



International Atlantic Salmon Research Board

SAG(14)3

***Progress in Developing a Metadatabase of Salmon Survey Data and
Sample Collections of Relevance to Mortality of Salmon at Sea***

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Progress in Developing a Metadatabase of Salmon Survey Data and Sample Collections of Relevance to Mortality of Salmon at Sea

1. In 2011, the Board had recognized that recent international initiatives under the SALSEA Programme had generated some extremely valuable databases, including biological and genetic databases generated under the SALSEA Merge project, and time-series of data and historical tagging information compiled by ICES workshops supported by the Board. Similarly, the Board had also noted the existence of some historical marine survey samples, such as those generated by the international sampling programme at West Greenland, that represent an invaluable resource dating back some 40 years or more. The Board had decided that it could play an important role with regard to marine salmon survey data and sample coordination by establishing a metadatabase of existing datasets and sample collections.
2. The SAG had previously agreed a format for this metadatabase and requested that Parties/jurisdictions provide relevant information. In accordance with this request, an e-mail form, based on this format, had been sent to each Party/jurisdiction, but limited information had been provided. At its 2013 meeting, the SAG had recognised that there may have been some confusion regarding the purpose of the metadatabase. It was clarified that the metadatabase was not meant to be a vehicle to provide raw data to researchers and other interested Parties, but rather it is meant to advertise the availability of the valuable and unique datasets related to the marine phase of Atlantic salmon. A one page information sheet had been developed and agreed by the SAG that explained the purpose of the metadatabase and how it may contribute to increased collaboration and understanding of the marine-phase of salmon in the North Atlantic. It was agreed that this information sheet should accompany all requests to populate the database. The SAG had also noted the difficulty in identifying a single person to provide information related to a dataset that results from multi-Party/jurisdiction collaboration and that this may have contributed to the poor response.
3. Last year, in order to take this initiative forward, a list of candidate datasets for inclusion in the metadatabase was developed, specific points of contact were identified and the Secretary was asked to contact the Parties/jurisdictions concerned to request information for inclusion in the metadatabase. The SAG Chairman agreed to follow-up with the various points of contact individually and this has been done.
4. Since last year's SAG meeting, the following datasets have been included in the metadatabase (see Annex 1):
 - External tag recoveries from tagging programmes in Canada, USA, EU, Norway and Russia and International adult salmon tagging at Faroes and Greenland.
 - Faroes CWT recoveries
 - Greenland catch data
 - Greenland tag recaptures
 - North American Run Reconstruction Data
 - North-East Atlantic run reconstruction data

- SALSEA - Merge biological samples
 - SALSEA Greenland
 - SALSEA North America
5. In populating the metadatabase with these candidate datasets, a number of suggestions for changes to the structure of the metadatabase have been made. In the light of the feedback provided, and following consultation with the Chairman, it was felt that the fields for Party and Jurisdiction were unnecessary since there is a separate field for Information Location and it is more important to know which Parties and jurisdictions are represented in the data or sample collection. These two fields have, therefore, been removed and the field structure re-organised so that the name of the data/sample collection appears first. In order to identify all the jurisdictions represented in the data and sample collections, the metadatabase has been amended by including a new field. As a consequence, for some records details of the jurisdictions included in the data/samples will be needed because the information was provided before the changes were made to the metadatabase. Additionally, new options for the data and sample types have been included (e.g. plankton, assessment data). The changes made have also required changes to the data-entry form and to the guidance notes on its completion. Revised documents are included in Annexes 2 and 3, respectively. The SAG is asked to consider the changes made to the metadatabase and decide if these are acceptable; if so, the data entry form and supporting documents could be re-issued to each Party/jurisdiction with a request that additional information be provided.

