Nordic Council of Ministers

FROM GOOD PRACTICE TO NEXT PRACTICE IN THE NORDIC BIOSPHERE RESERVES

How Nordic UNESCO Biosphere Reserves can support the implementation of the Global Biodiversity Framework

Contents

This publication is also available online in a web-accessible version at:
https://pub.norden.org/nord2025-011

MAB-LAB

MAB-LAB is a collaboration between the UNESCO Man and Biosphere Reserves in the Nordic countries. LAB stands for Local Actions for Biodiversity, and the overall purpose of MAB-LAB is articulated as follows:

To strengthen Nordic cooperation between Biosphere Reserves under the auspices of UNESCO, in order to improve the Nordic countries' implementation of the Global Biodiversity Framework (GBF) and contribute to the realization of the Nordic Council of Ministers' vision of being the most sustainable and integrated region in the world.

MAB-LAB is developed in collaboration with and funded by Nordic Council of Ministers' Nordic Working Group for Biological Diversity.

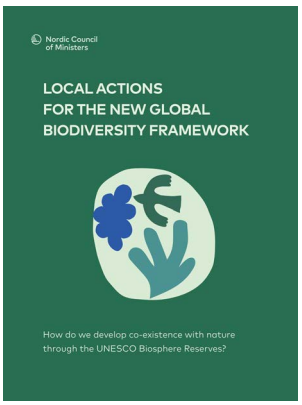
First phase of MAB-LAB resulted in the adaptation of the GBF for local implementation through UNESCO Biosphere Reserves.

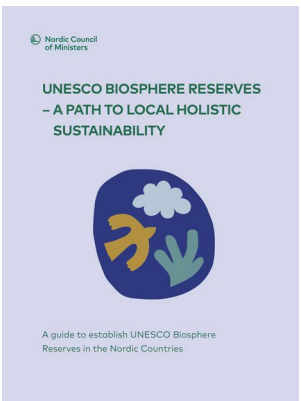
MAB-LAB I completed the following:

1. *Translated the GBF into the context of UNESCO Biosphere Reserves,*
2. *Developed a guide outlining the requirements for becoming a UNESCO Biosphere Reserve, and*
3. *Mapped potential new UNESCO Biosphere Reserves in the Nordic region (not published).*

Read the translation: https://www.norden.org/en/publication/local-actions-new-global-biodiversity-framework

Read the guide to establish an UNESCO Biosphere Reserve: https://www.norden.org/en/publication/unesco-biosphere-reserves-path-local-holistic-sustainability





LEARNING TO LIVE IN LOCAL HARMONY WITH NATURE

The interaction between nature and humanity is a critical focus in today's world. As we have distanced ourselves from nature, it's crucial to understand that in the Earth's ecosystem, one cannot take without also giving back. Creating a better balance is imperative, necessitating a holistic approach to living, dwelling, and cultivating for the thriving of all species.

Establishing a UNESCO Biosphere Reserve is one way to initiate local collaboration to strengthen the interactions with environments that sustain both nature and people. Biosphere Reserves are designed to deal with one of the most important questions the world faces today: How can we reconcile the conservation of biodiversity, the quest for economic and social development and the maintenance of associated cultural values?

The global situation is challenging the way we live, produce, and interact with nature.

If we are to meet the goals and targets of the Kunming-Montreal Global Biodiversity Framework (GBF) we need a diverse approach. To reach these goals, a range of instruments, tools, actions, and traditional protection measures are necessary and needed.

The UNESCO Man and the Biosphere Program (MAB) offers a holistic and well-documented tool to address global challenges such as climate change and the biodiversity crisis through local actions.

Among the 23 targets, the GBF aims to protect at least 30 percent of the planet's land and water by 2030. Yet, even if we succeed in protecting 30 percent of the Earth's surface, the challenge of addressing the remaining 70 percent remains. This is a central aspect of the GBF's 2050 vision: to live in harmony with nature. Additional changes outside the protected areas are also necessary and crucial.

Being a UNESCO Biosphere Reserve means being part of an ongoing process of learning and improvement. It is about developing solutions that enable people and nature to co-exist in harmony. This process acknowledges that what works well in one place may not be effective in another, given differences in culture, environment, and resources.

The Nordic UNESCO Biosphere Reserves offer a strong approach to supporting the local implementation of the GBF and enhancing the opportunities and capabilities of local communities to work strategically and in a place-based manner on sustainable development. This includes recognizing the importance of improving the relationship between nature and culture.

To support local communities in innovating and contributing to the implementation of the GBF, we have developed this guide to help transform many existing good practices into "next practices" that are innovative, adaptable, and aligned with global challenges such as biodiversity loss and climate change.

> **UNESCO Biosphere Reserves play a key role in contributing to the implementation of the Kunming-Montreal Global Biodiversity Framework.**

NORDIC APPROACH IS NEEDED

For the GBF to succeed in the Nordic countries, it is crucial to embrace innovative thinking and foster new forms of collaboration, particularly at the local level. The task is both large and complex, requiring cross-sectoral cooperation and the involvement of a wide range of stakeholders. This collaboration must occur both horizontally, across different sectors, and vertically, involving multiple levels of governance and engagement.

This means collaboration between international, national and local authorities and actors in a multilevel governance perspective, where top-down meets bottom up and collaboration across governance silos, so that, for example, climate and biodiversity do not become competing perspectives, but collaborative and integrated perspectives.

With the agreement on the GBF, Nordic Cooperation is presented with a unique opportunity to lead the way globally with holistic, integrative, and bottom-up contributions, directly interacting with national and global perspectives, frameworks, and priorities.

In a collaboration between the UNESCO Man and Biosphere Reserves (MAB) in the Nordic countries we have invented MAB-LAB. LAB stands for Local Actions for Biodiversity, and the overall purpose of MAB-LAB is articulated as follows:

To strengthen Nordic cooperation between Biosphere Reserves under the auspices of UNESCO, in order to improve the Nordic countries' implementation of the Global Biodiversity Framework (GBF) and contribute to the realization of the Nordic Council of Ministers' vision of being the most sustainable and integrated region in the world.

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First phase of MAB-LAB resulted in the adaptation of the GBF for local implementation through UNESCO Biosphere Reserves.

MAB-LAB has identified six main potential contributions of Biosphere Reserves to the GBF. By fulfilling these roles and objectives, UNESCO Biosphere Reserves can play a crucial role in supporting and advancing the implementation of the GBF. In doing so, they will contribute to a more sustainable future for biodiversity and ecosystems worldwide.

