

Kolarctic CBC – Project KO4178; Conserving our Atlantic salmon as a sustainable resource for people in the North; fisheries and conservation in the context of growing threats and a changing environment.

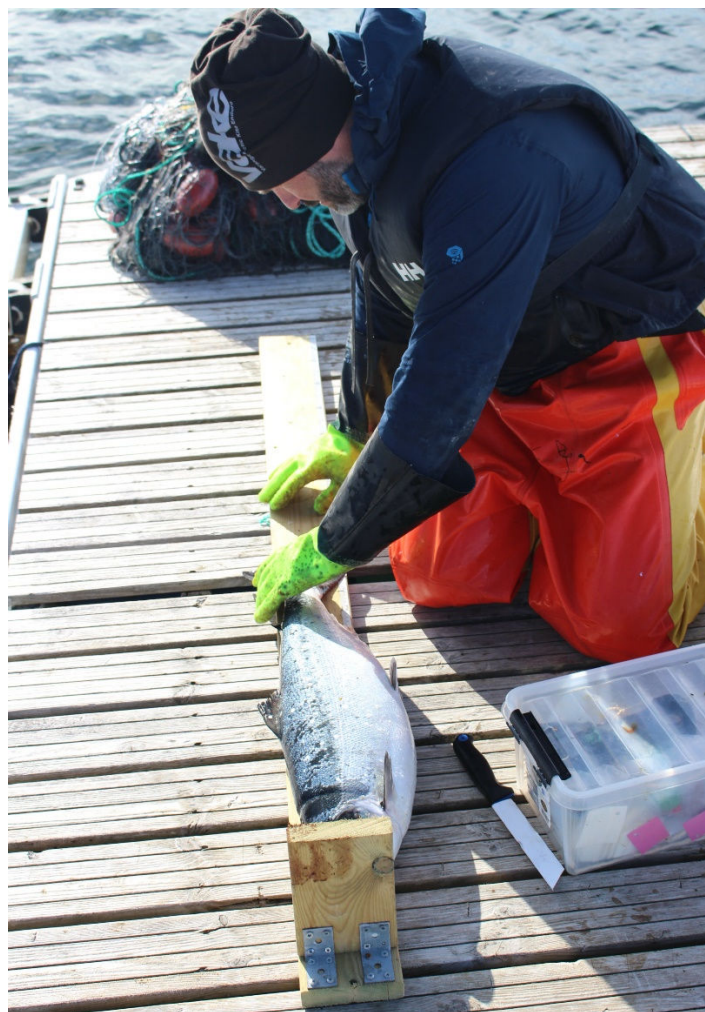
## **Report XI. Weekly salmon catch distributions at sea in Finnmark municipalities, in terms of numbers and size distributions for small, medium and large salmon, indicating size dependent timing throughout the summer**

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| Statsforvalteren i Troms og Finnmark<br>PB 700, 9815 VADSØ<br><a href="http://www.statsforvalteren/troms-finnmark/">www.statsforvalteren/troms-finnmark/</a><br><br>CoASal – KO4178 project  | ISBN 978-82-94021-10-9<br>Date: 31.1.2023 |
| <p>REPORT XI. Weekly salmon catch distributions at sea in Finnmark municipalities, in terms of numbers and size distributions for small, medium and large salmon, indicating size dependent timing throughout the summer</p> <p>Niemelä <sup>1,2</sup>, E., Hassinen<sup>1,2</sup>, E., Høstmark<sup>3</sup>, M.S., Kalske<sup>3</sup>, T.H</p> <p><i><sup>1)</sup> Biodiversity Unit, University of Turku; Turku, Finland</i><br/> <sup>2)</sup> <i>Firm Olli van der Meer; Oulu; Finland</i><br/> <sup>3)</sup> <i>County Governor of Troms and Finnmark; Vadsø, Norway</i></p>  |   |
| <p><b>Abstract</b></p> <p>in Norway in 1993, new orders came in force regarding how to inform about the daily salmon catches. The new catch reporting orders included that catches should be reported daily, and divided in three size groups ( &lt;3kg, 3-7kg, &gt;7 kg) in numbers and weights. Catch reports should also inform if salmon were caught in bag net or bend net. Salmon in the weight group &lt;3kg corresponds salmon in the age of one seawinter, 3-7kg corresponds salmon in the age of two seawinter and also most of previous spawning salmon age groups, &gt;7 kg corresponds salmon in the age of 3-5 seawinter salmon.</p> <p>Graphs for each municipality are showing weekly catches from bag net and bend net fishery combined. Nowadays, salmon fishing restrictions are differing between geographical areas and in one municipality there can be areal fishing restrictions, like in Sør-Varanger municipality. Weekly numbers of salmon in the catches show how much the catches have declined after the new fishing restrictions were implemented, especially when comparing catches in 1990's with the catches in 2010's.</p> <p>Weekly salmon catches in all the municipalities are showing that the size distributions in salmon catches are changing slowly from the beginning to the end of fishing season. Largest salmon have been making the majority early in the fishing season in the catches and their proportion has slowly declined and compensated by medium size salmon and finally by small size salmon. The cutting of salmon fishing season early in the summer has affected in some municipalities into the smaller amounts of large salmon in the catches in the latest years.</p> |   |
| <p><b>Key words:</b><br/> Catch distributions, Finnmark, Atlantic salmon, <i>Salmo salar</i>, size dependent timing, bag net, bend net</p>   |   |
| <p><b>Front page photo:</b><br/> Eero Niemelä</p>  |   |

## Content

|   |    |
|---|----|
| 1. Annual and weekly catches in numbers for combined bag net and bend net fishery in Loppa and Hasvik municipalities, for three size groups of salmon .....                 | 4  |
| 2. Annual and weekly catches in numbers for combined bag net and bend net fishery in Alta municipality, for three size groups of salmon.....                                | 7  |
| 3. Annual and weekly catches in numbers for combined bag net and bend net fishery in Kvalsund municipality, for three size groups of salmon .....                           | 8  |
| 4. Annual and weekly catches in numbers for combined bag net and bend net fishery in Hammerfest municipality for three size groups of salmon .....                          | 9  |
| 5. Annual and weekly catches in numbers for combined bag net and bend net fishery in Måsøy and Nordkapp municipalities, for three size groups of salmon .....               | 10 |
| 6. Annual and weekly catches in numbers for combined bag net and bend net fishery in Måsøy municipality for three size groups of salmon .....                               | 11 |
| 7. Annual and weekly catches in numbers for combined bag net and bend net fishery in Nordkapp municipality, for three size groups of salmon .....                           | 12 |
| 8. Annual and weekly catches in numbers for combined bag net and bend net fishery in Porsanger municipality, for three size groups of salmon .....                          | 13 |
| 9. Annual and weekly catches in numbers for combined bag net and bend net fishery in Lebesby municipality, for three size groups of salmon .....                            | 14 |
| 10. Annual and weekly catches in numbers for combined bag net and bend net fishery in Tana, Gamvik and Berlevåg municipalities, for three size groups of salmon .....       | 15 |
| 11. Annual and weekly catches in numbers for combined bag net and bend net fishery in Gamvik municipality, for three size groups of salmon .....                            | 16 |
| 12. Annual and weekly catches in numbers for combined bag net and bend net fishery in Tana municipality, for three size groups of salmon .....                              | 18 |
| 13. Annual and weekly catches in numbers for combined bag net and bend net fishery in Berlevåg municipality, for three size groups of salmon .....                          | 19 |
| 14. Annual and weekly catches in numbers for combined bag net and bend net fishery in Vadsø and Nesseby municipalities, for three size groups of salmon .....               | 20 |
| 15. Annual and weekly catches in numbers for combined bag net and bend net fishery in Sør-Varanger, Nesseby and Vadsø municipalities, for three size groups of salmon ..... | 21 |
| 16. Annual and weekly catches in numbers for combined bag net and bend net fishery in Sør-Varanger municipality for three size groups of salmon .....                       | 22 |

# 1. Annual and weekly catches in numbers for combined bag net and bend net fishery in Loppa and Hasvik municipalities, for three size groups of salmon

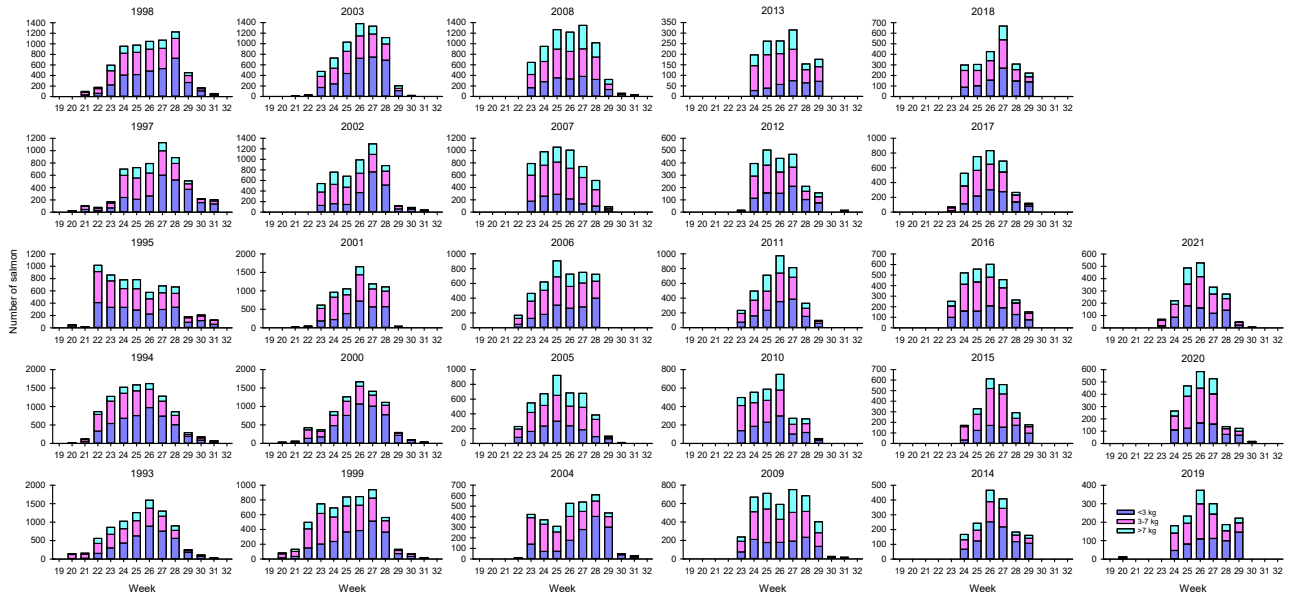


Figure 1. Annual and weekly catches in numbers for combined bag net and bend net fishery in Loppa and Hasvik municipalities, for three size groups of salmon.

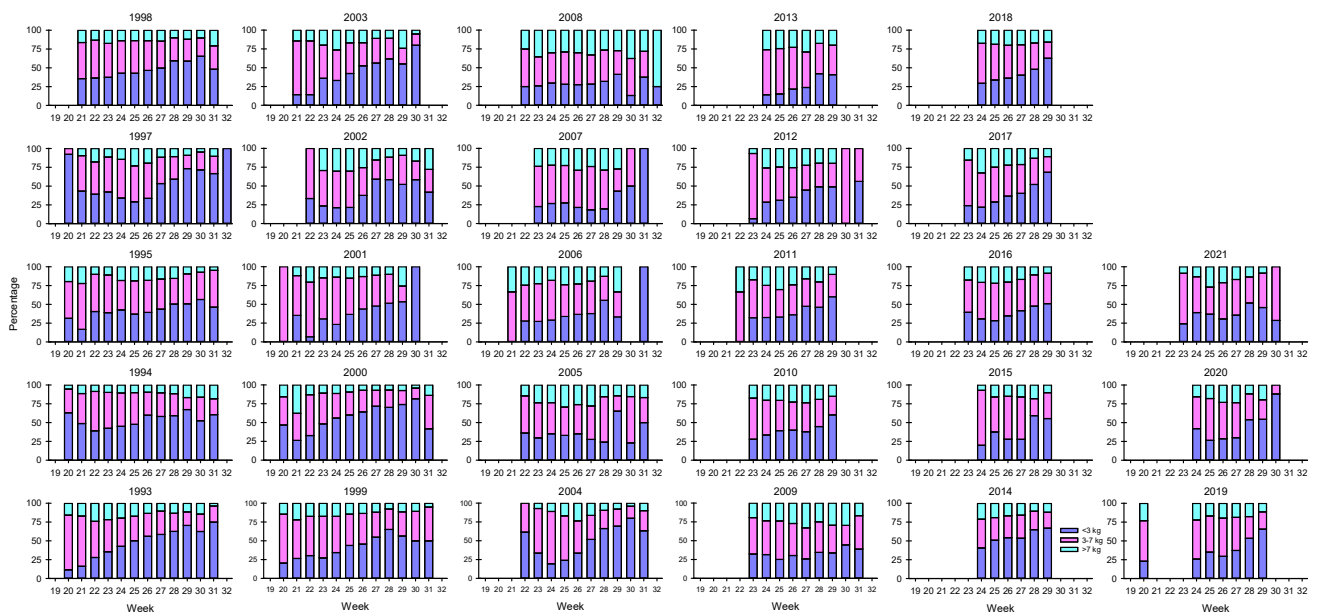


Figure 2. Annual and weekly distributions (%) in combined bag net and bend net fishery in Loppa and Hasvik municipalities, for three size groups of salmon.

