**COMMON WADDEN SEA SECRETARIAT** TRILATERAL WADDEN SEA COOPERATION ANNUAL REPORT 2021







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ast year we introduced a new version of the annual report with topical articles, interviews, and profiles, as well as progress reports of the many projects currently underway in the cooperation. Now, the second annual report of the Common Wadden Sea Secretariat (CWSS) is in your hands. It gives you an overview of the main activities in 2021, when although the restrictions of the Covid19 pandemic still prevented many meetings, we managed to carry out much work — of course mostly in virtual space.

The overarching theme for this year is Wadden Sea Science in the Trilateral Wadden Sea Cooperation. The lead article looks at how we engage more young researchers and scientists in the Wadden Sea including interviews with students about their work in the area. This year also saw the commencement of the Trilateral Programming Committee on Wadden Sea Research, aimed at strengthening the cooperation with scientists, to discuss trilateral topics and to identify funding sources.

Collaboration with our partners is at the heart of Wadden Sea work and we are very happy that the Prowad Link project is extended until December 2022. Stakeholders are actively included in the various Prowad Link projects, across the five partner nations, which gives them an opportunity to contribute to the conservation and development of the site. You can also read about the progress with the Partnership Hub, which has seen an increase in new initiatives as well.

The seal agreement, the guiding principle for monitoring and management in the Wadden Sea, celebrates its 30-year anniversary, and is reflected on by Dr. Christian Buschbaum and Dr Ursula Siebert

The single integrated management plan (SIMP) is an important step to improving the coordination of management and maintenance of the Outstanding Universal Value of the Wadden Sea across the three countries. The SIMP has been intensively discussed, it is shaping up well and a progress report is given.

The German presidency in the Trilateral Wadden Sea Cooperation will finish next year, and already the preparations are starting for the Trilateral Governmental Conference (29 Nov - 1 Dec 2022). The main targets of the four-year period were, amongst several others, the completion of the SIMP, devel-

opment of the Partnership Hub and the Wadden Sea Foundation. Ilka Wagner, Hans Gabanyi, Ingelore Hering and Vera Knoke, the German representatives on the Wadden Sea Board, give a short overview of the German presidency.

For the first time the Flyway Youth Forum (FYF) was hosted by the Wadden Sea, and focussed on conservation along the East Atlantic Flyway. Held online over two weekends in September, the FYF invited young people to participate and become engaged in the Wadden Sea Flyway Initiative, which also celebrates a ten-year anniversary this year.

This year has also seen the addition of younger members of staff in the Secretariat, and you can read about Amelie Banke, Lars Weber and Marine Perrin's views on youth engagement in our work.

We welcome new faces in the office: Kristine Meise for Flyway and biodiversity themes, and Ditte Hviid leading communications, while Annika Bostelmann is on maternity leave.

We wish you an interesting reading.

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Karin Lochte Chairperson of the Wadden Sea Board







### **PERSPECTIVES FROM CWSS**

The following article by **Professor Kai** Jensen and Dr Stefanie Nolte gives a **German perspective** on an issue which is prevalent in all three countries of the Wadden Sea, namely, how to grasp the opportunities for engaging young **scientists in research** pertaining to the area. Next year sees the first ever **Youth Conference** to be held in connection with the Trilateral Governmental Conference in Wilhelmshaven in November. The Youth Conference, which aims to bring together young people from across the entire Wadden Sea Region, is an effort to inform and involve them in the many faceted work of the Trilateral Wadden Sea Cooperation. As we start to engage more young people in our work, it is important to maintain the strong links between the three countries, in order to ensure that **future work** in the Wadden Sea maintains the trilateral interchange **and perspective.** The article regarding the German efforts and opportunities on behalf of young scientists could serve as a stepping stone to further cement the international understanding and cooperation.

n the past few years young people have become more and more worried and outspoken about biodiversity loss, climate change, and what they perceive to be the inactivity of current policymakers. We have all seen the pictures on the news of the then 15-year-old Greta Thunberg protesting, which led to the development into the youth-led 'Fridays for Future' movement. In a recent study, nearly 60% of young people said they felt very worried or extremely worried about climate change (Hickman et al 2021). Young people have also become increasingly interested in the effects of climate change on nature and human societies, and many young people now try to reduce their personal carbon dioxide footprint by for example preferring to travel by public transport or by following a vegetarian or even vegan lifestyle. In Germany, for example, the highest proportion of vegetarians is found in the age-group of 18- to 29-year-olds (Mensinck et al. 2016).

This is also the time in life when young people choose a career and for some the climate and biodiversity crisis might be an incentive to study or work in fields relevant to those topics. But do these interested and dedicated young people only see the problems in far-away ecosystems such as the Amazon Rainforests and the Great Barrier Reef: or do young people living in the Netherlands, Germany and Denmark know about the current status and global relevance of the Wadden Sea? By 2014 the entire Wadden Sea had been declared a World Heritage site with nature of Outstanding Universal Value. At that time, current first semester students would have probably been in primary school. So how could we en-

courage young people to consider a career in research in the Wadden Sea? In our opinion, we as 'senior Wadden Sea scientists' have a specific responsibility to encourage young people to carry out research in the Wadden Sea. We have a variety of opportunities to do so, for example by teaching undergraduate and graduate students, but also by involving students and early career scientists in research projects.

### Teaching in the Wadden Sea

An important first step for involving and encouraging students to become

Wadden Sea scientists is teaching. To the best of our knowledge, there is currently no existing undergraduate or graduate programme with a specific focus on the Wadden Sea. Nevertheless, several universities in The Netherlands Germany and Denmark offer specific classes on the different aspects of the Wadden Sea. At Universität Hamburg, where we both have gained most of our teaching experience, classes related to the Wadden Sea and its larger estuaries, span from ecological topics like landscape development, adaptations of animal and plant species, and

ecosystems ecology, to human geography and even history. Classes are taught at the undergraduate (Bachelor) and the graduate (Master) level and include lectures, seminars, as well as lab and field courses. In our experience, creating a lasting awareness of any issue, including the Wadden Sea, largely relies on two pillars: Connecting the content of the class to everyday life and the challenges for the students, and including hands-on exercises. Climate change, associated sea-level rise, and biodiversity loss are topics relevant to current Wadden Sea research with

which we can 'catch' students' attention. Lab and field-based classes give hands-on experience in the adaptation of plants and animals to site conditions of specific habitats and/or on management effects on Wadden Sea ecosystems. To find out more about the students' viewpoint, we have asked two students to tell us more about their experience (see Interviews p. 6).

In our opinion, nearly 40 years after the initiation of the Trilateral Wadden Sea Cooperation and about 15 years after harmonising undergraduate and-





NADINE HAUSCHILD

What study programme do you currently attend and what is your major motivation for attending this specific programme? I am currently a Bachelor student of Biology at the University of Hamburg. I am writing my bachelor thesis within the NordSalt project, which studies the effects of climate change of salt marshes of the Baltic Sea in Finland, Sweden and Denmark. My major motivation lies within the huge topic of climate change. The salt marshes are one of those major carbon fixators and therefore important for the whole discussion for keeping the 1,5°C goal.

Did you attend classes in which any aspects on the Wadden Sea were taught? If yes, how did this class/these classes change your perception of the Wadden Sea?

I attended a class that dealt with the landscapes of northern Germany, and of course the Wadden Sea is part of that. We didn't actually talk that much about the Wadden Sea itself, but again about the wetlands on the coasts of the North Sea. So my perception hasn't changed. But the Wadden Sea is the largest habitat of its kind and rightfully protected as such. It is home to

a lot of (endangered) species and a special landscape that you cannot find anywhere else on earth to this extent.

Are you aware of ongoing research in the Wadden Sea region and would you be interested to contribute to this research?

Yes, I am aware of ongoing research, again mostly of the impacts of climate change. I am also interested to contribute to this research, for the same reasons I am interested in the NordSalt project.

What would you like to do after finishing the current programme? After I finish my bachelor thesis, I am starting the Master of Science again at the University of Hamburg. After that I hope I can find someplace within this topic, whether as a researcher or as staff e.g., at a national park.



**MADS ESKILDSEN** 

What study programme do you currently attend and what is your major motivation for attending this specific programme? I am a M.Sc. Biology student at the University of Hamburg, attending only classes with focus on biodiversity, ecology, and

evolution. I already did my Bachelor thesis in the context of avian ecology (feeding analysis of black-headed gulls). Following this, my aim was to learn more in the field of avian ecology with special focus on Wadden Sea birds. Thus, I chose my classes to gain as much knowledge as possible about the Wadden Sea in general.

Did you attend classes in which any aspects of the Wadden Sea were taught? If yes, how did this class/these classes change your perception of the Wadden Sea?

Yes, I put special emphasis on choosing classes with Wadden Sea reference. Due to sea level rises near vicinity of the coast, I often visited the Wadden Sea to study its flora and fauna. So, these classes could not change my perception of the Wadden Sea at all, but they were able to give me a more complete and deeper impression of it. Especially the interconnectedness of so many small factors working together to build such a great and unique ecosystem fascinates me a lot.

Are you aware of ongoing research in the Wadden Sea region and would you be interested to contribute to this research? I really am interested in recently published literature to get an overview of what is new in the Wadden Sea. But there are so many different scientific disciplines being researched in the Wadden Sea, that it is impossible to read every new paper. I concentrate

my efforts in my favoured disciplines to be able to contribute to research in those areas in near future.

What would you like to do after finishing the current programme? I had different jobs as research assistant to get an insight of what

is going on in research institutions along the western coast of Schleswig-Holstein. During these periods I was able to learn from these researchers and gain knowledge in different scientific fields like benthology or avian ecology. So, these experiences encouraged me to imagine starting a scientific career after finishing my thesis.

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graduate programmes all over the European Union through the so-called Bologona-Process, time is ripe to establish an international MSc programme with focus on the Wadden Sea. This (two years) MSc programme could be hosted by for example three universities located in each of the different countries along the Wadden Sea coast. In the first year, students could attend classes at each of the universities. These classes could span from humanities (history of the Wadden Sea, coastal communities and climate change, and governance of the Wadden Sea), via classes of biophysical and biogeochemical processes to biology, ecology, and nature conservation (such as ecosystem ecology and nature conservation in the Wadden Sea). In the second year of the programme, students would work on their thesis, preferably associated to ongoing research in the Wadden Sea.

