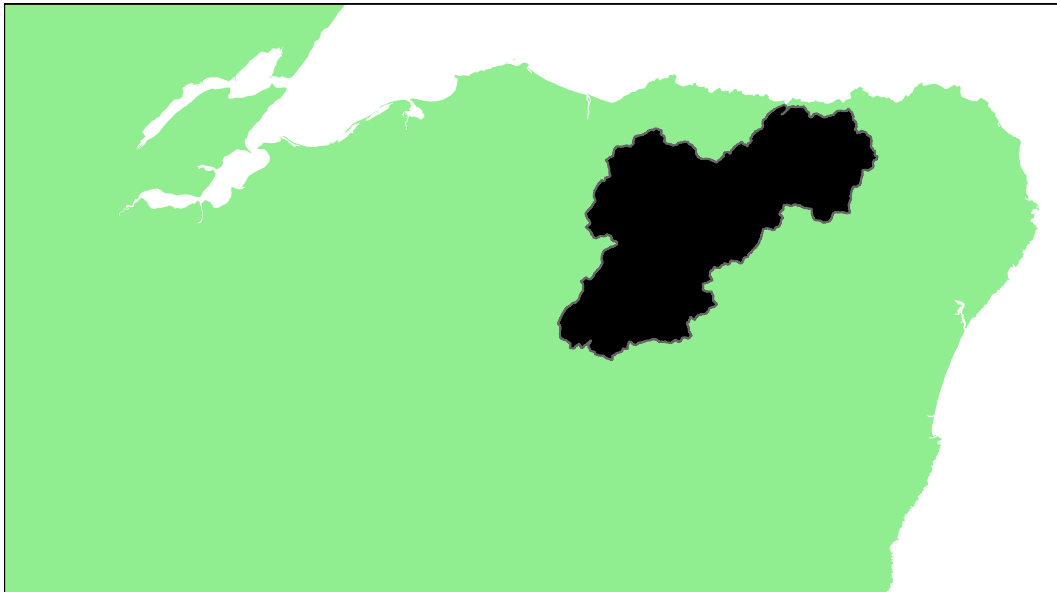
Egg requirement

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

5. Percentage chance that the egg requirement has been reached

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)
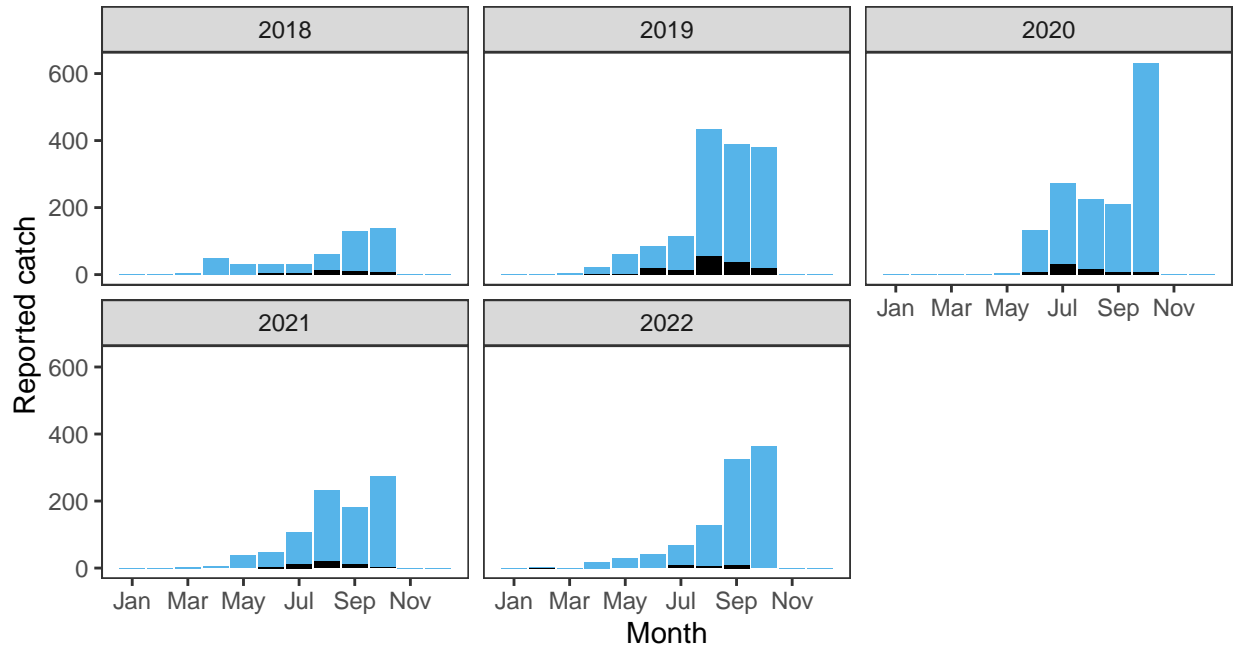
River Deveron: Grade 2

Summary Table

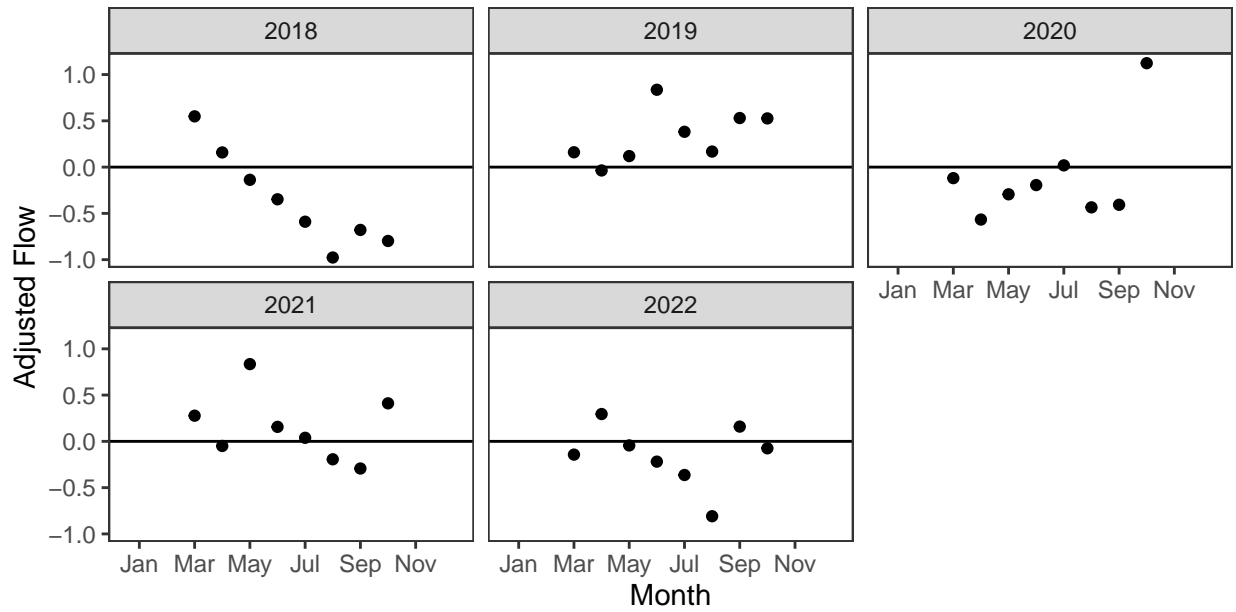| Eggs required (m²)[a]	Area (m²)[a]	Total egg requirement[a]	Percentage chance meeting requirement						Grade
			2018	2019	2020	2021	2022	Overall	
3.14	3,345,000	10,466,000	48.62	79.3	85.93	66.34	65.53	0.69144	2

[a] Figures presented are median values

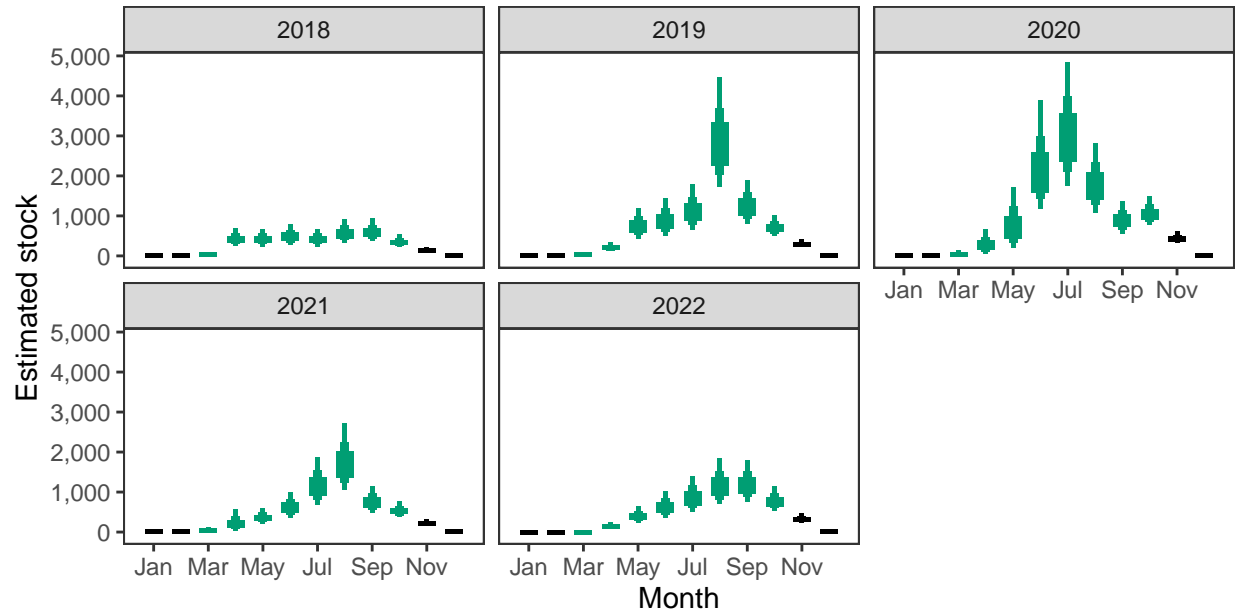# 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black = retained, blue = released)
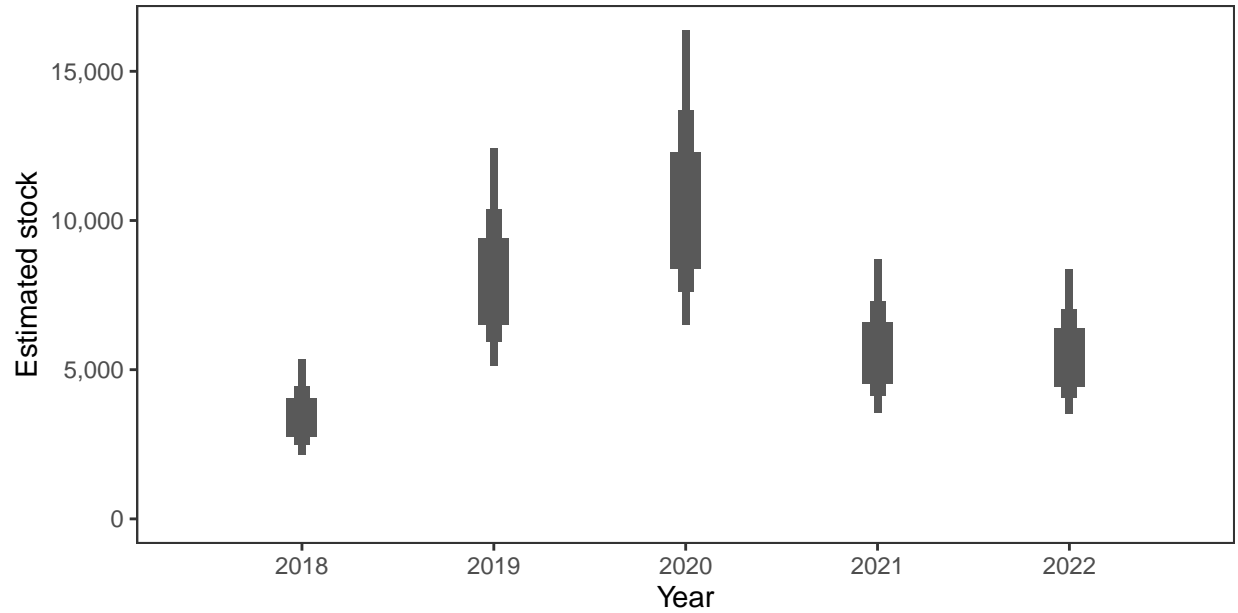

Monthly flow data

Monthly stock estimates (out of season in black)
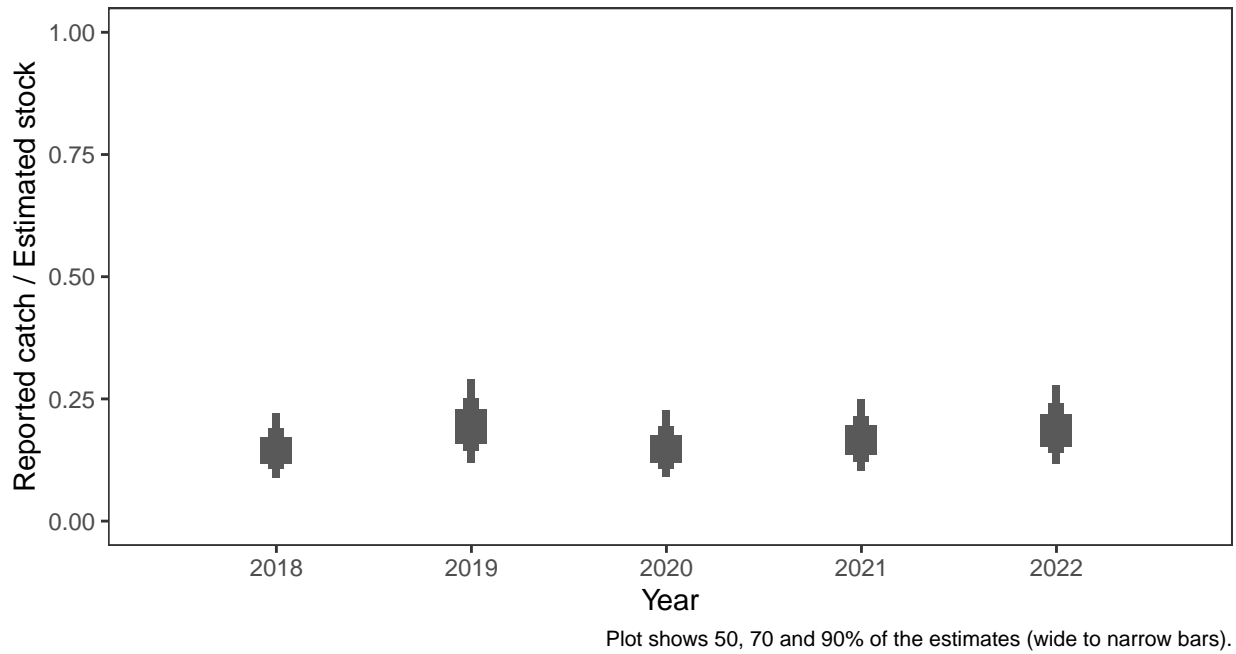

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).
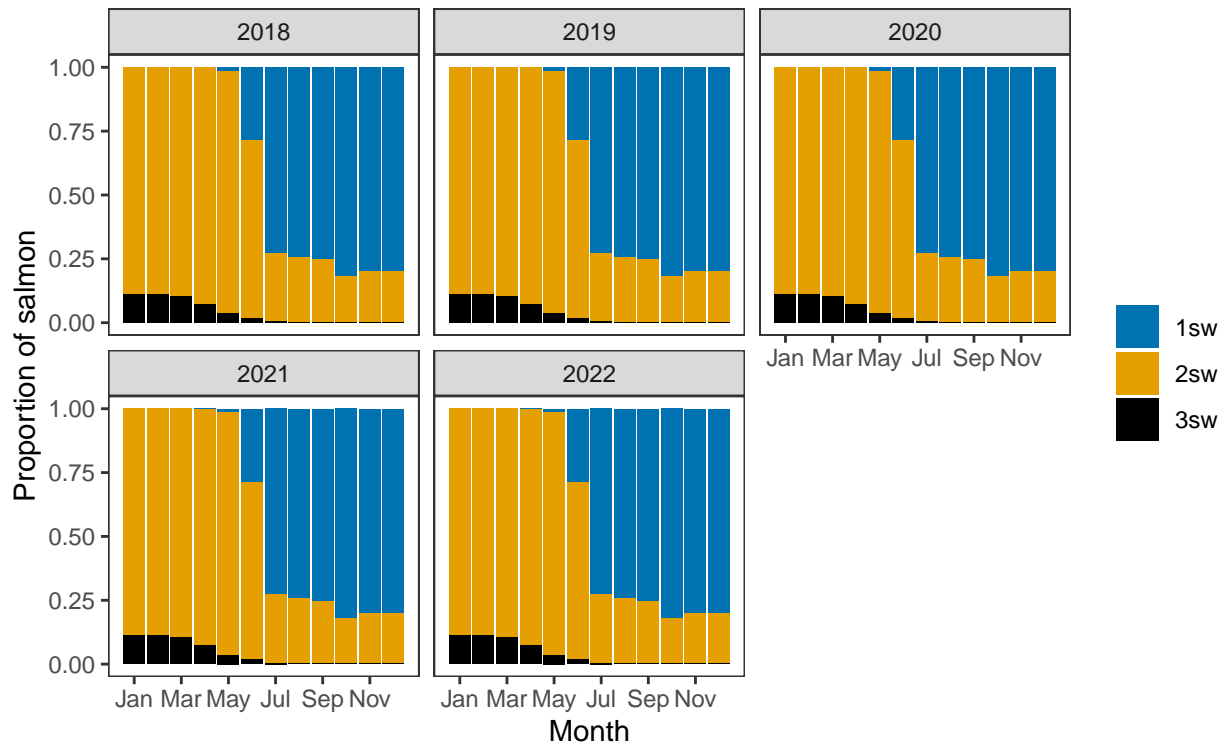
Annual estimated stock

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).
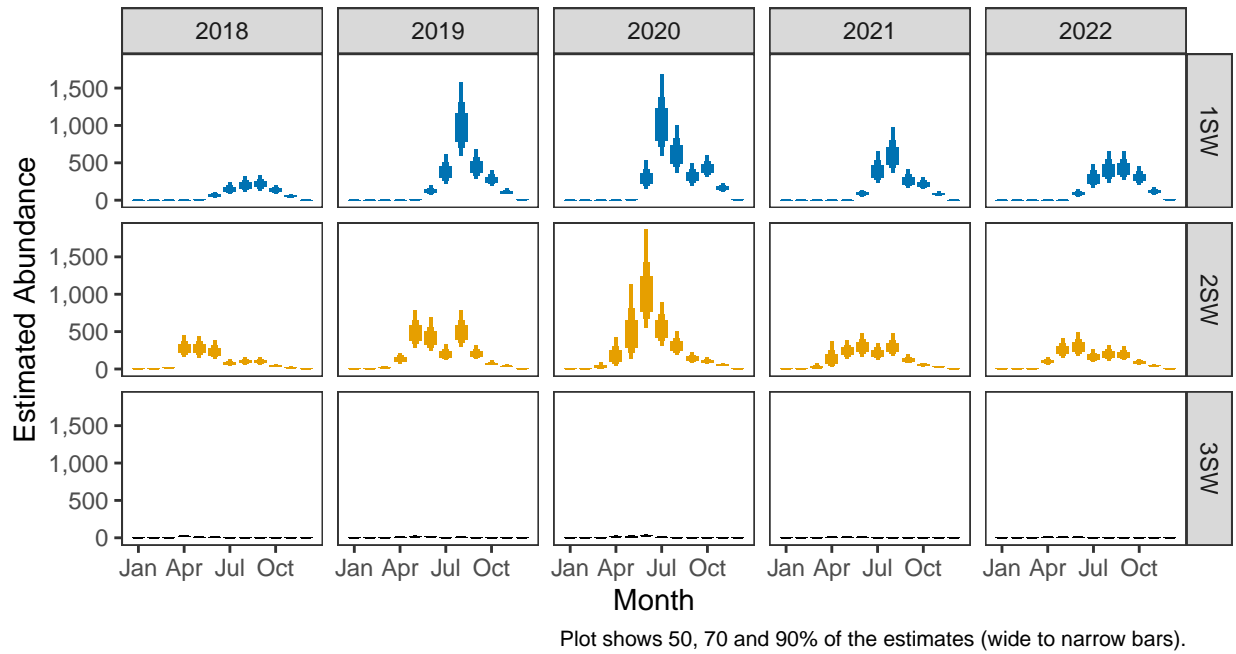
Annual catch as a proportion of stock

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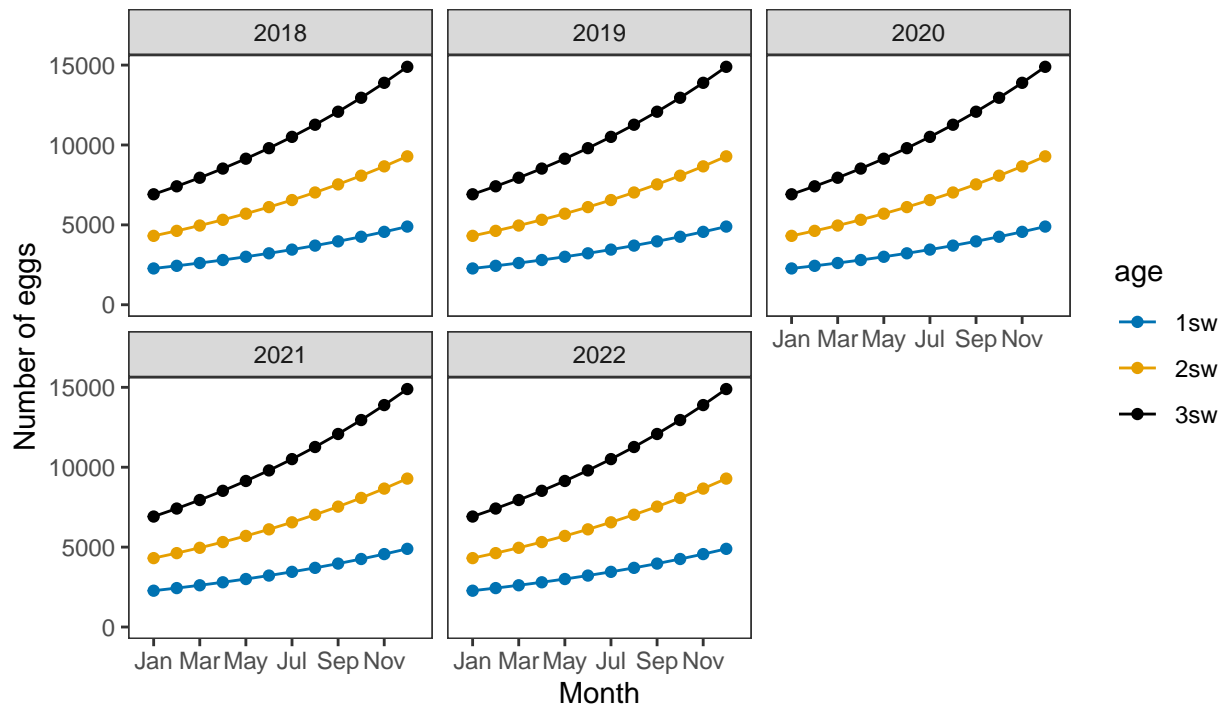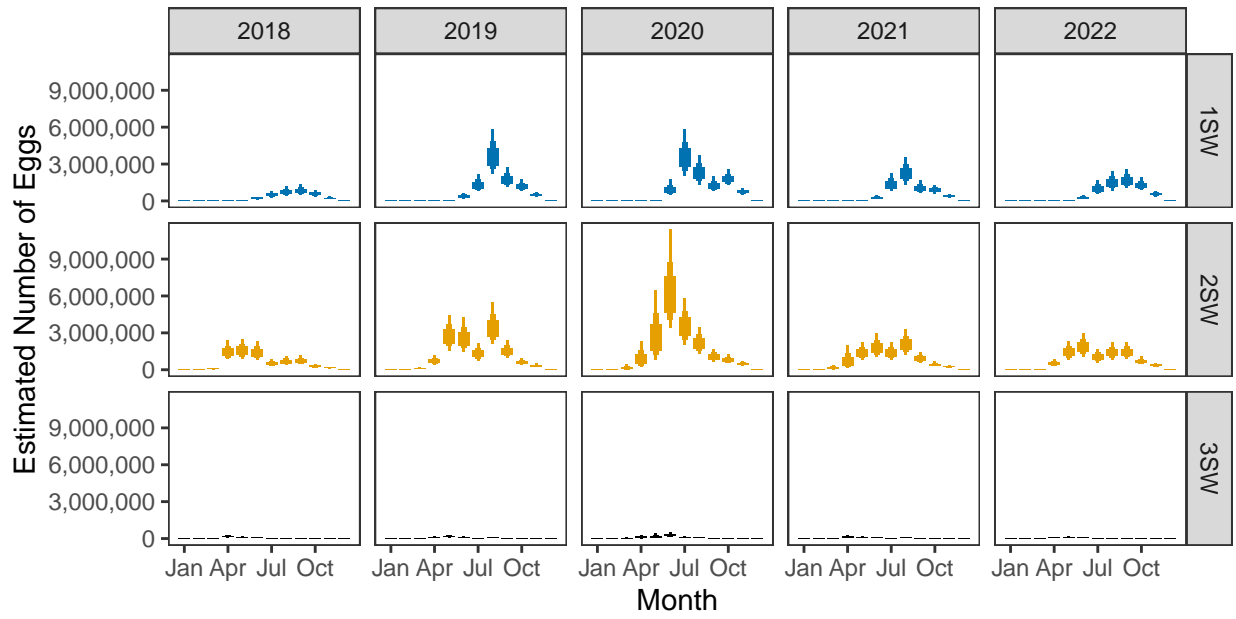
3. Converting Number of Spawners to Number of Eggs

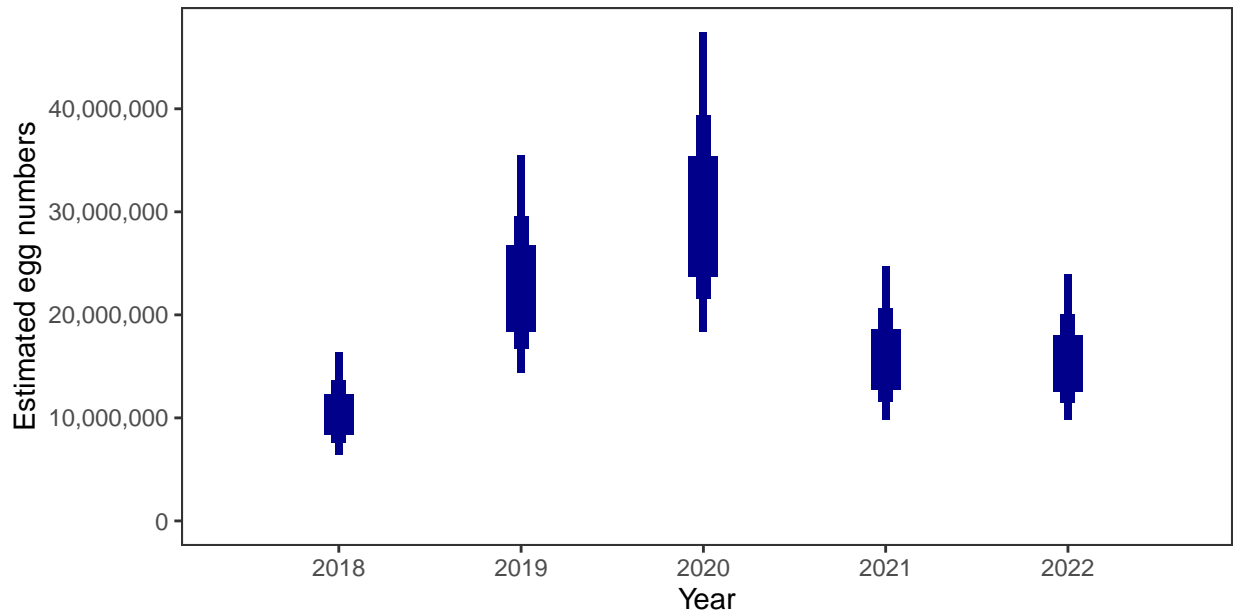*Egg contents of females*

Monthly number of eggs

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

Total annual egg numbers

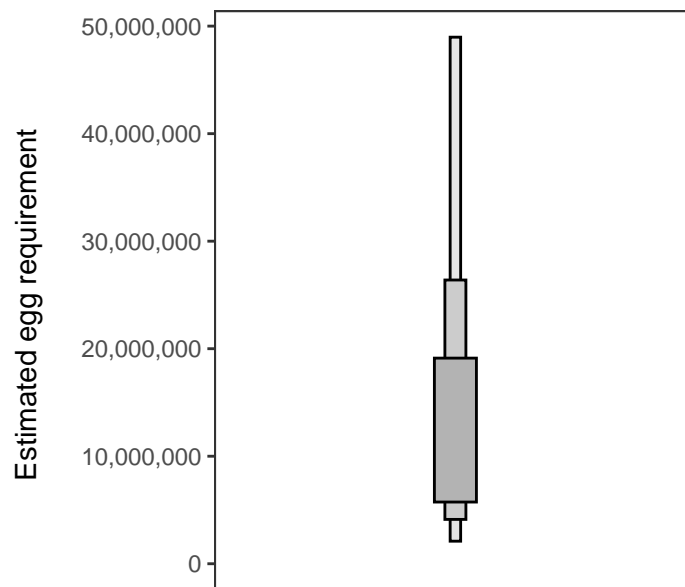Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	48.62
2019	79.30
2020	85.93
2021	66.34
2022	65.53

4. Egg requirement

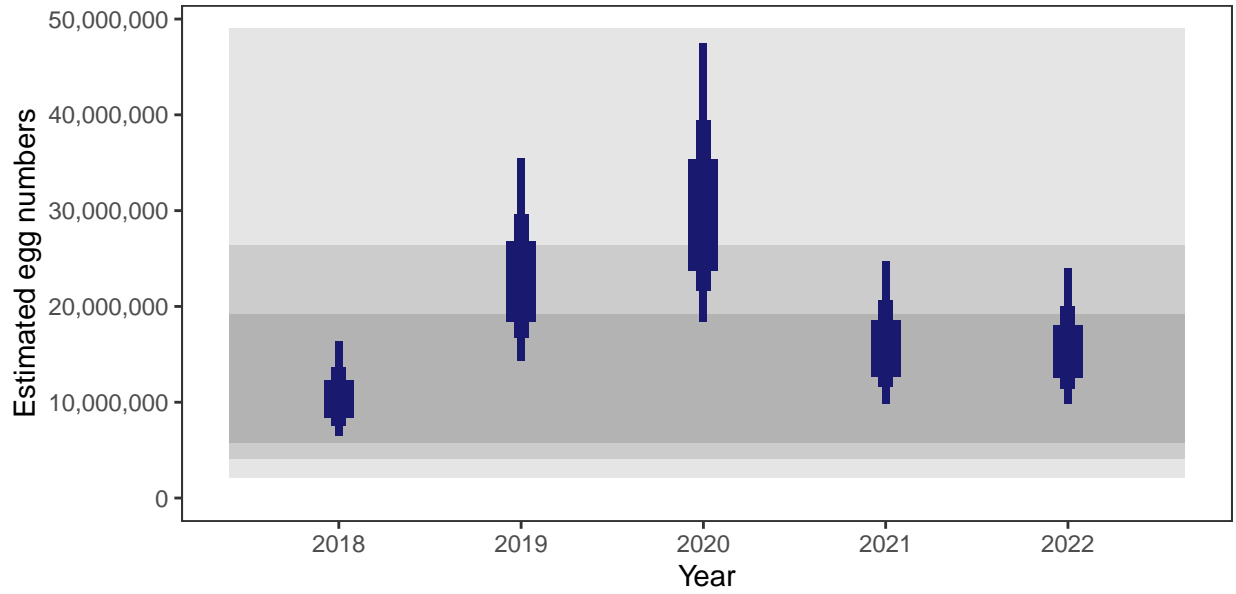### *Areas of salmon habitat in square meters*

There is an estimated 3,650,998 square meters of known salmon habitat in the River Deveron and a further 297,776 square meters where salmon may be present.
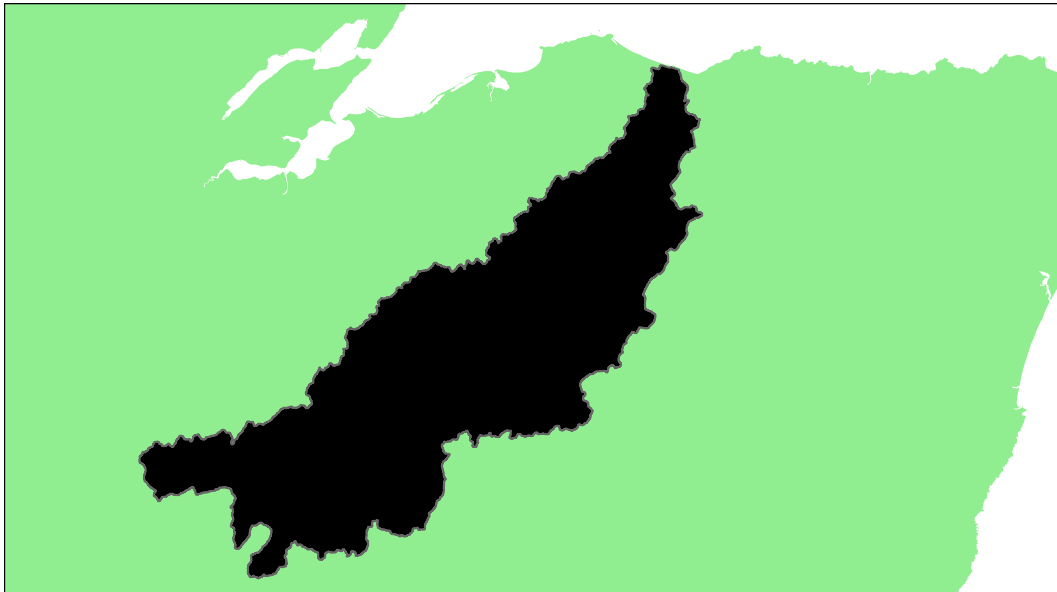
Egg requirement

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

5. Percentage chance that the egg requirement has been reached

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)
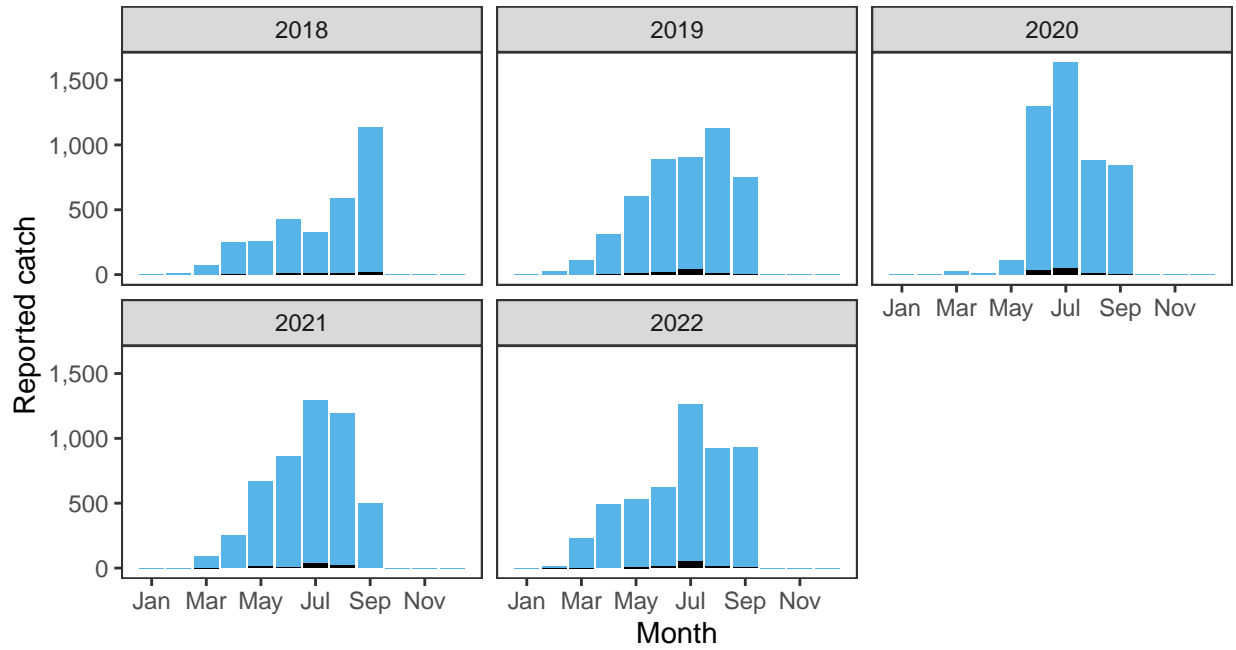
River Spey SAC: Grade 1

Summary Table

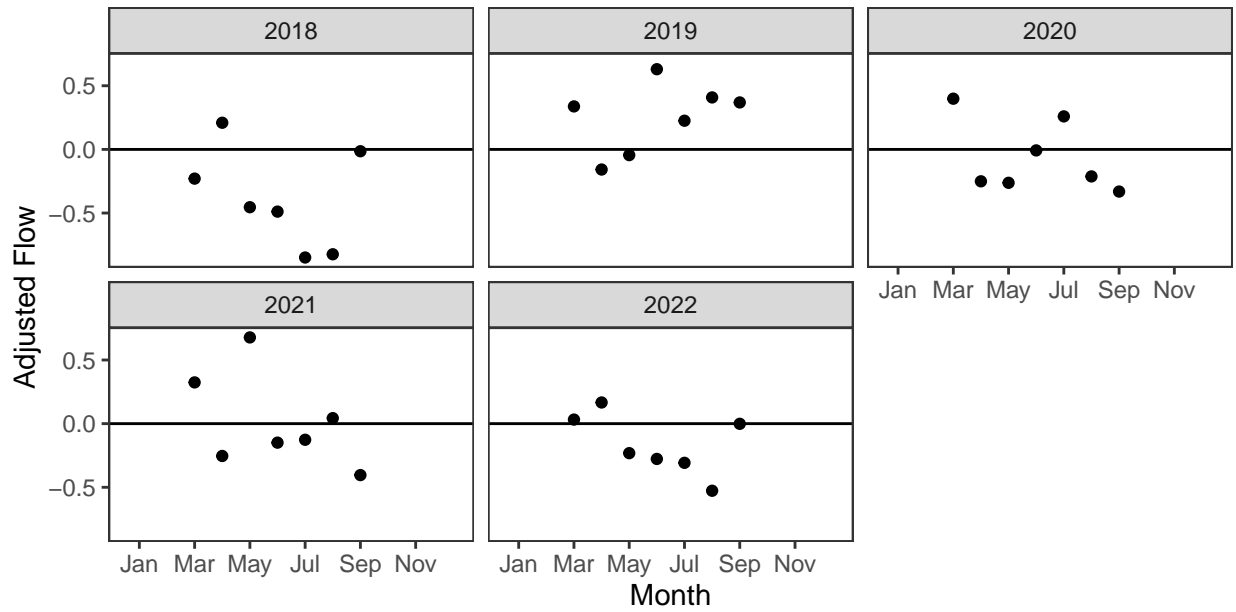| Eggs required (m²)ᵃ | Area (m²)ᵃ | Total egg requirementᵃ | Percentage chance meeting requirement | | | | | | Grade |
			2018	2019	2020	2021	2022	Overall	
2.9	13,485,000	39,231,000	71.02	79.64	88.97	82.74	84.49	0.81372	1

ᵃ Figures presented are median values

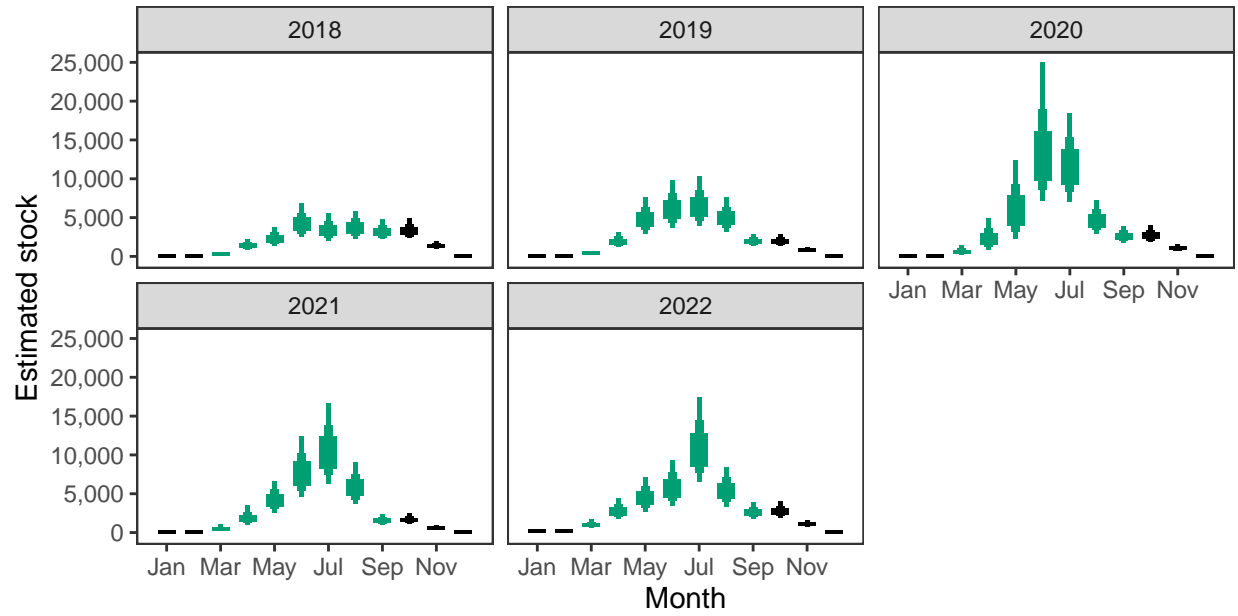# 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black = retained, blue = released)
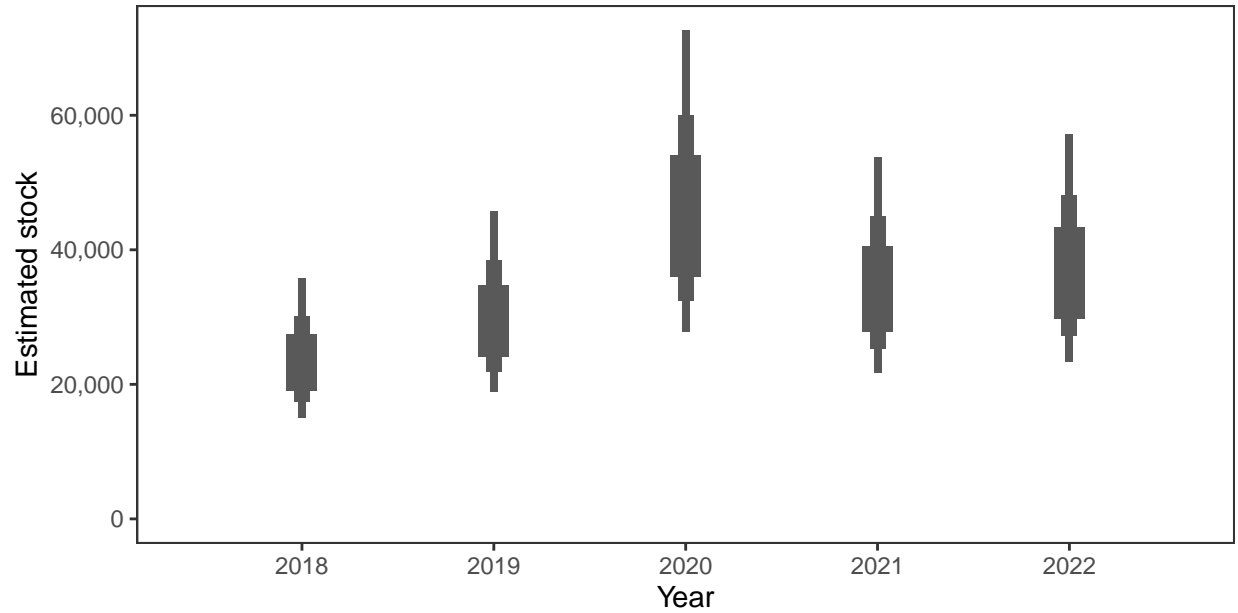

Monthly flow data

Monthly stock estimates (out of season in black)
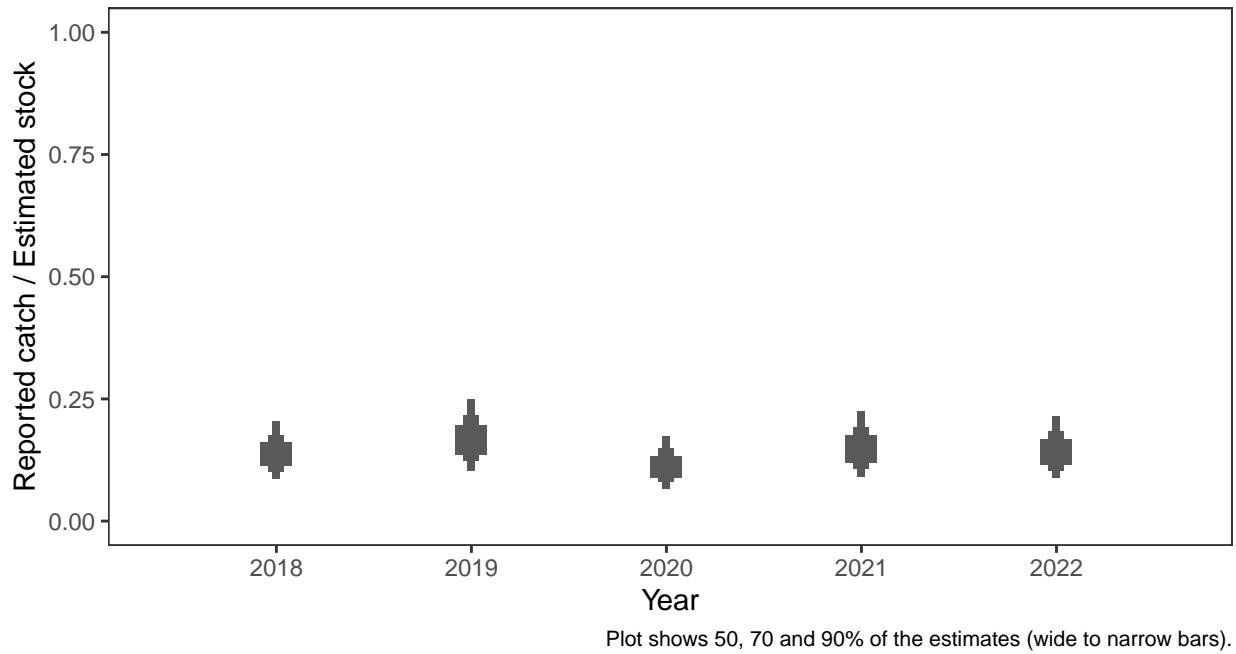