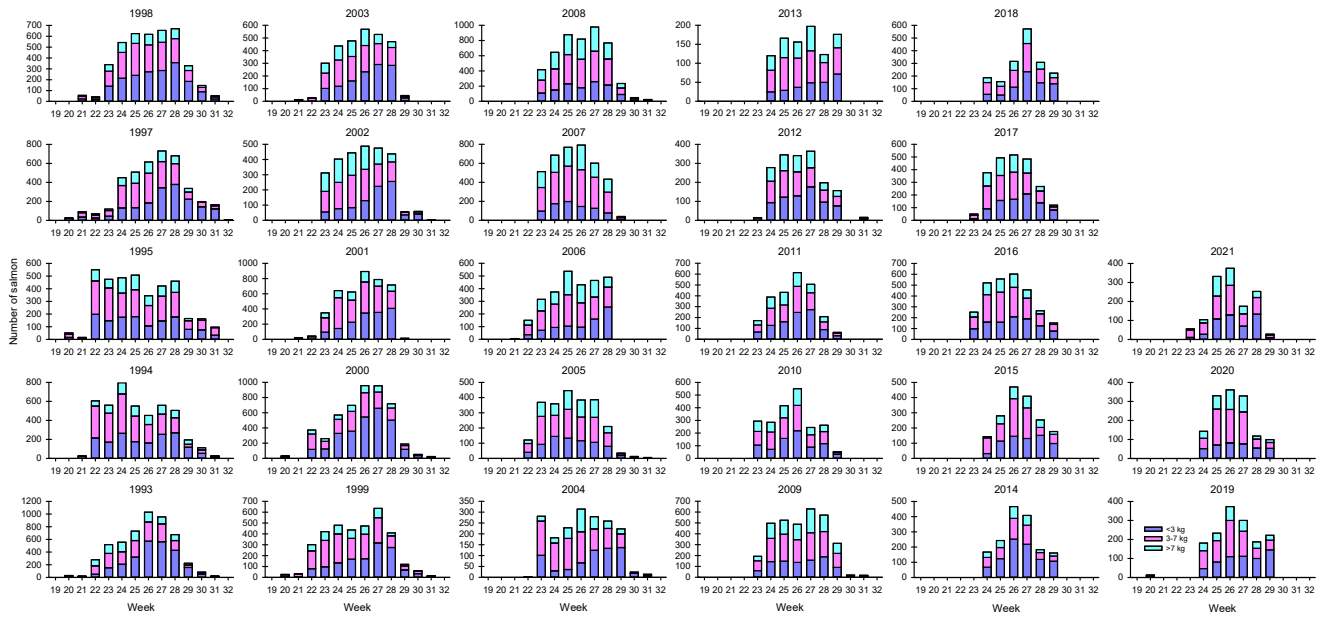


Figure 3. Annual and weekly catches in numbers for combined bag net and bend net fishery in Loppa municipality, for three size groups of salmon.

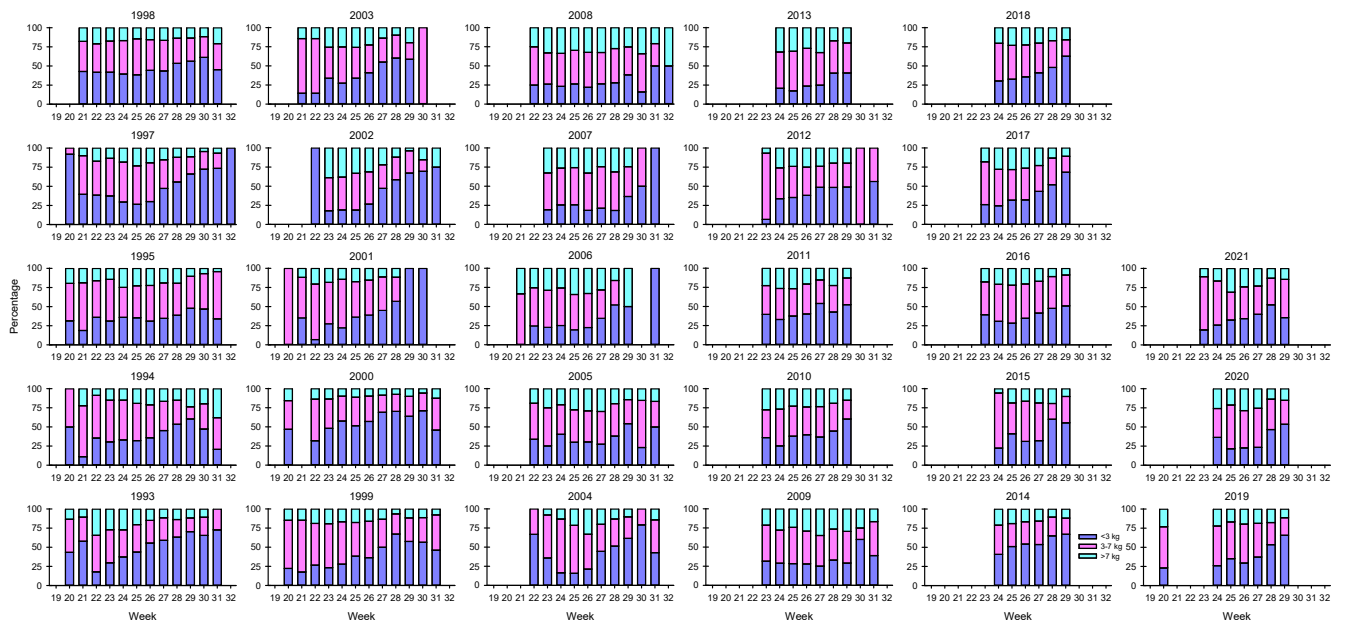


Figure 4. Annual and weekly distributions (%) in combined bag net and bend net fishery in Loppa municipality, for three size groups of salmon.

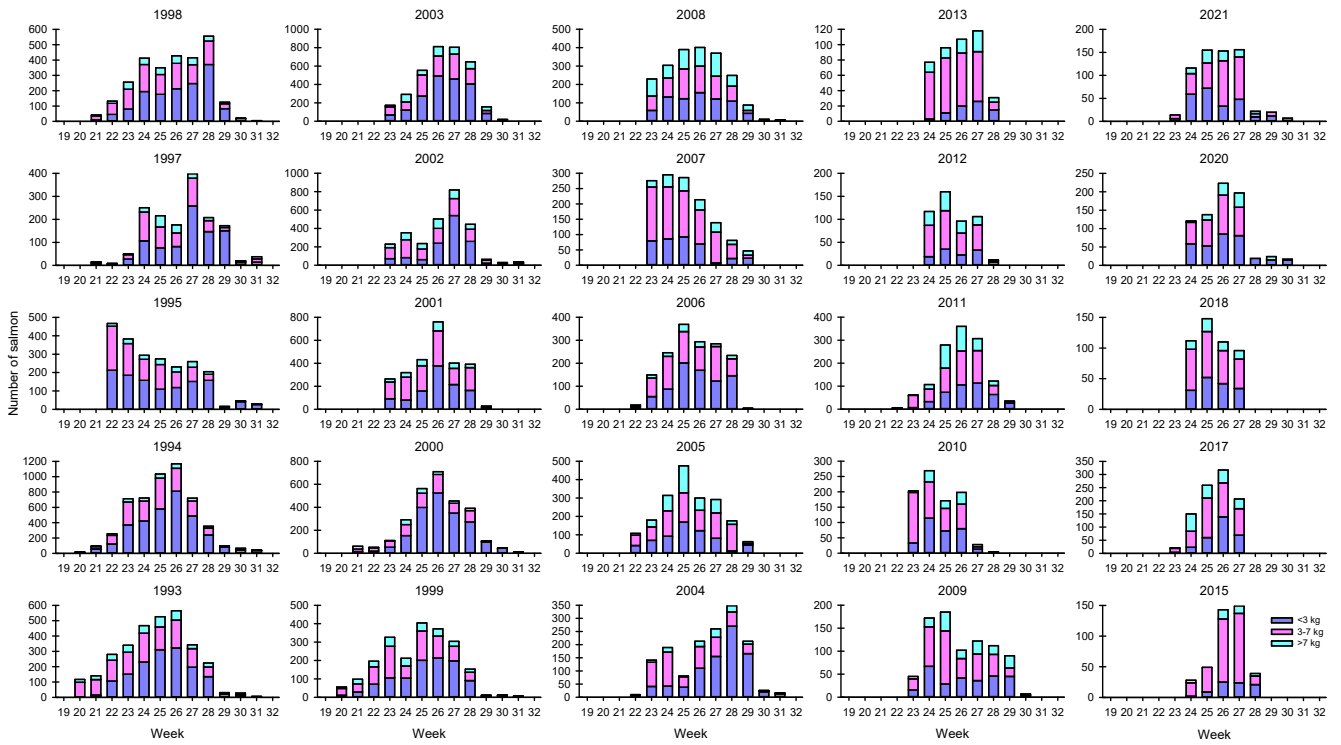


Figure 5. Annual and weekly catches in numbers for combined bag net and bend net fishery in Hasvik municipality, for three size groups of salmon.

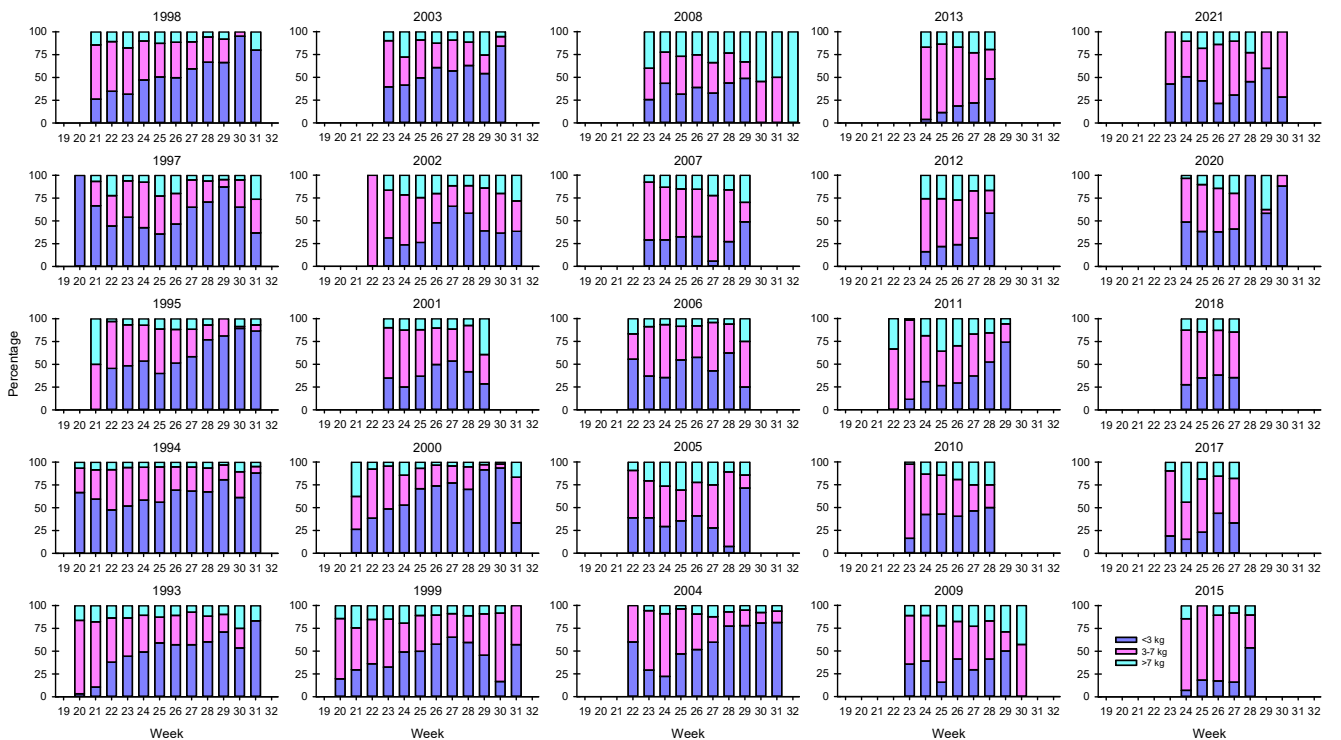


Figure 6. Annual and weekly distributions (%) in combined bag net and bend net fishery in Hasvik municipality, for three size groups of salmon.

## 2. Annual and weekly catches in numbers for combined bag net and bend net fishery in Alta municipality, for three size groups of salmon

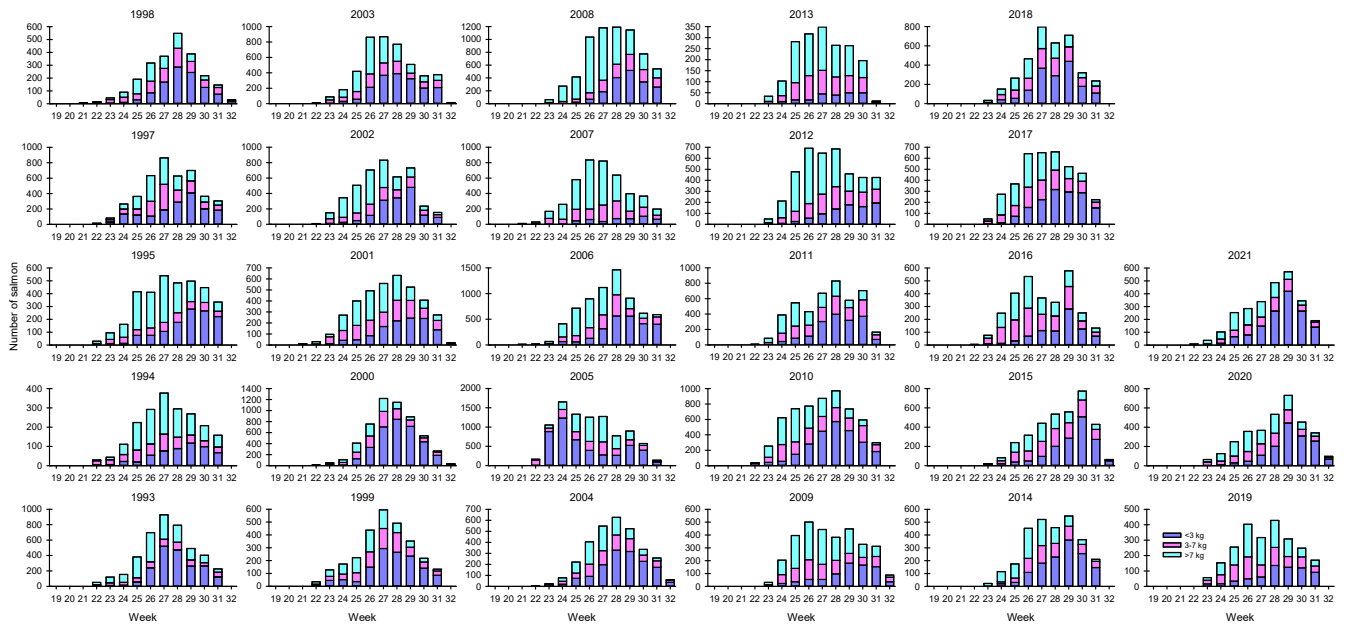


Figure 7. Annual and weekly catches in numbers for combined bag net and bend net fishery in Alta municipality, for three size groups of salmon.

