

Archipelago Sea BR, Finland

## HABITABILITY FOR SUSTAINABLE ISLANDS



Habitability is a brand new concept developed on the island of Kökar, Åland, to measure and develop the attractiveness and sustainability of an island. Habitability is closely related to the SDGs, Agenda 2030, but the focus is concrete and on a local level. Island communities, with their clear boundaries and low population numbers, are very thankful to test new ideas on.

Being habitable means there are jobs, housing, a school, ferries, etc. - the prerequisite for a sustainable society that can take care of its inhabitants, its nature and the surrounding sea. This is existential for an island to attract a resident population in a sustainable way.

One of the main partners of the Archipelago Sea Biosphere Reserve is Åbo Akademi University. During spring 2021, the Archipelago Institute of the university administered a course for Habitability facilitators, in which 34 islanders from 13 European islands participated. Two of the islands, Öro and Houtskär, are situated in the Archipelago Sea Biosphere Reserve in the Southwest of Finland.

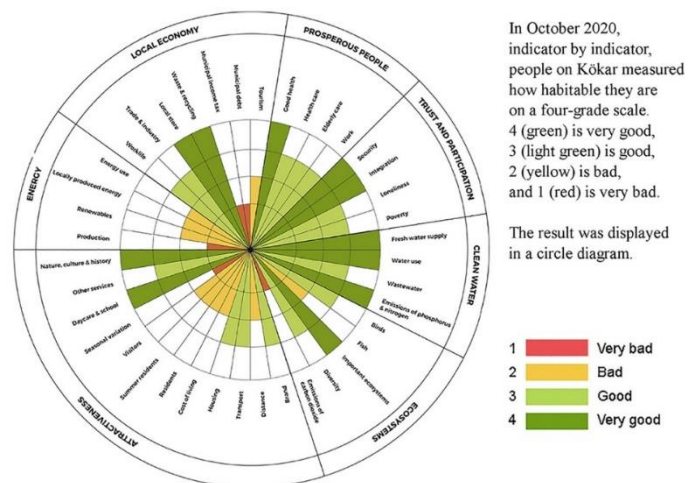
The outcome of this course is an up to date image of the habitability of a small island: facts, strong and weak aspects, perceived and possible perspectives. How can this image and knowledge be used to find common grounds for vital development?

Many small island communities in Europe are struggling to be livable and sustainable. Almost all have a declining population. At the same time, there is a shortage of affordable housing for year-round use, since most houses are sold for part-time living. The low-lying islands are also among the first to suffer from an unpredictable climate and a rising sea level.

The islanders in Kökar defined their habitability by 40 indicators arranged in seven areas. Inspired by MEP Tonino Picula, they especially developed the energy area and are, thanks to EU-funding and their solid and innovative habitability framework, turning their island fossil free.

Several new courses and projects on habitability are being planned.

<http://www.abo.fi/en/centre-for-lifelong-learning/habitability/>



## ART EXHIBITION CELEBRATING BIOSPHERE ISLE OF MAN HAS LASTING LEGACY

Schools and libraries are being gifted copies of a book that collects together art depicting and celebrating UNESCO Biosphere Isle of Man.

*Ellyn: A Tale of Manx Contemporary Art* accompanied the recent exhibition, staged by the Isle of Man Arts Council. Ellyn is Manx Gaelic for art.

UNESCO Biosphere Isle of Man and the Arts Council are gifting copies of the book to every school and every public library in the Isle of Man.

Clare Barber MHK, Minister for Environment, Food and Agriculture, presented a copy of the book to DEFA's neighbouring St John's Primary School.

She said: 'Under its local strategy, Working Together for a Sustainable Future, UNESCO Biosphere Isle of Man encourages us to appreciate all that is special about our Biosphere and celebrate it creatively.'

'The Ellyn project is a great example of that.'

'Curating such a vast and varied collection of art was a wonderful achievement by the Isle of Man Arts Council in conjunction with the Biosphere team and it was fascinating to see how our talented artists responded to the challenge and how they depicted our Biosphere.'

'The book will enable generations of people to look back on the exhibition, view how it captured the Island at this time, and be inspired by it in their own artistic endeavours.'

'I hope it will be a useful resource for teachers as they encourage children to celebrate our Biosphere in their own unique and imaginative ways, ahead of [the schools' week celebrating our Biosphere status](#) in the summer term 2022.'