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).
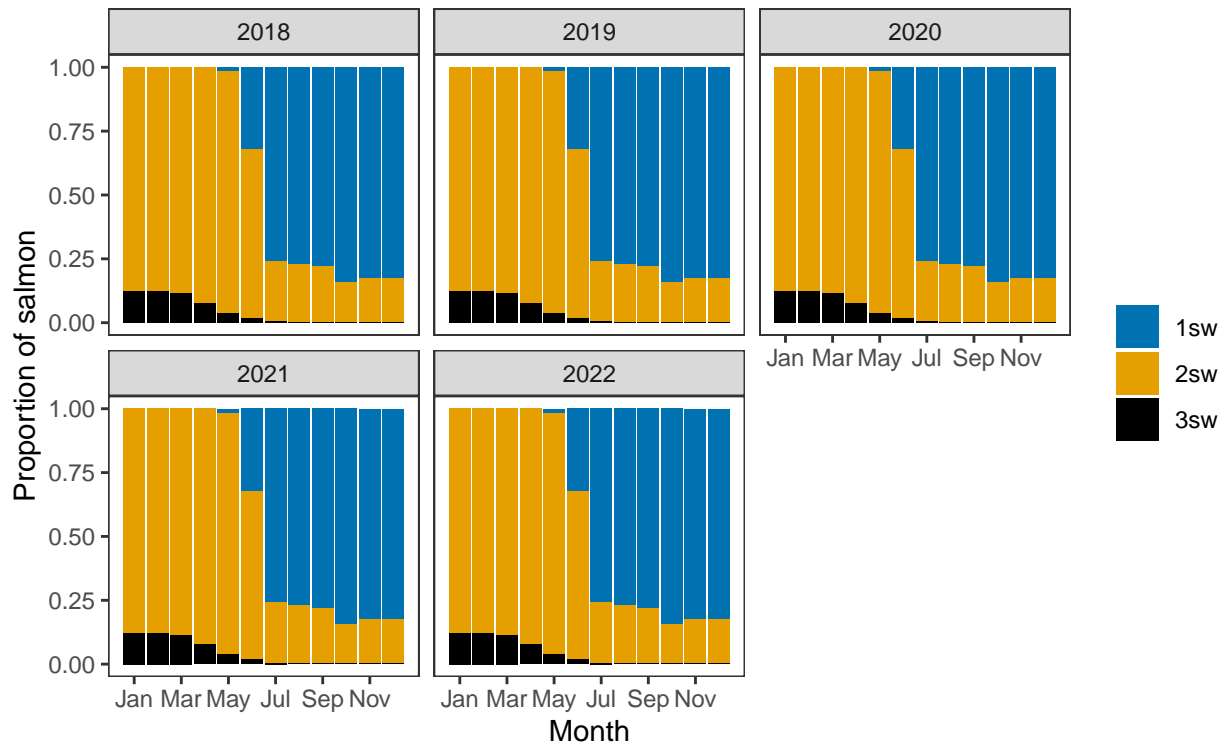
Annual estimated stock

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).
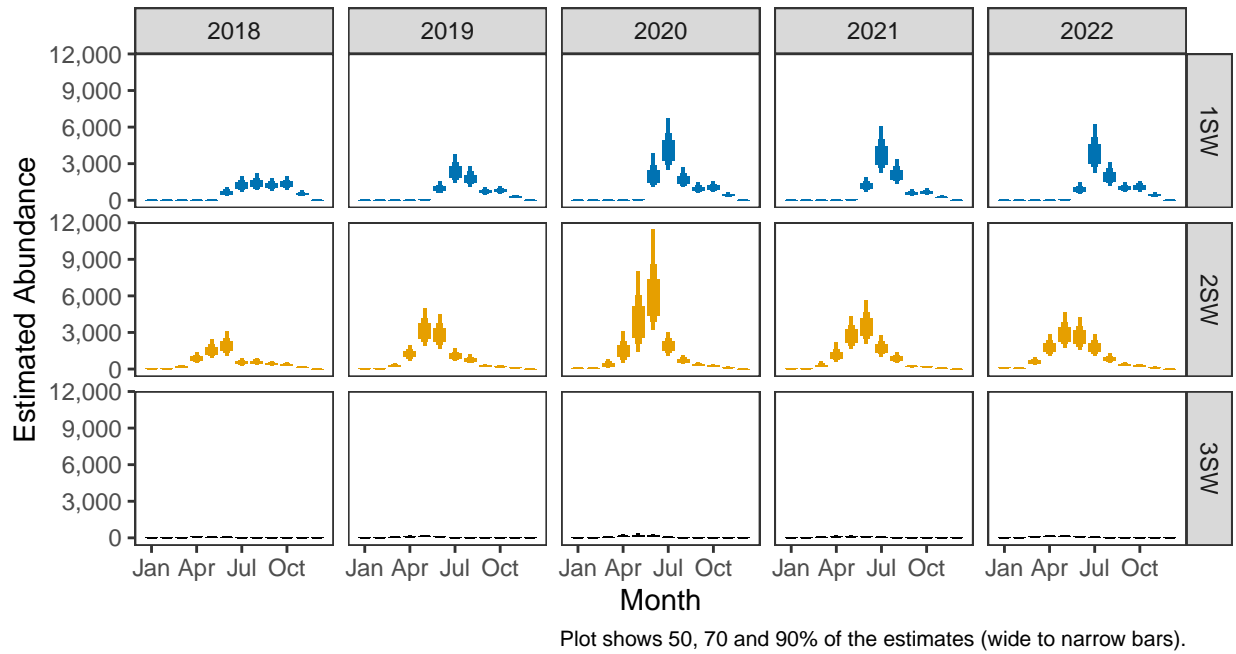
Annual catch as a proportion of stock

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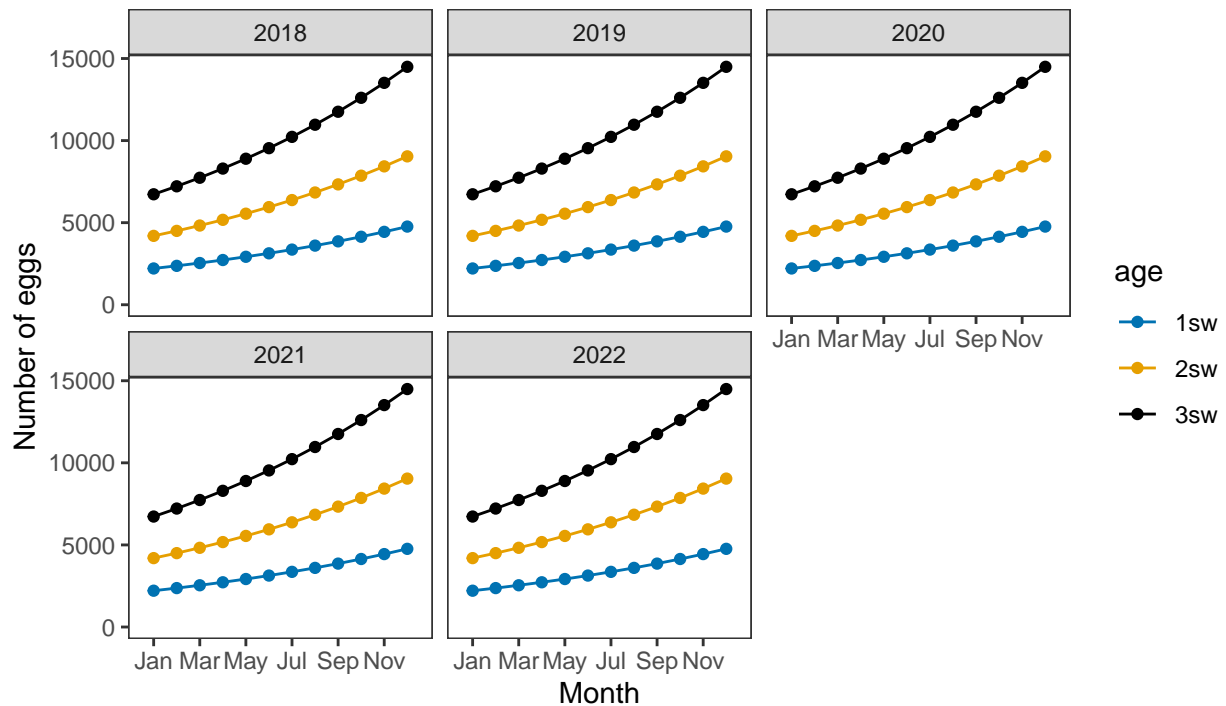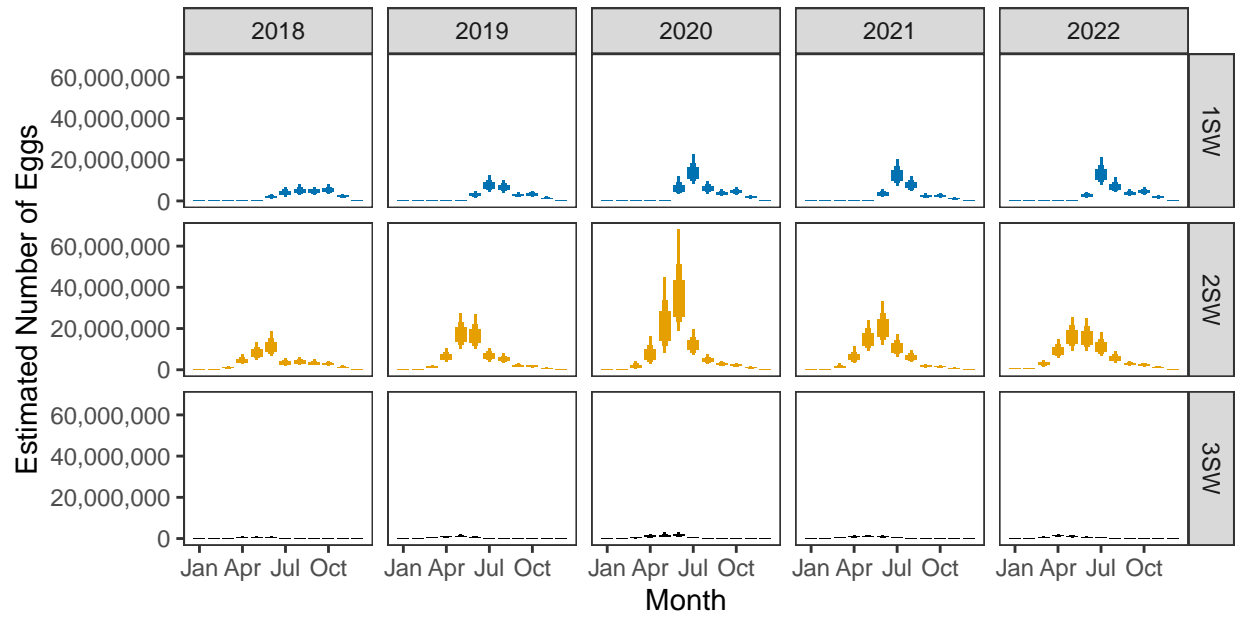
3. Converting Number of Spawners to Number of Eggs

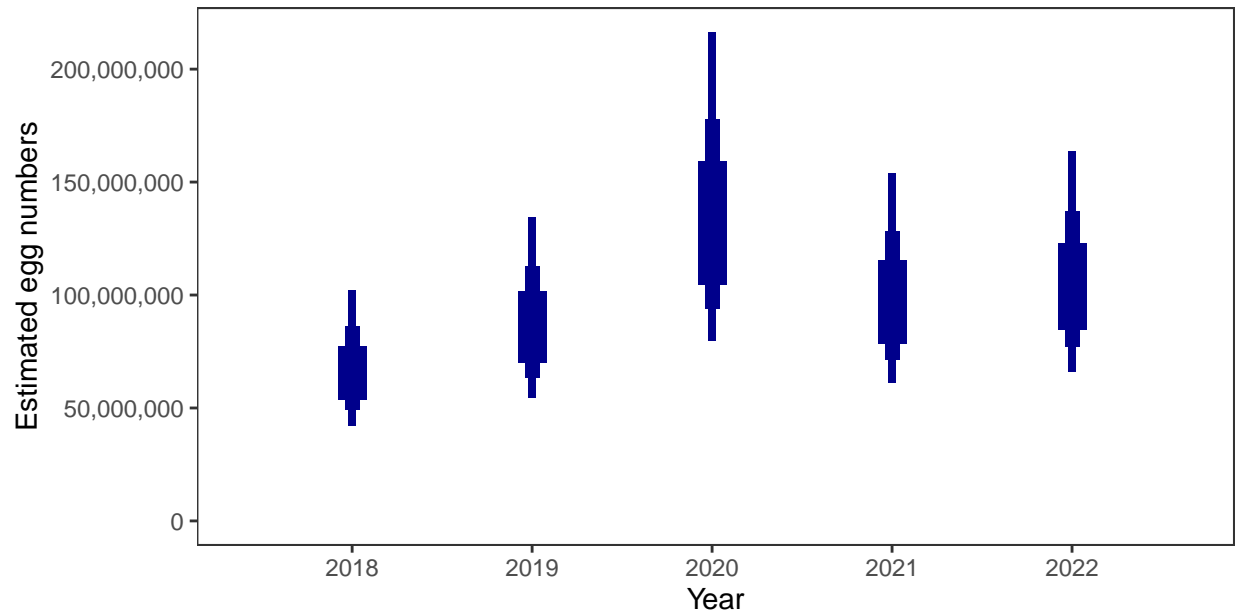*Egg contents of females*

Monthly number of eggs

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

Total annual egg numbers

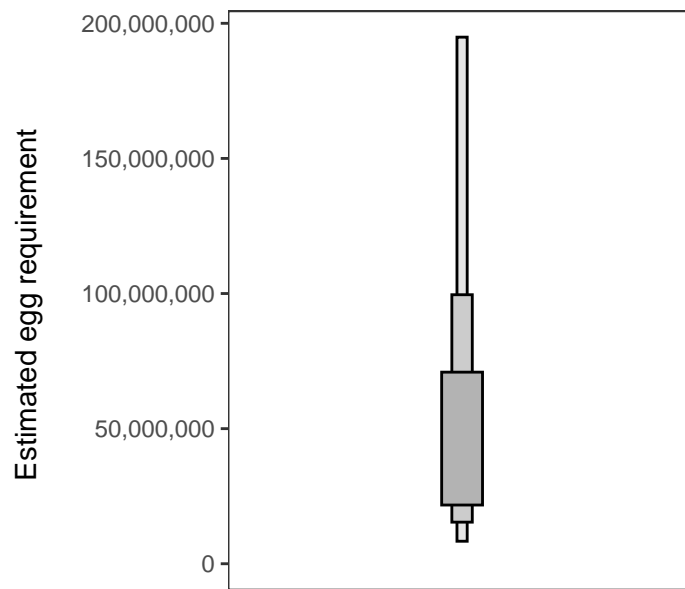Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	71.02
2019	79.64
2020	88.97
2021	82.74
2022	84.49

4. Egg requirement

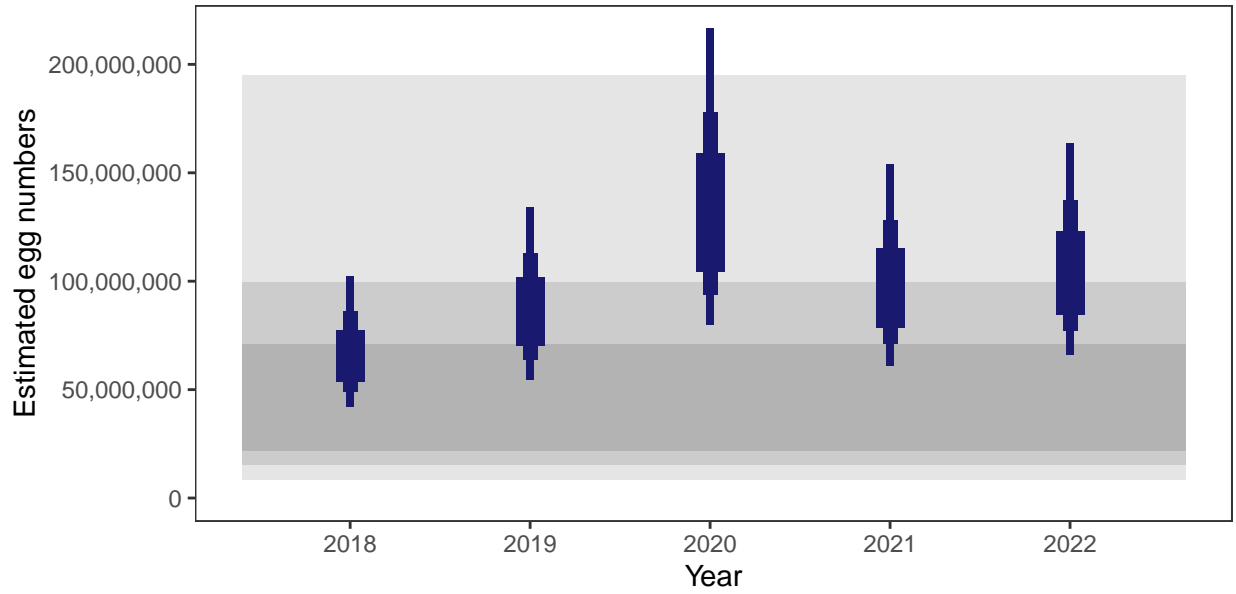### *Areas of salmon habitat in square meters*

There is an estimated 14,896,015 square meters of known salmon habitat in the River Spey SAC and a further 879,789 square meters where salmon may be present.
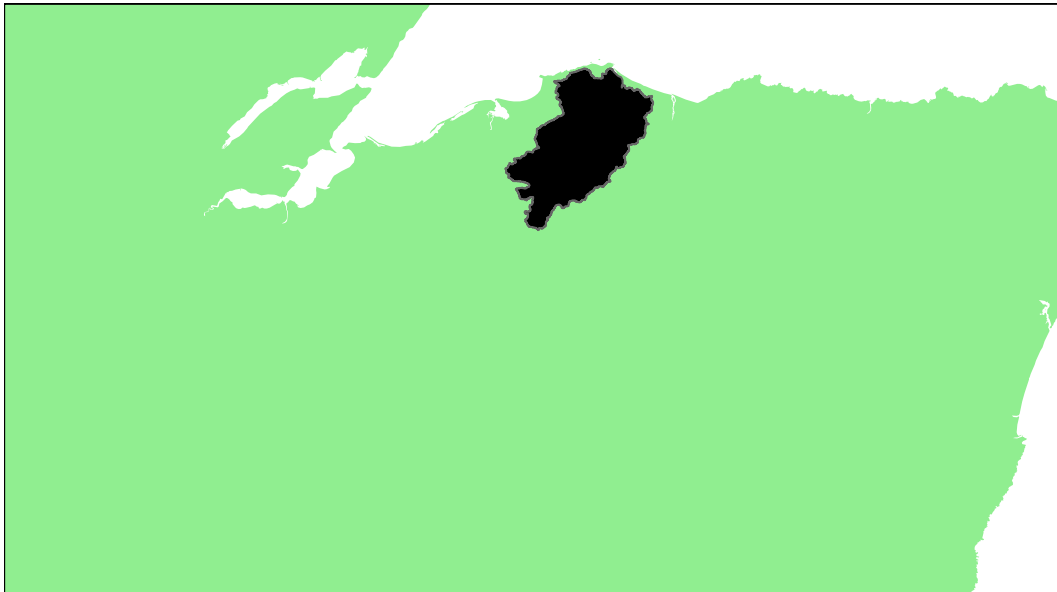
Egg requirement

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

5. Percentage chance that the egg requirement has been reached

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)
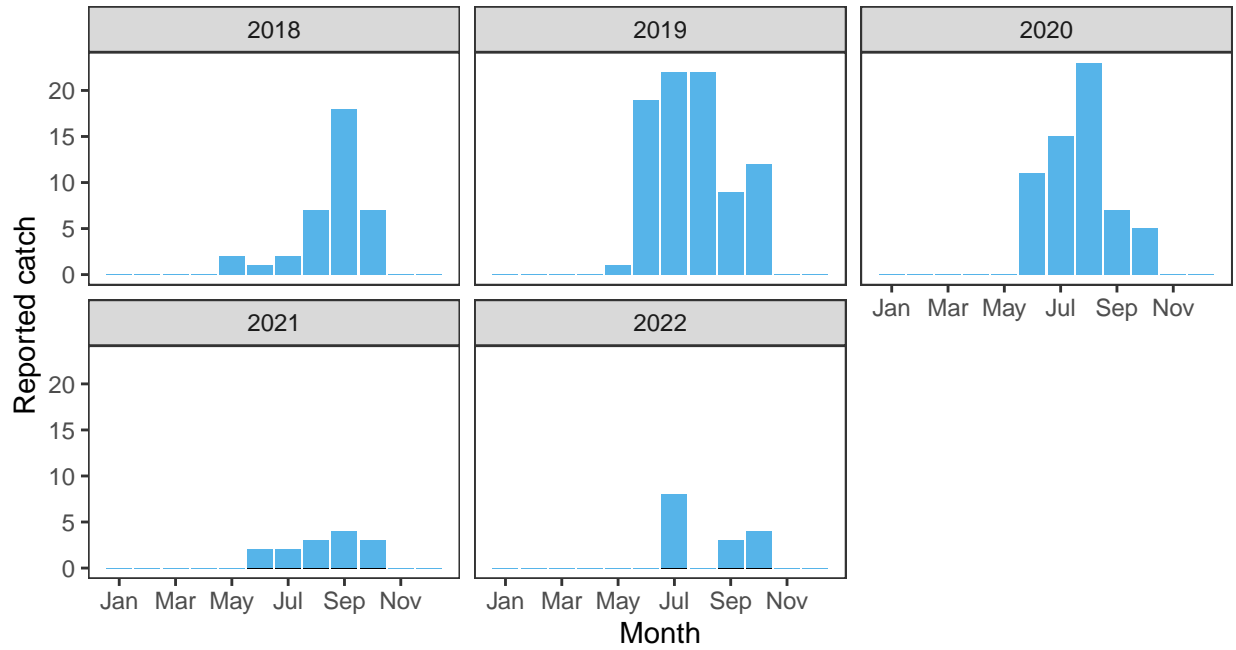
River Lossie: Grade 3

Summary Table

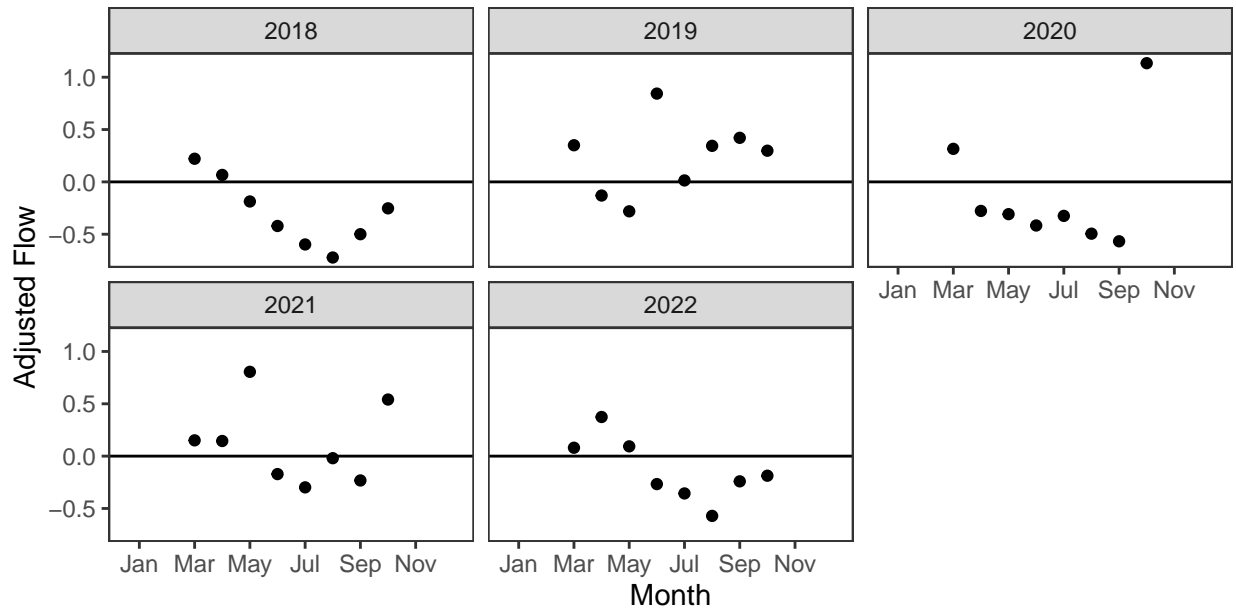| Eggs required (m^2)[a]	Area (m^2)[a]	Total egg requirement[a]	Percentage chance meeting requirement						Grade
			2018	2019	2020	2021	2022	Overall	
1.81	647,000	1,167,000	24.54	61.71	62.06	7.7	8.05	0.32812	3

[a] Figures presented are median values

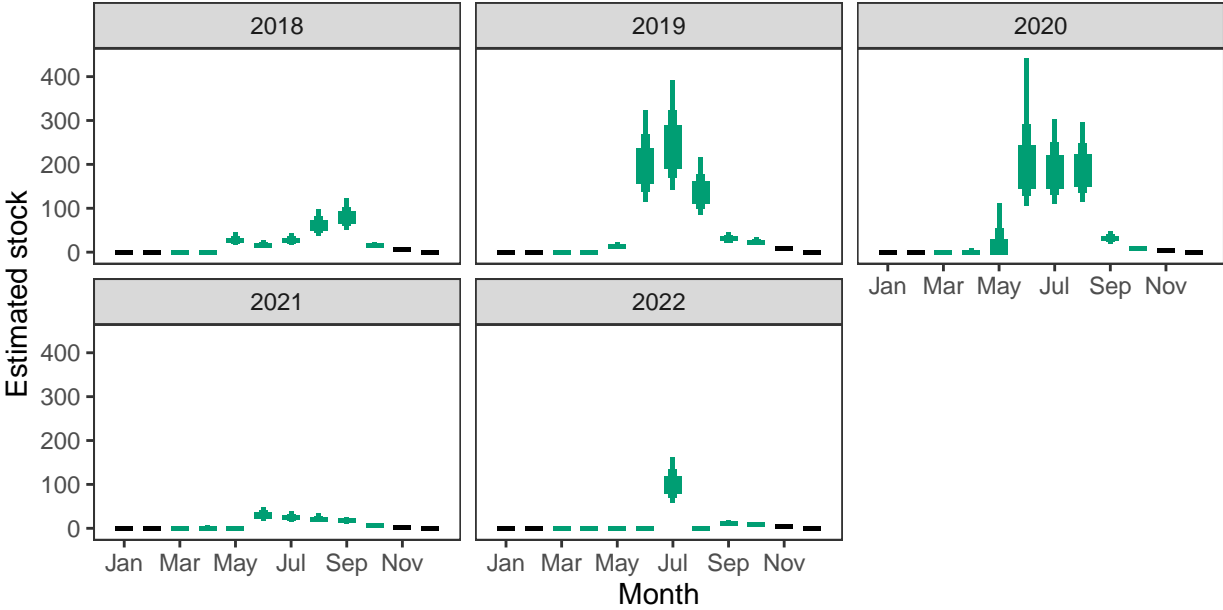# 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black = retained, blue = released)
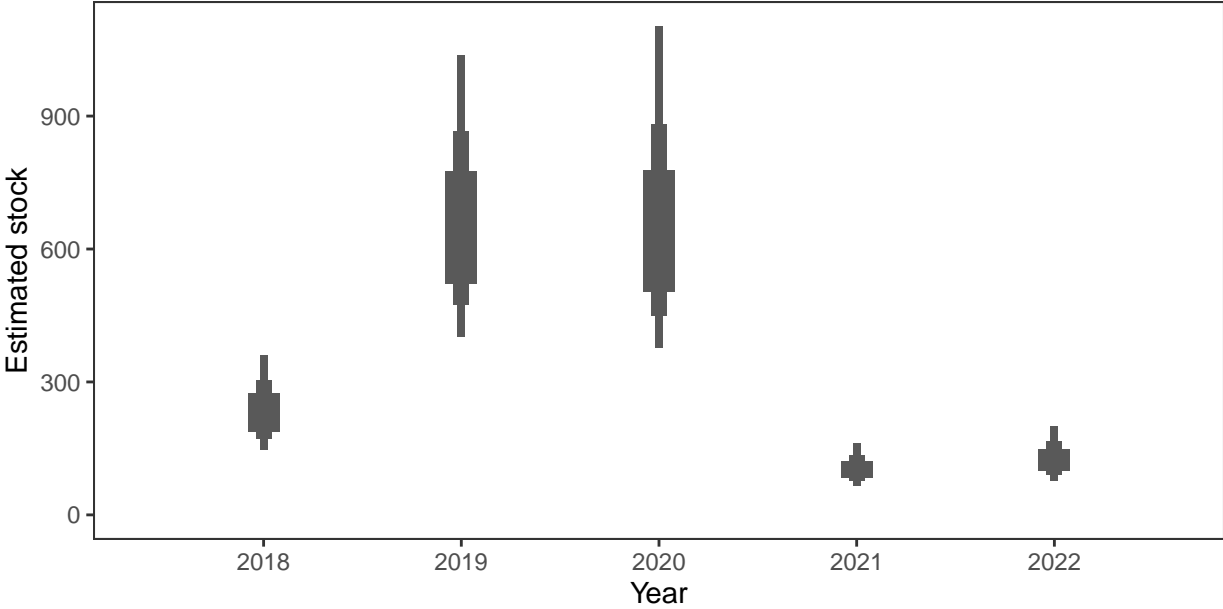

Monthly flow data

Monthly stock estimates (out of season in black)
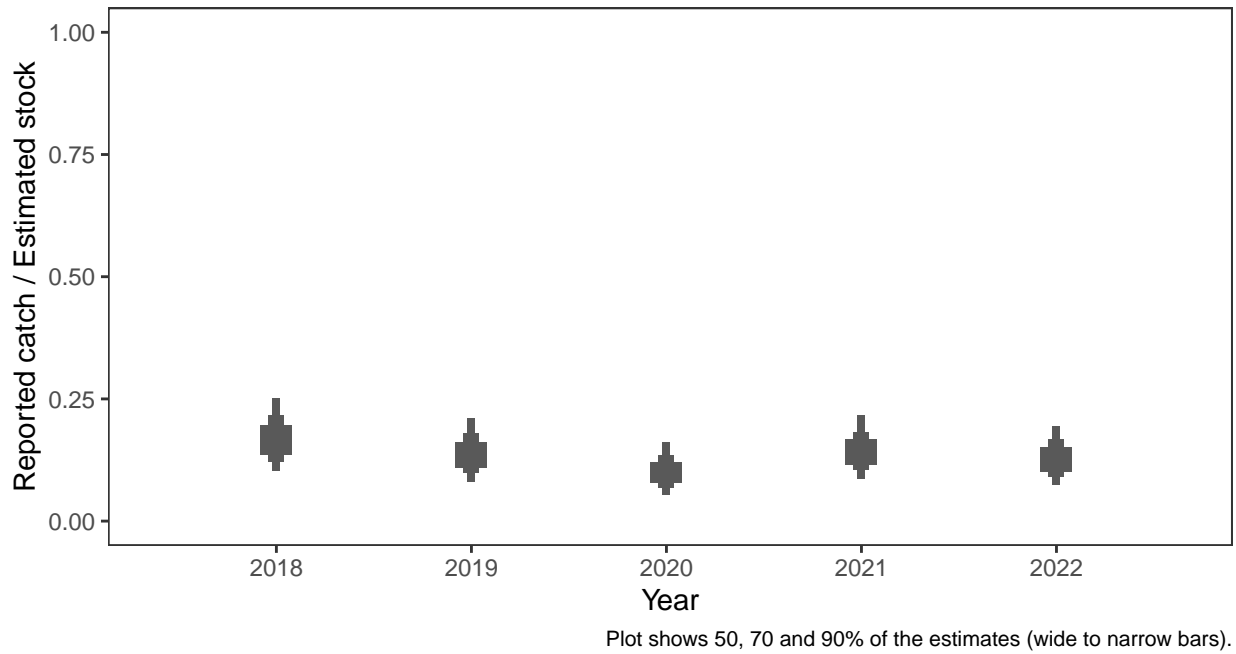

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).
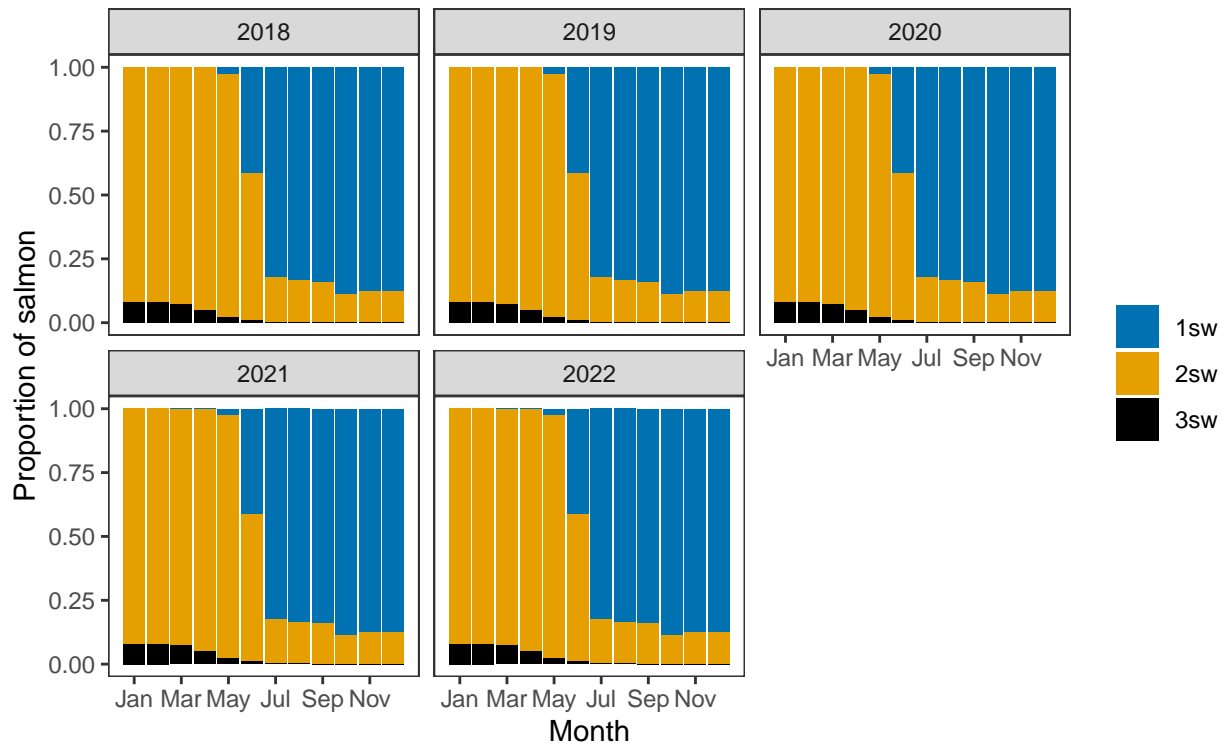
Annual estimated stock

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).
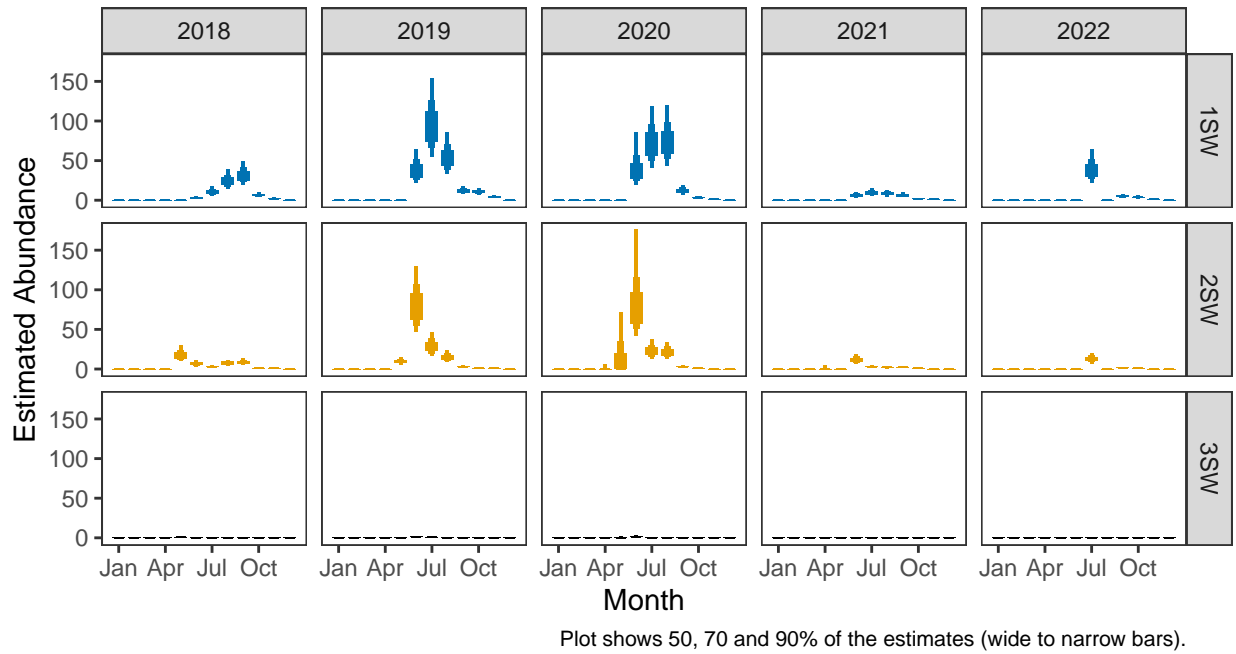
Annual catch as a proportion of stock

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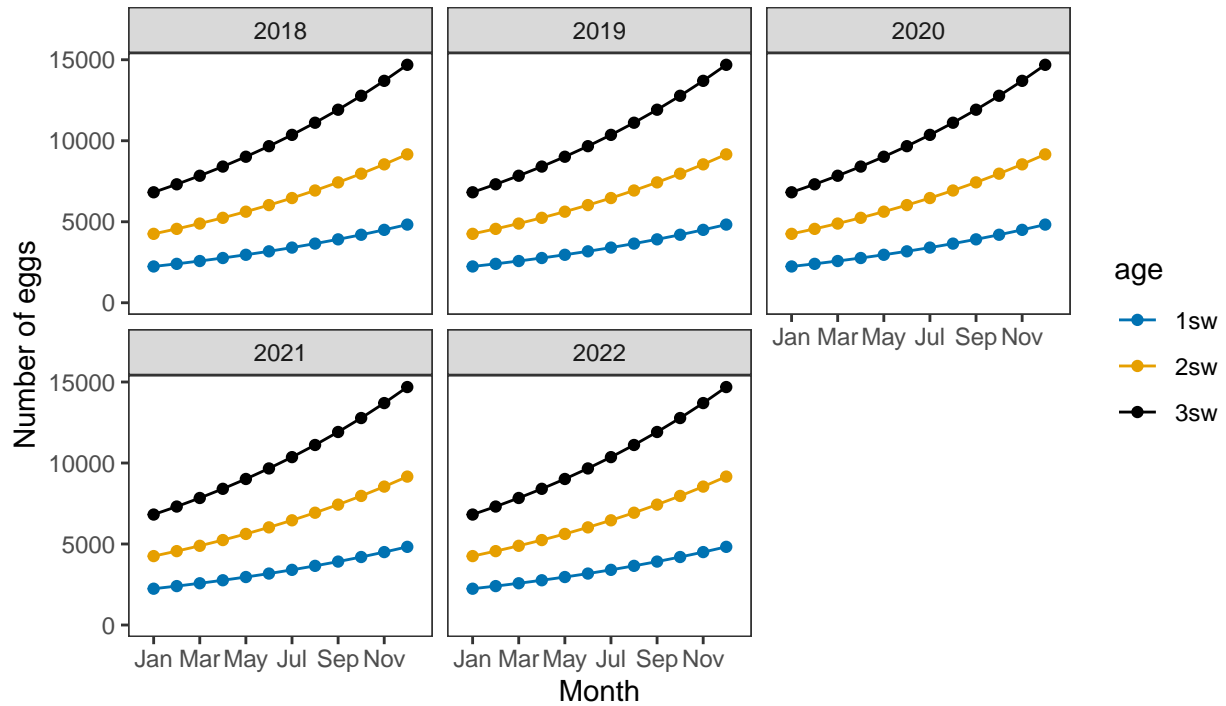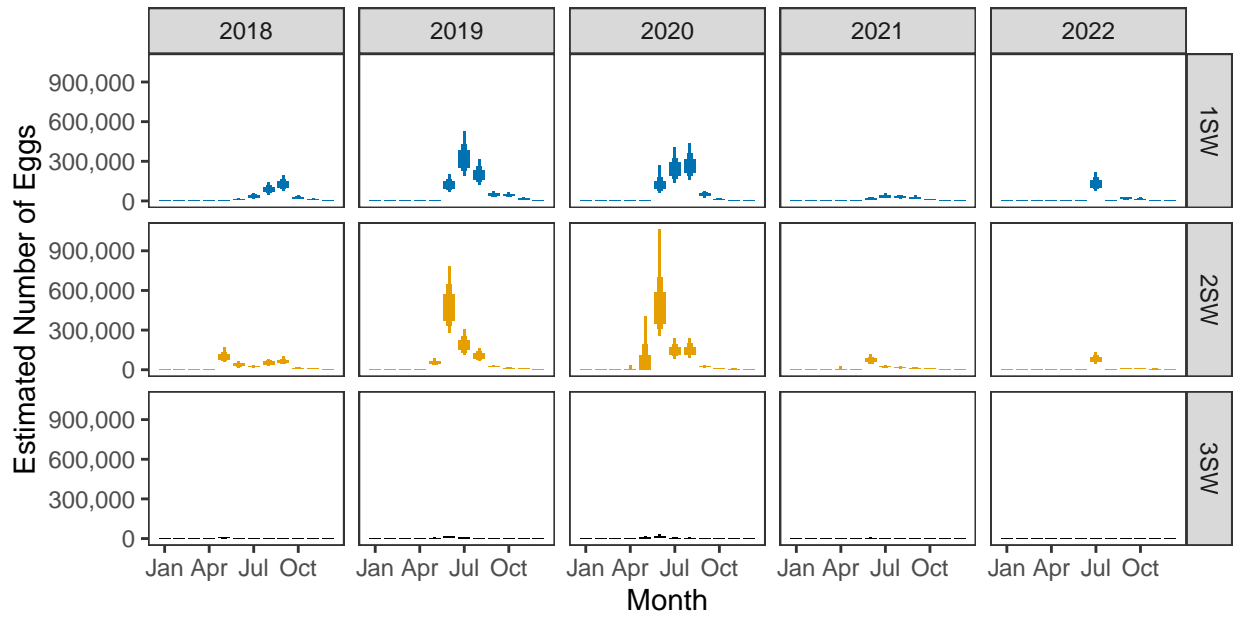
3. Converting Number of Spawners to Number of Eggs

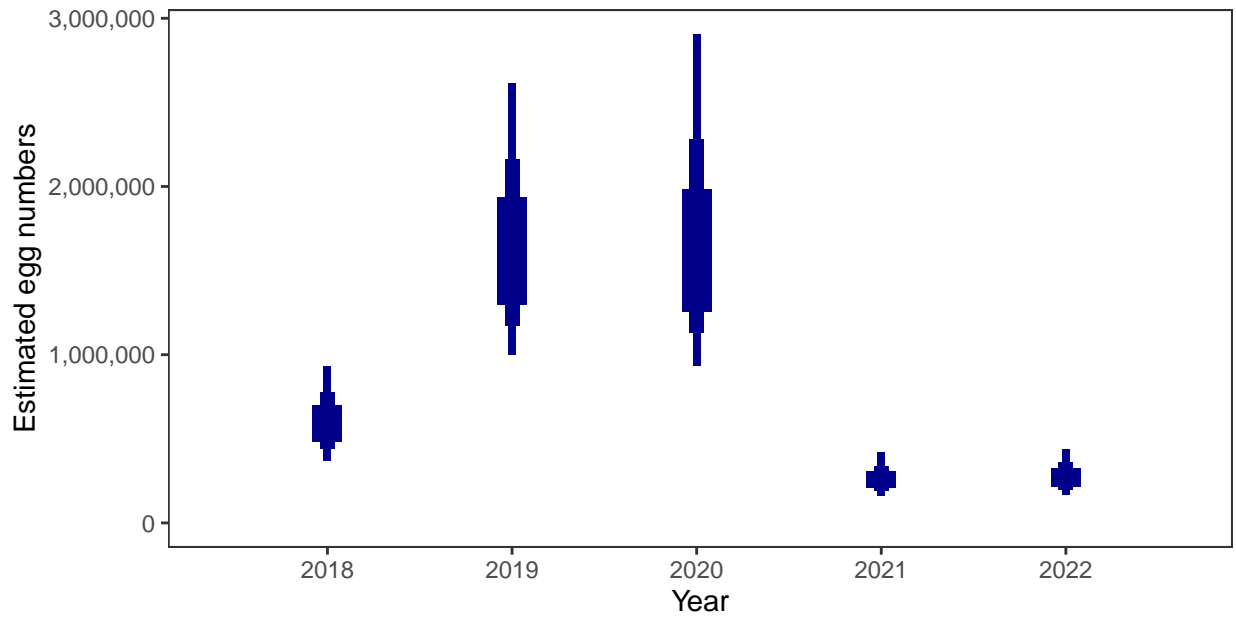*Egg contents of females*

Monthly number of eggs

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

Total annual egg numbers

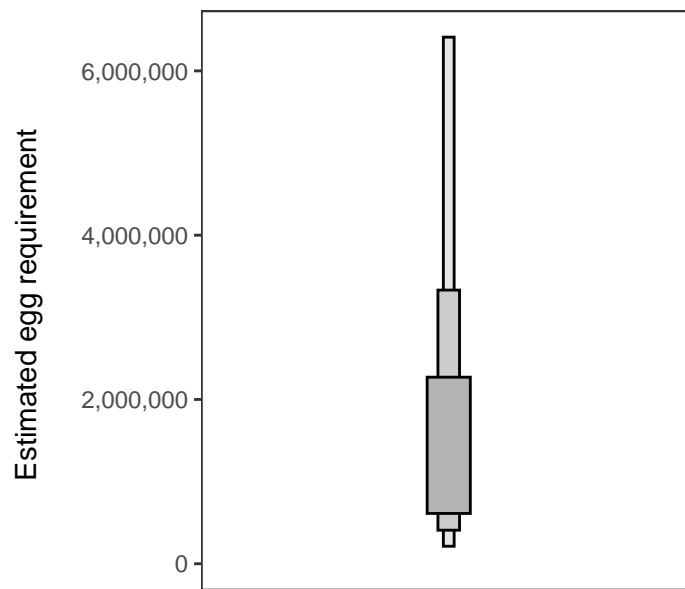Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	24.54
2019	61.71
2020	62.06
2021	7.70
2022	8.05

4. Egg requirement

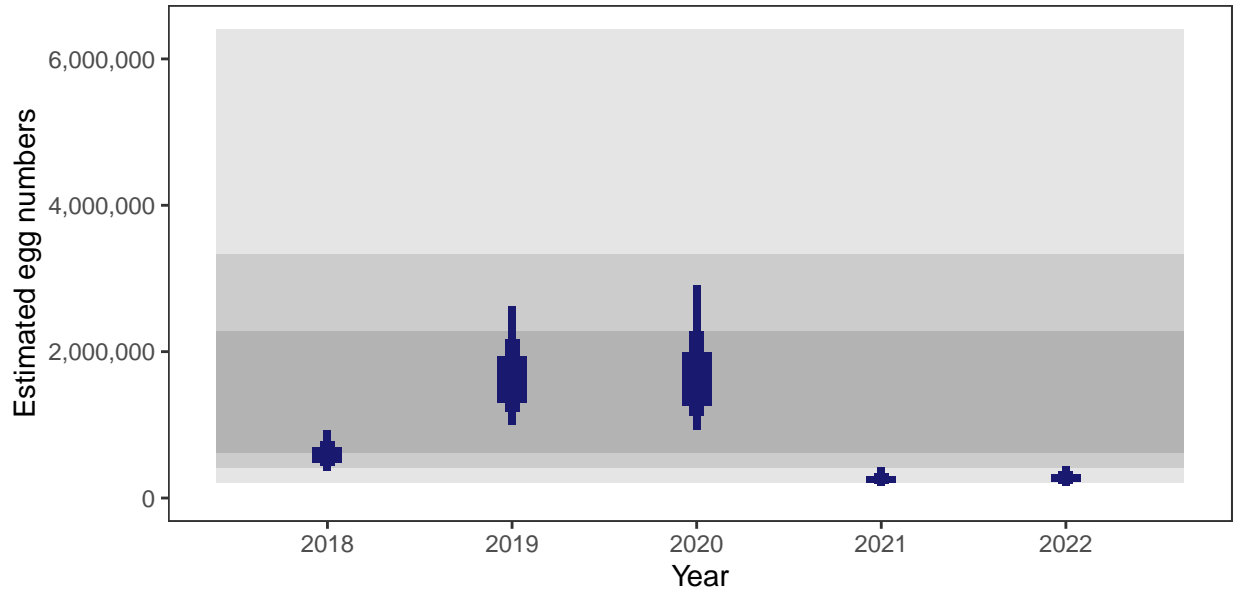*Areas of salmon habitat in square meters*

