

IX MEETING OF THE WORLD NETWORK OF ISLAND AND COASTAL BIOSPHERE RESERVES



The 9th Network Meeting was held in Gouritz Cluster Biosphere Reserve (GCBR) and the Hessequa region and delegates from 11 nations from all over the globe convened for this historic event. The event was noteworthy in that it was the first time that the meeting was held on African soil.

The theme of this year's conference was Coastlines in Balance. The group of the thirty-three delegates boasted a multitude of ages, cultures and languages – all sharing the single purpose and shared passion for protecting the natural environment.

The presentations covered a range of topics and addressed various challenges, each having relevance and applicability within the group. The theme of plastic waste appeared in many of the presentations, with many inspiring stories of mitigation actions, including a beach clean-up in Spain and the introduction of a “plastic/waste” museum in the Commander Islands (Russia) Additionally, themes throughout the presentations included environmental education and community involvement, all with a strong focus on getting the youth involved in biosphere reserve projects.

Delegates were treated to site visits on two occasions by Research Fellow for the African Centre for Coastal

Paleoscience (ACCP) (Nelson Mandela University) Dr Jan De Vynck, where they learnt about the region's rich history of early human development, as well as some fascinating botanical facts about the region. The group also enjoyed an excursion to one of the GCBR projects in the area – the Goukou Resilient River Project – where they learnt about the threats of invasive alien plants to biodiversity and water security in South Africa.

GCBR deserves the highest praise for organizing a successful conference, and the atmosphere could be described as one of renewed vigour and enthusiasm for the work at hand – the realisation that we are not alone in conserving the natural world; we are part of a global network that is as strong as it is large, and together we can confidently face the challenges that lie ahead.

For more information:

<http://www.islandbiosphere.org/Contingut.aspx?IdPubb=1222>

7TH UNESCO TRAINING COURSE FOR ICBR MANAGERS



The 7th UNESCO Training Course for Island and Coastal Biosphere Reserve Managers, organized by UNESCO MAB and Jeju Special Self-Governing Province and convened by Jeju Secretariat of WNICBR, took place on Jeju Island, the Republic of Korea from October 30th to November 1st, 2019.

A total of 9 participants participated in this event including Buenavista (Cuba), Garden Route (South Africa), Fuerteventura (Spain), Snake Island (China), Georgian Bay (Canada), Maccahbee/Bel Ombre (Mauritius), North Vidzeme (Latvia), Haiti MAB National Committee (Haiti) and Cu Lao Cham-Hoi An (Vietnam).

The participants took part in the official ceremony for the extension of Jeju Island BR where Shahbaz Khan, Director and Representative of UNESCO Regional Science Bureau for Asia and the Pacific delivered the keynote address titled, "The vision for World Network of Island and Coastal Biosphere Reserves."

The participatory session enabled the participants to share good practices and lessons learned with one another on issues such as waste management and education on sustainable development.

The field trip was accompanied by Dr. Jeon Yong-moon, a geologist in charge of UNESCO Jeju Global Geopark. While enjoying the wonders of nature, the participants were able to learn the formation process of Jeju Island.



JOIN ECO-FRIENDLY HOLIDAY CHALLENGE

This year the Commander Islands Biosphere Reserve is very inspired by raising interest in recycling and sustainable use. With the coming holiday season, which usually lasts in Russia from December 31 to January 7, we decided to create a festive atmosphere beforehand. We use social networks to invite everyone to take part in #WildWinter Challenge.



Home Decor for the New Year

#WILDWINTER with the Commander Islands

Every December week we will propose one of the tasks for the participants. The first one was published on December 2. That week the task was to share your ideas of eco-friendly Christmas and New Year decorations. While we are very eager to see the winners of the first week, our team feels like real elves preparing some presents.

We were pleasantly surprised to see that many people started sharing their stories about old and memorable decorations, which had been in the families for decades. Such objects hold the holiday spirit and help us avoid unnecessary single-use purchases. Moreover, the challenge is a fun way to learn and exchange old and new sustainable practices from different parts of the world.

Even though the challenge is not directly connected with unique mammals or rare plants, we believe that it is a valuable experiment of adding educational value and sharing the festive mood. Not creating a single piece of waste in the process, we do not harm local species and do not contribute to the Great Pacific Garbage Patch.

We invite you, your community, friends and family to join. Share your way of celebrating. Make your holidays merry for you and nature around!