Find out more about UNESCO Biosphere Isle of Man via [www.biosphere.im](http://www.biosphere.im) and via social media



*Minister Barber presenting a copy of Ellyn to St John's Primary School School Council and headteacher Tracy Willoughby. Also pictured is Olivia Savage, Arts Graduate Intern with the Isle of Man Arts Council, who organized the exhibition*



*Breeshey Kermode, Project Assistant with UNESCO Biosphere Isle of Man, at the Ellyn exhibition*



*The call to artists to take part in Ellyn*

## **OPEN LETTER FROM THE CANARIAN FOUNDATION LA PALMA BIOSPHERE RESERVE**

Dear partners,

La Palma Biosphere Reserve is living a complicated situation due to the volcanic eruption that is devastating part of our territory. In this difficult time, we would like to convey our gratitude on behalf of our Board of Trustees, our technical team and, especially, La Palma inhabitants, for all the supportive and affective expressions for our Island.

There is no doubt that we are going through one of the saddest episodes in our history, but the fact remains that the temperament, tenacity and strength of the people of La Palma will allow us to overcome such this dire situation.

Everyone must now pull together and it is our obligation to rise to the occasion, responding effectively, wisely and intelligently to the needs of the people who need us most at this time.

We appreciate the trust placed in the Canarian Foundation La Palma Biosphere Reserve, by the Ministry for the Ecological Transition and the Demographic Challenge of Spain, which will contribute 15 million euros to the entity with the aim of recovering the natural heritage and the socioeconomic status of our territory.

We know we're assuming a great responsibility in the administration of these funds, a challenge that we face with all the enthusiasm, and hoping this action does not remain in a punctual fact, but serving for the Ministry to trust on the Biosphere Reserves as valid, efficient and self-financed territorial management entities.

These days, we "The people of La Palma" have sent a message to the world: "being together is the guarantee to get ahead". We are men and women who always ratchet up in the face of adversity, we are showing it, working tirelessly for our neighbors, for our island. That unity, that work, that being by the side of the people at all times is what makes us stronger than the volcano.

A huge hug and thank you very much for all the support and affection received.

Ernesto Aguiar Rodríguez,  
Executive Director, La Palma Biosphere Reserve

<https://lapalmabiosfera.es/sinopsis-de-la-erupcion-volcanica-en-la-palma-reserva-mundial-de-la-biosfera/>



Photograph:  
Silvia Díaz Quinteiro

## **ENVIRONMENTAL VOLUNTEERING DAY ON ARNELA BEACH LIFE FLUVIAL PROJECT (23rd October 2021)**

### **Problem addressed and location chosen**

The purpose of the day was based on social awareness of the environmental damage derived from the presence of waste and plastic in the aquatic environment, in this case in the marine environment.

The location chosen on the coast of the municipality of Sada (A Coruña – Galicia - Spain), in addition to suffering the usual pressures from coastal environments close to population centers, also suffers from being an area of moderate marine traffic (recreational and inshore fishing), in addition to having aquaculture facilities nearby (mussel rafts).

In order for the activity to be as demonstrative as possible, a date outside the beach season was chosen (with less intensive cleaning work by the responsible entities) and also that, due to its limited accessibility, no allow the entry of mechanical means for such tasks.

### **Actions developed**

The volunteering activity is part of the dissemination and awareness actions of the LIFE Fluvial project (LIFE16 NAT/ES/000771), of which the Mariñas Coruñesas e Terras do Mandeo Biosphere Reserve is partner.

On this occasion there were ten volunteers as a result of the collaboration of the Biosphere Reserve with the NGO International Cooperation.

The work, supported by the Sada City Council's environmental department, consisted of explanatory talks on the problems of plastic and on invasive alien species of flora, to then proceed to the selective collection of waste found in the beach and surroundings.

Once collected, they were quantified and typed according to the MARNOBA protocol. This platform, created by the Vertidos Cero Association and supported by the Biodiversity Foundation (Ministry for the Ecological Transition and the Demographic Challenge), aims to collect, store or display information on marine litter from beaches, floats and funds through an application and a web viewer.

### **Results obtained**

At the end of the actions on an approximate net area of 7,800 m<sup>2</sup>, approximately 13 kg of micro-plastics and small-format waste were removed.



<http://www.lifefluvial.eu>

<https://vertidoscero.com/marnoba/>

## THE COMPETITION "CREATING SMALL CONSTRUCTION WORKS FROM ECO-BRICKS AT THE SCHOOL"

The Management Unit of the Biosphere Reserve Cat Ba Archipelago, with an effort to organize activities to reduce plastic waste every year, has organized many forms of propaganda to all island people in order to raise the sense of community and tourists at the area not only national but also international

In 2021, due to the complicated developments of the Covid-19 pandemic and the implementation of Covid-19 prevention measures, the Management Unit of the Biosphere Reserve Cat Ba Archipelago 's activities are somewhat limited. However, with the efforts and determination of the Management Unit of the Biosphere Reserve Cat Ba Archipelago and the smooth coordination of all organizations should in 2021 deploy and the Competition "Creating small construction works from eco-bricks at the school"

The Competition had been launched from June 2021 to September 2021 within Primary schools and junior high schools (16 schools in Cat Ba island ). Among 3 months, all schools have deployed to teachers, students' parents and students to participate. As a result, 16 schools had 16 projects in the school district from ecological bricks that were designed creatively and meaningfully. With an estimated number of over 18,886 bricks, equivalent to 3,777 kg of plastic waste (mainly including plastic bags, plastic bottles and disposable waste). The judges of the competition had evaluated, unanimously scored, and selected 8 excellent works to attend the final in October, 2021.