The six main potential contributions are:

1. Conservation of biodiversity
2. Sustainable use of resources
3. Research and education
4. Community engagement and participation
5. Policy support and implementation on a local level
6. International cooperation and networking

Source: https://www.norden.org/en/publication/local-actions-new-global-biodiversity-framework

FROM GOOD PRACTICE TO NEXT PRACTICE - A GUIDE

This guide is designed to help local communities not only improve but also foster collaboration across Biosphere Reserves, other UNESCO sites, and municipalities, enabling shared learning and innovation. It outlines the process, providing an expanded explanation of each step along with concrete examples tailored to the Nordic Biosphere Reserves.

The guide has been developed through ongoing discussions among representatives of the Nordic UNESCO Biosphere Reserves, focusing on how to use these sites as model areas and hubs for sustainable development.

This collaborative process gradually led to the formulation of a step-by-step approach - comprising seven steps - that allows all stakeholders to work in a structured manner, beginning with an assessment of current good practices and identified successful strategies and for inspiration, several potential initiatives were developed, complemented by selected examples of good practice.

The guide is divided into three parts:

- Part 1 presents a 7 steps method for transitioning from 'Good Practice to Next Practice' by increasing capacity and catalyzing local actions for the GBF
- Part 2 outlines potential initiatives that can be applied to support the GBF.
- Part 3 provides 12 concrete examples showcasing how Nordic Biosphere Reserves are working with biodiversity and related initiatives in support of the GBF.

PART 1:
NEXT PRACTICE FOR UNESCO BIOSPHERE RESERVES TO SUPPORT THE GBF

Being designated as a UNESCO Biosphere Reserve does not signify that everything is perfect or that the ultimate goal has been achieved. Rather, it represents a continuous journey toward improvement. The designation highlights a commitment to progress, with a focus on striving for better outcomes in the relationship between humanity and nature.

It is important to recognize that there is no fixed "best practice" waiting to be discovered and replicated universally. The journey involves an ongoing search for inspiration and innovation, constantly exploring ways to strike a better balance. What works well in one context may not necessarily be suitable in another, as it depends on a variety of factors such as local context, resources, culture, and people.

To truly understand why a specific practice is successful in one place, a deeper exploration is needed. This understanding then becomes the foundation for adapting and evolving that practice to become a successful "next practice" in a different location.

UNESCO Biosphere Reserves serve as model areas for place-based sustainable development, offering valuable examples of good practices that can inspire other communities.

To facilitate the dissemination and adaptation of these practices, we have created a short 7-step guide to help transition from good practices to next practices. These steps do not constitute a rigid, linear framework, and the process does not necessarily unfold sequentially. Instead, they serve as a flexible guide to navigate the process.

Next practice

The work with next practices has the following overall objectives:

- To strengthen the implementation of the GBF through locally anchored and place-based efforts for sustainable development.
- To inspire a joint Nordic effort that leverages the position of individual municipalities and Biosphere Reserves to develop new approaches and methods for implementation.
- To inspire ways to strengthen municipal and local competencies in working with biodiversity strategically and purposefully, based on local conditions.
- To support processes that recognize that global challenges must be met with local solutions.
- To emphasize the importance of cooperation between the actors involved, particularly in the exchange of experiences, competence development, and actions that lead to new and better solutions at the local level.

The method can be used by any local community, Biosphere Reserve, UNESCO site, municipality, or similar entity aiming to enhance their capacity and competence in addressing local solutions to global challenges. It is also a valuable tool for fostering cross-community cooperation and supporting collaborative development initiatives.

The 7 steps method

A methodological process for transitioning from good practices to next practices in local actions for the GBF within UNESCO Biosphere Reserves involves a structured, iterative approach designed to improve biodiversity conservation and sustainable development outcomes.

This process focuses on building upon existing successful strategies (good practices) and evolving them into innovative, future focused solutions (next practices) that align with the global biodiversity targets.

By focusing on these detailed actions, Biosphere Reserves can turn the 7-step guide into a practical roadmap for innovation, collaboration, and sustainable development.

Figure: 7-Step Guide to transition from good practices to next practices. These steps are not necessarily sequential but rather serve as a flexible framework to guide the process.

The 7 steps to help transition from good practices to next practices

Assess current good practices

What to do:

- **Inventory existing practices**: Create a detailed catalog of local initiatives, such as wildlife conservation efforts, eco-friendly farming, or educational programs. Include descriptions, goals, successes, and lessons learned.
- **Engage stakeholders**: Hold community meetings, interviews, and surveys to gather input from local residents, scientists, businesses, and policymakers about which practices they value and why they work.
- **Conduct a gap analysis**: Use tools like SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis to identify what's working well, where there are shortcomings, and what opportunities exist for improvement or scaling up.
- **Document and share**: Create case studies or reports on successful practices and share them with other Biosphere Reserves and communities for inspiration.

Local example:
A Biosphere Reserve could inventory sustainable forestry practices used by local communities. By analyzing successes and challenges, they might identify techniques to reduce carbon emissions or enhance biodiversity, which could then be adapted elsewhere.

Align with Global Biodiversity Goals

What to do:

- **Map practices to GBF targets**: Match local activities with the 23 targets of the GBF, such as habitat restoration, reducing pollution, or ensuring the sustainable use of natural resources.
- **Review policies**: Ensure local actions align with UNESCO's Man and the Biosphere Programme and national biodiversity strategies. Adjust policies and plans if needed.
- **Organize training workshops**: Educate local stakeholders on how their efforts contribute to global biodiversity goals. Use visual tools like charts and maps to make the connections clear.
- **Leverage partnerships**: Collaborate with national and international organizations to align local practices with broader goals and secure additional resources or expertise.

Local example:
A Biosphere Reserve could organize workshops to educate stakeholders on how preserving wetlands supports global biodiversity targets, such as maintaining freshwater ecosystems and enhancing climate resilience.

Innovate and transform good practices into next practices

What to do:

- **Foster innovation**: Create innovation hubs where locals, researchers, and policymakers can collaborate to brainstorm new solutions. For example, explore integrating technology such as drones for forest monitoring.
- **Pilot new ideas**: Test novel approaches on a small scale before expanding. For instance, trial agroforestry techniques to increase biodiversity and improve local food security.
- **Encourage co-creation**: Partner with community members to design projects that incorporate their traditional knowledge alongside modern science.
- **Build capacity**: Offer workshops, training programs, or access to resources that help communities adopt and adapt innovative solutions.

Local example:
A Biosphere Reserve might pilot a program to use beavers in wetland restoration, testing how their natural dam-building improves biodiversity and water management.