Facebook:

<https://www.facebook.com/wastemuseum/>

Instagram:

<https://www.instagram.com/p/B5jr4UXhP8x/>

Vkontakte:

https://vk.com/commanderislands?w=wall-58344088_5818

EXPLORING THE GEORGIAN BAY BIOSPHERE: AMAZING PLACES AND BIOSPHERE WALKS

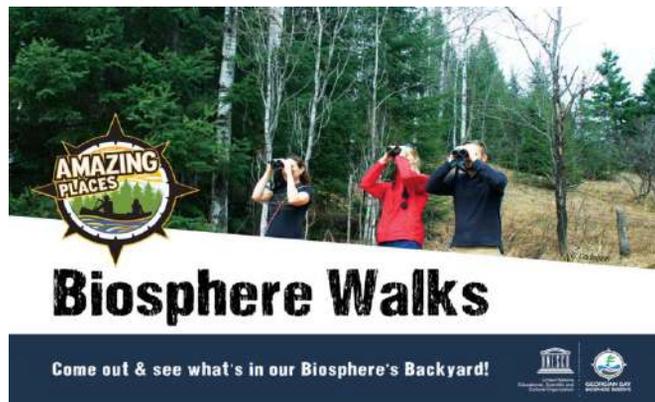
Written by Emara Streich, Sustainable Tourism Development Coordinator at the Georgian Bay BR

You will know an Amazing Place the moment you see it... it may be a visit so powerful and majestic that it will literally take your breath away.

The Georgian Bay Biosphere Reserve (GBBR) stretches 200 km from Port Severn to the French River along the eastern coast of Georgian Bay, in Ontario, Canada, and was designated by UNESCO in 2004. It is recognized for its biodiversity, and is the largest freshwater archipelago on earth: known as the 30,000 Islands.

Situated within the Robinson-Huron Treaty of 1850, the GBBR is located on Anishinaabek territory. Our organization acknowledges the Rights of Indigenous Peoples in this territory and work towards respectful and reciprocal relationships, as we are all caretakers of the land.

The GBBR is a non-profit registered Canadian charity with an office downtown Parry Sound. Our mission is to help create more resilient ecosystems and sustainable communities within eastern Georgian Bay. We rely solely on grants and donations to do conservation and education projects. For example, we work with 10 local schools, support 7 community gardens, and work with researchers on 52 species at risk, including the Massasauga rattlesnake and the Blanding's turtle.

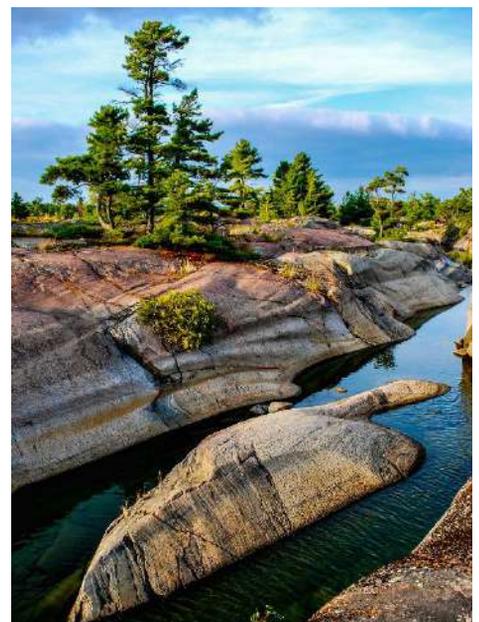


A newer program area at the GBBR is eco-tourism. In 2014 the Amazing Places program was launched in this biosphere, modeled after the Fundy Biosphere Reserve in Atlantic Canada. This is a collection of 20 must-see destinations throughout this region (see visitamazingplaces.ca) where people can hike, paddle, bike, ski, and more! These places were chosen for their breathtaking views, unique landscapes, and several other criteria, including the ability to handle increased visitation. Amazing Places tell a story about physical, biological, cultural and historical features. We encourage our social media followers to use the hashtag #AmazingGBay when posting pictures of their adventures!

The objectives of the Amazing Places program is to celebrate the landscape of our UNESCO Biosphere Reserve, connect residents and visitors with nature and culture, and to collaborate with partners to create meaningful, regional economic impact.

The collection of 20 Amazing Places is comprised of six parks, two Indigenous partners, as well as other iconic places within the biosphere, and several hundred kilometres of trails.

Grondine Park is 7,000 hectares of scenic wilderness landscape, and is owned and operated by Wikwemkoong Unceded Territory First Nation. Visitors can paddle or hike more than 20km worth of trails within the park. Cultural experiences are also offered here, including guided hikes and Anishinaabek song and drum teachings.



Point Grondine Park

The Waterfront Trail in Parry Sound is a favorite amongst locals, with its gentle terrain meandering along the iconic Georgian Bay shoreline. This trail is just over 3km, and began life as a rail spur line for the Canadian National and Canadian Pacific railroads. Today, people use it to enjoy the five fitness stations dispersed along the path, the artist stations (to commemorate Tom Thompson’s visit), or to simply take in the views. In the winter, cross-country skiing and fat biking is popular.



Waterfront Trail

The Massasauga Provincial Park is famous for its striking landscape of colorful gneiss rocks and geological patterns, narrow bays and inlets. This cluster of islands is accessed by boat only, and motorboats are not permitted on inland lakes –the best way to experience this Amazing Place is by paddling a canoe or kayak! It’s a popular destination for backcountry camping, and you can pick up a self-guided interpretive booklet with information corresponding to certain points along designated hiking trails.

