Biosphere Reserves are learning sites for sustainable development. Upon the recommendation of national governments, these sites are recognized by UNESCO as part of its Man and the Biosphere (MAB) programme. The MAB brings together a number of agendas – natural sciences, social sciences, economics and education – to improve our living conditions and to protect ecosystems. It particularly encourages innovative approaches to economic development which respect to social, cultural and ecological values. The World Network of Biosphere Reserves consists of 669 sites in 120 countries.

NordMAB is a sub-network for Nordic cooperation, within the World Network of UNESCO Biosphere Reserves. Biosphere Reserves, researchers, experts and government officials who collaborate in this network, address the challenges of regional sustainable development in a northern context. The Nordic Countries involved are Canada, Scotland, Denmark (Greenland), Norway, Sweden, Finland, Denmark, Latvia, Estonia and Russia. NordMAB aims to strengthen cooperation across Nordic Biosphere Reserves and create models of synergy, capacities and management that will be recognized within UNESCO and the World Network of Biosphere Reserves.

NordMAB focus themes:

- **Fostering Northern sense of belonging**: The objective is to provide a strong identity experience to Nordic youth, to enhance their knowledge and foster their motivation to take part of Nordic environmental awareness raising issues, climate changes in particular.

- **Building collaborative partnerships with private sector**: The objective is to enhance collaboration between BRs and BR Candidates across the North to build beneficial links with private sector, in order to maximize social responsibility and sustainable development in Nordic BRs.

- **Using traditional knowledge**: The objective is to connect with indigenous communities in the North through sharing of their traditional knowledge and to strengthen models of sustainable development, environmental and social management strategies and policies.
Activities during 2017/2018

NordMAB Network meeting
The NordMAB network meeting were held in the newly designated biosphere reserve, Moen in Denmark, October 2017. The main objective of the meeting was to offer an opportunity for experience exchange between Nordic BRs and to contribute to strengthening the identity of the network. As a follow-up from the meeting in 2017 (where we explored how and in what way the Lima Action Plan (LAP) supports and strengthens the collaboration between Nordic BRs and where we ended up with a synthesis of LAP priorities and a list of activities that will stimulate more collaboration and visibility of the network) the network focused on exchange of knowledge, projects and opportunities for collaboration. The outcome was a list of ideas and projects for the Nordic BR’s to explore or join; from ongoing local food-programs and communication work to how to partner up with private sector and develop a Nordic teacher- and student exchange between the BR’s.

Students on Ice
The aim of this project is to provide two youth from the Manicouagan-Uapishka Biosphere Reserve with a transformative experience and to put them in touch with other youth from around the world, especially the Nordic regions, as part of a stimulating learning process focused on field experience. NordMAB’s partnership with Students On Ice aims to explore how youth are effective change agents in their community and how their efforts contribute to positive societal action.

Shape
Sustainable Heritage Areas: Partnerships for Ecotourism
The aim of SHAPE is to enable authorities, businesses and communities to develop innovative approaches for ecotourism initiatives which preserve, manage and create economic value from local assets in the ‘Cool North’. To address the common challenges of the involved SHAs, the project partners will work throughout the project with stakeholders – particularly from the resource-based and tourism sectors and local government – by bringing them together 1) to build networks and partnerships which will identify common goals and priorities; 2) to map and understand cultural and natural assets and how they interact; 3) to realise opportunities for partnerships of stakeholders to use sets of assets for visitor initiatives which support development. SHAPE will work on practical solutions applicable to the stakeholders involved, but the scope of the project is to gather these experiences and make them available to communities struggling with similar challenges across the NPA region.

Biosphere for Baltic
Biosphere for Baltic is a project that aims to facilitate learning and disseminate good practices from biosphere reserves in the Baltic Sea region, within and beyond the network of biosphere reserves. Also, to highlight the contribution of biosphere reserves to the UN Sustainable Development Goals (SDG 14 in particular) and the 2030 Agenda. The project focuses on two themes: Source to Sea and Learning and Ocean Literacy. Both themes are of great importance to sustainable development in the Baltic Sea and for the implementation of SDG 14 – Life below water. The themes are also broad, in the sense that they cover many topics and can be interpreted widely.

Source to Sea is highly relevant for the Baltic Sea, with its dynamic interface between land and ocean. Human activities upstream; on land and along rivers, affect the ecosystem downstream; in the coastal zone and the marine environment, with several associated environmental challenges, e.g. plastic pollution, water quality, eutrophication etc.