Secretary
Edinburgh
12 May 2014



IASRB Metadatabase of Salmon Survey Data and Sample Collections of Relevance to Mortality of Salmon at Sea

Name of Data Sample Collection **SALSEA Greenland**

Information Description
(e.g. including location of data/sample collection, # of samples)

Samples came from a land-based marine survey of Atlantic salmon harvested in the mixed-stock fishery off the west coast of Greenland. Biological characteristics data, tissue for DNA sampling, preserved sea lice, various tissue samples for a variety of disease and parasite sampling (heart, kidney, spleen, pyloric caeca, gill arch, liver, gill filaments, brain, heart, muscle, intestines), stomach samples, variety of tissue samples for stable isotope sampling (scales, liver, muscle, caudal fin, adipose), tissue for lipid sampling, otoliths, and scales were collected and are in various states of processing and availability.

Information Type **Biological Samples**

Data Type

- ☐ Assessment Data
- ☐ Tag Release/Recovery
- ☐ Freshwater Surveys
- ☐ Marine Surveys
- ☐ Index River Monitoring
- ☐ Genetic Baselines
- ☐ Other

Biological Sample Type

- ☒ Scales
- ☒ Otoliths
- ☒ Tissue
- ☒ Stomach Contents
- ☒ Parasites
- ☒ Plankton
- ☒ Other

Start Year of Information **2009**

End Year of Information **2011**

Information Source **International**

Jurisdictions included in Data/Samples:

- ☐ Canada
- ☐ Denmark
- ☐ Faroe Islands
- ☐ Finland
- ☐ France
- ☐ Germany
- ☐ Greenland
- ☐ Ireland
- ☐ Norway
- ☐ Portugal
- ☐ Russia
- ☐ Spain
- ☐ Sweden
- ☐ UK - England & Wales
- ☐ UK - N. Ireland
- ☐ UK – Scotland
- ☐ USA
- ☐ Iceland
- ☐ St. Pierre et Miquelon
- ☐ Unknown
- ☐ Potentially All

Information Location, i.e. Institute or Laboratory

NOAA Fisheries Service, Woods Hole MA 02540 USA.

Information Manager's Name **Timothy Sheehan**

Information Manager Email **Tim.Sheehan@noaa.gov**

Accessibility of Information **On Request**



IASRB Metadatabase of Salmon Survey Data and Sample Collections of Relevance to Mortality of Salmon at Sea

Name of Data Sample Collection **Greenland catch data**

Information Description
(e.g. including location of data/sample collection, # of samples)

Logbook data and catch data

Information Type **Data**

Data Type

- ☐ Assessment Data
- ☐ Tag Release/Recovery
- ☐ Freshwater Surveys
- ☐ Marine Surveys
- ☐ Index River Monitoring
- ☐ Genetic Baselines
- ☒ Other

Biological Sample Type

- ☐ Scales
- ☐ Otoliths
- ☐ Tissue
- ☐ Stomach Contents
- ☐ Parasites
- ☐ Plankton
- ☐ Other

Start Year of Information

End Year of Information **Ongoing**

Information Source **International**

Jurisdictions included in Data/Samples:

- ☐ Canada
- ☐ Denmark
- ☐ Faroe Islands
- ☐ Finland
- ☐ France
- ☐ Germany
- ☒ Greenland
- ☐ Ireland
- ☐ Norway
- ☐ Portugal
- ☐ Russia
- ☐ Spain
- ☐ Sweden
- ☐ UK - England & Wales
- ☐ UK - N. Ireland
- ☐ UK – Scotland
- ☐ USA
- ☐ Iceland
- ☐ St.Pierre et Miquelon
- ☐ Unknown
- ☐ Potentially All

Information Location, i.e. Institute or Laboratory

Greenland Institute of Natural Resources
Kivioq 2
P.O. Box 570
3900 Nuuk
Greenland
Phone: +299 36 12 00 - Fax: +299 36 12 12

Information Manager's Name **Rasmus Nygaard**

Information Manager Email **rany@natur.gl**

Accessibility of Information **On Request**



IASRB Metadatabase of Salmon Survey Data and Sample Collections of Relevance to Mortality of Salmon at Sea

Name of Data
Sample Collection

Greenland tag recaptures

Information Description
(e.g. including location of
data/sample collection, # of
samples)

All known recaptures of CWTs and external tags in the West Greenland fishery

Information Type

Data

Data Type

- ☐ Assessment Data
- ☒ Tag Release/Recovery
- ☐ Freshwater Surveys
- ☐ Marine Surveys
- ☐ Index River Monitoring
- ☐ Genetic Baselines
- ☐ Other