Visitors to these remarkable destinations are strongly encouraged to do their part to keep these places “Amazing”, following Leave No Trace principles. An example of this is to tread lightly, and where applicable, follow routes for walking or cycling to preserve the integrity of the ecosystems. And of course, whatever you take in with you, take out! Be sure to discover the rich Indigenous cultures around Georgian Bay, and ask about local foods and culinary specialties. Support local businesses by purchasing any needed supplies or souvenirs from them.

“Biosphere Walks” are GBBR staff-led interpretive hikes throughout the biosphere region. They are often hosted at Amazing Places, including the Waterfront Trail in Parry Sound, the Rose Point Trail in Seguin,

and the School House Trail in Port Severn. Each event has themed topics, ranging from wildlife, tree ID, spring migration, and more! GBBR staff started experimenting with these by-donation events in 2018, and they have been gaining momentum since –with two walks boasting more than 40 participants each! These are offered year round, and include snowshoeing in the winter.

What makes these events so special is that they are excellent opportunities to bring members of the community together to learn about the Biosphere in their own backyard! Many participants have never been on the trails before, whether because they were simply unaware of them, or because they felt they had no companions to explore with. These guided hikes offer a fun, safe environment for people to connect with the natural world around them. Alternatively, some people who join the hikes have been on the trails countless times, but are seeking a deeper understanding of the area around them, and so they come to the experts to learn more. The donations received from guests on these hikes directly help continue more education and conservation programming with the biosphere.

To learn more about all Amazing Places within the Georgian Bay Biosphere, see visitamazingplaces.ca, and visit gbbbr.ca to stay updated with our other programming and initiatives. Follow us on Facebook and Instagram at [@GBayBiosphere](https://www.instagram.com/GBayBiosphere).



THE FUERTEVENTURA BIOSPHERE RESERVE AND THE NEED TO ADAPT ITS ACTION PLAN TO THE SUSTAINABLE DEVELOPMENT GOALS (SDGS).

Written by Antonio Gallardo Campos, Managing Director of the Biosphere Reserve of Fuerteventura (fuerteventurabiosfera@gmail.com)

The Lima Action Plan (MAB 2016) is committed to implementing the UN 2030 Program for Sustainable Development, both within and outside of the biosphere reserves, through the global dissemination of sustainability models developed in the reserves of the biosphere. The MAB Strategy foresees that, in the next 10 years, the MAB Program will focus its support on Member States and stakeholders in biodiversity conservation; the restoration and improvement of ecosystem services; the promotion of the sustainable use of natural resources; the contribution to a healthy and equal sustainable society, to an economy and a set of prosperous human settlements in harmony with the biosphere; the facilitation of biodiversity, sustainable science, training for sustainable development and capacity building, and support for climate change mitigation and adaptation to it, and other aspects of global climate change.

The Fuerteventura Biosphere Reserve that celebrates its 10th anniversary in May 2020 assumes the challenge of adapting its Action Plan to the new strategy derived from the Lima Action Plan and the UN 2030 Agenda set out in the SDGs. An Action Plan to be assumed by the Climate Emergency declaration made by the government of the island, the autonomous region and the European Parliament.

Although the objectives of the action plans inspired by the Madrid strategy are very similar to the current SDGs and Action Plans, a review is necessary considering the new problems facing the planet and especially in the field species conservation, ocean care and the Biosphere as a whole. As well as, the distribution of wealth societies, traditional cultures, climate and people's health. Changes that occur in an accelerated way and that require tools of analysis, execution and social consensus.

That numerous areas of the planet have declared the climatic emergency and call for a decisive action in reducing GHG and temperature is nothing more than the verification of the seriousness of the moment. The biosphere reserves must take up the challenge and contribute decisively to the search for solutions and in any case to implement sustainability measures and this must be done by incorporating the SDGs into their Action Plans and work schedules.



THE ELANDSBERG HAKEA CHALLENGE

Local action to control invasive alien trees in the Mountain Catchment Areas supplying water to the Ladismith area

One of the greatest threats to key water resource areas in the Mountain Catchment Areas of the Western Cape, South Africa are invasive alien trees. Dense infestations of hakea and pine trees generally result in more than a 10% increase in water loss to the atmosphere, and thus if these trees are not controlled this will result in a reduction in yield of many millions of litres of water, with potentially severe impacts on the businesses and farms which depend on this water, especially during droughts. This has particular relevance to Ladismith and the surrounding farms, with almost all of its water supplied by the Klein Swartberg Mountains.

Over the last 15 months, three volunteers (Donovan Kotze, Hugh Sussen and Samantha Adey) have been clearing invasive alien trees once or twice a month. Over this time, they have systematically covered over 1 500 hectares of mainly sparsely infested areas and have cut down more than 4 200 trees. However, to win the battle several more people were required to become involved.