Implement and adapt

What to do:

- **Start small**: Launch small-scale initiatives that allow for learning and adjustment. For example, implement a tree-planting program in one part of the reserve before expanding.
- **Monitor progress**: Develop systems for real-time data collection, such as biodiversity surveys or citizen science programs, to track the success of initiatives.
- **Engage the community**: Host regular meetings or forums to update locals on progress and gather feedback to refine actions.
- **Adapt strategies**: Use the feedback and monitoring data to make changes as needed, ensuring projects stay relevant and effective.

Local example:
A Biosphere Reserve could introduce a trial program for organic farming methods in a small area, monitor the impact on soil health and crop yields, and refine the approach based on results.

Evaluate and share knowledge

What to do:

- **Conduct impact assessments**: Evaluate how initiatives affect biodiversity, ecosystems, and the well-being of local communities. Use standardized methods to make results comparable across reserves.
- **Create knowledge products**: Develop reports, infographics, videos, or presentations that explain the outcomes of initiatives.
- **Establish peer-learning networks**: Set up regular exchanges with other Biosphere Reserves to discuss successes, challenges, and lessons learned.
- **Use technology**: Develop online platforms or databases to share findings and allow other reserves to access resources.

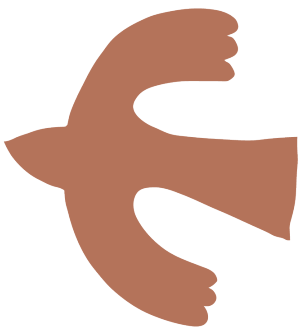
Local example:
A Biosphere Reserve might evaluate the success of a wildflower planting initiative for pollinator conservation, share the results in a report, and host a webinar to inspire similar projects in other reserves.

Iterate and scale up

What to do:

- **Analyze evaluation results**: Identify which aspects of a practice worked well and which need refinement. For example, adjust planting methods based on which native species thrived best.
- **Develop replication trategies**: Create guidelines for scaling up practices, ensuring they can be adapted to new contexts.
- **Collaborate with partners**: Work with regional or national organizations to expand successful practices to a broader area.
- **Secure funding**: Use evidence of success to apply for grants or government support to scale initiatives.

Local example:
A successful pilot program to reduce fertilizer use in farming might be scaled up to other regions, with adjustments made for local soil types and crops.



Integrate science and long-term monitoring

What to do:

- **Partner with universities**: Engage researchers to study the long-term impacts of local initiatives and provide data to guide policies.
- **Set up monitoring systems**: Use tools like remote sensing, biodiversity surveys, or citizen science apps to collect continuous data.
- **Engage the community**: Involve schools and local groups in monitoring projects to foster environmental stewardship.
- **Adapt over time**: Use monitoring data to respond to new challenges, such as climate change impacts or changes in species populations.

Local example:
A Biosphere Reserve could establish a long-term bird monitoring program, involving schoolchildren in data collection. This would provide valuable data while building local awareness of biodiversity.

PART 2:
POTENTIAL LOCAL INITIATIVES TO SUPPORT THE GBF

The Nordic UNESCO Biosphere Reserves have identified several potential initiatives for joint actions for the GBF. A list of key initiatives with practical steps that UNESCO Biosphere Reserves and other local communities can implement to strengthen their contributions to the GBF goals is presented here:

A. Visibility of local actions

Objective: Showcase local biodiversity projects and their contributions to global goals.

What to do:

- Create a standardized reporting system to document and promote local initiatives.
- Develop case studies and success stories to share with policymakers, communities, and international partners.
- Use digital platforms like websites or social media to highlight local actions under the GBF.

Example: Biosphere Reserves could collectively launch a dedicated online portal where communities share updates on biodiversity projects, such as reforestation or habitat restoration.

B. Community engagement and ownership

Objective: Strengthen community involvement in Biosphere Reserve activities.

What to do:

- Host participatory forums where residents can voice ideas and collaborate on biodiversity initiatives.
- Organize thematic meetings on topics like climate resilience, sustainable farming, or water management.
- Offer hands-on workshops to teach practical skills, such as planting pollinator-friendly vegetation or creating wildlife corridors.

Example: A Biosphere Reserve might organize regular community clean-up days to protect wetlands, encouraging locals to take ownership of conservation efforts.

C. Improving communication strategies

Objective: Enhance outreach efforts to connect local actions to global biodiversity goals.

What to do:

- Develop engaging social media campaigns that highlight the impact of local projects.
- Create newsletters and short videos to share success stories within the community.
- Organize events, like biodiversity festivals, that celebrate local achievements and raise awareness.

Example: A Biosphere Reserve could create a video series featuring interviews with farmers and fishers adopting sustainable practices, linking their work to the GBF targets.

D. Educational initiatives and awareness campaigns

Objective: Increase understanding of biodiversity issues and inspire local action.

What to do:

- Partner with schools to create biodiversity-focused curricula and outdoor education programs.
- Hold public seminars or nature walks to teach residents about local ecosystems and species.
- Collaborate with local media to share educational content about biodiversity conservation.

Example: Students in a Biosphere Reserve could participate in hands-on activities like bird monitoring or tree planting, fostering a connection to nature.

E. Workshops on global and local connections

Objective: Help stakeholders understand the link between local actions and global biodiversity goals.

What to do:

- Host workshops to explain how specific local activities, like wetland conservation, contribute to the GBF targets.
- Invite experts to share knowledge on innovative approaches, such as regenerative agriculture or ecosystem restoration.
- Use these sessions to identify opportunities for collaboration across biosphere reserves.

Example: A workshop could focus on how restoring peatlands helps capture carbon and supports global climate and biodiversity goals.

F. Leveraging strengths of Biosphere Reserves

Objective: Use the unique role of Biosphere Reserves to test and innovate solutions.

What to do:

- Pilot projects focused on critical issues like pollinator conservation, sustainable forestry, or water resource management.
- Partner with research institutions to test cutting-edge biodiversity solutions.
- Scale successful projects to other biosphere reserves or communities.

Example: A Biosphere Reserve could collaborate with scientists to develop nature-based solutions for flood management, benefiting both ecosystems and local farmers.

G. Developing national support and recognition

Objective: Advocate for stronger integration of biosphere reserves into national biodiversity strategies.

What to do:

- Prepare policy briefs demonstrating the contributions of Biosphere Reserves to GBF goals.
- Share examples of successful biosphere initiatives from other countries.
- Lobby for increased funding and policy support from national governments.