Biological
Sample Type

- ☐ Scales
- ☐ Otoliths
- ☐ Tissue
- ☐ Stomach Contents
- ☐ Parasites
- ☐ Plankton
- ☐ Other

Start Year of Information

1963

End Year of Information

Ongoing

Information Source

International

Jurisdictions
included in
Data/Samples:

- ☒ Canada
- ☐ Denmark
- ☐ Faroe Islands
- ☐ Finland
- ☐ France
- ☐ Germany
- ☐ Greenland
- ☒ Ireland
- ☒ Norway
- ☐ Portugal
- ☐ Russia
- ☒ Spain
- ☐ Sweden
- ☒ UK - England & Wales
- ☐ UK - N. Ireland
- ☒ UK – Scotland
- ☒ USA
- ☒ Iceland
- ☐ St. Pierre et Miquelon
- ☐ Unknown
- ☐ Potentially All

Information Location, i.e. Institute or Laboratory

Cefas. Lowestoft, UK

Information Manager's Name

Ian Russell

Information Manager Email

ian.russell@cefas.co.uk

Accessibility of Information

On Request



IASRB Metadatabase of Salmon Survey Data and Sample Collections of Relevance to Mortality of Salmon at Sea

Name of Data
Sample Collection

North-East Atlantic run reconstruction data

Information Description
(e.g. including location of
data/sample collection, # of
samples)

National catches. non-reporting rates, exploitation rates, return times, sex ratios, fecundities, smolt age composition

Information Type

Data

Data Type

- ☒ Assessment Data
- ☐ Tag Release/Recovery
- ☐ Freshwater Surveys
- ☐ Marine Surveys
- ☐ Index River Monitoring
- ☐ Genetic Baselines
- ☐ Other

Biological
Sample Type

- ☐ Scales
- ☐ Otoliths
- ☐ Tissue
- ☐ Stomach Contents
- ☐ Parasites
- ☐ Plankton
- ☐ Other

Start Year of Information

1970

End Year of Information

Ongoing

Information Source

International

Jurisdictions
included in
Data/Samples:

- ☐ Canada
- ☐ Denmark
- ☒ Faroe Islands
- ☒ Finland
- ☒ France
- ☒ Germany
- ☒ Greenland
- ☒ Ireland
- ☒ Norway
- ☐ Portugal
- ☒ Russia
- ☐ Spain
- ☒ Sweden
- ☒ UK - England & Wales
- ☒ UK - N. Ireland
- ☒ UK – Scotland
- ☐ USA
- ☒ Iceland
- ☐ St.Pierre et Miquelon
- ☐ Unknown
- ☐ Potentially All

Information Location, i.e. Institute or Laboratory

ICES WGNAS Reports and ICES Sharepoint site

Information Manager's Name

ICES

Information Manager Email

info@ices.dk

Accessibility of Information

On Request



IASRB Metadatabase of Salmon Survey Data and Sample Collections of Relevance to Mortality of Salmon at Sea

Name of Data
Sample Collection

SALSEA - Merge biological samples

Information Description
(e.g. including location of
data/sample collection, # of
samples)

Held in various locations and includes samples analysed and those yet to be analysed. Some samples are committed to existing studies.

Information Type

Biological Samples

Data Type

- ☐ Assessment Data
- ☐ Tag Release/Recovery
- ☐ Freshwater Surveys
- ☐ Marine Surveys
- ☐ Index River Monitoring
- ☐ Genetic Baselines
- ☐ Other

Biological
Sample Type

- ☒ Scales
- ☒ Otoliths
- ☒ Tissue
- ☒ Stomach Contents
- ☒ Parasites
- ☐ Plankton
- ☐ Other

Start Year of Information

2008

End Year of Information

2009

Information Source

International

Jurisdictions
included in
Data/Samples:

