WP 7: Improving Harmonizing Biodiversity Monitoring

October 21. 2017 INTERACTH2020 Annual meeting













Presentation topics;

- Background to CAFF/CBMP
- WP7 Goals and objectives
- The Rif field station
- Rif workshop
- Arctic Biodiversity Data Service
- Arctic Biodiversity Congress 2018

Kári Fannar Lárusson (kari@caff.is)

Jónína Sigríður Þorláksdóttir (jonina@rifresearch.is)





CAFF and the Arctic Council



- 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

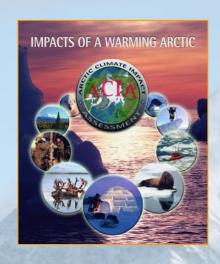


CBMP - in CAFF



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

Actions

for Arctic

Biodiversity









CBMP; Part of ABA actions



CIRCUMPOLAR BIODIVERSITY MONITORING PROGRAM

19 actions in ABA tracking tool regard CBMP, including:

- Continue implementation of CBMP (All Rec's)
- Review, evaluate, and update CBMP strategies and its monitoring plans (All Rec's)
- Report on changes in Arctic species, ecosystems, and the effects of stressors through SABR's (Rec 13)
- Consider impacts of stressors and drivers within the scheduled reviews of the CBMP monitoring plans (Rec 16).
- Next CAFF Biodiversity Congress in 2018: CBMP as an important contributor (All Rec´s)









Overall CBMP status





- International network of networks improving detection, understanding, reporting on Arctic biodiversity trends.
- Three CBMP Adaptive and Ecosystem Based Monitoring Plans and four Steering Groups;
 - 1. Marine
 - 2. Freshwater
 - 3. Terrestrial
 - 4. Coastal Plan on its way
- Four year Strategic Plan (2018-2021 plan in development)
- State of The Arctic Biodiversity Reports are major outputs from CBMP.
- -Indices and Indicators

CAFF S

Structure and work; CBMP October 2017





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

Terrestrial-SG (Iceland/ Sweden)



Freshwater-SG (Canada / Sweden)



Coastal Expert Monitoring Group (US/ Canada)



Marine SG (Russia/ US)





Implementation projects. 6 implementation projects



State og The Arctic Freshwater Report 2018 Special Journal Issue and short SAFBR

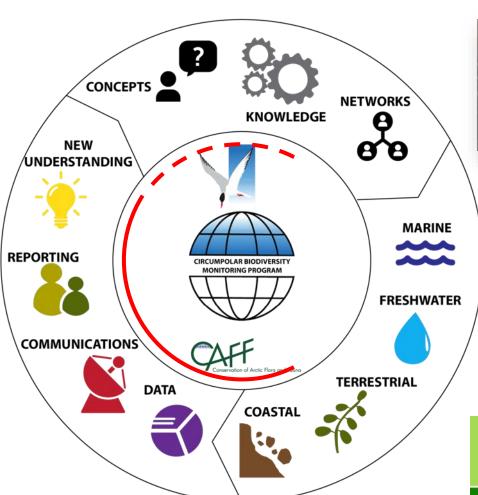
Invertebrate Expert Network Bird Expert Network