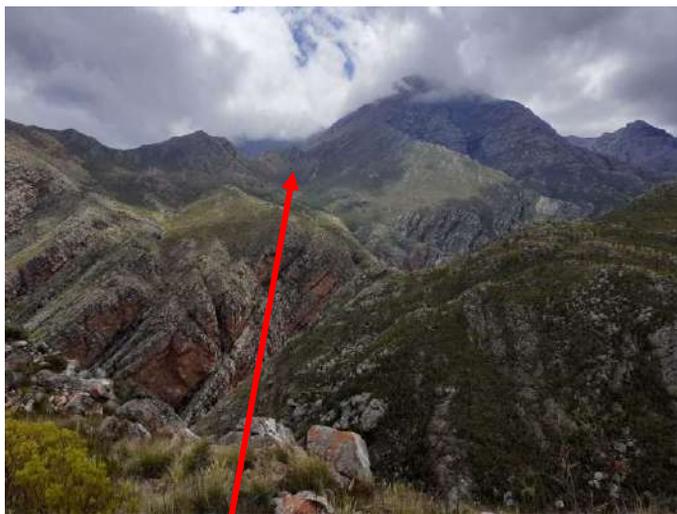
In an attempt to draw more people into clearing invasive alien plants, the team organised the Elandsberg Hakea Challenge with the goal of cutting down at least 3 000 invasive alien trees. The challenge was advertised through local contacts and social media and included two clearing events.

A total of seven volunteers undertook the first Elandsberg hakea challenge on 9 November 2019 and managed to cut down about 1 650 trees and clear 2 hectares. The challenge continued on 15 November with eight farmworkers and the team did really well to clear another 2 hectares and approximately 2 700 trees.

The Gouritz Cluster Biosphere Reserve (GCBR) sponsored gloves and saws for the events and is very proud of the teams' achievements and for exceeding their target and all in two days!

For more information:

<https://gouritz.com/2019/11/27/the-eldandsberg-hakea-challenge-report-back-and-way-forward/>



The location of the November 2019 Hakea challenge on the slopes of the Elandsberg, in a strategically important area between generally very low infestations in the west and several high infestations in the east

BIO-CULTURAL HERITAGE TOURISM PROJECT

At the beginning of October, the Iroise Islands and Sea Biosphere Reserve organised the "Local Heritage and Sustainable Tourism in Iroise" seminar.

This is the 2nd seminar proposed as part of the INTERREG Bio-cultural Heritage Tourism (BCHT) project, which brought together some sixty participants. We welcomed our English and French partners to the Iroise Biosphere Reserve: the English partner biosphere reserves North Devon and Brighton and Lewes Down, and the French partner Marais Audomarois, as well as the associate partners the University of Exeter in England and the departmental agency Pas de Calais Tourisme.



Over the three days of meetings, one day was devoted to presenting the progress of the BCHT project over the past year.

Participants participated in various workshops on issues related to the project, such as "how to mobilize tourism professionals in favour of sustainable development" or "how to enhance under or over visited sites in their Biosphere Reserve through innovative tourism activities?".

The other two days in Ushant Island and Molène Island provided participants with a forum for exchanges between eco-actors of biosphere reserves on the tourist activities in which they participated. Most of the activities were led by the eco-actors of the Iroise Biosphere Reserve, such as a visit to the only agricultural project of the Molène Island or the manufacture of cosmetics based on natural resources proposed by the Savonnerie d'Ouessant.

Subscribe to the Facebook page @Iroise UNESCO Biosphere Reserve to get all the latest news!

And to discover more about the BCHT project: <https://www.bcht.eu/> and Twitter: #BCHT Project

THE NEST TO OCEAN PROGRAM IN THE GREAT SANDY BIOSPHERE, AUSTRALIA

The coastline of the Great Sandy Biosphere is internationally renowned for its marine turtle nesting sites. These sites support significant breeding populations of vulnerable Green and Flatback turtles, as well as over 50% of the endangered Loggerhead turtles within the South Pacific Ocean.

Turtles are seasoned travelers by the time they arrive to nest within the Great Sandy Biosphere. These turtles spend decades journeying across the Pacific Ocean before reaching maturity and returning to lay eggs at the same beach where they were born.

These iconic species experience a range of serious threats to their survival, including climate change, pollution and changes to habitats. Other threats include predation of eggs and hatchlings by introduced pests such as feral pigs, dogs and the European red fox.

The “Nest to Ocean” Turtle Protection program is an ongoing commitment by the Australian and Queensland Governments to protect marine turtle nesting sites from these introduced predators.

The Nest to Ocean program particularly targets the region’s fox population through deployment of conservation detection dogs to locate and fumigate fox dens. Foxes dispersing into the area from adjacent habitats will continue to use old dens in subsequent seasons. These dens are mapped to enable ranger teams to revisit dens and implement control actions such as fumigation and trapping prior to future turtle nesting seasons. The use of soft-jaw foot-hold traps outside fumigated dens has proved an effective way to intercept returning and adolescent foxes.

The continued involvement of the region’s Traditional Owners, including the Gidarjil Development Corporation’s Land and Sea Ranger team, enhances the sense of community stewardship within the Nest to Ocean program. Local communities, particularly school students, are always keen to interact with rangers and learn about their contribution to preserving one of our region’s oldest natural wonders.



Figure 1 Technical officer, Tom Garrett, searching for fox dens with conservation detection dog, Rocky.