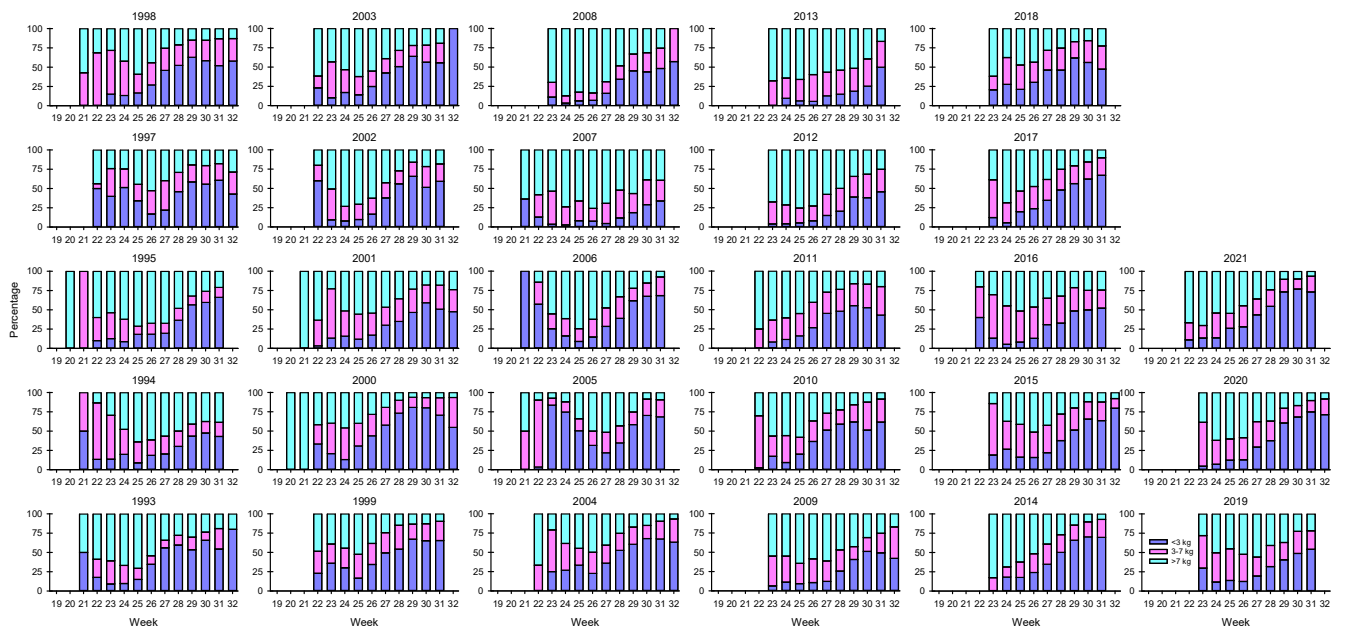


Figure 8. Annual and weekly distributions (%) in combined bag net and bend net fishery in Alta municipality, for three size groups of salmon.

### 3. Annual and weekly catches in numbers for combined bag net and bend net fishery in Kvalsund municipality, for three size groups of salmon

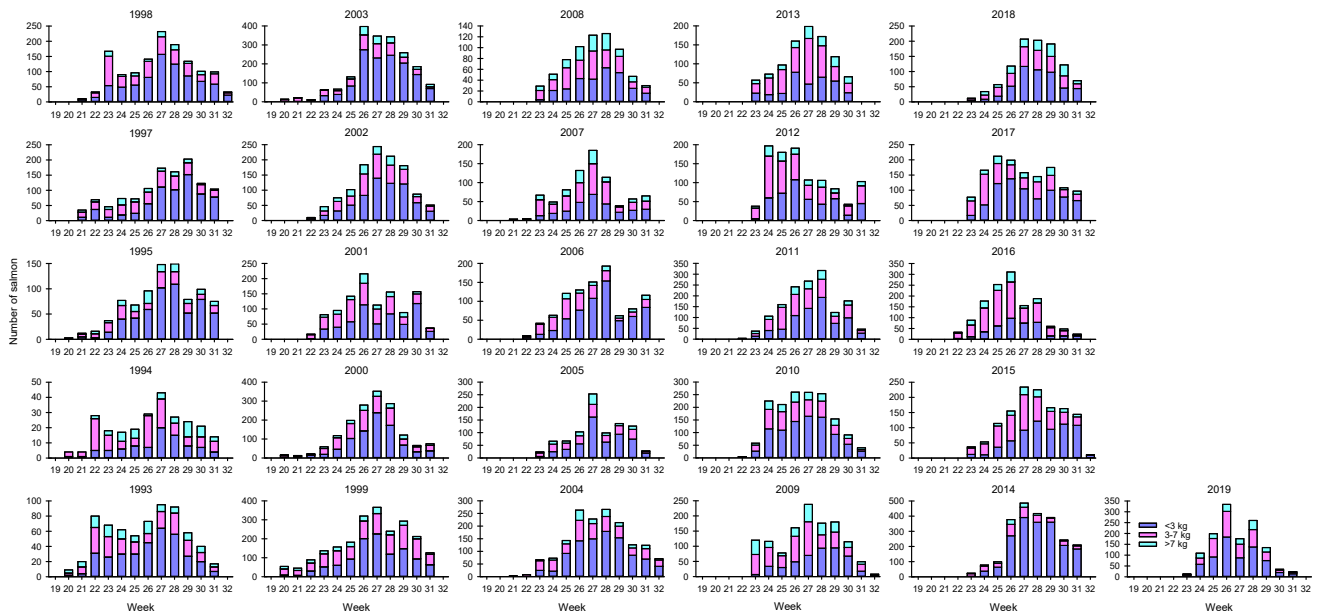


Figure 9. Annual and weekly catches in numbers for combined bag net and bend net fishery in Kvalsund municipality, for three size groups of salmon.

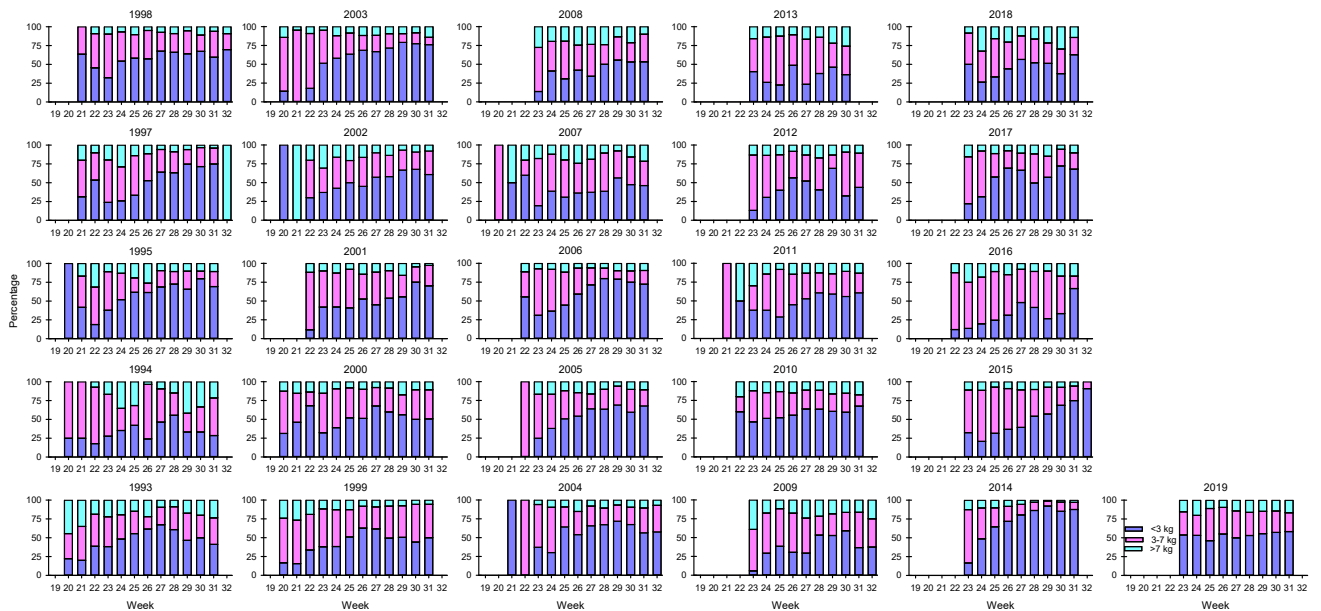


Figure 10. Annual and weekly distributions (%) in combined bag net and bend net fishery in Kvalsund municipality, for three size groups of salmon.



## 4. Annual and weekly catches in numbers for combined bag net and bend net fishery in Hammerfest municipality for three size groups of salmon

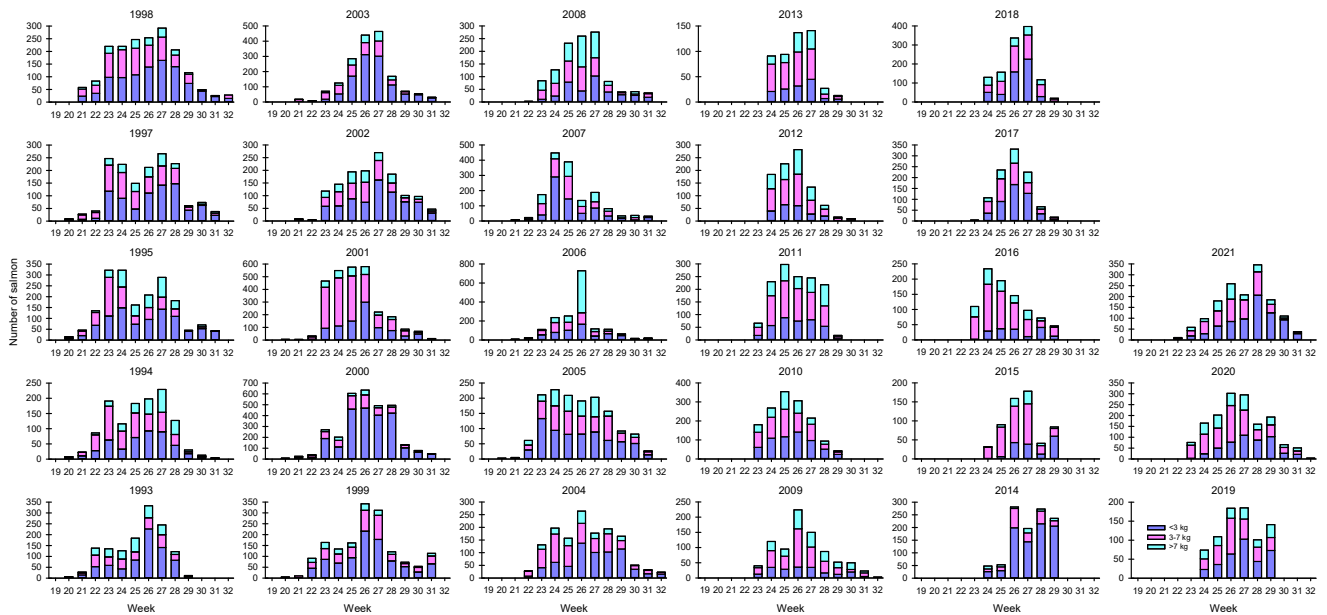


Figure 11. Annual and weekly catches in numbers for combined bag net and bend net fishery in Hammerfest municipality, for three size groups of salmon.

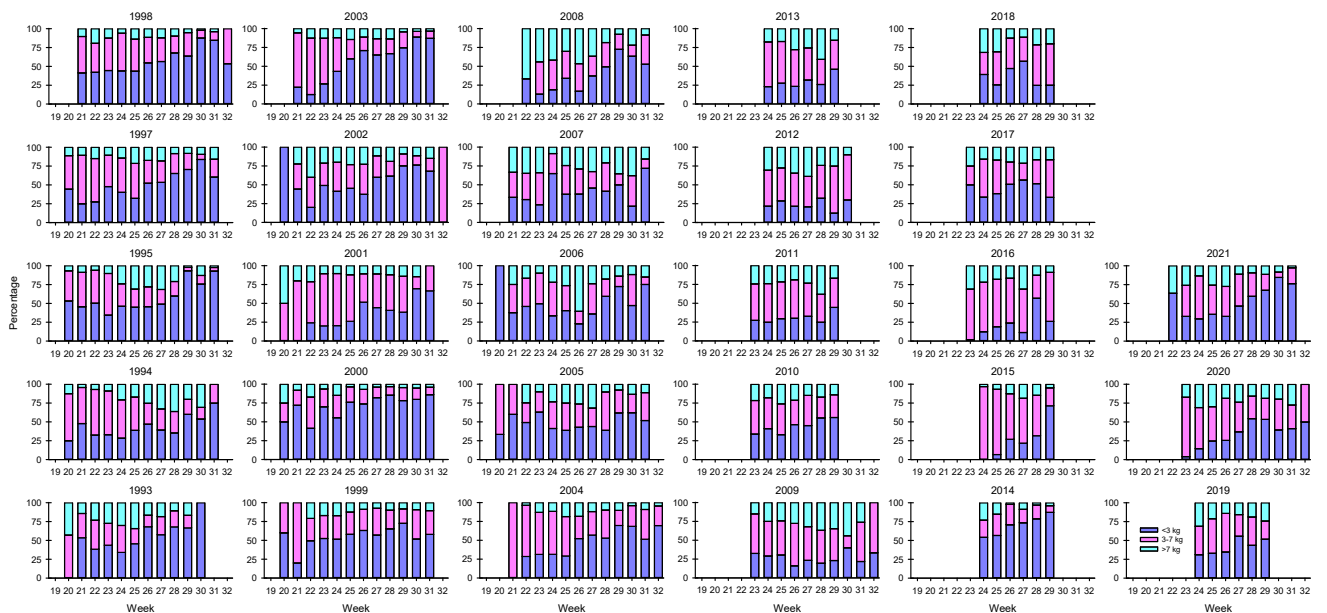


Figure 12. Annual and weekly distributions (%) in combined bag net and bend net fishery in Hammerfest municipality, for three size groups of salmon.