At the final of the competition, the teams had impressive presentations about their projects. And the final results (prizes for the primary and junior high schools): 2 first prizes, 2 second prizes, 2 third prizes, 2 consolation prizes and 1 extra prize for the best presentation team.

The competition has created a positive and pervasive effect in the community with a profound meaning.



## Cascade Head BR Launches Watershed and Salmon Educational Video Series

The [Cascade Head Biosphere Collaborative](#) has recently completed two video series, scripted, filmed, and edited all right here within the biosphere reserve, which are ready to share across the globe. The series are aimed at 3rd and 6th grade students as part of a grant we received from the National Oceanic and Atmospheric Administration (NOAA), but are suitable for all ages. The first video series titled the "**Raindrop to Sea**", follows a raindrop rising out of the ocean, falling a top one of our headlands, coursing its way through the ground, into a spring, into a lake, a river, an estuary, and eventually migrating its way back to the sea. The 9-part series is hosted by two young adults and provides a captivating look at our wondrous biosphere reserve while providing meaningful watershed educational experiences. The second series, launched just in November of 2021 follows a superhero in our watershed, the mighty SALMON! The "**Secret Life of Salmon**" explores the lifecycle of this iconic species and provides a glimpse underwater and into the fresh and saltwater lives of these intrepid organisms.

Watch all the episodes on the Cascade Head Biosphere Reserve [YouTube Channel](#).



Secret Life of Salmon | Episode 1 - "Why are Salmon Superheroes?"



Raindrop to Sea Video Series - LC 1 - High Meadow

## “BRING RESIDENTS TOGETHER”

Located in the south of Japan, Kuchinoerabu Island was designated as an UNESCO Biosphere Reserve in 2016 along with the neighboring island Yakushima. It is known for a rich natural environment and hot springs, and the entire island is designated as a National Park. The island’s symbolic volcano had a massive eruption in 2015, causing the residents to evacuate from the Island due to the threat of another eruption for about six months. Although the residents started to return to the island, the population is declining rapidly from 150 people in 2000 to 95 people in 2021. The only elementary/junior high school on the island has only 20 students. Of these, only four were born and raised on the island.

Despite this situation, it has been a "student island" for nearly 50 years, hosting students from Keio University, Hiroshima University, Ikubunkan Global High School in Tokyo, and more students who proactively engaged in disaster recovery and community development.

In 2019, the “Kuchinoerabu Island Future Conference” was held, bringing together residents, high school and university students to discuss the future of Kuchinoerabu Island. Beyond "academic research", researchers and students collaboratively envisioned the future of the island. Like this, one of the charms of Kuchinoerabu Island is that researchers and students can stand at the same perspective as the islanders to co-design the region.

The openness of the islanders is the key to enable the co-design. Students can learn important lessons through real issues and struggling to solve them together with the residents.

To take pride in the value of the wonderful food, culture, and natural environment of Kuchinoerabu Island which they take for granted, we should continue to increase opportunities to have interactions with students from outside to the island. I think the next target for Kuchinoerabu Island is to make the residents to be proud of UNESCO BR.

Kuchinoerabu Island have the courage to let people know about the issues, so that we can co-create ideas to solve the issues and to create fans who care about the island.

## Celebration of the 50th Anniversary of the UNESCO MaB Program with the #SoyBiosfera Movement



### Ospatu bizitza

Munduari erakutsi nahi diogu nola ematen diogun bizia Urdaibairi eta nola eraikitzen dugun etorkizuna gure Biosfera Erreserbarekin harmonian

Queremos enseñar al mundo cómo damos vida a Urdaibai y construimos un futuro en armonía con nuestra Reserva de la Biosfera

### Celebrar la vida

- 2021 marks the fiftieth anniversary of the UNESCO MAB Program and Urdaibai Biosphere Reserve celebrates it through the #SoyBiosfera movement.
- UNESCO's MaB program encourages the collaboration of governments and institutions worldwide for the conservation of nature and sustainable development.
- The #SoyBiosfera movement, created by the Urdaibai Biosphere Reserve Service and UNESCO Etxea, aims to give visibility to local initiatives in the territory that are aligned with the principles of sustainable development.

The citizens of Urdaibai coexist with the spectacular natural heritage that the Biosphere Reserve presents. The MAB Program highlights the importance of conserving it and developing initiatives in harmony with Nature.