Example: Biosphere Reserves could work together to highlight their role in achieving national biodiversity targets, securing recognition in government strategies.

H. Next-level development projects

Objective: Launch ambitious projects that align with GBF targets.

What to do:

- Expand conservation areas or create wildlife corridors to support biodiversity.
- Promote sustainable farming, fishing, or tourism practices.
- Test new economic models that prioritize ecosystem services, such as carbon credits or eco-tourism.

Example: A reserve could partner with local businesses to create a sustainable seafood brand, reducing pressure on marine ecosystems.

I. Citizen science and regenerative practices

Objective: Engage the public in biodiversity monitoring and ecosystem restoration.

What to do:

- Launch citizen science programs, like bird counts or water quality monitoring.
- Encourage regenerative practices, such as rewilding degraded lands or planting native species.
- Provide training on these practices to empower local residents.

Example: Locals could use a smartphone app to report sightings of rare species, contributing valuable data to biodiversity monitoring.

J. Collective efforts and networking

Objective: Foster collaboration across Biosphere Reserves to address shared challenges.

What to do:

- Form networks to tackle issues like pollinator decline, invasive species, or deforestation.
- Pool resources for joint funding applications or large-scale projects.
- Organize annual meetings to exchange best practices and coordinate efforts.

Example: Biosphere Reserves in the Nordic region could jointly implement a regional pollinator conservation strategy, sharing resources and expertise.

K. Focus on rural areas and sustainable development

Objective: Support rural communities while addressing biodiversity challenges.

What to do:

- Develop strategies that integrate biodiversity conservation with local economic benefits, like eco-tourism or sustainable agriculture.
- Address depopulation by creating jobs linked to conservation efforts.
- Provide training programs to help rural residents adopt sustainable practices.

Example: A Biosphere reserve could establish a nature-based tourism initiative that promotes local culture and generates income while conserving biodiversity.

L. Development and implementation of Nature-Based Solutions

Objective: Use nature-based approaches to address environmental challenges while enhancing biodiversity and ecosystem services.

What to do:

- *Identify local challenges:* Assess key environmental issues in the biosphere reserve, such as flood risks, soil erosion, or declining water quality, where nature-based solutions (NBS) can be applied.
- *Pilot NBS projects:* Design and implement small-scale projects, such as wetland restoration for flood management or urban green spaces to improve air quality and biodiversity.
- *Engage stakeholders:* Collaborate with local communities, policymakers, and scientists to co-create and support these initiatives.
- *Measure and monitor impact:* Develop tools to evaluate the effectiveness of NBS in improving biodiversity and addressing specific challenges.
- *Promote knowledge sharing:* Share results and best practices across biosphere reserves to inspire similar efforts.

Example:
A Biosphere Reserve could restore degraded coastal wetlands to reduce flooding, enhance carbon sequestration, and provide habitats for bird species. This initiative could serve as a model for other coastal areas facing similar challenges, demonstrating the value of NBS in achieving biodiversity and climate goals.

PART 3:
EXAMPLES OF GOOD PRACTICE TO SUPPORT THE GBF

To inspire further local actions, we present selected activities conducted in Nordic Biosphere Reserves that stand out as good practices in supporting the GBF. This is an important contribution to the Nordic Cooperation and UNESCO's efforts for the GBF and highlights the role of Biosphere Reserves as model regions, where innovative actions drive positive change.

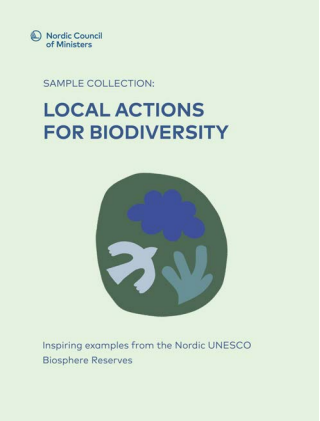
The aim of the collection of good practises is to demonstrate:

- The range of local actions already contributing to the GBF goals.
- The Biosphere Reserves' strength to connect people and nature, using the local resources.
- The Biosphere reserves' value to create important knowledge to policy makers and planners.

This part of the report is based on a sample collection of good cases in Nordic UNESCO Biosphere Reserves work with biodiversity and related initiatives for the GBF.

You can see all the samples in the MAB-LAB II report *"Nordic UNESCO Biosphere Reserves contribution to Global Biodiversity Framework – An inspiring catalogue on local actions for biodiversity from the Nordic UNESCO Biosphere Reserves"* .

NORDIC UNESCO BIOSPHERE RESERVES CONTRIBUTION TO GLOBAL BIODIVERSITY FRAMEWORK – An inspiring catalogue on local actions for biodiversity from the Nordic UNESCO Biosphere Reserves"



This project and publication are supported and funded by the Nordic Council of Ministers – Nordic Working Group for Biological Diversity.

Biosphere Reserves that have contributed to this collection:

Denmark	Møn UNESCO Biosphere
Finland	North Karelia Biosphere Reserve
	Archipelago Sea Area Biosphere Reserve
Sweden	Voxnadalen Biosphere Reserve
	Kristianstads Vattenrike Biosphere Reserve
	Vindelälven-Juhttátahkka Biosphere Reserve
	Lake Vänern Archipelago and Mount Kinnekulle Biosphere Reserve
Iceland	Snæfellsnes Regional Park (Biosphere Reserve candidate)
Norway	Nordhordland Biosphere Area

The examples presented are organized into the 6 main potential contributions outlined in the translation completed as part of MAB-LAB I. By fulfilling these roles and objectives, UNESCO Biosphere Reserves can effectively support and enhance the implementation of the GBF, working towards a more sustainable future for biodiversity and ecosystems worldwide.

Conservation of Biodiversity:

Land of epic poetry

North Karelia Biosphere Reserve

Main goal: The main goal is basin-wide catchment restoration based on traditional knowledge and science, aimed at re-establishing connectivity through the creation of aquatic and forest corridors and restoring up to 1,000 hectares of boreal peatlands. The project also aims to stimulate a resurgence of traditional knowledge, oral histories, and local governance in villages along the river.

Content: The project aims to restore several key features of the Koitajoki watershed to ecological health. By the end of the project, created wetlands, ecological corridors, and restored peatland marsh mires will protect waters downstream and enhance biodiversity, restoring carbon and water cycles. Webs of life will begin to re-establish what industrial land use has removed—the interconnected aquatic and terrestrial matrix of Koitajoki. Restored hydrological interconnectivity will benefit whitefish, trout, grayling, and land-locked Atlantic salmon, addressing issues that have affected the basin for over 70 years. Restoration and increased conservation around terrestrial "core areas" will be established as a model for the restoration of similar areas in the boreal forest suffering from ecological fragmentation.

