

# WP 7: Improving Harmonizing Biodiversity Monitoring

*September 24. 2018 INTERACTH2020 Annual meeting*



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*Presentation topics;*

- *Quick Background to CAFF/CBMP*
- *WP7 Goals and objectives*
- *Overview on tasks and deliverables*



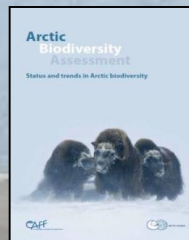
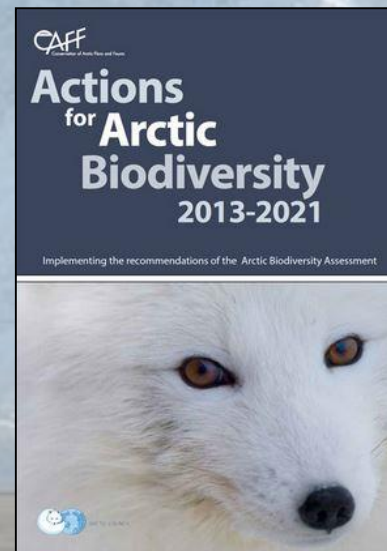
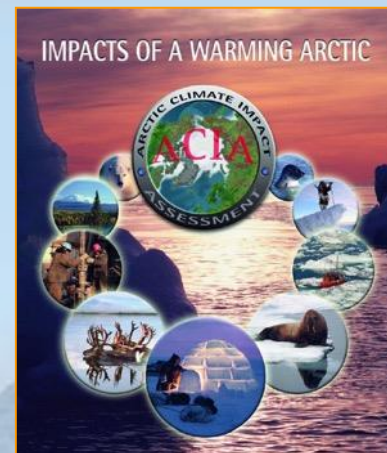
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- Conservation of Arctic Flora and Fauna (CAFF) biodiversity Working Group of the Arctic Council
- Mandate:
  - to address the conservation of Arctic biodiversity, and to communicate its findings to the governments and residents of the Arctic, helping to promote practices which ensure the sustainability of the Arctic's living resources
- Monitoring, assessment, data management, communication
- CAFF operates on the boundary between science and policy



## CIRCUMPOLAR BIODIVERSITY MONITORING PROGRAM

- CAFF's /Arctic Councils biodiversity monitoring programme
- Started as response to Arctic Council recommendations on biodiversity and ecosystem monitoring (ACIA).
- Now also a tool for CAFF to implement ABA Action Plan.
- Focal point for current and credible Arctic biodiversity information





**CAFF Board**

**CBMP Coordination Committee & Technical Team.  
(DK / GL, US, CAFF sec).**

## Terrestrial-SG (Iceland/ Sweden)



## Expert networks

## Vegetation Expert Network

# Mammal Expert Network

### Freshwater-SG (Canada / Sweden)



## National networks

**Implementation projects.**  
6 implementation projects

## State of The Arctic Terrestrial Biodiversity Report 2019 Special Journal Issue and short START

**Coastal Expert Monitoring  
Group (US/ Canada)**



**Marine SG  
(Canada US)**



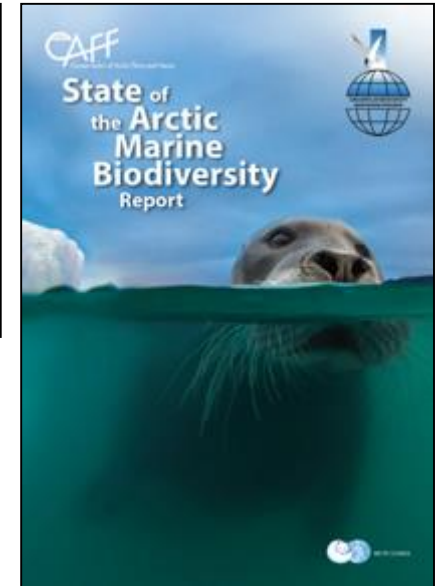
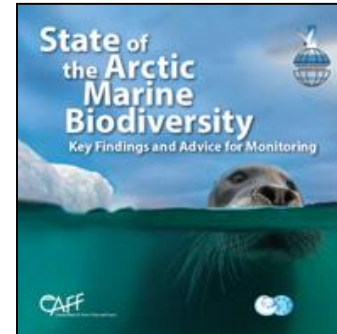
**Marine Mammals, Benthos,  
Plankton, Cbird, Sea Ice  
Biota.**