## 5. Annual and weekly catches in numbers for combined bag net and bend net fishery in Måsøy and Nordkapp municipalities, for three size groups of salmon

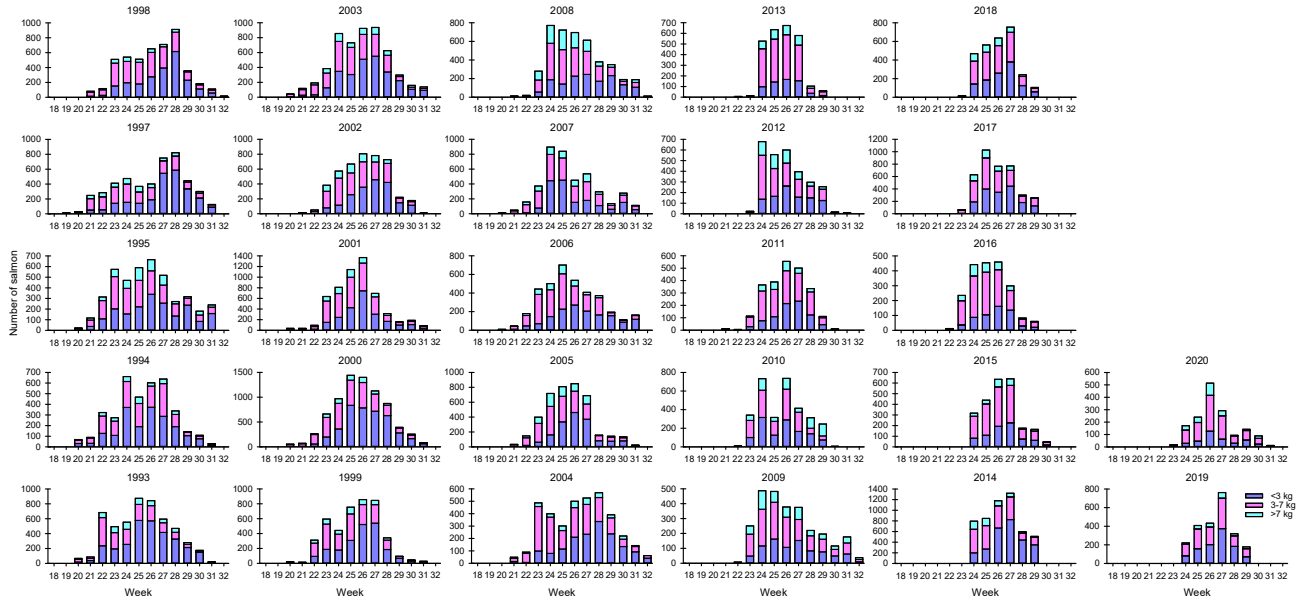


Figure 13. Annual and weekly catches in numbers for combined bag net and bend net fishery in Måsøy and Nordkapp municipalities, for three size groups of salmon.

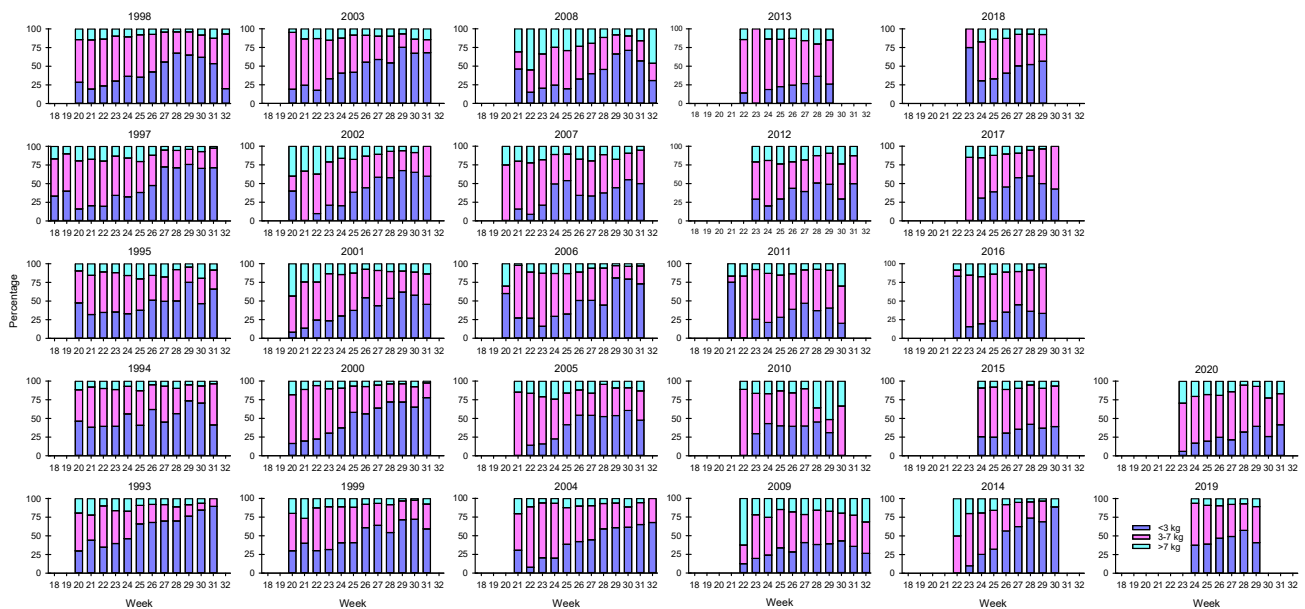


Figure 14. Annual and weekly distributions (%) in combined bag net and bend net fishery in Måsøy and Nordkapp municipalities, for three size groups of salmon.

## 6. Annual and weekly catches in numbers for combined bag net and bend net fishery in Måsøy municipality for three size groups of salmon

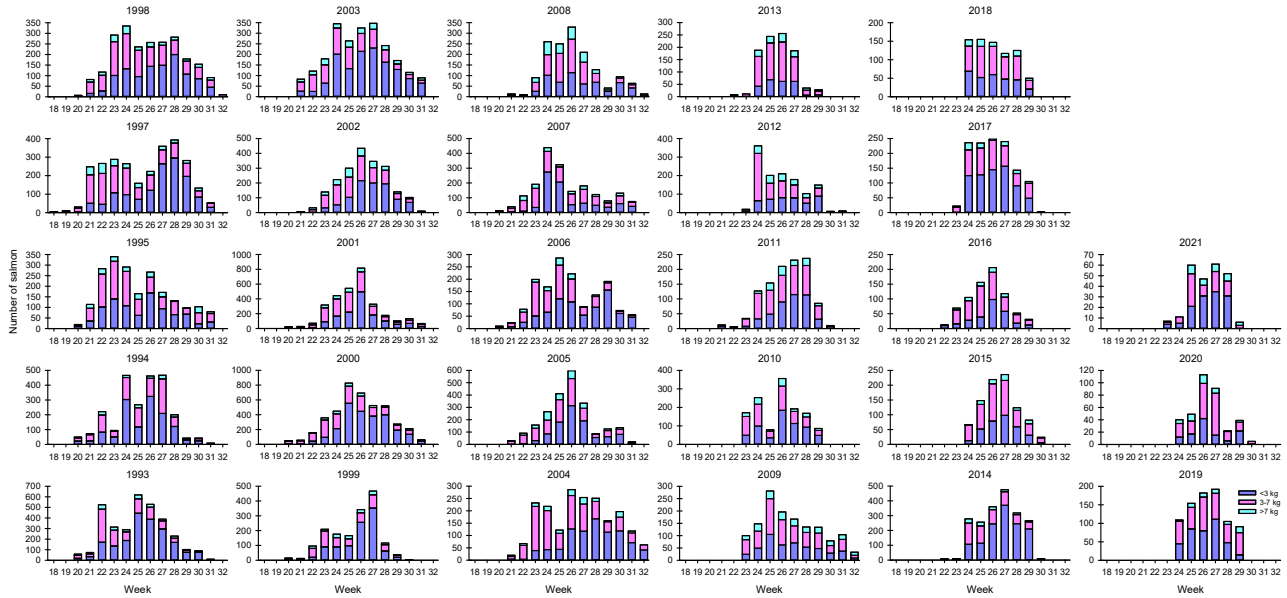


Figure 15. Annual and weekly catches in numbers for combined bag net and bend net fishery in Måsøy municipality, for three size groups of salmon.

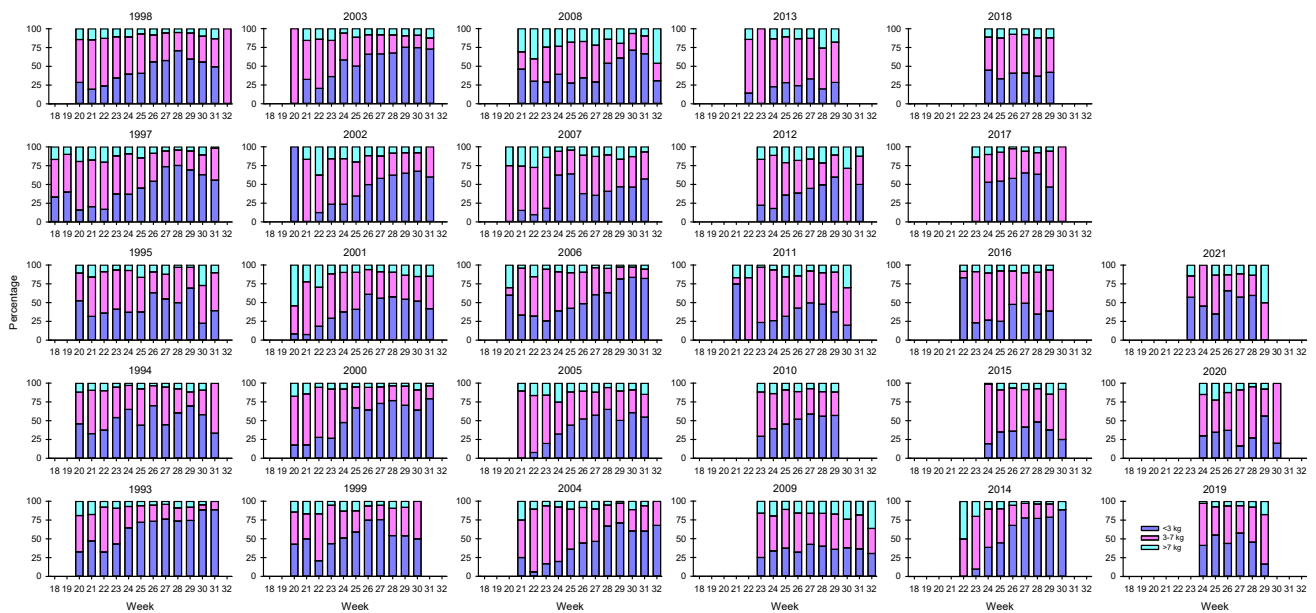


Figure 16. Annual and weekly distributions (%) in combined bag net and bend net fishery in Måsøy municipality, for three size groups of salmon.

## 7. Annual and weekly catches in numbers for combined bag net and bend net fishery in Nordkapp municipality, for three size groups of salmon

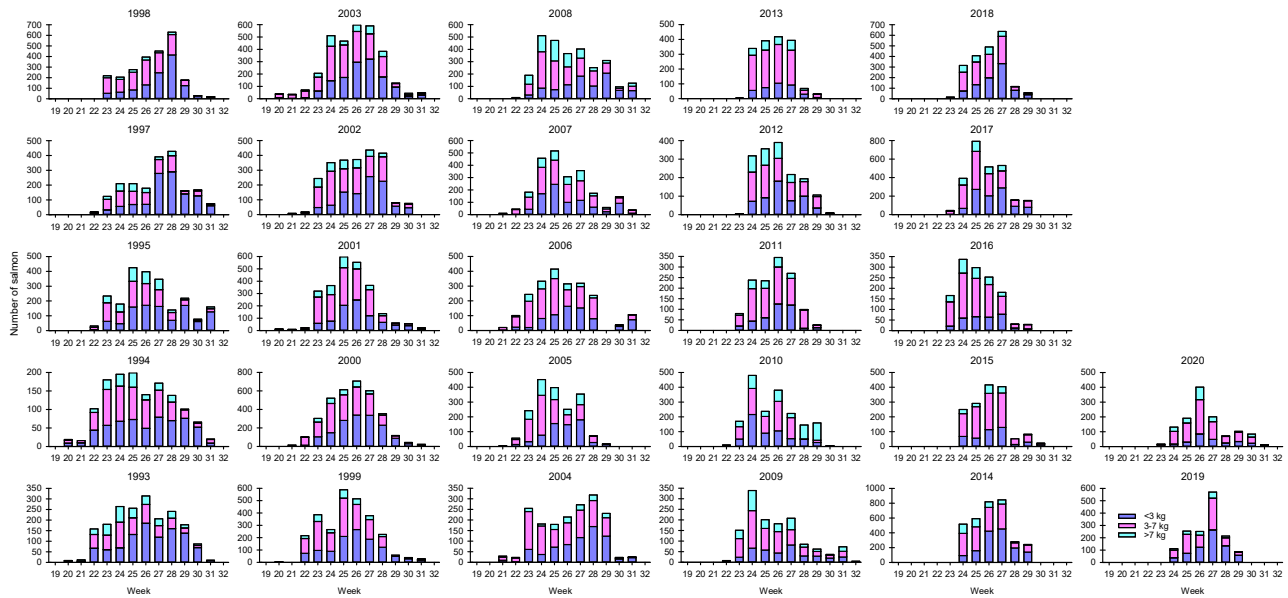


Figure 17. Annual and weekly catches in numbers for combined bag net and bend net fishery in Nordkapp municipality, for three size groups of salmon.