Results / effects: The project has a wide range of positive effects, including:

- Increasing focus on nature-based activities, eco-tourism, and cultural heritage.
- Increasing the number of people engaged through the River Guardian program.
- Improving pH balance, as well as organic and chemical loading conditions.
- Enhancing vegetation.
- Advancing candidacy for UNESCO World Heritage status.
- Identifying forest patches suitable for protection and natural regeneration.
- Increasing the abundance of endangered fish in restored waterscapes.
- Boosting the abundance of birds through peatland restoration.

Conservation of Biodiversity:

Improving habitat for fish and wildlife in small streams of the river Voxnan catchment

Voxnadalen Biosphere Reserve

Main goal: The main goal of the project is to improve wildlife habitats in small streams that were modified by human activity during the early 20th-century timber floating era.

Content: Many small streams in the Voxnan River catchment have been modified by human activity. Until the 1960s, waterways in the catchment were used to float timber from the forests to downstream sawmills. Modifications to facilitate timber floating included the removal of large stones and other obstacles, as well as transforming naturally meandering waterways into straight canals. These modifications had negative impacts on biodiversity in the streams, including the loss of spawning habitats for fish.

In this project, small streams are being restored manually using a set of sorting tools (the Hartijoki method). The Biosphere Reserve has trained both supervisors and several young people (aged 14–16) in the Hartijoki method, providing them with meaningful summer jobs while teaching them about biodiversity.

Results / Effects:

- Improved quality in 2 km of freshwater stream habitat.
- 50 m of spawning ground for fish (trout) restored.
- 6 young people, aged 14–16, have been educated in the Hartijoki method.

Conservation of Biodiversity:

Eelgrass planting as a part of the project WWF – Recreating the vitality of the Baltic Sea

Kristianstads Vattenrike Biosphere Reserve

Main Goal: The main goal of the project is to restore 7,500 square meters of eelgrass meadows and strengthen the coastal ecosystems in affected areas.

Content: The Baltic Sea Project focused on restoring and increasing knowledge about underwater ecosystems in three geographically selected areas: the High Coast World Heritage Site, the Stockholm Archipelago, and the Kristianstad Vattenrike Biosphere Reserve. These selected environments serve as spawning and nursery grounds for many marine species and as migration routes for fish.

One part of the project focused on marine conservation efforts in shallow coastal bays from northern to southern Sweden. In the Kristianstad Vattenrike Biosphere Reserve, this involved planting new eelgrass meadows in Hanöbukten (Hanö Bay). Eelgrass meadows are an essential part of Hanöbukten's ecosystem, serving as nurseries for many fish species and providing shelter for both fish and small invertebrates. By transplanting plants from healthy eelgrass meadows to new areas or sites with low coverage, valuable underwater environments have been created. Existing eelgrass meadows in Hanöbukten were also connected into a larger ecological unit through the new plantings. This seagrass planting has contributed to strengthening the green infrastructure in the sea.

Results / Effects:

- 7,500 square meters of eelgrass meadows restored across three sites.
- Short- and long-term improvement of conditions for biodiversity in Hanöbukten.
- Improved conditions in and connectivity between eelgrass meadows.
- Various indirect environmental benefits, including mitigating climate issues through erosion reduction and increased carbon dioxide absorption.

Sustainable use of resources:

Leaving no Trace

Møn UNESCO Biosphere Reserve

Main goal: The aim of the project is to raise awareness about the importance of "Leave No Trace" principles for everyone traveling in nature and within the biosphere reserve. The aim is to foster a mindset and ethical approach that encourages responsible behavior to preserve nature. Additionally, the project seeks to develop a concept or brand that effectively communicates and embodies this knowledge.

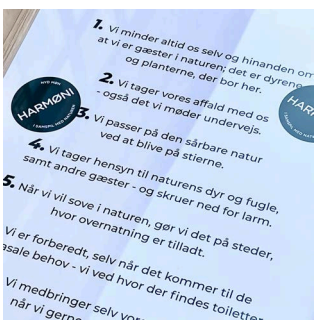
Content: The project *'Leaving No Trace'* has explored how both residents and visitors can care for Møn's nature through responsible behavior. As a result, Møn has gained valuable insights into the specific challenges related to human activity in its natural areas. The project identified 10 key areas of intervention and over 60 concrete actions that can help increase awareness of how to experience nature while leaving no trace.

Tourism and nature conservation are not inherently at odds, and the first step in implementing *'Leaving No Trace'* initiatives was a campaign targeting both locals and visitors. When tourists arrived on Møn during the summer of 2024, they were greeted by the new campaign *HARMØNI*. Its message is clear: guests on Møn must care for the island's nature and leave no trace of their visit.

HARMØNI is a friendly nudge aimed at raising awareness among both Møn residents and tourists about the importance of protecting the nature we all cherish. It introduces a code of conduct and a manifesto for everyone visiting Møn and its natural areas.

Results / effects:

- Raising awareness among residents and visitors about how to experience nature responsibly.
- Supporting the development of regulations and infrastructure that promote nature restoration within the biosphere reserve.
- Encouraging behavioral change by maintaining a strong focus on nudging communication.
- Building a local sustainable tourism profile to attract the right guests.



Sustainable use of resources:

Strengthened biodiversity along power line streets at Kinnekulle

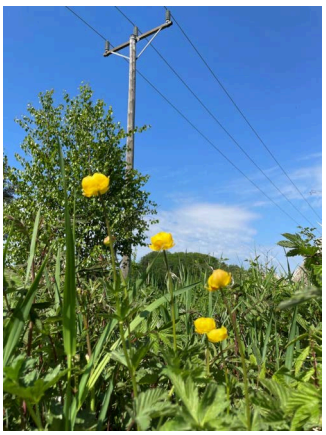
Lake Vänern Archipelago and Mount Kinnekulle Biosphere Reserve

Main Goal: The project aims to map the biotopes within power line corridors on Kinnekulle in relation to the surrounding landscape's green infrastructure. Based on this mapping, it will analyze how tailored land management within the power line corridors can enhance conditions for biodiversity across the entire landscape.

Content: The project focuses on promoting biodiversity within power line corridors on Kinnekulle. By mapping the biotopes in these corridors and the surrounding landscape, it aims to establish a solid foundation for creating management plans that optimize conditions for biodiversity in identified areas. Additionally, the project seeks to strengthen the expertise of Kinnekulle Energy employees in nature conservation practices and highlight how their operations align with Agenda 2030 and national environmental quality goals.