Ocean literacy is defined as “an understanding of the ocean’s influence on you and your influence on the ocean” and learning is key to increased ocean literacy among people and societies. Learning has also always been fundamental to the work in the biosphere reserves and is a part of their success stories. The biosphere reserves in the Baltic Sea region raise awareness and educate people on a daily basis – by connecting people to nature and by stimulating new knowledge development as well as education for sustainable development.

During 2018, Biosphere for Baltic joins 9 biosphere reserves in two international exchange events. The first exchange event was held in Sweden in BR Kristianstads Vattenrike in May, and the second event is
planned to be held in October in Archipelago Sea in Finland. The project targets the aim of the NordMAB network by enhancing synergies among NordMAB. Participating NordMAB BRs are Kristianstads Vattenrike, Blekinge Archipelago, River Landscape of Nedre Dalälven (all in Sweden), Archipelago Sea in Finland, West Estonian Archipelago in Estonia, North Vidzeme in Latvia and Møn in Denmark. The biosphere reserves of Southeast Rügen BR in Germany and Slowinski in Poland are also participating in the project. The project is fully funded by the Swedish Agency for Marine and Water Management and supported by Swedish MAB Programme. The project is expected to end in February 2019.
Country Action Reports October 2016 - October 2017

1. Canada
2. Sweden
3. Finland
4. Estonia
5. Denmark
6. Greenland
7. United Kingdom
8. Norway

Manicouagan Uapishka Biosphere Reserve, Canada

Name of rapporteur: JP Messier
E-mail address of rapporteur: jpmessier@rmbmu.com

1. Actions undertaken to enhance synergy among NordMAB:
   - Addition of a Canadian Nordic Biosphere (Tsatsuë) in the nordmab extended network. Their active participation in the network might start when funding comes back.
   - Work with Greenland have continued.

2. Actions undertaken within the NordMAB focus themes:
   a. Fostering Northern sense of belonging
      - Students on Ice have continued. 2 youth were sent in 2017, one from Manicouagan, one from Clayoquot Sound.

   b. Building collaborative partnerships with private sector
      - Our work with mining sector have continued and progressed. The stakeholder and SD diagnosti tool have improved. We are working with mining cie within Manicouagan and in Philippines and Ecuador.

   c. Using traditional knowledge
      - Partnership between Manicouagan Innus and Samis (Vindell Valley in Sweden) have continued.

3. Actions undertaken to enhance NordMAB visibility and presence
   - Active presence at Lima congress, France EuroMAB, Youth MAB congress, Arctic Circle Assembly.
   - Presence at meeting with Nordic Council of Ministers and participation in a new financial proposal submission.
Biosphere Reserves of Sweden

Name of rapporteur: Göran Blom
E-mail address of rapporteur: goran.blom@naturvardsverket.se

Reinforced national program - We have started a process investigating the organizational form of the national program. The goal is to both strengthen the program and to secure long term financial support.

1. Actions undertaken to enhance synergy among NordMAB:
   Project Biosphere for the Baltic - Overall objective: stimulate exchanges of experiences and dialogue between stakeholders focusing on Baltic Sea issues and to disseminate lessons and practical experiences from biosphere areas. Also highlight the role of biosphere areas in Agenda 2030 and communicate good examples that contribute to the Global goals. Participating countries are: Sweden, Denmark, Germany, Poland, Latvia, Estonia and Finland.

2. Actions undertaken within the NordMAB focus themes:
   a. Fostering Northern sense of belonging
      The Biosphere Östra Vätterbranterna project “Grow together” with focus on integration. They also initiated a biosphere ambassador training for newly arrived refugies.

      In Biosphere Vänerskärgården a communication project highlight good examples of implementation of the 2030 Agenda. This year's Biosphere Challenge was about Recycling and Creativity, and many schools in other countries participated. The challenge this year involved about 1000 students and educators from Austria, Canada, Estonia, England, Italy, South Africa and Uganda.