In 2021, the UNESCO MaB Program will be 50 years old and Biosphere Reserves around the world have joined in its celebration with initiatives of different kinds gathered on the [UNESCO website](#). The Urdaibai Biosphere Reserve has also joined the celebration by creating the #SoyBiosfera (#IamBiosphere) movement, promoted by the Urdaibai Biosphere Reserve Service, dependent on the Department of Economic Development, Sustainability and Environment of the Basque Government and UNESCO Etxea, UNESCO Center of the Basque Country.

The movement aims to give visibility to citizen initiatives in the territory that seek to fulfill the essence of the MaB Program: respect and care for Nature and the development of a dynamic territory full of possibilities.

The #SoyBiosfera movement wants to call on local citizens to present their initiatives and explain what they contribute to the Urdaibai Biosphere Reserve, how they contribute to the fulfillment of Sustainable Development Goals and what their keys to living harmoniously with Nature are. All this because sustainable development initiatives are the bases for conserving the environment and moreover, because it requires the collaboration of all people.

Participating initiatives will be included in the [#SoyBiosfera space](#) on the Urdaibai Biosphere Reserve website, where they will be part of a community of Urdaibai ambassadors who are committed to collaborate developing actions that respect the environment.

We think that showing and communicating the projects on-going in Urdaibai BR is crucial to raise awareness about the importance of conserving Nature, caring for its cultural heritage, and promoting new initiatives based on the principles of the sustainable development.

## LATVIAN ANNUAL JUNIOR RANGER CAMP

From 12 to 14 July in the North Vidzeme Biosphere Reserve the annual Junior Ranger Camp was held. This time camp's theme was "Revealer of Coastal Secrets". The camp was attended by Junior Rangers from Gauja, Razna and Kemeru National parks and North Vidzeme Biosphere Reserve.



Latvian annual Junior Rangers camp participants

During the camp Junior Rangers got to know North Vidzeme Biosphere Reserve nature values. For example, first day at camp they went hiking along the seacoast and explored Veczemju cliffs by finding cliffs pillars and measuring the longest cave at Veczemju cliffs. Junior Rangers also explored and learned about coastal plants species. And in the evening, Rangers formed a choir and sung songs about water.

The first part of the second day was dedicated to the theme of birds. They made seven birdhouses, learned about the most common bird species in Latvia like common whitethroat (*sylvia communis*), green sandpiper (*tringa ochropus*) et al., and took part in a discussion about birds' habitats and food base. Junior Rangers also looked for answers to the question such as how humans affect birds' life's. After activities about birds' they went to hike to explore great (ancients) trees, but in the evening Rangers learned how fashion is related to nature and painted t-shirts using plants. Of course, night track was not missed either – at each night tracks checkpoint Junior Rangers learned facts about animals' behavior.

On the last day of the camp, LIFE REEF project team introduced Rangers to marine biodiversity. Solvita Strāķe, the leading researcher of the Latvian Institute of Aquatic Ecology, and her assistant talked about species of algae, shellfish and crustacean and special attention was paid to invasive species such as mud crab (*scylla serrata*), Chinese mitten crab (*eriocheir sinensis*) and round goby (*neogobius melanostomus*). After learning theoretical knowledge, young people went to sea and drew a research network into the sea. In the net they found goby and killer shrimp (*dikerogammarus villosus*).

Also this time Junior Rangers took part in Nature Conservation Agency in cooperation with World Wildlife Fund Latvia initiative "Daru labu dabai" (Do well for nature). This time it was weeding blue lettuce (*lactuca tatarica*), invasive coastal plant species, on the beach.



Junior Rangers learning process about algae, shellfish, crustacean, mud crab, Chinese mitten crab and round goby



## KILLER WHALE RESEARCH IN BREMER CANYONS



*Foraging pair of siblings. (Photograph courtesy John Totterdell)*

The Fitzgerald Biosphere on Western Australia's South Coast is internationally renowned for its extremely rich plant diversity and species endemism. This spectacular botanical display is eclipsed for several months each year by another incredible wildlife phenomenon that draws the world's rapt attention.

In a rarity, seldom found elsewhere, large numbers of whales congregate in a tiny patch of ocean off the coast of Bremer Bay, drawn by the presence of nutrient rich upwellings from underwater canyons, and each other.

John Totterdell, senior researcher with the Cetacean Research Centre, a Western Australian non-profit marine research team, describes the phenomenon as follows:

During the austral summer and autumn in offshore waters 25-35 Nautical Miles south of Bremer Bay a series of deep ocean canyons provide a nutrient rich marine environment that sustains annual multi species cetacean aggregations.

Upwellings and ocean currents combine and intensify in a relatively small area (approximately 20NM x 5NM) known as 'the patch'. Headlining these aggregations is one of the largest populations of killer whales in the Southern Hemisphere. Numbering upwards of 200 animals, in several dozen family groups, many dominate the rich offshore 'patch' on a daily basis.