### Research in the Wadden Sea with focus on PhDs and post doctorates

After a MSc, young researchers must decide whether they want to further pursue research by doing a PhD, where the Wadden Sea offers many interesting opportunities in various fields. An excellent overview of the diversity of topics can be found on the homepage of the Waddenacademie, the Dutch organisation focussed on the development of a sustainable knowledge structure for the Wadden Sea Region, where PhD-students can upload their finished dissertation to a repository. Most of these dissertations have been submitted to the Waddenacademie repository by PhD-students from the Netherlands, but according to their homepage the organisation would like to encourage students from German, Danish or other universities to submit their work as well. The Waddenacademie repository clearly shows the wide variety of fields and topics of Wadden Sea PhD-projects. These fields include social sciences, engineering, economics, archaeology, linguistics, and the natural sciences. Indeed, the latter seems to be the majority and most studies are probably from the geo- and biological sciences Within the biological sciences we again find a wide variety of ecosystems and organisms being studied including plants, fish, invertebrates, and, of course, birds. There are also studies focussing on the processes, interactions and adaptations which are relevant for understanding the effects of climate change and for acting to combat it. The bibliometric overview of the Dutch studies can be found on the Waddenacademie's website.

This diversity of topics and disciplines is also reflected in the winners of the 'Waddenacademie Prize', which is awarded by the Waddenacademie every other year to the best Wadden Sea-related PhD thesis and was established to stimulate research in the Wadden Sea Region by young researchers. This clearly illustrates that the Wadden Sea provides many interesting topics for young researchers. But what really drives young researchers to pursue a PhD in the Wadden Sea region? To find out, we have asked Svenia Reents and Clarisse Goessele to tell us more about their research and what inspired them to work in the Wadden Sea (see pp. 8-9).

### The important funding of PhDs

However, many young researchers who are interested in working in the region can only get the opportunity

### CURRENT LIST OF TITLES OF ALL PHD THESIS IN THE WADDENACADEMIE

More information: https://www.waddenacademie.nl/en/







**SVENJA REENTS** 

### When was the first time you heard about the research in the Wadden Sea

I was studying biology (BSc) and attended a lecture about coastal ecosystems. Before that I only knew the Wadden Sea because of their tidal flats, but I've never heard of salt marshes. Therefore, I was really surprised to find out that these ecosystems occupy vast areas in the Wadden Sea region, where you can find highly specialised organisms and that they are also very important to us humans (e.g. coastal protection and long-term carbon storage).

### Were you aware of the relevance of the Wadden Sea as an ecosystem before that?

Only as important habitat for migratory birds and other animals. I think that is the only thing I was able to remember from those guided walks to tidal flats I attended when I was a child.

### Why did you decide to choose the Wadden Sea as a research topic for your BSc-research project?

At first, I just wanted to do something with plants but the more I learned about salt marshes the more curious I became about these ecosystems (and in my personal life I always felt drawn to the sea, too). Consequently, for my BSc thesis, I really enjoyed conducting a litterbag study in the Wadden Sea salt marshes to investigate how

grazing affects the decomposition of belowground biomass, a process that influences the local carbon storage potential. It was a great experience doing meaningful work in such a lovely environment.

### How did this first research project influence your plans afterwards? What are you working on now?

At the end of my BSc-research project, I was so intriqued by its beauty and importance I continued working in salt marshes for my Master's degree and now for my PhD. I am currently investigating how climate change affect the vegetation of salt marshes and thereby its coastal protection function. I hope my results will contribute to a better understanding and protection of these truly exceptional ecosystems (in a changing world).

### What would you like to do after your current project?

In general, I would like to work for the protection of salt marshes (preferably in the Wadden Sea). I have not decided whether I want to stay in science or not. Short-term contracts, "publish or perish" mentality and working less applied with increasing work experience makes me think. I am also looking for more applied jobs (e.g. in nature conservation associations or national park administrations). I think my ideal job would be a combination of both research and nature conservation, but without short-term contracts, of course.



**CLARISSE GÖSELE** 

### When was the first time you heard about the research in the Wadden Sea?

I first encountered Wadden Sea research through getting to know scientists running a warming experiment in salt marshes at the Wadden Sea. They were the lecturers of a laboratory course I worked in as a student associate. They told me about their eventful and relevant warming experiment – before that I have never had any memorable contact with real ecological field research and was astonished about what research questions could be investigated directly on site in an as dynamic ecosystem as the Wadden Sea.

### Were you aware of the relevance of the Wadden Sea as an ecosystem before that?

Not really, I had heard about their contribution to climate change mitigation in a lecture before, but to be honest, all the professions of the Institute of Plant Science and Microbiology contribute to mitigating or adapting to global warming in a greater sense. Which is probably why I did not remember the Wadden Sea as a relevant ecosystem in particular.

### Why did you decide to choose the Wadden Sea as a research topic for your BSc-research project?

Originally, I was mainly interested in ecology and plant physiology, no matter what plant and ecosystem. The topic I was offered was "A 13C-labeling study in Spartina anglica" with the aim to determine the flux of root exudates from the salt marsh plant Spartina anglica into the soil. Once I started literature research, I realised the importance of carbon cycling in blue carbon ecosystems like salt marshes in the Wadden Sea. So I applied a 13C-CO<sub>2</sub>-label just on the aboveground biomass of the Spartina plant and then traced the 13C-label throughout the plant compartments (aboveground biomass, belowground biomass and soil) via isotope ratio mass spectrometry. I was actually able to determine a relevant flux of root exudates from the plant into the soil.

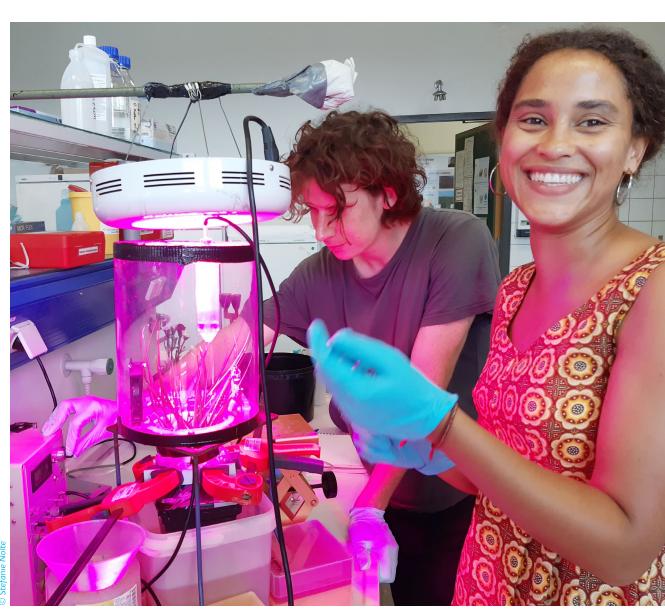
### How did this first research project influence your plans afterwards? What are you working on now?

What I like most about working in and with the salt marsh

ecosystem at the Wadden Sea is the versatility of working tasks. I am glad I do not have to decide which tasks I like most, because I get to do them all: literature research, building measuring devices, field work at the coast and the greenhouse, laboratory work etc. My bachelor's thesis was actually the start of my scientific career as a coastal ecologist and biogeochemist.

### What would you like to do after your current project

The next step for me will be starting my PhD project with the focus on coastal ecology and biogeochemistry at the University of Hamburg. To determine the capacity of the blue carbon salt marsh ecosystem to sequester carbon, I (amongst others) will create a carbon budget of salt marshes. To achieve this, we will measure different carbon fluxes in salt marshes across large geographical distances (Europe, South America, Asia). I am more than excited to go on this blue carbon journey, especially because I will get to see other blue carbon ecosystems like mangrove forests, seagrass beds and salt marshes all over the world, get to know different/new approaches and work in close collaborations with all kinds of scientists.



to do a PhD, or continue working as a Postdoctoral academic, when there is funding available. For postdoctoral positions, there are many different opportunities to find individual funding, such as the 'Marie Skłodowska-Curie Actions Postdoctoral Fellowship'. Here the researcher must develop their own research program and apply for funding. Usually, most PhD-positions are connected to project funding which has previously been acquired through various funding streams by project leaders. In Germany, for example, research projects which include funding for PhD projects can be funded through general streams such as a DFG 'Individual Research Grant'. However, here projects with a Wadden Sea focus compete with other topics from theoretical physics to medicine. In contrast, there are also more targeted calls, which specifically aim to fund research relevant to or in the Wadden Sea area. The BEN program, an acronym for Biodiversity, Ecology and

Nature for example specifically aims to fund young scientists who wish to work on an integrative research programme in the large, protected areas of the German North Sea and Baltic Sea coasts. We have asked Marilen Macher, who coordinates the program for the Bauer-Holmann-Foundation, to tell us more about her experience with young researchers working in the research projects which have been funded by BEN (see below).

In research projects, such as those funded by BEN, there are usually between one and three PhD-projects available. In Germany, even larger number of PhD-projects can be funded for example through a Research Training Group. In 2021 such a Research Training Group was started at University of Hamburg, with 15 PhD and two postdoctoral positions established to study "biota-mediated effects on carbon cycling in estuaries". By a combination of ecological, biogeo-

chemical, and molecular approaches, key processes of the carbon cycle will be analysed in the rhizosphere of marshes, at the sediment surface of intertidal flats, and on organic matter aggregates in estuarine channels. Yet, the aim of these research training groups, is not only to do interdisciplinary research on a specific topic, but to provide doctoral and postdoctoral researchers an outstanding platform for their career development. Working in research projects with multiple PhD-students and especially in such research training groups, has multiple advantages for PhD-students. Perhaps most importantly they give young researchers the opportunity to work, sometimes even interdisciplinarily, as part of a team, while also developing skills like communication. This kind of funding for PhD-research in projects also means that young researchers must rely on finding a project topic they are interested in the first place. And once they start their projects, young researchers in these larger project teams are often bound to project aims or study designs already partly in place, which can sometimes mean that young researchers only have very limited time and resources to follow their own ideas.

### **Conferences and Workshops**

For all young researchers, whether they are part of a larger project or not, it is incredibly important to create networks, both with other researchers in the same career stage and more senior scientists. To balance this within the limited timeframe of their project, young researchers need to choose from a multitude of options which networking events to attend. These include both general scientific conferences (such as the Estuaries and coastal seas in the Anthropocene, European Geosciences Union, and NEAM) or Wadden Sea specific events, as well as those targeted at young participants or open to participants from different career stages. The two main events organised in the framework of the TWSC with a general target audience are the International Scientific Wadden Sea Symposium (ISWSS every 3-4 years) and the Wadden Sea Day (annually). It would be very interesting to know how many of the participants of these events are from earlier career stages (like PhD-students), To better include young researchers, several organisations have now started to organise events or groups specifically for this aim.