Results / Effects:

- Identification of natural values within a power line corridor.
- Development of a management plan to promote biological diversity.
- Analysis of the landscape's capacity to support biological diversity and the formulation of measures for improvement, based on a biodiversity indicator developed by researchers at the University of Skövde.
- Contribution to the preservation and enhancement of biological diversity through actions by Kinnekulle Energy.
- Creation of a best practice example of how an energy industry actor can take responsibility for sustainable development of the natural environment within their operational area.
- Inspiration for other power companies and municipalities to undertake similar investments



Research and education:

Biosphere Academy is strengthening young people's sense of belonging

Archipelago Sea Area Biosphere Reserve

Main Goal: The Biosphere Academy aims to develop educational activities focused on nature, the environment, culture, and sustainability, targeting children and young people who live in, visit, or stay in the Archipelago Sea Biosphere Reserve. The program seeks to strengthen young people's sense of local belonging and pride in their environment, providing them and their educators with the knowledge and tools to address climate and environmental challenges. Together, they aim to build a sustainable future. The program also seeks to increase interest in natural sciences, sustainability studies, and job opportunities in the archipelago.

Content: The Biosphere Academy is the educational program of the Archipelago Sea Area Biosphere Reserve. The Biosphere Reserve has long-term goals for the program, strongly linked to strengthening young people's sense of belonging and fostering their interest in returning to the region after completing their studies. By doing so, the program encourages participation in the local agenda for a sustainable future within the framework of the UNESCO MAB program.

The activities of the Biosphere Academy are coordinated by the Biosphere Office and implemented in schools and early childhood education in collaboration with central partners and stakeholders. Additional activities are organized at the Kid's Lab of the Archipelago Center Korposträm.

The Biosphere Academy serves as an umbrella for all educational activities in the Archipelago Sea Biosphere Reserve. These include:

- The Kid's Lab at the Archipelago Center Korposström.
- The Pike and His Friends, a program for kindergarten children.
- The adventure route The Island Expedition, designed to raise awareness among visitors in guest harbors.
- The Sustainability Path in basic education, a tool for teachers to address sustainability issues.
- Fun and educational activities featuring the imaginary Archipelago researchers Sanna and Emil.

Results / Effects:

- An educational program built on cooperation and closely connected to municipalities and the national curriculum.
- An educational program reaching children and young people of all ages throughout the region, including visitors.
- An increased sense of belonging among participants, fostering young ambassadors for the biosphere reserve and its mission for a sustainable future.

Community engagement and participation:

Concrete actions for biodiversity in the villages of NKBR

North Karelia Biosphere Reserve

Main Goal: The goal of the project is to create environmentally conscious and sustainable village communities in rural areas. Carbon wisdom, sustainable development, and practical environmental actions are promoted as strengths and attraction factors for village communities and the countryside.

Content: Villages and other rural communities are actively engaged in planning and implementing concrete actions to conserve species, biotopes, and cultural environments. They are also encouraged and supported in preparing new environmental projects and applying for funding.

Although many solutions and tools already exist to address rural environmental and climate challenges, they need to be better understood and utilized by local operators. Community-based, locally implemented measures to improve

environmental conditions help achieve broader environmental and climate goals. Actions undertaken collectively are more easily transferred to individuals and households, integrating sustainable practices into everyday life.

The project organizes workshops on various topics, such as:

- Making biochar.
- Preventing the spread of invasive species.
- Creating habitats for birds and insects.
- Planting seedlings.
- Building traditional wooden and stone fences.

Village-led actions include:

- Creating communal gardens.
- Restoring nature paths.
- Removing invasive species.

Results / Effects:

- Improvement in the environmental condition of the area.
- Participation of villages and other communities within the biosphere reserve, with each participant implementing at least one concrete action.
- Support for communities in project planning to consider environmental aspects, fostering environmentally friendly projects in villages.
- Promotion of sustainable lifestyles through themed events.
- Organization of study visits for local actors to the Archipelago Sea Biosphere and other European Biosphere Reserves, fostering collaboration between actors and biosphere reserves.

Research and education:

Citizen Science Seal project

Snæfellsnes Regional Park (Biosphere Reserve candidate)

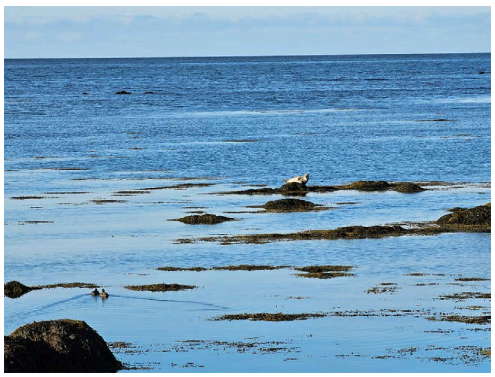
Main Goal: The main aim of the project is to contribute to biodiversity conservation, particularly of the grey seal and the harbour seal, and to raise awareness around this topic.

Content: The seal project is a Citizen Science initiative designed to engage the community and tourists in data collection efforts focused on the vulnerable grey seal and the endangered harbour seal. It fosters collaboration between scientists and local stakeholders, such as tourist companies, landowners, and schools.

The project provided an opportunity for tourists to participate in local conservation work. They were invited to map and count seals (following a fixed plan) and record data on time and weather conditions. Participants documented their observations and submitted their findings. A dedicated box for data sheet collection was set up at the seal beach to facilitate this process.

Results / Effects:

- A learning process on how to conduct a Citizen Science project and understanding the role of the regional park (or future biosphere reserve) in involving stakeholders and fostering open communication and exchange.
- Increased stakeholder engagement in biodiversity conservation.
- Enhanced local interest and awareness regarding seal conservation and regenerative tourism.
- Expanded experience in networking and education.
- Improved skills in the practical organization and implementation of a project.



Community engagement and participation:

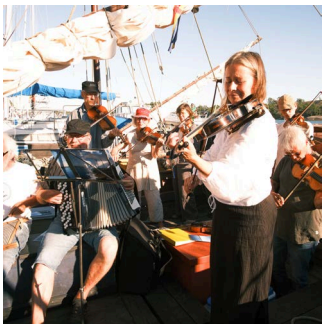
I am part of the Biosphere - promoting shared responsibility and ownership

Archipelago Sea Area Biosphere Reserve

Main Goal: The program aims to enhance a sense of shared ownership, belonging, and empowerment among local communities. It strives to promote both horizontal and vertical cooperation, with a strong emphasis on community involvement and methods to engage people in creating a sustainable future and supporting the Biosphere Reserve.