## State of The Arctic Freshwater Report 2019 Special Journal Issue and short SAFBR

## Invertebrate Expert Network

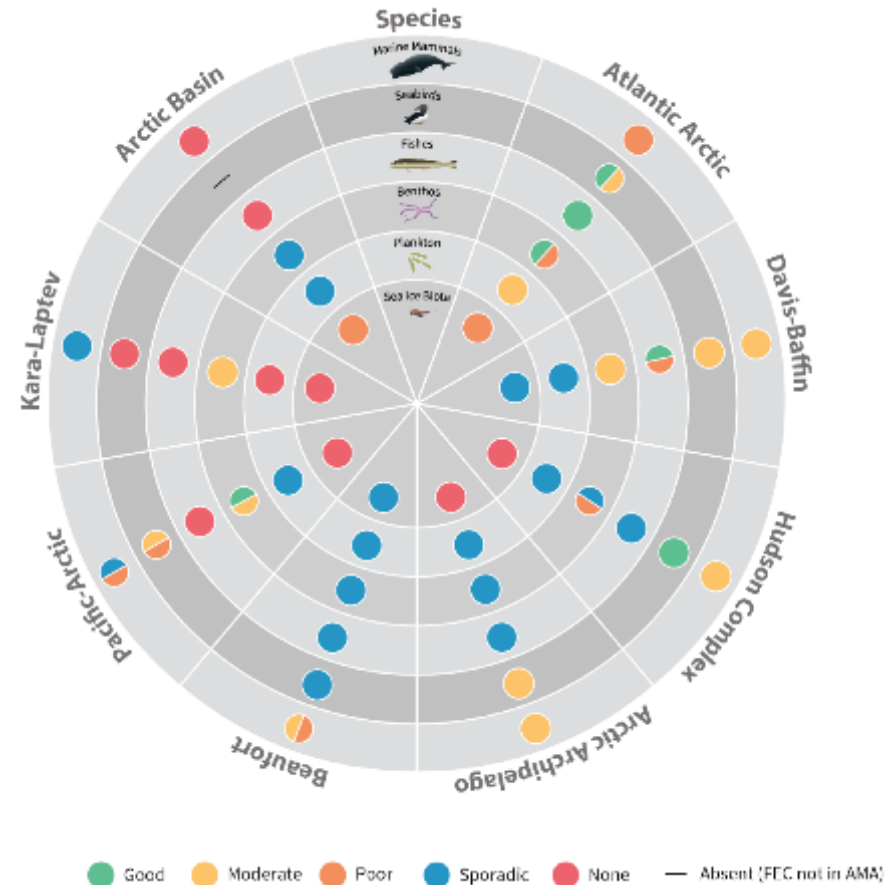
## CIRCUMPOLAR BIODIVERSITY MONITORING PROGRAM

- What can we say on changes occurring in Arctic biodiversity and ecosystems based on current data?
- Identify knowledge gaps
- Provide key trends
- Advice for monitoring, directed towards policy and decision makers
- Process; lessons learned



## CIRCUMPOLAR BIODIVERSITY MONITORING PROGRAM

- What can we say on changes occurring in Arctic biodiversity and ecosystems based on current data?
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## WP7: Overall goal

Test the CBMP Freshwater and Terrestrial monitoring plans at INTERACT stations

## WP7: Members

CAFF  
Rif Field Station  
Aarhus University  
Zackenbug Research Station  
CHARS Research Station