The Trilateral Governmental Conference (TGC) in 2022, organised by the German presidency, will this time also organise a youth conference connected to the main meeting. The Youth Conference will aim to involve and engage youths from all three Wadden Sea countries, much in the same way as the TGC does, in the challenges and opportunities of the trilateral work. While the Waddenacademie established the 'Young Wadden Academy' in 2016, with five original members. Their aim is to encourage researchers to study the Wadden Sea Region, preferably in multidisciplinary teams and to inspire young researchers to involve themselves more explicitly in policy that affects the Wadden Sea region. And 2021 saw the first ever East Atlantic focussed Flyway Youth Forum, which represents a 'crosscutting contribution to connect the youth with the global agendas to conserve wetlands and waterbird species across the Flyway as well as connecting global agendas to the priorities and ideas of the flyway youth'. The Youth Forum attracted participants from 34 different countries and contributions from AE-WA-UNEP, Ramsar and other global

### MARILEN MACHER



### What is BEN?

The BEN program, an acronym for Biodiversity, Ecology and Nature, was initiated by the German Bauer-Hollman Foundation in 2007. The funding program, which is announced every four years, offers young scientists funding opportunities to work on an integrative research program in the large protected areas – including national parks, biosphere reserves – of the German North Sea and Baltic Sea coasts.

Why did the 'Bauer Hollmann Foundation' choose to fund mainly young scientists and research in this particular region? Coastal landscapes are fragile habitats. They contain dynamic and sensitive ecosystems that are interconnected by interactions.

The foundation's initiative aims to encourage young scientists to address this complex issue as part of their doctoral thesis. After all, the effects of climate change and the impending loss of biodiversity need smart minds and expertise to meet these challenges at a high scientific level and develop sustainable strategies.

### What has your experience been working with the young researchers funded via BEN over the past projects?

To date, 12 PhD students and four postdocs have benefited from the program. During this time, the foundation has met passionate, highly committed young scientists with great ideas. It is impressive for the foundation to see that, in addition to many high-ranking published papers, the approach is always to bring scientific findings into the social debate and concrete implementation.





### PERSPECTIVES FROM CWSS

Since 1998 it has been possible for young people between the ages of 18 to 27 to engage in a year of voluntary conservation and ecology work through the Freiwilliges Ökologisches Jahr (FÖJ) programme, which is supported by the individual German states. The programme has had great success and a large number of volunteers can be found at national parks, nature conservation organisations around the Wadden Sea. For a number of years these volunteers have even been placed with visitor centres in the Danish Wadden Sea.

The programme is meant as a break before continuing studies, often at university, or as period of time when the volunteers can determine if the subject, they have chosen to study is the right choice for them. Having been greatly inspired by the FÖJ programme, some Danish partners in the Wadden Sea are currently working to establish a similar programme in Denmark.

Many of the management organisations charged with the protection and conservation of the site also welcome interns, which is a invaluable way for young scientists to experience other types of jobs that are open to them, should they wish to work with science in the Wadden Sea, though outside academia. organisations. As part of the work with the FYF, 12 Flyway Youth Ambassadors were appointed, who will continue to lead and contribute the work to be set out in the FYF declaration. (https://www.flywayyouthforum.com/).

Interestingly, there are also networking opportunities which have developed 'bottom-up' to fill some gaps in networking opportunities. In 1993, for example, Jan Bakker (University of Groningen) and Kathrin Kiehl (University of Kiel) decided that it would be a great opportunity to organise a workshop for their students to meet, discuss ideas and visit a salt marsh in Germany together. So, the first 'Coastal Ecology Workshop' was held in Friedrichskoog with 13 participants. The following year, the Dutch colleagues invited their German colleagues to visit Schiermonnikoog. Since then, the workshop has also been hosted by PhD-students from Belgium, the United Kingdom, and France, and the number of participants has grown to app. 30-40 each year. While in the beginning the workshop focussed on salt marsh ecology, the topics have since then developed and changed over the years and now include intertidal flats, dunes, estuaries, and more (Garbutt et al. 2017). This informal annual meeting gives the young researchers not only a great platform to share their research and discuss ideas, but also to visit other field sites. For many of them it is vital to see that the same ecosystem can look and function quite differently in different regions. And for many participants the connections and sense of community built during the workshop led to co-authored papers, shared projects, new proposals, possibilities for a Postdoc, lasting friendships, and a generally very useful network which helped them to continue their research career.

### Outlook

There are many options for young people to get interested in and contribute to research in the Wadden Sea. But the main question is not just 'How do we get young people interested?'. It should also be 'What are the career opportuni-

ties for young people after studying or after PhD?'. And of course, what could be done to improve these opportunities? Only a small number of students will be able to stay in academia and continue research in a university setting. So, what are the career opportunities outside of academic research? To show students what career paths outside academia they could consider, we think that it is important to connect young researchers with practitioners, managers, and other stakeholders early on. This network can also make them aware of open positions. Additionally, we need to remember in our teaching and research supervision, that it is not just about Wadden Sea specific knowledge, but other transferable skills, such as project management and communication. After all, we observe every day in teaching and supervising, that young people bring an enormous amount of motivation and drive to tackle the problems the Wadden Sea faces in the 21st century. We just need to give them the right tools and a chance to contribute.

### PERSPECTIVES FROM CWSS



The TWSC continues to create new building blocks to strengthen the vital work of the cooperation on behalf of the Wadden Sea, taking inspiration from our partners and engaging them and their ideas wherever possible. This is at the centre of the Partnership Hub thinking, and it is hoped that the Hub will foster similar "bottom-up" approaches, such as the one seen in the CEW network, while also being a support for new avenues of cooperation, such as the Trilateral Research Agenda, which is currently being furthered by the Trilateral Programming Committee on Wadden Sea Research.

### THE ROLE OF MONITORING AND ASSESSMENT IN

## THE CONSERVATION OF THE WADDEN SEA WORLD HERITAGE SITE

he Guiding Principle of the Trilateral Wadden Sea Cooperation states the aim is "to achieve, as far as possible, a natural and sustainable ecosystem in which natural processes proceed in an undisturbed way", (Joint Declaration 2010). One key factor in achieving this is the Trilateral Monitoring and Assessment Programme (TMAP), a joint survey and monitoring programme for the entire Wadden Sea, carried out in a harmonised manner by the three countries.

The programme, launched in 1997 (Stade Declaration), is coordinated by the Common Wadden Sea Secretariat, and the information obtained through TMAP is the basis for the regular scientific assessment of the ecological

status of the Wadden Sea, the "Quality Status Reports" (QSR), with some of those Thematic Reports currently being updated, and for the progression of measures for nature conservation.

Under the German presidency, it was envisaged that the TMAP sustainability and compatibility with the requirements of a World Heritage Site and those arising from European nature conservation and marine protection directives is ensured. To fulfil this mission, the Task Group Monitoring and Assessment (TG-MA) was installed in 2018 to review and adjust the programme and to support the OSR process, coordinated by CWSS.

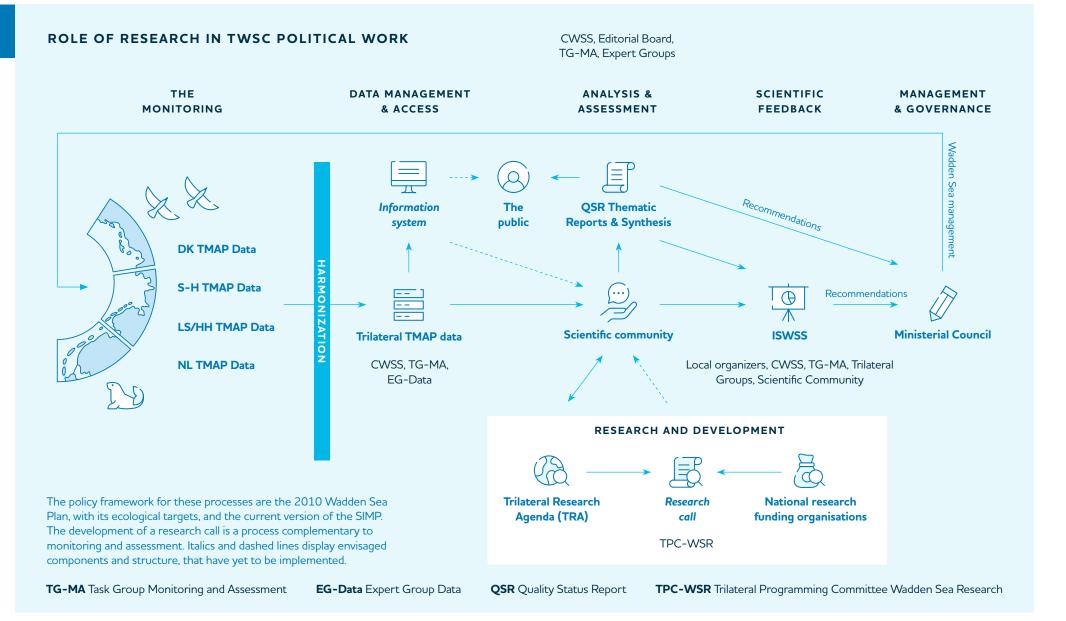
The findings of the QSR are discussed at the International Scientific Wadden Sea

Symposia (15th ISWSS from 30th November to 3rd December 2021 in Büsum, Germany) with the entire Wadden sea science and research community.

In order to meet the challenges of future developments affecting the conservation status of the Wadden Sea and the sustainable development of the Wadden Sea region, the Trilateral Wadden Sea Cooperation (TWSC) fosters exchange and cooperation with the science and research community. The Trilateral Research Agenda (TRA), prepared by a consortium of independent scientists, is an important basis for this.

For further implementation of the TRA and to attract corresponding funding,

the Trilateral Programming Committee on Wadden Sea Research (TPC-WSR) is developing a joint research call based on the TRA, which it is hoped will be financed by the major national research funding organisations in the three Wadden Sea countries. The aim is to compile a substantial financial basis for a call on trilateral research projects of current importance to support the Guiding Principle and the integrity of the Outstanding Universal Value (OUV) of the UNESCO World Heritage Site. Such a call is expected to be renewed after its expiry and should then be adjusted to up-coming scientific questions and challenges serving the protection goals.



THE REMARKABLE RECOVERY OF THE WADDEN SEA HARBOUR SEAL POPULATION

### 30 YEARS OF THE WADDEN SEA SEAL AGREEMENT

arbour seals (Phoca vitulina) are among the largest predators found in the three Wadden Sea countries. As marine predators they use the same resources as us, namely fish, and were therefore historically viewed as a threat to local fisheries and severely hunted in the first half of the 20th century. In the 1960's it became apparent that less than 10% of the harbour seal population in the Wadden Sea, which had been estimated at roughly 40.000 animals in 1900, were left. Urgent policy changes were needed to help the seal population recover and by 1977 hunting bans were in place in all three Wadden Sea countries. While first signs of recovery were observed in the following years, the outbreak of Phocine Distemper virus (PDV) in 1988 again decimated the population.