Large groups (100 plus) of long finned pilot whales also frequently pass through. Towards summer's end and into autumn many dozen sperm whales, females, juveniles and calves join adult males who linger around the patch more frequently. Periodically large groups, at times many hundred, common dolphin or striped dolphin can be observed.

Killer whale research has been conducted annually for eight years, focusing on abundance, distribution, diet and genetics. Killer whales target a range of prey species including other whales, squid, fish and sharks. Beaked whales are commonly taken with several witnessed each season. Others documented are minke, humpback and blue whale, including a 20m adult in March 2019; the only adult blue whale known to be attacked and killed by orca.

One unique aspect about the 'Bremer Canyon Patch' is that it is the only known location anywhere in the world where you can find and study the same groups of 'offshore' killer whales year after year.

<https://www.researchgate.net/profile/John-Totterdell>



*Foraging compilation. (Photograph courtesy John Totterdell)*

## OLD FRIENDS AND NEW BEGINNINGS

September 2021 was a very active month for the Commander Islands Biosphere Reserve. We participated in the Sea of Life festival, which is traditionally held by Association of Specially Protected Natural Areas of Kamchatka Krai and Kamchatka Specially Protected Natural Areas in Petropavlovsk-Kamchatsky every autumn.

This year we teamed up with the organizers of the Whale Trail Eco-Run and the Local's Surfing School to create an active and educational site where everyone can find something to their liking.

The CINBR together with Kronotsky Nature Reserve and the Volcanoes of Kamchatka Nature Park conducted Researchers of the Protected Lands Quest for children 7-14 years old. The participants also learned to collect a real hiking backpack, climbed to the top of a volcano climbing wall, learned about the rules of behavior in protected areas, learned how to sort waste, met the members of Vitus Bering's expedition and made a souvenir with one of them. They identified marine mammals by their skeletons and seabirds by silhouettes, and, of course, they got acquainted with the unique objects of each protected area of Kamchatka.

The CINBR also organized a quiz dedicated to the Second Kamchatka Expedition. The author of the quiz is Natalya Tatarenkova, Head of the Historical and Cultural Heritage Preservation Department of the CINBR. Simultaneously with the events in Petropavlovsk-Kamchatsky, the Sea of Life festival was held on Bering Island. Eleven children went on an ecological expedition to Severo-Zapadnoye Rookery.



Earlier that month we hosted a big unveiling ceremony, as tourists can now visit the Scientists' Spot on Bering Island! We are very proud with this new awareness platform about researchers, who worked on the Commander Islands and cherished them. The first of them was Georg Wilhelm Steller.



As a participant of the Second Kamchatka Expedition, he was a physician and the first naturalist to explore northwest of North America, creating the first description of the Aleutian Islands. The spot with info boards about other scientists is a part of Severo-Zapadnoye Rookery complex. It will serve to redirect tourists and enrich their experience.

<http://komandorsky.ru/en/georg-steller-monument-unveiling.html>

<http://komandorsky.ru/en/3-facts-you-didn%E2%80%99t-know-about-georg-steller.html>



## **First Action Plan of the Tuscany Islands Biosphere Reserve published**

The Tuscan Island Biosphere Reserve is continuing on its path of increasing structuring through the drafting and approval of its first Action Plan.

The Action Plan of a Biosphere Reserve acts as an instrument for the coordination and valorisation of the best projects that aim to pursue sustainable development, whether they are proposed and implemented by public or private subjects, or whether they are projects in progress, in planning or "only" proposed. However, as the Biosphere Reserve is not an Authority, it has no title to determine the planning or management of the territory (it does not introduce standards or rules).

The Action Plan is developed in coherence with the directives contained in the "Lima Action Plan" and the Guidelines of the Italian National MAB Technical Committee. The Action Plan is structured to fulfil the three general functions that the UNESCO MAB programme assigns to Biosphere Reserves, declined in thematic categories characterizing the characteristics of the Tuscan archipelago and the sustainability challenges that its communities are facing. The thematic categories respond to the specific objectives that they further describe and decline on the territory of the Tuscan Islands, in order to initiate a process of continuous improvement.

In order to facilitate the identification of the most suitable projects to be included in the Action Plan, meetings were held with different categories of stakeholders and an online form was made available through which all the interested parties could submit their own projects, enhancing both the National Park's projects and those of the territorial stakeholders, in order to have an Action Plan participated by the territory.

## **THE 3RD Meeting of Italian Biosphere Reserves on the Tuscan Islands**

From 4 to 6 November 2021, the Third National Meeting of the Italian Biosphere Reserves recognised by UNESCO as part of the Man and the Biosphere (MAB) programme was held in the Tuscan Islands Biosphere Reserve. The title of the meeting was "50 years of the Man and the Biosphere Programme: the Italian MAB Reserves in a network to plan and grow".