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



CBMP – Implementation Status















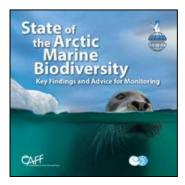


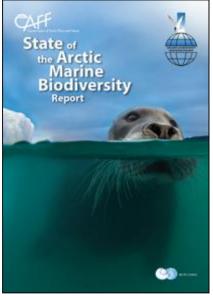


State of the Arctic Biodiversity Report



- 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



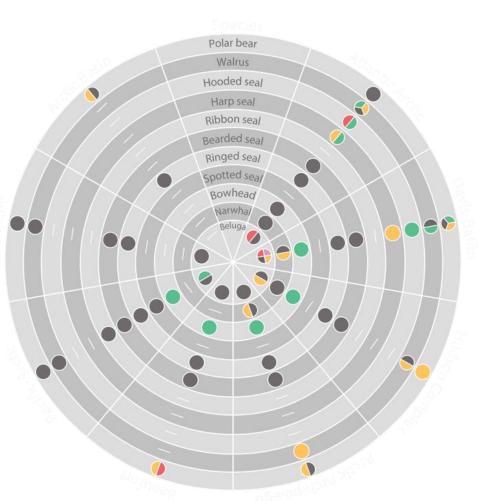




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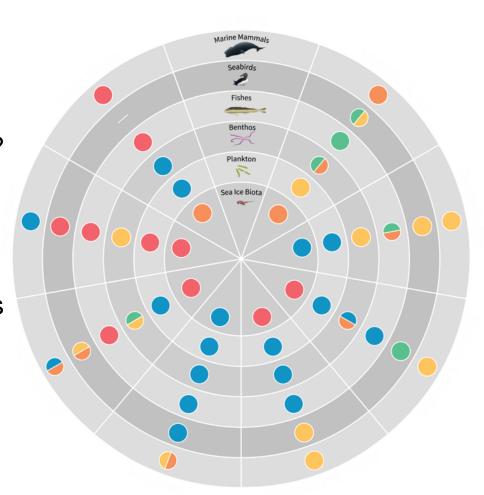




State of the Arctic Biodiversity Report



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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
Zackenburg 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





WP7: Task 1



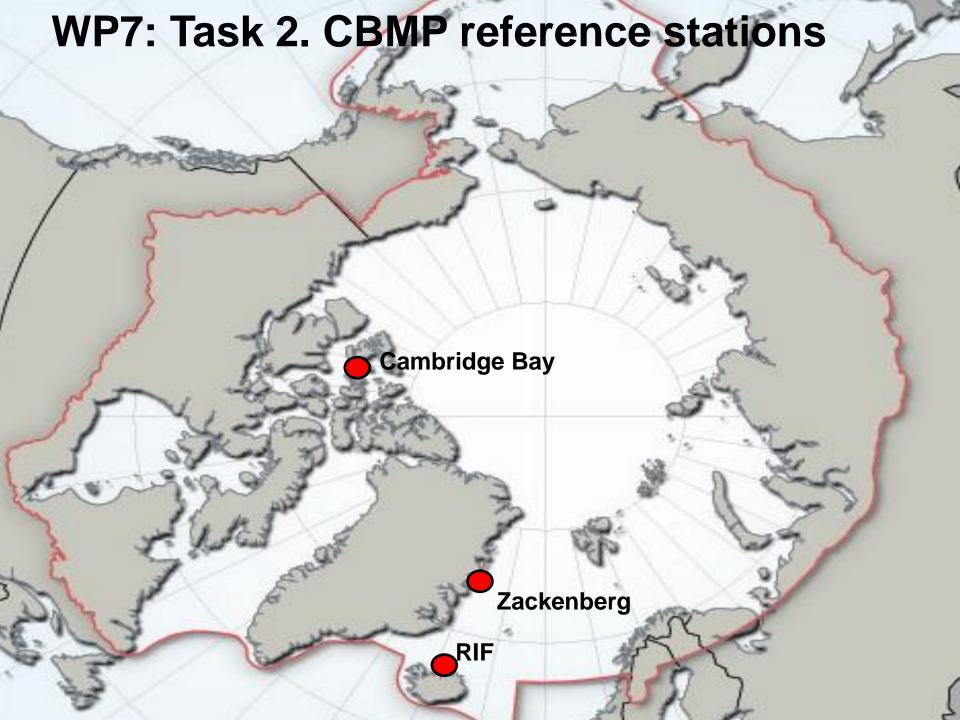
CIRCUMPOLAR BIODIVERSITY MONITORING PROGRAM

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
- Annual meeting + teleconferences
- Guide and advise 3 INTERACT field stations in implementation of CBMP Monitoring Plan
- First meeting at Rif August 22-24, 2017

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







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: Products

- A data management plan for the Rif station
- A user manual for implementing CBMP at INTERACT stations
- Describe the flow of data from the field to Arctic Council assessments, monitoring and reporting activities



Rif Field Station



- 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 (ready next spring)
 - Educational programs

Environmental conditions

- Melrakkaslétta peninsula classified as Low Arctic (Panarctic Flora Checklist, 2011) → Characterized by plants of Arctic origin
- Open and exposed to cold, northerly winds
- High humidity and low summer temperatures













WP 7 Rif Workshop outcomes

- Existing biotic and abiotic monitoring at the three stations identified
- (Draft) monitoring plans for each station reviewed
- Guidance and assistance to Rif on FECs to monitor
- Identification of FECs to be addressed at each station
- Approach for data management explored
- Assignment of tasks
- Timeline