The three Wadden Sea states decided to establish the first transnational,

legally binding agreement under the auspices of the newly established UN Convention on the Conservation of Migratory Species of Wild Animals (CMS). The Agreement on the Conservation of Seals in the Wadden Sea (or short: Wadden Sea Seal Agreement, WSSA) was signed on 16th October 1990 in Bonn, Germany, and entered into force on 1st October 1991. The aim of this trilateral agreement was to achieve and maintain a favourable conservation status for the Wadden Sea harbour seal population through close collaboration in research and monitoring and by increasing the public awareness for the Wadden Sea seal populations as an entity and as an integrated part of the ecosystem.

Despite a second PDV outbreak in 2002, leading to a 57% decline in numbers, the harbour seal population has recovered significantly since the WSSA

came into effect. In the Quality Status report from 2017 it was suggested that the population has now reached the pre-hunting population size as estimated for 1900. The population is now regarded as viable and in no immediate risk of critical decline. However, outbreaks of PDV or influenza virus are likely to reduce the population of harbour seals at regular natural intervals. In addition, a variety of human activities, including pollution, shipping, fisheries, construction of wind farms, and ecotourism, have the potential to negatively affect the population. It is important to monitor the impact of human activities to ensure the quality of their Wadden Sea habitat is sufficient to aid the recovery of the harbour seals population after natural occurring disease outbreaks.





**URSULA SIEBERT** 

**Prof. Dr. Ursula Siebert** from the Institute of Terrestrial and Aquatic Wildlife Research (ITAW) in Büsum, Germany, has been a member of the **Expert Group Marine Mammals since 1996.** In 2020, she took over as **chair of the group** when her predecessor, Dr. Richard Czeck, retired from his active duty in the Wadden Sea. In the following interview Prof. Siebert is providing an **overview of her work within the Trilateral Wadden Sea Cooperation** and the **importance of the Seal Agreement** for the **recovery of the harbour seal population** in the Wadden Sea.

### What was the main driving force for the establishment of the Agreement on the Conservation of Seals in the Wadden Sea?

During the first seal-die-off in 1988/89 thousands of harbour seals died in the Wadden Sea, leading to a decrease of the already diminished population by an additional 57%. This was the main driving force for the establishment of the trilateral Seal Agreement with the aim to protect and manage the seal population in the Wadden Sea to allow the recovery of the seals as an important part of the Wadden Sea ecosystem.

### Since when and how have you been involved in the implementation of the seal agreement?

Since 1990, I am involved in the implementation of the seal agreement. My involvement is mainly to conduct research on seals, both on living and dead free-living animals. The aim of

my research is to have a better understanding on the seals' biology, their health status, and the existing/possible threats within the Wadden Sea. Thereby, my research results can help with management decisions and contribute to outreach strategies to inform the public.

### In your opinion, what have been the most effective measures that contributed to the recovery of the harbour seal population in the Wadden Sea?

In 1975, the harbour seal population in the Wadden Sea was estimated to include less than 5500 individuals leading to the ban of seal hunting in all three Wadden Sea countries. While the hunting ban is certainly a substantial contributor to the overall increase in harbour seal numbers in the Wadden Sea in the past decades, initially pollution and the outbreak of the Phocid

Distemper Virus (PDV) hampered the recovery of the population. With the establishment of the seal agreement in 1990, additional measures were taken into account. The reduction and management of human activities in the Wadden Sea and the protection zones in the National parks allowed the seal population to prosper and the quick recovery after the second PDV outbreak in 2002. In addition, seal stations were important institutions to conduct public information about the situation of seals in the Wadden Sea

### How has the work changed over the past 30 years?

The Trilateral Monitoring Programme is still at the core of our trilateral work. Every year, flights are taking place throughout the Wadden Sea to get an estimate of the abundance of seals in the different areas. However, scientific techniques have continued to devel-

op over the past 30 years. Thus, while seals were initially counted by experienced observers during the monitoring flights, we now use digital camera technology to help prevent human error, for example in distinguishing young grey seals from adult harbour seals in flight.

Besides the technical advancement. the habitat of harbour seals outside the Wadden Sea is facing considerable changes due to the impact of new human activities such as the construction of Offshore-Windfarms. Thus. our research today also focuses on the impact of developments outside the Wadden Sea, especially in terms of their impact on the movements of foraging seals. Natural changes in the dynamic landscape of the Wadden Sea can also impact the local harbour seal population and need consideration. While we may often think about the disappearance of sandbanks in these circumstances, it has been recognized that the growing number of grey seals in the Wadden Sea and adjacent waters may also influence the development of the harbour seal population.

### Can the Wadden Sea seal agreement act as a template for similar initiatives in the region (e.g. for other species)?

I think the Wadden Sea seal agreement, over the last decades, has proven to be a successful international agreement which can serve as an example for other regions. It has allowed the coordinated international data collection, the joint interpretation and treatment of the data and the development of suitable management strategies. This process is key for the effective implementation of conservation management initiatives as it provides

a sound basis for the assessments of successful activities.

### What are the key issues that the Wadden Sea seals are going to face in the future?

The Wadden Sea seals will continue to face large changes in their offshore feeding grounds mainly by increased human activities, such as the construction of offshore windfarms, shipping, chemical pollution, and marine litter. In addition, the seal habitat of the Wadden Sea will modify due to climate change. Harbour seals give birth, rest, and moult on sandbanks where human disturbance is minimal. Loosing these vital habitats through sea level rise could negatively affect the Wadden Sea seal population. Increased local tourism could further exaggerate the effect as it may lead to more disturbance at the remaining haul out sites.

### What is your most memorable moment of working with seals in the Wadden Sea?

My best memories of working with seals in the Wadden Sea is when we are in the field examining the health status of harbour seals in Wadden Sea; the water is suddenly gone due to low tide and you observe the overwhelming beauty of the Wadden Sea with its richness of species and the change between water and land.

### INTERNATIONAL COLLABORATION ON BEHALF OF MIGRATORY BIRDS

### TEN YEARS OF THE WADDEN SEA FLYWAY INITIATIVE

uring migration, waterbirds depend on a network of wetlands to rest and refuel their energy reserves to be able to complete their strenuous journey. Detrimental environmental conditions at a critical site can have overarching consequences as they can affect, for example, the birds' body condition or the timing of their migration and thus the environmental conditions they are going to encounter at the site of arrival. These effects can, in turn, influence breeding success and thus the overall survival of the species. Close collaboration among countries along a migratory route is therefore necessary to identify the main bottlenecks for migratory species and possible management measures to reduce their impact. The Wadden Sea Flyway Initiative (WSFI) was established

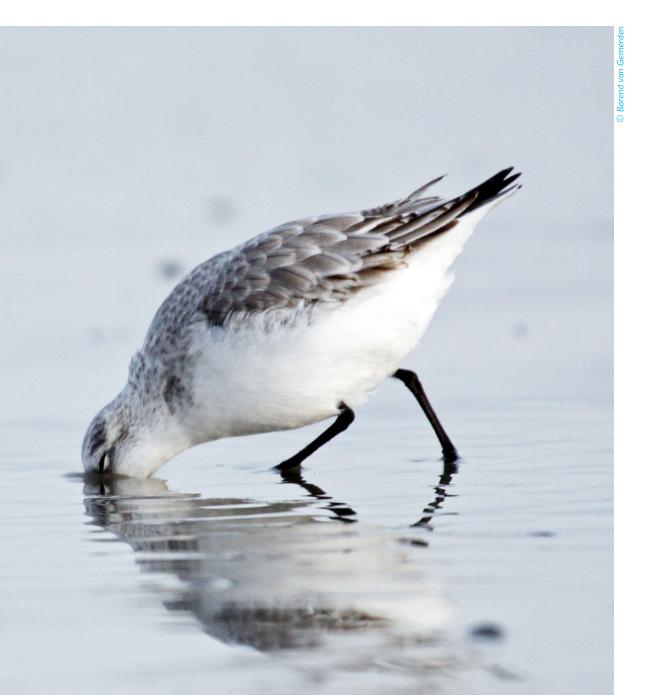
in 2012 with the aim of strengthening the cooperation between the three Wadden Sea States and other countries along the East Atlantic Flyway (EAF), which provide critical habitats for migratory waterbirds, thereby ensuring that migratory birds find lasting refuge along the Flyway.

The activities of the WSFI can broadly be categorised under two main topics: 'Monitoring' and 'Capacity Building and Management'. The objective of WSFI Monitoring programme is to provide timely and accurate information about the status of waterbird populations along the East Atlantic Flyway. Comparisons between flyway numbers and site numbers can provide information on the potential impact of environmental conditions at specific sites on

the overall flyway population. If a population is doing better or worse at the local level compared to the overall flyway, this is an indication that the reason for the difference may be found at this specific site (Bregnballe et al. 2017). For the Wadden Sea, for example, low population numbers compared to flyway numbers have been found for the Eurasian Oystercatcher and the Pied Avocet. While we continue monitoring the population developments, our aim is also to identify the causes of these declines and to develop management strategies to stop or reverse them.

At the flyway level the capacity to regularly report on species numbers, to identify the underlying causes of declines and to develop targeted management actions is often still scarce. "During migration, waterbirds depend on a network of wetlands to rest and refuel their energy reserves to complete their strenuous journey"





The objective of the WSFI Capacity Building and Management programme is therefore to intensify cooperation for the protection of waterbirds along the EAF, with a special focus on capacity-building and the improvement of policies such as area management plans. To ensure the sustainability of any management decisions, it is important to involve local, national and regional stakeholders in the decisionmaking processes and to learn from experiences made at similar sites along the flyway. Regular exchange between stakeholders through awareness campaigns or networking opportunities is therefore becoming increasingly important in the design of our WSFI programmes. Thus, we have recently started the WSFI Waterbird Network in collaboration with our African part-

ners, to provide a platform for young conservationists to exchange information around the conservation and management of migratory waterbirds in different parts of the Flyway and develop ideas for concerted action. In support of this the first WSFI Flyway Youth Forum was held online in September 2021.

We would like to take this opportunity to thank Marc van Roomen and Tim Dodman for their unwavering and ongoing support for the WSFI over the past decade. Their enthusiasm and drive for conserving the migratory waterbirds along the East Atlantic Flyway has certainly contributed to the success of the WSFI. ~~~

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### AT THE FOREFRONT

## CLIMATE VULNERABILITY INDEX COMPLETED



s one of the first World Heritage properties worldwide, the Trilateral Wadden Sea Cooperation initiated the assessment of their site by means of the Climate Vulnerability Index (CVI).