Figure 2 Green sea turtle visiting a coral reef within the Great Sandy



Figure 3 Sea ranger, Kelvin Rowe, with an emerging nest of loggerhead turtle hatchlings that had been protected from foxes and goannas

LA PALMA BIOSPHERE RESERVE AND THE CANARY HEALTH SERVICE SET TO DISSEMINATE GOOD ENVIRONMENTAL PRACTICES IN THE HOSPITAL AND HEALTH CENTERS OF THE ISLAND

Mariano H. Zapata, the president of the La Palma World Biosphere Reserve Foundation, Kilian Sánchez, the director of the La Palma Health Area, and Mercedes Coello, the health services manager on the Island, signed an agreement to disseminate good environmental practices, which will not only result in the improvement of residents' quality of life and health but also contribute to a greater humanization of the General Hospital of La Palma and of the health centers of the Island.

The document states that the objective of this agreement is to facilitate the dissemination of the ethical values and commitments of residing in a territory declared the biosphere reserve, authorizing the use of informative materials of the La Palma Biosphere Reserve in all health centers of the Island, while the Reserve itself will distribute and replace it if necessary.



STUDENTS IN THE DOCTORAL PROGRAM OF PROTECTED NATURAL AREAS CARRY OUT THEIR PRACTICES IN THE LA PALMA BIOSPHERE RESERVE

Three students studying for Ph.D. program in Protected Natural Areas carried out their training practices in La Palma Biosphere Reserve, organized by three Spanish universities (Autonomous University of Madrid, Complutense University and the University of Alcalá), through the Fernando González Bernáldez Foundation, and in collaboration with EUROPARC-Spain.

The work carried out was framed in the Preparatory Phase of the Active protection and integrated management of Nature 2000 Network in Azores project "LIFE-IP AZORES NATURE", project led by the Regional Directorate of the Environment of Azores (DRA), in which this institution participates as a beneficiary partner and whose action consists in the design, testing and evaluation in the project islands, of an operational framework for prevention, early warning and rapid response to invasive alien species.

The students have learned some protected natural areas of the Island, where they have also shared experiences with other trainees and the National Park staff.

SUSTAINABLE DEVELOPMENT GOALS BOOK CLUB LAUNCHED IN LOCAL PRIMARY SCHOOLS

Primary school pupils will learn about the United Nations' Sustainable Development Goals as a result of a gift from UNESCO Biosphere Isle of Man.

As a UNESCO Biosphere, the Isle of Man is committed to working towards a more sustainable future. Globally, sustainability is driven by the United Nations' 17 Sustainable Development Goals, or Global Goals.

The SDG Book Club is launched to assist children aged six to 12 to learn about the Global Goals. Each month, for 17 months, a panel is selecting books that will be impactful for children throughout the world.

UNESCO Biosphere Isle of Man is providing a set of books for each Isle of Man primary school, building a Global Goals library. Schools are also encouraged to undertake SDG Book Club activities.

Geoffrey Boot MHK, Minister for Environment, Food and Agriculture, dropped into St John's Primary School today to launch the initiative and deliver the first three books, covering poverty, health and wellbeing and gender equality.

He said: 'The Global Goals provide a framework for people, the planet, prosperity, peace and partnerships. SDG Book Club books address these big issues in a child-friendly way. We are pleased to have sourced the books through local bookshops. I hope they will provide a thought-provoking and stimulating addition to school libraries.'



Photo shows Minister Boot presenting the first SDG Book Club books to pupils of St John's Primary School.

A STUDY ON MILLENNIALS BEHAVIOR TOWARDS NORTH VIDZEME BIOSPHERE RESERVE IN LATVIA

"No one will protect what they don't care about; and no one will care about what they have never experienced" — David Attenborough

Due to climate change and becoming biodiversity crisis, it is needed to pay attention to new generations relationship with protected areas. Gen Z (born 2000-2013) and Gen Y (born 1982-1999) is important target group for visiting national parks and biosphere reserves, particularly in the future. Do they visit and revisit nature-protected areas and do they pay special attention to them, as well – what motivates to visit these areas – are questions that comes in focus in latest researches.

The internationally recognized UNESCO chair on Biosphere and Man was established in 2019, in the Vidzeme University of Applied Sciences - the only university in this region. It was designed to raise awareness of the ideas of the Biosphere Reserve in society and to strengthen stakeholder cooperation in the realization of this concept, as well it opens more opportunities for scientific researches in specific territory and it is one of the ways to raise awareness of importance of reserve between students.

Between May and August 2019, an online survey of the behavior of Gen Z and Gen Y towards biosphere reserve in Latvia (target audience 15-25 years old youth) was held by Vidzeme University of Applied Sciences with the main purpose to explore motivation and influencing factors for young people to visit the North Vidzeme Biosphere Reserve (NVBR). The novelty of the work is that for the first time in Latvia the potential target audience of protected area is divided into generations.