      In Biosphere Nedre Dalälven - BUS in the Biosphere project. (BUS is a Swedish acronym for Preserve Develop Support, and also means “having fun”). By increasing knowledge, awareness and understanding of efforts that have been made for sustainable development, the project wants to create commitment and interest in the BR. The project will market the BR through storytelling, joy and belief in the future in a tangible, creative and offensive way without being stuck in technicalities, prohibition and fact boxes.

   b. Building collaborative partnerships with private sector
      Social entrepreneurship - The Millstone Quarry in Lugnås, from BR Vänerskärgården, is presented at the conference Social Enterprise and Biosphere Reserves in Italy as a good example of social entrepreneurship.

   c. Using traditional knowledge
      (The objective is to connect with indigenous communities in the North through sharing of their traditional knowledge and to strengthen models of sustainable development, environmental and social management strategies and policies)

3. Actions undertaken to enhance NordMAB visibility and presence
   National Biosphere Day 2 June - Examples of Activities:
   Breakfast seminar at the Swedish Unesco Council, on the 2030 Agenda-report
   12 over 12 information at the Swedish Environmental Protection Agency, on the 2030 Agenda-report
   World premiere for the Biosphere film. An english version will be ready soon
   Excursion in Vindelälven,
   Biosphere bus in Vattenriket,
   Distribution of biosphere scholarship in Vänerskärgården,
   Biosphere lunch in NEDA

Some other examples:
Swedish Biosphere Reserves as Arenas for Implementing the 2030 Agenda. Analysis and practice (SEPA Report 6742)
Workshop on the guidance for biosphere reserves with national adaptation of LAP. Brochure with Swedish priorities.

The Arkipelagrutten project in Biosphere Blekinge Arkipelag gather hiking, cycling, sailing and kayaking paths in a network of travel opportunities and products through the coast and archipelago and provide potential for outdoor tourism development.

Biosphere Vattenriket - Sri Lanka has translated and dubbed the movie about Vattenriket and use it to inspire biosphere areas in their country. They want exchange with Vattenriket, based on the example of cranes as they experience similar problems with peacocks.

North Karelia Biosphere Reserve, Finland

Name of rapporteur: Timo J. Hokkanen
E-mail address of rapporteur: timo.hokkanen@ely-keskus.fi

1. Actions undertaken to enhance synergy among NordMAB:
   - SHAPE-project (Sustainable Heritage Areas – Partnerships for Ecotourism). This project is a Northern effort in Northern periphery and Arctic programme intended to improve tourism co-operation and effectiveness between BR’s and regional parks (Norway, Finland, Scotland, Iceland, Greenland and Canada)
   - Planning Karelia CBC (cross border co-operation) project SUPER, which aims at improving environmental conditions and tourism in UNESCO programme areas (Kizhi WHS, Vodlozersky BR, North Karelia BR and Rokua Geopark). We are on the second round and funding opportunities are about 80 %.

2. Actions undertaken within the NordMAB focus themes:
   a. Fostering Northern sense of belonging
   b. Building collaborative partnerships with private sector
   c. Using traditional knowledge

All three sectors are taken into account in our partnership programme. Sustainability partnerships with private sector (businesses, associations and other private organisations as well as public actors such as municipalities, schools, museums) forms the cornerstone of North Karelia BR’s regional development strategy.

North Karelia BR has a provincial system of formal agreements between partners and BR to promote sustainability. More than 30 big and small actors already belong to the partnership network.

Advances obtained
   - Our partner Valoparta OY has strong co-op with UNESCO and we feel that it will create new opportunities for the North to influence and be visible. The motto of Valoparta OY is “influencing with light”.
   - All BR municipalities are now in the partnership programme; BR issues have been written into municipal development strategies
   - new links have been created between actors (private and private & public)
   - BR’s position as a neutral (sustainable) development platform has improved
   - partnerships have improved project planning, application preparing and implementation
   - many-sided, extended and sustaining visibility
1. Actions undertaken to enhance synergy among NordMAB:
- NordMAB meeting in October 2016 in Nordhordland, Norway Archipelago Sea, North Karealia and Päijänne Lake candidate BR were all represented.
- NordMAB meeting in October 2017 in Mön, Denmark, Archipelago Sea Area and Lake Päijänne candidate were represented.