On the occasion of this annual meeting, convened by the Man and the Biosphere National Technical Committee, an important result was achieved: the definition of an agreement to give life to a coordination and networking action of the Italian Biosphere Reserves, a need that had emerged on various previous occasions and that brings Italy into line with what is already happening in the main European countries.

Over 60 participants representing the 20 Italian Biosphere Reserves worked together to monitor the projects, growth paths and opportunities developed within the Italian UNESCO MAB network. The representatives of the Ministry of Ecological Transition, the National Technical Committee "Man and the Biosphere" and the Italian National Commission for UNESCO, who were present at the meeting, emphasised how the Reserves are important tools for cooperation in order to grow together, places of learning about sustainable development and biodiversity and conflict management, precious garrisons to represent the balance between man and nature, but also a stimulus to build resilient societies, to look beyond the protected area and network with the pulsating actors of the territory.

The meeting was also an opportunity to present the recent recognition by UNESCO of the new Monte Grappa Biosphere Reserve (the twentieth in Italy) and the extension of the Tuscan-Emilian Apennines Biosphere Reserve through the enthusiastic and passionate telling of their journey to the candidacy and the positive final result.

During the three-day event, the Islands of Tuscany Biosphere Reserve showed its experiences and projects relating to actions for the development of sustainable tourism, the enhancement of sustainable rurality and typical products, environmental conservation, and the dissemination and education of the Reserve's values.

## CELEBRATING THE MAB 50TH ANNIVERSARY, COMMUNITY AND OUR ICONIC KOALA

As part of our celebration of the 50th Anniversary of the UNESCO MAB Programme, the Noosa Biosphere Reserve Foundation held its 2nd annual fundraising gala on 2 November. This year raising support for koala conservation in the Noosa Biosphere Reserve.

In the last ten years, the South East Queensland region has seen an 80 percent decline in the number of koalas. In 2004, the Queensland Government listed the koala as Vulnerable.

Noosa is fortunate to have a significant wild koala population, however their long-term survival is under constant threat from habitat loss, urbanisation, fragmentation, disease, car strike and dog attack. The Noosa Biosphere Reserve has been a region focused on ground-breaking koala conservation and research. This year's Wild Koala Gala fundraiser would help to stimulate community action and support for koala conservation in the region.

The event was a huge success with 180 guests in attendance. A panel of experts discussed the plight of the koala and what is being done in the region to protect the vulnerable species. The resounding message however was optimistic and clear – community-wide collaboration is the key to ensuring a sustainable wild koala population.



*Koala expert panel at Noosa Biosphere Wild Koala Gala*

The expert panel included representatives from Noosa & District Landcare, Australia Zoo Wildlife Hospital, Queensland Koala Crusaders, USC Detection Dogs for Conservation and researchers at the University of the Sunshine Coast – all of whom are leading the charge in protecting local koala populations and their habitat.

The Foundation launched its Noosa Wild Koala Initiative which aims to develop a shared community vision and inspire focused and meaningful action towards the future survival of Noosa's wild koala. The event raised over \$50,000 which will go towards seed-funding new initiatives.

Local school students and fashion designers showcased recycled, upcycled and sustainable fashions, to engage residents in conscious fashion.



A personal video message was also received from world renowned conservationist [Dr. Jane Goodall](#), Ambassador to the 50th Anniversary of UNESCO's Man and Biosphere Programme who reinforced the urgent need to conserve biodiversity and for communities to live sustainably.



*Dr. Jane Goodall, MAB 50th Anniversary Ambassador delivers video message to Noosa Biosphere Wild Koala Gala.*

The Foundation also launched the Noosa Biosphere Awards this year, a new initiative to recognise environmental and sustainability excellence in the biosphere reserve.

## Management of protected marine areas in an island Biosphere Reserve: The project MAREBI's successful closing



initiated debate and reflection on current issues such as sea turtle nesting in Menorca, the state of health of our sea, the effect of climate change on corals, how noise pollution affects cetaceans, the need to move towards responsible consumption of fishery products and the situation of women in marine sciences, among many others.

The project MAREBI, "Management of protected marine areas in an island Biosphere Reserve" of the Menorca Biosphere Reserve Agency, was successfully completed. A year after it started, the project was brought to a close through a closing ceremony which served to evaluate the participation of the project's dissemination activities and to present the main results of five new studies related to the marine environment of Menorca.

The studies contribute to improve the knowledge of the coastal and marine ecosystems of the island and evaluate different pressures and threats to which they are exposed. With special attention to the different protected marine areas of Menorca, the aim is to provide useful tools that will help to advance towards better management and conservation of the sea of the Menorca Biosphere Reserve.