The CVI is a rapid assessment tool that has been specifically developed for application in World Heritage properties. The CVI framework builds upon the vulnerability framework approach described in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). It comprises two distinct phases and outcomes, by assessing the vulnerability of the Outstanding Universal Value as central concept of World Heritage, and the vulnerability of the community.

The OUV is the central concept for all WH properties. OUV determines why a site is inscribed as World Heritage. In short, the Wadden Sea is the largest unbroken tidal flat system in the world, whose processes are largely undisturbed (for long version, see whc. unesco.org/en/list/1314). The OUV is backed with the three criteria, geological processes, ecological processes and in-situ biodiversity conservation, as well as the Wadden Sea's integrity, protection and management.

The Wadden Sea was considered a good candidate to test and apply the new method given that the Wadden Sea World Heritage property is a serial tri-national property posing an additional challenge for managing climate

### ~~

### CVI

The Climate Vulnerability Index framework to undertake rapid assessment of climate change vulnerability of World Heritage properties and associated communities (Day et al., 2020). Outcomes are vulnerability of the Outstanding Universal Value (OUV) - central concept of World Heritage - and Community Vulnerability.

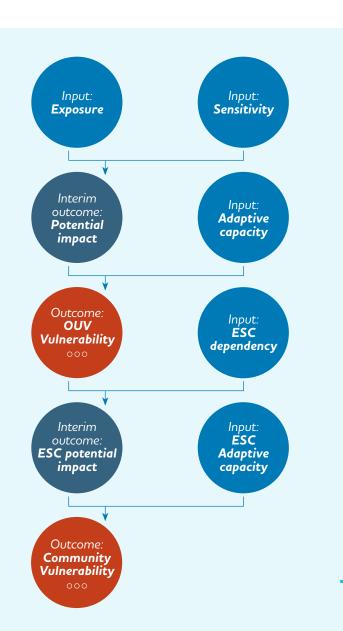
Source: www.waddensea-worldheritage.org/resources/2020-cvi-report

### **Modifiers:**

Exposure Sensitivity Adaptive capacity

### ESC:

Economic-social-cultural



change adaption, the existing expertise on climate change, and a willingness to identify priority issues for climate change adaptation and to consider a broader, globally consistent approach to assessing climate change.

The Trilateral Wadden Sea Cooperation decided already in 2019 to pilot the new method CVI in their World Heritage Property under the lead of CWSS, the trilateral Expert Group Climate Change Adaptation (EG-C) and with support of the trilateral Task Group World Heritage (TG-WH). As a first step, CWSS and TG-WH translated the official statement of the Outstanding Universal Value into ten key values. These key values were then used in a workshop in 2020 to complete the first phase of the CVI: assessment of the OUV vulnerability by assessing exposure, sensitivity and adaptive capacity of the key values to climate change. In the workshop, experts of relevant scientific and academic sectors as well as policy makers and conservationist identified three most relevant climate stressors for the World Heritage:

- Temperature trend (air and/or water)
- Extreme temperature events
- Sea level rise

The three stressors were held against the key values and possible impacts of climate change were discussed for two timeframes: 2050 and 2100. The workshop assessed the OUV vulnerability as overall high for both timeframes. The impact of the first two key climate stressors was considered as high for both time periods. The stressor "sea level rise" was seen as low with regard to 2050, with a less rapid rise in this



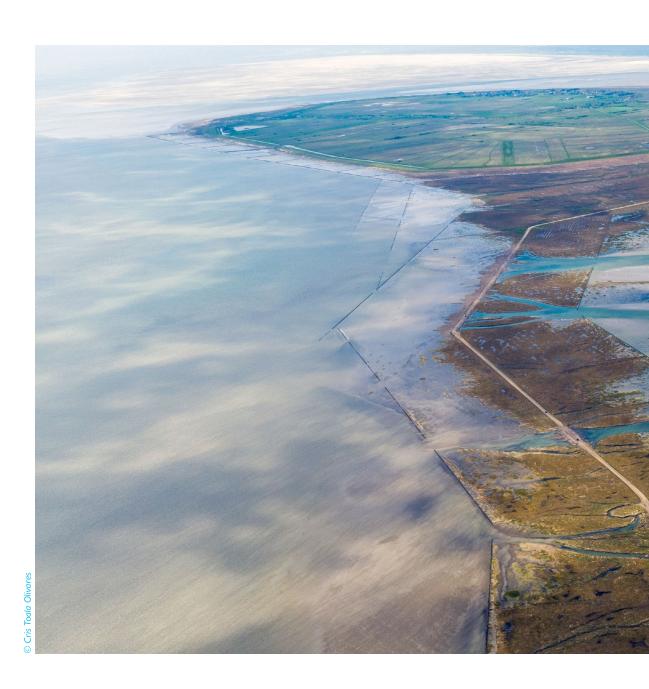


period, and as high for 2100, with the sea level expected to rise more rapidly between 2050 and 2100. The scenario high vulnerability holds that a major loss or substantial alteration of the majority of the OUV values is foreseen.

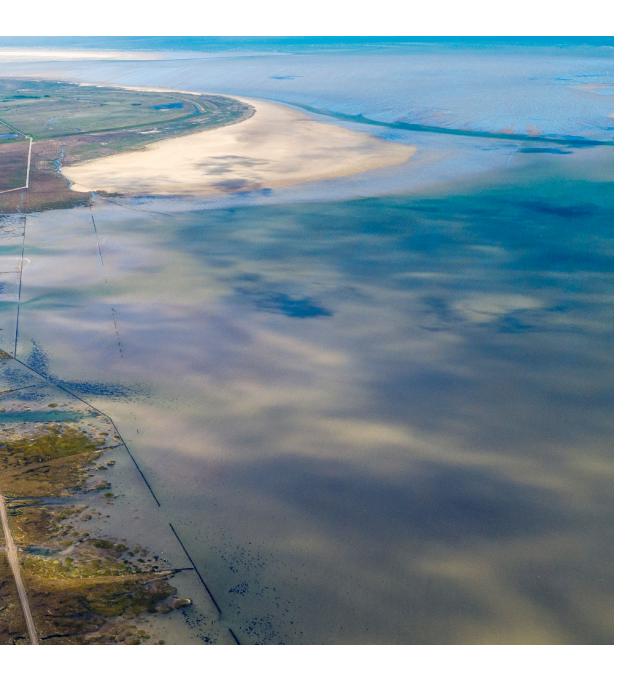
The second phase of the CVI, assessment of the Community Vulnerability, was conducted in this year – online, as an in-person meeting was impossible due to the COVID 19 pandemic. This CVI assessment builds on the results of the first phase and is based on the economic, social and cultural dependencies upon the World Heritage property, and the adaptive capacity of these to cope with climate change. For each of these aspects, the measure of the dependency upon the property

and the capacity to adapt in the face of projected climate change is evaluated. Dependency reflects the extent to which the loss of World Heritage values will affect economic, social, and cultural indicators in the future - positive or negative.

With the workshop in 2021 it was assessed, how economy, society and culture react on changes in the Wadden Sea's OUV. There was a recognition and broad agreement amongst participants that the components of the Community Vulnerability (i.e., the ESC economicsocio-cultural components) were important and needed to be assessed; some of these in more detail than given in the rapid assessment nature of the process. Contributions of participants







have shown that these components need more attention in future because of the complex relationship between ESC and OUV and the limited knowledge about this relationship. The additional uncertainty on how the Wadden Sea morphology and biology will exactly respond to climate change makes it even more hard to describe effects on economy, society, and culture.

The CVI methodology is now well established but continues to evolve with every application. The approach also been applied at other WH sites (Shark Bay, Orkney, Edinburgh) and further are in preparation (https://cvi-heritage.org) Applying the CVI in in the Wadden Sea has provided many useful lessons for subsequent applications of the method.

In 2021, chairs of the trilateral TG-WH and EG-C shared experiences gained during the CVI application in the Wadden Sea with the UNESCO World Heritage marine site managers community. By now, first assessments of other marine World Heritage sites are planned.

The systematic and rapid assessment approach of the CVI means that it can be regularly repeated to determine if changes have occurred to the condition of attributes, or to the vulnerability of OUV and the community associated with the Wadden Sea. Re-assessment could align with World Heritage Periodic Reporting (approximately every six years), or with any updated release of climate change projections.





TWSC groups
have commented
and advised on
specific topics and
advisory boards
have been
informed about
the SIMP



Approaching a final phase of development, the Task Group World Heritage, who holds oversight over the SIMP content development process with support of CWSS, is working to define concrete activities to address relevant questions for site management at the trilateral level. Thus, the implementation of those activities would have an added value for site management, the trilateral cooperation, as well as for the whole Wadden Sea area. Proposed activities address the five key topics of the SIMP and respect the differences in the legal responsibilities and competences of site management among the three countries. The SIMP does not alter existing national or trilateral plans or policies and will be complementary to the Wadden Sea Plan. The Wadden Sea Plan, updated in 2010, establishes the common framework for the protection and sustainable management of the Wadden Sea.

The SIMP is scheduled to go through a Consultation Phase during the first half of 2022 and to be adopted at the next Ministerial Conference in November 2022 in Wilhelmshaven.

### THE BASICS OF THE SINGLE INTEGRATED MANAGEMENT PLAN

The purpose The process The end product

The single integrated management plan's (SIMP) main purpose is to support the continuous improvement of a coordinated management for the conservation of the transboundary Wadden Sea World Heritage site. Thus, the focus of the SIMP is the protection and maintenance of the Outstanding Universal Value.

The SIMP is an opportunity to enhance exchange of best practices, experiences and knowledge among site managers. This exchange at different levels supports the development or updating of trilateral agreements and initiatives and allows for the connection of existing and future trilateral strategies and plans with regional and local strategies and plans, showing how we work together and highlighting which of the aspects the cooperation could be further strengthened.

Since the Wadden Sea is home to a significant population and human uses, there are aspects that require an ongoing attention to maintain the area's Outstanding Universal Value. The SIMP will address the ones identified in the Statement of Outstanding Universal Value, by the Wadden Sea's site managers, prioritised by the Task Group World Heritage and endorsed by the Wadden Sea Board: fisheries, tourism, shipping and ports, renewable energy and energy from oil and gas and coastal flood defence and protection.

The SIMP will be published as a concise stand-alone document as print and available online. Relevant background information gathered in the process of developing the SIMP will be made available in an online microsite as part of the Cooperation's website www.waddensea-worldheritage.org.

### 2018-2022 - AND BEYOND

## A REFLECTION OF THE GERMAN TWSC-PRESIDENCY

ince Germany took over the Presidency of the Trilateral Cooperation on the Protection of the Wadden Sea (TWSC) from the Netherlands in 2018 the world has changed in an unforeseen way due to the Covid-19 pandemic. Tackling the pandemic as well as the global twin crisis of climate change and biodiversity loss calls for urgent internationally coordinated action, including at the Wadden Sea World Heritage (WSWH).