- ☐ Canada
- ☐ Denmark
- ☒ Faroe Islands
- ☐ Finland
- ☐ France
- ☐ Germany
- ☐ Greenland
- ☒ Ireland
- ☒ Norway
- ☐ Portugal
- ☐ Russia
- ☐ Spain
- ☐ Sweden
- ☐ UK - England & Wales
- ☐ UK - N. Ireland
- ☐ UK - Scotland
- ☐ USA
- ☐ Iceland
- ☐ St. Pierre et Miquelon
- ☐ Unknown
- ☐ Potentially All

Information Location, i.e. Institute or Laboratory

Marine Institute Ireland (Dr Niall Ó Maoiléidigh)
Faroes Marine Research Institute, (Dr Jan Arge Jacobsen)
Institute of Marine Research Norway (Dr Peder Fiske)

Information Manager's Name

Dr Niall Ó Maoiléidigh, Marine Institute I

Information Manager Email

niall.omaoleidigh@marine.ie

Accessibility of Information

Developing Protocols



IASRB Metadatabase of Salmon Survey Data and Sample Collections of Relevance to Mortality of Salmon at Sea

Name of Data Sample Collection

Faroes CWT recoveries

Information Description
(e.g. including location of data/sample collection, # of samples)

Information on 348 tag recoveries of coded wire tags at Faroes from mid 1980's to mid 1990's

Information Type

Data

Data Type

- ☐ Assessment Data
- ☒ Tag Release/Recovery
- ☐ Freshwater Surveys
- ☐ Marine Surveys
- ☐ Index River Monitoring
- ☐ Genetic Baselines
- ☐ Other

Biological Sample Type

- ☐ Scales
- ☐ Otoliths
- ☐ Tissue
- ☐ Stomach Contents
- ☐ Parasites
- ☐ Plankton
- ☐ Other

Start Year of Information

1984

End Year of Information

1996

Information Source

International

Jurisdictions included in Data/Samples:

- ☐ Canada
- ☐ Denmark
- ☒ Faroe Islands
- ☐ Finland
- ☐ France
- ☐ Germany
- ☐ Greenland
- ☐ Ireland
- ☐ Norway
- ☐ Portugal
- ☐ Russia
- ☐ Spain
- ☐ Sweden
- ☐ UK - England & Wales
- ☐ UK - N. Ireland
- ☐ UK - Scotland
- ☐ USA
- ☐ Iceland
- ☐ St. Pierre et Miquelon
- ☐ Unknown
- ☐ Potentially All

Information Location, i.e. Institute or Laboratory

Faroes Marine Research Institute and Marine Institute Ireland

Information Manager's Name

Dr Niall Ó Maoiléidigh, Marine Institute I

Information Manager Email

niall.omaoleidigh@marine.ie

Accessibility of Information

Developing Protocols



IASRB Metadatabase of Salmon Survey Data and Sample Collections of Relevance to Mortality of Salmon at Sea

Name of Data
Sample Collection

External tag recoveries from tagging programmes in Canada, USA, EU, Norway and Russia and International adult salmon tagging at Faroes and Greenland.

Information Description
(e.g. including location of data/sample collection, # of samples)

Information on 2,696 external tag recoveries at Faroes and 5,080 tag recoveries from Greenland from smolt releases in homewater countries of EU, N. America, Norway and Russia

Information Type

Data

Data Type

- ☐ Assessment Data
- ☒ Tag Release/Recovery
- ☐ Freshwater Surveys
- ☐ Marine Surveys
- ☐ Index River Monitoring
- ☐ Genetic Baselines
- ☐ Other

Biological
Sample Type

- ☐ Scales
- ☐ Otoliths
- ☐ Tissue
- ☐ Stomach Contents
- ☐ Parasites
- ☐ Plankton
- ☐ Other

Start Year of Information

1960

End Year of Information

Ongoing

Information Source

International

Jurisdictions
included in
Data/Samples:

- ☒ Canada
- ☐ Denmark
- ☒ Faroe Islands
- ☐ Finland
- ☐ France
- ☐ Germany
- ☒ Greenland
- ☐ Ireland
- ☒ Norway
- ☐ Portugal
- ☒ Russia
- ☐ Spain
- ☐ Sweden
- ☐ UK - England & Wales
- ☐ UK - N. Ireland
- ☐ UK – Scotland
- ☒ USA
- ☐ Iceland
- ☐ St.Pierre et Miquelon
- ☐ Unknown
- ☐ Potentially All