There is an estimated 689,934 square meters of known salmon habitat in the River Lossie and a further 91,099 square meters where salmon may be present.
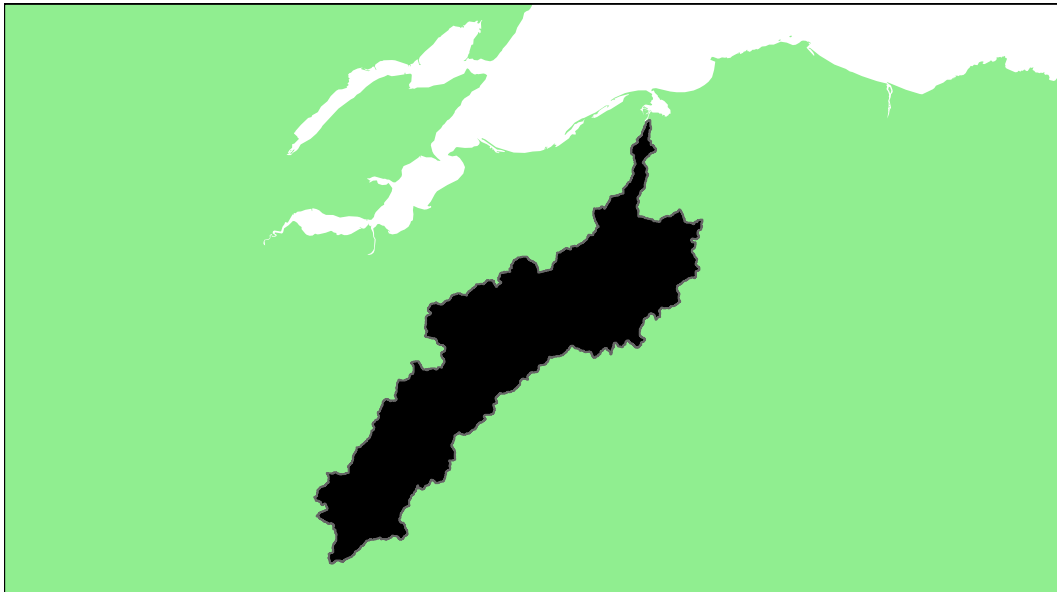
Egg requirement

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

5. Percentage chance that the egg requirement has been reached

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)
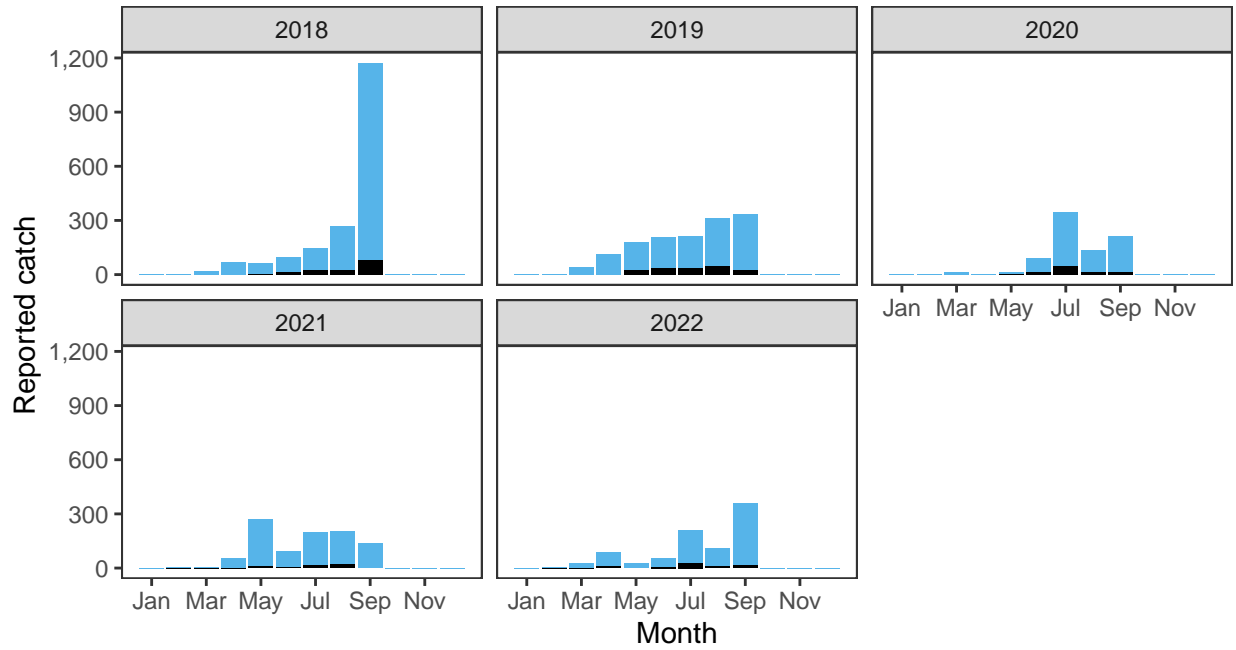
River Findhorn: Grade 1

Summary Table

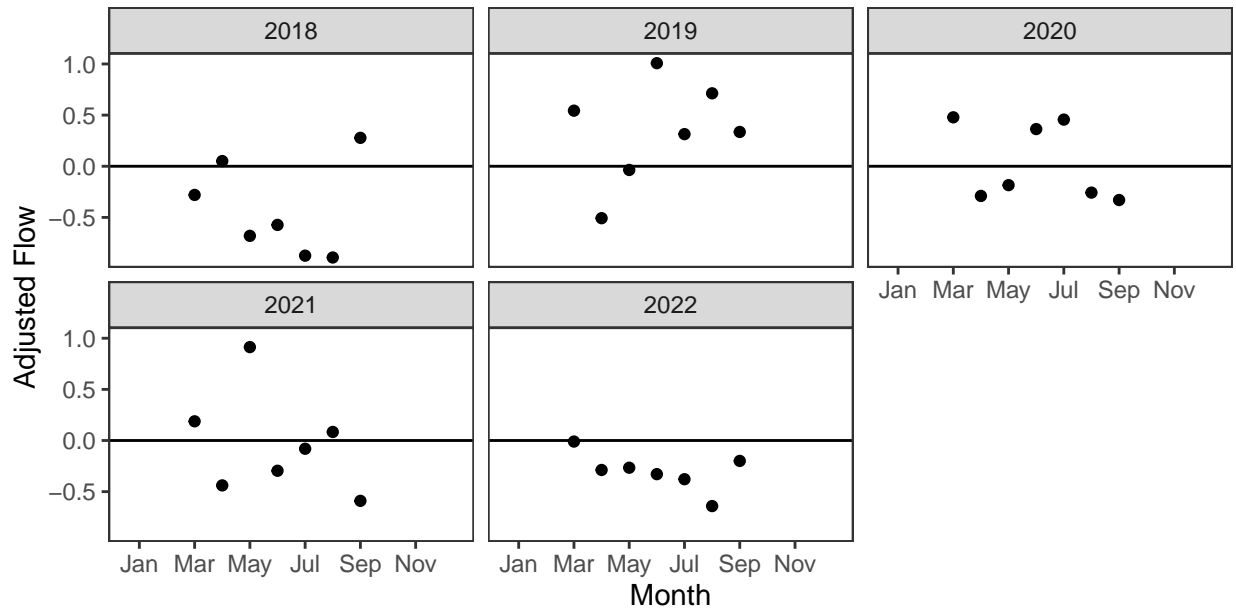| Eggs required (m²)[a] | Area (m²)[a] | Total egg requirement[a] | Percentage chance meeting requirement | | | | | | Grade |
			2018	2019	2020	2021	2022	Overall	
2.78	3,251,000	9,036,000	94.42	91.37	91.84	88.03	84.26	0.89984	1

[a] Figures presented are median values

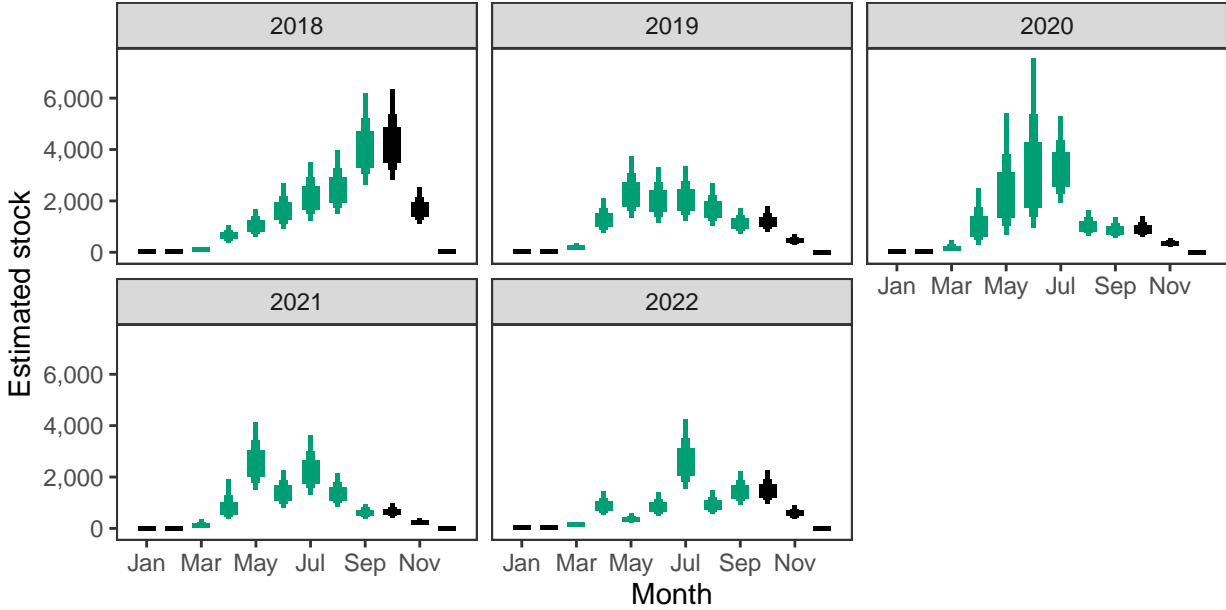# 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black = retained, blue = released)
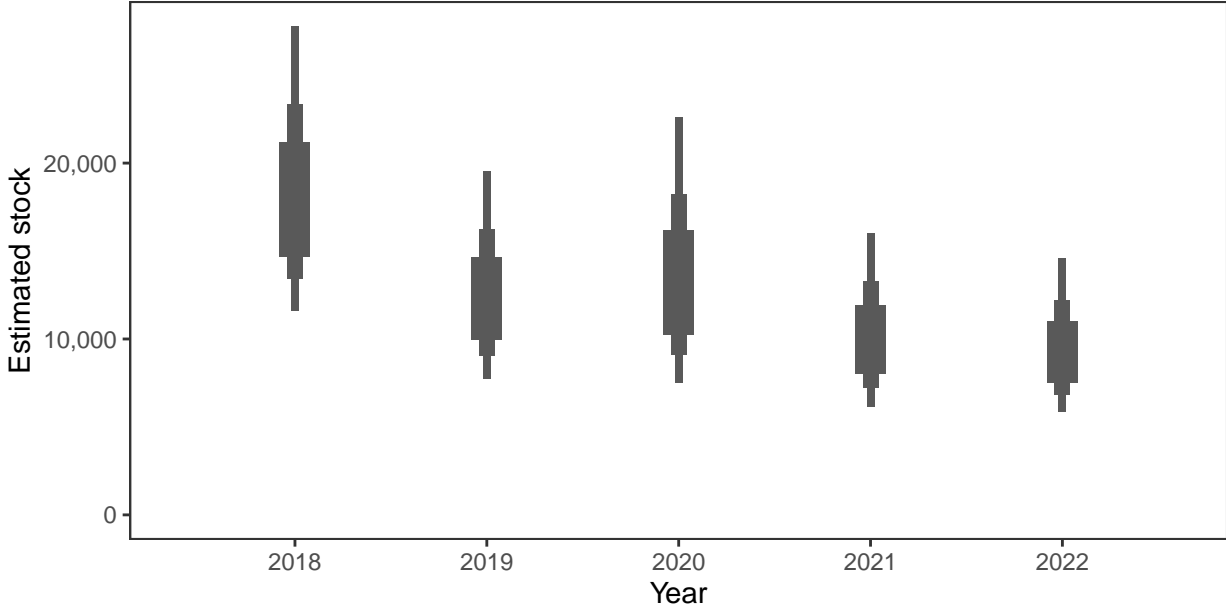

Monthly flow data

Monthly stock estimates (out of season in black)
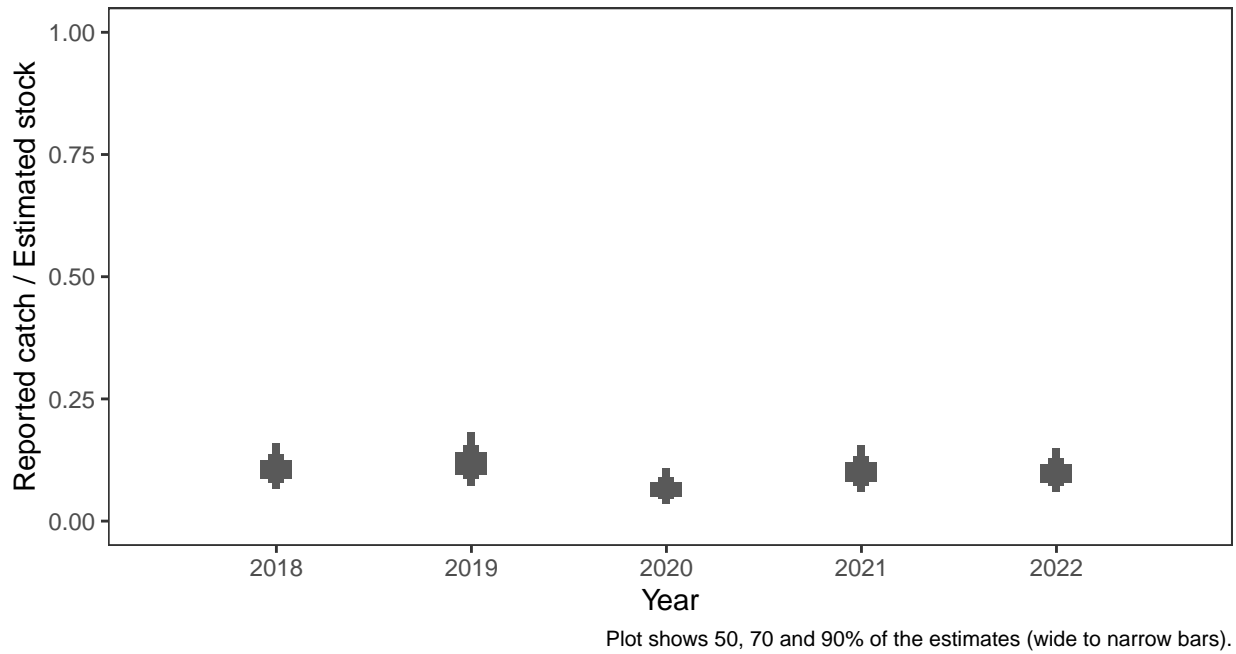

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).
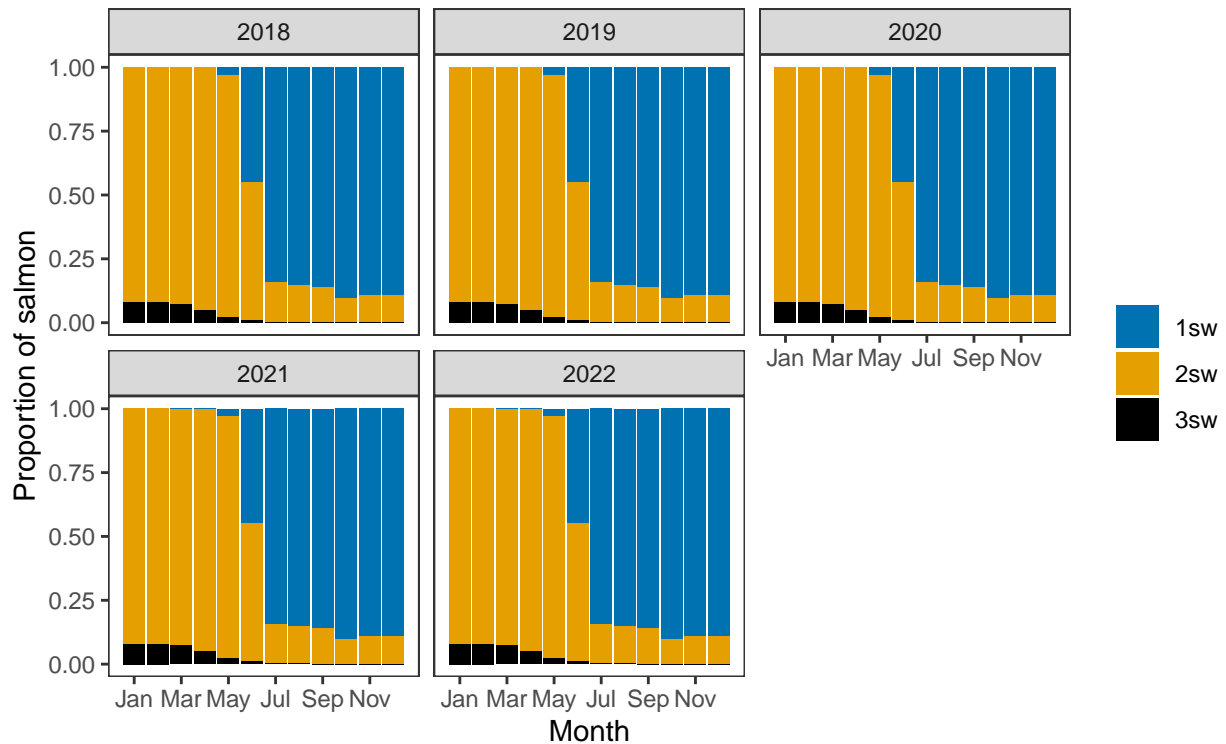
Annual estimated stock

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).
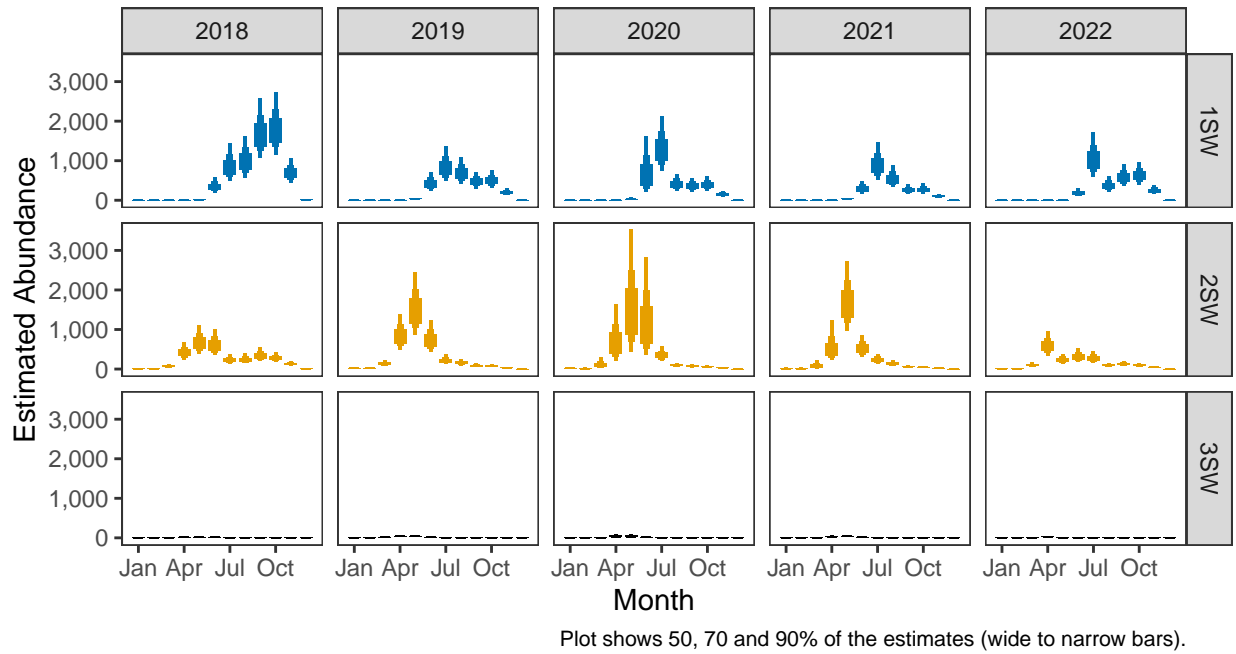
Annual catch as a proportion of stock

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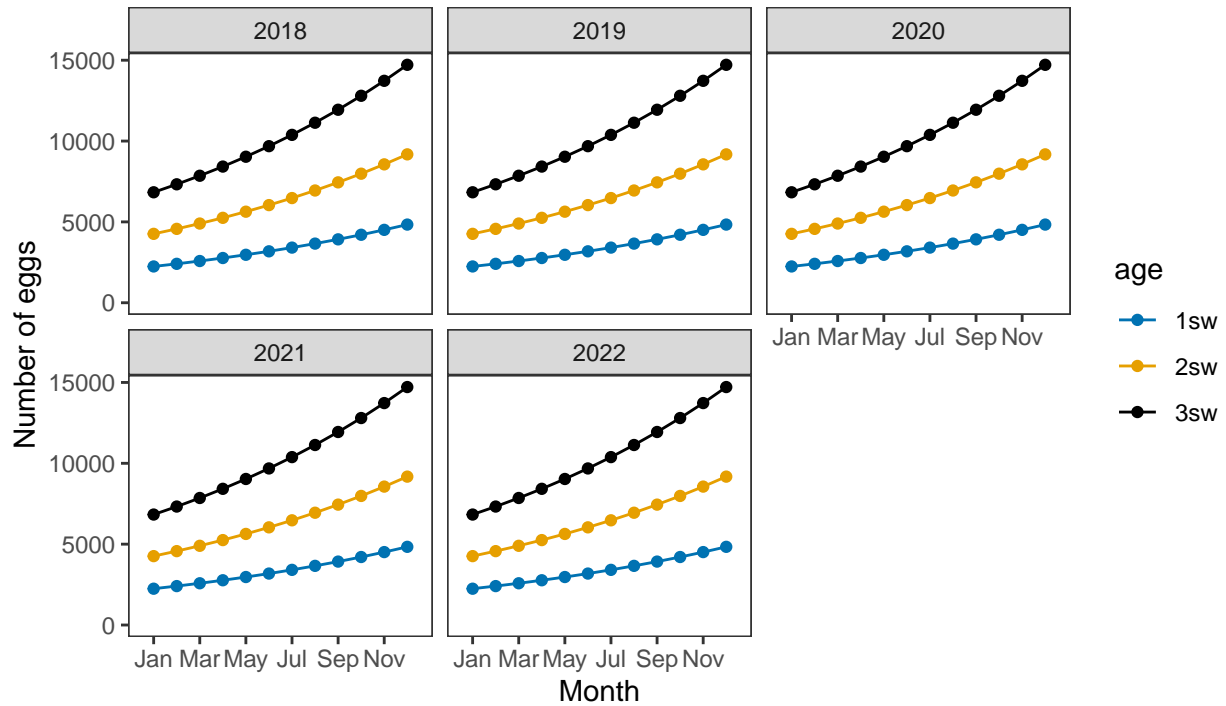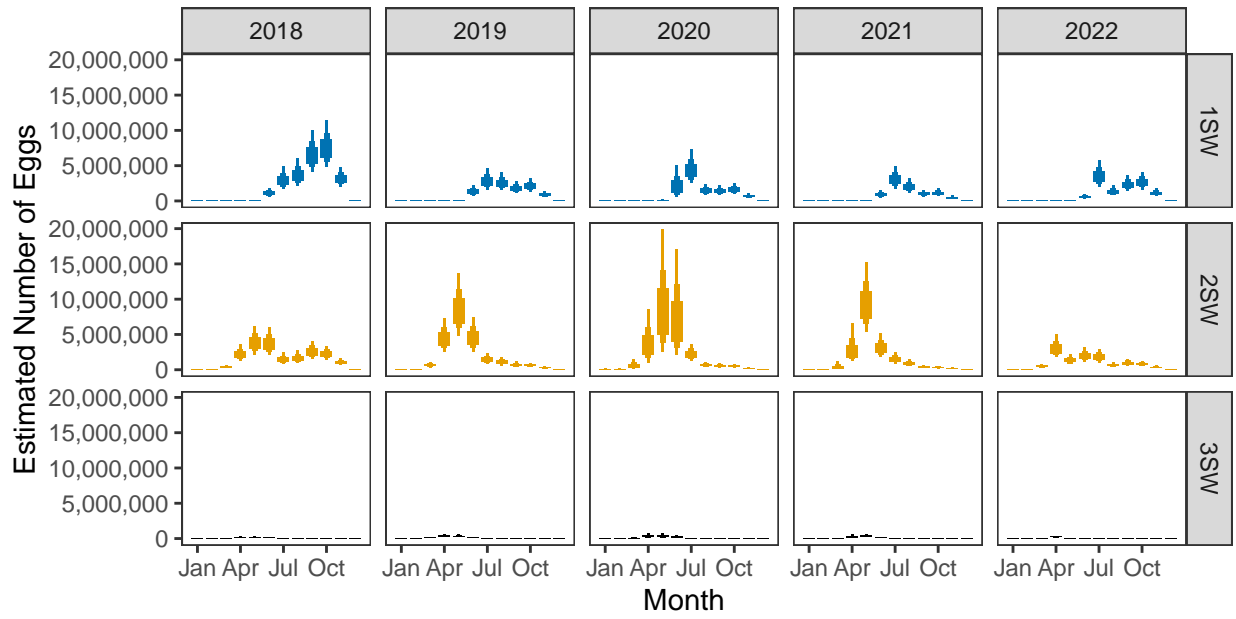
3. Converting Number of Spawners to Number of Eggs

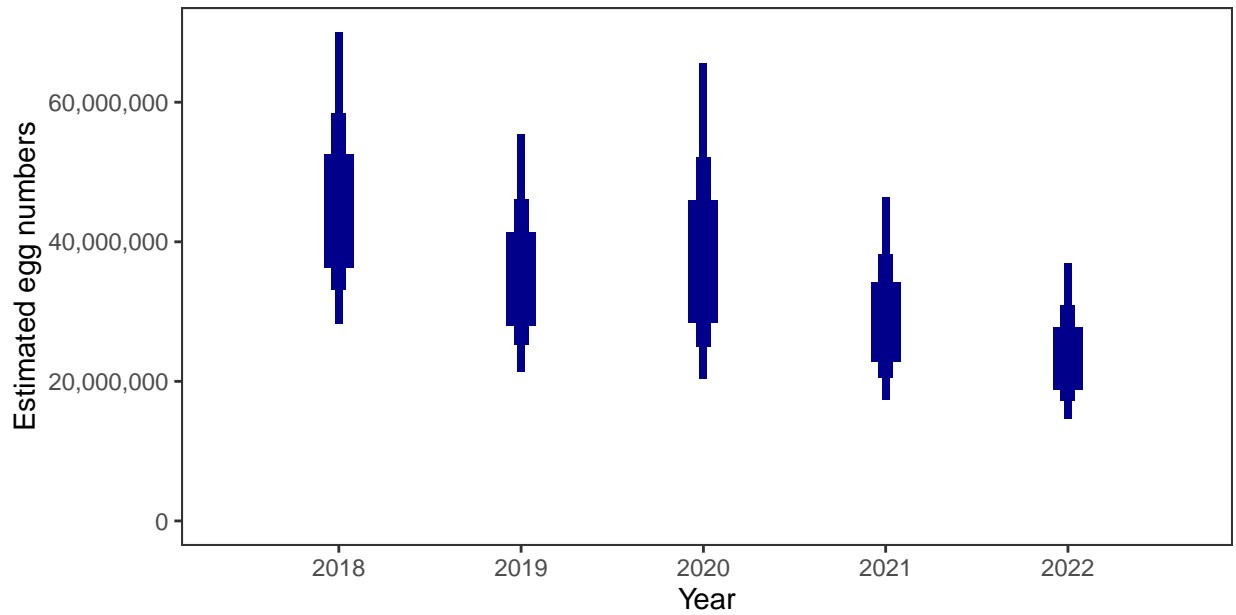*Egg contents of females*

Monthly number of eggs

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

Total annual egg numbers

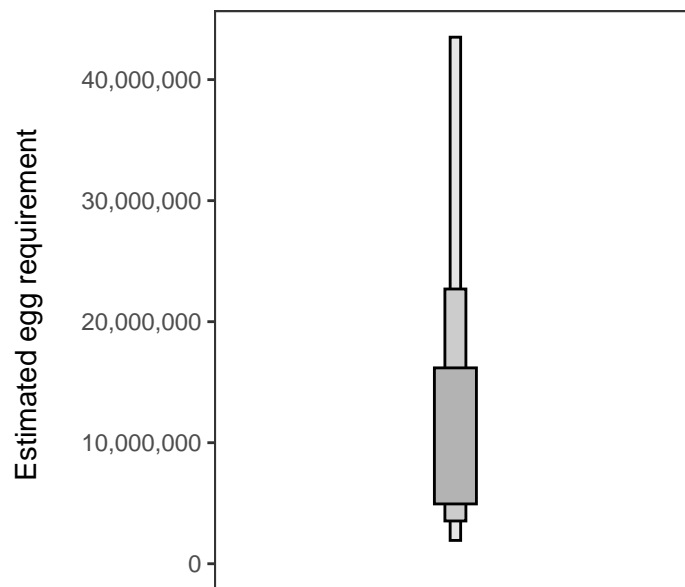Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	94.42
2019	91.37
2020	91.84
2021	88.03
2022	84.26

4. Egg requirement

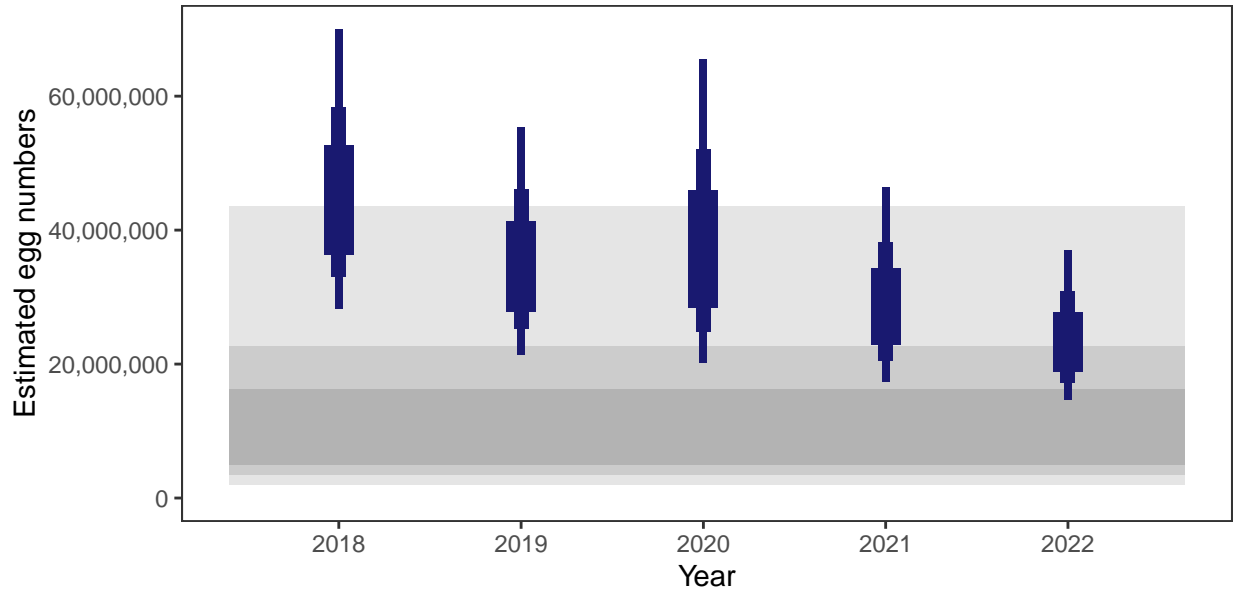### *Areas of salmon habitat in square meters*

There is an estimated 3,615,975 square meters of known salmon habitat in the River Findhorn and a further 160,510 square meters where salmon may be present.
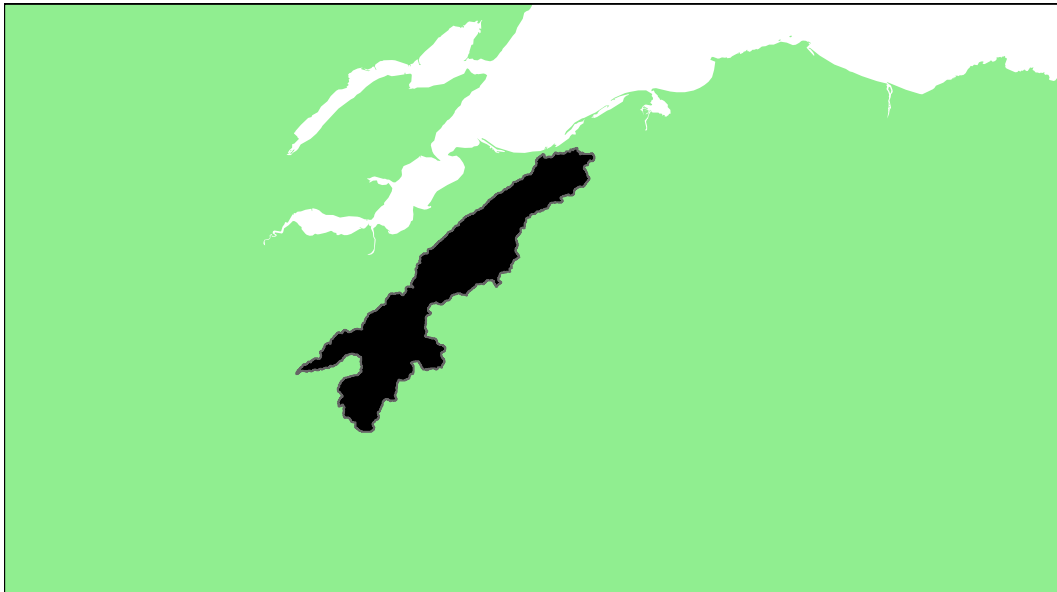
Egg requirement

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

5. Percentage chance that the egg requirement has been reached

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)
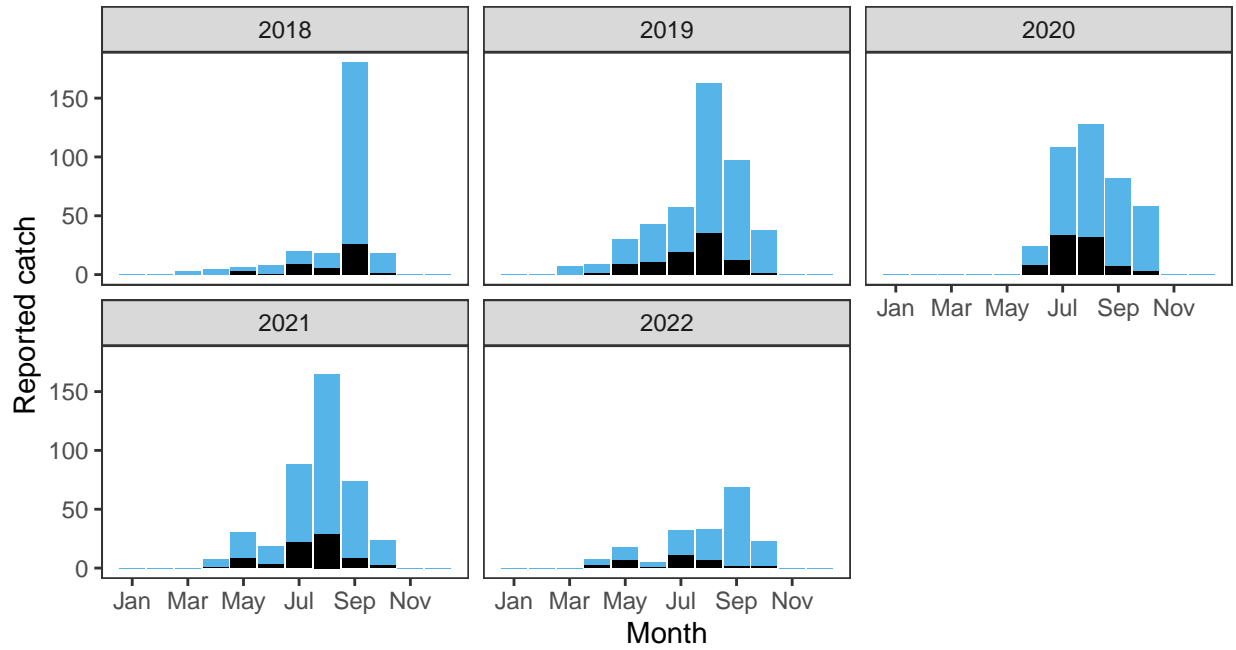
River Nairn: Grade 1

Summary Table

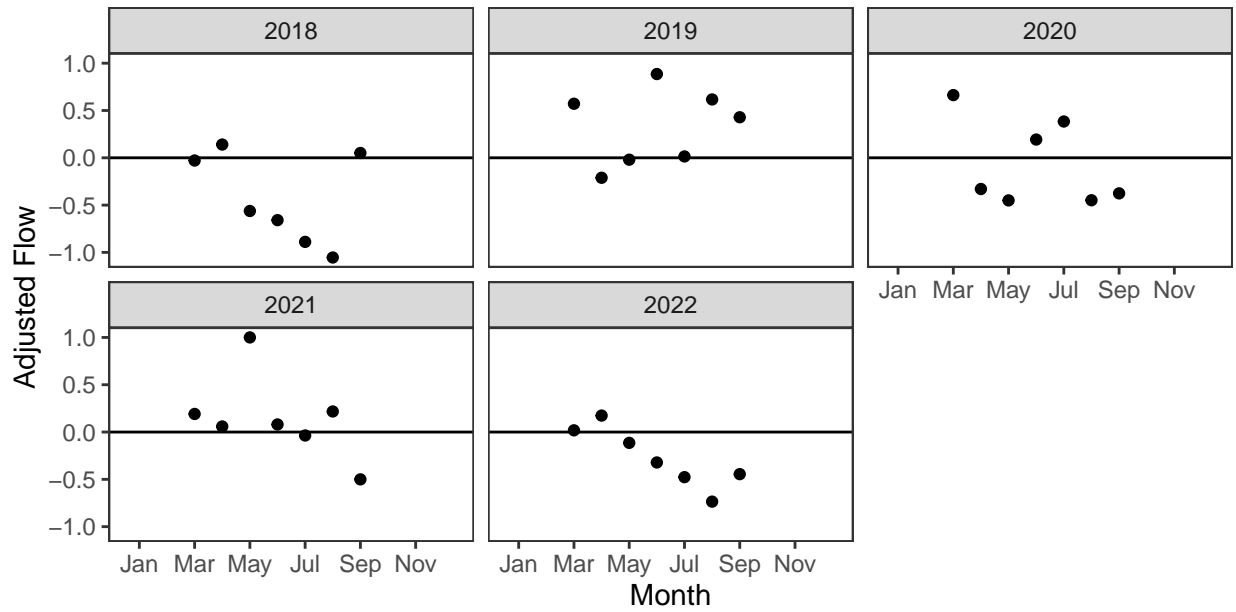| Eggs required (m²)[a]	Area (m²)[a]	Total egg requirement[a]	Percentage chance meeting requirement						Grade
			2018	2019	2020	2021	2022	Overall	
2.57	826,000	2,119,000	85.09	91.74	94.85	91.88	78.07	0.88326	1

[a] Figures presented are median values

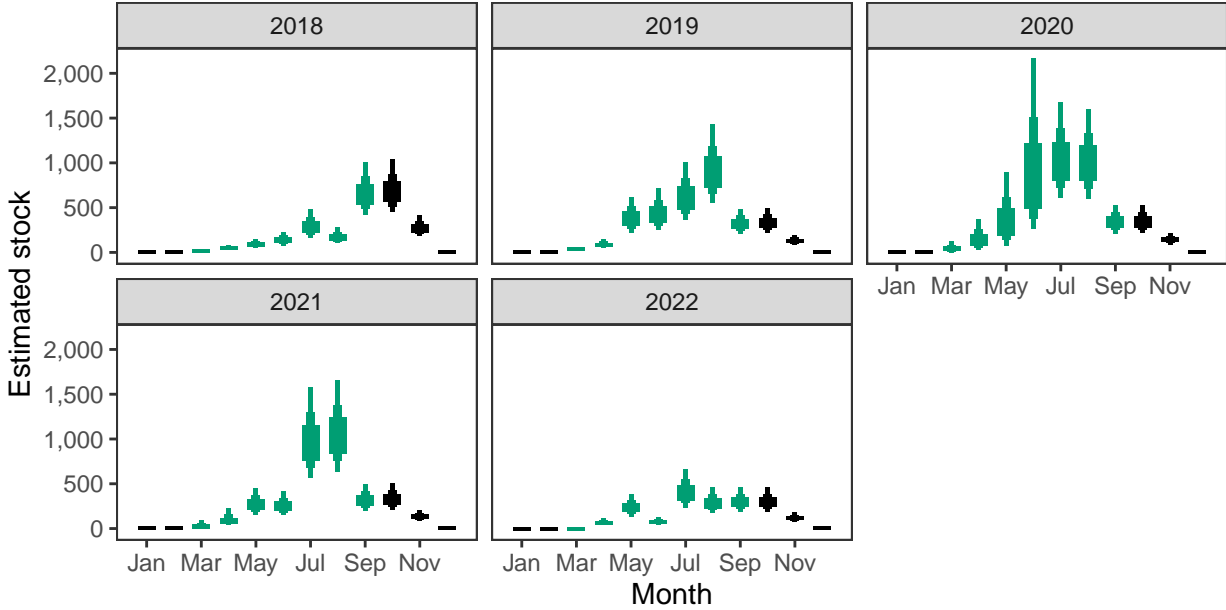# 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black = retained, blue = released)
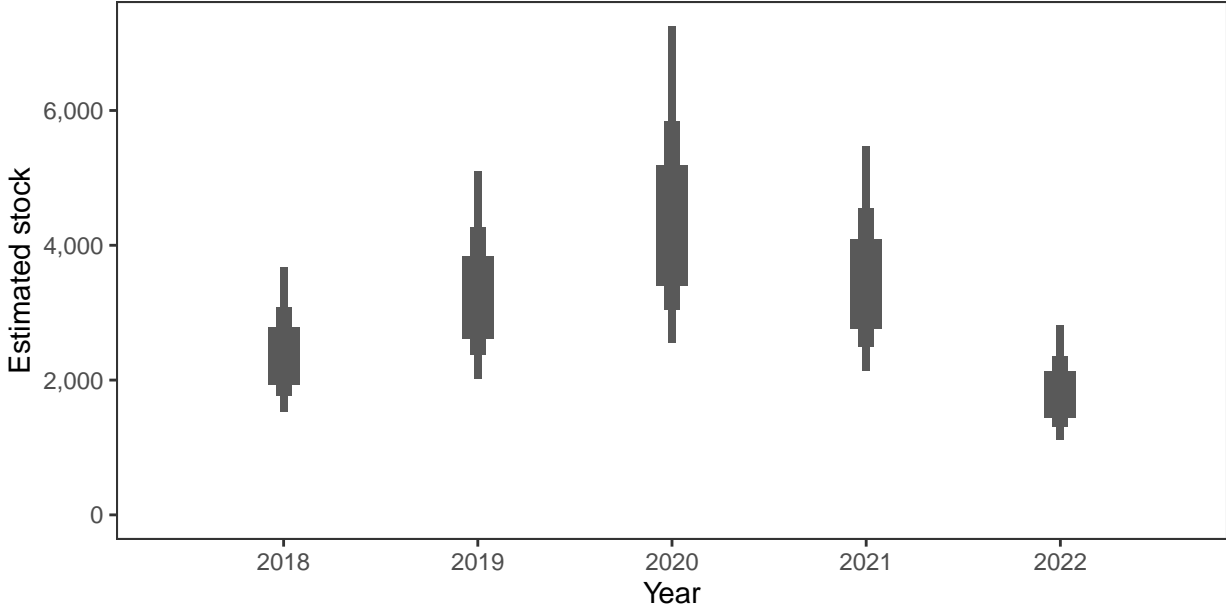

Monthly flow data

Monthly stock estimates (out of season in black)
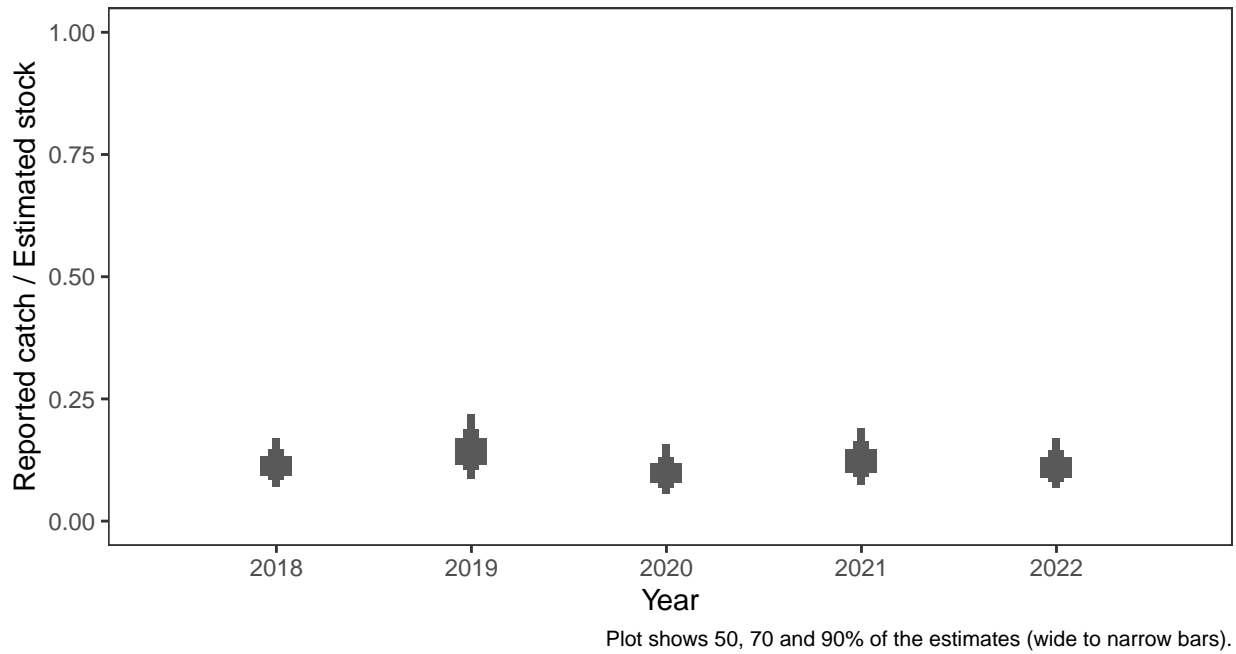