NVBR was chosen as a study area, because it is the largest protected area in Latvia, covering the 7% of total area of Latvia. The reserve was established in 1997 and already on December 15, 1997, recognized as a protected territory of international importance in the framework of the UNESCO program Man and Biosphere. NVBR represents the terrestrial and coastal

Baltic sea ecosystems, covering also river basins of the coast of Gulf Riga. It includes 10 counties – fully and partially - with a total area of 457,708 hectares. More than a half of NVBR terrestrial area is covered by forests and swamps. Studies on youth behavior in the NVBR have been ongoing since 2007. Tendencies shows that knowledge and recognition of area is decreasing. Although, they are visiting reserve or even living in it, they do not know that it is a part of North Vidzeme Biosphere reserve.

Results showed that actually there is differences between mentioned two age groups. The average age of the respondents (n=295) was 18.9 years. Of all participants, 65% were young people in the age group 15-19, and 35% in the 20-25 age group. 25% of the respondents live in the BR area, 65% have visited it at least once. Results showed that all respondents are with high interest 51%, to do activities in nature. Most popular activities are hikes, walks, cycling and swimming also sightseeing. As other activities what Gen Y likes to do outside is geocaching, doing sport games (football, volleyball, etc.). All respondents were rising interest about walking trails in bogs, which underline motivation to escape daily routine and gives unique experience. Even walking and hiking were top activities, respondents had less information about 4 long distance routes that crosses biosphere reserve. In tourist sites it is necessary to have rest rooms 93%, tourism information 66% and free parking 55%. GEN Z were more interested in local beverage and products to buy. Talking about information, Gen Y is more important than Gen Z to have historical information in the tourist site. Most popular channels for searching information are Internet 63%, friends and family – 50% and social network Facebook.com 55%. Gen Z would like to receive information also in Snapchat. The motivations to visit biosphere reserve were relieves stress and alleviates tension, to socialize, escape from daily life, doing activities and sporting, to vitalize respondent's daily life and enrich knowledge, as well as to gain new and unique experience. Both groups have shown that information and ads are too less about biosphere reserve, but they would visit are, if their friends would visit it and post beautiful photography's in social media.

For more information about research, please contact Anda Arklina (UNESCO Chair in Biosphere and Man, Institute of Social, Economic and Humanities Research of Vidzeme University of Applied Sciences) anda.arklina@va.lv

About North Vidzeme Biosphere Reserve in Latvia - https://www.daba.gov.lv/public/eng/protected_areas/north_vidzeme_biosphere_reserve/



© Andris Soms Nature Conservation Agency of Latvia

Young participants in hiking event with geology experts along Baltic sea coastline 2019, North Vidzeme BR

ZERO PLASTIC WORKING GROUP UPDATES

The 2nd Zero Plastic News Bulletin was published in October, 2019. In it we welcome new Zero Plastic member, Islands of Iroise Sea Biosphere Reserve, share summaries from the Zero Plastic presentation during the IX Meeting of the WNICBR in South Africa and the Annual Meeting of the Spanish Board of Biosphere Reserve Managers, highlight efforts such as the CAPONLITTER INTERREG Europe Project in Gran Canaria, "Creando Con Ciencia" in Fuerteventura, share a focus the Urdaibai and Isle of Mann Biosphere Reserves taking actions against plastic pollution, and shine a spotlight on several examples of plastic-related policies. To read more, here's the link: [\[http://zeroplastic.islandbiosphere.org/Contingut.aspx?IdPub=1028\]](http://zeroplastic.islandbiosphere.org/Contingut.aspx?IdPub=1028)

Members from the Biosphere Reserves of Lanzarote and Menorca, along with members of the international research network Marine Sciences For Society, have written an article entitled, "Plastic as a force of social disintegration: Kilometer zero and Zero Plastic, two sides of the same coin," to be published in

an upcoming edition, *Ecologista* nº 102, of the *Ecologistas en Acción* magazine (<https://www.ecologistasenaccion.org/revista/>). The article reflects on the ways in which plastics have facilitated globalized exchanges of goods that once were obtained locally, at "kilometer zero", and how this change has contributed to breaking ties of communal interdependence and increasing social-environmental injustices. We call for all sectors of society, particularly politicians and industry leaders, to commit to rediscovering who we are through our human and material relations, and engage in processes of social reintegration to get us to kilometer zero and zero plastic.

Members of the Zero Plastic working group are beginning to propose collaborative efforts, such as a Waste Museum managed by the Commander Islands Nature and Biosphere Reserve -- more details to come in the 3rd edition of the Zero Plastic News Bulletin, January 2020.

ZERO PLASTIC

WORLD NETWORK OF BIOSPHERE RESERVES

For more information:

<http://zeroplastic.islandbiosphere.org/>

2ND ASTROTOURISM STARLIGHT MEETING

Last November Menorca hosted the 2nd Astrotourism Starlight Meeting, the only global forum on star tourism, which gathered more than 50 representatives including managers and specialized tourist lodgings, experts in lighting, energy efficiency and measurement of the quality of the night sky, specialized guides and reporters, and representatives of international Starlight territories such as Canada, Portugal, Colombia and Chile, and from different parts of Spain as the Canary islands, Andalusia, Galicia, Castile and León, Castilla-La Mancha, Extremadura and Catalonia.