Experts in marine biology have assessed the conservation status of the seagrass meadows in the north of Menorca, analysed which are the most vulnerable marine areas and updated the cartography of the different underwater habitats.

In addition, technicians from the Department of the Environment have updated the indicators of the influx of users to the beaches of Menorca and the monitoring of the populations of three species of seabirds.

Among the dissemination activities of the project, the cinema cycle "CineMar" and the talks "Una illa, una mar" were very well received. 32 experts from different fields have shared their knowledge and

The tale "A sea of treasures" has also been published for children and primary school children: an environmental education activity in storytelling format. And, finally, the manual of good practices for sailing "More Sea More Life" has been reissued and distributed to different strategic locations.

MAREBI has been possible thanks to the support of the Biodiversity Foundation of the Ministry for Ecological Transition and Demographic issues, through the Pleamar programme co-financed by the European Maritime and Fisheries Fund (FEMP).

<http://biosferamenorca.org/Contingut.aspx?IDIOMA=2&idpub=6584>



## MOBILE EDUCATION STEAM-Y

Reflecting on the year 2021, we found that Cape Winelands Biosphere Reserve partnerships, collaboration, and passionate mentors invested in their communities are the cornerstone for long-term solutions in outreach and relevant meaningful impact.

The Cape Winelands Biosphere Reserve team are excited to share the launch of our mobile education unit STEAM-Y (science, technology, engineering, art, and mathematics - for youth). The project, originally an educational Science Bus, has become a catalyst for building partnerships and encouraging collaboration, with the aim to ignite curiosity in children and young adults who have experienced an unstable academic year because of the pandemic and its impact on social norms.

Through sharing resources, whether educational material, pristine areas such as nature reserves, transport, or institutional knowledge, the CWBR team together with partners are co-creating innovative ways to foster the importance of learning and self-development for children and young adults to navigate through the 21st century.

The CWBR activities in and around the mobile unit are hands-on and focus on topics such as magnification by using binoculars, telescopes and magnifying glasses, drone technology through flying a drone and learning how to evaluate river health. Topics discussed include a biodiversity, care for the natural environment, recycling, food security, global warming, pop-up cinema, and the awareness of Biosphere Reserves.

Together with over 20 partners and collaborators, the CWBR team co-facilitates youth outreach on an ongoing basis that involves: exposure to pristine environments, environmental education, involvement in research, hands-on creativity, wilderness therapy, resourcefulness towards careers and employment, introduction to science and technology, food security, celebration of culture, and cross-cultural knowledge exchange.

The long-term vision is to support teachers through aligning with the curriculum taking education off the blackboard, and co-facilitating a travelling Educational Circus, wherein partners come together for pop-up educational events.

STEAM-Y highlight of the year was the launch on Youth Day June 21 of the Mobile Career Café, a project in partnership with a non-profit organization that empowers youth to be ready for the world of work. The CWBR team ventured to Tsitsikamma to support a community driven initiative. Check out the short videos in the links!

Mobile Career Café:

<https://www.youtube.com/watch?v=FWmsxHHMDiY>

Tsitsikamma:

<http://www.youtube.com/watch?v=zBG4mINbJQE>



## 2021 VIRTUAL MEETING OF THE WNICBR



The annual meeting of the WNICBR was held virtually on Wednesday 24th November, being its main objective to keep each other up-to-date of the Network's news and share ideas, proposals and projects.

The meeting, which lasted two hours, offered the perfect scenario for the presentation and discussion of many topics of interest for the Network. These included the outcomes of the 2021 ICC-MAB; the creation of the new graphic image of the Network; the presentation of results of the survey "Island and Coastal Biosphere Reserves in the COVID-19 pandemic" and the presentation of the ongoing projects funded by the WNICBR "Mitigating of the COVID pandemic in island and coastal BR" by their managers.

What's more, the members of the Network had the chance to share news and proposals for the Zero Plastic working group; and to discover several proposals to join the celebration of the 50th MAB anniversary during 2022, such as joining the "It's about life!" exhibition, and the development of a "Tapestry of words" expressing the relationship between society and nature in biosphere reserves.

This meeting gathered more than 40 representatives of 30 island and coastal BR spread over the world. Under pandemic conditions, the last two annual meetings of the Network (2020-21) have been held on a virtual basis, although it is exciting to cling onto the likelihood of seeing each other face-to-face next year.

Access the summary and highlights of the meeting through the links below.

<http://www.islandbiosphere.org/Contingut.aspx?IdPub=1781>

## 2021 YOUTH SUSTAINABILITY LEADERSHIP CAMP

The Palawan Council for Sustainable Development Staff, through its ECAN Education and Extension Division (EEED), organized the 2021 Youth Sustainability Leadership Camp via Zoom on October 21-22, 2021.