2. Actions undertaken within the NordMAB focus themes:
   a. Fostering Northern sense of belonging
      “Biosphere education” in kindergarten, secondary school and upper school.
      1. The Pike and his friends visit kindergartens
      The focus of this model lies on environmental knowledge for small children. Through stories, expeditions and playing, children get to learn about different environmental issues from a bunch of stuffed animals that circulates between the kindergartens of the BR in a corf for live fish transportation. During each visit, The Pike and his gang brings a theme to all kindergartens. The theme varies every year and has so far included children’s rights, recycling and the state of the Baltic Sea. The coming theme will put focus on food and sustainability. This model has proven to be very popular, and the children look forward to the visits by the pike and his friends. The visits don’t involve any external teacher or personnel of the BR Office, since the pike circulates around the kindergartens with thorough instructions for the personnel.
      2. Biosphere Reserve goes lower secondary school
      This model puts focus on knowledge of the natural and cultural values of the region. The most important part is to make the children interested in and proud of their own home-region. The BR Office assists the teachers in a yearly class about the BR and the MAB Programme. The highlight is a trip to an island in the National Park together with children from other schools of the biosphere area.
      3. The MAB concept integrated in the educational program of upper secondary school
      The two secondary schools of Pargas are together developing voluntary bilingual courses with a strong connection to the MAB Program. The first pilot course is named “Changes - a study of the Archipelago Sea Area BR” and is conducted for the first time in the spring of 2017.
   b. Building collaborative partnerships with private sector
      1. Mathantverk – Artisan food, a new concept especially suited for small-scale surroundings like the archipelago.
      In the Archipelago Sea Area BR huge efforts has been made to develop the conditions for entrepreneurship in artisan food. In association to one of the BR winter meetings, entrepreneurs indicated a great interest in food craftsmanship. The artisan food concept, developed by the National Resource Center Eldrimner in Sweden, was presented during the meeting. In cooperation with other regions in Finland, a training program for different trades within the food craftsmanship was started. The first educational programs in artisan food based on the Eldrimner concept were arranged 2013, 2016-2017 and 2017-2018. Some of the students are new entrepreneurs and others developed their business in order to brand themselves as food artisans.

Artisan food production is an interesting alternative for coastal and island environs, where economic activities that can be practiced on a small-scale and still be profitable is highly needed. The unique nature and geography limits the possibilities for major cultivating areas. The area is also not suitable for large industrial plants. There is access to primary products of many kinds, but refined products with a local character are scarce. Islanders often have several occupations and artisan food production is suitable as a sideline. Most food artisans grow something that is being refined and many of them possess interesting traditional recipes that could sell well whilst the trend in local food is booming. To get a sufficient basis
for courses and resource networking, it is important to exert the regional borders and cooperate beyond national borders.
The BR is involved in arranging an annual open Finnish Championship in Food Craftmanship. Participants from Finland, Baltic and Nordic countries are welcome to join the competition. In the Finnish Championship in Food Craftmanship in 4-6 October 2017 Food Artisans from Sweden and Estonia (Saaremaa in Western Estonian Archipelago BR) participated. The competition is also a place for sharing knowledge and experiences and getting professional feedback for your products.

2. The Archipelago Sea Biosphere Reserve was involved in founding the Åboland Archipelago Foundation, a foundation focused on promoting a vital archipelago. The foundation collects funds through gifts and donations. Its mission is to work for a living archipelago by promoting and supporting opportunities for permanent housing, promote migration into the archipelago, and to pursue also other ways of reaching a sustainable economic, ecological and socio-cultural development in the Archipelago Sea area.

Bränskär, an archipelago estate with newfound vitality. The Åboland Archipelago Foundation flagship is a culturally and socially valuable archipelago property. This property, on the island of Bränskär, has become a model for how a viable archipelago can be promoted by leasing out homes for all year round accommodation. It is a model adapted to the modern world, but based on traditional values. A young boat builder, who has developed an innovative tourism experience together with some business colleagues on the island, has now inhabited Bränskär for more than five years. All construction work and all activities have been realized in a sustainable manner, by taking into consideration the natural values and the cultural history of the island. In addition, the business idea of the island is based on these very values, this venture serving as a role model for other tourism entrepreneurs in the region. At present, already two families live on the island and two new companies, with several employees during summer, are based on the island. Throughout the development of this model, the BR and the Åboland Archipelago Foundation have been able to realize an action that exactly corresponds to the purposes of the BR.
The foundation was offered a new interesting project in beginning of 2017 to rent a property on a small island called Björkholm, were a couple had during 50 years run touristic activities like fishing tourism and renting cottages. A young couple was chosen to rent and run the place from the beginning of 2018.

3. Organization based on partnership
The municipalities are centrally involved in the management through the cooperation agreement. The municipalities run development projects and participate in organizing various events, for example the Archipelago Winter Meeting.
All partners of the Biosphere Reserve are participating in the realization of the BR activities. The universities manage research, monitoring and education and, in addition, they have a central role to popularize science. Metsähallitus manages the Archipelago National Park located in the BR core area. Moreover, large parts of the biosphere reserve are located on privately owned land. Metsähallitus also promotes a sustainable development in the area, especially in connection to recreation and tourism. Also other actors of archipelago development can manage activities for the Biosphere Reserve, such as local associations, national research institutes or universities. Entrepreneurs and residents have an important role in highlighting the work of the BR and realize the goals of the BR through their own activities and everyday actions. The BR concept and management have played an important role in the founding of the Åboland Archipelago Foundation. A close cooperation has been developed between the BR Office and the Åboland Archipelago Foundation - today, some of the significant operations of the BR are handled by the foundation.