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).
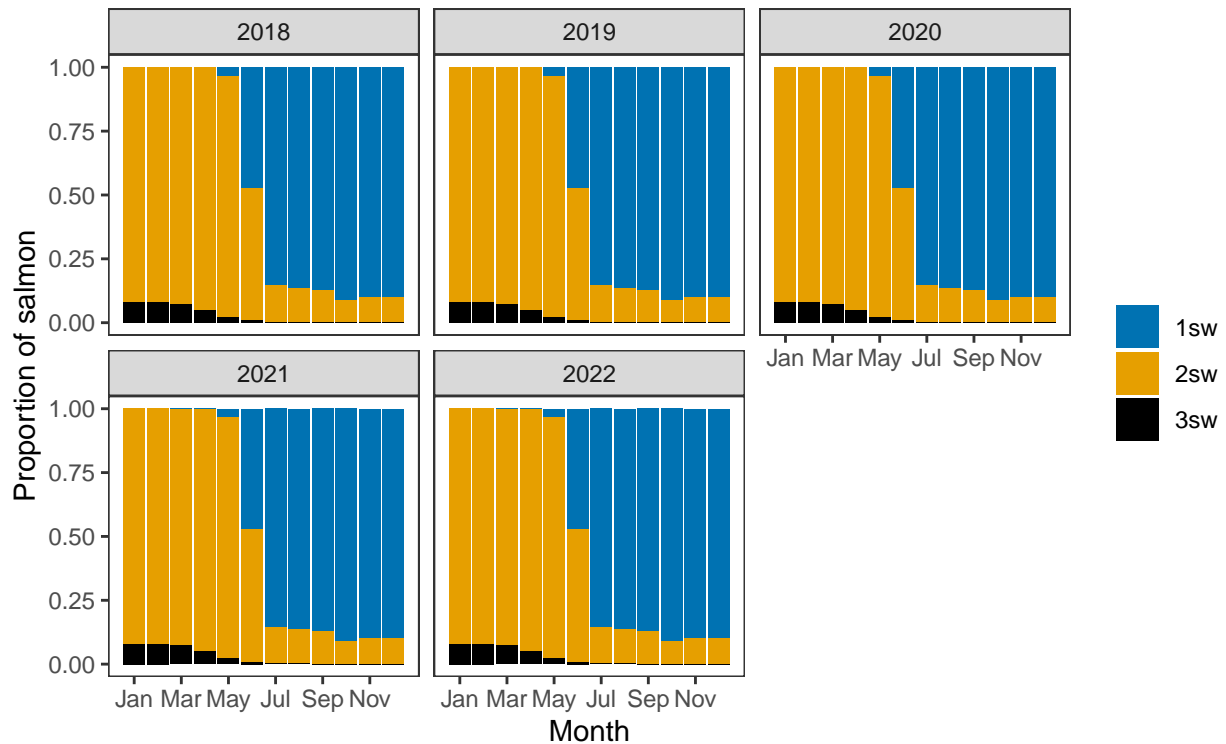
Annual estimated stock

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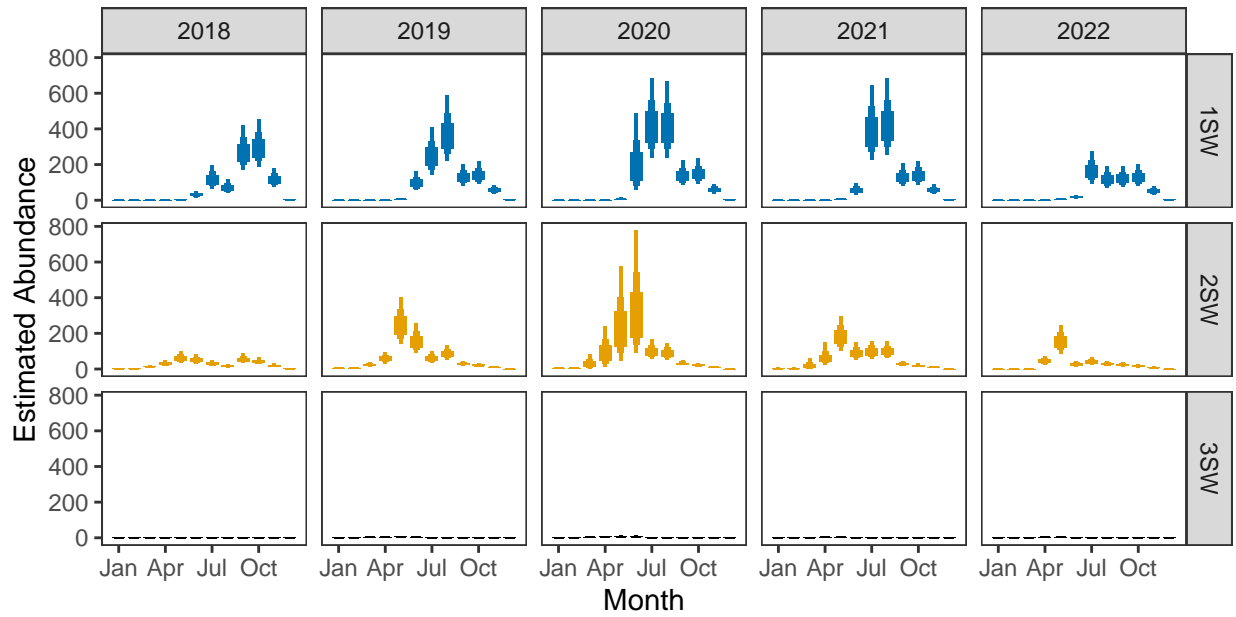
2. Converting Numbers of Returning Salmon to Numbers of Spawning Females
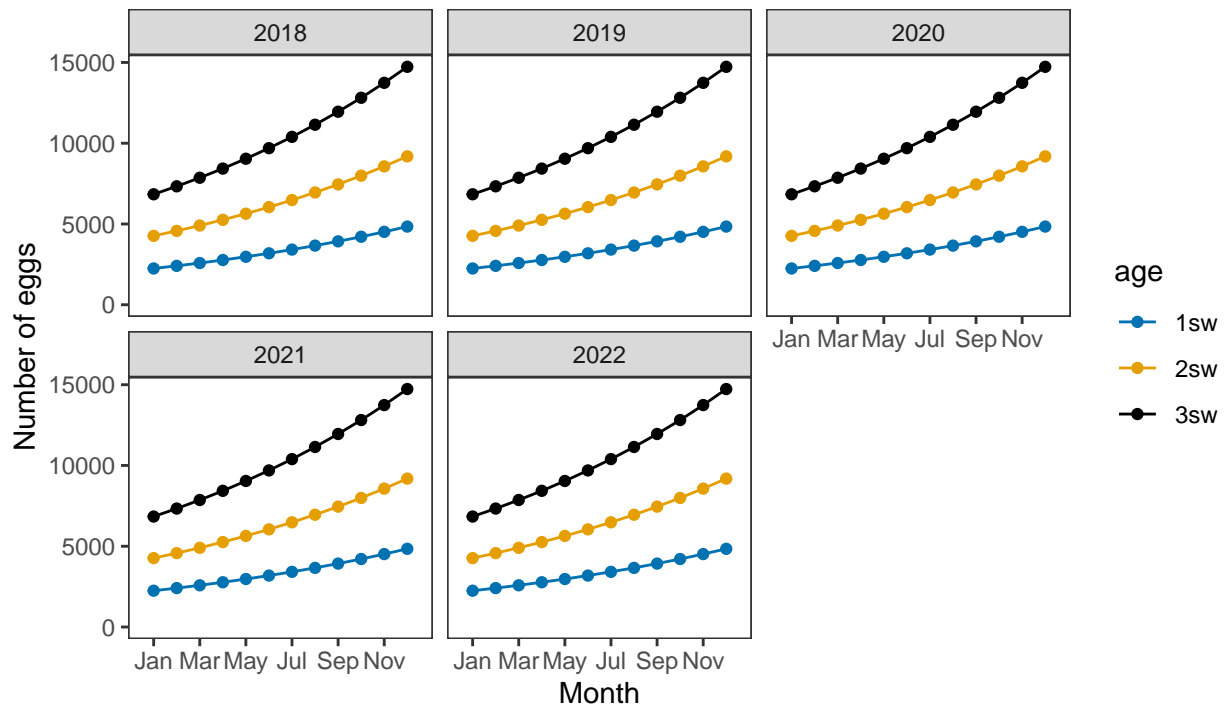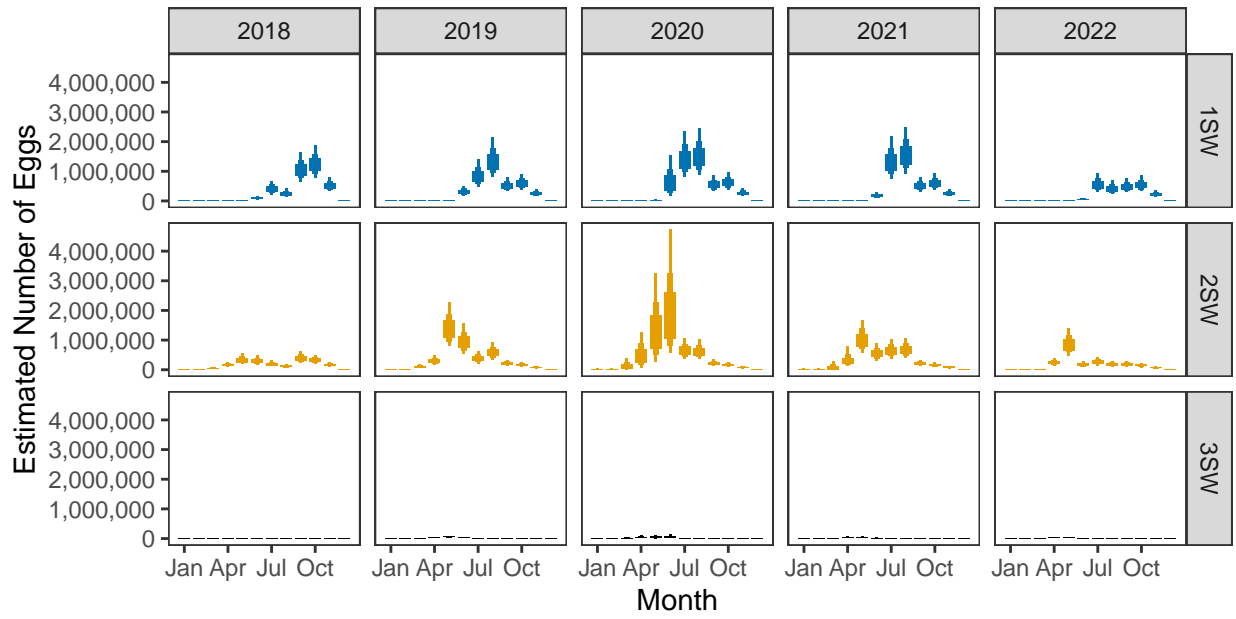
Ages of fish

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

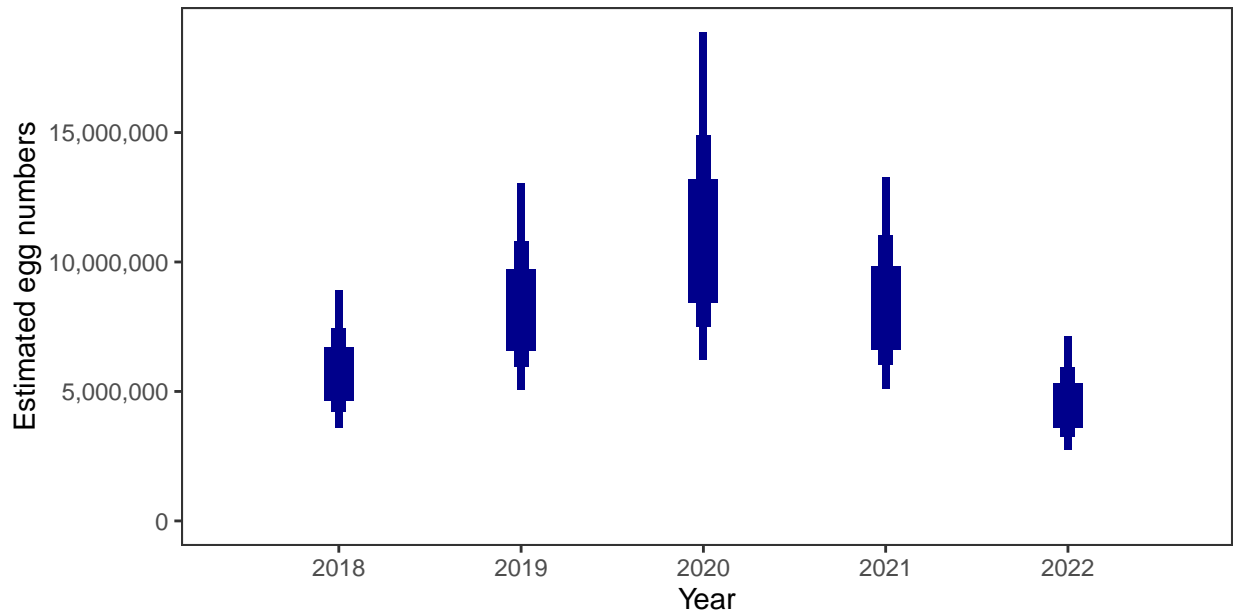*Egg contents of females*

Monthly number of eggs

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

Total annual egg numbers

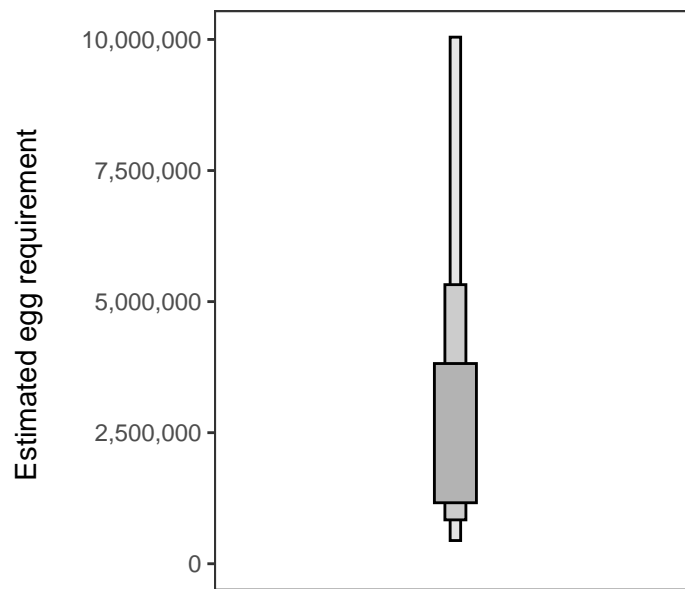Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	85.09
2019	91.74
2020	94.85
2021	91.88
2022	78.07

4. Egg requirement

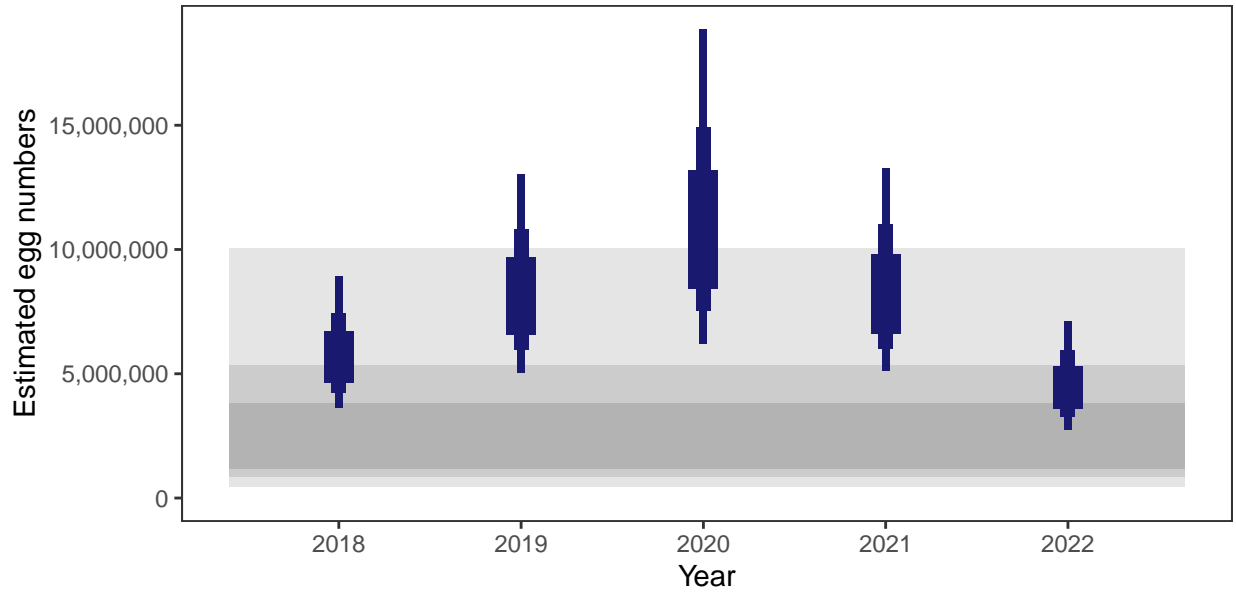### Areas of salmon habitat in square meters

There is an estimated 881,788 square meters of known salmon habitat in the River Nairn and a further 114,175 square meters where salmon may be present.
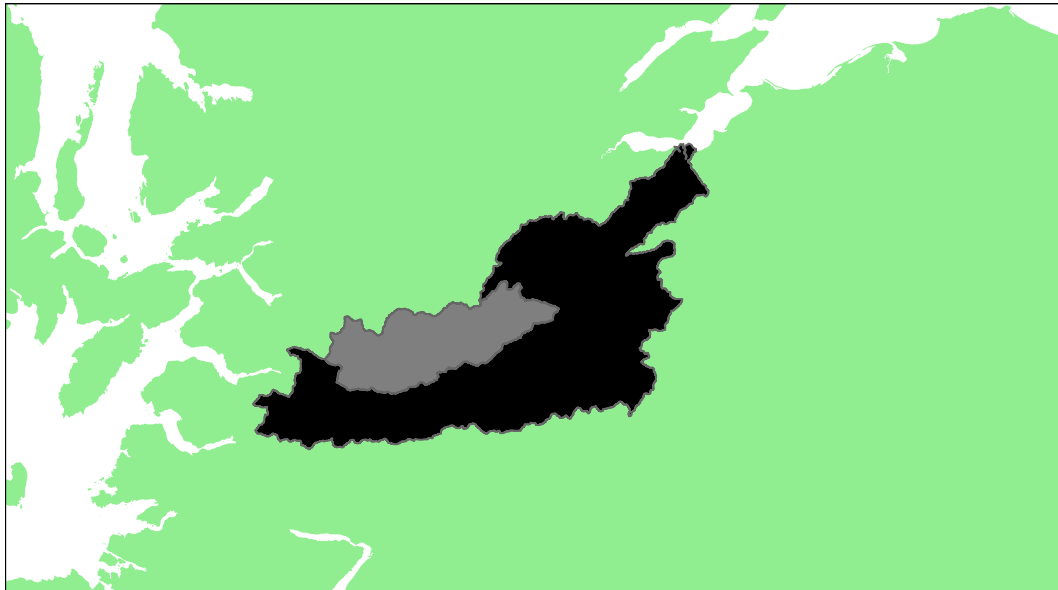
Egg requirement

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

5. Percentage chance that the egg requirement has been reached

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 Ness [non-SAC]: Grade 2

NOTE: assessment carried out using information from whole catchment but grading applies only to non-SAC area (shaded black). SAC (shaded grey) graded separately
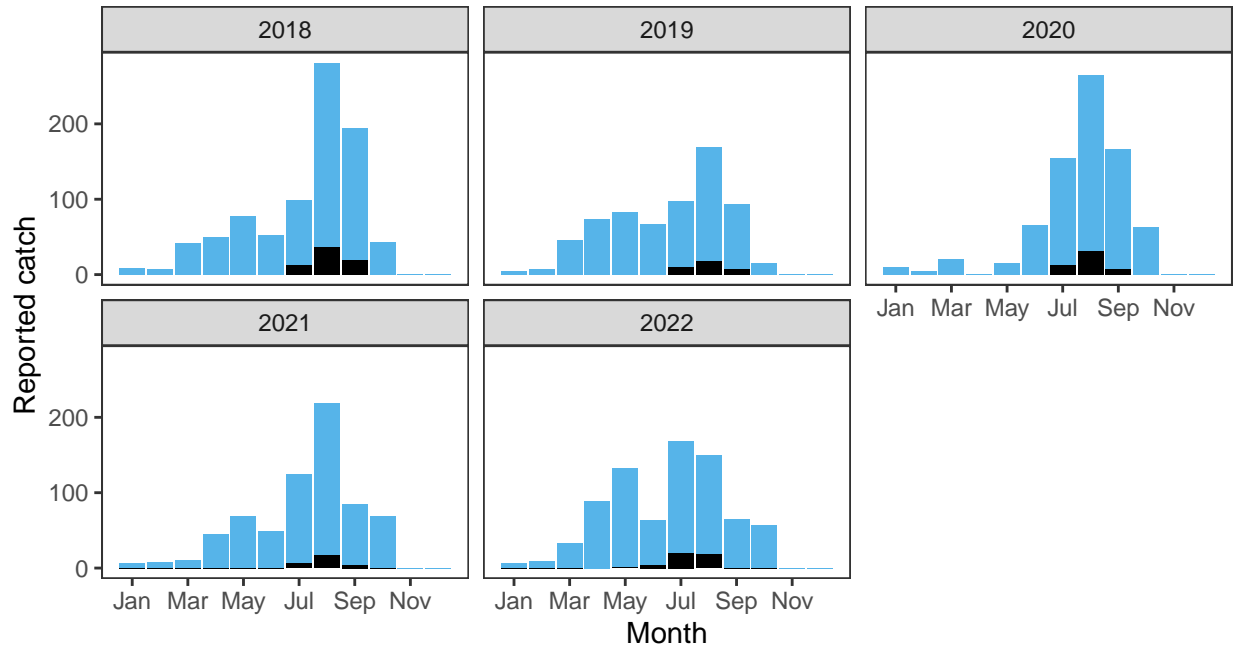
Summary Table

Eggs required (m²)ᵃ	Area (m²)ᵃ	Total egg requirementᵃ	Percentage chance meeting requirement						Grade
			2018	2019	2020	2021	2022	Overall	
2.5	2,815,000	7,049,000	86.21	82.98	90.09	82.36	86.85	0.85698	2

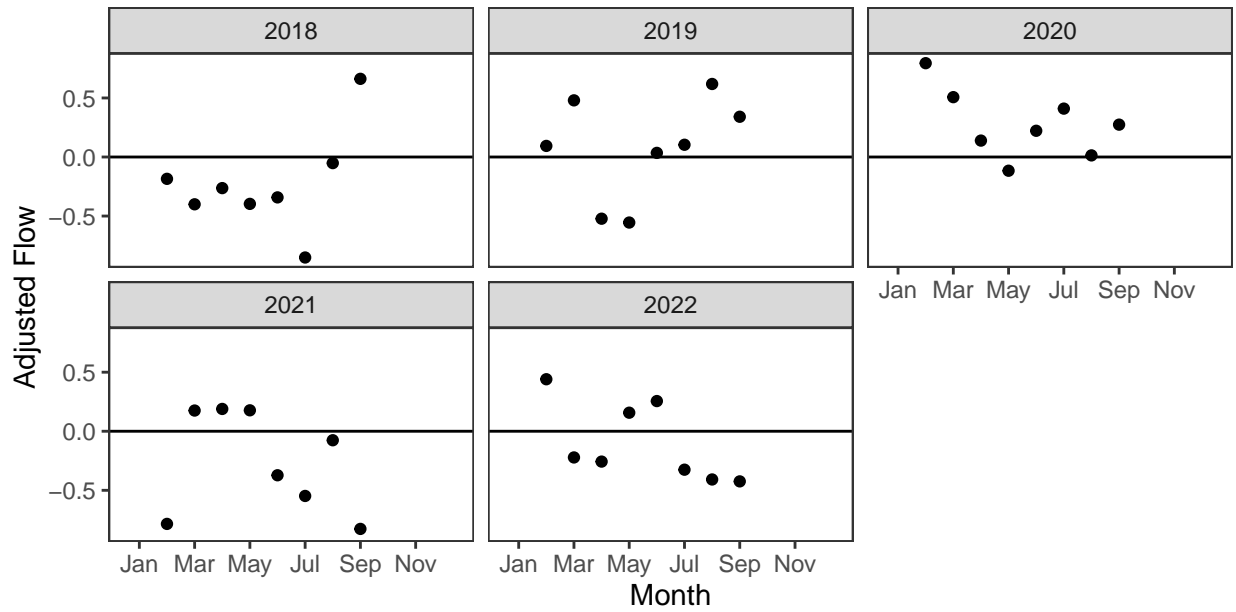ᵃ Figures presented are median values

Grade 2 due to the presence of the River Moriston SAC

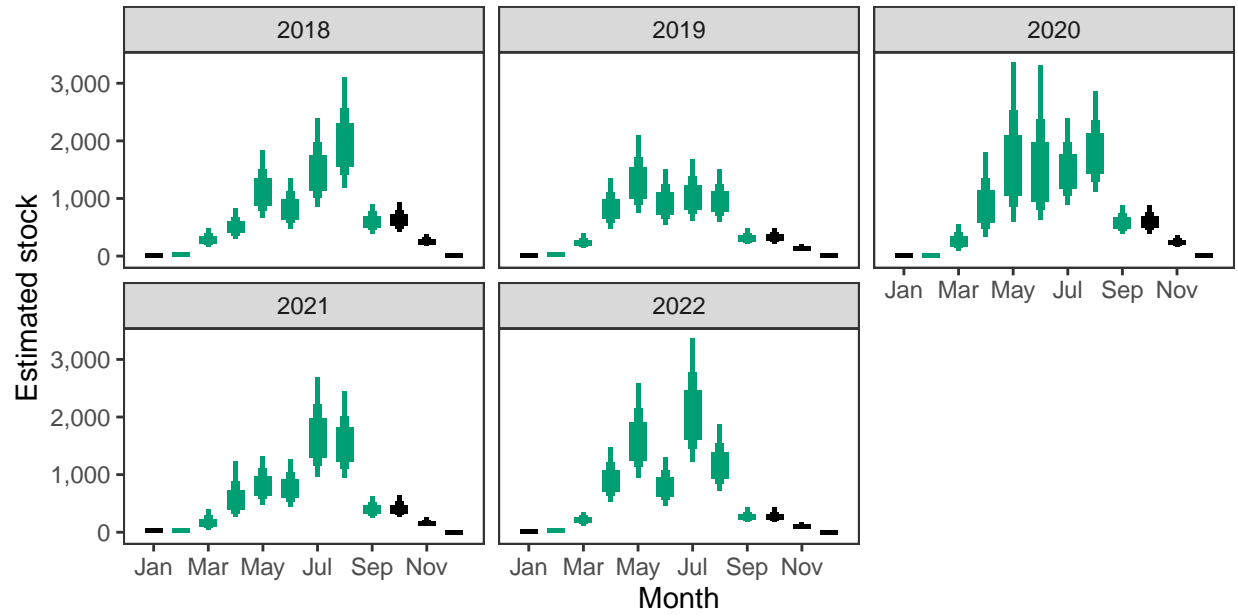# 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black = retained, blue = released)
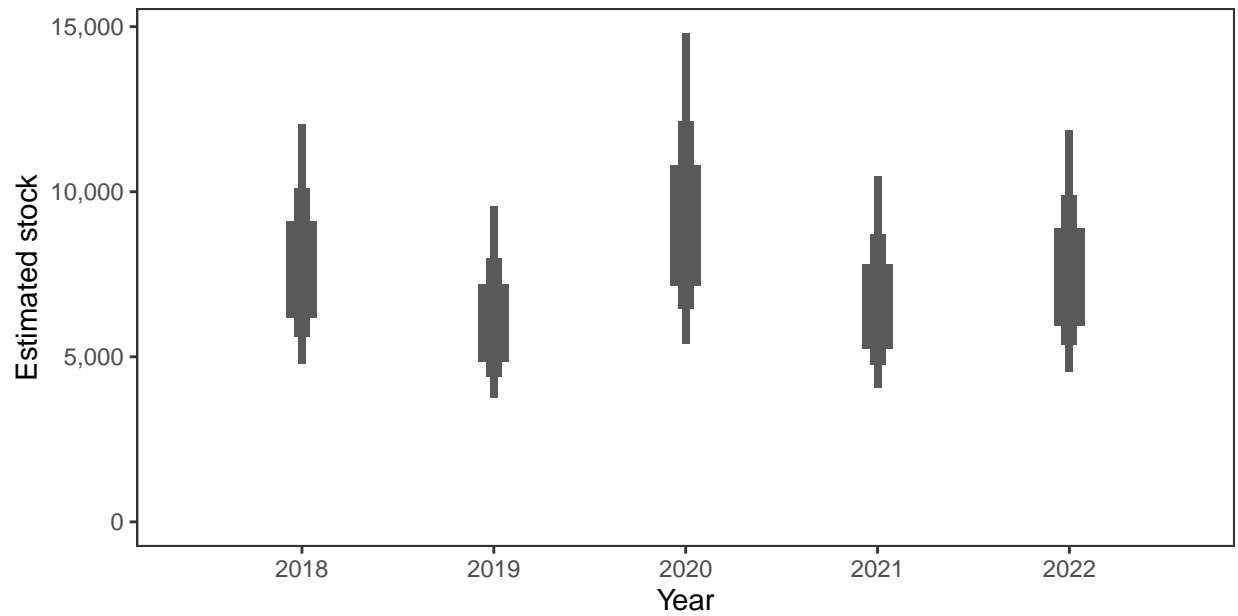

Monthly flow data

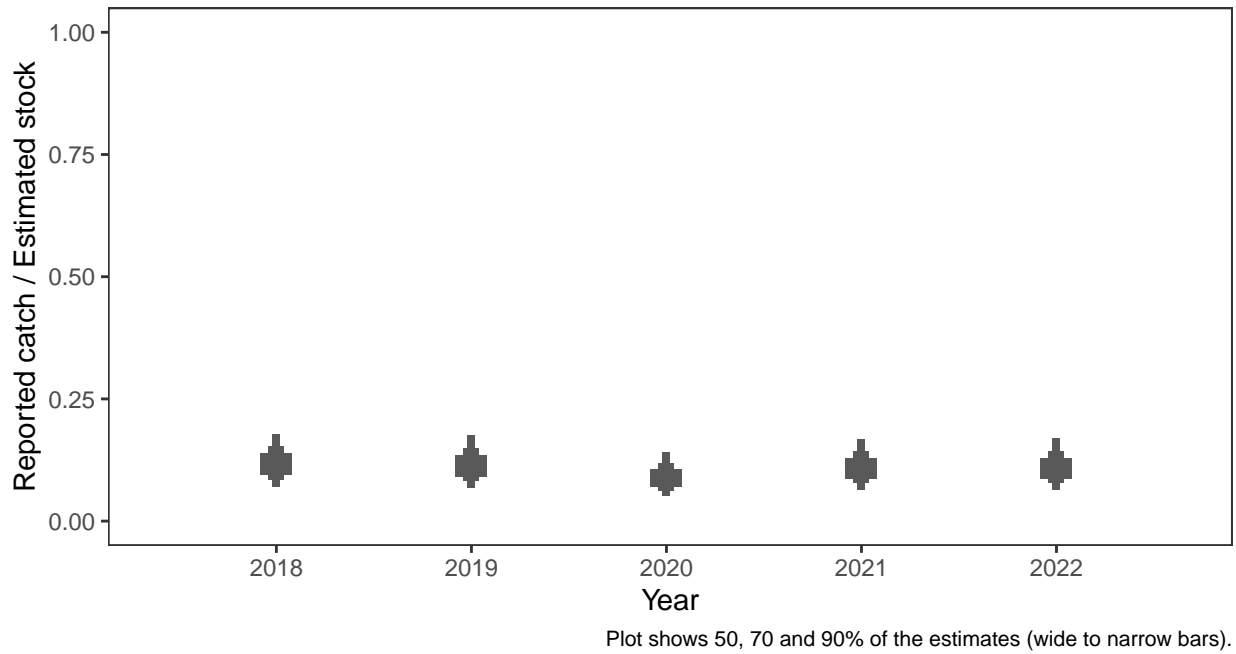*Monthly stock estimates (out of season in black)*

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).
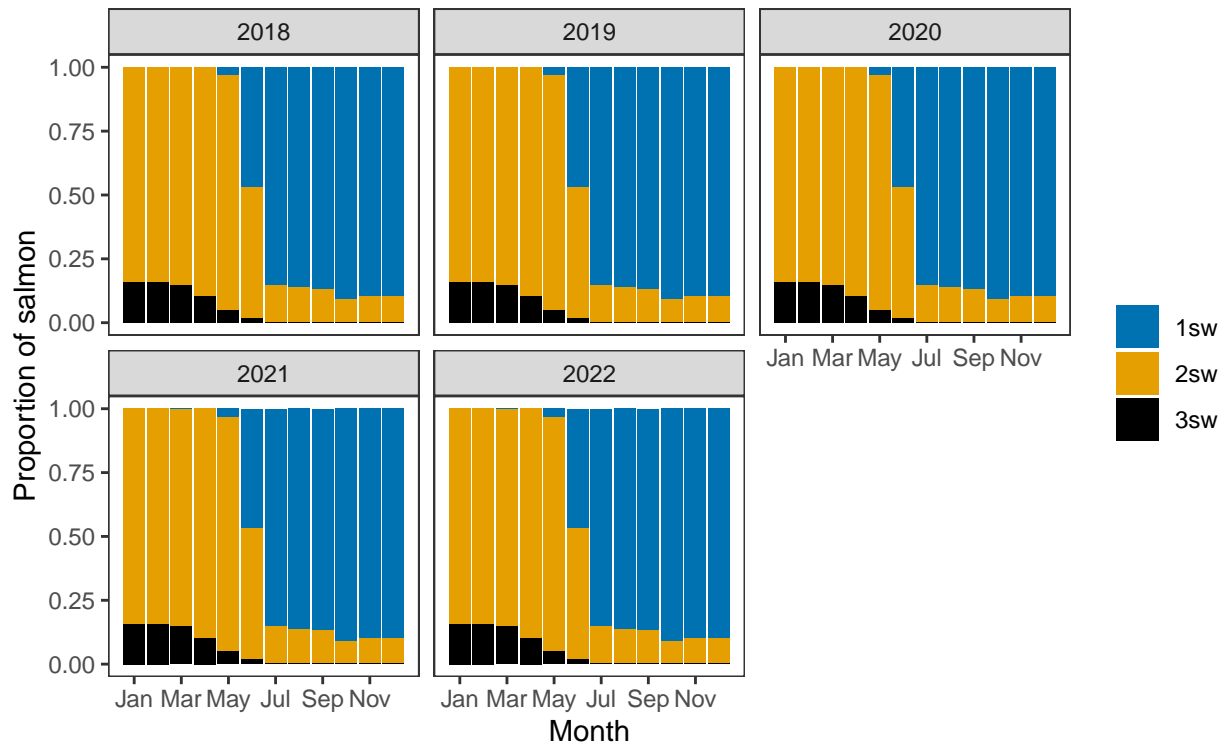
Annual estimated stock

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).
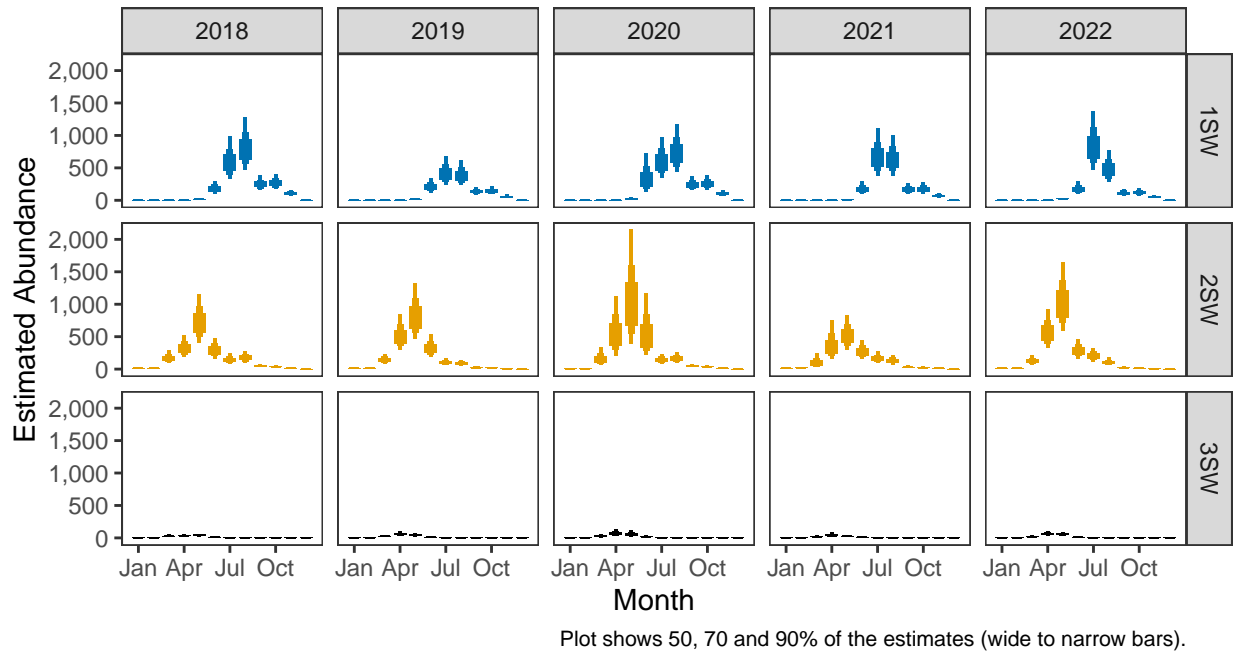
Annual catch as a proportion of stock

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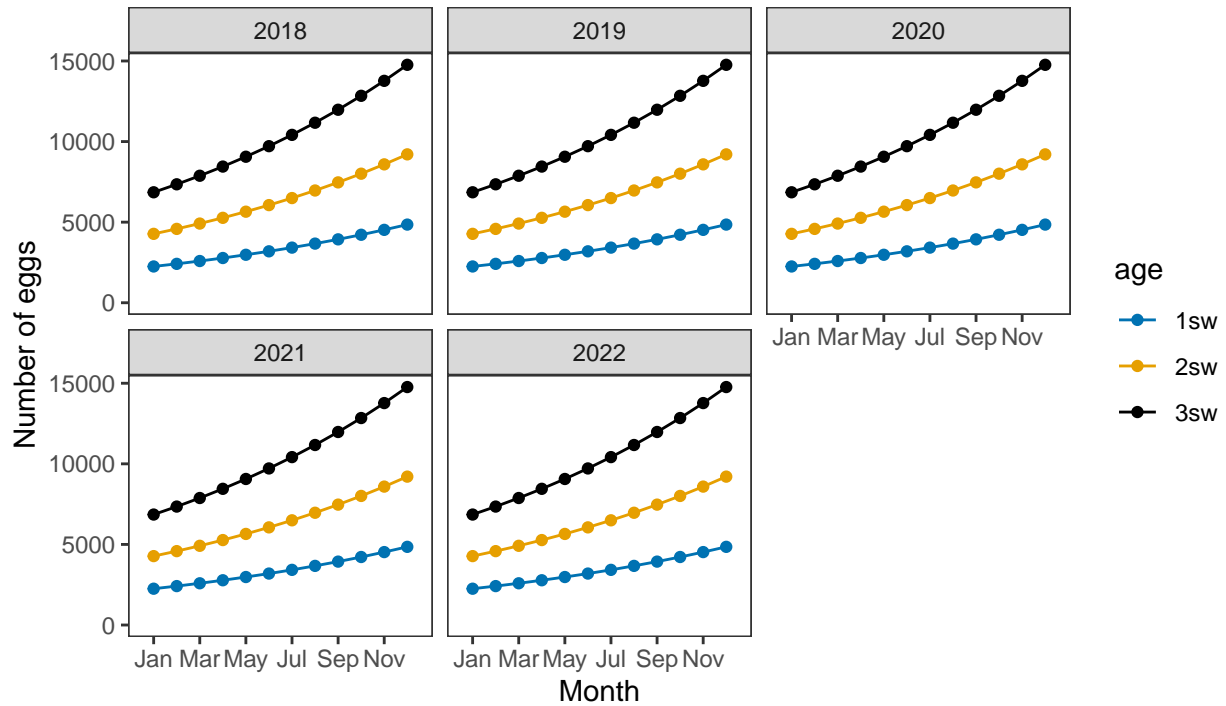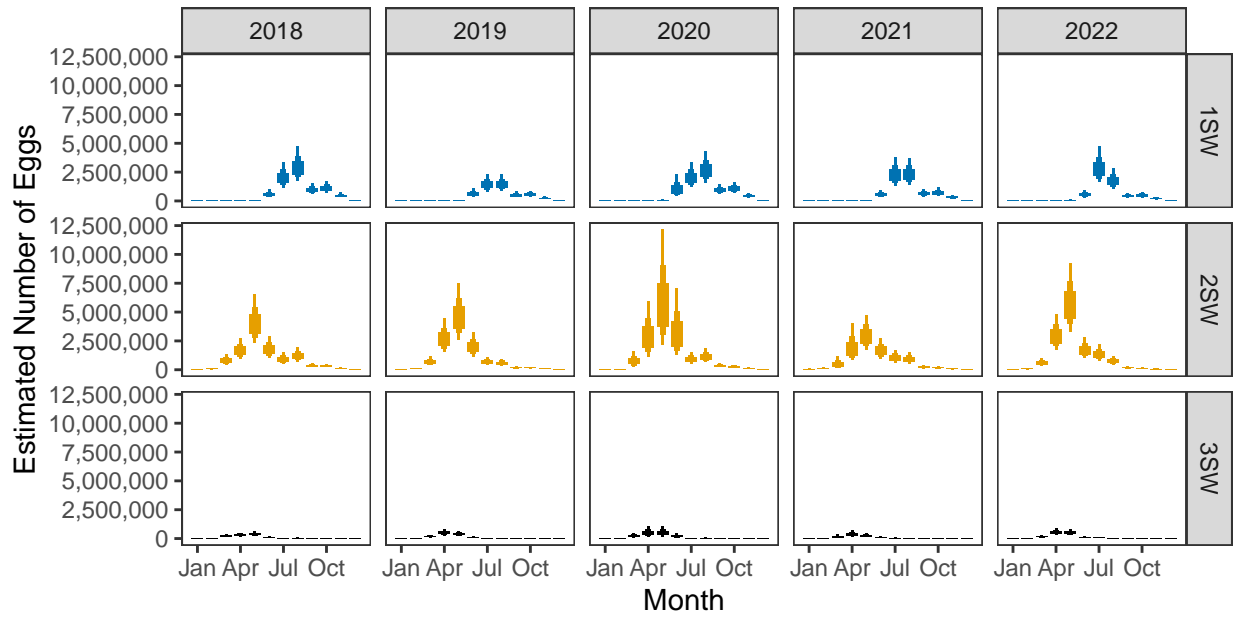
3. Converting Number of Spawners to Number of Eggs

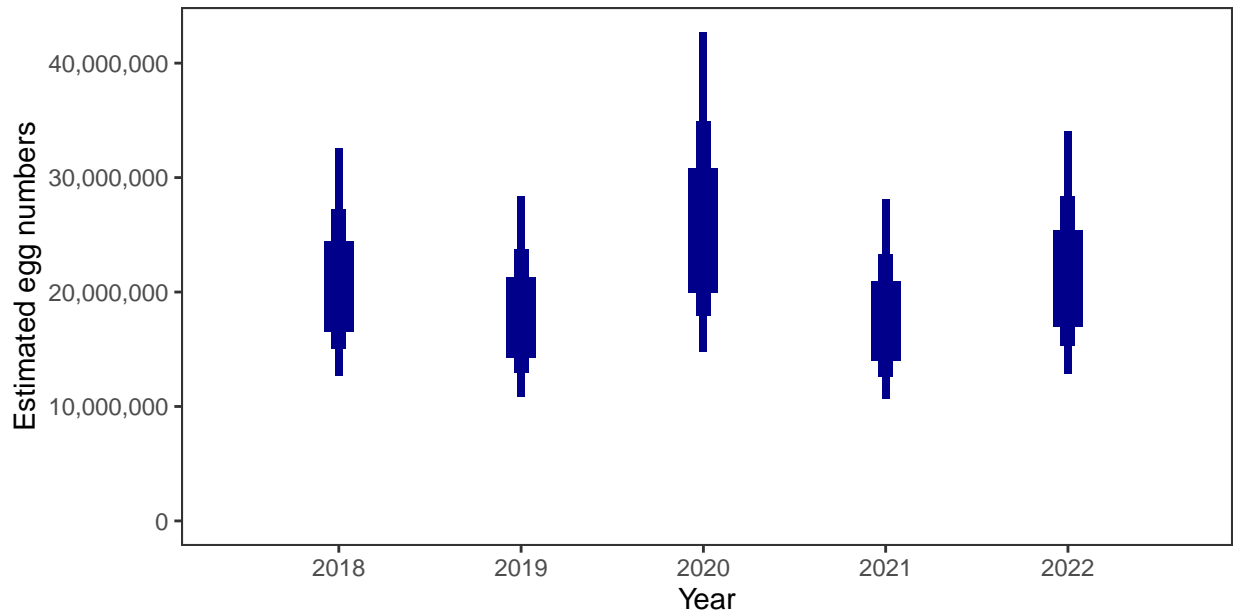*Egg contents of females*

Monthly number of eggs

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

Total annual egg numbers

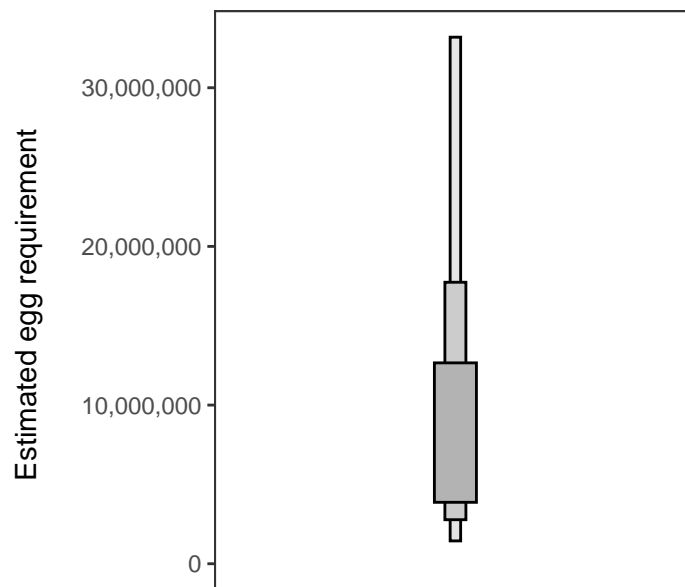Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	86.21
2019	82.98
2020	90.09
2021	82.36
2022	86.85

4. Egg requirement

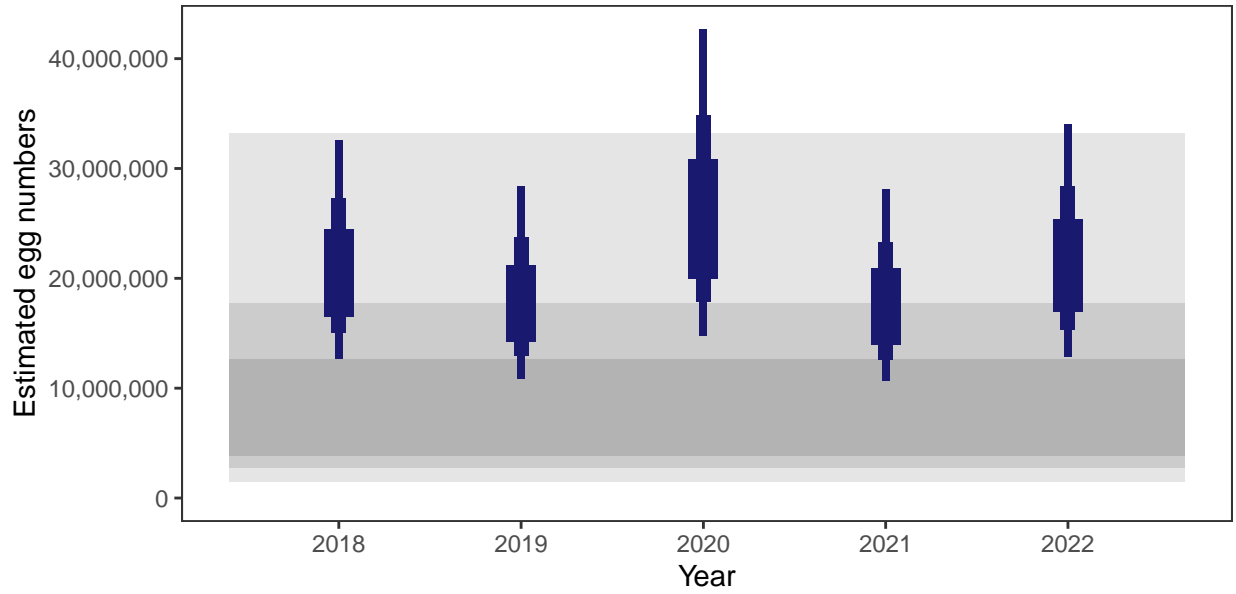### *Areas of salmon habitat in square meters*

There is an estimated 3,026,057 square meters of known salmon habitat in the River Ness and a further 346,180 square meters where salmon may be present.