# WP7 Objectives

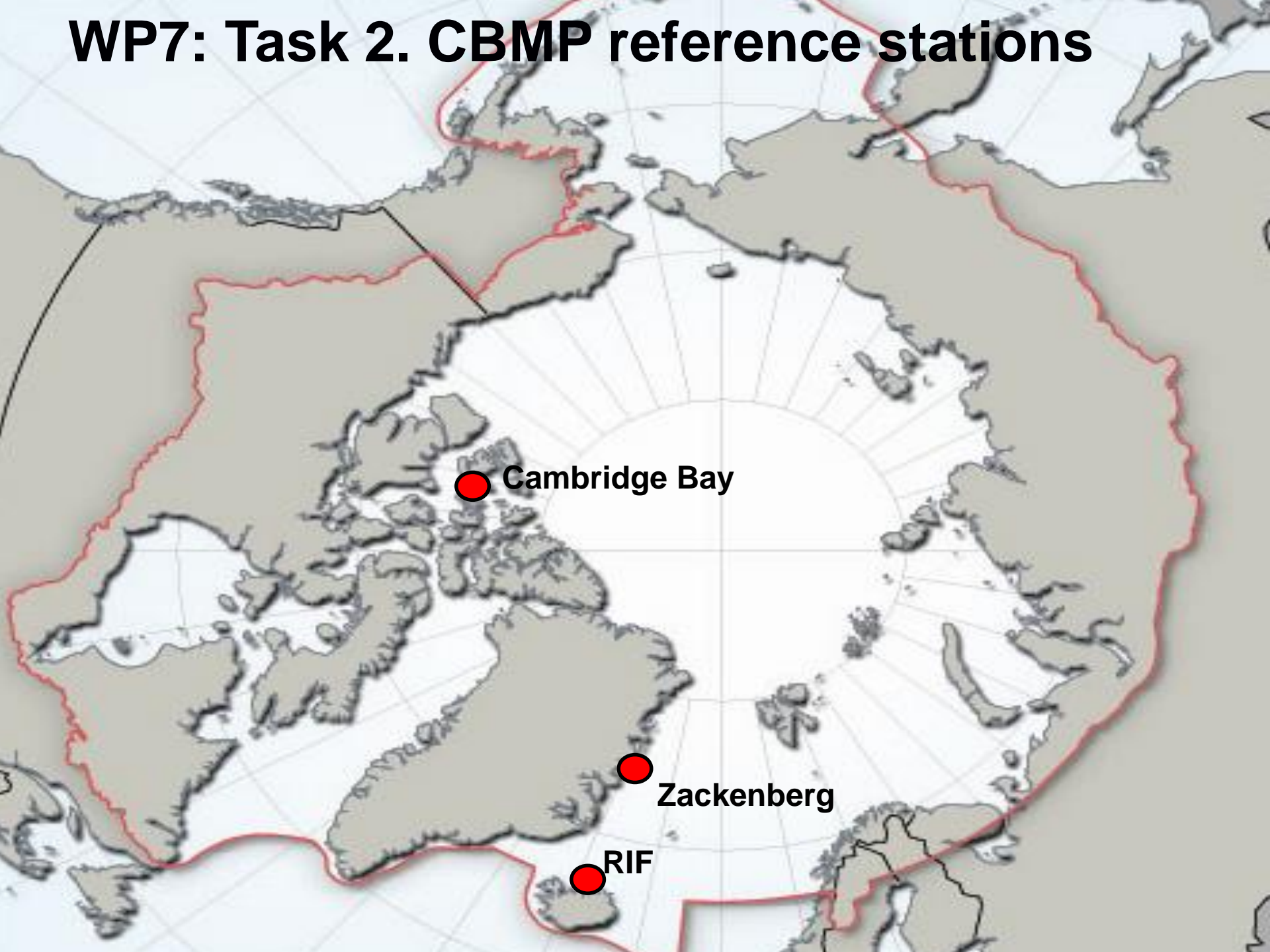
- Establish interface between CBMP and INTERACT
- Inform development of Rif Field Station in Iceland based on lessons learnt at Zackenberg and CHARS
- Test CBMP Freshwater and Terrestrial Monitoring Plans at Rif and develop a user manual for implementation
- Identify how data from INTERACT stations can inform Arctic Council initiatives
- up-dated publication on Arctic terrestrial biodiversity for the Encyclopedia of Biodiversity