During 2017 a partnership program has been discussed and structured to formalize the partnership with the already involved organizations and with new interested ones and to develop the participation of and cooperation with the private sector.

c. Using traditional knowledge
Mathantverk – Artisan food, a new concept especially suited for small-scale surroundings like the archipelago.
3. Actions undertaken to enhance NordMAB visibility and presence

Resource Wisdom and and Biosphere Areas in UBC Cities -
A United Baltic Cities conference the 16th-8th of May in Jyväskylä. A conference to support the establishment of Päijänne Lake BR. Presentations from Biosphere Reserves in Blekinge Arkipelag, Western Estonia Archipelago and Archipelago Sea. Best practices from NordMAB BR:s presented by coordinator of Archipelago Sea Area BR.

Pro Päijänne Assosiation, BR Candidate, Finland

Name of rapporteur: Päivi Halinen
E-mail address of rapporteur: paivi.halinen@gmail.com

1. Actions undertaken to enhance synergy among NordMAB:

Participation in the NordMAB meeting in Bergen Norge 2016, Minna Tunkkari-Eskelinen, the University of Applied Sciences in Jyväskylä.

The Lake Päijänne area has been a Biosphere Candidate from about 2007-8 when the Report about the Preconditions of the Lake Päijänne Biosphere was made.

2. Actions undertaken within the NordMAB focus themes:

Pro Päijänne Association has been promoting the biosphere establishment from the year 2016. During 2017 Pro Päijänne Association has been co operating with Muurame municipality in a project, where the stakeholders, especially enterprises have been encouraged to engage in promoting the biosphere activity in their own fields. The biosphere concept has been introduced in several occasions to at least 250 stakeholders representing enterprises, municipality representatives, NGO’s and citizens during 2017. The concept has been reintroduced and discussed with the Ministry of Environment representative in January 2017. City of Jyväskylä(in the northern end of the lake Päijänne) hosted the meeting of Union of the Baltic sea Cities (UBC) in May 2017. The meeting consisted of two themes: Resource Wisdom and the Biosphere Concept. The biosphere concept was introduced to the participants, Coordinator Katja Bonnevier presented the network of Biosphere Reserves in the Baltic Sea Area, Toomas Kokovkin presented the UNESCO MAB Strategy 2015-2025 and the experiences on the Estonian biosphere reserve. Biosphere Blekinge Archipelago was presented by Magnus Larsson, Deputy Mayor of Karlskrona. The Biosphere Concept was introduced and discussed in three meetings of Finnish National network of the International Centre for Responsible Tourism (ICRT) in 2017. The Biosphere Concept was introduced in the meeting of University Museums and Collections (UMAC) meeting in Jyväskylä, September 2017. There were about 100 participants from 27 countries participating in the meeting.

All the introductions and presentations mentioned above have been made by Päivi Halinen Pro Päijänne Association.

During 2017 A Project “Branding Päijänne” has been prepared In the University of Applied Sciences in Jyväskylä / Minna Tunkkari-Eskelinen, Mirva Leppälä and Pro Päijänne Association/ Päivi Halinen. The Project has got the funding and will start 1.1.2018.

a. Fostering Northern sense of belonging

The Biosphere Concept has been presented to the tourism students in the University of Applied Sciences in Jyväskylä in spring and in autumn 2017. The students have become acquainted with the concept by visiting municipalities and enterprises in the Päijänne area. They have developed the biosphere activity models in their study works.

b. Building collaborative partnerships with private sector

Representatives of Pro Päijänne Association and Jyväskylä University of Applied Sciences participated
The Winter meeting of Archipelago Biosphere Reserve in May 2017, in order to learn about the collaborative partnerships with private sector.

During 2017 Pro Päijänne Association has been co-operating with Muurame municipality in a project, where the stakeholders, especially enterprises have been encouraged to engage in promoting the biosphere activity in their own fields. The biosphere concept has been introduced in several occasions to at least 250 stakeholders representing tourism and other enterprises, municipality representatives, NGO’s and citizens.