Egg requirement

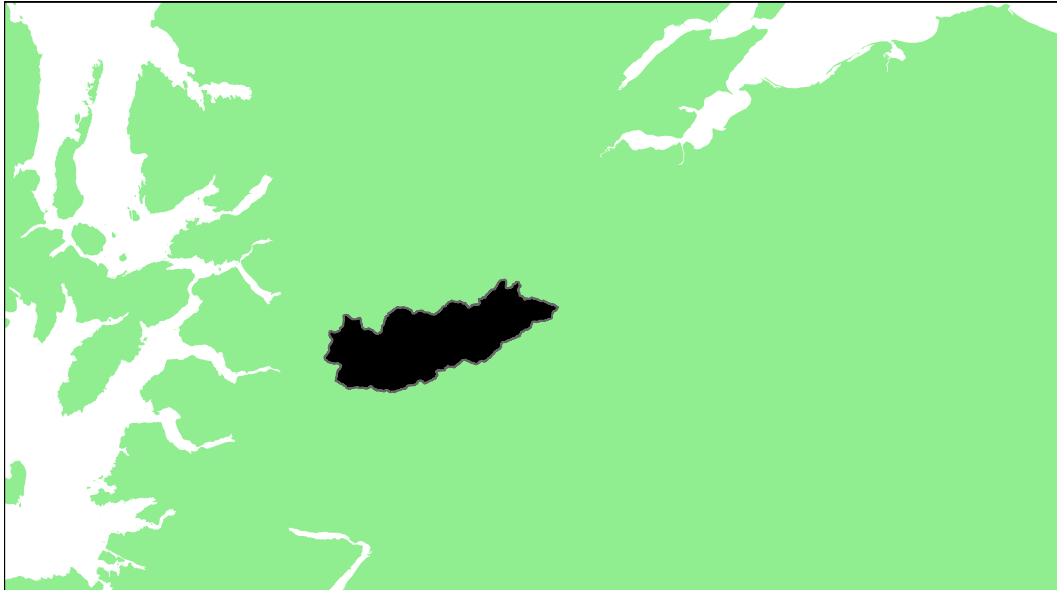Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

5. Percentage chance that the egg requirement has been reached

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)

Grade 2 due to the presence of the River Moriston SAC
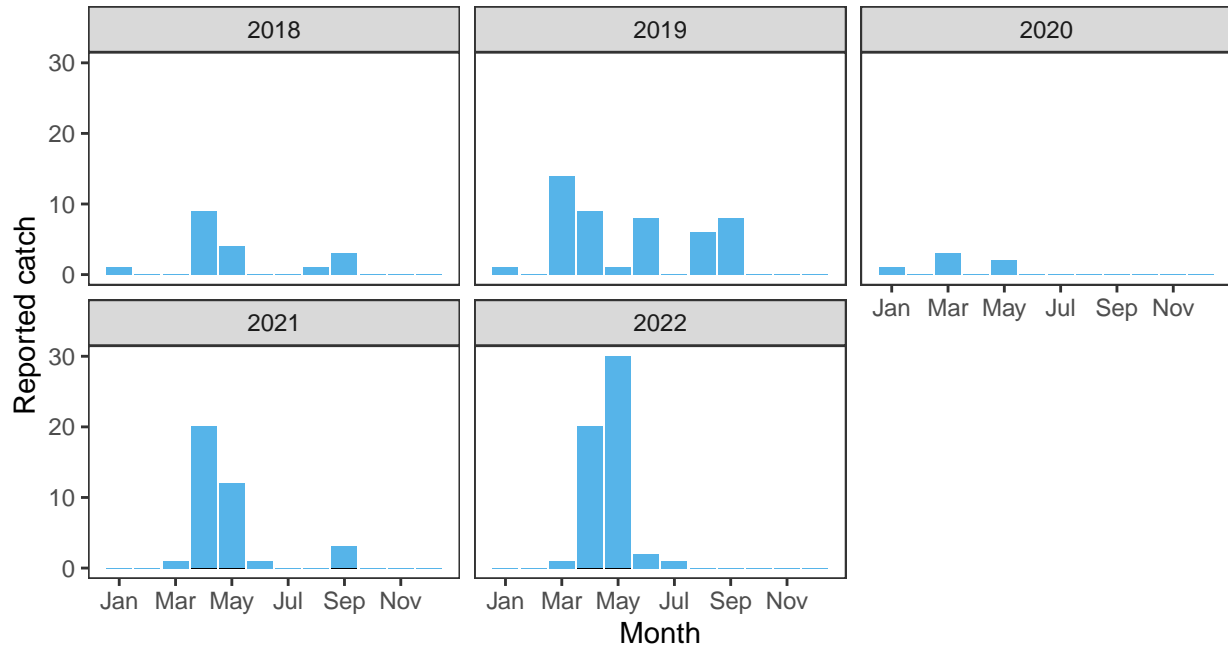
River Moriston SAC: Grade 2

Summary Table

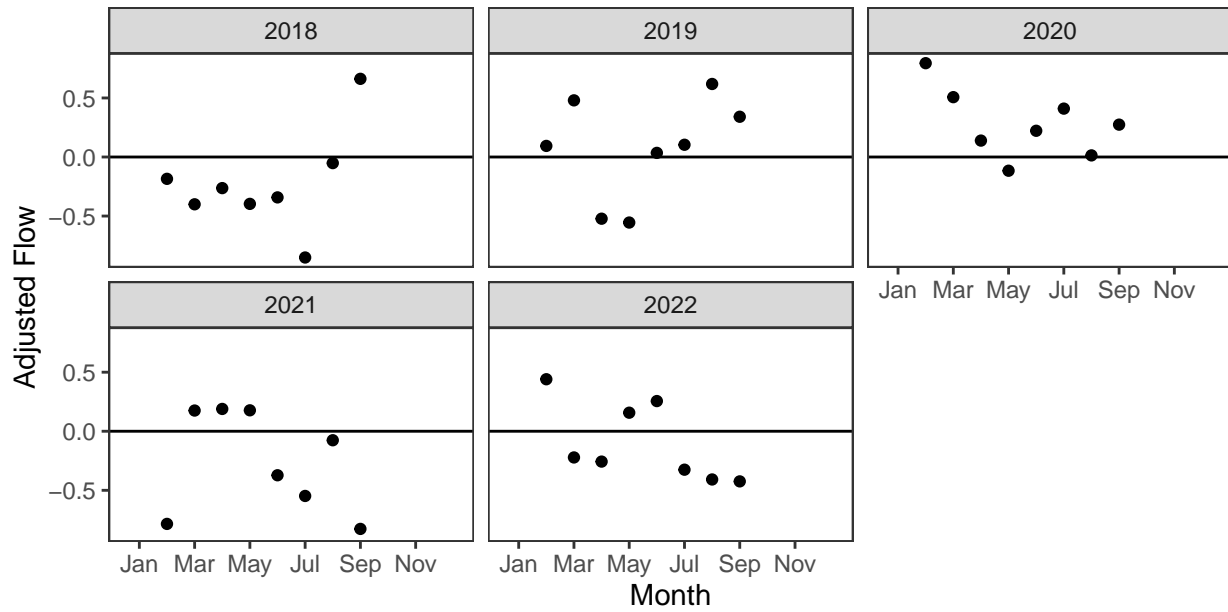| Eggs required (m²)[a]	Area (m²)[a]	Total egg requirement[a]	Percentage chance meeting requirement						Grade
			2018	2019	2020	2021	2022	Overall	
0.95	921,000	876,000	23.7	97.66	46.97	97.57	99.98	0.73176	2

[a] Figures presented are median values

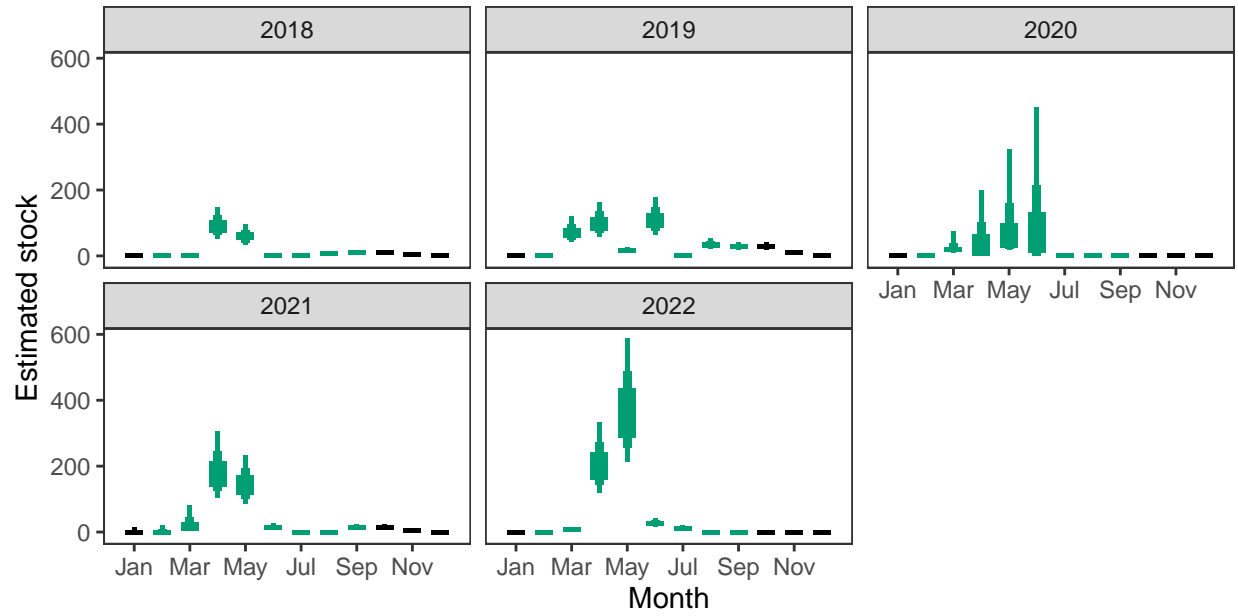# 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black = retained, blue = released)
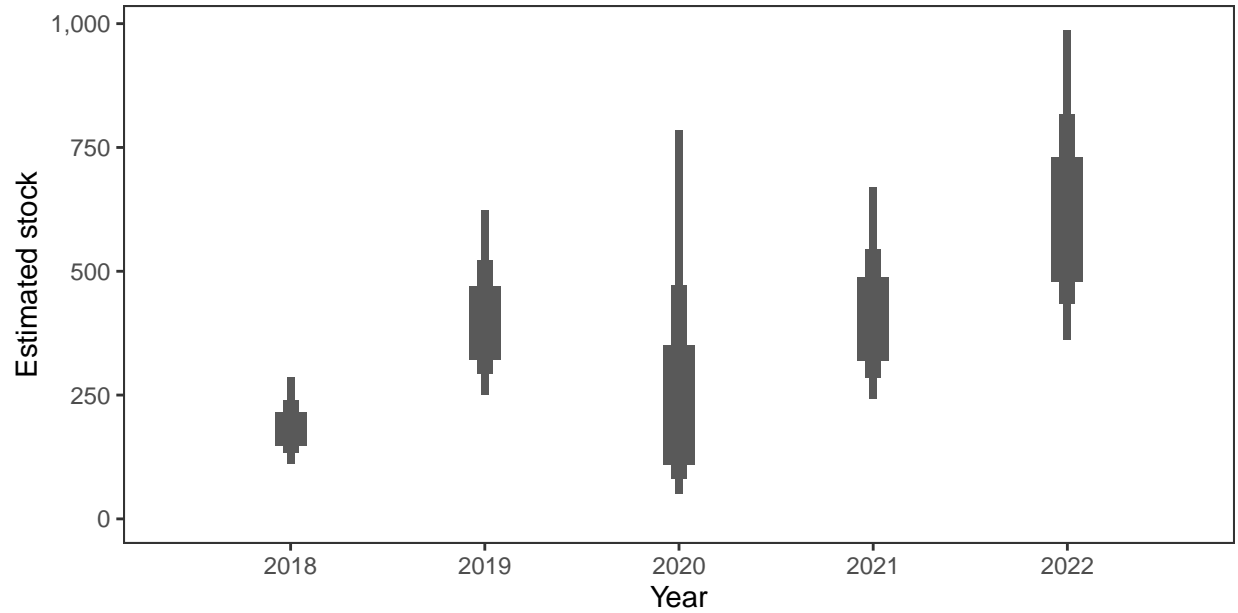

Monthly flow data

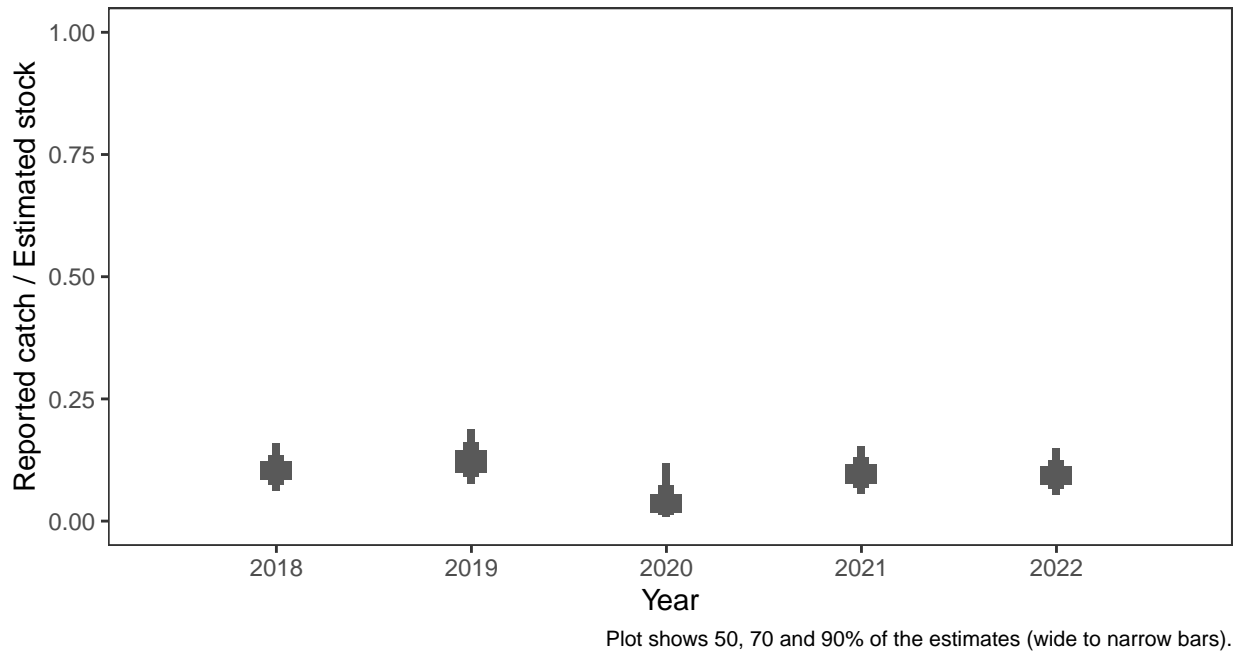## Monthly stock estimates (out of season in black)

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).
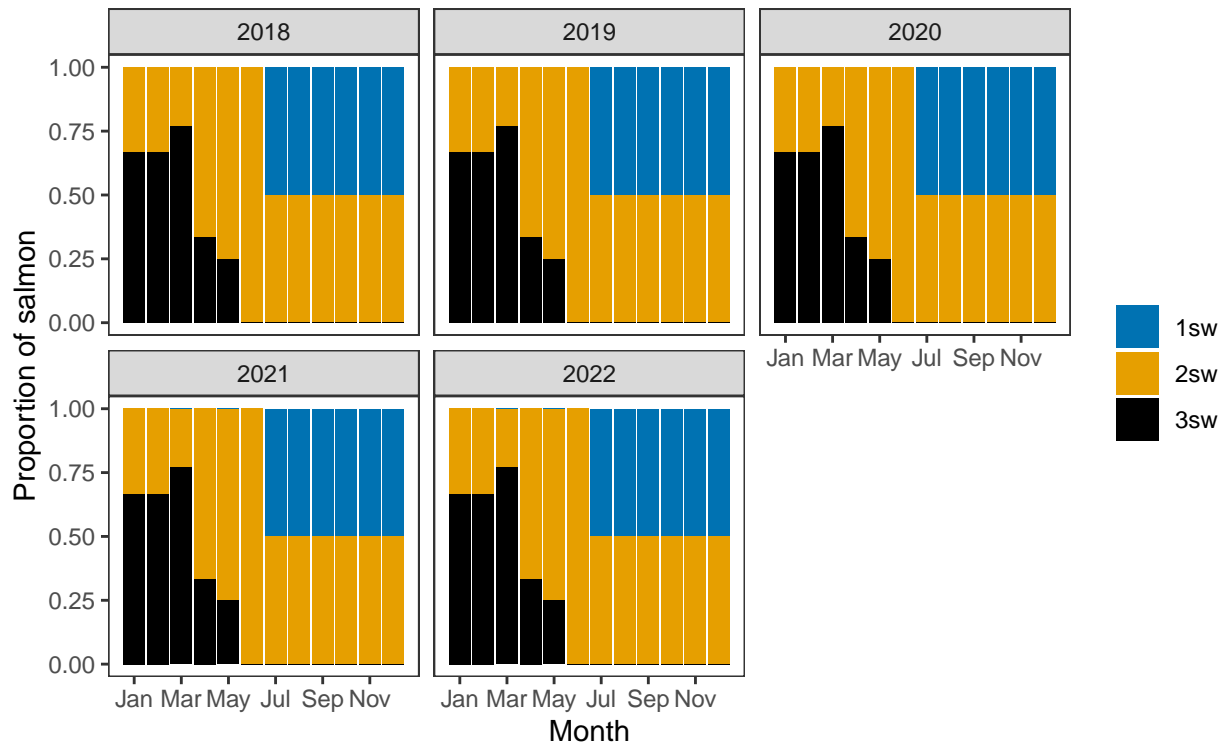
Annual estimated stock

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).
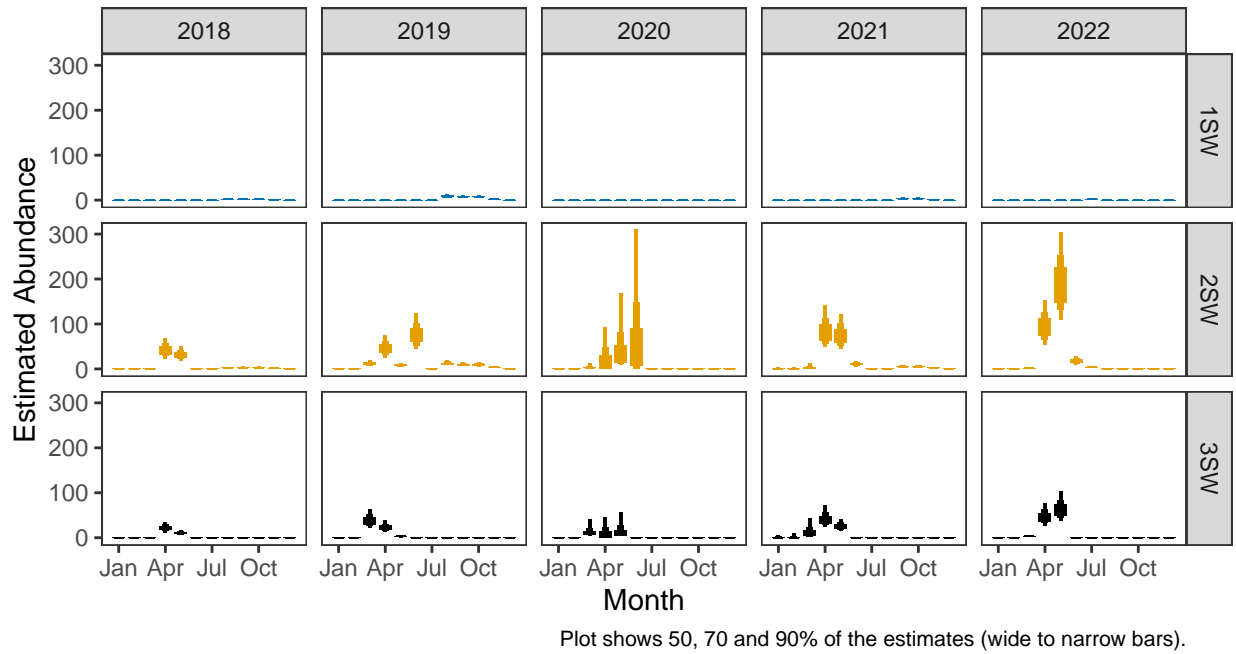
Annual catch as a proportion of stock

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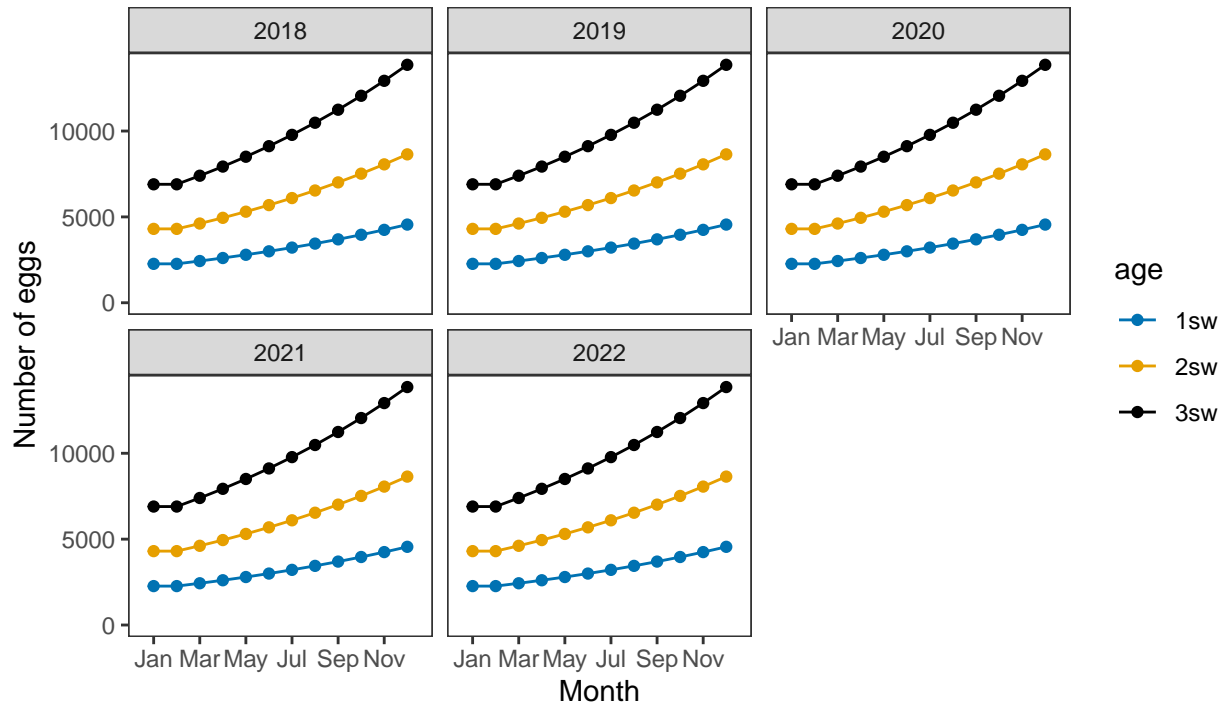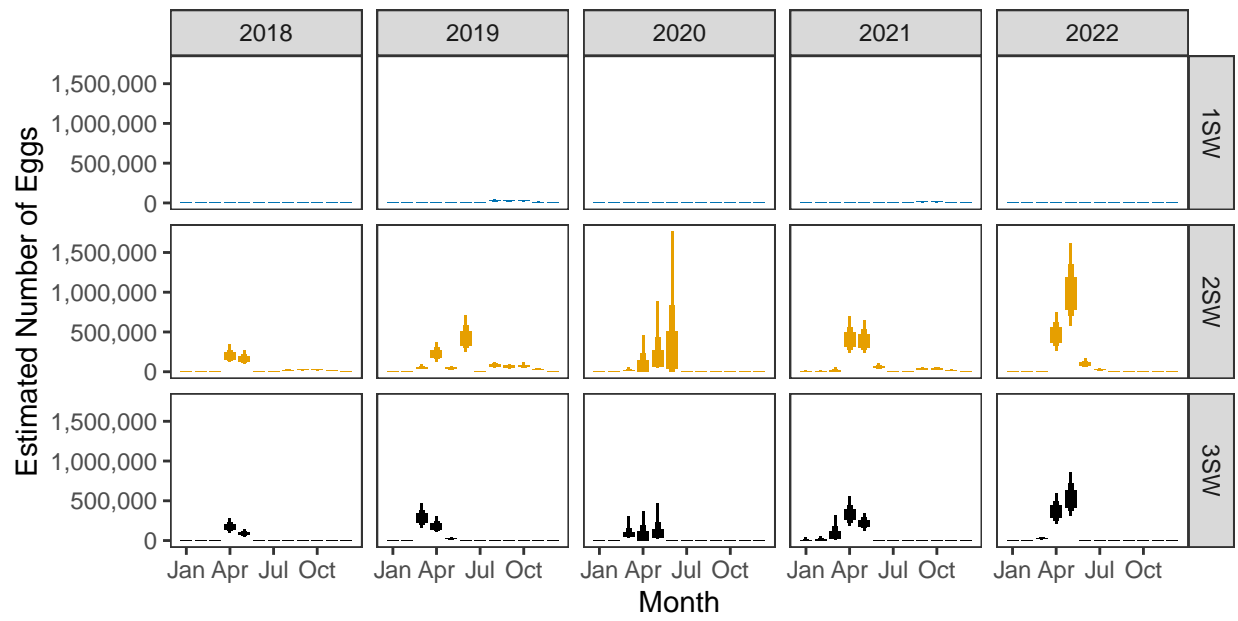
3. Converting Number of Spawners to Number of Eggs

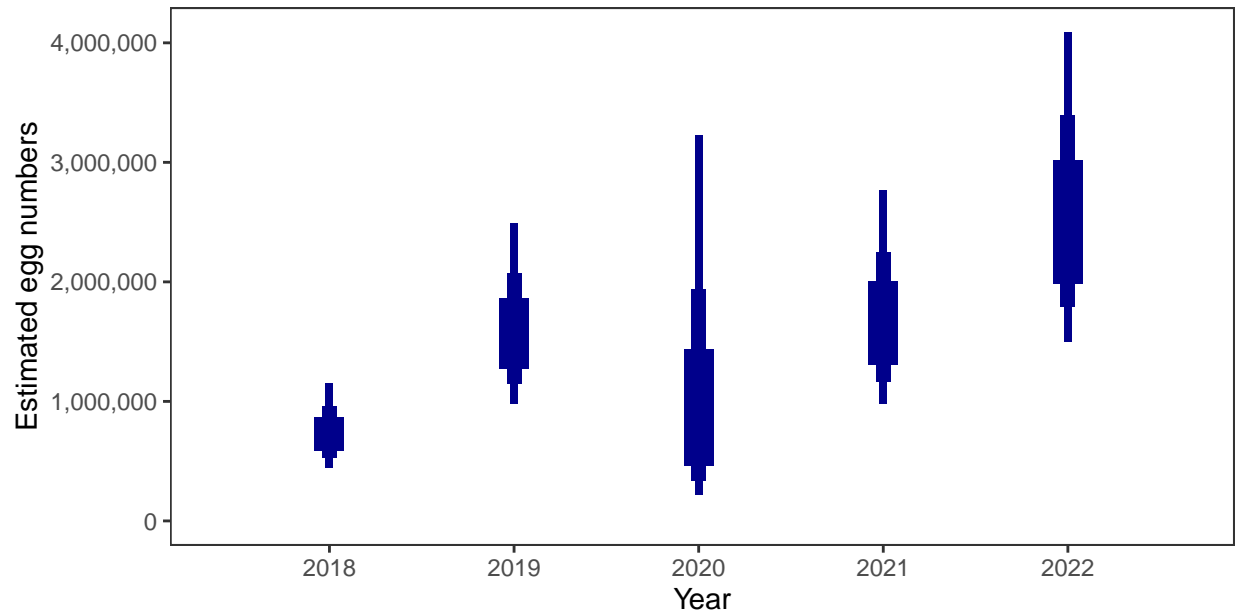*Egg contents of females*

Monthly number of eggs

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

Total annual egg numbers

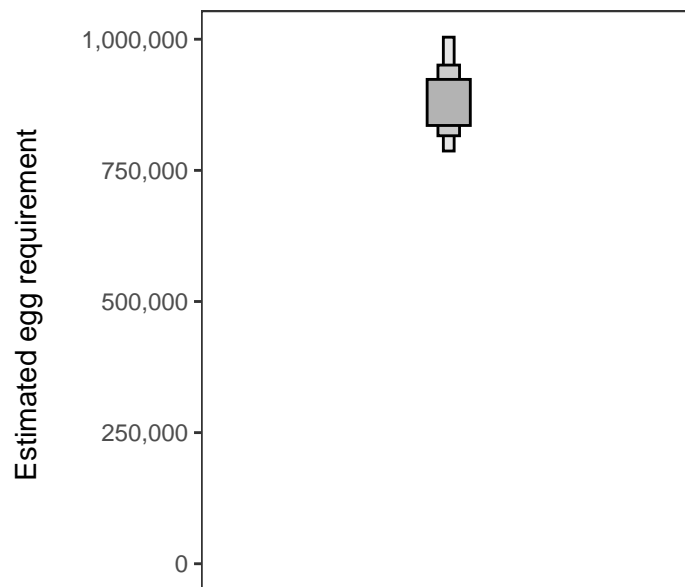Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	23.70
2019	97.66
2020	46.97
2021	97.57
2022	99.98

4. Egg requirement

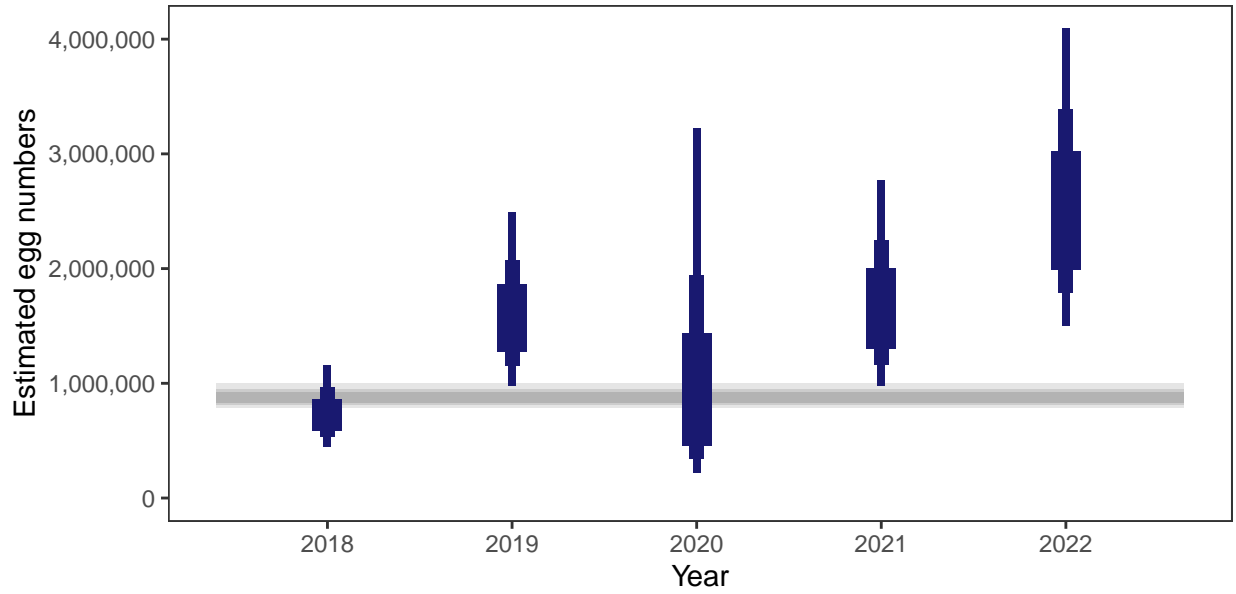### Areas of salmon habitat in square meters

There is an estimated 1,014,554 square meters of known salmon habitat in the River Moriston SAC and a further 64,454 square meters where salmon may be present.
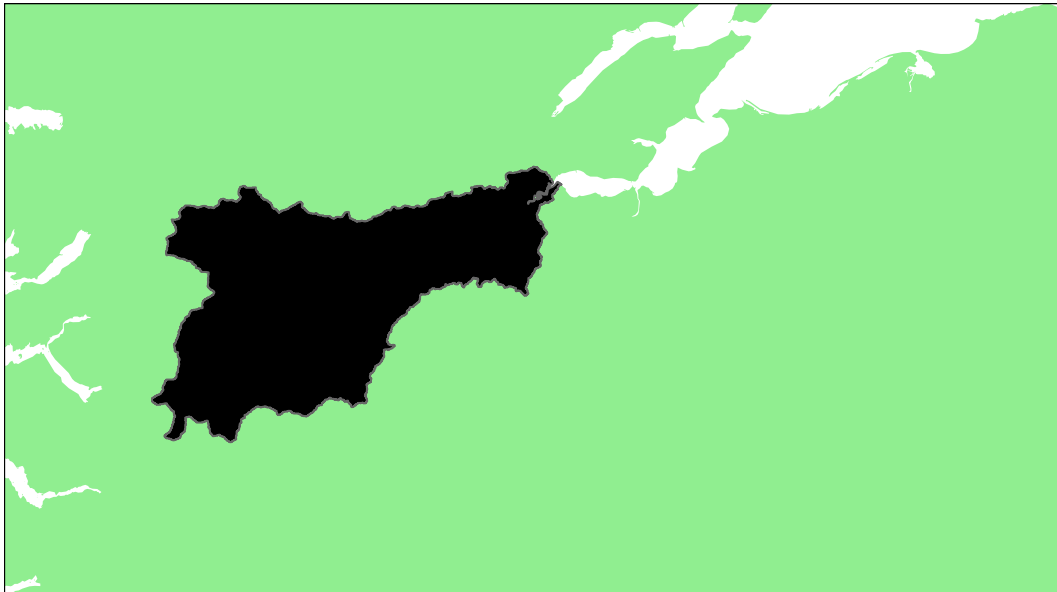
Egg requirement

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

5. Percentage chance that the egg requirement has been reached

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)
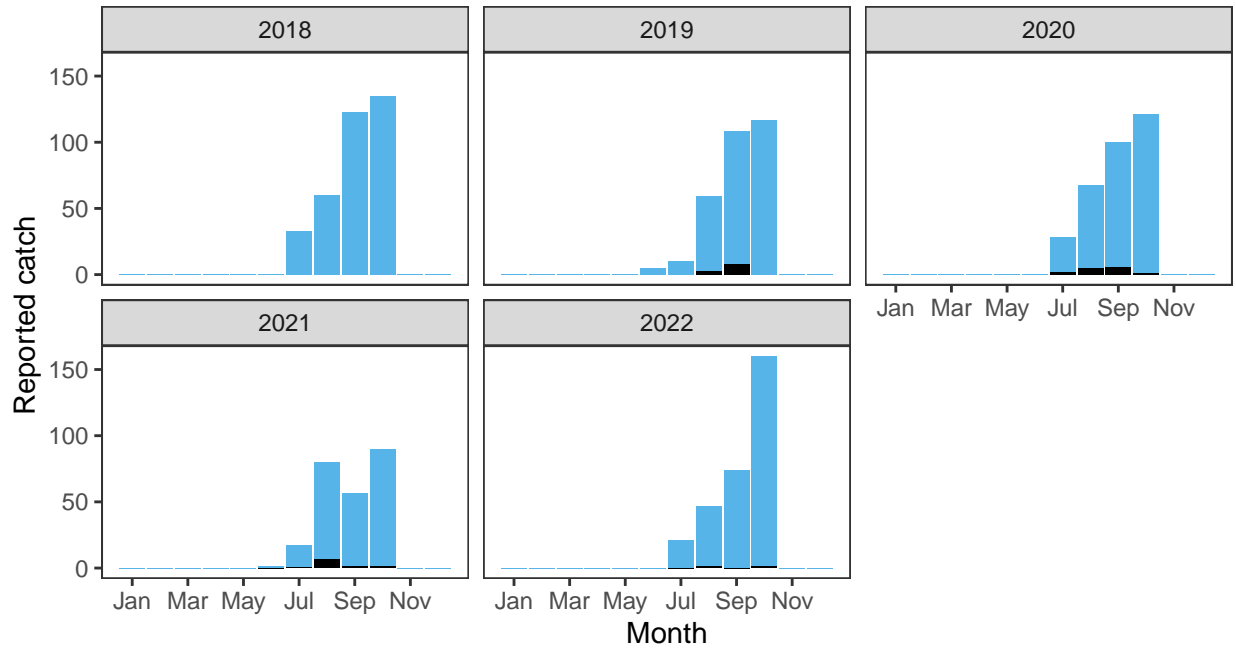
River Beauly: Grade 2

Summary Table

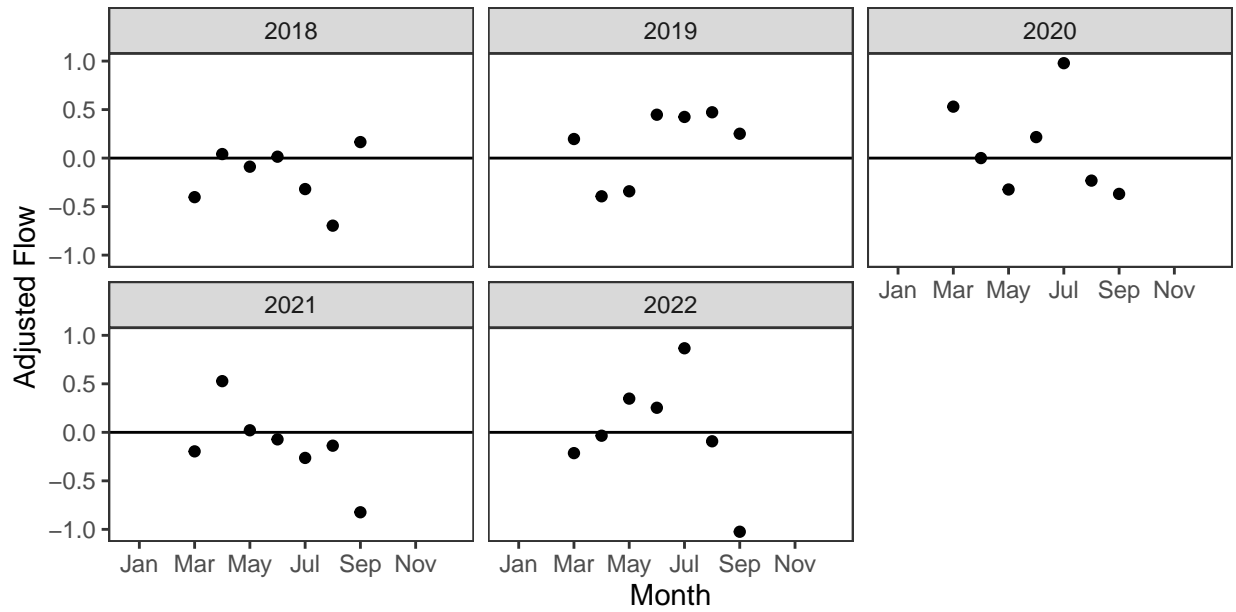| Eggs required $(m^2)^a$ | Area $(m^2)^a$ | Total egg requirement[a] | Percentage chance meeting requirement | | | | | | Grade |
			2018	2019	2020	2021	2022	Overall	
3.33	1,489,000	4,958,000	86.42	53.39	76.41	56.9	45.93	0.6381	2

[a] Figures presented are median values

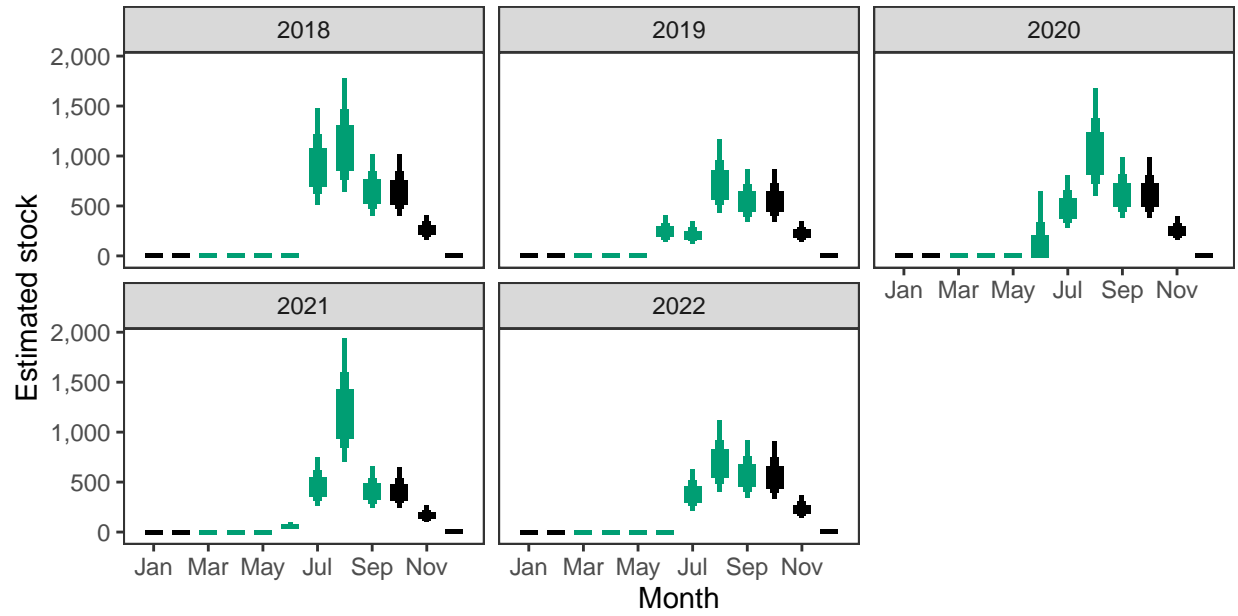# 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black = retained, blue = released)
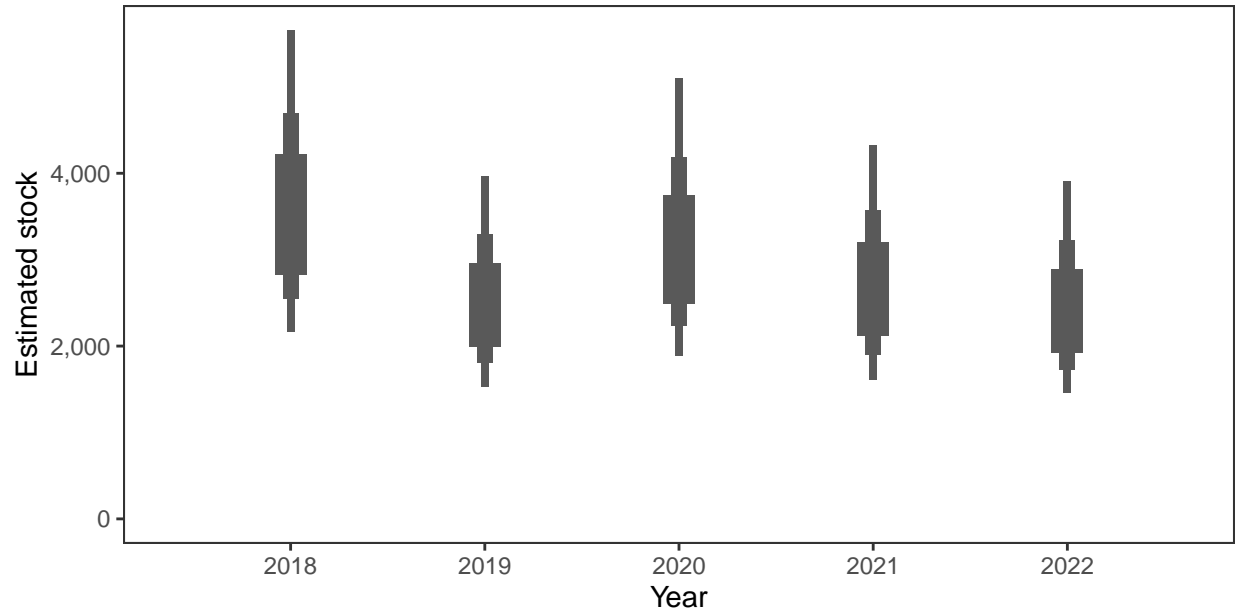