Information Location, i.e. Institute or Laboratory

Various international laboratories. Centralised database being developed with ICES

Information Manager's Name

Dr Niall Ó Maoiléidigh, Marine Institute I

Information Manager Email

niall.omaileidigh@marine.ie

Accessibility of Information

Developing Protocols



IASRB Metadatabase of Salmon Survey Data and Sample Collections of Relevance to Mortality of Salmon at Sea

Name of Data
Sample Collection

North American Run Reconstruction Data

Information Description
(e.g. including location of
data/sample collection, # of
samples)

Seven base files in Excel format that contain catch data, returns data, and spawners data by jurisdiction

Information Type

Data

Data Type

- ☒ Assessment Data
- ☐ Tag Release/Recovery
- ☐ Freshwater Surveys
- ☐ Marine Surveys
- ☐ Index River Monitoring
- ☐ Genetic Baselines
- ☐ Other

Biological
Sample Type

- ☐ Scales
- ☐ Otoliths
- ☐ Tissue
- ☐ Stomach Contents
- ☐ Parasites
- ☐ Plankton
- ☐ Other

Start Year of Information

1970

End Year of Information

Ongoing

Information Source

National

Jurisdictions
included in
Data/Samples:

- ☒ Canada
- ☐ Denmark
- ☐ Faroe Islands
- ☐ Finland
- ☐ France
- ☐ Germany
- ☐ Greenland
- ☐ Ireland
- ☐ Norway
- ☐ Portugal
- ☐ Russia
- ☐ Spain
- ☐ Sweden
- ☐ UK - England & Wales
- ☐ UK - N. Ireland
- ☐ UK – Scotland
- ☒ USA
- ☐ Iceland
- ☐ St.Pierre et Miquelon
- ☐ Unknown
- ☐ Potentially All

Information Location, i.e. Institute or Laboratory

Base files at Fisheries and Oceans Canada Gulf Region Science Branch, Moncton, New Brunswick, Canada and on the ICES Working Group North Atlantic Salmon Sharepoint site

Information Manager's Name

Gérald Chaput

Information Manager Email

gerald.chaput@dfo-mpo.gc.ca

Accessibility of Information

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IASRB Metadatabase of Salmon Survey Data and Sample Collections of Relevance to Mortality of Salmon at Sea

Name of Data Sample Collection **SALSEA North America biological samples**

Information Description
(e.g. including location of data/sample collection, # of samples)

Samples came from a marine pelagic survey targeting Atlantic salmon in the Labrador Sea. Biological characteristics data, tissue for DNA sampling, preserved sea lice, various tissue samples for a variety of disease and parasite sampling (heart, kidney, spleen, pyloric caeca, gill arch, liver, gill filaments, brain, heart, muscle, intestines), stomach samples, variety of tissue samples for stable isotope sampling (scales, liver, muscle, caudal fin, adipose), tissue for lipid sampling, otoliths, scales and plankton samples at select locations were collected and are in various states of processing and availability.

Information Type **Biological Samples**

Data Type

- ☐ Assessment Data
- ☐ Tag Release/Recovery
- ☐ Freshwater Surveys
- ☐ Marine Surveys
- ☐ Index River Monitoring
- ☐ Genetic Baselines
- ☐ Other

Biological Sample Type

- ☒ Scales
- ☒ Otoliths
- ☒ Tissue
- ☒ Stomach Contents
- ☒ Parasites
- ☒ Plankton
- ☒ Other

Start Year of Information **2008**

End Year of Information **2009**

Information Source **International**

Jurisdictions included in Data/Samples:

- ☒ Canada
- ☐ Denmark
- ☐ Faroe Islands
- ☐ Finland
- ☐ France
- ☐ Germany
- ☐ Greenland
- ☐ Ireland
- ☐ Norway
- ☐ Portugal
- ☐ Russia
- ☐ Spain
- ☐ Sweden
- ☐ UK - England & Wales
- ☐ UK - N. Ireland
- ☐ UK – Scotland
- ☒ USA
- ☐ Iceland
- ☐ St.Pierre et Miquelon
- ☐ Unknown
- ☐ Potentially All

Information Location, i.e. Institute or Laboratory

NOAA Fisheries Service, Woods Hole MA 02540 USA. Samples are at various locations and in various states of processing.