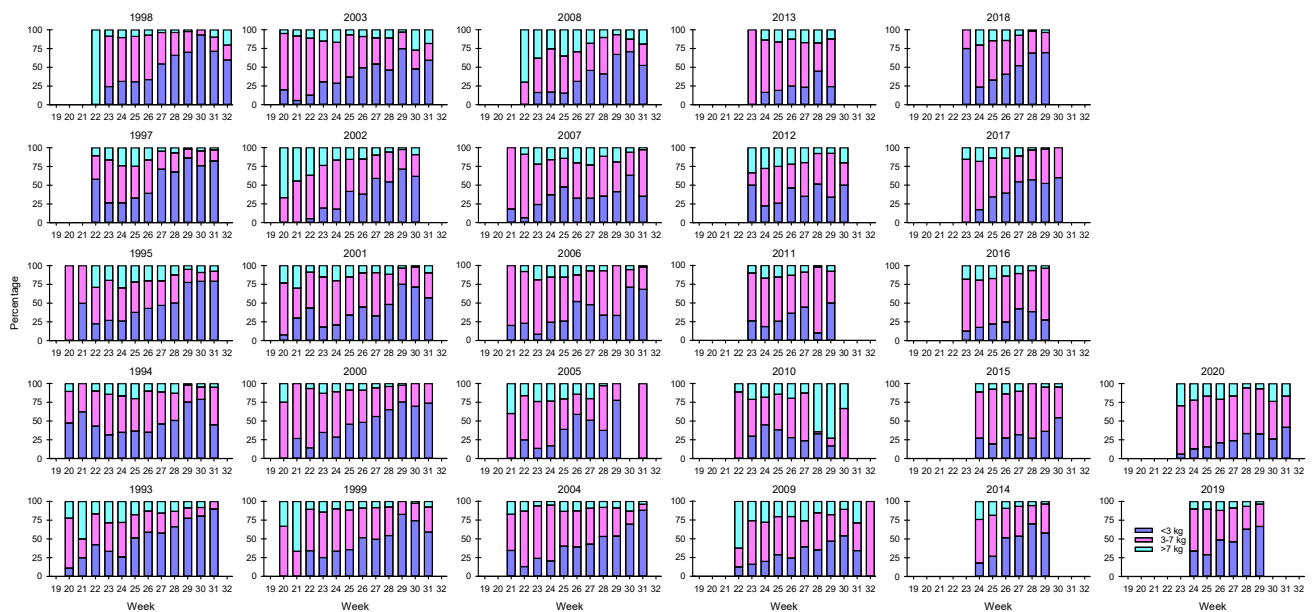


Figure 18. Annual and weekly distributions (%) in combined bag net and bend net fishery in Nordkapp municipality, for three size groups of salmon.

## 8. Annual and weekly catches in numbers for combined bag net and bend net fishery in Porsanger municipality, for three size groups of salmon

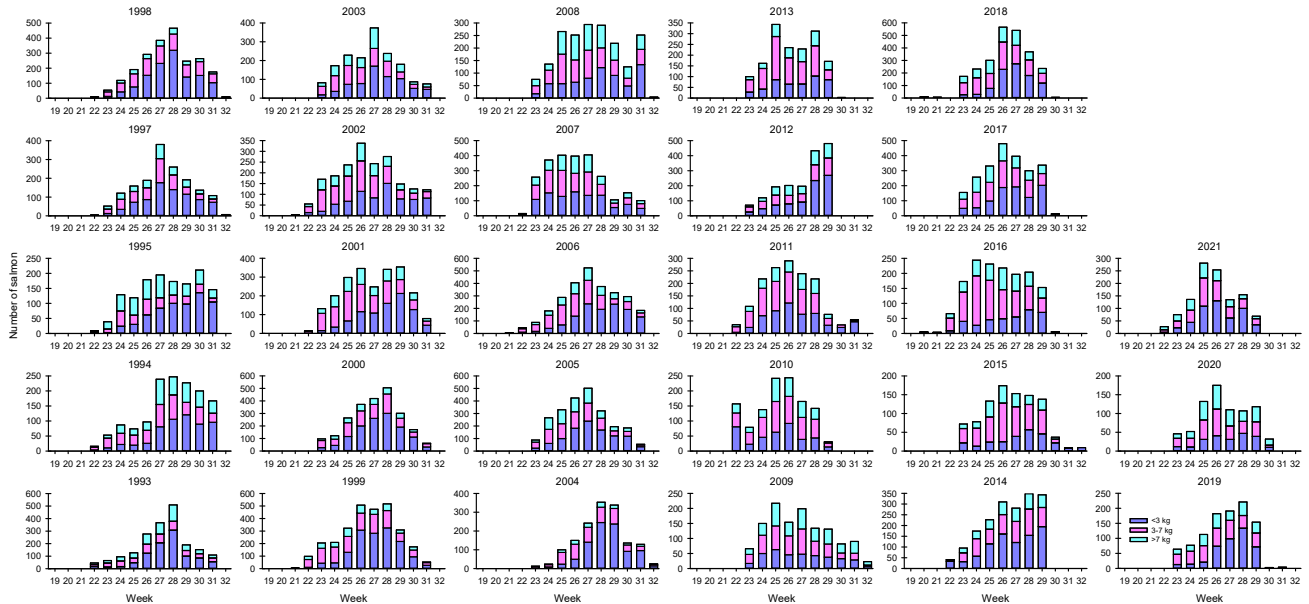


Figure 19. Annual and weekly catches in numbers for combined bag net and bend net fishery in Porsanger municipality, for three size groups of salmon.

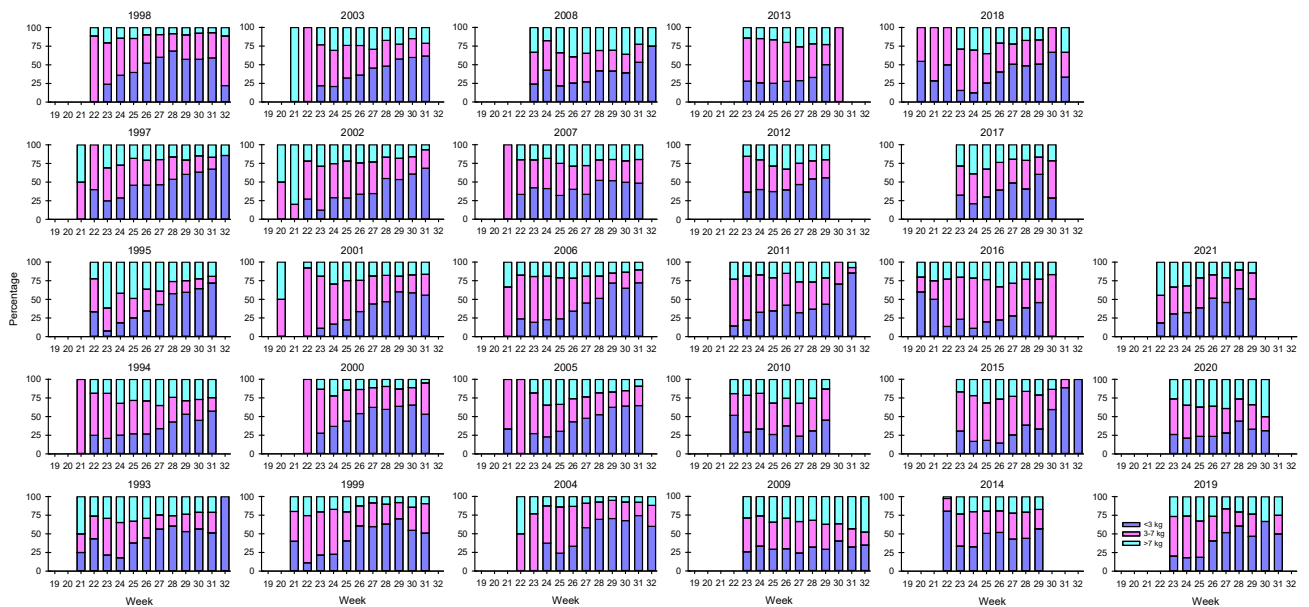


Figure 20. Annual and weekly distributions (%) in combined bag net and bend net fishery in Porsanger municipality, three size groups of salmon.

## 9. Annual and weekly catches in numbers for combined bag net and bend net fishery in Lebesby municipality, for three size groups of salmon

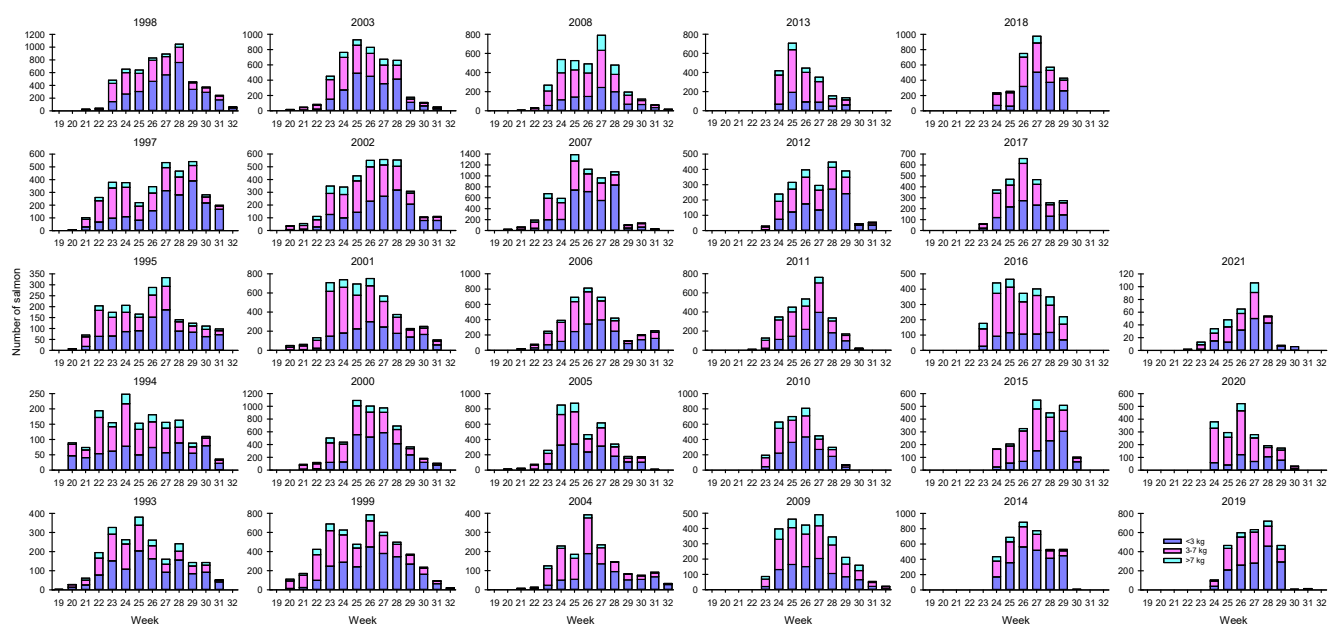


Figure 21. Annual and weekly catches in numbers for combined bag net and bend net fishery in Lebesby municipality, for three size groups of salmon.

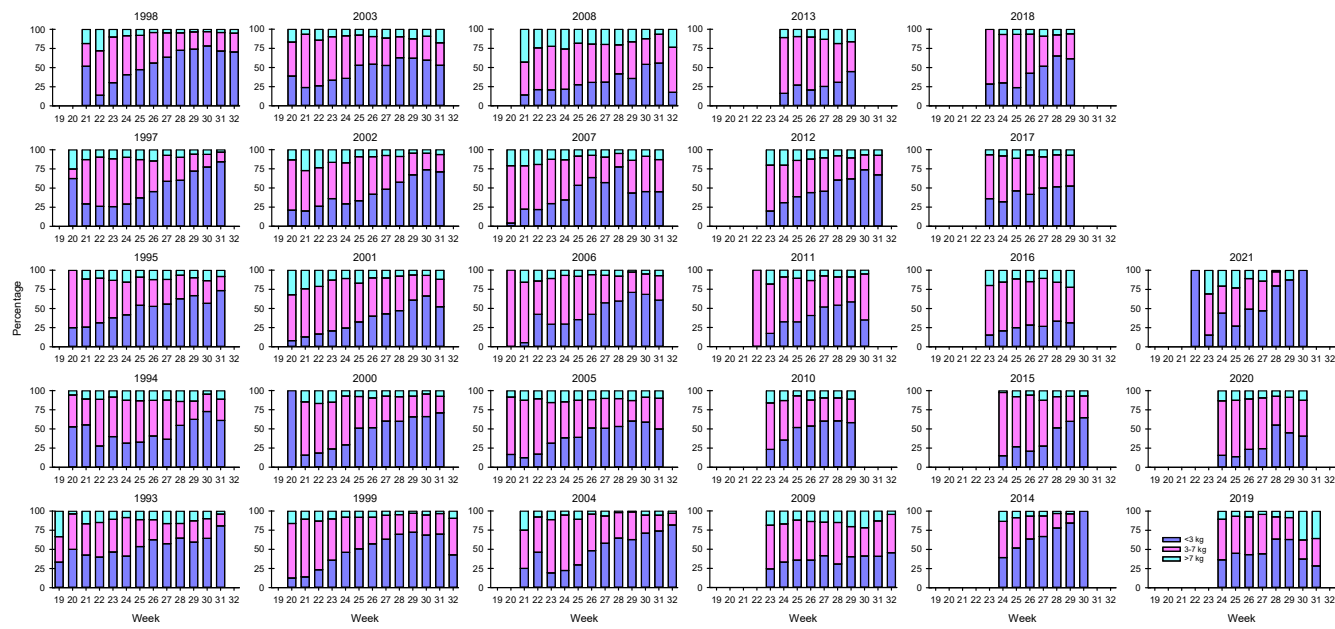


Figure 22. Annual and weekly distributions (%) in combined bag net and bend net fishery in Lebesby municipality, for three size groups of salmon.