Monthly flow data

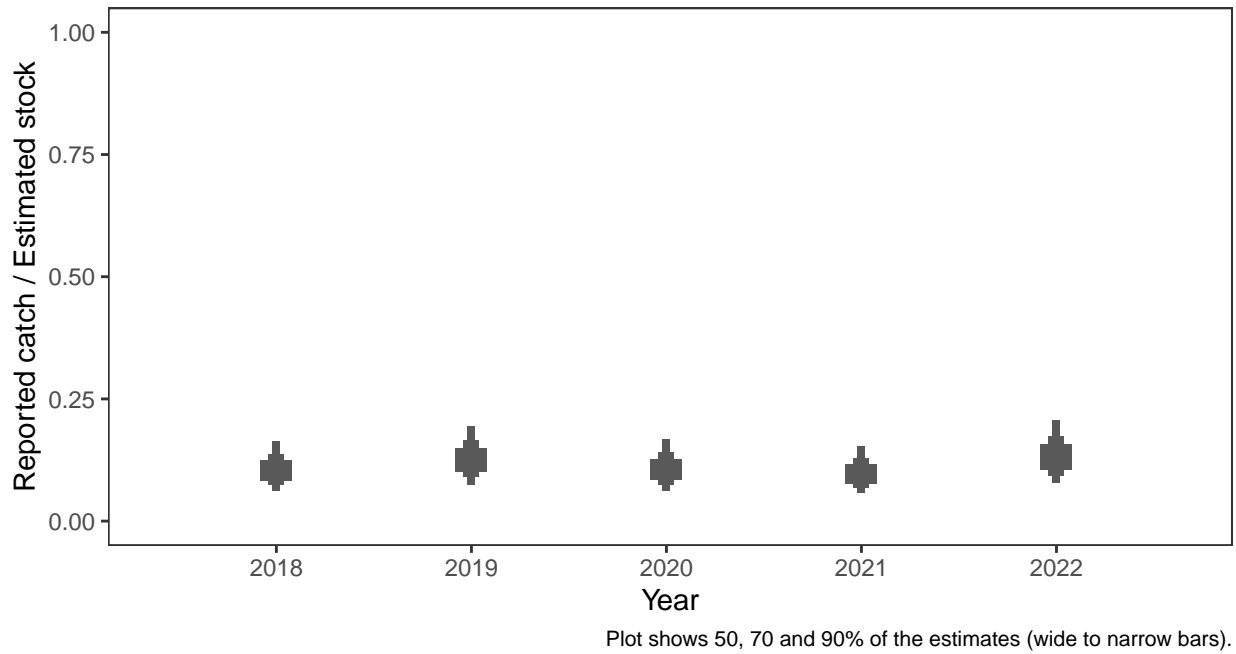## Monthly stock estimates (out of season in black)

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).
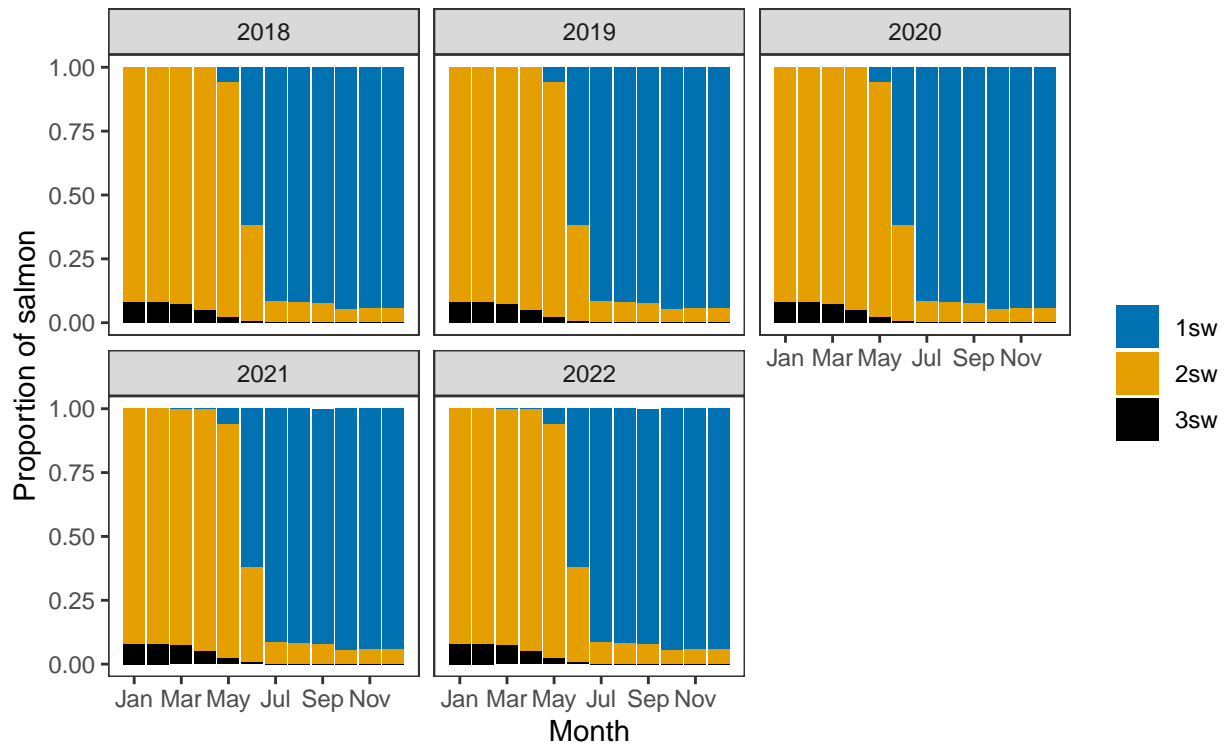
Annual estimated stock

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

Annual catch as a proportion of stock

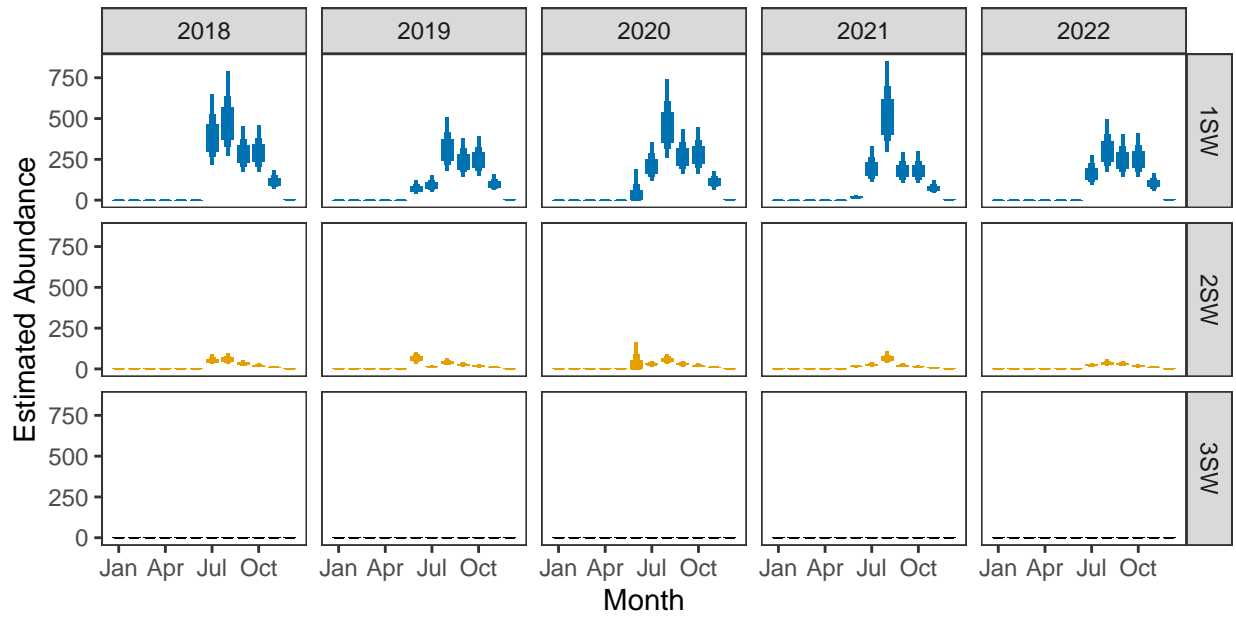Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

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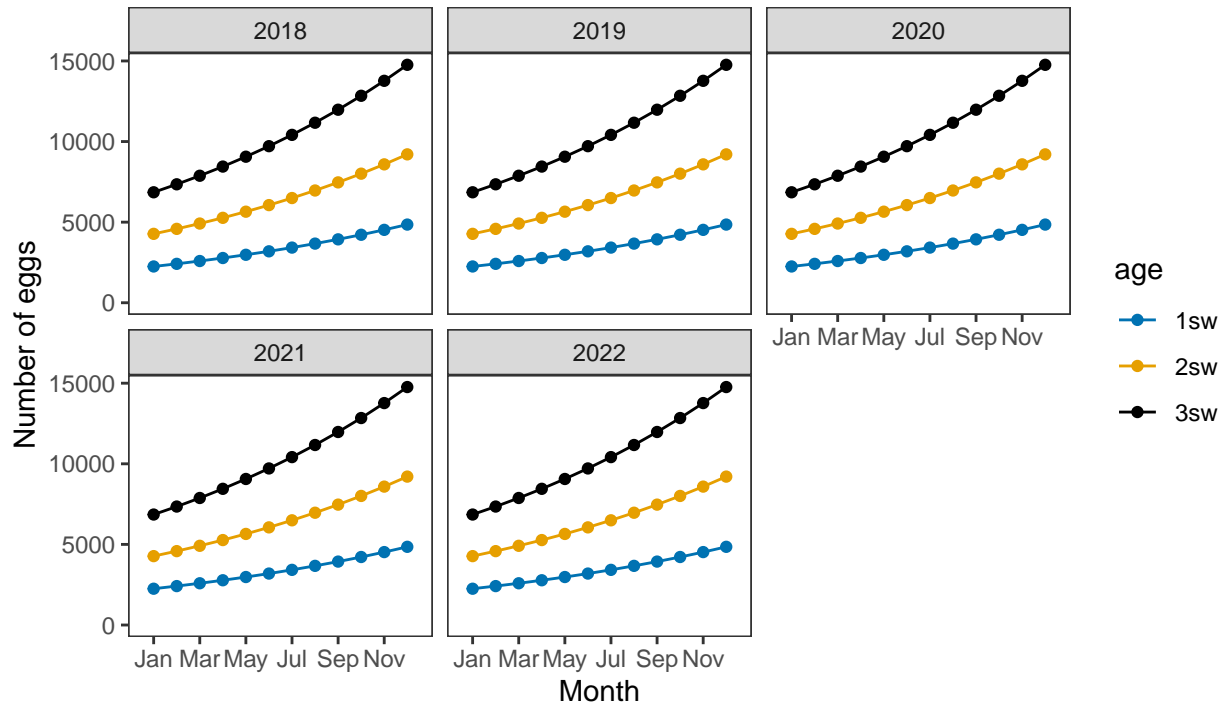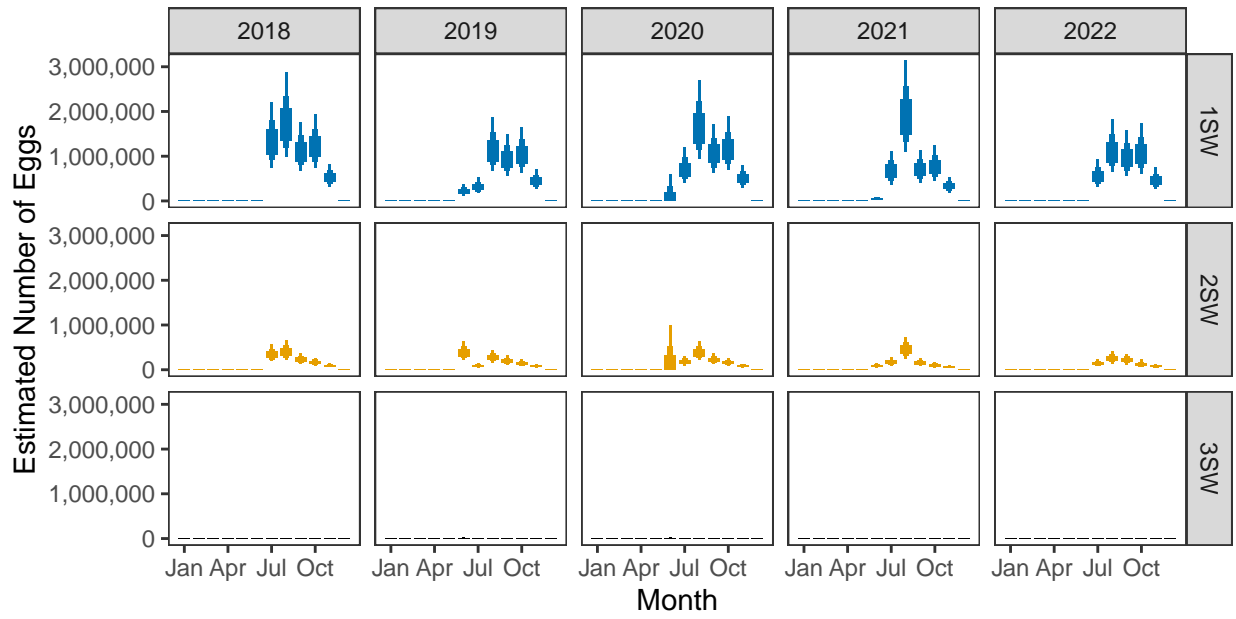
Ages of fish

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

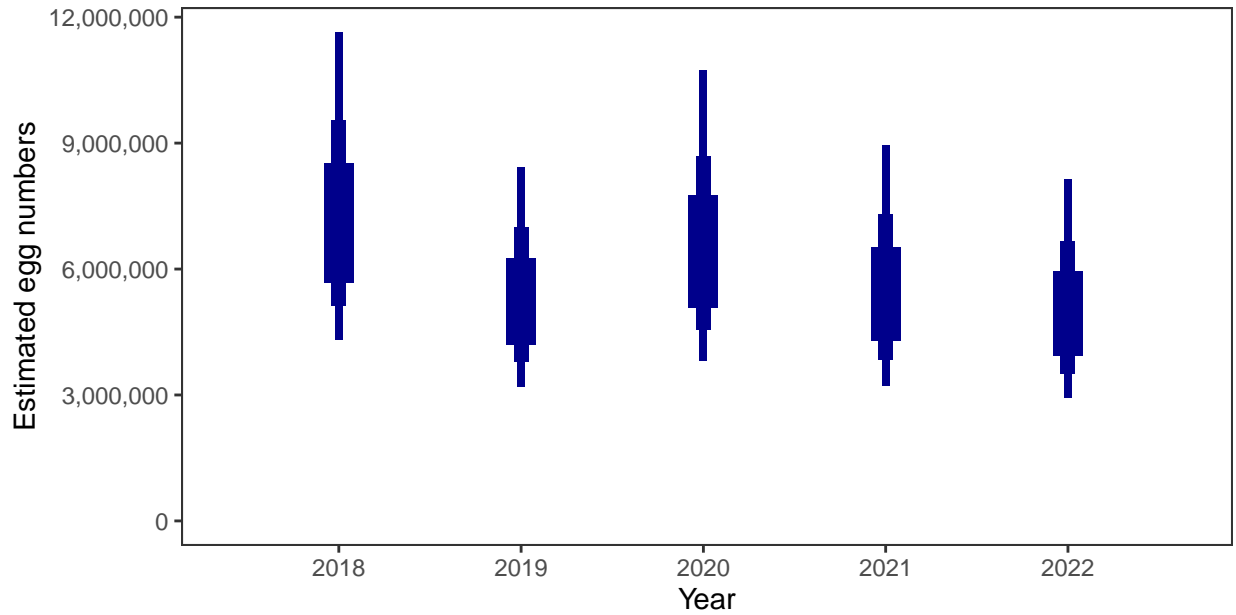*Egg contents of females*

Monthly number of eggs

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

Total annual egg numbers

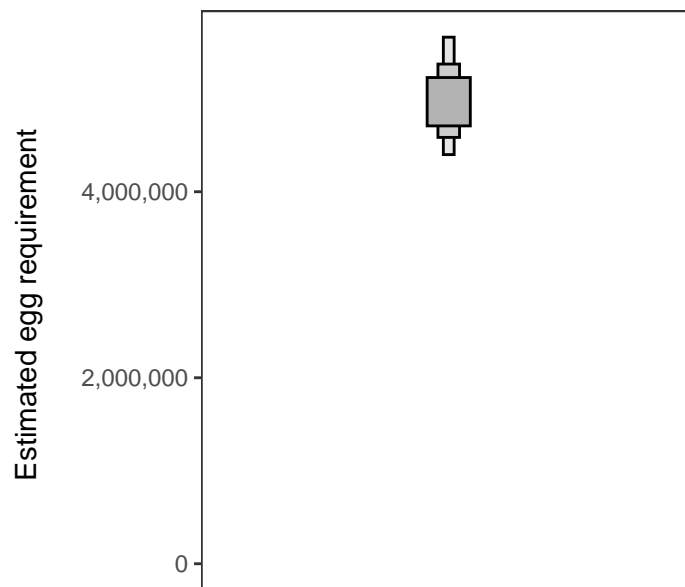Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	86.42
2019	53.39
2020	76.41
2021	56.90
2022	45.93

4. Egg requirement
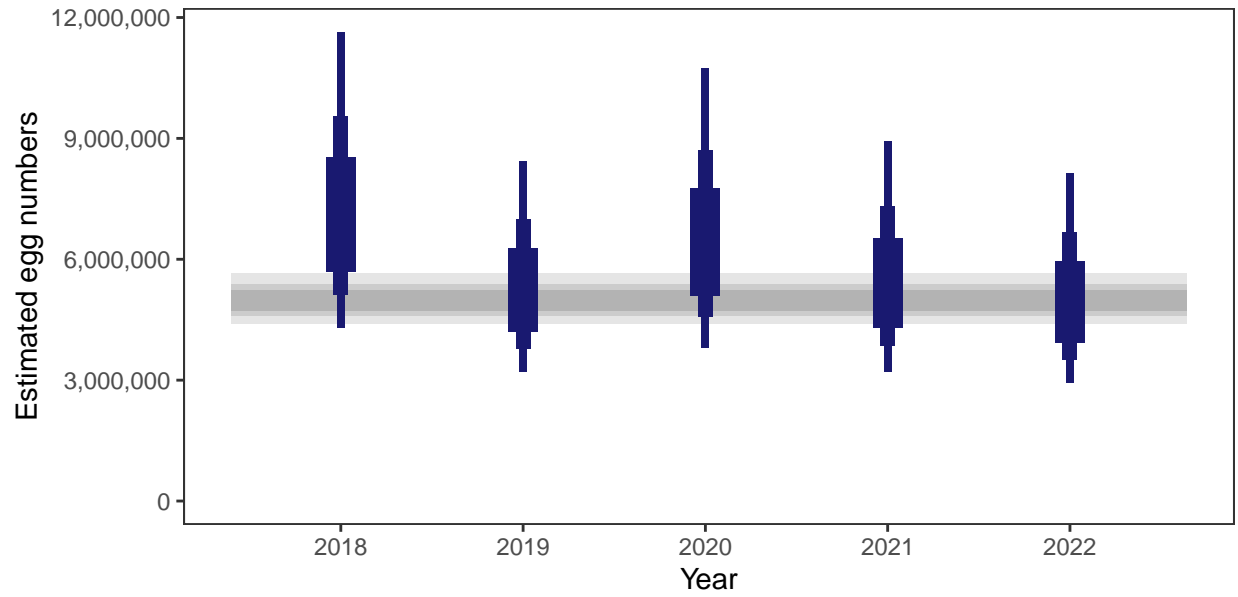
Areas of salmon habitat in square meters

There is an estimated 1,568,607 square meters of known salmon habitat in the River Beauly and a further 249,192 square meters where salmon may be present.
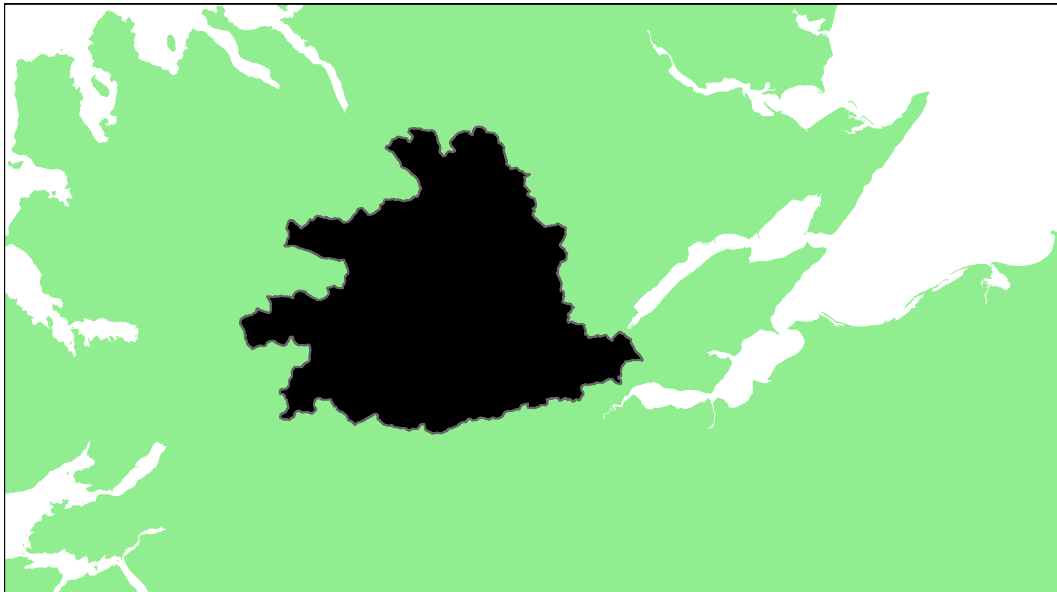
Egg requirement

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

5. Percentage chance that the egg requirement has been reached

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)
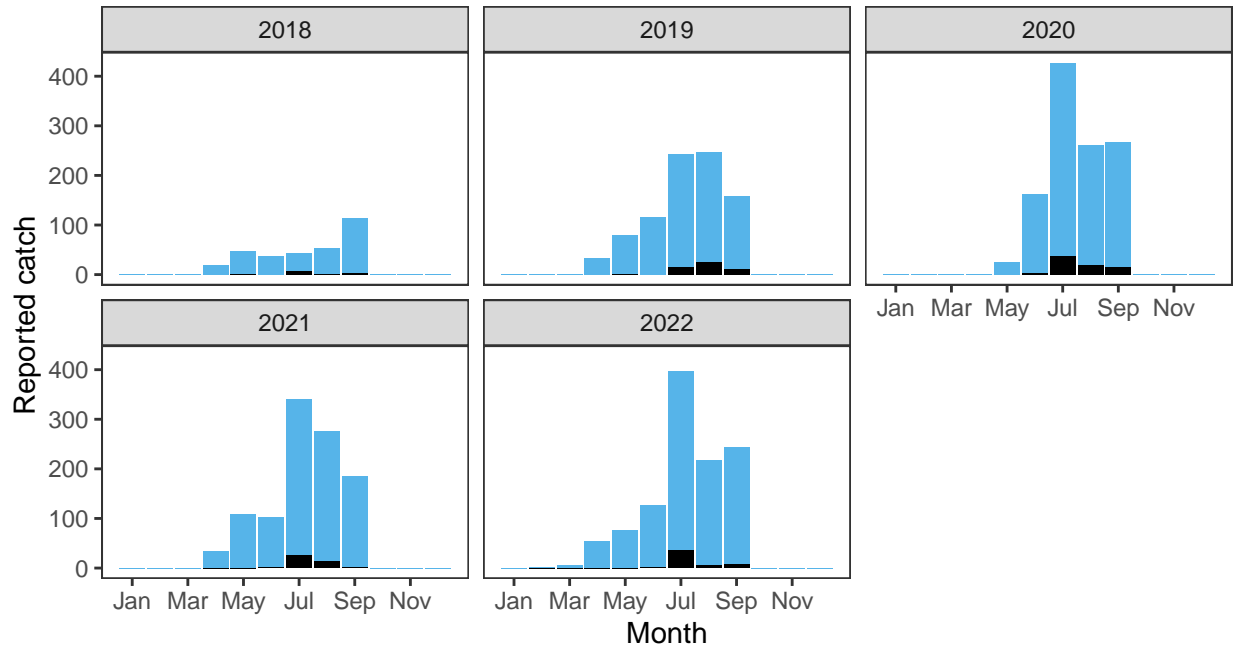
River Conon: Grade 1

Summary Table

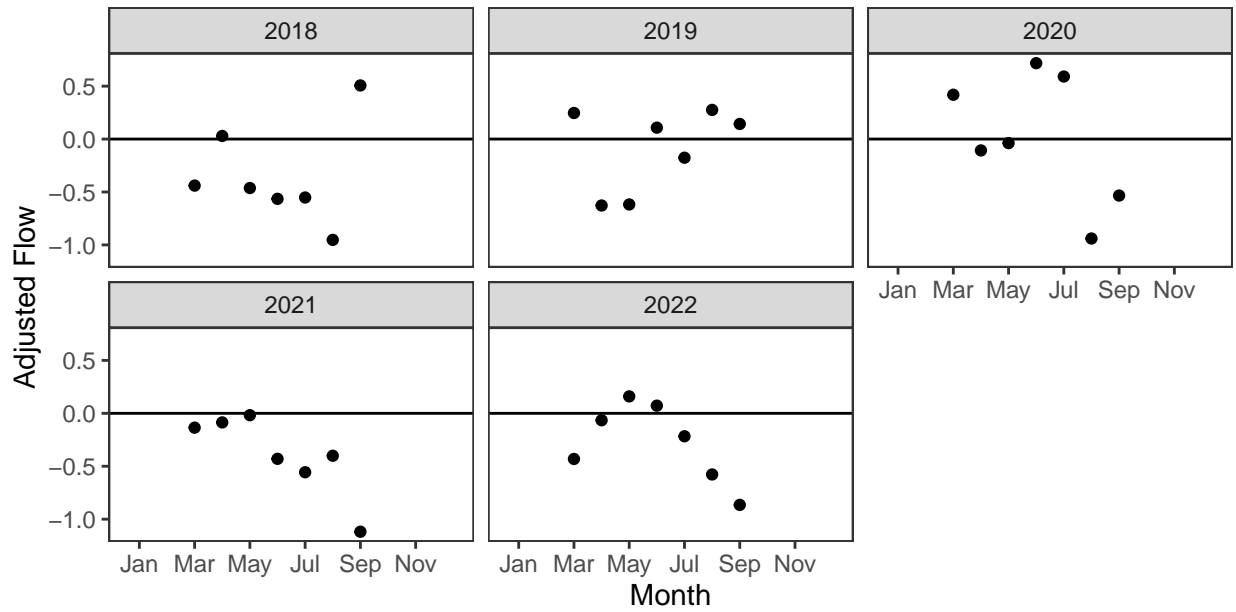| Eggs required (m²)[a]	Area (m²)[a]	Total egg requirement[a]	Percentage chance meeting requirement						Grade
			2018	2019	2020	2021	2022	Overall	
2.85	2,304,000	6,540,000	63.59	89.39	94.47	93.53	93.46	0.86888	1

[a] Figures presented are median values

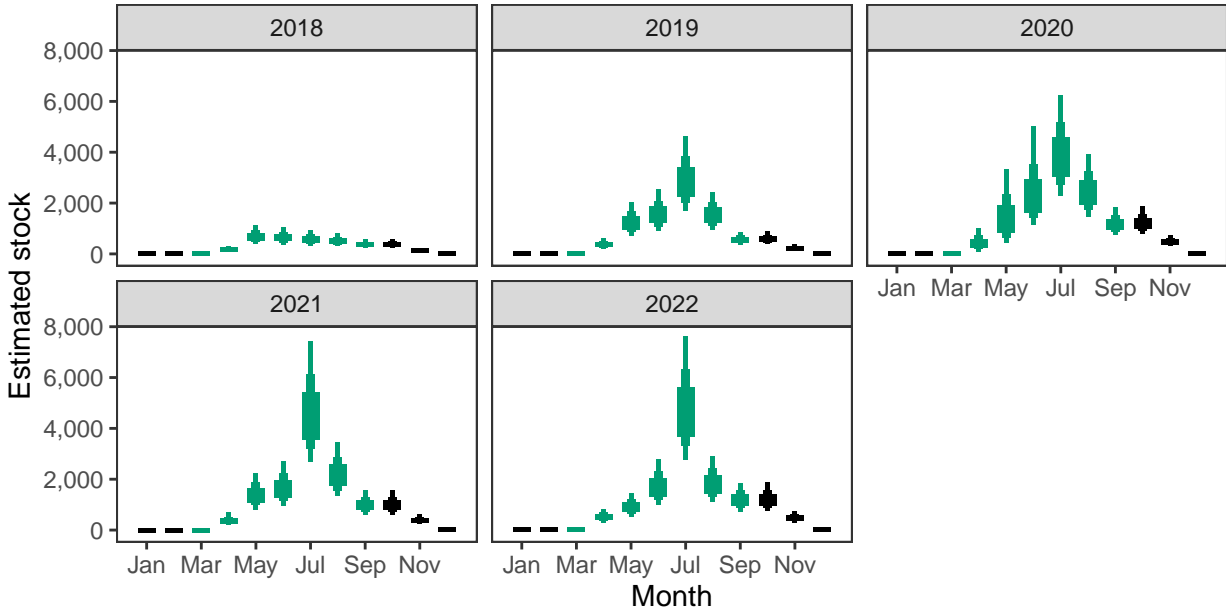# 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black = retained, blue = released)
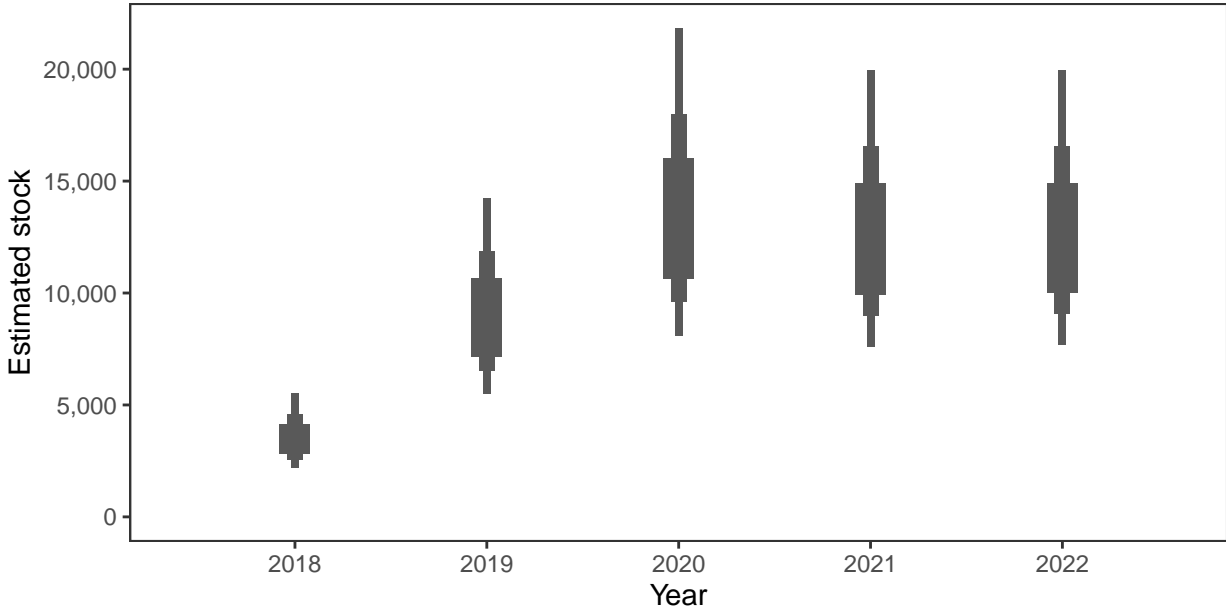

Monthly flow data

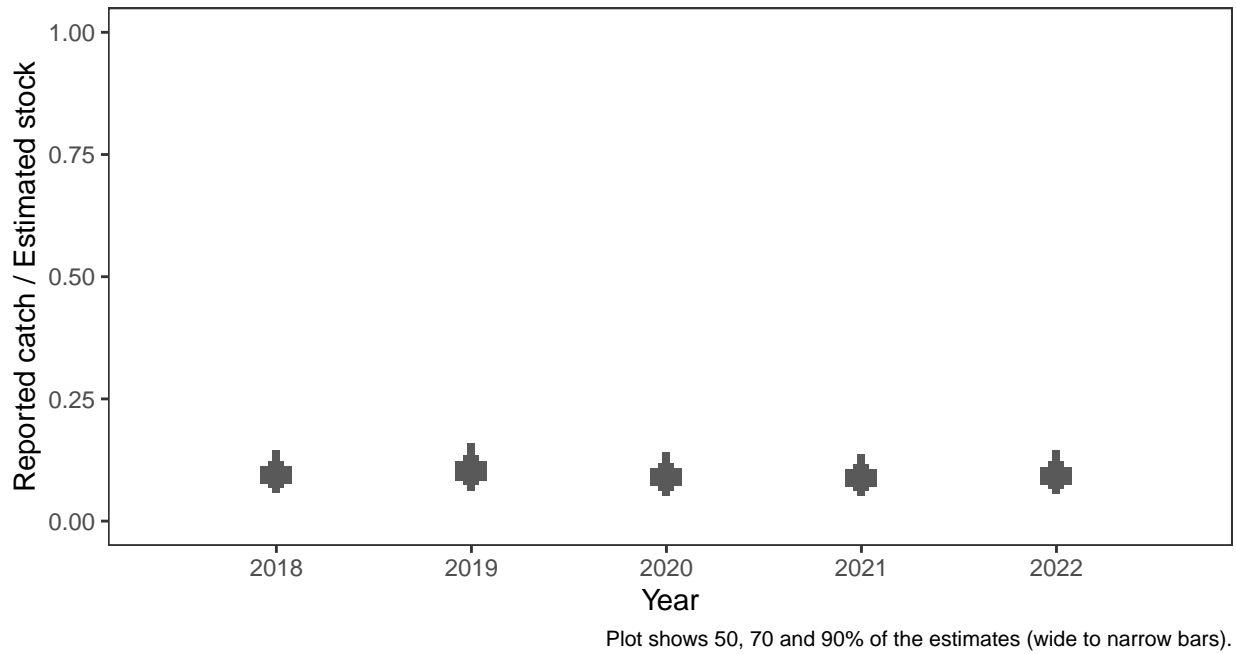## Monthly stock estimates (out of season in black)

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).
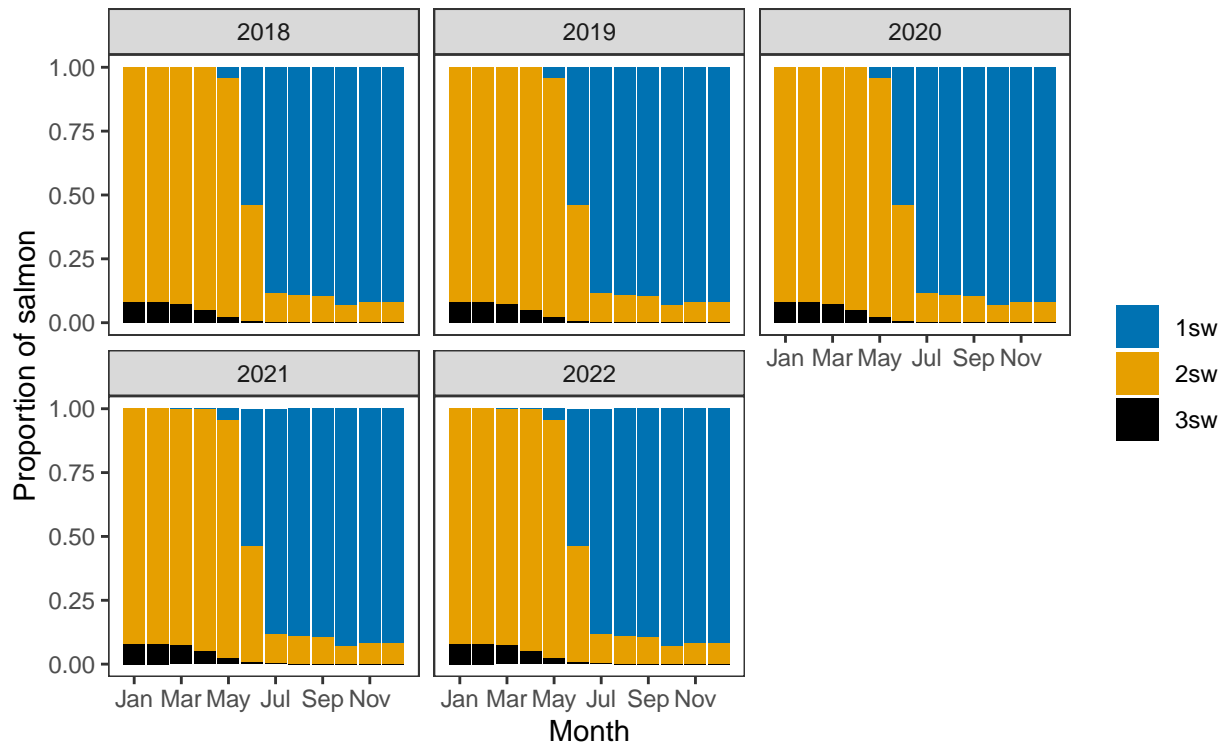
Annual estimated stock

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).
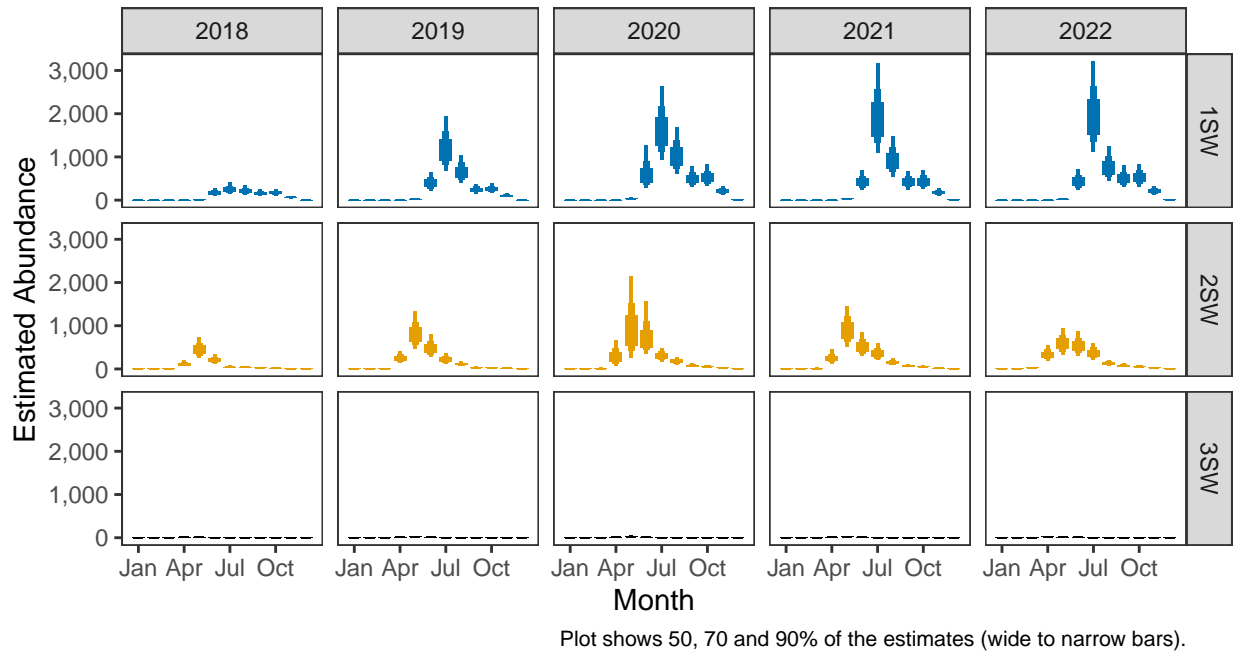
Annual catch as a proportion of stock

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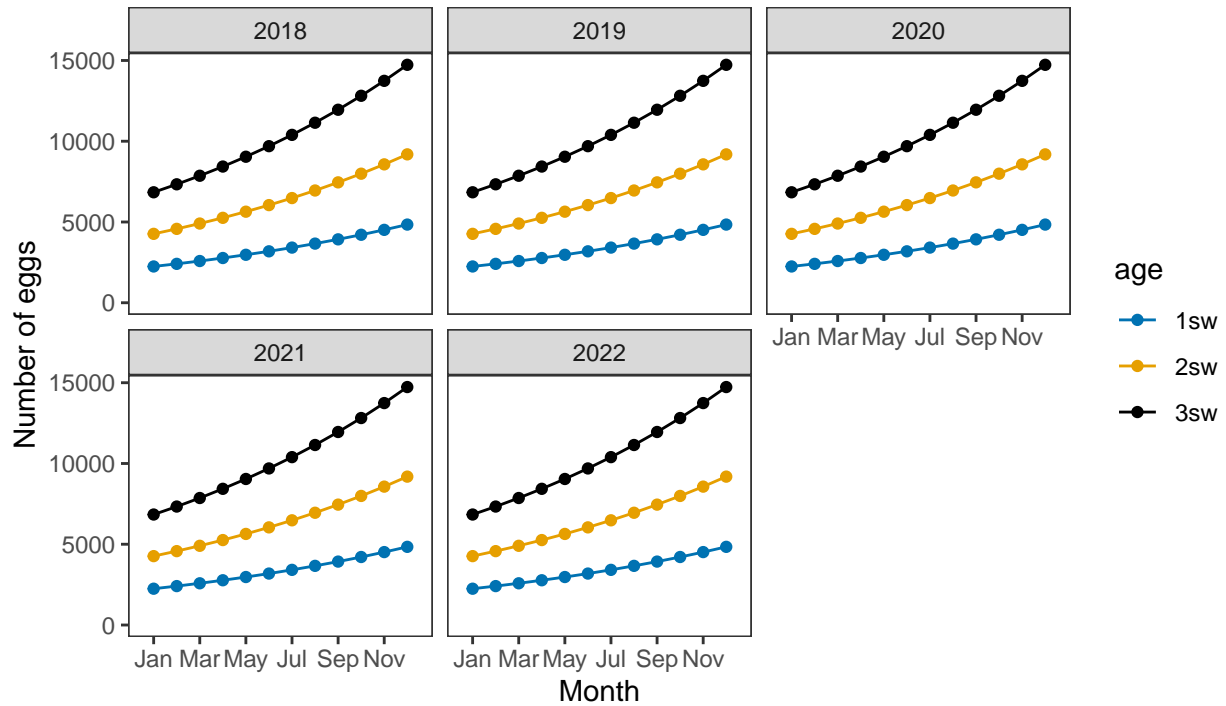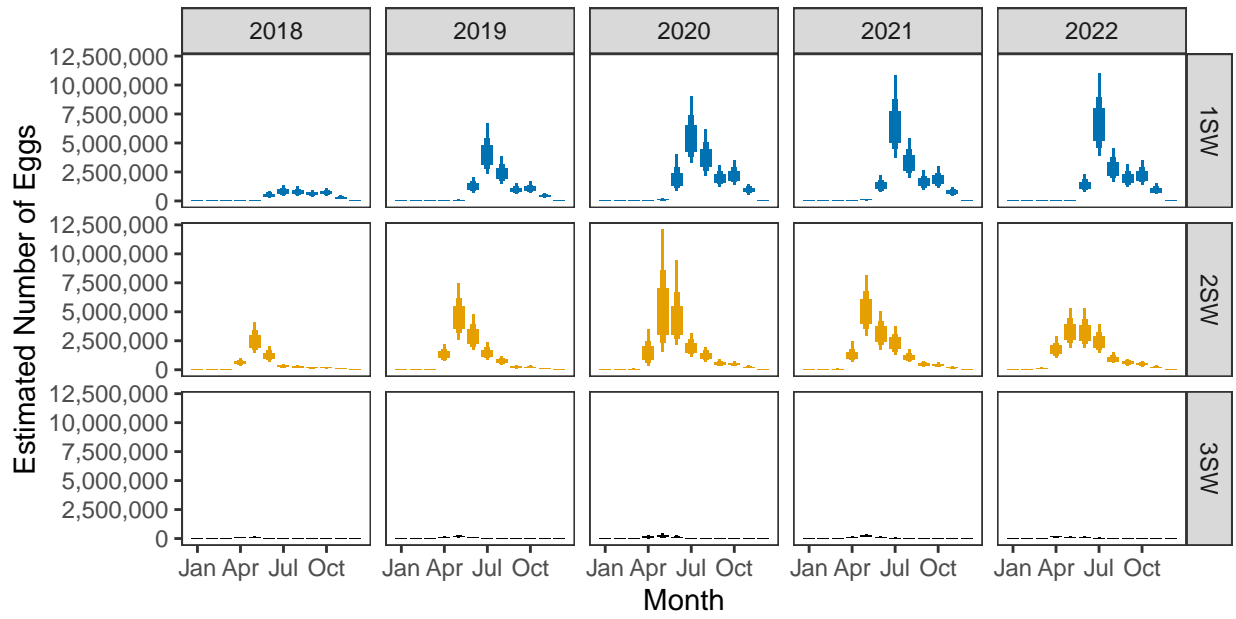
3. Converting Number of Spawners to Number of Eggs

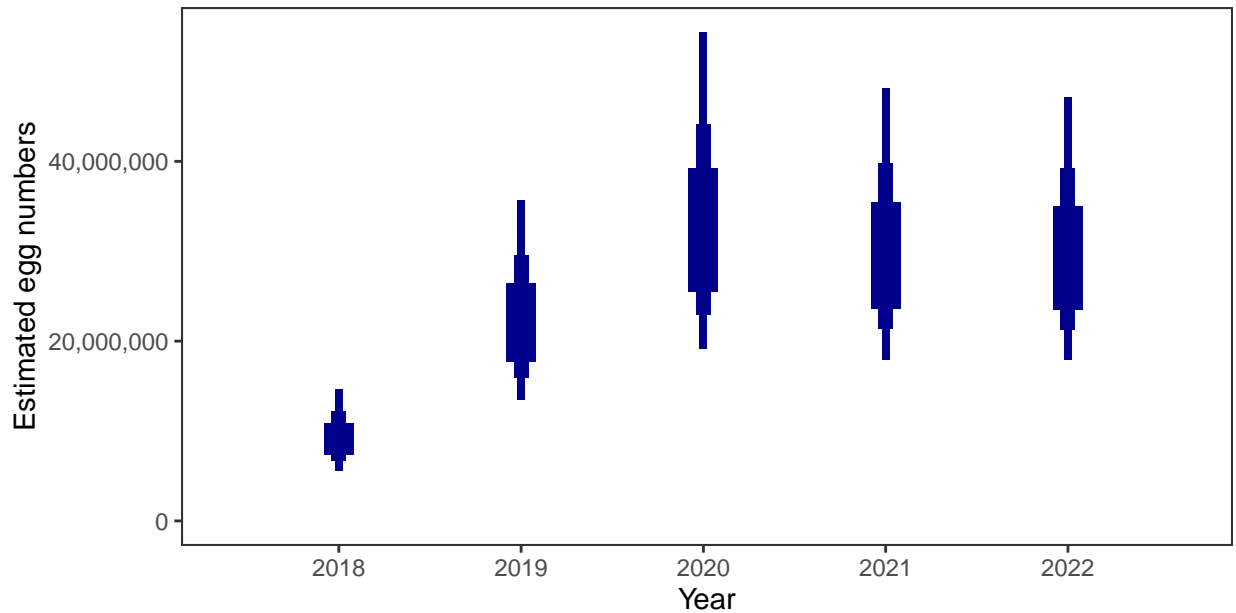*Egg contents of females*

Monthly number of eggs

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

Total annual egg numbers

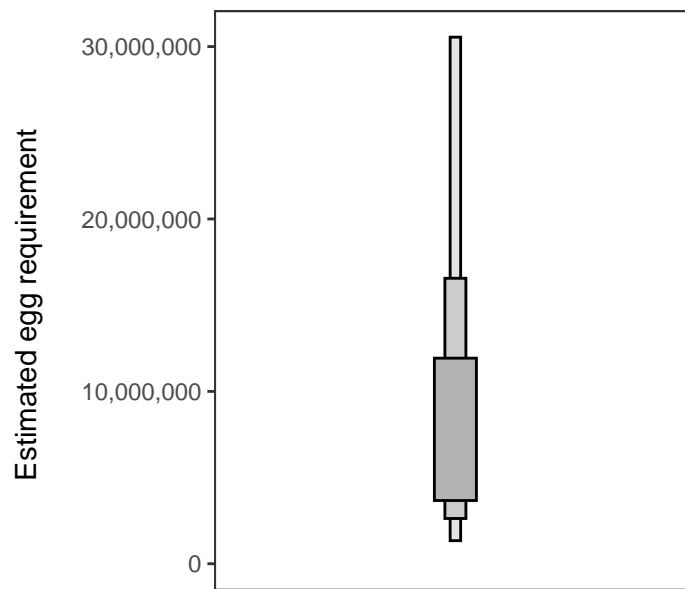Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	63.59
2019	89.39
2020	94.47
2021	93.53
2022	93.46