3. Actions undertaken to enhance NordMAB visibility and presence
City of Jyväskylä (in the northern end of the lake Päijänne) hosted the meeting of Union of the Baltic sea Cities (UBC) in May 2017. The meeting consisted of two themes: Resource Wisdom and the Biosphere Concept. The biosphere concept was introduced to the meeting participants, Coordinator Katja Bonnevier presented the network of Biosphere Reserves in the Baltic Sea Area, Toomas Kokovkin presented the UNESCO MAB Strategy 2015-2025 and the experiences on the Estonian biosphere reserve. The Biosphere Blekinge Archipelago was presented by Magnus Larsson, Deputy Mayor of Karlskrona. Connected to the meeting there were World Café -workshops dealing with Business, Research and science, Environmental Education and citizen’s participation.

West Estonian Archipelago Biosphere Reserve, Estonia

Name of rapporteur: Lia Rosenberg
E-mail address of rapporteur: lia.rosenberg@keskkonnaamet.ee

1. Actions undertaken to enhance synergy among NordMAB:
With the support of several collaborative projects, contacts have been established between the neighboring biosphere areas, companies and organizations have exchanged experiences on good examples of ongoing or already completed projects. There have been representatives from different sectors who are interested in their sectoral cooperation. With the support of the Leader program, the Hiiumaa’ sheepriders were introduced to the Norwegian sheep production and marketing solutions in Nordhordland the candidate biosphere area. The cooperation network project sponsored by the Nordic Council of Ministers started with a conference in Hiiumaa last autumn, there were representatives from Sweden and Latvian BR. They presented their biosphere programme activities. In May, a study visit took place to Blekinge Archipelago BR and in September we visited the North-Vidzeme BR. Latvian North-Vidzeme biosphere area delegation has been to Vilsandi National Park, to Saaremaa and Muhumaa in April.

2. Actions undertaken within the NordMAB focus themes:
   a. Fostering Northern sense of belonging
The MaB messages of our (Estonia, Latvia) region and the target groups were formulated with our close neighbors in the EuroMaB Communication work-shop. We have been discussed about how to involve young people. The study program is completed for the gymnasium students. The program was conducted to help students in their future choices. Environmental sciences could be their university topic!
Working with sustainable development goals and linking goals with the biosphere program. Study visits to neighboring biosphere areas have proven our belonging to a common cultural space, it is easy to create contacts and build future cooperation.
We decided to celebrate the Biosphere Day on March 27, when Estonia received the MAB Certificate from UNESCO.
b. Building collaborative partnerships with private sector
Protocols of common intentions have already been signed with 11 companies / organizations. Negotiations are currently with 2 more. Partners and their contacts are displayed on the Environmental Board website.

The LAG of Hiiumaa has linked its new strategy with the biosphere program. Applicants will receive additional points if the project ideas meet the biosphere program's agenda. As a result, there is an increasing number of companies / organizations that bind their activities to the biosphere program (for sustainable development purposes).

c. Using traditional knowledge
In the study trip to Norway, the old traditional methods to preserve mutton and traditional sheep products were introduced. The old traditional way to catch lampry was shown during the study trip to North-Vidzeme Biosphere Reserve. Traditional local food is becoming increasingly popular. Several food festivals and local food fairs and other events are organized to promote local food.

3. Actions undertaken to enhance NordMAB visibility and presence
We have once again established contact with the Nordic Council of Ministers, and we are proud to introduce NordMAB as an active network. NordMAB always has its own theme group at EuroMAB.

Moen Biosphere Reserve, Denmark

Name of rapporteur: Annette Tenberg
E-mail address of rapporteur: anrg@vordingborg.dk

1. Actions undertaken to enhance synergy among NordMAB:
The Moen Biosphere Reserve had been represented during the EURO MAB meeting in France in April 2017 and has arranged the NORD MAB partner meeting in October 2017. Furthermore there has been arranged a study trip for Moen Biosphere Ambassadors to Vattenriket Biosphere Reserve, Kristianstad, Sweden in March 2017; participation in the national meeting of UNESCO sites in Denmark.

2. Actions undertaken within the NordMAB focus themes:
a. Fostering Northern sense of belonging
The Moen Biosphere reserve has organized a number of workshops for the public in 2017, as e.g. Species in the low water, species of the Baltic sea and sustainable angling.

b. Building collaborative partnerships with private sector
The Moen Biosphere Reserve has established partnership with the GeoCenter Moen Klint about the dissemination of the geological birth of Denmark. The cooperation has been presented during the Nord MaB partner meeting on Moen in October 2017. Furthermore the Moen Biosphere Reserve has been cooperating with The Moen Trading Association about sustainable and ‘non plastic’ carrier bags.

c. Using traditional knowledge
Inspired by the Heathland Centre in Nordhordland, Norway, the Moen Biosphere Reserve wants to establish a dissemination and sustainable development centre on the island of Nyord in the Moen Biosphere Reserves Western core area. Here the traditional cattle grazing have created the best prerequisites for the largest bird sanctuary in the Eastern Denmark. We will work with concepts of
conservation, learning of development of a sustainable future for the islands inhabitants and for the youth in the Moen Biosphere Reserve.