# 10. Annual and weekly catches in numbers for combined bag net and bend net fishery in Tana, Gamvik and Berlevåg municipalities, for three size groups of salmon

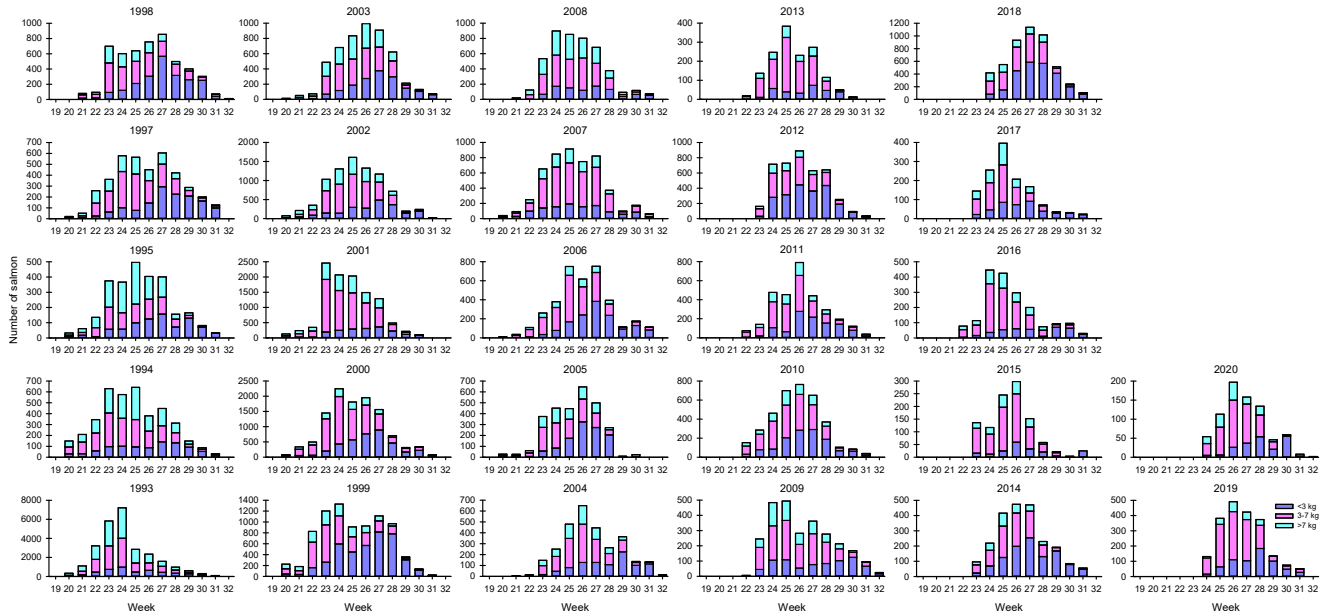


Figure 23. Annual and weekly catches in numbers for combined bag net and bend net fishery in Tana, Gamvik and Berlevåg municipalities, for three size groups of salmon.

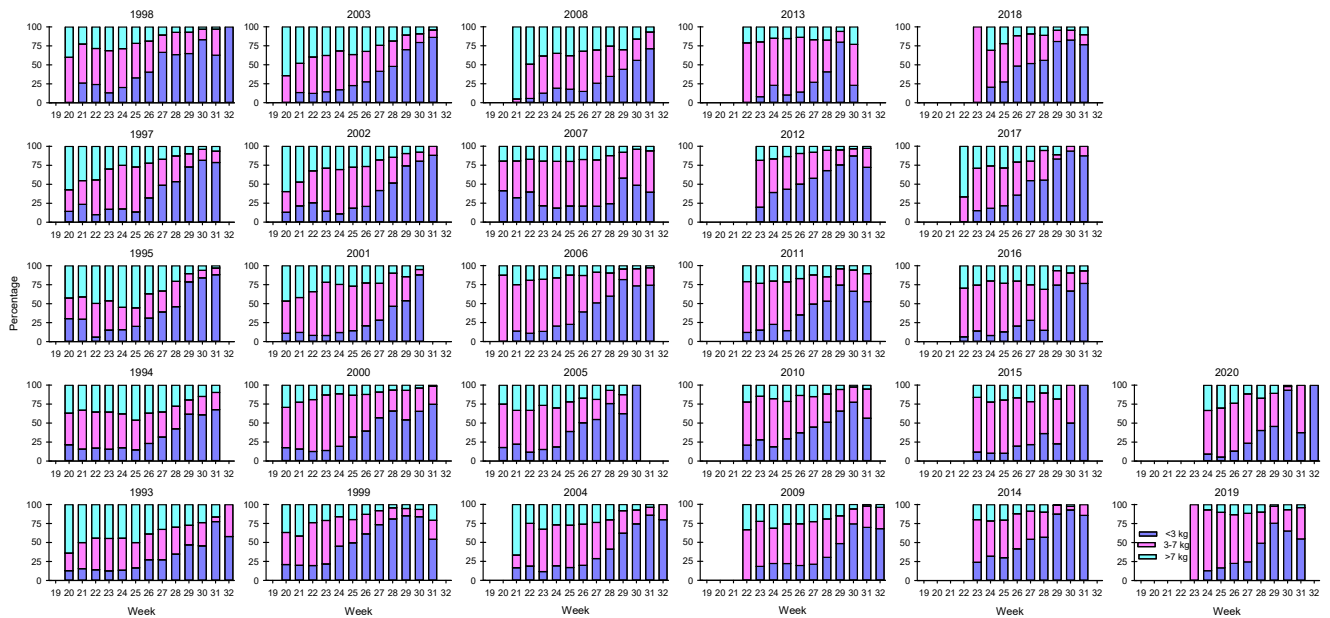


Figure 24. Annual and weekly distributions (%) in combined bag net and bend net fishery in Tana, Gamvik and Berlevåg municipalities, for three size groups of salmon.

# 11. Annual and weekly catches in numbers for combined bag net and bend net fishery in Gamvik municipality, for three size groups of salmon

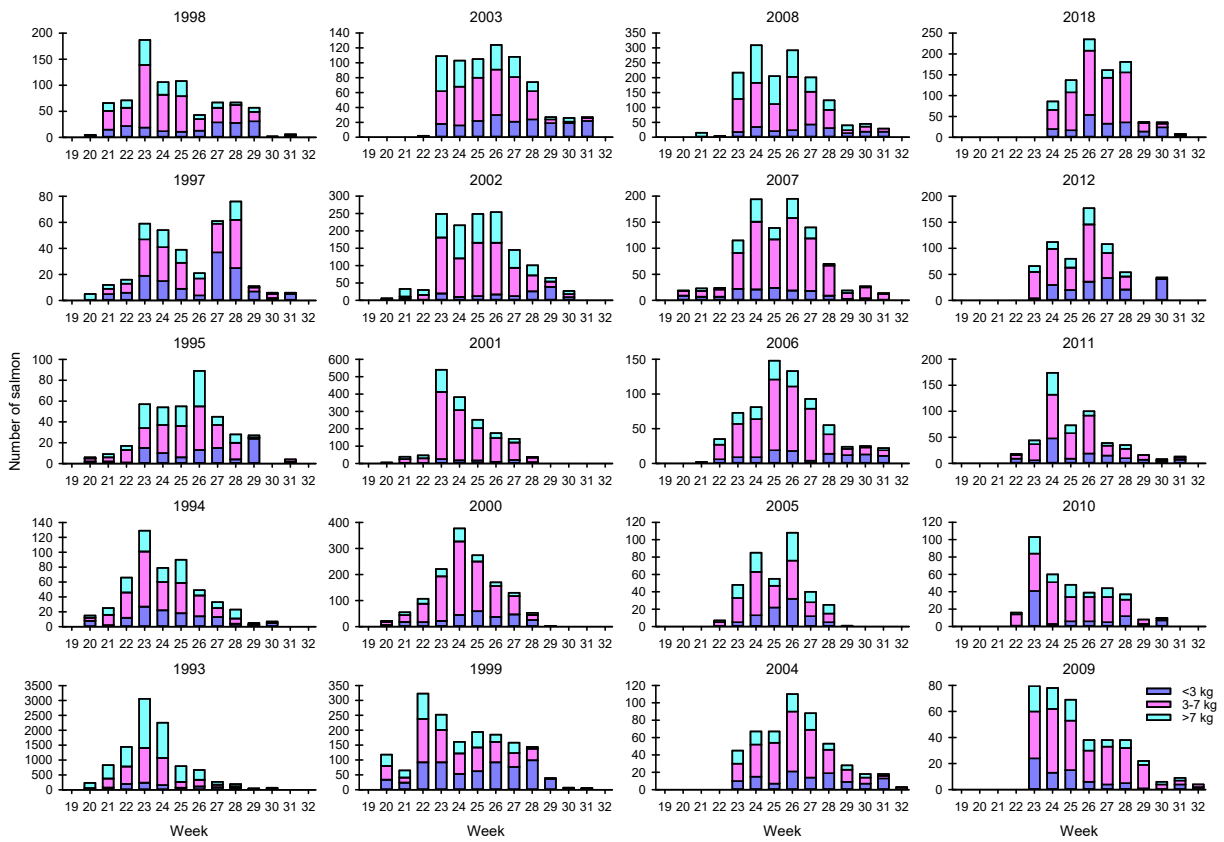


Figure 25. Annual and weekly catches in numbers for combined bag net and bend net fishery in Gamvik municipality, for three size groups of salmon.



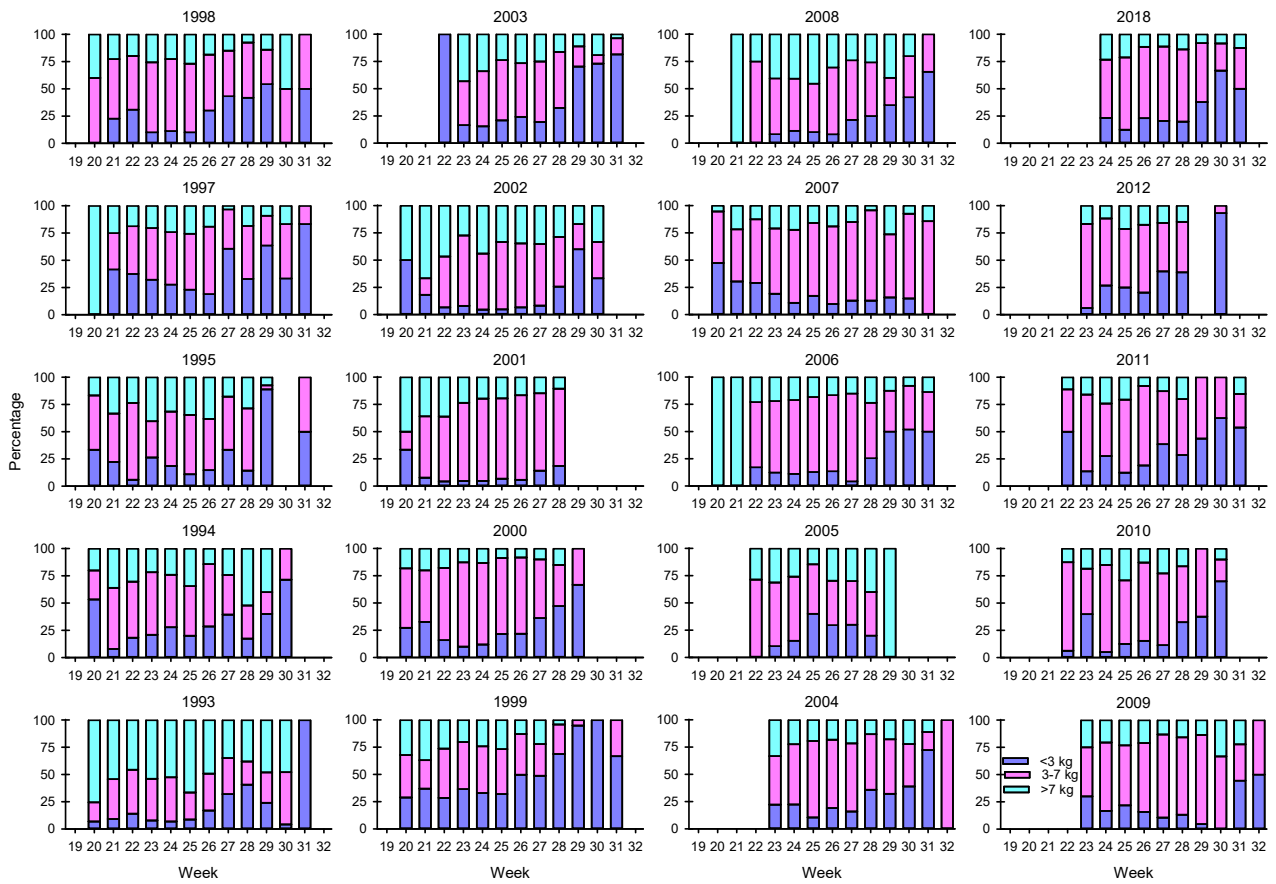


Figure 26. Annual and weekly distributions (%) in combined bag net and bend net fishery in Gamvik municipality, for three size groups of salmon.