4. Egg requirement

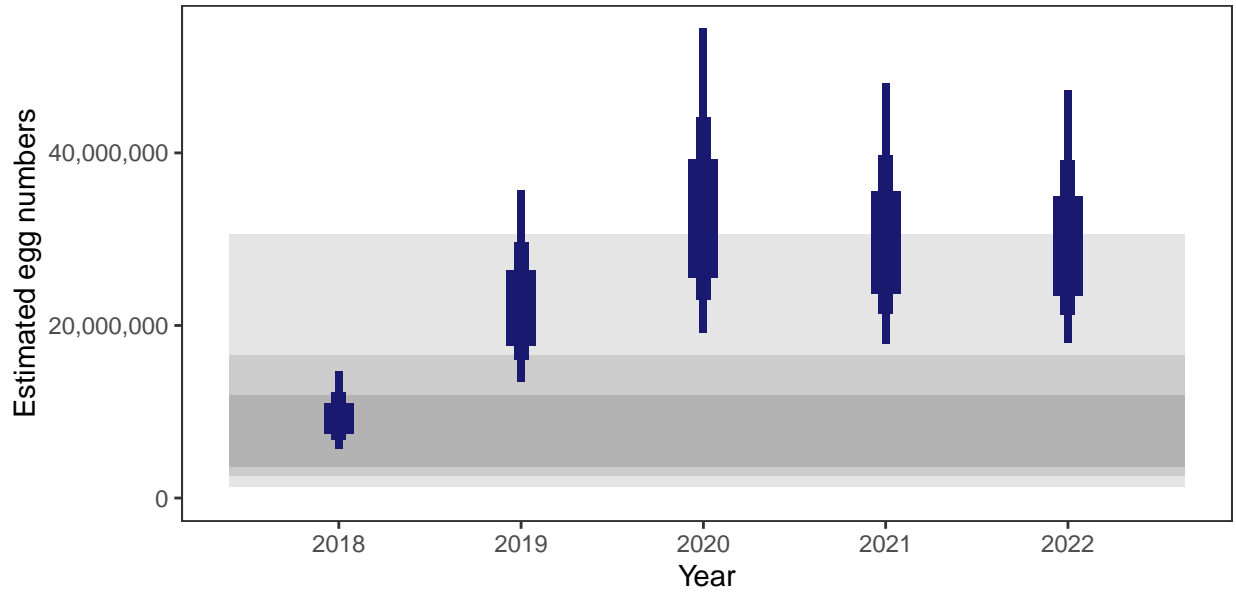### Areas of salmon habitat in square meters

There is an estimated 2,457,814 square meters of known salmon habitat in the River Conon and a further 325,447 square meters where salmon may be present.
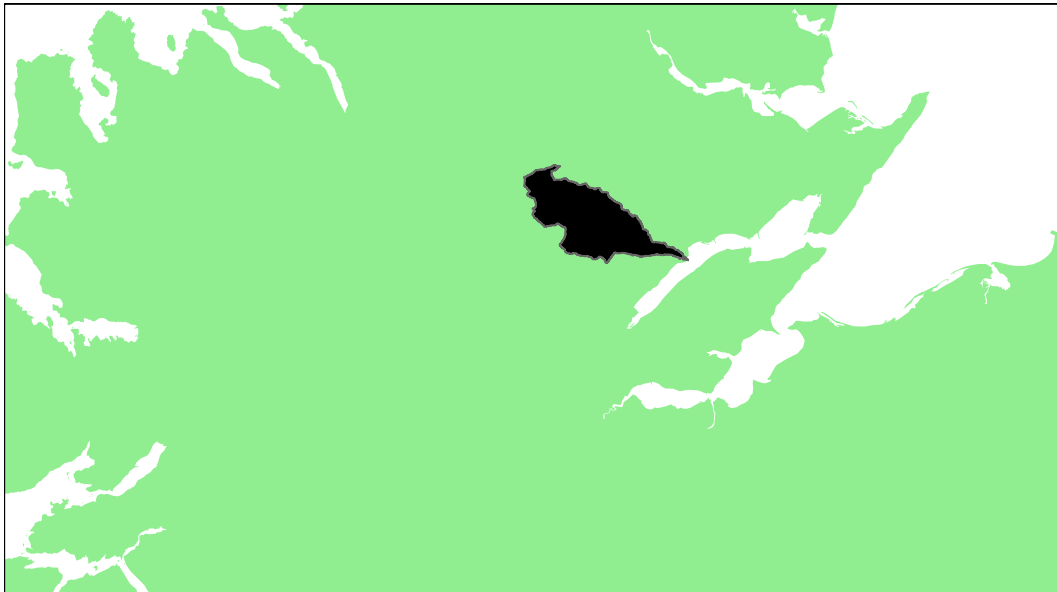
Egg requirement

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

5. Percentage chance that the egg requirement has been reached

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)
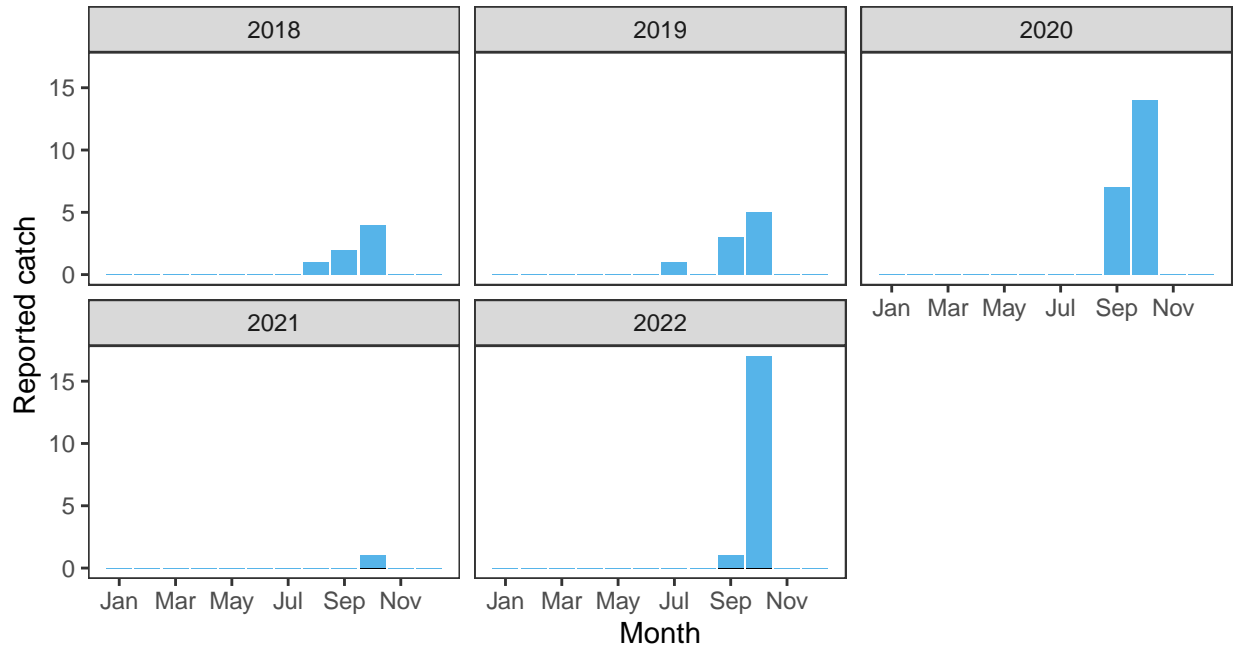
River Glass: Grade 3

Summary Table

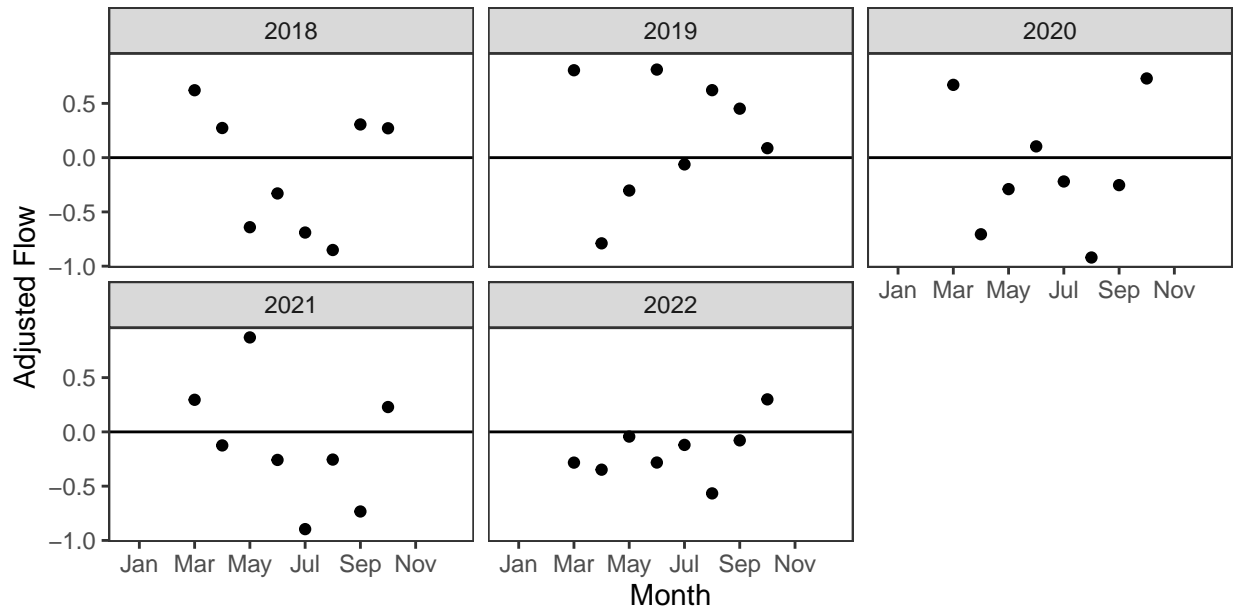| Eggs required (m²)[a] | Area (m²)[a] | Total egg requirement[a] | Percentage chance meeting requirement | | | | | | Grade |
			2018	2019	2020	2021	2022	Overall	
2.51	48,000	119,000	25.41	34.05	61.48	0.72	49.06	0.34144	3

[a] Figures presented are median values

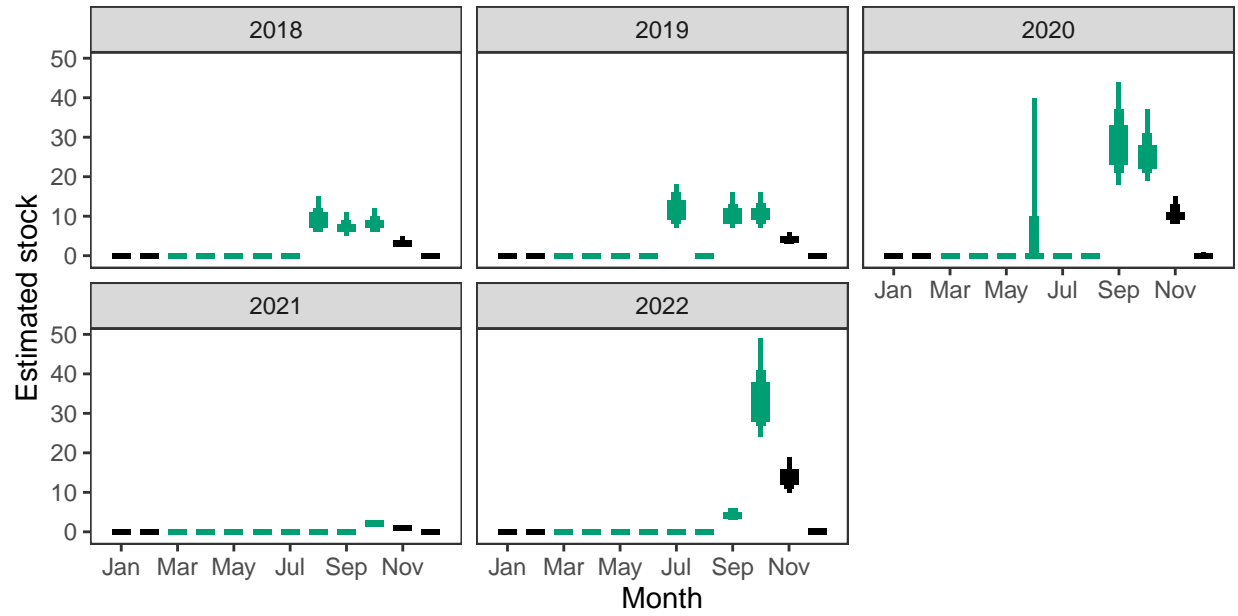# 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black = retained, blue = released)
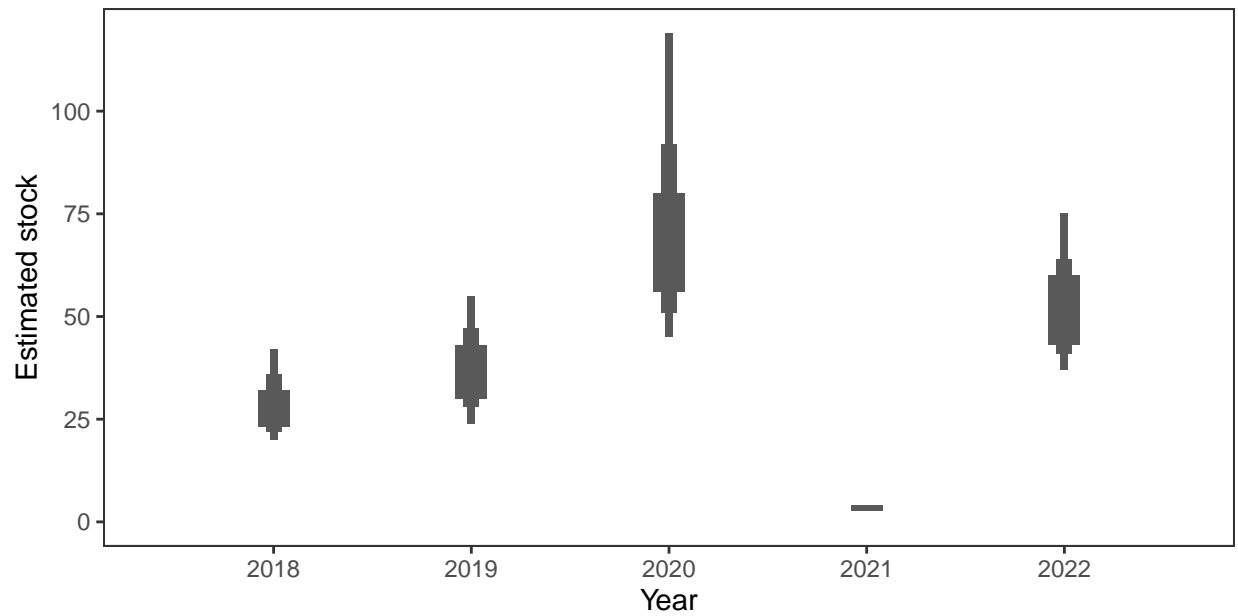

Monthly flow data

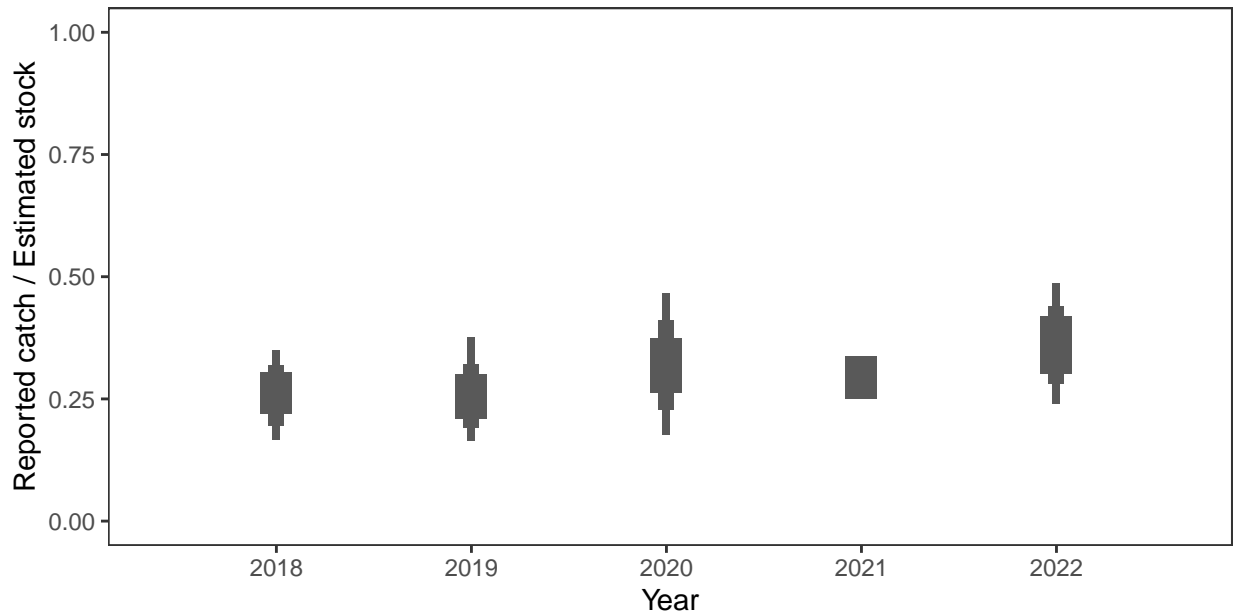## Monthly stock estimates (out of season in black)

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

Annual estimated stock

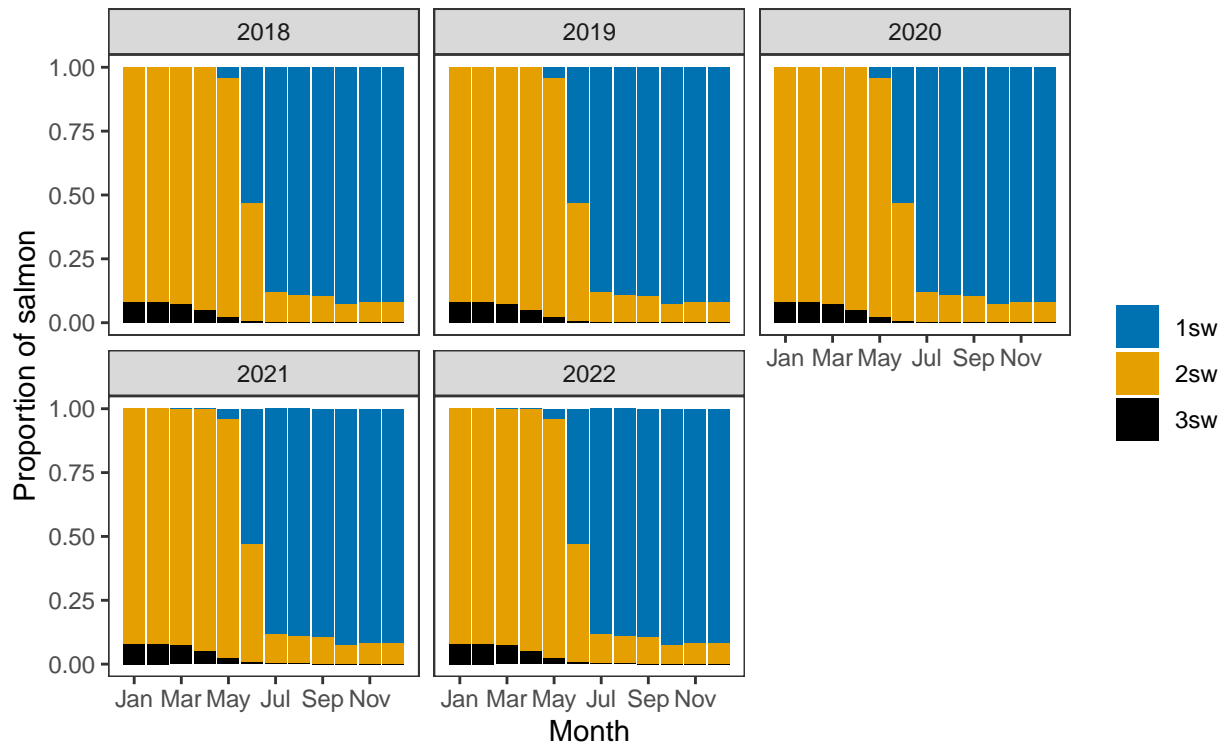Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

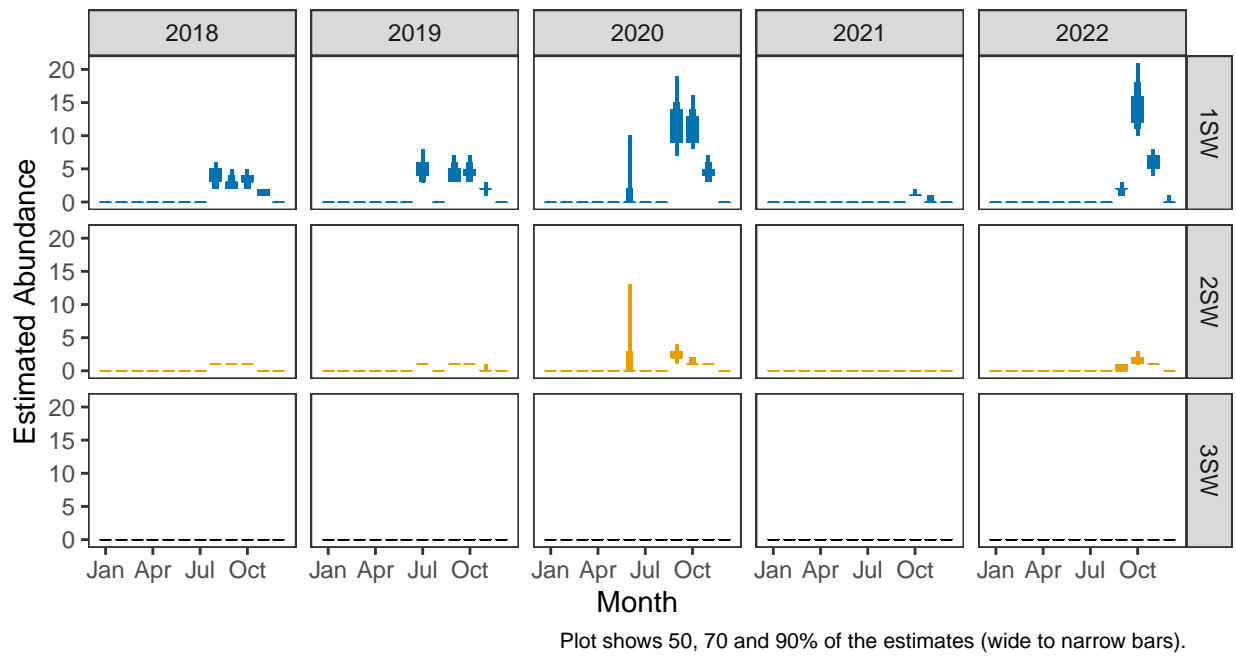*Annual catch as a proportion of stock*

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

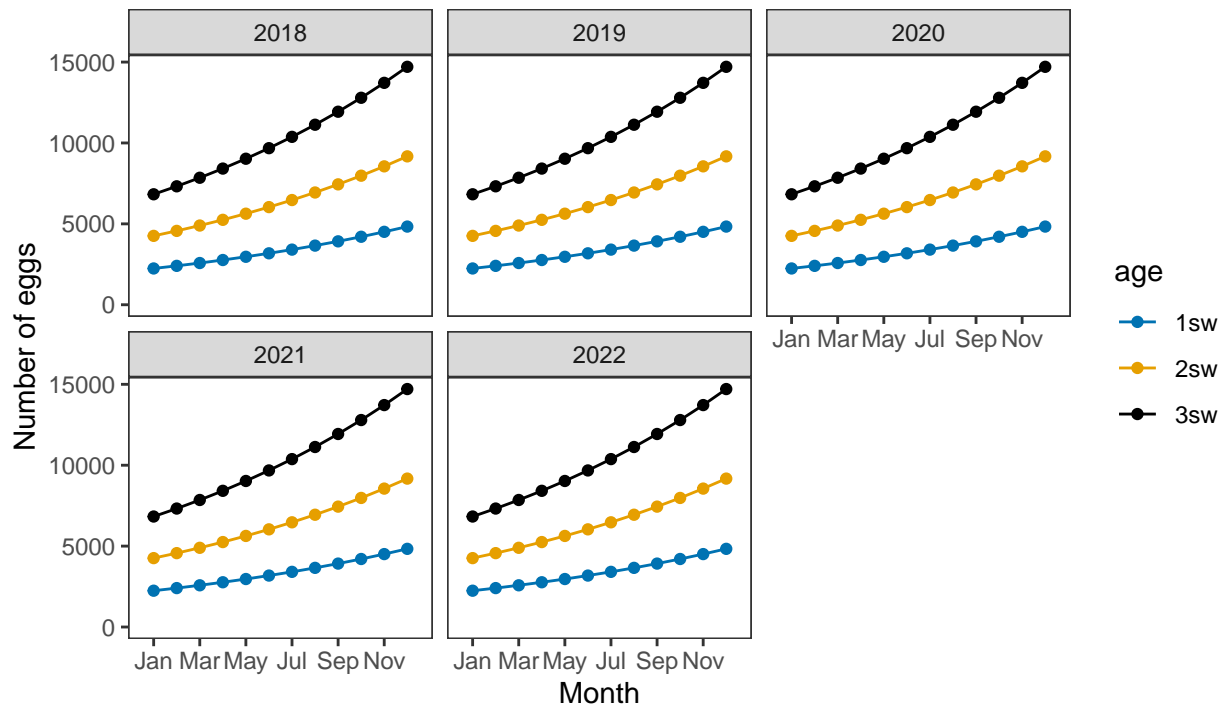## 2. Converting Numbers of Returning Salmon to Numbers of Spawning Females

Ages of fish

Monthly number of spawning females

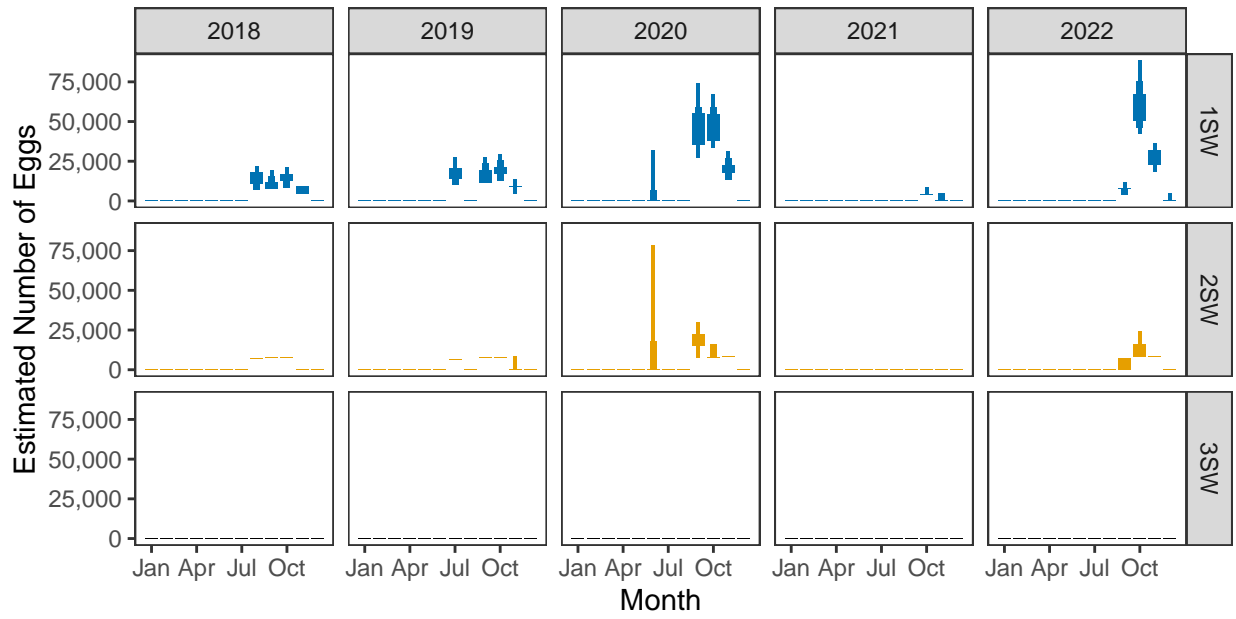Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

3. Converting Number of Spawners to Number of Eggs

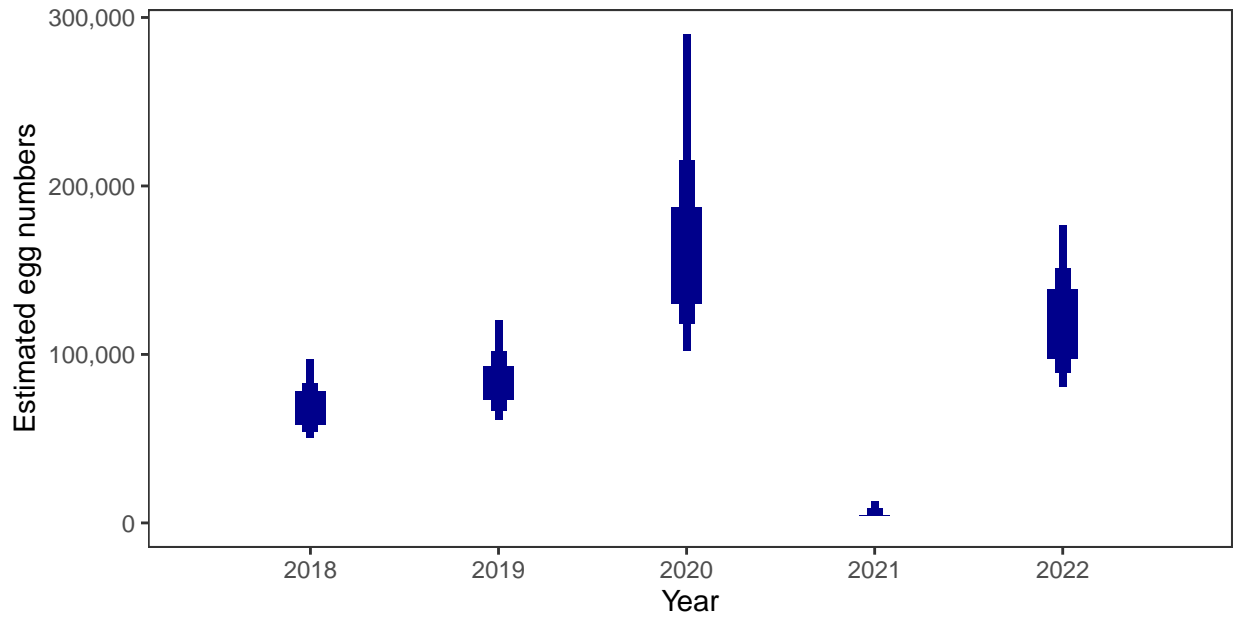*Egg contents of females*

Monthly number of eggs

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

Total annual egg numbers

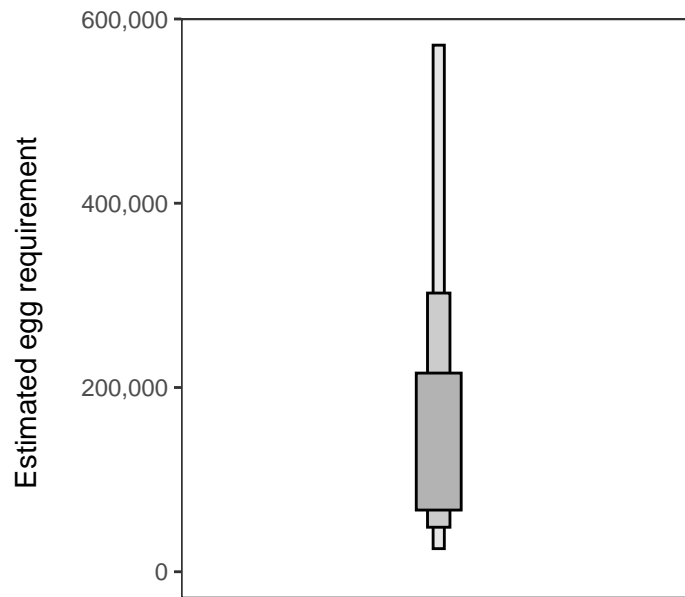Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	25.41
2019	34.05
2020	61.48
2021	0.72
2022	49.06

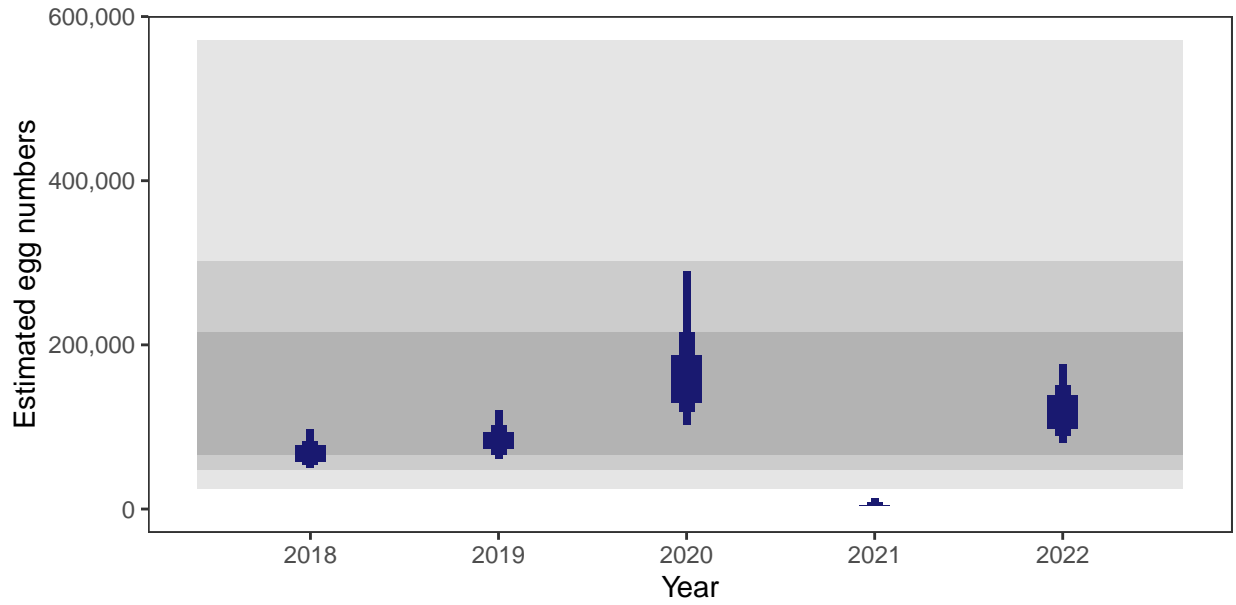## 4. Egg requirement

Areas of salmon habitat in square meters

There is an estimated 54,078 square meters of known salmon habitat in the River Glass and a further 25 square meters where salmon may be present.

Egg requirement

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

5. Percentage chance that the egg requirement has been reached

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)
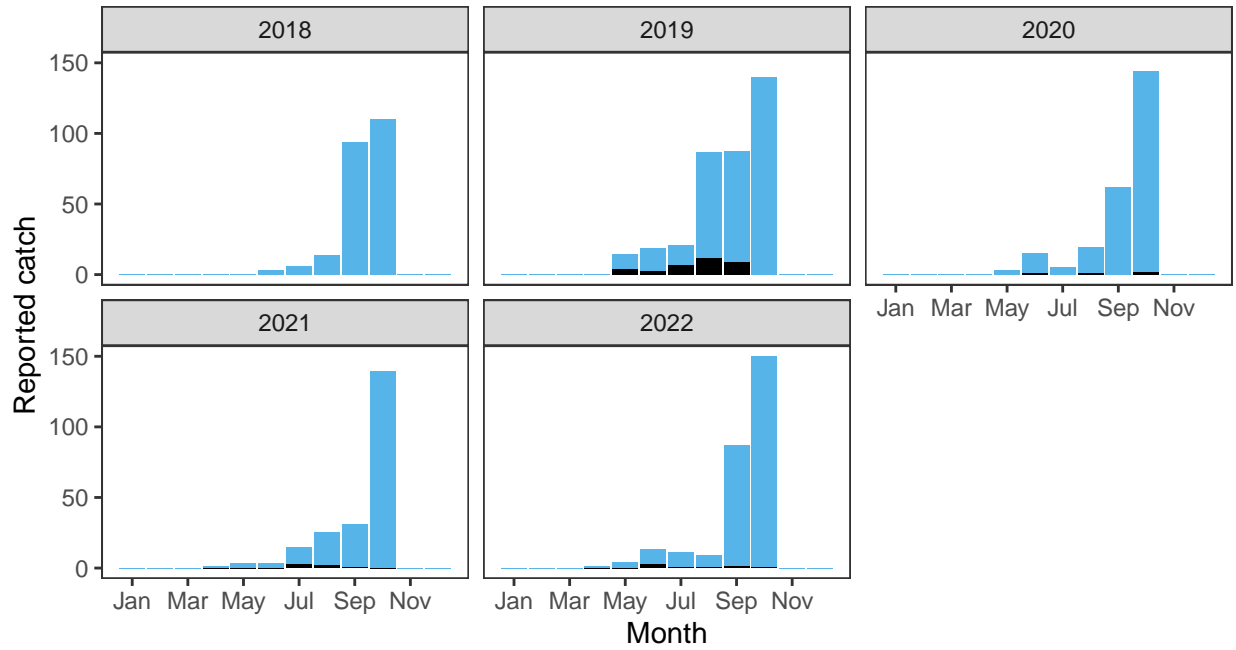
Alness River: Grade 2

Summary Table

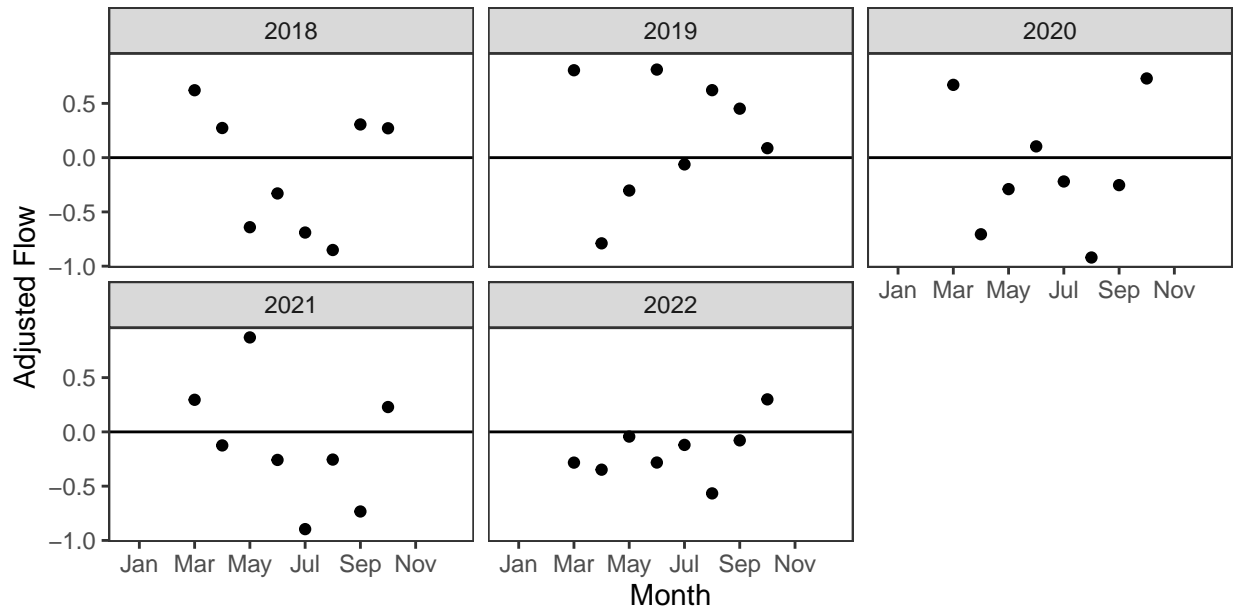| Eggs required (m²)[a]	Area (m²)[a]	Total egg requirement[a]	Percentage chance meeting requirement						Grade
			2018	2019	2020	2021	2022	Overall	
2.58	574,000	1,480,000	61.76	87.26	77.28	68.52	75.76	0.74116	2

[a] Figures presented are median values

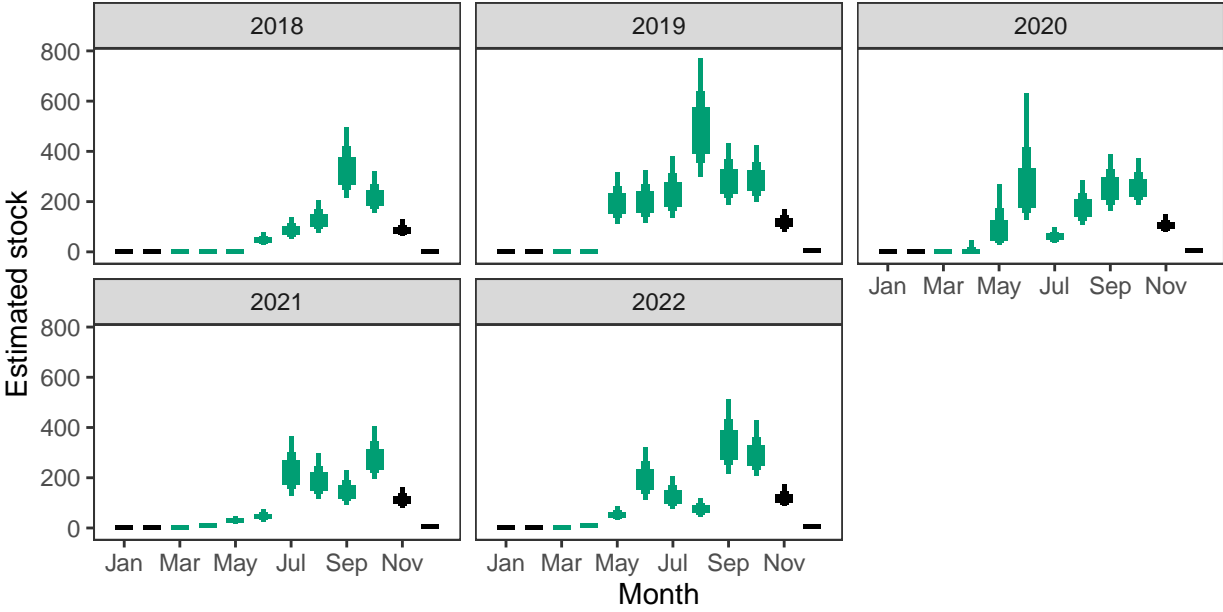# 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black = retained, blue = released)
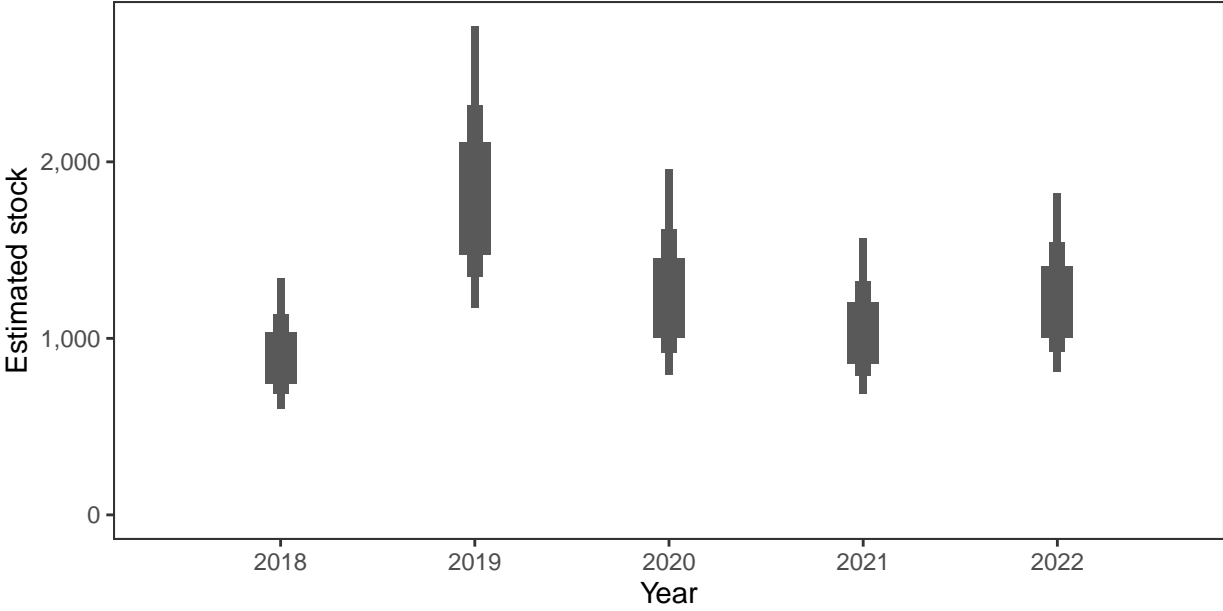

Monthly flow data

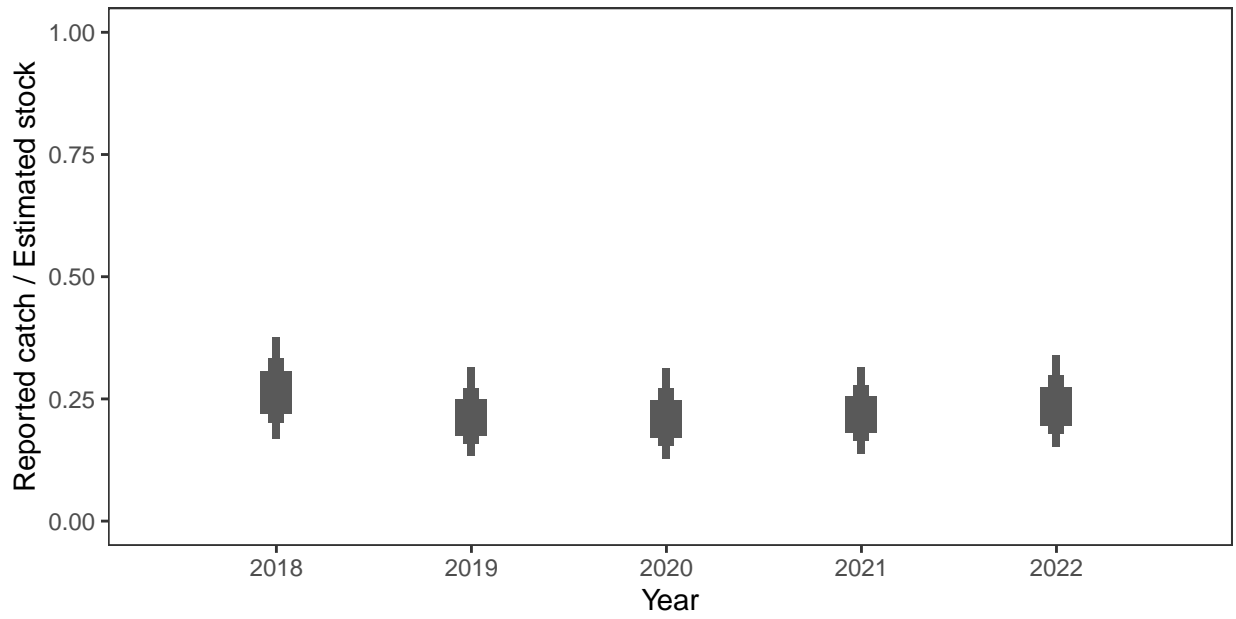## Monthly stock estimates (out of season in black)