Information Manager's Name **Timothy Sheehan**

Information Manager Email **Tim.Sheehan@noaa.gov**

Accessibility of Information **On Request**

IASRB Metadatabase of Salmon Survey Data and Sample Collections of Relevance to Mortality of Salmon at Sea

Please complete one column for each dataset or sample collection

Name of Data/Sample Collection	
Information Description	
Information Type	
Data Type * (Multiple choices allowed)	
Biological Sample Type * (Multiple choices allowed)	
Start Year of Information	
End Year of Information	
Information Source	
Jurisdictions included in Data/Samples (Multiple choices allowed)	
Information Location	
Information Manager	
Information Manager Email	
Accessibilty of Information	
<i>* Complete only Data Type or Biological Sample Type</i>	

Guidance Notes for the Completion the Metadatabase Entry Form

Name of Data/Sample Collection:	This is a free-text field. Please provide a name for the data/sample collection. e.g. <i>Greenland CWT tag recaptures; North-East Atlantic run reconstruction data</i> .
Information Description:	This is a free-text field. Please provide a description of the data or samples held. e.g. 'Information on 348 CWT recoveries at Faroes from mid-1980s to mid-1990s.'
Information Type:	In the drop-down list, select the appropriate choice. <div style="margin-left: 20px;">Biological Samples</div> <div style="margin-left: 20px;">Data</div>
Complete only Data Type or ...:	In the drop-down list, select the appropriate choice. <div style="margin-left: 20px;">Assessment Data</div> <div style="margin-left: 20px;">Tag Release/Recovery</div> <div style="margin-left: 20px;">Freshwater Surveys</div> <div style="margin-left: 20px;">Marine Surveys</div> <div style="margin-left: 20px;">Index River Monitoring</div> <div style="margin-left: 20px;">Genetic Baselines</div> <div style="margin-left: 20px;">Other</div>
... or Biological Sample Type:	In the drop-down list, select the appropriate choice. <div style="margin-left: 20px;">Scales</div> <div style="margin-left: 20px;">Otoliths</div> <div style="margin-left: 20px;">Tissue</div> <div style="margin-left: 20px;">Stomach Contents</div> <div style="margin-left: 20px;">Parasites</div> <div style="margin-left: 20px;">Plankton</div> <div style="margin-left: 20px;">Other</div>
Start Year of Information:	This is a free-text field. Please indicate the year in which the data or sample collection commenced.
End Year of Information:	This is a free-text field. Please indicate the year in which the data or sample collection ended; or indicate that the data collection is ' Ongoing '.
Information Source:	In the drop-down list, select the appropriate choice. <div style="margin-left: 20px;">International</div> <div style="margin-left: 20px;">National</div>

Jurisdictions included in Data/Samples (Multiple choices allowed) *:	<p>In the drop-down list, select ALL Jurisdictions which are included in the data or samples, from the following choices.</p> <ul style="list-style-type: none"> Canada Denmark Faroe Islands Finland France Germany Greenland Ireland Norway Portugal Russia Spain Sweden UK - England & Wales UK - N. Ireland UK – Scotland USA Iceland St.Pierre & Miquelon Unknown Potentially All
Information Location:	<p>This is a free-text field. Please provide details of the location where the data or samples are held. i.e. the name and address of the Institute/Laboratory</p>
Information Manager:	<p>This is a free-text field. Please provide the name of the manager responsible for the data or samples held.</p>
Information Manager's Email	<p>This is a free-text field. Please provide a contact email address for the manager responsible for the data or samples held.</p>
Accessibilty of Information:	<p>In the drop-down list, select the appropriate choice.</p> <ul style="list-style-type: none"> Public On Request Developing Protocols Not Available