- **Establish advisory group**
  - 3 Station Managers/ scientific leaders
  - CBMP leads from terrestrial and freshwater group
  - Relevant country CBMP SG members
  - CAFF secretariat
  - CBMP Co-Chair
- Guide and advise 3 INTERACT field stations in implementation of CBMP Monitoring Plan



## WP7: Task 2. CBMP reference stations





# WP7: Task 2

- ***Develop three CBMP reference stations:***
  - Test the Freshwater & Terrestrial Monitoring Plans in the field
  - Identify existing biotic and abiotic monitoring
  - Identify monitoring gaps
  - Conduct field trials on selected FECs
  - Develop a data management plan for the Rif station
  - Develop a user manual for implementing CBMP at INTERACT stations



# Rif Field Station

CIRCUMPOLAR BIODIVERSITY MONITORING PROGRAM



- Established in 2014 with the goal of:
  - Promoting and enhancing ecological research and monitoring in the area
  - Help gather, manage and share information gained through research and monitoring
  - Supporting the local community
- Operation so far
  - Accommodation, assistance and support to visiting scientists
  - Simple research facilities (development ongoing)
  - Educational programs





## Towards RFS Monitoring Plan

- Two workshops
  - Raufarhöfn, August 2017
  - Copenhagen, April 2018
  - Workshop reports, available on Interact website (or during week)



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## CIRCUMPOLAR BIODIVERSITY MONITORING PROGRAM

- Main focus of workshops
  - Existing biotic/abiotic monitoring identified at the three stations
  - Draft monitoring plans presented/comparer and reviewed
  - Monitoring components for RFS and comparable monitoring components between the 3 stations explored
  - Assignment of tasks and timeline
  - RMP finalised, version 1- Living document – version 2 in 2020
  - Initial mapping of the RFS Data Management Plan

# RFS Monitoring Plan



- Provides aims and objectives of ecosystem monitoring at RFS
- Outlines environmental characteristics of the area
- Overview of existing monitoring and research
- Describes key monitoring components, questions and identifies Focal Ecosystem Components

## Rif Field Station Ecosystem Monitoring Freshwater and Terrestrial Monitoring Plan May 2018



Developed with the direction of the Circumpolar Biodiversity Monitoring Program (CBMP)  
as part of INTERACT Work Package 7

# RFS Monitoring Plan

## Objectives:

- Test the CBMP protocols
- Rif as a “model” for terrestrial and freshwater monitoring in the Arctic





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CIRCUMPOLAR BIODIVERSITY MONITORING PROGRAM

# Data managers workshop. August, 2018 Akureyri





# Data Management Plan

- Draft in final stages, needs input from WP5
- Intended to ensure data is;
  - Preserved
  - Discoverable
  - Accessible
  - Ethically managed

# Data Management Plan

- Metadata for all activities will be stored within CAFF's Arctic Biodiversity Data Service
- Ensuring metadata compliance will be incorporated in the access application to RFS
- In cases where researcher is not using another data service all data can be hosted within Arctic Biodiversity Data Service (ABDS).

## WP7: Task 3

- Identify pathways: Data from INTERACT stations to Arctic Council assessments.
- Coordinate with WP 2 and build on the data flow systems created under WP 5
- Identify and present relevant Arctic Biodiversity Assessment and ICARP III recommendations



## WP7: Deliverables

- A data management plan for the Rif station (31.09.2018)
- Implementation of pilot studies of selected focal ecosystem components. 31.03.2019
- A user manual for implementing CBMP at INTERACT stations. 31.01.2020
- An up-dated publication on Arctic terrestrial biodiversity for the Encyclopedia of Biodiversity. 31.03.2020
- A report describing the flow of data from the field to Arctic Council assessments, monitoring and reporting activities. 31.03.2020





# Thank you