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).
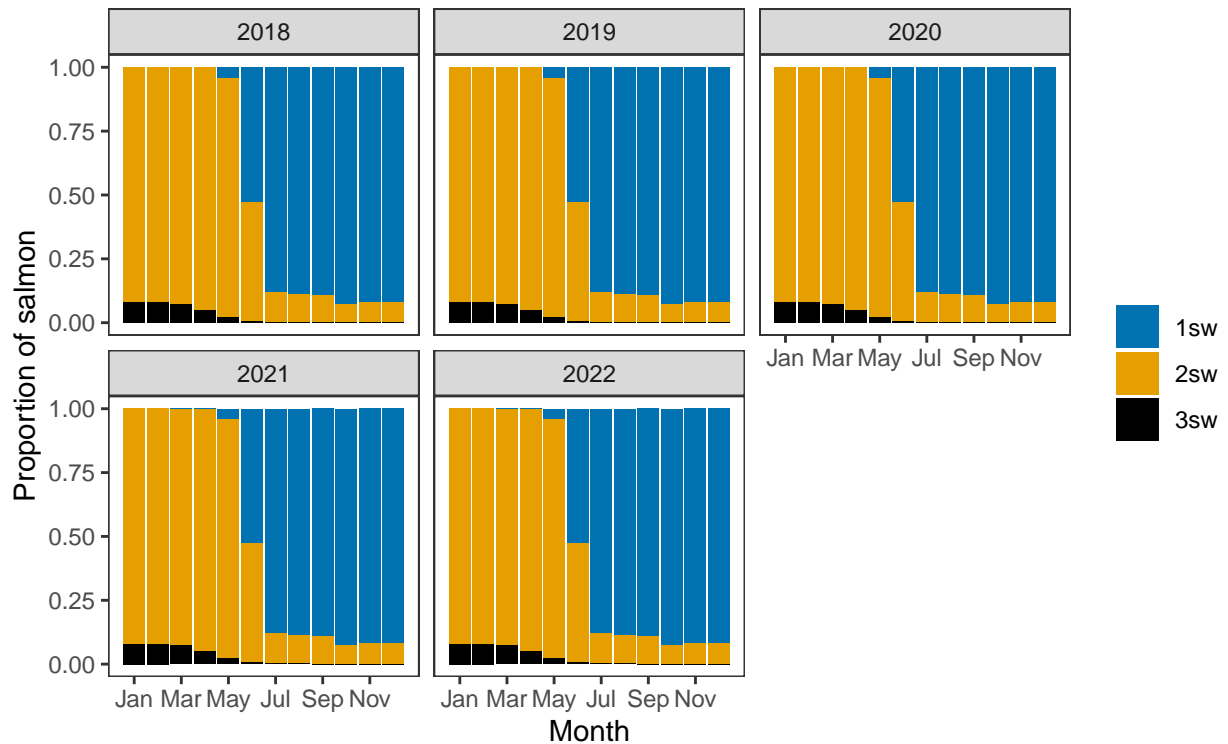
Annual estimated stock

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).
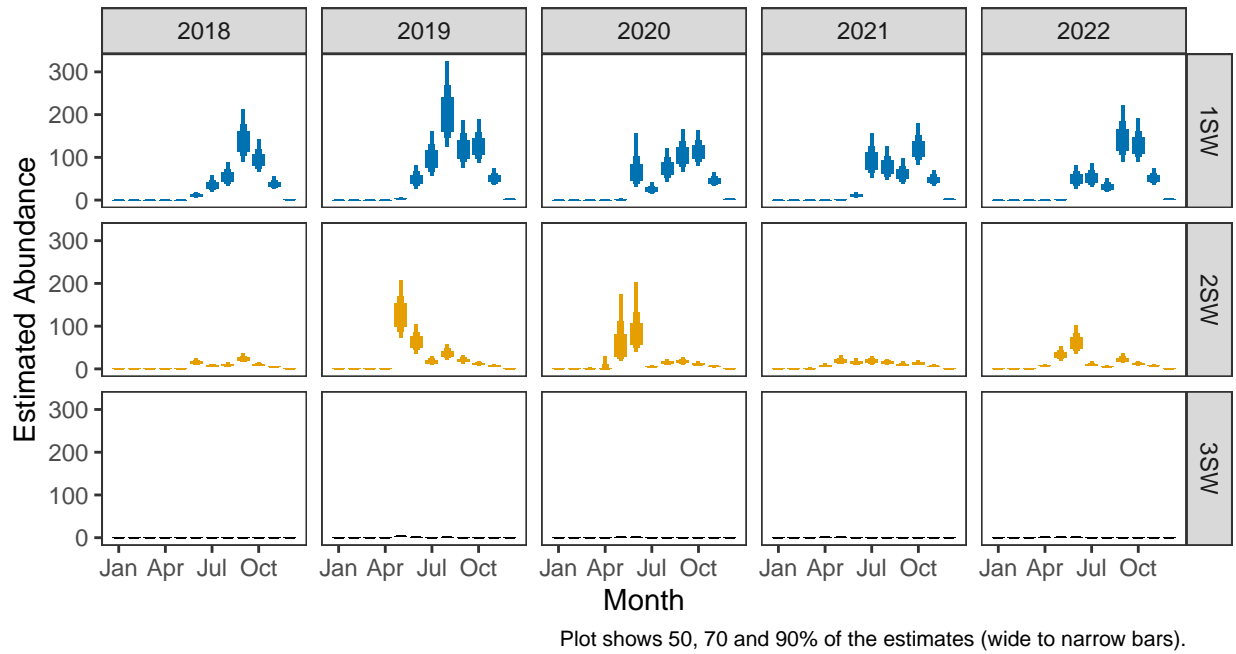
Annual catch as a proportion of stock

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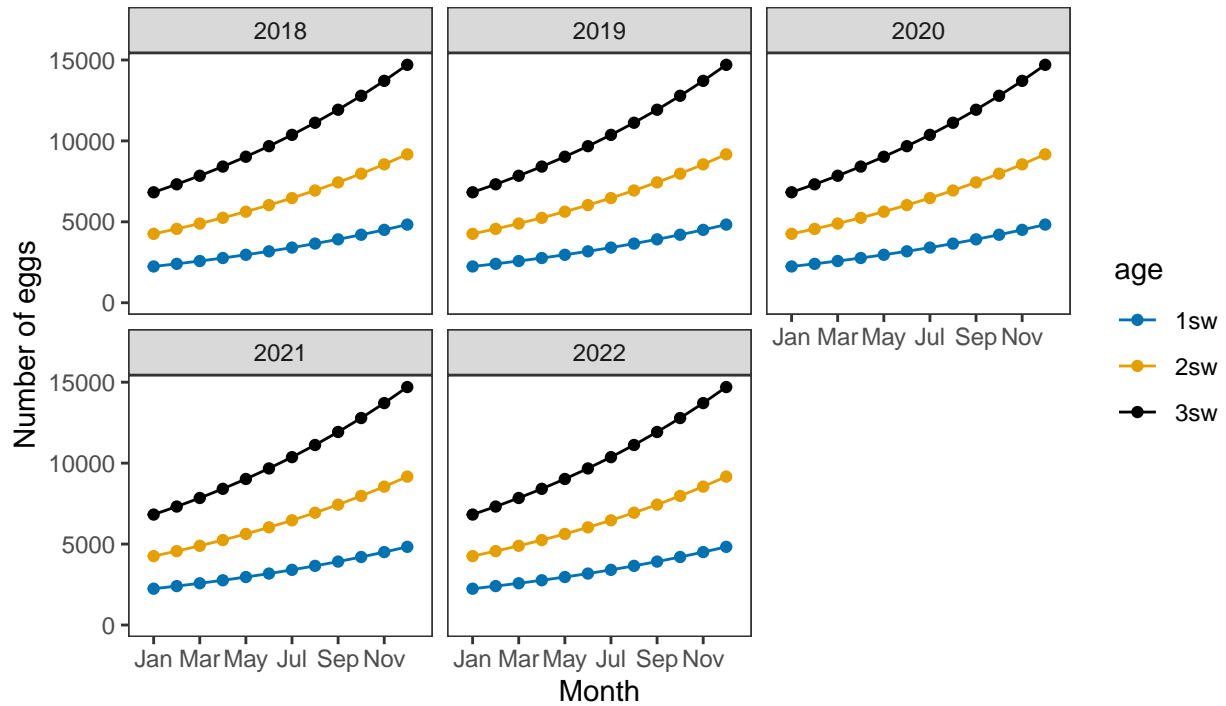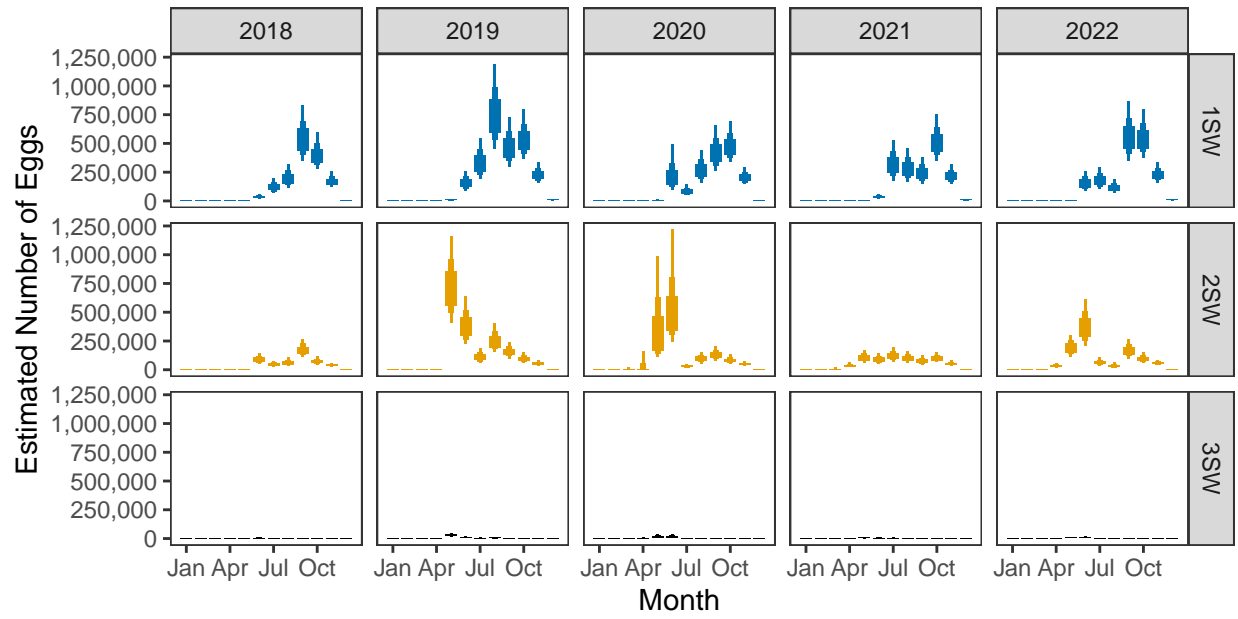
3. Converting Number of Spawners to Number of Eggs

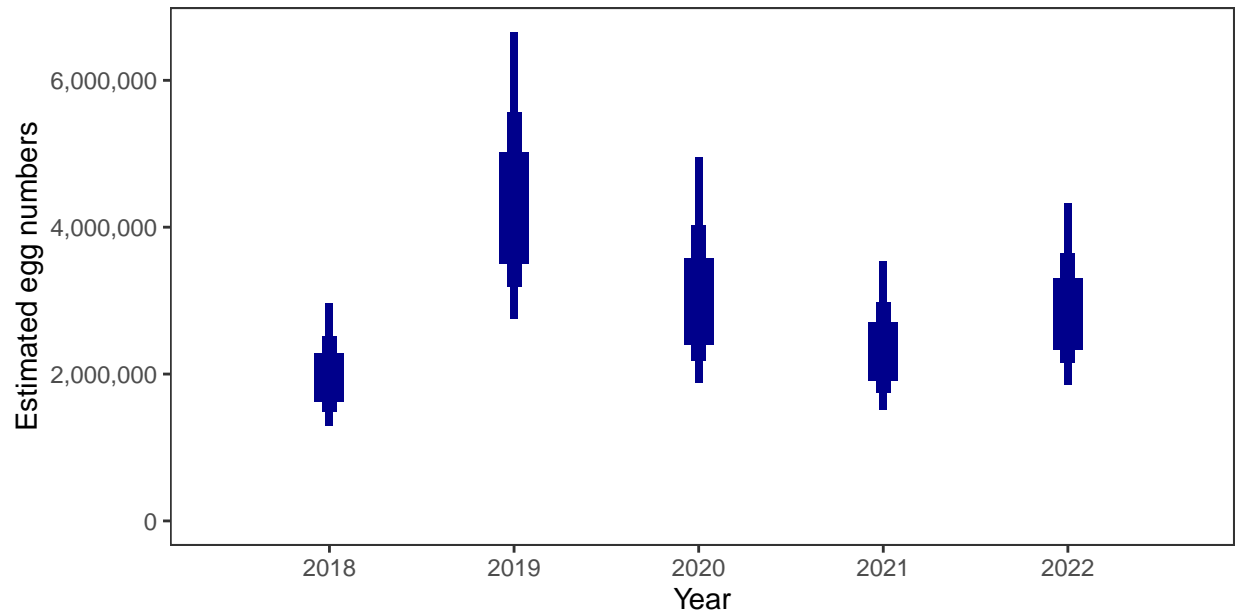*Egg contents of females*

Monthly number of eggs

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

Total annual egg numbers

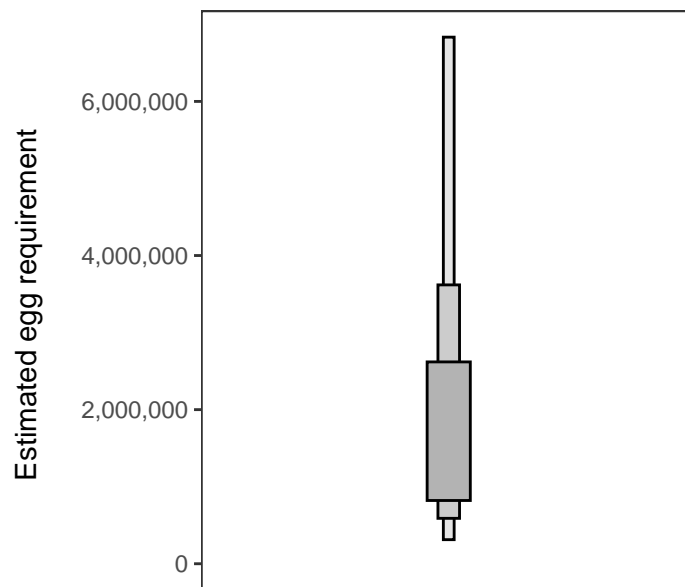Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	61.76
2019	87.26
2020	77.28
2021	68.52
2022	75.76

4. Egg requirement

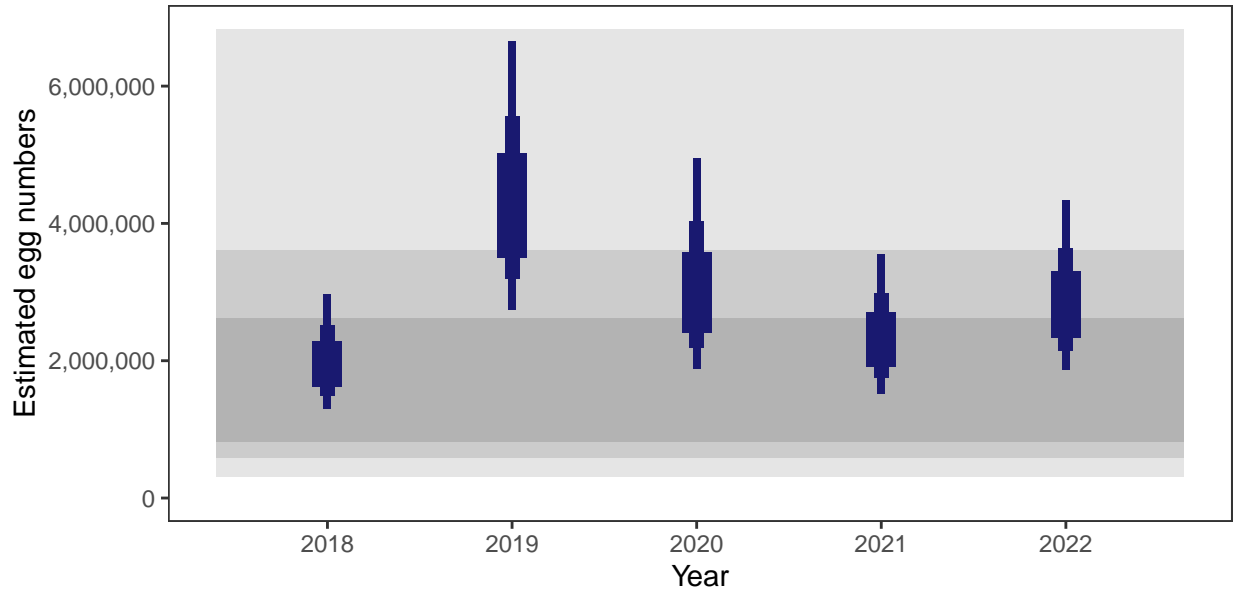*Areas of salmon habitat in square meters*

There is an estimated 648,228 square meters of known salmon habitat in the Alness River and a further 8,771 square meters where salmon may be present.

Egg requirement

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

5. Percentage chance that the egg requirement has been reached

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)
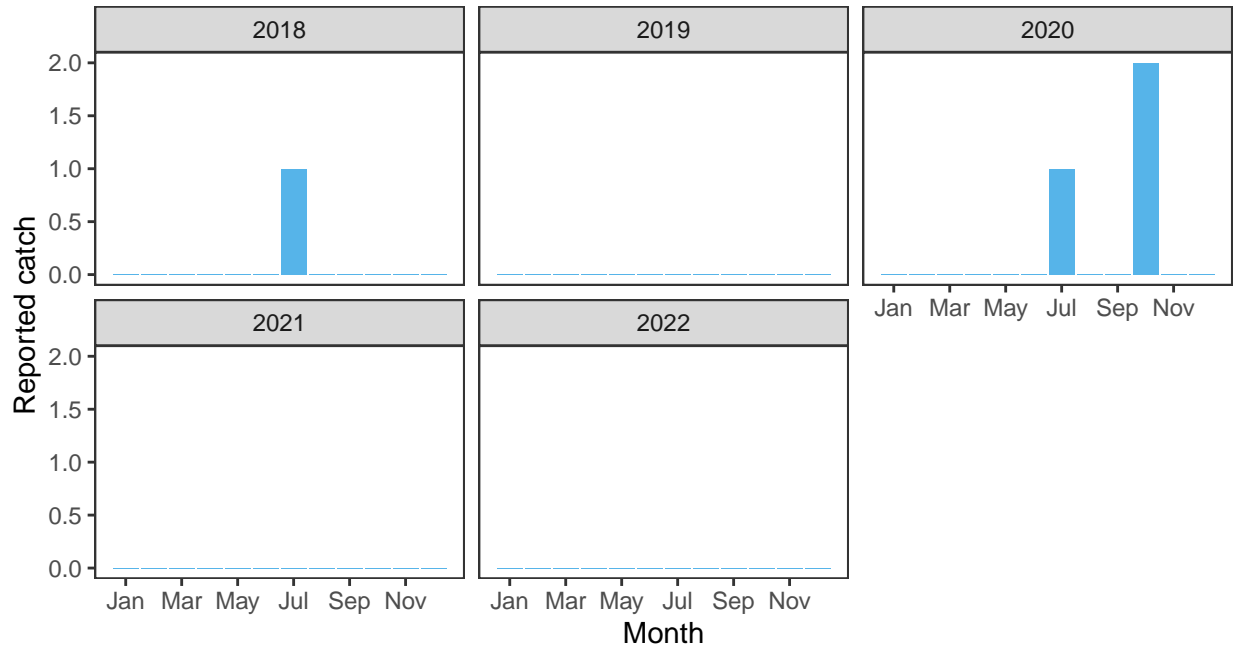
Balnagowan River: Grade 3

Summary Table

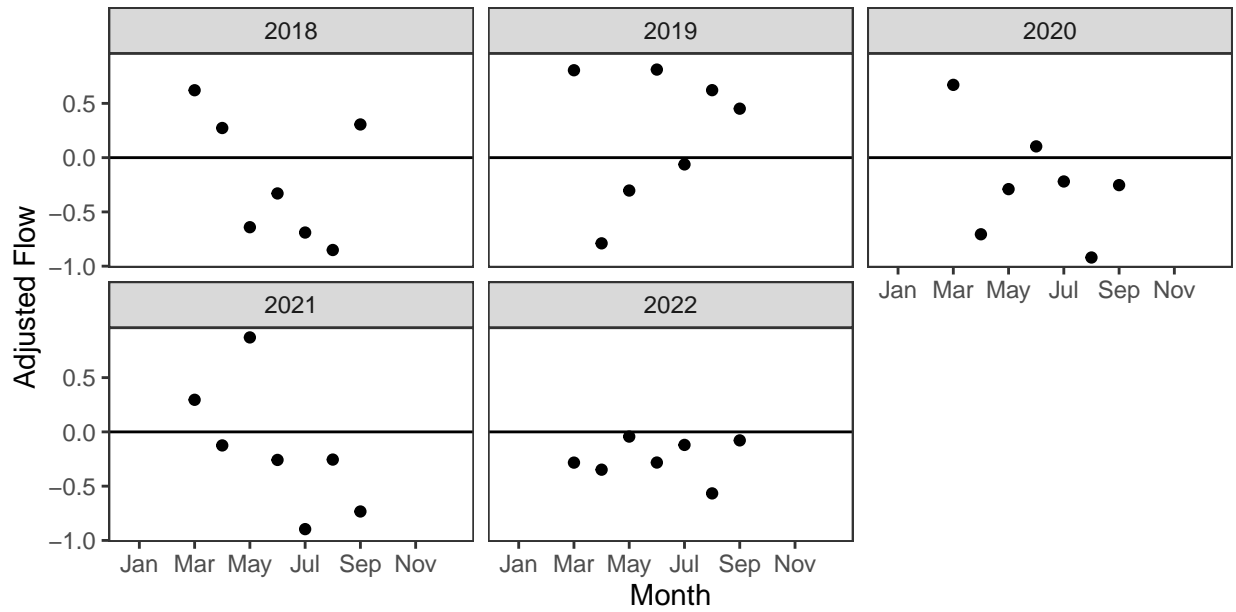| Eggs required $(m^2)^a$ | Area $(m^2)^a$ | Total egg requirement[a] | Percentage chance meeting requirement | | | | | | Grade |
			2018	2019	2020	2021	2022	Overall	
2.55	170,000	434,000	0.69	0	2.72	0.14	0	0.0071	3

[a] Figures presented are median values

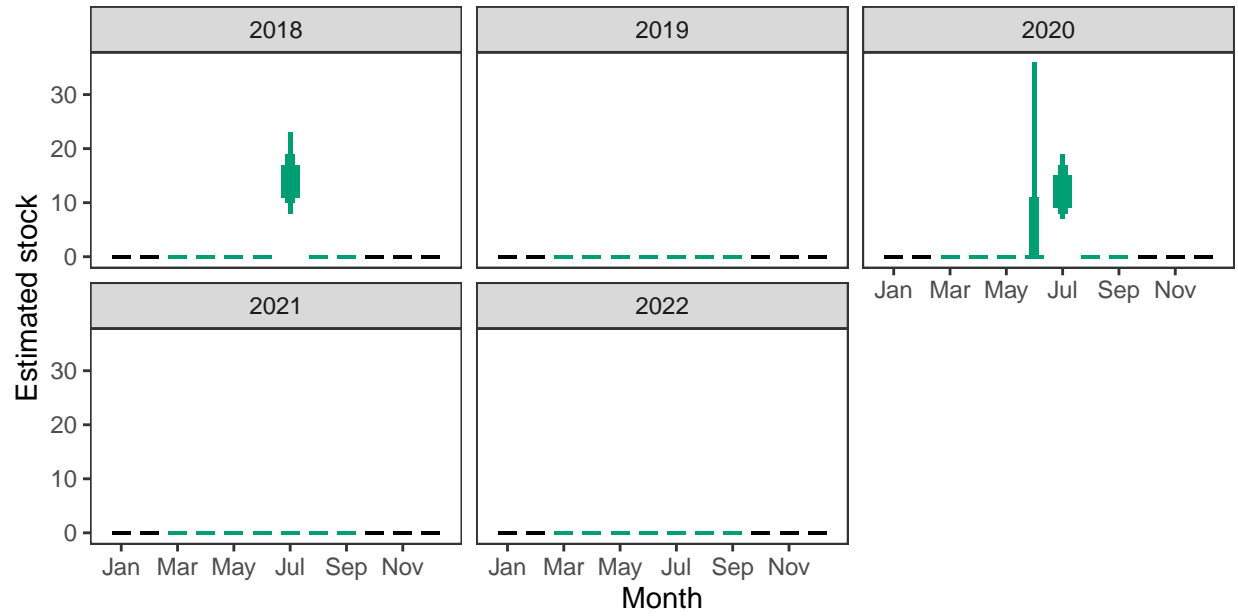# 1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black = retained, blue = released)
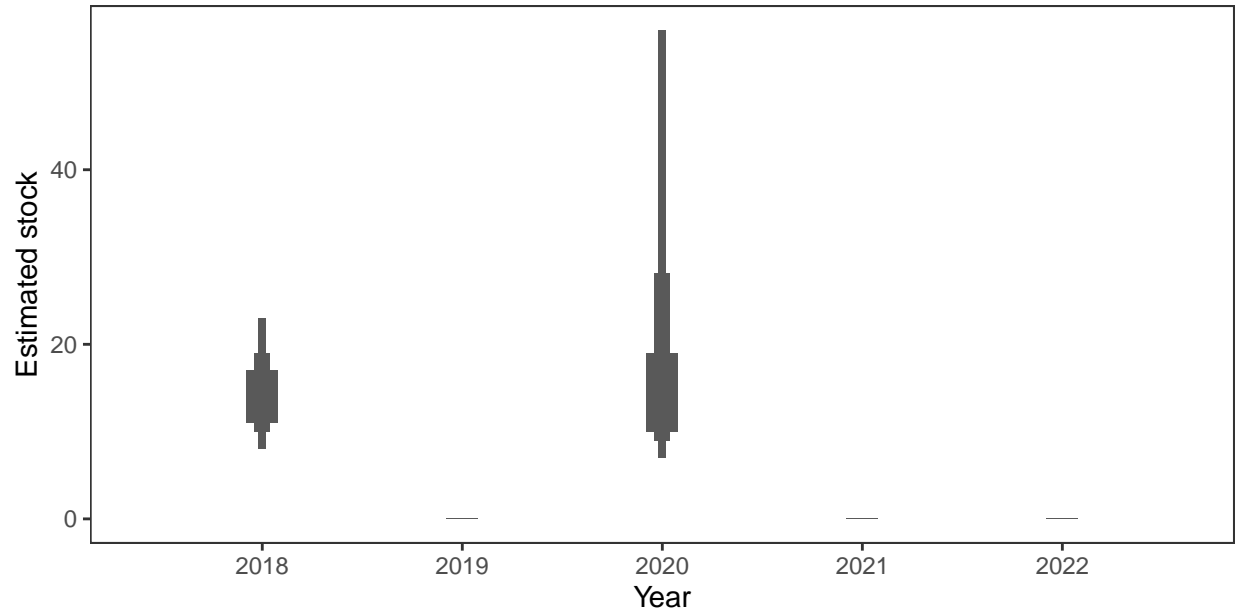

Monthly flow data

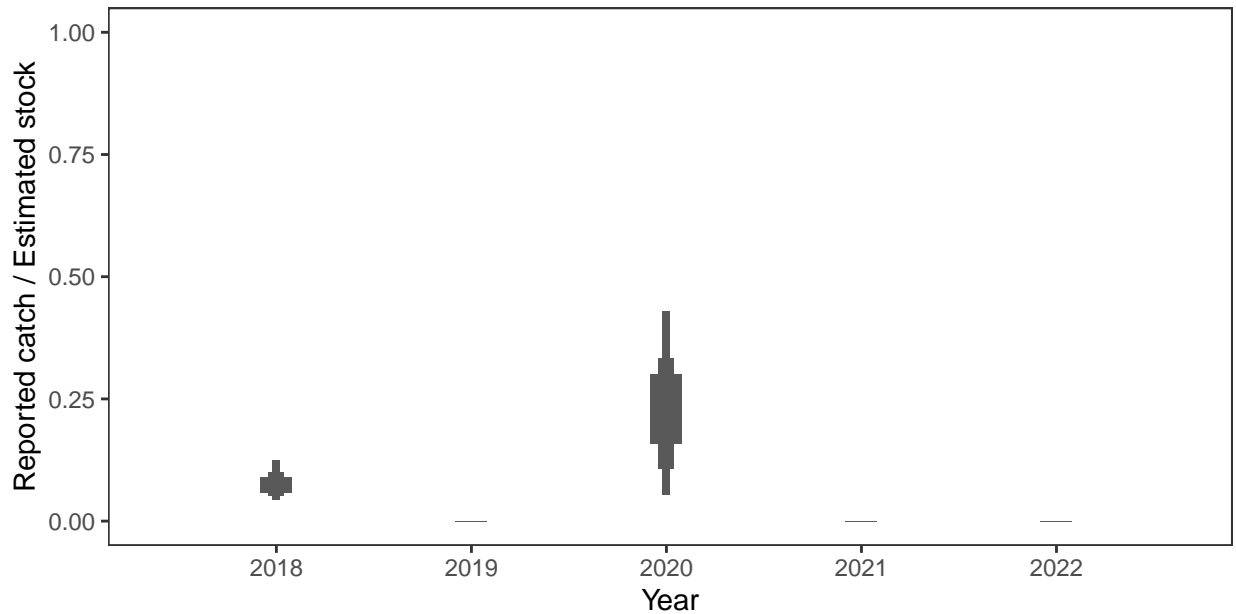*Monthly stock estimates (out of season in black)*

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

Annual estimated stock

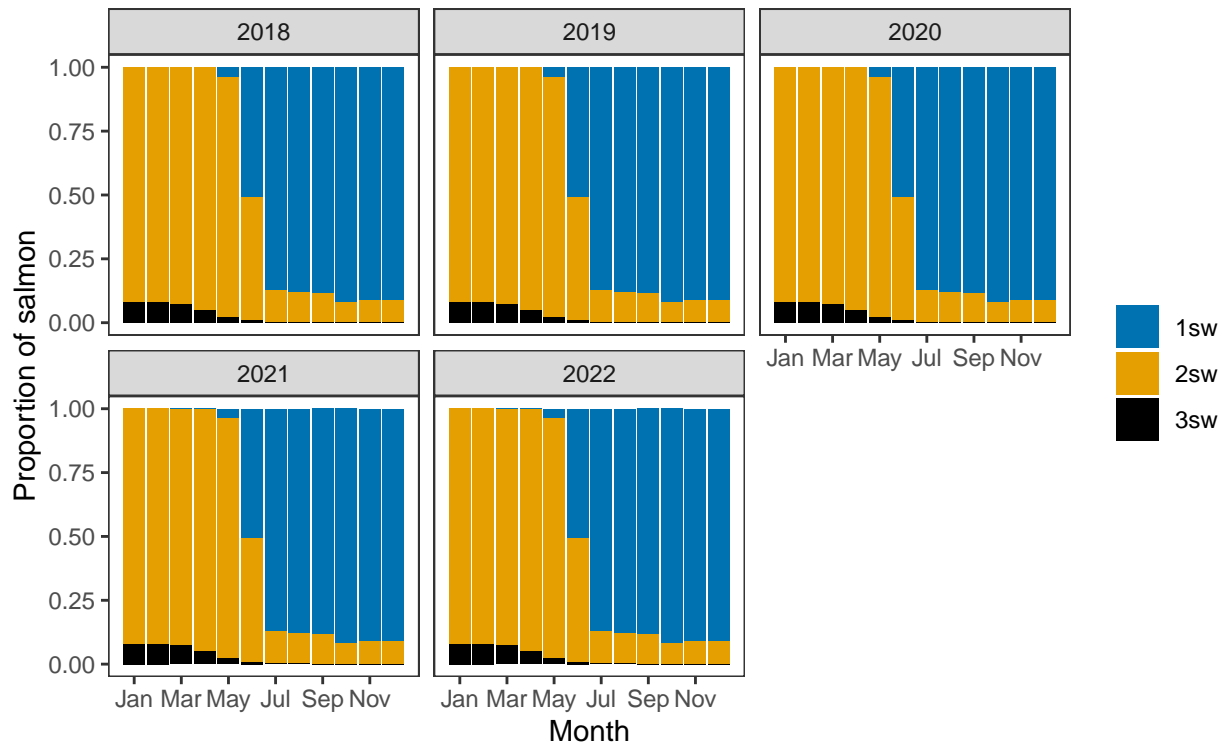Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).
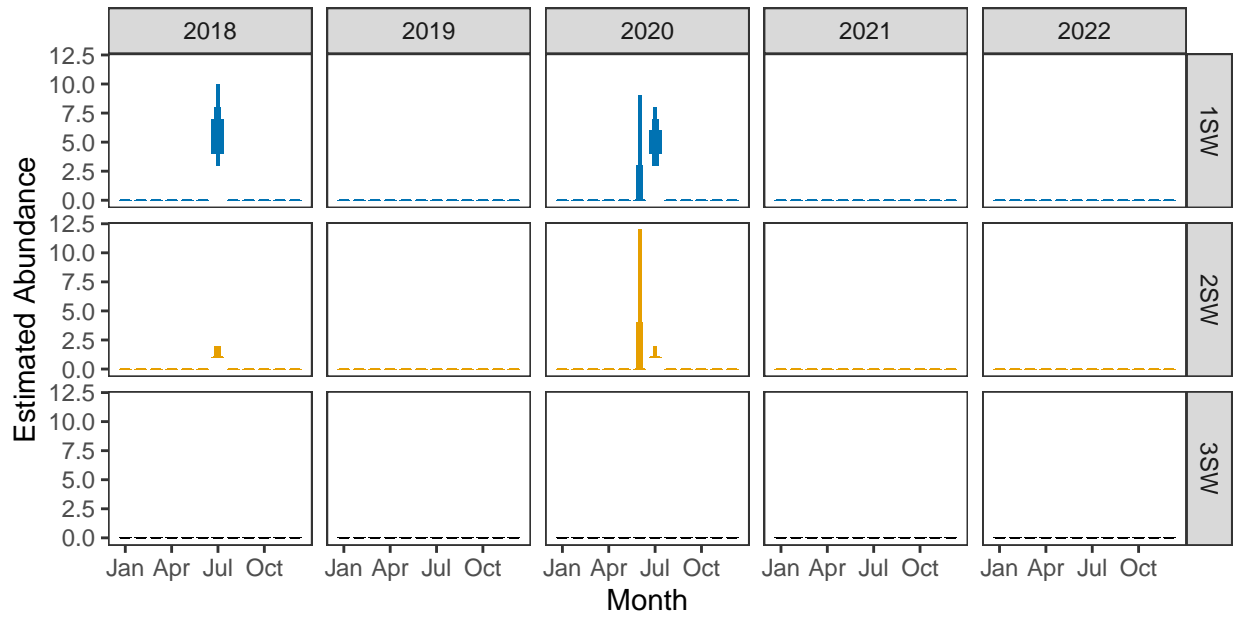
99

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
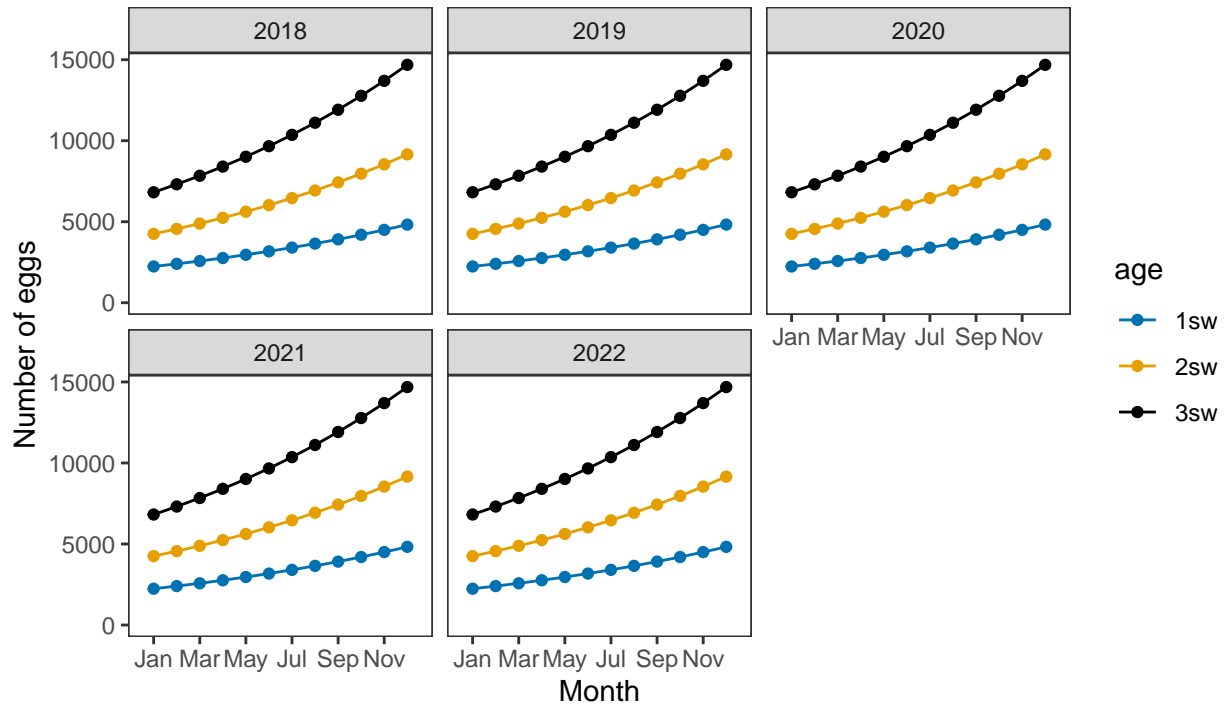
Ages of fish
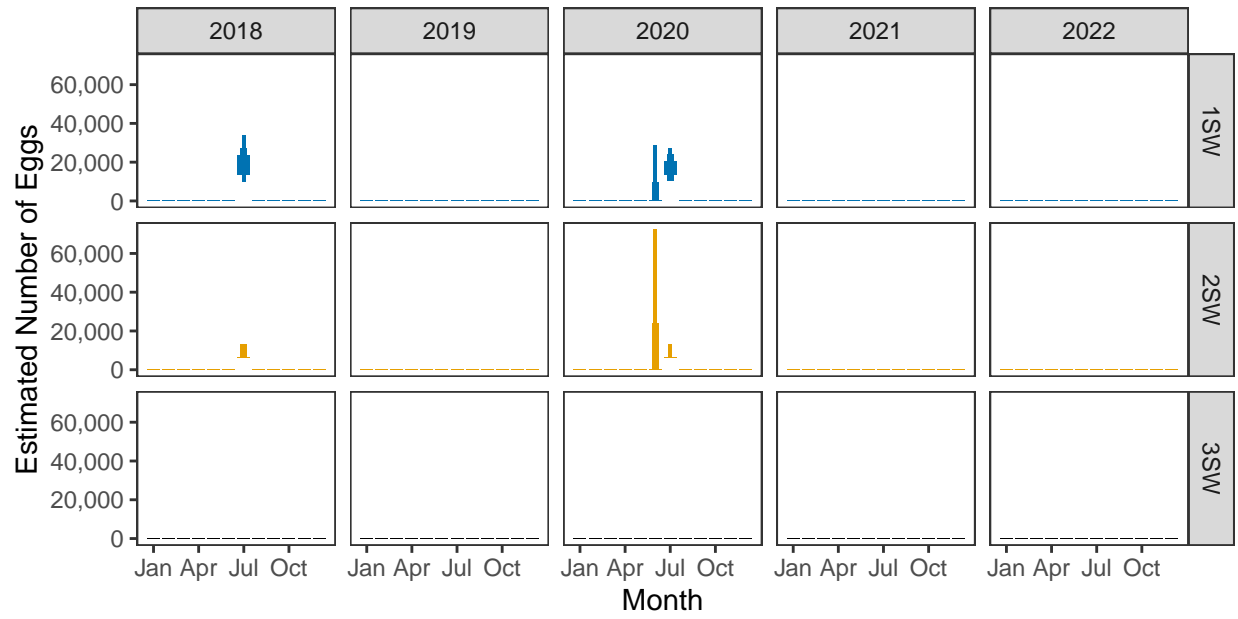
Monthly number of spawning females

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

3. Converting Number of Spawners to Number of Eggs
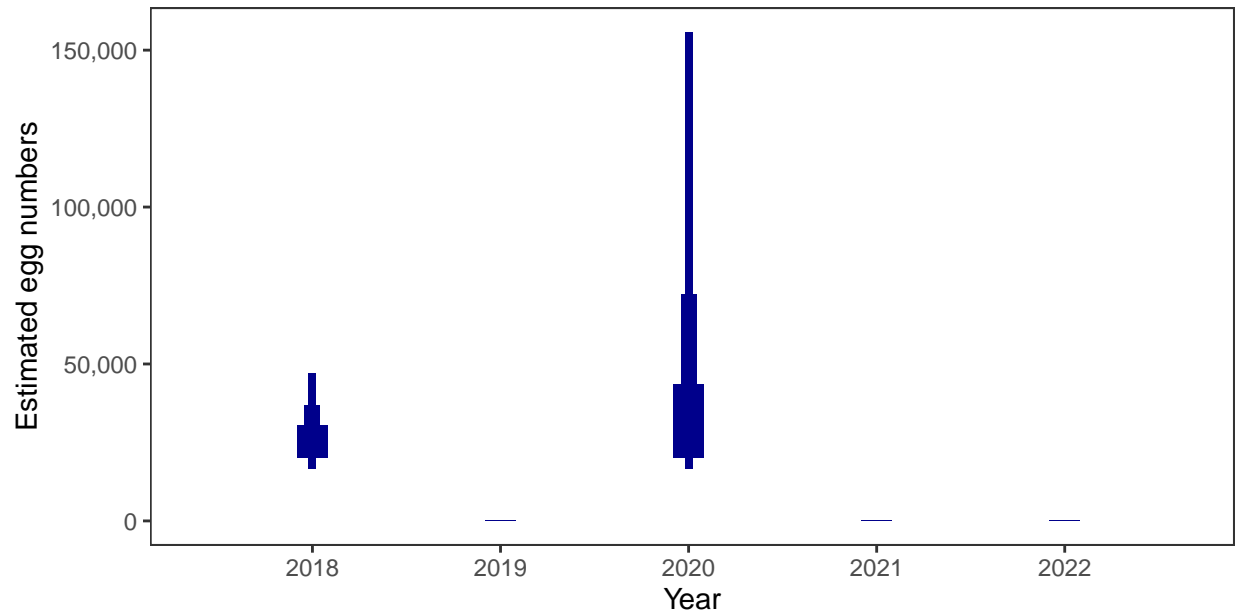
Egg contents of females

Monthly number of eggs

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

Total annual egg numbers

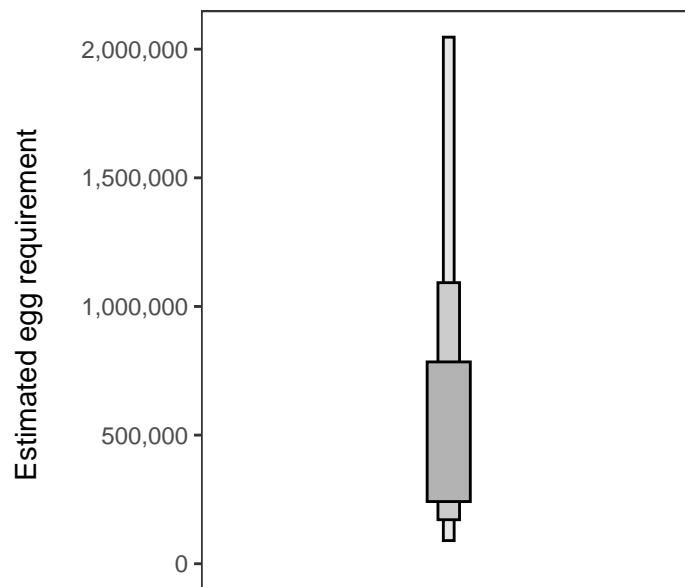Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	0.69
2019	-
2020	2.72
2021	0.14
2022	-

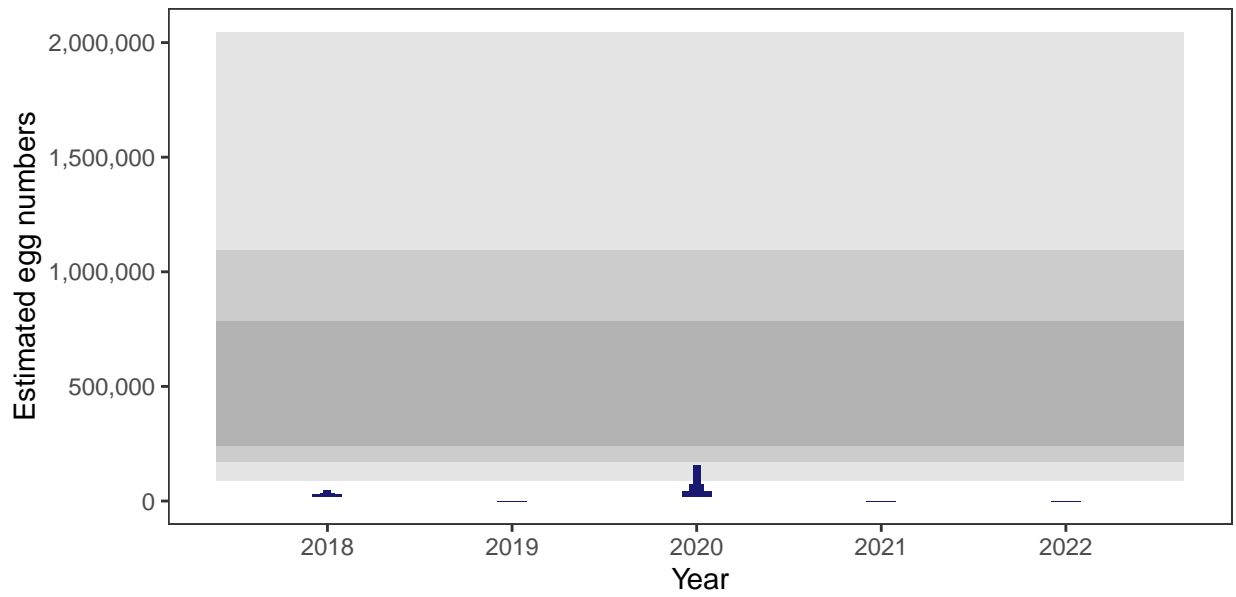## 4. Egg requirement

Areas of salmon habitat in square meters

There is an estimated 190,152 square meters of known salmon habitat in the Balnagowan River and a further 6,181 square meters where salmon may be present.

Egg requirement

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

5. Percentage chance that the egg requirement has been reached

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)