Content: Engaging people, sharing responsibility, and celebrating collaborative success are key challenges for Biosphere Reserves. Over the past decade, we have focused on strategies to inspire local stakeholders and residents to actively participate in the UNESCO Biosphere Reserve and support the archipelago's sustainable development.

Two key tools were developed:



1. **The Biosphere Reserve Partners Program**: This program engages organizations and companies in sustainable development, rather than evaluating them. Through their efforts, the Biosphere Reserve's goals become more tangible, with shared responsibility enhancing its work.
2. **The Biosphere Ambassadors Program**: This program raises awareness by connecting ambassadors with stakeholders, local residents, and visitors through their networks. Participants attend training to discover their role in the Archipelago Sea Biosphere Reserve.

Results / Effects:

- 17 Biosphere Partners and approximately 60 Biosphere Ambassadors.
- A strong sense of shared ownership among participants.
- Increased visibility of sustainability actions undertaken by Biosphere Partners.
- Spaces for networking and sharing best practices among Biosphere Partners.
- A variety of activities conducted by ambassadors.
- Diversification of the biosphere concept, represented by different people in diverse environments and reaching several target groups.
- Mutual added value for the Biosphere Reserve, its partners, and ambassadors in working toward a sustainable future.

Policy support and implementation on a local level:

Route to Paris

Vindelälven-Juhttátahkka Biosphere Reserve

Main goal: The *Route to Paris* project aims to explore the climate change mitigation potential of forests by bridging the gap between science, policy, and practice. Its goal is to integrate sustainable forest land use into the transition toward a carbon-neutral society, as outlined in the Paris Climate Agreement.

Content: The project will analyze carbon flows and wood product consumption under various forest policy scenarios, assessing how different forest management strategies impact carbon sequestration and emissions. This will help identify pathways to overcome barriers in forest policy and support the transition to sustainable forestry practices aligned with carbon reduction goals.

A key component of the project is engaging stakeholders and rights holders, including forest owners, policymakers, environmental organizations, and Indigenous communities. Through inclusive dialogues, workshops, and using the Biosphere Reserve as a living lab, the project will gather diverse perspectives and foster collaboration on sustainable forest management, balancing ecological, social, and economic objectives.

The project explores new financial instruments, market incentives, and policies that promote sustainable land use while rewarding forest owners for their climate mitigation efforts. By aligning economic incentives with environmental outcomes, it aims to create a supportive environment for forest owners to engage in climate action.

Results / effects:

- Advanced tools and knowledge for sustainable forest management, addressing conflicts by examining the social-ecological system.
- Compilation of scientific knowledge to support transparent decisions on trade-offs in forest use across sectors and scales.
- Contributions to policy discussions on sustainability in Europe, supporting Sweden's Environmental Quality Objectives, UN Sustainable Development Goals, the Paris Agreement, and the European Green Deal's climate neutrality goals.
- Identification of knowledge gaps and uncertainties in policymaking and forest management to overcome obstacles to climate-smart forestry and promote broader societal value through stakeholder dialogue in Sweden.

Policy support and implementation on a local level:

GBF – Nature agreement

Nordhordland Biosphere Area

Main goal: The project has three main aims. First, to map existing knowledge and identify the tools and information needed to achieve the goals outlined in the Nature Agreement. Second, to enhance the competence of municipalities in working toward these goals. Third, to communicate effectively about the Nature Agreement to ensure it is well-known both politically and administratively within the municipalities of Nordhordland.

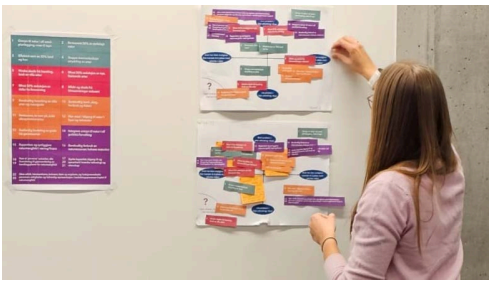
Content: Norway has recently published its Nature Agreement, outlining the strategy for how the country plans to work with the GBF. A significant portion of the responsibility is placed on municipalities. We will explore how the Nordhordland UNESCO Biosphere Reserve can serve as a valuable tool to assist municipalities in achieving the targets of the Nature Agreement.

Through this collaborative project, we aim to identify good processes and working methods that can be shared among municipalities, fostering collaboration to develop and refine such approaches. In this way, the biosphere reserve acts as a living laboratory for testing and implementing strategies to conserve and restore biodiversity, aligning with the goals of the Kunming-Montreal Framework.

Additionally, the project will raise awareness about the GBF and the Norwegian Nature Agreement.

Results / effects:

- Understanding of what the Nature Agreement means for municipalities.
- Knowledge of how municipalities can contribute to delivering on the Nature Agreement.
- Increased engagement in efforts related to the Nature Agreement.
- Enhanced understanding and awareness of how municipalities can integrate the Nature Agreement into their tasks and address associated challenges.
- Strengthened collaboration between municipalities on issues related to the Nature Agreement.
- Utilization of the Biosphere Reserve as a communication platform.



International cooperation and networking:

Supported by nature

Møn UNESCO Biosphere, Biosphere for Baltic

Main goal: The EU Interreg project *Supported by Nature* aims to increase the understanding of Nature Based Solutions and how they contribute to improved environmental conditions and the promotion of biodiversity in the Baltic Sea.

Content: The project is rooted in the network *Biosphere for Baltic,* which, in 2023, received funding for the *Supported by Nature* project through the Interreg Baltic Sea Programme. *Biosphere for Baltic* offers a unique platform for UNESCO Biosphere Reserves in the Baltic Sea Region to network, exchange experiences and results from local initiatives and projects, and identify new opportunities for collaboration.

The project will establish learning sites across six countries around the Baltic Sea, with participation from nine project partners. Within Møn UNESCO Biosphere Reserve, the project focuses on coastal water habitats. One of the main activities is the creation of an experimental rock reef in the biosphere reserve, which will also serve as one of the project's 17 learning sites. A preliminary investigation will determine potential locations for the test rock reef and propose its size and scope. The future rock reef will function as a learning site with associated communication efforts, aiming to inspire similar initiatives to enhance biodiversity in the Baltic Sea.

The project adopts a multistakeholder approach, involving a broad spectrum of national and local stakeholders to ensure long-term sustainability. Møn UNESCO Biosphere Reserve is working closely with Aarhus University and local organizations, including Møn Sports Fishing Association and Møn Diver Association.