The pandemic and the following loss of personal exchange has created a real challenge to our TWSC, as it has been based for more than 40 years on close cooperation and individual contact, especially with our international partners. The Common Wadden Sea Secretariat team and all the colleagues and partners involved did an extraordinarily

successful job, guaranteeing that our trilateral work could continue, showing the exceptionality of our cooperation. During the last 20 months, we experienced additional ways of efficient virtual communication and meetings, which helped to overcome this situation. While this contributes to improve our cooperation, it became obvious how essential a mutual personal exchange is.

In the Leeuwarden Declaration, we recognised the challenges and pressures and agreed on goals and activities with regard to our joint responsibility for preserving the unique WSWH site for the benefit of current and future generations. At the beginning of our presidency, Germany highlighted its priorities in the Leeuwarden Declaration. These encompass the further development of international coopera-

tion; the Wadden Sea Flyway Initiative (WSFI); the future viability of the Trilateral Monitoring and Assessment Programme (TMAP) and the creation of a Single Integrated Management Plan (SIMP) for the WSWH Site as requested by UNESCO, as well as the further development and strengthening of partnerships and cooperation beyond the governmental sector, including the establishment of a Partnership Hub. To make this a coherent approach, the Dutch initiative to establish a Trilateral Wadden Sea World Heritage Foundation was carried on.

### Cooperation among partners

A memorable highlight of the German presidency of our trilateral cooperation was the bike tour "One Wadden Sea. Two wheels. Three countries" in June 2019, celebrating the anniversary of

the Wadden Sea's inscription on the World Heritage List. An event involving many partners and attracting participants in all regions. The tour ended with the WSWH Experience Festival in Wilhelmshaven where representatives of the trilateral Wadden Sea Forum. environmental NGOs, the Wadden Sea research sector and sustainable tourism sector from Denmark, Germany, and the Netherlands and the TWSC signed a Memorandum of Understanding on the establishment of a strategic multi-stakeholder "Trilateral Partnership in support of the UNESCO Wadden Sea World Heritage". Based on this agreement and a concept for the Partnership Hub, a trilateral working group of the strategic partners, the Operational Team Partnership Hub. supported by the Management Unit Partnership Hub associated with the CWSS, is implementing that approach in the pilot phase. They aim at enhancing ownership of the WSWH, initiate common projects and activities and thus create synergies between nature conservation and sustainable development in the Wadden Sea Region in close cooperation with all relevant partners.

### Integrated Management of the Wadden Sea World Heritage Site

Another focus of the German presidency has been the development of a Single Integrated Management Plan for the trilateral Wadden Sea World Heritage property (SIMP). In 2014 when the UNESCO World Heritage Committee accepted the extension of the World Heritage property to include the Danish Wadden Sea, it had also tasked the three countries to "develop a single"

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integrated management plan for the property and to consider the options to strengthen the effectiveness of implementation of coordinated management within the property".

Under the lead of the Task Group World Heritage, the work on the SIMP has taken important steps: The structure of the SIMP has been set out and the key issues to be addressed were selected and prioritised. Workshops and consultations on the main risks, opportunities and potential joint activities for the identified key topics were held to get input from the whole of the TWSC

family, including on the site management level. The SIMP presents existing joint management activities across the property and showcases gaps, which need enhanced joint efforts to maintain the area's Outstanding Universal Value (OUV). The SIMP links each key topic directly to the OUV, describes

the common ground expressed in the Wadden Sea Plan (WSP) and other trilateral tools, and shows how the countries implement measures. It aligns closely to international processes such as the Sustainable Development Goals, the Convention on Biodiversity, and the EU Biodiversity Strategy. Continued oversight by the Wadden Sea Board has been an essential element to move the work on the SIMP forward, as well as to ensure full support on political level. The SIMP will be an important tool to integrate the management trilaterally for the joint WSWH Site in this decade.

### Scientific cooperation

From its beginning, the TWSC has been based on a close cooperation with the scientific community. To further strengthen this cooperation, a Trilateral Programming Committee on Wadden Sea Research (TPC-WSR) was established in September 2020. The committee elaborates a joint Trilateral Programme on Research priorities relevant to the WSWH and its implementation, including stimulation and search for funding possibilities.

Reliable data for solid monitoring and assessment are essential pillars of safeguarding the OUV of the WSWH. The well-established Trilateral Monitoring and Assessment Programme (TMAP) was recognised and honoured by UN-ESCO. To make the TMAP fit for the future and to increase the value to users and a wider range of stakeholders the Task Group Monitoring and Assessment (TG-MA) was re-established. The TG-MA shall also coordinate the update of selected thematic reports of the Wadden Sea Quality Status Report (QSR). Some of these reports will be presented and discussed at the 15th International Scientific Wadden Sea Symposium (ISWSS) in December 2021 in Büsum. The ISWSS brings together scientists from different sectors to discuss the future challenges of the WSWH in the context of climate change and give recommendations for the future work of



the TWSC. The findings and a message from the ISWSS will be presented at Trilateral Governmental Conference 14 (TGC 14), in Wilhelmshaven, and will be used in the preparation of the Wilhelmshaven Declaration.

### Flyway Cooperation

The protection of birds migrating along the East Atlantic Flyway is one of the central pillars of our TWSC. After ten years of effective cooperation within the Wadden Sea Flyway Initiative (WSFI), it is time to enlarge the outreach and impact of the initiative and look for further resources to combat the increasing future challenges on migratory birds. Capacity building and awareness raising, monitoring and cooperation along the flyway are among the many successful activities initiated by the WSFI. Nevertheless, there is need and room for further improvement and engagement of the signatories of the WSFI as well as for further funding possibilities to sustain future projects.

### International Cooperation

TWSC stands for a broad range of cooperation on local, regional, and international levels, from on the ground activities with local partners up to the exchange with the 49 other marine UNESCO World Heritage sites. The cooperation with South Korea, and along the East Atlantic Flyway with Senegal, Guinea-Bissau, and Mauretania is an important part of our work and should be further enhanced in the future, as we can learn from each other and benefit in regard to our engagement on safeguarding our OUV.

### Tackling future challenges together

The trilateral Climate Change Adaption Strategy (CCAS) for the Wadden

Sea, adopted 2014 in Tønder, is still the main pillar of the TWSC to enhance the resilience of the Wadden Sea ecosystem against the impacts of climate change like rising sea levels and sea temperatures. The current focus within TWSC lies in the coordinated implementation of the CCAS. To assess and understand the impacts of climate change on the OUV, the Climate Vulnerability Index (CVI) was conducted. The topic has yet to be analysed in close cooperation with other marine World Heritage Sites. The challenges will continue to increase, and we have to identify the responsibility of the TWSC in this regard.

### A Trilateral Wadden Sea World Heritage Foundation

The envisaged Trilateral Foundation should be supplementary to the reqular tasks of the Trilateral Wadden Sea Cooperation. By funding projects and initiatives, it could enhance ownership of the WSWH, promote the pride of and identity with the property, and raise its profile nationally and internationally. This foundation will complement the whole set of activities and engagements and create possibilities to realise ideas beyond the formal competences. It is the aim of the six founders: Denmark, the Netherlands and Germany together with the three German Länder Hamburg, Lower Saxony and Schleswig-Holstein to launch the Foundation at TGC 14.

### **Engaging future generations**

To enhance the awareness of the young generation of the Wadden Sea Region as a shared heritage, the German presidency will invite committed young people to a Youth Conference in September 2022 in Sankt-Peter-Ording.



On the agenda will be the idea for a trilateral voluntary service, which could lead to a more transboundary involvement of the young generation for the sake of the WSWH. Together with the experiences from the first East Atlantic Flyway Youth Forum in September 2021, organised by Youth Engaged in Wetlands (YEW), Migratory Birds for People Programme (MBP) of Wetlands Int., CWSS, and the International Wadden Sea School (IWSS), there will be a further inspiring message towards TGC 14.

### And beyond

At the 14th TGC in Wilhelmshaven in December 2022, the TWSC has to decide on how to tackle the future challenges for the protection of the WSWH. The need for further re-

sources and support is obvious, and the Wadden Sea states have to take on their responsibility. However, to make the WSWH and the region future proof is also a task to be done in close cooperation with the partners and people in the regions. TGC 14 in Wilhelmshaven will comprise the mentioned activities but will also go beyond. We therefore invite all partners and the inhabitants of the Wadden Sea region to come to Wilhelmshaven and engage in this Conference to make it a success that contributes to the better protection of our shared natural World Heritage Site and a better and sustainable livelihood and future for the people in the Wadden Sea region.

### Ilka Wagner

German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

### Volker Brengelmann

Lower Saxon Ministry for the Environment, Energy, Construction and Climate Protection

### Klaus Janke

Hamburg Agency for Environment and Energy

### Vera Knoke

Schleswig-Holstein Ministry for Energy Transition, Agriculture, Environment, Nature and Digitalisation

### UPDATES FROM

## THE TRILATERAL WADDEN SEA COOPERATION

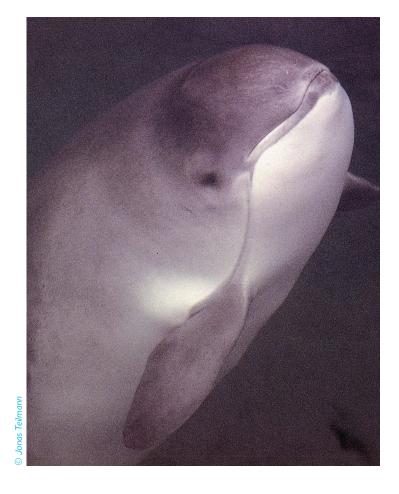
t the start of 2021, Gerold Lüerßen, who helped built up the Trilateral Wadden Sea Cooperation in his 25 years of service, began his well-deserved retirement. In January he was replaced by Dr Kristine Meise, who joined the CWSS with an academic career spent working on understanding how the physical and social environment shapes animal communities. She also brings over 10 years of international research and management experience that provided her with a good understanding of the conservation challenges arising from opposing ecological needs and socioeconomic interests and the need to address both aspects at the same time to develop sustainable solutions.



Kristine has joined the CWSS's conservation unit and coordinates the Wadden Sea Flyway Initiative, as well as acting as secretary for the Joint Monitoring of Migratory Birds (JMMB) and the Joint Monitoring Breeding Birds (JMBB) Groups. This year the expert group concerned with seals in the

Wadden Sea was expanded to include harbour porpoises, and for that reason the group was renamed Expert Group Marine Mammals (EG MM), of which Dr Meise is also the secretary.