The meeting included different presentations and debates to share experiences about astrotourism, discuss the opportunities that it brings in terms of sustainable tourism and understand the advantages and the implementation processes of this kind of tourism, which aims to protect and highlight a territory's night sky and connect it to its cultural, historical, gastronomical and ethnological values.

The first Starlight International Awards took place during the meeting. These rewarded the work of territories, companies and initiatives related with the night sky whose main objectives are to protect it, to culturally disseminate astronomy, to promote the tourism of the stars and to fight against light pollution.

Moreover, the first Starlight International Awards took place during the meeting. These rewarded the work of territories, companies and initiatives related with the night sky whose main objectives are to protect it, to culturally disseminate astronomy, to promote the tourism of the stars and to fight against light pollution.

<http://www.biosferamenorca.org/Contingut.aspx?IDIOMA=3&idpub=4022>



FROM PALAWAN BR AND BEYOND: 2019 INTERNATIONAL CONFERENCE ON BIOSPHERE AND SUSTAINABILITY



Starting off as a national research symposium, the Conference on Biosphere and Sustainability has expanded over the years to an international networking event of researchers and experts. In collaboration with academic, government & civil society partner through the Palawan Knowledge Platform, Palawan BR's management authority (Palawan Council for Sustainable Development), has been hosting the annual conference since 2013.

Around 250 participants joined the 2019 International Conference last 24-26 July 2019 held in Puerto Princesa City in Palawan BR, the Philippines. Local and international experts, researchers, delegates and students gathered together to share their research endeavors, and discuss and collaborate on issues tackling the environment and sustainability. Four sessions gave insights into the research fields of (1) Biosphere Reserves, Climate Change Resilience and Sustainability; (2) Ecological and Biophysical Systems; (3) Human and Social Systems; and (4) Economic Systems, Innovation and Technology. The conference showcased a total of 82 researches/studies conducted in Palawan and throughout the Philippines, which was composed of 49 oral and 33 poster presentations.

Welcome messages were given by UNESCO-Philippines' Lindsay Barrientos, Palawan Vice Governor Victorino Dennis Socrates, Puerto Princesa City Vice Mayor Maria Nancy Socrates and Palawan Council for Sustainable Development Executive Director Nelson Devanadera. Keynote speeches were delivered by Dr. Antonio de Abreu, Biosphere Reserve Expert from Portugal and UNESCO-MAB Consultant, and Ms. Armida Andres of the Department of Environment and Natural Resources-Biodiversity Management Bureau.

Dr. Abreu emphasized that UNESCO seeks to build peace thru international cooperation in education, science, and culture. A notable plenary presentation was delivered by Dr. Dai-Yeun Jeong of Asia Climate Change Education Center and Jeju National University, who presented the framework for achieving a carbon-free society. Other presenters are: Dr. Rafe Brown (University of Kansas), Dr. Devendra Saroj (University of Surrey), Dr. Paulina Maria Neisch (City University of Hong Kong), Dr. Dominique Caouette (University of Montreal), Dr. Anthony Shun Fung Chiu (De La Salle University-Manila), Dr. Roy G. Ponce (Davao Oriental State College of Science and Technology), Mr. Anders Haagen (Lionheart Farms Philippines Corporation), Mr. Frederic Tardieu (Sulubai Environmental Foundation), Ms. Val Angelie Ungson (Tubbataha Reefs Natural Park), and Ms. Aubrey Jayne Padilla (Centre for Sustainability).

To put emphasis on exchange of ideas and opinions on the important issues confronting the BRs, panel discussions were held on the second and third day of the conference, focusing on the topics of 1) Biodiversity and Sustainable Development and 2) Social Sustainability and the United Nations Sustainable Development Goals. Diverse opinions were heard from the discussants representing the academe, industries, civil society, and government institution.

The research-conference also featured and showcased projects and programs being conducted in UNESCO-designated sites, the Tubbataha Reefs Natural Park and Puerto Princesa Subterranean River National Park, and the Palawan BR itself, through the UNESCO-Philippines exhibits. By recognizing the need to continuously improve the knowledge base and provide the latest scientific information, the organizers committed to holding this international research-conference annually. The key local academic partners in this conference were Palawan State University, Western Philippines University, Holy Trinity University, Palawan Polytechnic College, Inc., and Fullbright College.

https://pcsd.gov.ph/igov/biosphere-2019/?fbclid=IwAR3_cVV_loPf5QjoFstKZFvKLIKli1Wqj1t3eR15T6rtmNZaZCfZyM_riMU

URDAIBAI BIOSPHERE RESERVE ORGANIZES THE I INTERNATIONAL CONGRESS: CREATING BRIDGES BETWEEN SCIENCE AND MANAGEMENT IN BIOSPHERE RESERVES (NOVEMBER 13 – 15)

Urdaibai Biosphere Reserve has hosted the I International Congress from November 13 to 15: Creating Bridges between Science and Management in Biosphere Reserves. Towards sustainable and resilient societies and territories through contributions to the 2030 Sustainability Agenda.