3. Actions undertaken to enhance NordMAB visibility and presence
   Actions undertaken: participation in the EuroMab and Nord Mab meeting 2017; Participation in the national meeting of UNESCO sites in Denmark.
   Non UNESCO related meetings: Visit of the Nordic Council od Ministers together with partners of the Nord MaB network.

Biosphere Reserve, Greenland

Name of rapporteur: Per Roe
E-mail address of rapporteur: peroe@nanoq.gl
E-mail address of the Ministry of Nature and Environment: pan@nanoq.gl

1. Actions undertaken to enhance synergy among NordMAB:
   The Ministry of Nature and Environment continuous to maintain a dialog and communication efforts with UNESCO and members of the Man and Biosphere programme. Participation in the NordMAB meeting in Møn, Denmark marks the third year in a row that the Ministry of Nature and Environment has been present at the annually held NordMAB meetings.

2. Actions undertaken within the NordMAB focus themes:
   The Ministry of Nature and Environment continuous its efforts towards completing a new executive order which will include new zonation with graduated management measures.

   a. Fostering Northern sense of belonging
      Greenland is not yet at a stage in the process where efforts can be put forth in this respect.

   b. Building collaborative partnerships with private sector
      The Ministry of Nature and Environment continuous to collaborate with stakeholders, including those with interest in utilizing mineral resources within the biosphere, and hereby maintaining and strengthening the collaboration with all stakeholders as we move forward in our efforts. This is also true in regards to members of the scientific community, as they represent a significant stakeholder in the biosphere. The Ministry of Nature and Environment are maintaining a close dialogue with scientist working in the biosphere to ensure the best possible conditions for science while conserving a balance with other interest.

   c. Using traditional knowledge
      The use of traditional knowledge is being incorporated via the work done in an established working group during the initial work on a new executive order. Also the new executive order has been in public hearing where much knowledge has been given to the Ministry of Nature and Environment, including from organisations representing traditional knowledge.
3. Actions undertaken to enhance NordMAB visibility and presence

The Ministry of Nature of Environment has been limited to participation in the annual NordMAB meeting held in Møn, Denmark, but always strive to participate in as many events as possible within our budget and the logistical limitations that comes with being located in Greenland. The Ministry of Nature and Environment will always aim at maintaining contact and share information regarding what’s presented and decided during meetings, even when we are not able to participate. The Ministry of Nature and Environment would welcome the incorporation and use of modern communication technology at various meetings within the NordMAB network, as it is important with initiatives that allow for smaller administrations to take part in meetings where physical participation may not be possible.

Wester Ross Biosphere Reserve, UK

Name of rapporteur: Natasha Hutchison
E-mail address of rapporteur: natasha@westerrossbiosphere.com

1. Actions undertaken to enhance synergy among NordMAB:
   n/a to date – just joined

2. Actions undertaken within the NordMAB focus themes:
   a. Fostering Northern sense of belonging
      Currently our youth are very involved in various marine health activities, taking part in various beach cleans around our coasts and learning about marine life. The north of Wester Ross has also established a new but highly popular Snorkel Trail. Snorkel instruction is provided to young pupils in Ullapool’s community-owned swimming pool and equipment for this training was funded through local donations. One primary school from Glasgow heard about the project and raised funds themselves to donate to our cause. They were in turn invited to come up and visit, see what their funds went toward and had a chance to see a study boat that was moored in the Ullapool Harbour for educational purposes.

   b. Building collaborative partnerships with private sector
      WRB is a partner in a 3-year EU funded Northern Arctic and Periphery Program called ‘Sustainable Heritage Areas: Partnerships for Ecotourism’ (SHAPE). SHAPE will identify sustainable heritage ecotourism opportunities. At the end an e-service will be produced to help businesses, communities and tourism groups enhance their tourism opportunities and may be a catalyst for youth to stay in the area. Perhaps using a social enterprise model? SHAPE partners – Iceland, Norway, Finland, Greenland, Canada

      WRB has experienced a dramatic increase in tourism due to a new initiative called the North Coast 500 – a driving route which takes in 500 miles around the north coast of Scotland. There has been some discontent in our communities about the sustainability of increased tourism, as our amenities and services are already stretched. The biosphere is in the beginning stages of exploring ways to collaborate with the NC500 in order to address these issues and increase the awareness of biosphere principles.