## 12. Annual and weekly catches in numbers for combined bag net and bend net fishery in Tana municipality, for three size groups of salmon

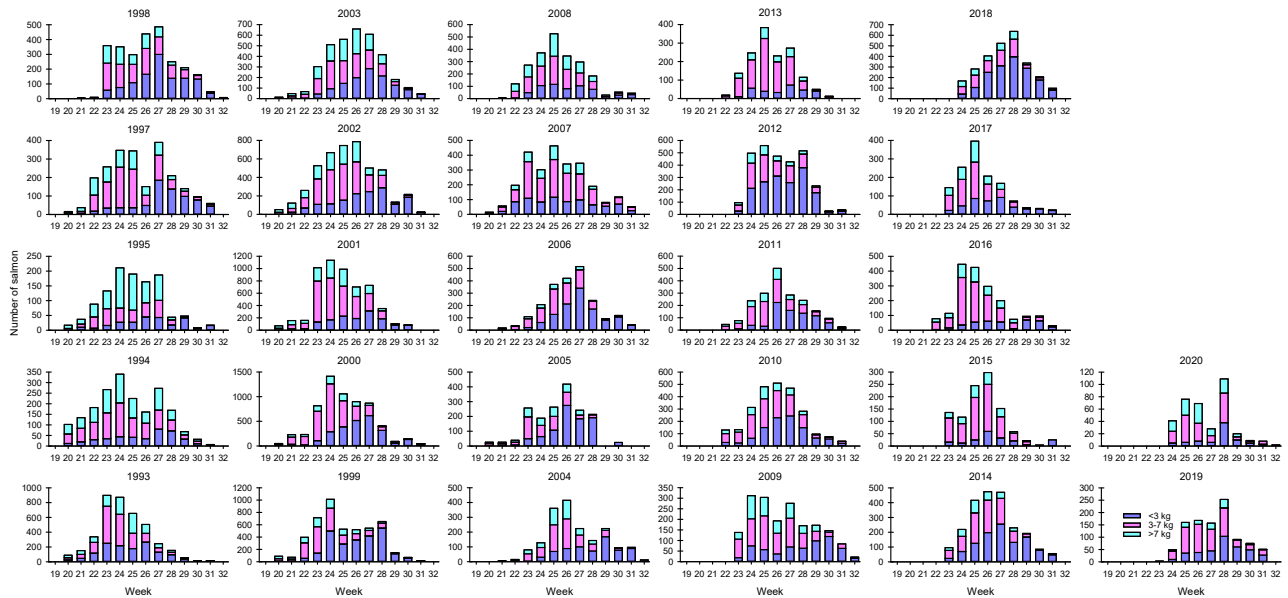


Figure 27. Annual and weekly catches in numbers for combined bag net and bend net fishery in Tana municipality, for three size groups of salmon.

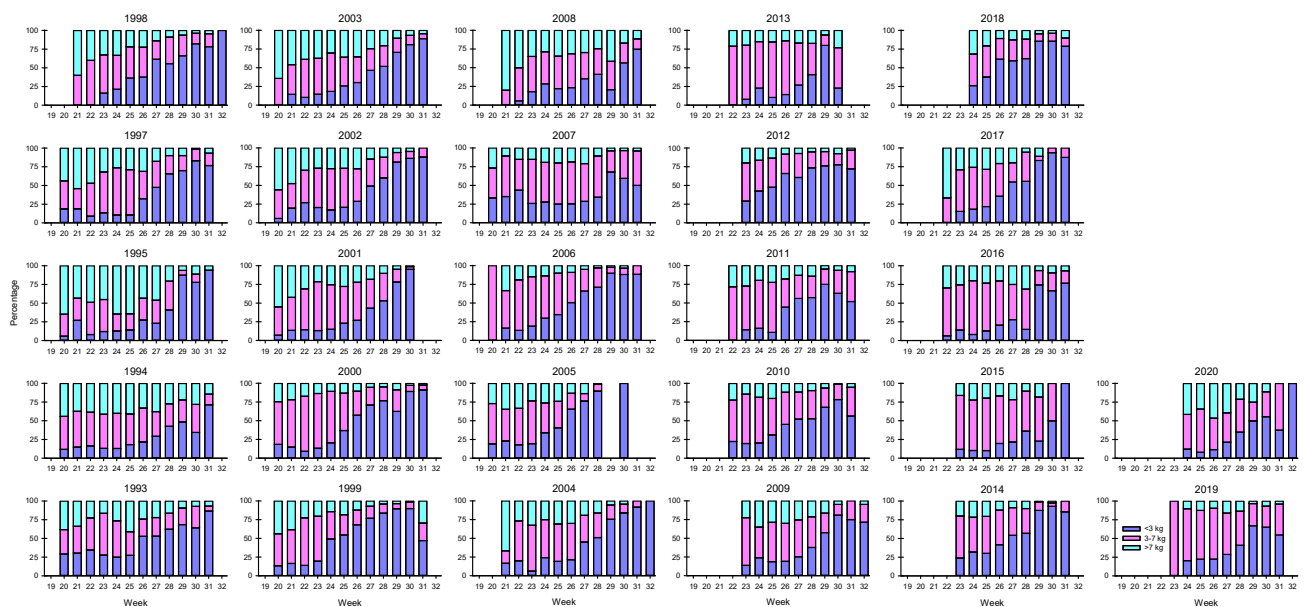


Figure 28. Annual and weekly distributions (%) in combined bag net and bend net fishery in Tana municipality, for three size groups of salmon.

### 13. Annual and weekly catches in numbers for combined bag net and bend net fishery in Berlevåg municipality, for three size groups of salmon

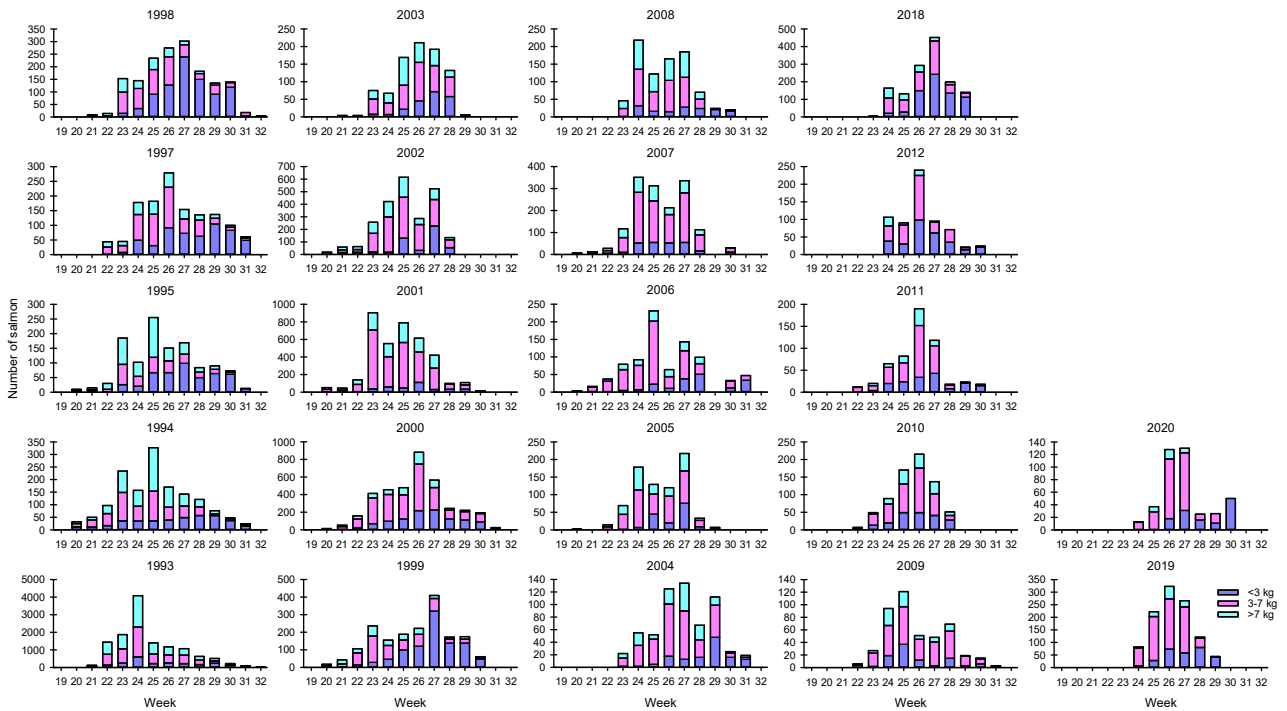


Figure 29. Annual and weekly catches in numbers for combined bag net and bend net fishery in Berlevåg municipality, for three size groups of salmon.

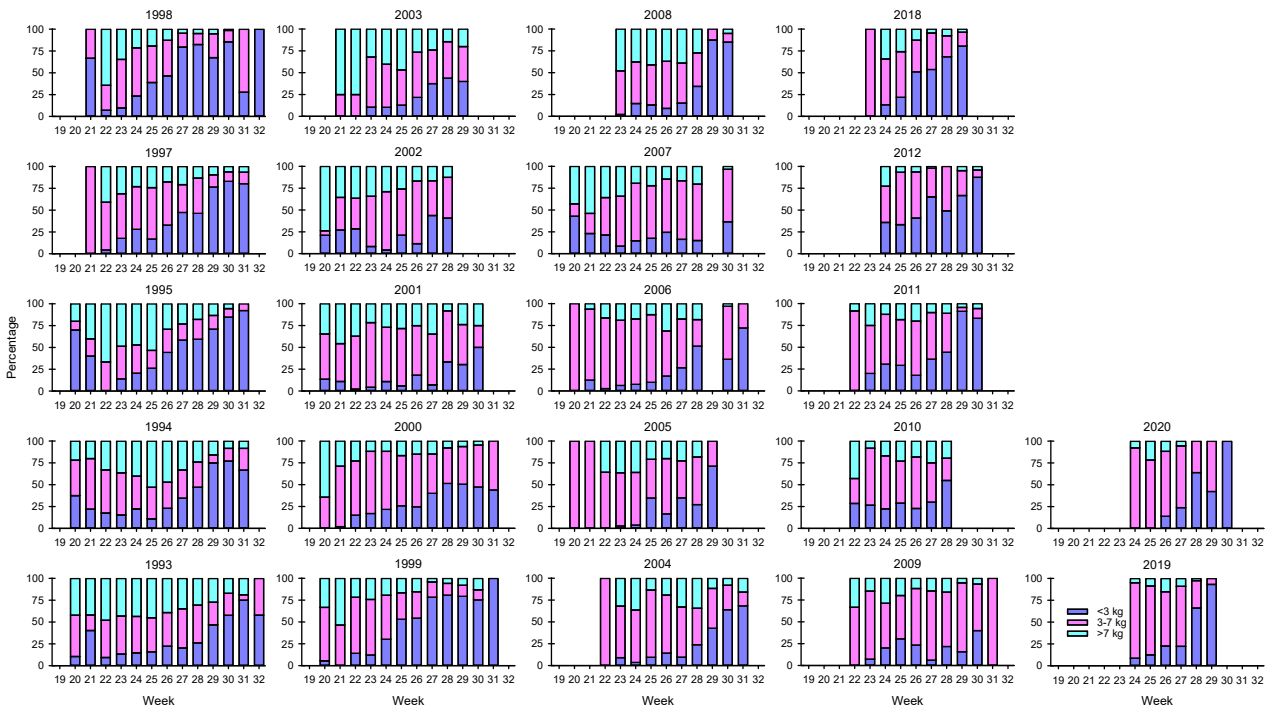


Figure 30. Annual and weekly distributions (%) in combined bag net and bend net fishery in Berlevåg municipality, for three size groups of salmon.

# 14. Annual and weekly catches in numbers for combined bag net and bend net fishery in Vadsø and Nesseby municipalities, for three size groups of salmon

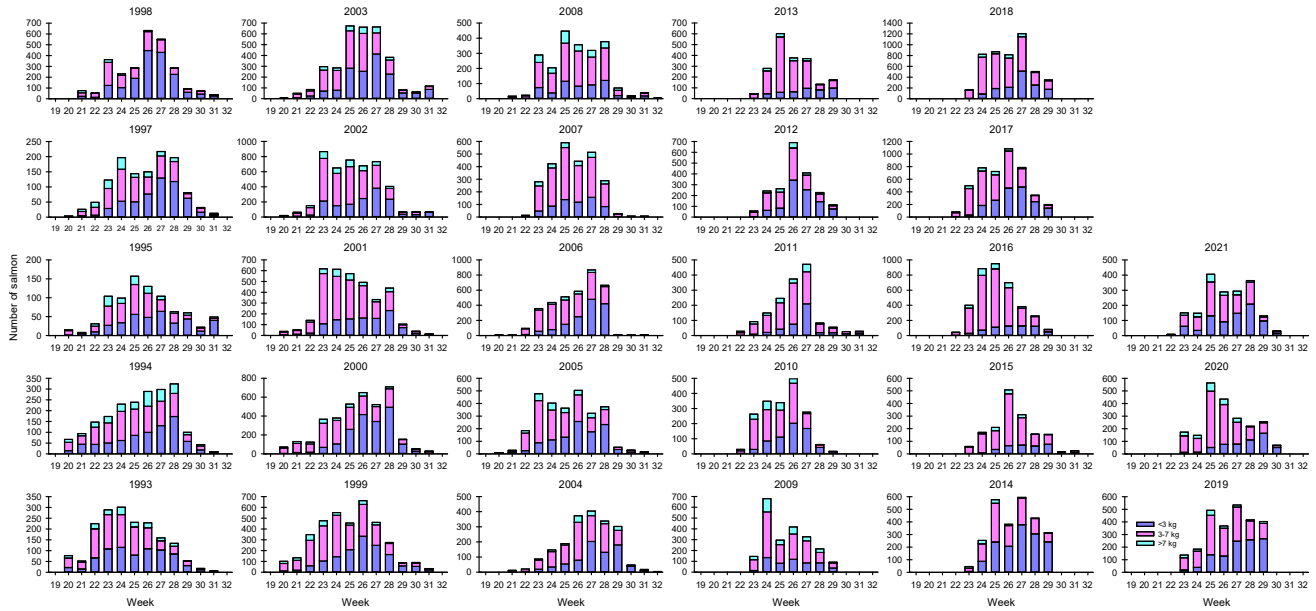


Figure 31. Annual and weekly catches in numbers for combined bag net and bend net fishery in Vadsø and Nesseby municipalities, for three size groups of salmon.