The main objective of the Congress has been to establish the research lines for the next 10 years, which address the knowledge needs for management and sustainable development in the Biosphere Reserves. The appointment has sought to achieve the Plan for Interpretation, Research, Training and Education for Sustainable Development (PICE-IGHP) 2015-2025 of the Urdaibai Biosphere Reserve, whose main objectives are the identification of scientific work which is carried out around the Biosphere Reserves, their possibilities of application to management and the integration of this knowledge with the Sustainable Development Goals (SDGs) of the 2030 Agenda.

Participation has been a fundamental axis of the Congress, where discussion tables and work dynamics that integrate knowledge needs for management and research activity have been raised. The three conference days have been structured based on the achievement of the Sustainable Development Goals of the 2030 Agenda, and have been divided into 4 sessions: Planet, Society, Prosperity, and finally, Alliances and Education. The 4 sessions have been attended by more than 40 experts and almost 100 attendees. The day of November 13, has dealt with the 9 of the 17 SDGs linked to the Planet y Society, with the collaboration of Carlos Montes, Professor of Ecology at the Autonomous University of Madrid. On November 14 instead, the act will deal with the 8 remaining SDGs, grouped in the Prosperity and Partnerships sessions, and will be attended by Dr. Erik Gómez-Baggethun of the Norwegian University of

Sciences of the Life and the Institute of Environmental Change of the University of Oxford. Finally, on November 15, and after the presentation of Sergio Guevara, President of the Council International Coordination Program Man and Biosphere, the day has focused on the presentation of the results of the participation process, both researchers and managers and in establishing the lines of research for the next 10 years.



<https://www.uik.eus/es/kudeaketa-eta-zientziaren-arteko-zubiak-eraikitzen-iraunkortasunerako-ikerketa-biosfera-erreserbetan>

THE XV INTERNATIONAL NATURE CONSERVATION FORUM HAS BEEN HELD IN THE URDAIBAI BIOSPHERE RESERVE FROM OCTOBER 23 TO 25, 2019

The Urdaibai Biosphere Reserve has hosted the XV International Nature Conservation Forum, whose institutional opening has been attended by Aitor Zulueta, director of Natural Heritage and Climate Change of the Basque Government. In his speech, Zulueta stressed that "we have to reflect on what the vision of society is and how we want to relate to nature." He has also pointed out that "society expects science to free us from responsibility and allow us to continue consuming. The important thing is that we change our habits."

The XV International Nature Conservation Forum is the main annual meeting of the Spanish Committee of the International Union of Conservation of Nature (IUCN). The Forum began on October 23 with the celebration of the CeUICN Members Assembly. The day of October 24, open to the public, has had 90 attendees who will have the opportunity to hear the presentations of experts on conservation, climate change and nature-based solutions.

Aitor Zulueta has begun the presentations with the presentation of the draft Basque Law on Climate Change, noting that "Basque Country assumes the principle of shared responsibility aware of the impacts and risks that loom over the planet." The Basque Law on Climate Change aims to define a framework for action to achieve the goals set in the Climate Change Strategy KLIMA 2050. The act has concluded on the 25th, the day on which the draft IUCN Program 2021-2024 has been presented and the strategic lines of the IUCN Mediterranean program 2021-2024. The day has ended with a field trip to the Interpretation Center of the Urdaibai Biosphere Reserve and the San Kristobal Bird Observatory (Busturia, Urdaibai).



<http://www.uicn.es/foroceuicn2019/>

RACE FOR WATER ODYSSEY VISITS PALAWAN BIOSPHERE RESERVE (PHILIPPINES)

On September 19 to October 6, 2019 students, researchers, government officials, leaders, business and civil society from Palawan and the Philippines came to Puerto Princesa City and Pangatalan Island in Taytay Municipality to see the world's largest solar-powered catamaran in anchorage in Palawan BR.

The Swiss-registered vessel with French crew, under the auspices of the Race for Water Foundation, is on voyage around the world to raise awareness on plastic pollution and show innovative solutions and business models that give value to plastic waste and encourage its collection. The vessel gained praises from people around the world due to its special design that models transition to renewable energy, as it is hundred-percent powered by the sun, water, and wind.

This is not the first time the Race for Water Foundation has set out in an odyssey. In 2015, they made a global assessment of marine plastic pollution where they concluded that "plastic islands" do not exist. Instead, only 1 to 3 percent of plastic pollution remains on the surface and the rest makes the ocean a "veritable toxic soup of microplastics" that is impossible to clean up. Since then, the foundation decided to direct its attention in dealing with the source of the problem-- not on the waters, but on the land.

During the press conference on-board the vessel, the crew presented the foundation's biogreen solution that converts plastic waste into energy. This greener technology was designed by the Race for Water and developed by the company ETIA.

The visit of the Race for Water team in Palawan was made possible through the efforts of Sulubai Environmental Foundation (<https://sulubai-foundation.com/>), a valuable partner of the Palawan Council for Sustainable Development (PCSD), the BR's management authority and the local government units in Palawan. The Foundation recently signed as member of the Palawan Knowledge Platform for Biodiversity and Sustainable Development (www.pkp.pcsd.gov.ph).