The virtual camp was attended by a total of 158 youth sectors and representatives from different schools, student body governments, and youth organizations from Palawan, Romblon, Bicol, Bohol, Tarlac, Iloilo, and Marawi. It focused on the United Nations Sustainable Development Goals (UN SDG) 14 (Life Below Water) and 15 (Life on Land), with the corresponding lectures about Food Security, Waste Management, and Climate Change.

The two-day event entailed messages for youth on sustainable development, lectures on SDG 14 and SDG 15, as well as discussions on the salient points of RA 7611, or the Strategic Environmental Plan for Palawan (SEP) Law, Waste Management, Climate Change, and the role of youth in agriculture and food systems given by Miss World Manila 2021, Miss Earth Philippines Lapu Lapu 2021, Oceanus Conservation co-founder, SEED4COM Project Coordinator, Palawan State University Professor, Agritech and Business Solutions Director, and PCSD Staff.

After the presentations, a workshop was held using Zoom's breakroom feature, in which participants, divided into groups, brainstormed about the activities/initiatives they believe can improve the use of knowledge and information as enablers of climate action, as well as their classification of the issues, potential hazards, and proactive solutions for the aforementioned topics. Then, a virtual graduation ceremony was held, signaling the end of this year's virtual camp.



## **PALAWAN MPA NETWORK REVITALIZATION MEETING**

The Palawan Council for Sustainable Development Staff (PCSDS), through the ECAN Policy Research and Planning Division (EPRPD), conducted the Palawan Marine Protected Area Network (MPAN) Revitalization Meeting via Zoom on September 30, 2021.

The event was initiated to revitalize the MPA Network Clusters of Palawan, tap existing initiatives, and provide technical assistance that can assist in strengthening implementation. It was attended by representatives from various LGUs, Academe, Palawan MPAN Partners, and PCSD staff.

Notable persons present in this event are PCSDS Executive Director Atty. Teodoro Jose S. Matta, PCSDS Director for Planning, PCSDS EPRPD Chief, and representatives from the Office of the Provincial Agriculturist (OPA), Pilipinas Shell Foundation, Inc. (PSFI), Calamianes MPA Network, USAID Fish Right/PATH Foundation Philippines, Inc (PFPI), City Agriculture Office; and Northeast Palawan MPA Network and Worldwide Fund for Nature (WWF)-Philippines.

The activity entailed discussions about the Palawan MPA Network's overview, organizations, and milestones, as well as initiatives in the Palawan MPA Network's formation and the status, opportunities, and challenges. Also, part of the presentations were the updates on the Palawan MPA Network Clusters, the South East MPAN and Calamianes MPAN, PPC MPAN Experience, and North East MPAN.

After the situationer, participants engaged in break-out sessions to discuss MPAN challenges and implementation needs.

Culminating the group sessions, the participants reconvened and presented their work plans during the plenary session. It was followed by a synthesis of the Palawan MPAN Revitalization meeting, focusing on a summary of all the cluster presentations, as well as the key points that participants must include in their activities, as well as in the implementation and ongoing management of the MPA Network.

## **SPECIES IDENTIFICATION AND MANAGEMENT TRAINING FOR BATARAZA**

The Palawan Council for Sustainable Development Staff (PCSDS) EEED, in partnership with PCSDS EZMED, held Species Identification and Management Training in Bataraza, Palawan last November 3, 2021.

The species identification and management training were primarily held to identify potential risks to the Nicobar pigeon, commonly known as "Siete colores," which is the flagship species of the municipality of Bataraza.

The activity entailed discussions on the Republic Act 7611 (SEP Law), RA 9147 (Wildlife Resources Conservation and Protection Act), legal basis and status of Flagship Species in Palawan, Palawan's wildlife endemism, biology of the Nicobar Pigeon, and the status of wildlife trafficking in Palawan.

Part of the activity is a session that focused on the development of a five-year action plan towards the conservation and protection of Nicobar pigeons as the flagship species of Bataraza.

The workshop's participants identified and ranked the following as the key threats to the declining population of Nicobar pigeons: a) competition for food, habitat, and space with other species on the island; b) habitat destruction due to predation, nest destruction, egg destruction, and climate change; c) poaching and/or hunting of Nicobar pigeons in nearby islets; d) limited information on the biology and presence of Nicobar pigeons at UIGRBS; e) disturbance and/or unregulated entry to the Ursula Island Game Refuge and Bird Sanctuary (UIGRBS); and f) low awareness in adjacent communities where Nicobar pigeon is present.

After identifying and ranking the threats faced by Nicobar pigeons, the participants were able to construct the necessary strategies and steps to address these challenges, as well as the relevant agencies and their involvement in the conservation and protection of Nicobar pigeons in Bataraza.

The participants' outputs will be submitted to the Sangguniang Bayan for approval and adoption.