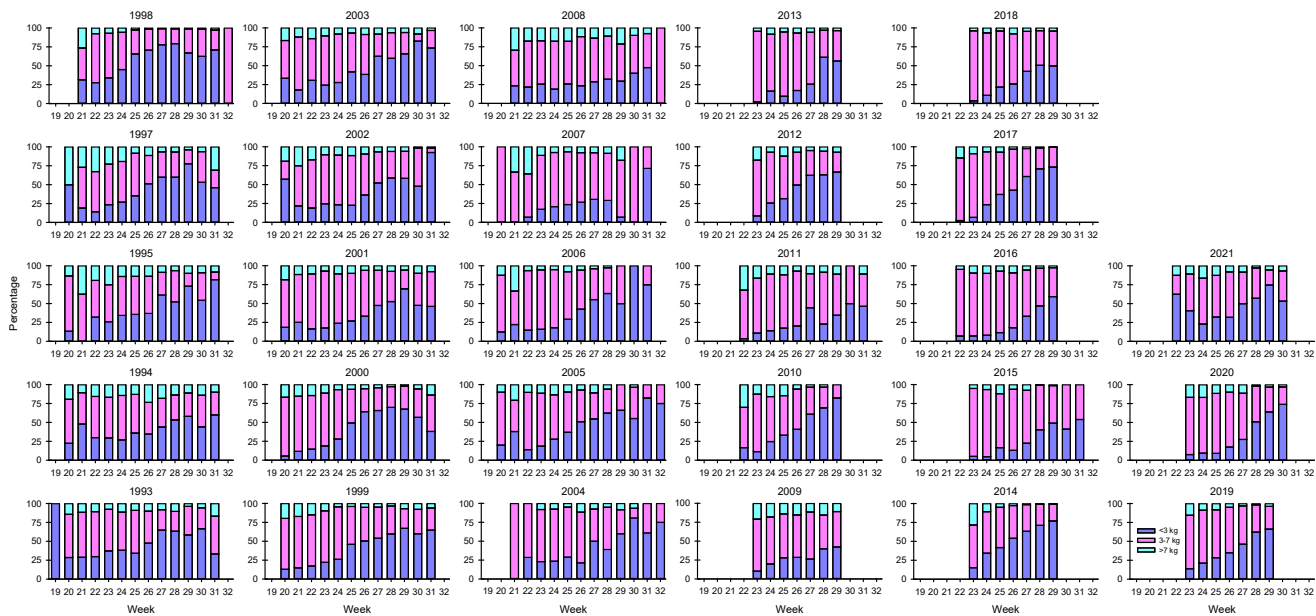


Figure 32. Annual and weekly distributions (%) in combined bag net and bend net fishery in Vadsø and Nesseby municipalities, for three size groups of salmon.

## 15. Annual and weekly catches in numbers for combined bag net and bend net fishery in Sør-Varanger, Nesseby and Vadsø municipalities, for three size groups of salmon

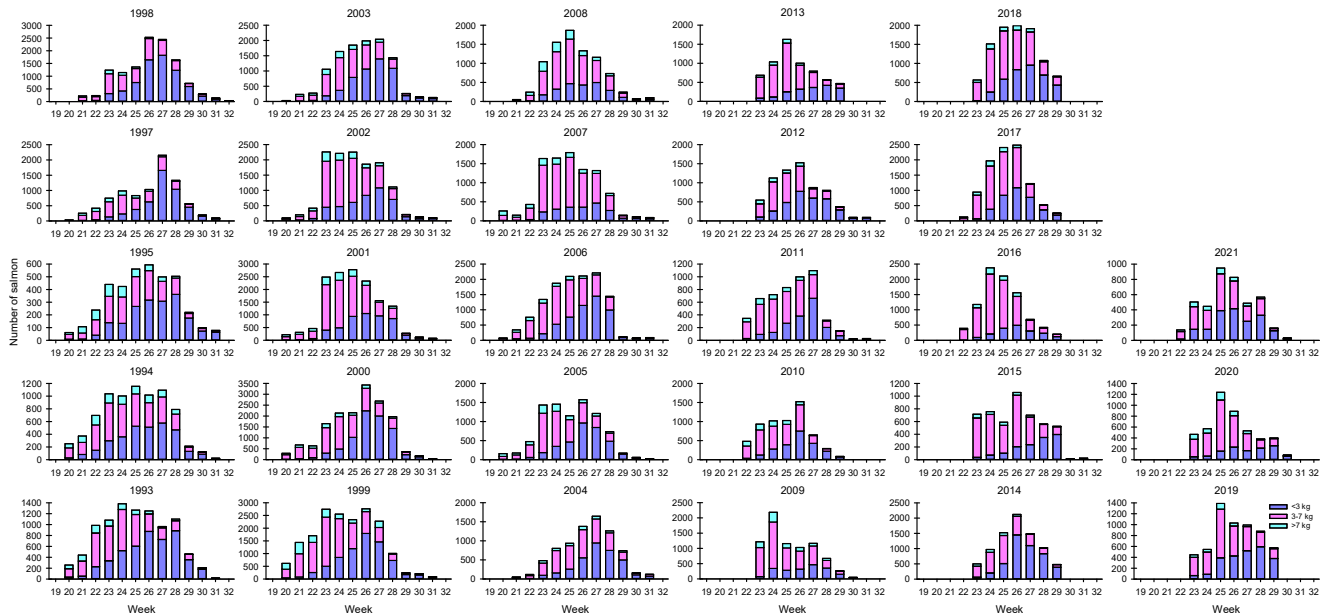


Figure 33. Annual and weekly catches in numbers for combined bag net and bend net fishery in Sør-Varanger, Nesseby and Vadsø municipalities, for three size groups of salmon.

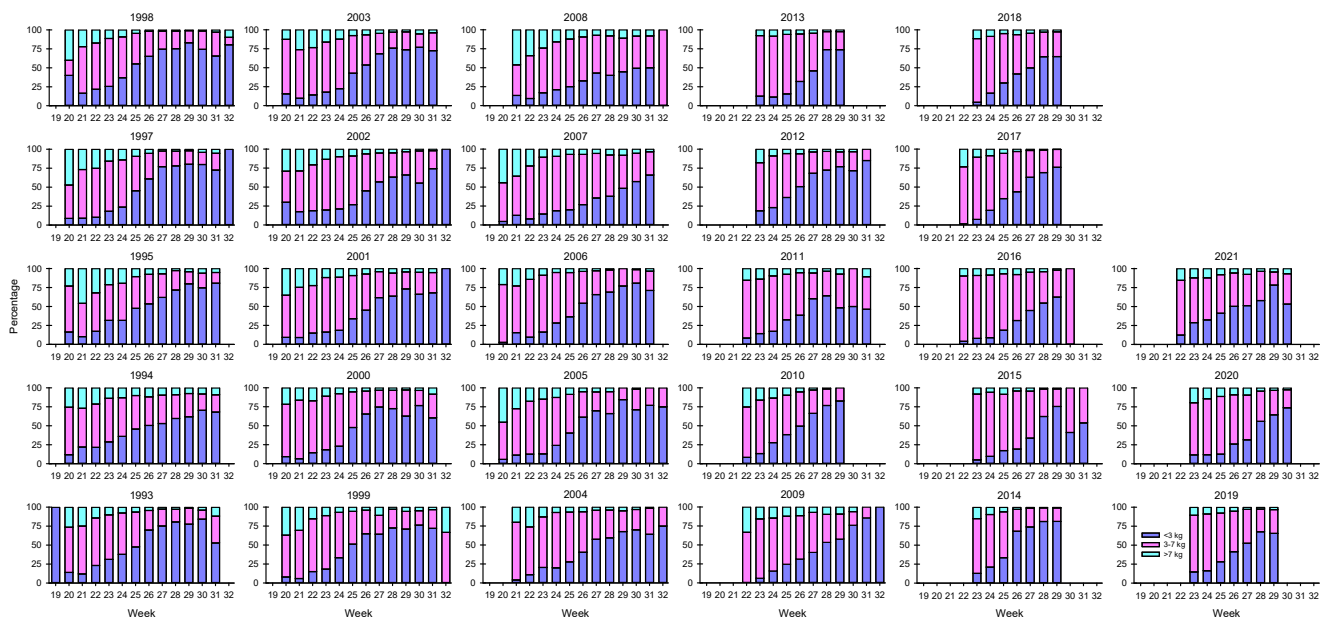


Figure 34. Annual and weekly distributions (%) in combined bag net and bend net fishery in Sør-Varanger, Nesseby and Vadsø municipalities, for three size groups of salmon.

## 16. Annual and weekly catches in numbers for combined bag net and bend net fishery in Sør-Varanger municipality for three size groups of salmon

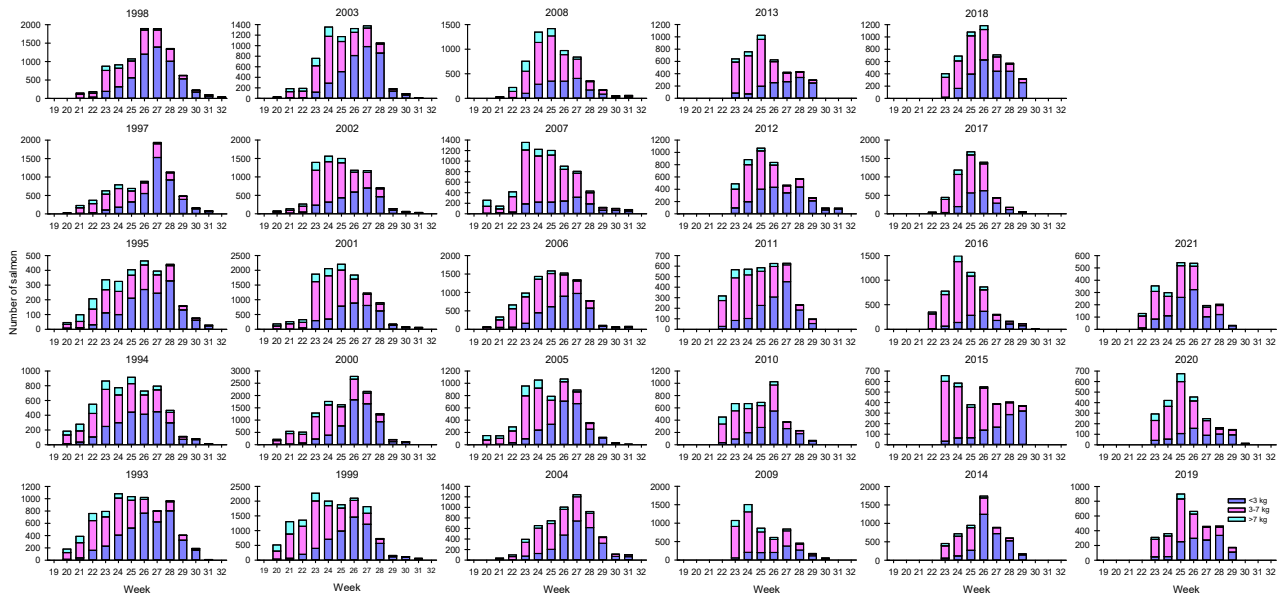


Figure 35. Annual and weekly catches in numbers for combined bag net and bend net fishery in Sør-Varanger municipality, for three size groups of salmon.

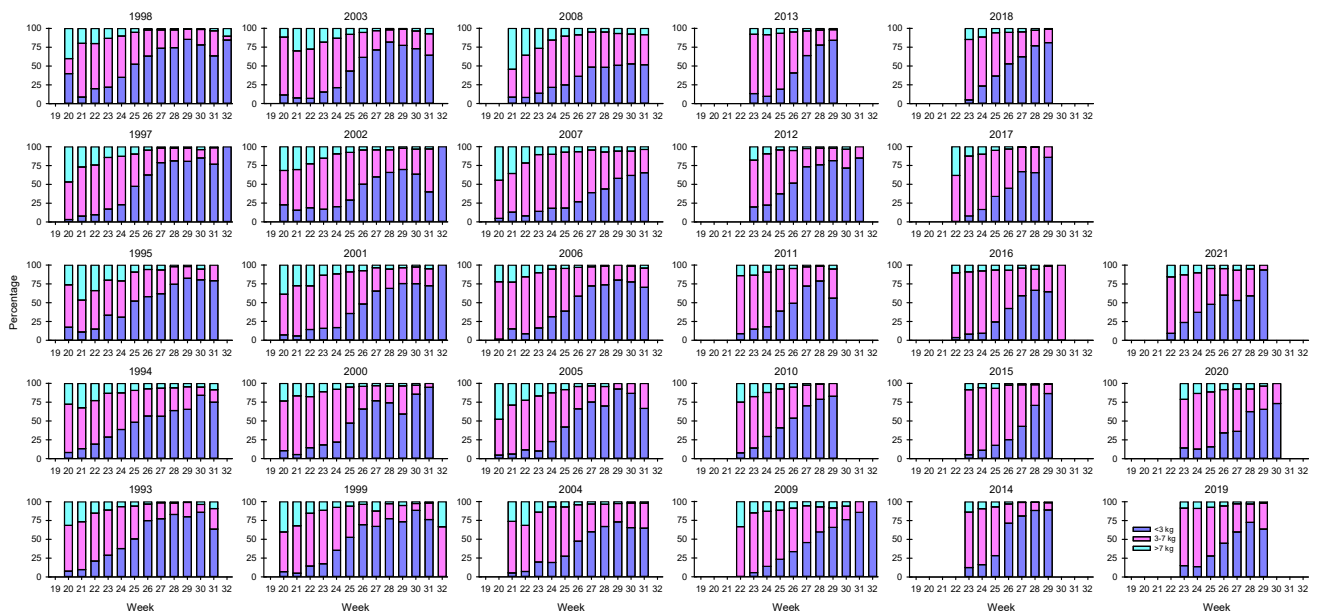


Figure 36. Annual and weekly distributions (%) in combined bag net and bend net fishery in Sør-Varanger municipality, for three size groups of salmon.