After a trilateral agreement to work on the further implementation of fish targets for the Wadden Sea 12th Trilateral Governmental Conference in Tønder (2014), the topic was brought forward during the Dutch presidency. An important step was the Swimway Vision and Action Programme and its initiation by an ad hoc Working Group Swimway, which was installed under the Leeuwarden Declaration in 2018. In 2021, the group was cemented as a permanent Expert Group, and contin-



ues to be supported by Dr Julia Busch form CWSS. The group continues the important work of contributing to the improvement of the situation for fish in the Wadden Sea. This goal is to be achieved by fostering trilateral collaboration on the implementation of the trilateral fish targets as laid down in the WSP 2010 and to provide an overar-

ching SWIMWAY approach as umbrella for initiatives related to achieving the targets according to the Swimway Vision Action Programme and its four pillars: research and monitoring; policy; measures and stakeholder involvement, communication, and education.

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### INVOLVING THE YOUTH

### **CWSS YOUNG STAFF**



### **AMELIE BANKE**

I am the first FOJ to join the CWSS, and the next year I will be working mostly on communication and events. I look forward to learning more about the Wadden Sea, but also to being an active member of staff in the secretariat.

I think it is important to get in direct contact with youth, to give them the opportunity is to be part of discussions, events, and meetings. Let us see your current work and talk to us face to face about the topics. It helps to have a conversation with each other. On the one hand we will learn the structure, systems, and formalities and how complex the Cooperation can be. On the other hand, we might have a different perspective on some points and a different impression about ideas. We can assist with questions like: if these topics activate youth or not? What appeals to young people?



### LARS WEBER

I am Lars Weber, 22 years old and studying 'Coastal and Marine Management' in Leeuwarden. Within my study it is mandatory to participate in a 20-week internship. The CWSS directly caught my eye, as it was fitting perfectly to what I am studying. During my internship at the CWSS, I prepared databases, including for spatial application of four European Union Directives of the Netherlands, Germany, and Denmark and trilateral political instruments mentioned in national law. Furthermore, I participated in site manager meetings, where I got a good inside view into the work of the Trilateral Wadden Sea Cooperation. Here I saw that the topics sustainability, climate change and the extinction of species are all big parts of what is being tackled. As these are topics, which are concerning the young already, it should be easy to include them into the work of the TWSC, as they are already showing big interest in the politics related to the topics.



### MARINE PERRIN

In the fall 2020, I had the great opportunity to join the CWSS team as an intern and further on as a colleague. As I took my first steps in the world of work, I constantly felt supported and guided by the team as well as other stakeholders of the trilateral cooperation. Bernard Baerends and the CWSS as a whole believed in my ability to contribute to the mission of the TWSC: preserving the Wadden Sea. This experience brought me knowledge but also the confirmation that young people can make their part for the environment when given the chance.



FIRST EVER EAST ATLANTIC

### FLYWAY YOUTH FORUM

"79 enthusiastic young conservationists from 34 countries had signed up for the event"





### VIRTUAL FLYWAY YOUTH FORUM



uring two weekends in September 2021, the first ever East Atlantic Flyway Youth Forum took place with 79 enthusiastic young conservationists from 34 countries who had signed up for the event to discuss the role and importance of youth engagement in flyway conservation.

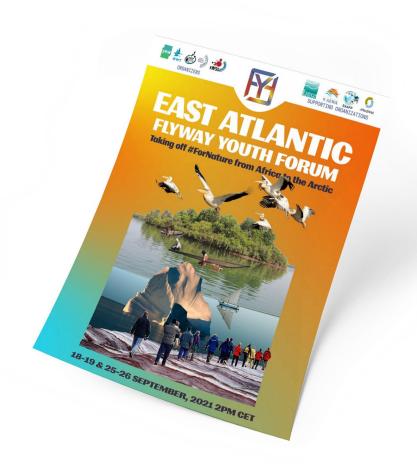
The participants enjoyed presentations from Finland, the Philippines, Mauritania, The Netherlands, Greenland, the UK, Senegal, South Korea and Portugal, ensuring the event had a truly international focus. There was also opportunities for the participants to engage in important networking, designed to support their continued work in conservation. In the words of Jacques Trouvilliez,

Executive Secretary of AWEA-UNEP "the ultimate goal of the Forum is to connect and empower and provide a unique platform for dialogue for future youth leaders, which are focussing on wetlands and waterbird conservation in many of the countries found along this specific flyway.

A declaration is currently being drafted based on the outcomes of the FYF by 12 young, dedicated conservationists who will also act as leaders and take representative roles within the FYF community as Flyway Ambassadors for the next twelve months.

In her keynote speech, Martha Rojas Urrego, Seretary General of RAMSAR, highlighted the importance of events such as the FYF, stating that: "At this critical time we need to redouble our efforts to protect migratory birds and the wetlands they inhabit, and I am deeply encouraged by the tenacity and commitment of young people globally, leading the charge to conserve ecosystems on which we all depend."

The event was organised in collaboration between the Common Wadden Sea Secretariat (as part of the Wadden Sea Flyway Initiative), Youth Engaged in Wetlands, Wildfowl & Wetlands Trust, Migratory Birds for People Programme and the International Wadden Sea School, and supported by AEWA-UNEP, RAMSAR, East Asian – Australasian Flyway Partnership, MedWet and Birdlife International.



### INTERNATIONAL WADDEN SEA SCHOOL

# INTERNATIONAL COOPERATION ON EDUCATION AND INTERPRETATION

"The Wadden Sea School network, was called upon to support, engage with and contribute to several UNESCO and UN led initiatives"



his year the Wadden Sea, through its very successful International Wadden Sea School network, was called upon to support, engage with and contribute to several UNESCO and UN led initiatives.

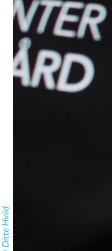
In April the UN held its World Conference on Education for Sustainable Development, where the Wadden Sea was invited by the German UN Commission to take part in a satellite event focusing on how education for sustainable development can support communities and conservation. The Wadden Sea World Heritage

Site and Biosphere Reserve was the topic of a joint presentation by Claus von Hoerschelmann, of the Biosphere and long term partner of the IWSS and Anja Szczesinski, coordinator of the IWSS and Network Group Education. The conference, organized by UNE-SCO in cooperation with the Federal Ministry of Education and Research of Germany, was held as online event from 17 to 19 May 2021 and brought together stakeholders of education for sustainable development (ESD) from around the globe who adopted the Berlin Declaration on Education for Sustainable Development.

Within the framework of the UNESCO program ESD 2030 the German UNESCO commission has launched an initiative to certify educational offers that work towards the Sustainable Development Goals and help save our planet. CWSS was asked to join the jury to evaluate the applications and is represented by Anja Szczesinski, as coordinator of the IWSS on behalf of the TWSC.

Initiated by the German UNESCO commission, a schoolbook with a special focus on World Heritage is currently being produced by the renowned German publishing company Westermann Verlag. The CWSS has been asked to contribute a chapter on the Wadden Sea World Heritage Site, which Anja Szczesinski compiled together with colleagues from the National Park administrations of Germany.

And finally, the Wadden Sea World Heritage Site visitor centres were represented at the UNESCO workshop themed "Visitor centres and community engagement" in Italy, in October 2021, where inspiration for the network of Wadden Sea visitor centres was gained.





### PARTNERING FOR WORLD HERITAGE

## TRILATERAL PARTNERSHIP HUB ACTIVITIES

he International Wadden Sea School with the Network Group Education, the Wadden Sea Flyway Initiative, the Interreg Project PROWAD LINK, the Network Group Sustainable Tourism, and the Trilateral Programming Committee on Wadden Sea Research can be regarded as successful examples of Trilateral Partnership activities which support the Wadden Sea World Heritage. They reflect the collaboration and partnership between governmental and non-governmental parties and stakeholders that are in the DNA of the Trilateral Cooperation.

In recent years partners have achieved key milestones when setting out the purpose, the common vision and principles of collaboration and signing up a Memorandum of Understanding. In this article we will highlight by two examples how the partnership approach is translated into practice. The Partnership Hub development pilot phase runs until 2022

### General Principles for common activities and initiatives

The Hub initiates, supports, and further develops projects and activities, facilitates collaboration among strategic partners' networks, and encourages the development of new projects and ideas.

The base of this wide range of activities is given by general principles on how initiatives and projects should be oriented, organised, and conducted. All activities should contribute to the protection of the Wadden Sea, the safeguarding of the Oustanding Universal

Value (OUV) and to a sustainable Wadden Sea Region with socio-economic developments and vibrant communities. These should be achieved through the effective cooperation among stakeholders from different sectors on a transnational level. Following these principles, partners are encouraged to strengthen or create new collaborations across regional and national borders and join forces in tackling common issues.

### Projects and initiatives Dark Sky

While over 80% of people around the world can no longer experience true dark nights, nocturnal darkness still represents a key quality of large part of the Wadden Sea area that needs to be maintained and further enhanced. Recreational stargazing represents sustain-

able tourism opportunities to market destinations, new products and services, and, at the same time, it offers benefit for local communities. Nocturnal darkness not only gives us the possibility to look up and see a spectacular starry night sky, but its appearance is essential for biodiversity and natural ecological processes. The protection of darkness and reduction of light emissions affecting the Wadden Sea World Heritage Site supports and enhances the protection of the Outstanding Universal Value, because, among others, night-time lighting has a detrimental effect on migrating birds and endemic insect life. Human health can also be negatively impacted by increasing levels of light pollution. Lastly, reducing light contributes to energy savings and subsequently containing CO<sub>3</sub>-emissions.

The Trilateral Dark Sky Initiative aims to address all these aspects, highlighting the importance of nocturnal darkness for both the ecosystem and humans

and intends to unlock the potential linked to its preservation. Within this network a wide range of organisations, authorities and individuals meet regularly at a trilateral level to exchange knowledge and best practice examples by sharing their successful local stories and cooperate to raise awareness on the importance of nocturnal darkness, develop new activities and products, and increase the political awareness around this topic.

One of the milestones in 2021 was the successful organisation of the Webinar "A Darker Sky in the Wadden Sea Region", which brought together organisations, stakeholders and astronomers working on the different aspects related to nocturnal darkness in the Wadden Sea Region and beyond. The webinar, organised by the Programme Towards a Rich Wadden Sea with the support of the Dark Sky Initiative and numerous speakers, gathered almost 100 participants.