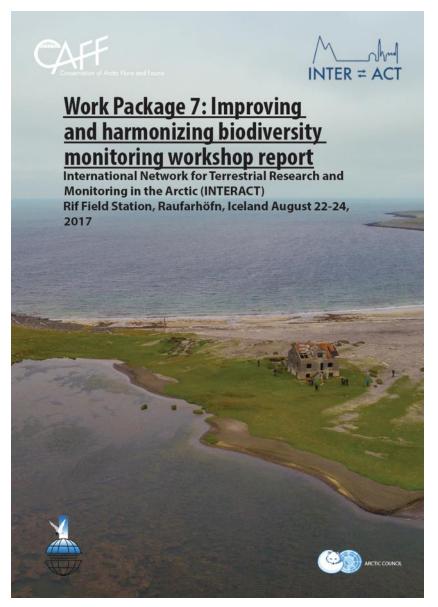


WP7 Milestones

- Melrakkaslétta peninsula defined as the Rif monitoring area
- List of selected FECs proposed in draft monitoring plan.
- Project website, and release workshop report
- Lessons learnt from CHARS and Zackenberg documented
- Finalize the Rif monitoring plan
- Develop a mapping database for Rif
- Overview document for WP7
- Construct a data management plan
- Communications plan and long term business plan



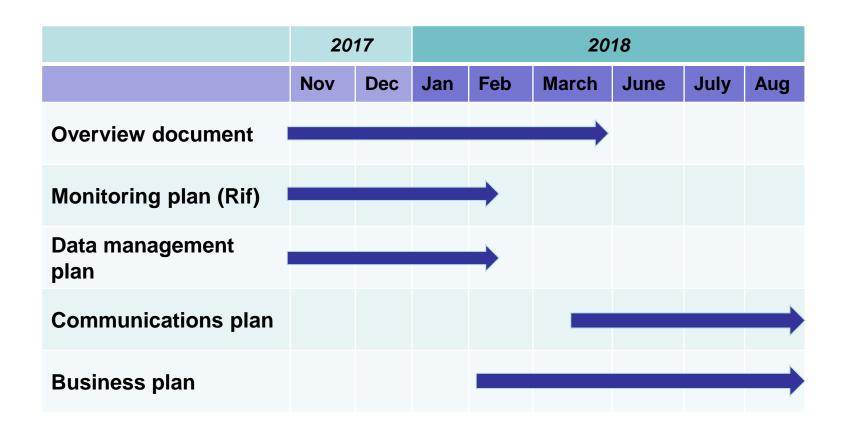






WP7 timeline for next steps









Next meetings

- Regular teleconferences: 1st in early Nov
- Annual workshop: August 2018 (Cambridge bay or Denmark)
- WP meeting at the Arctic Biodiversity Congress Rovaniemi, Finland: October 12th 2017
- Annual workshop: August 2019 in Raufarhöfn, Iceland

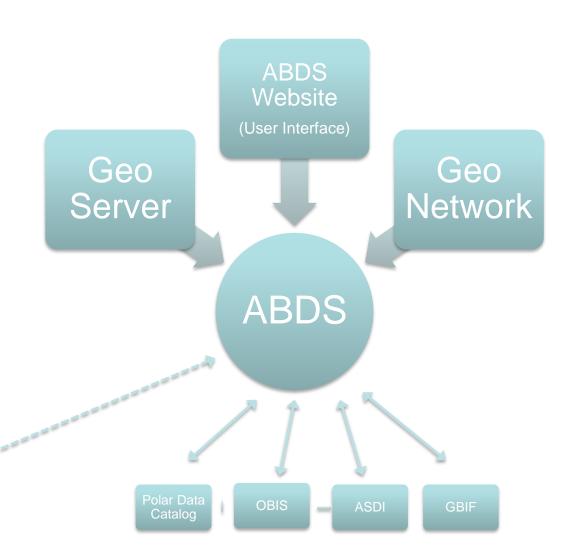








- Web Interface
- Geo Server
- Geo Network







- CAFF will be hosting The 2nd Arctic Biodiversity Congress:
 October 9-11, 2018 Rovaniemi, Finland
- Call for content in November
- Consider to having an Interact session