      WRB is also an official partner in a new Marine Tourism Scoping Study along Scotland’s West Coast. 2020 has been announced as the Scotland’s Year of Coast and Waters. The Scottish West Coast waters have often been described as some of the best sailing grounds in the world and in 2015 the Scottish Marine Recreation and Tourism Survey clearly highlighted the west coast as the primary hot spot around Scotland’s coast for marine recreation and tourism activity. 2020 now provides a very exciting prospect for the west coast destinations in Scotland to collaborate at an unprecedented
level and to develop marine tourism to generate local economic impact and benefits. If communities decide to go forward with development plans, we will be able to create a continuous link of destinations up and down the West Coast which will hopefully take some pressure off our roads in the high tourist season.

c. Using traditional knowledge

Our heritage is based on Gaelic language and crofting. A note on crofting: A croft is a small agricultural unit, most of which are situated in the crofting counties in the north of Scotland being the former counties of Argyll, Caithness, Inverness, Ross & Cromarty, Sutherland, Orkney and Shetland, and held subject to the provisions of the Crofting Acts. Many crofts are on estates. A landlord may have many crofts on his estate. The rent paid by the tenant crofter, except in fairly rare circumstances, is only for the bare land of the croft, for the house and agricultural buildings, roads and fences are provided by the crofter himself. Since 1976 it has become more common for a crofter to acquire title to his croft, thus becoming an owner-occupier. Should he fail to reside on or near the croft, he can himself be required to take a tenant. As we work on our 10-year development plan, Gaelic language, crofting and the relationship between them will figure prominently.

3. Actions undertaken to enhance NordMAB visibility and presence

The Arctic Circle Forum: Edinburgh 2017 will provide an opportunity for policy makers, academics, professionals and wider civic society to participate in discussions focused on areas of common interest between Scotland and Arctic region. We are attending and exhibiting at this conference and it will be a good opportunity to promote our NordMAB network and visibility.

Nordhordland Biosphere Candidate, Lofoten Initiative, Norway

Name of rapporteur: Kari Evensen Natland
E-mail address of rapporteur: kari@nordhordland.net

1. Actions undertaken to enhance synergy among NordMAB:
   Sustainable tourism

Nordhordland is a partner of the sustainable tourism initiative: SHAPE (Sustainable Heritage Areas; Partnerships for Ecotourism) with other Biosphere Areas, Regional parks and World Heritage sites. The aim of the NPA-project, funded by EU, is to develop ecotourism initiatives and methodologies for how authorities and businesses can develop sustainable tourism based on natural and cultural assets. The project aims to promote and help the initiatives through a e-service system.

Local food traditions

Nordhordland has prepared a studytrip and hosted a delegation with sheepbreeders from Estonia. The aim was to learn our traditions and foodcraft to use meat from sheep to different products. The studytrip lasted five days and they visited different local farms and foodproducers (both small-scale and large-scale productions).

2. Actions undertaken within the NordMAB focus themes:
   a. Fostering Northern sense of belonging

As we have been working on the application to be designated as a biosphere area, we have done different things and hosted several meetings with different stakeholders to raise awareness and a sense of belonging to the purposed biosphere area. One great success was the photo-competition we arranged during 2016: We asked for everyday-photos showing people in the biosphere area and every month the best picture got a ‘local food-price. The winner of the year got a trip for two to Paris.

b. Building collaborative partnerships with private sector

We have arranged several project that involves partnership with private sector: The local food project, working with different foodproducers for building up competence, marketing and branding food from the biosphere area.
SHAPE, as described working with the tourism industry in the area
Campaign for Norwegian wool in Nordhordland. Raise awareness for the use and traditions of the wool. Working with the whole business chain from farmers to designers and innovators

c. Using traditional knowledge
Our traditional knowledge is an important issue and a key factor in all of our projects described above.

3. Actions undertaken to enhance NordMAB visibility and presence
NordMAB had a session during EuroMAB 2017, and Nordhordland had an active role for planning and hosting this together with the NordMAB leading team (Sweden and Denmark).

Please also note:
Lofoten is at an early stage working towards a designation. They already have a lot of collaboration going on with the community and private sector to build a solid foundation for their biosphere area and their application.