Results / effects:

- Enhanced public awareness of Nature-Based Solutions, conservation, restoration, and the sustainable use of the Baltic Sea and its resources.
- Establishment of a learning site featuring a test rock reef, including informational signs to educate and engage the public.
- A practical guide to build knowledge about Nature-Based Solutions for target groups.

Interreg Baltic Sea Region

Co-funded by the European Union

SUSTAINABLE WATERS
Supported by Nature

International cooperation and networking:

How does nature benefit people?

Vindelälven-Juhttátahkka Biosphere Reserve

Main goal: The project aims to deepen understanding of how people benefit from nature and identify the specific locations where these benefits are received within the Vindelälven-Juhttátahkka Biosphere Reserve.

Content: Stretching from the mountainous Norwegian border in the west, through the forested central region, to the coastal lowlands in the east, the ways in which people in the Vindelälven-Juhttátahkka Biosphere Reserve value nature are highly diverse. Nature supports timber and agricultural production, provides clean water, and offers opportunities to harvest wild berries and mushrooms. It also sustains fishing and reindeer husbandry, while providing spaces for recreation, cultural traditions, and improved mental health through the tranquillity of the outdoors.

This project adopted a transdisciplinary approach to implement participatory mapping of ecosystem services—regulating, provisioning, and cultural—across the Vindelälven-Juhttátahkka Biosphere Reserve. This involved organizing and hosting workshops at local libraries and community halls.

Results / effects:

- Mapping of thousands of ecosystem services based on input from hundreds of respondents.
- Identification of hotspots for various valued services, including cultural heritage, outdoor recreation, biodiversity, mental well-being, and agricultural/forestry values, as perceived by diverse stakeholders.
- Enhanced understanding of how and where people—both residents and visitors—benefit from nature, enabling better preservation, development, and support for the Vindelälven-Juhttátahkka Biosphere Reserve now and in the future.
- Contribution to a broader international effort involving multiple biosphere reserves in Norway, Finland, and Sweden.

ABOUT MAB LAB

This publication presents findings from the Nordic Council of Ministers - Nordic Working Group for Biological Diversity funded project *MAB LAB: Man, and the Biosphere - Local Actions for the new global framework for Biodiversity – part II.*

The project is based on a fundamental ambition to foster and support local solutions to global challenges by increasing the number of UNESCO Biosphere Reserves in the Nordic region.

This aim of the project – MAB-LAB II - has been to elaborate on the work in the MAB-LAB I project that presented a "translation" of the GBF into a local context to create ownership, anchoring and action in local communities. Hence work has been done to increase interaction and readiness to work with the biodiversity targets at local, national, and Nordic level and to inspire on a global level.

The project was organized around the following activities:

1. Preparation of a collection of examples of local experiences with biodiversity work in Nordic biosphere areas in a short and manageable form. The work is carried out with the involvement of actors from the Biosphere Reserves, candidate areas or potential biosphere areas in all Nordic countries.
2. Conduct four digital network meetings for the Nordic biosphere reserves.
3. Preparation of an inspiration catalogue for the development of next practices in a short and manageable form involving actors from biosphere areas, candidate areas or potential biosphere areas in all Nordic countries.
4. Conducting a side event in connection with CBD COP16 in Cali, Colombia.

During the work on the project in 2024, a number of invitations were received to present the MAB-LAB work, and thus the opportunity to spread information about the Nordic approach in international forums. Specifically, this led to a presentation and discussion during EURO-MAB 2024 in Wittenberg, Germany and later during MAB-ICC in Agadir, Morocco. And finally, the side event at COP16 was carried out in close collaboration with the UNESCO Secretariat in Paris.

On the initiative of UNESCO in Paris, the COP16 presence was followed up in a series of webinars focusing on Latin America and the Caribbean, where the Nordic work was the primary source of inspiration for developing the work on local actions for biodiversity in Latin America and the Caribbean.

The overall objective of the MAB-LAB project is to contribute to catalyzing the readiness of the Nordic countries for the work of implementing the GBF.

This publication is about how Nordic UNESCO Biosphere Reserves can support the implantation of the Global Biodiversity Framework through local actions for biodiversity with a focus on good practice leading to next practice in the Nordic Biosphere Reserves.

Partners and execution

The MAB LAB project has been developed through a Nordic collaboration involving the following actors:

- Denmark: Møn UNESCO Biosphere Reserve (Katrine Dietrich)
- Sweden: Vattenriket, Biosphere Reserve (Carina Wettemark) National coordinator for the Swedish MAB-program (Johanna MacTaggert)
- Norway: Nordhordland Biosphere Reserve (Kari E. Natland), The Norwegian Biosphere Committee (Eva Hauge Fontaine).
- Finland: North Karelia Biosphere Reserve (Vilma Lehtovaara), Skärgårdshavets Biosphere reserve (Katja Bonnevier)
- Iceland: Snaefellsness Biosphere Reserve Candidate (Ragnhildur Sigurðardóttir)

The work was led by Katrine Dietrich (Møn UNESCO Biosphere Reserve, DK) and the report was prepared together with Kari E. Natland and Bigna Lu Abderhalden (Nordhordland Biosphere Reserve, NO), Ragnhildur Sigurðardóttir (Snaefellsness Biosphere Reserve Candidate, IS), Mads Randbøll Wolff, Sustainability 2030 and Nikolaj Sveistrup, URBAN AGENDA.

ABOUT THIS PUBLICATION

LOCAL ACTIONS FOR BIODIVERSITY From good practice to next practice in the Nordic Biosphere Reserves

Katrine Dietrich (Møn UNESCO Biosphere Reserve, DK), Kari E. Natland and Bigna Lu Abderhalden (Nordhordland Biosphere Reserve, NO), Ragnhildur Sigurðardóttir (Snaefellsness Biosphere Reserve Candidate, IS), Mads Randbøll Wolff (Sustainability 2030) and Nikolaj Sveistrup (URBAN AGENDA)

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Nordic co-operation

Nordic co-operation is one of the world's most extensive forms of regional collaboration, involving Denmark, Finland, Iceland, Norway, Sweden, and the Faroe Islands, Greenland and Åland.

Nordic co-operation has firm traditions in politics, economics and culture and plays an important role in European and international forums. The Nordic community strives for a strong Nordic Region in a strong Europe.

Nordic co-operation promotes regional interests and values in a global world. The values shared by the Nordic countries help make the region one of the most innovative and competitive in the world.

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