Currently, participants are looking for new ways to further strengthen and enlarge their network and continue improving their works. Within this framework, the possibility of develop-

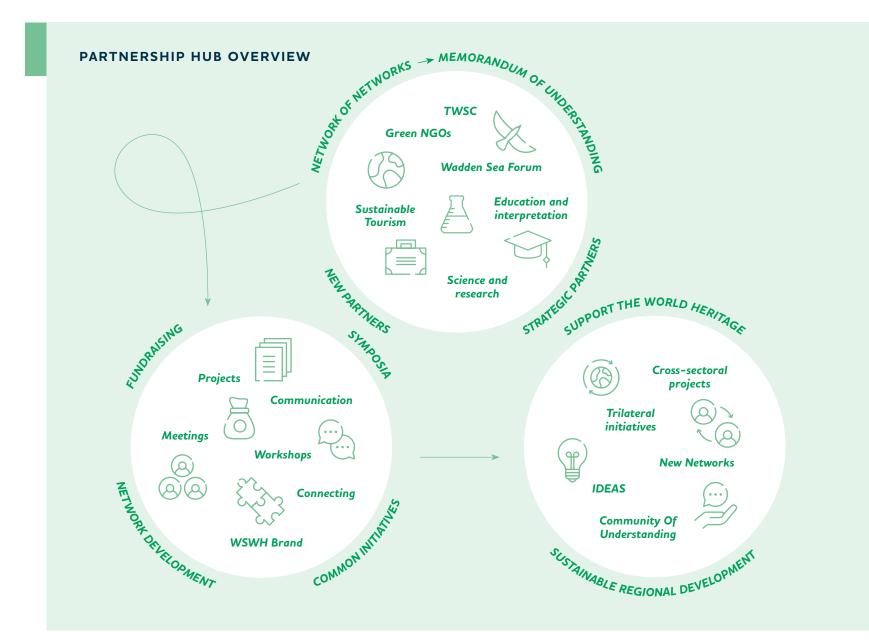
ing a transnational project on Dark Sky

### Shipping and Harbours

is currently being explored.

The southern part of the North Sea is one of the worlds' busiest areas in terms of international marine traffic. The shipping sector is highly important both for the economy and society in the three Wadden Sea Countries, but also represents a considerable threat to the Integrity of the Wadden Sea and its exceptional and globally outstanding tidal ecosystem. Even if some important improvements in shipping safety have been achieved in the latest years, a general environmental standard for shipping and ports operation has not been reached.

Against this background, the Wadden Sea Team of Green NGO's together with the Wadden Sea Forum are joining forces to work on sharing and developing knowledge on environmentally friendly shipping and ports operations. The aim of the project is to act as a catalyst for constructive and viable solutions for ports and shipping based on cooperation amongst different actors. Since many years the importance of the shipping and port sector for the Wadden Sea is well acknowledged and recognised at the TWSC level and is also one of the 5 key topics addressed in the SIMP. Within this context, the initiative by the WST/WSF will support and complement the actions taken up by the TG-Management as well as by the further developments in the SIMP process. ~~~



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### **PROWAD LINK**

### PROTECT AND PROSPER



s with many other projects, PROWAD Link has once again been heavily impacted by the Covid-19 pandemic, and outreach has shifted almost entirely to online co-creation workshops, webinars and video clips. On the other hand, using online tools has, in some cases, enabled the main target partners to attend more meetings and helped the project to better meet the demands of businesses.

The project group also developed a stronger and broader degree of digital communication in order to keep transnational cooperation alive. This led to a very constructive "digitalisation" of the entire project team with regards to the use of video software and the moderation and implementation of virtual project meetings and events. Since April 2020, three bi-annual project partner meeting were held successfully and enriched with online surveys and fruitful exchanges. There continues to be a strong level of engagement despite the virtual fatique that can affect projects during this trying period for the planet.

Two webinars were successfully carried out to present the reports on "Ecolabels for tourism SMEs" and how SMEs cope with the pandemic. The video series on SMEs during the pandemic has been reviewed and the first video now focusing on sustainable entrepreneurship was released in January 2021.

After cancelling the entire event in 2020, the ITB in Berlin decided to avoid another cancellation in 2021 by arranging the first ever ITB Berlin NOW, an entirely virtual platform. While the project partners were disappointed that they were yet again unable to meet physically, the opportunity to showcase the project and the three nature areas involved was warmly welcomed. Under the project heading of "Protect and Prosper", Geiranger Fjord, The Wash and The Wadden Sea were presented during the live event from 8th to 12th of March.

The parallel ITB Berlin Convention, which was streamed live on several channels from two broadcasting studios on the Berlin Exhibition Grounds, provided comprehensive orientation

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for the industry. Under the heading "Towards a sustainable recovery from COVID-19 for tourism in protected areas: Prowad Link – unlocking the

potential of natural areas for sustainable development", project partners and external experts offered insights into best practices, forecasts, and visions for the future. Overall, the participants offered a positive assessment of the virtual events and rated conference sessions as good, welcomed the

possibility to have recorded slots for later views, but missed the interaction and networking opportunities a regular fair offers.

Covid-19 has changed the world and how a lot of things are being done. This pandemic has highlighted how humankind and nature are closely interlinked. Natural heritage sites can be powerful and inspiring destinations for innovation and sustainable development. The brand activation for sustainable economic development work package was from the beginning aimed at improving local stakeholder and SME access to nature brands with economic value. As the economy after COVID-19 will need to be rebuilt, a huge opportunity to enact a green recovery that will protect people and the planet gives the project an opportunity for enabling our partners to do exactly that.

A brand activation guidebook and online toolbox to facilitate transnational communication and marketing for SMEs and local partners in four languages, was finalised providing a solid foundation for further brand activation. The toolbox brings together several functions under a single application interface, including appropriate brand information and tools (such as region-specific core stories) and schemes and tools for co-branding. The toolbox is now ready for use in the regions and in conjunction with ongoing or planned trilateral Partnership Hub activities.

A Partnership Hub officer was recruited in September 2020 to enhance engagement with potential partners as this has become more challenging during the pandemic. The officer has







facilitated joint projects to be carried out in the framework of the Hub and collected project ideas for new transnational projects and as well as how to facilitate knowledge exchange.

Work on sustainable entrepreneurship has continued with data collection and interviews with SMEs. Desk research was used to develop tools for enhancing sustainable entrepreneurship, while data collection on "Sustainable Entrepreneurship" was carried out for another report published in March 2021, New overviews of best cases of sustainable entrepreneurship were also released and focussed on:

- Sustainable businesses in touristic nature areas - Best case examples from 5 countries.
- Adapting to Covid-19. How local tourism businesses cope. Examples from 5 countries (living document)
- An Overview of Ecolabels for Small to Medium Sized Tourism Enterprises

A true highlight was the kick-off of the first transnational visitor survey covering the entire Wadden Sea World Heritage area which started in July 2020, during the summer holidays. The survey missed the spring season of 2020 as lockdowns in many parts of the three Wadden Sea countries prevented visitors from coming. This was also the case in spring 2021 and after careful consideration, it was therefore decided to extend the visitor survey to August 2021, with support from all regions. A preliminary analysis of the 2020 survey results was carried out to investigate potential changes in visitation in the Wadden Sea as a result of the Covid-19 pandemic and to help SMEs to adapt their products and services to the new situation.

Other activities, especially on co-creation and development of new and improved products and services, have continued. Three co-creation workshops were held in the German national parks, two of them virtually. In the Danish national park, new groups of stakeholders were formed to work on a sustainable future for the island of Mandø, developing a hiking route, and promoting sustainable school trips in the Wadden Sea.

As a follow up of co-creation workshops carried out in The Wash/North Norfolk in 2020, local SMEs were supported when applying for UK grants/ funding to support local initiatives, projects and products that fit into the Nature Business Benefit Cycle product co-creation workshops. Three businesses were supported to successfully apply for grants to implement their new products, and a total of seven new initiatives have been created developing new products and services in 2021. One of the businesses that successfully applied for grant funding has now also decided to support the local partnerships financially and proudly show the logo of "The Wash and North Norfolk Marine Partnership" on their website.



### $\sim$

### PROWAD LINK - PROTECT & PROSPER

In June 2021, an application for an extension of the project with new, additional activities was approved by the NSR Interreg Steering Committee. The project will now continue until 31 December 2022 and will address new topics:

1.

The North Sea Sustainable Innovation Challenge: Involvement of public (individuals, SMEs, students, stakeholders) to propose innovative business models and products, and support of winners in promoting and implementing their ideas.

2.

The beneficial effects of nature experience on mental and physical well-being:

- A pilot study to assess the link of nature experience and general mental and physical well-being.
- The development of guiding material for SMEs to address the growing market for mental and physical wellbeing offers that interlink with the awareness and protection of nature, thereby creating new business opportunities in harmony with nature.

3.

New innovative initiatives to create business opportunities by enhancing awareness for nature through:

- Transnational brand activation training and campaigns. implementing the new brand toolkit.
- Pilots for activation of a new nature brand connecting local destination marketing organisations and conservation agencies in The Wash/North Norfolk.
- Video tutorials to educate and guide inexperienced and new tourists in cooperation with local destination marketing organisations.

4.

The development of additional funding opportunities for the trilateral Partnership Hub by supporting and promoting the establishment of a new, trilateral foundation to support transnational knowledge and partnership exchange beyond the lifetime of this project.

The development of materials to guide and educate inexperienced and new tourists on how to connect with and behave in nature in a more sustainable way through for example video clips to be shared on social media, SME's own websites and communication channels.

5.

# **ORIS COOPERATION**

# DAT WATTAND THE WADDEN SEA



n May of 2021, the Oris Dat Watt watch, a tribute to of the Wadden Sea World Heritage Site, was launched. The watch is the newest in the line of professional diving watches that Oris SA has developed in cooperation with world class natural marine sites around the world. It is also the first time the Trilateral Wadden Sea Cooperation has entered into a partnership with a private company, and parts of the proceeds of the sale of the watches will be donated to support conservation efforts in the Wadden Sea.

As a guiding principle, cooperation with business partners has the overall goal to enhance awareness of the Wadden Sea as a fragile environment which has to be protected to maintain its Outstanding Universal Value. Over the past decade, Oris has worked with non-profit environmental organisations and clean-up movements all over the world, so the collaboration with the Wadden Sea, a marine World Heritage Site, was a nat-

ural fit. 2021 is also the year that Oris SA became climate neutral.

Sustainability is very much at the heart of the cooperation, and to that end Oris will host an event every year for three years, to be held in each of the Wadden Sea countries, with a focus on marine litter and local sustainability efforts.

September 2021 saw over 20 specially invited guests spent a weekend in Lauwersoog in the Netherlands, in order to pick marine litter, learn about the Wadden Sea and local sustainability initiatives and experience the World Heritage Site by sailboat. Generously provided and excellently skippered by the Wadvaarders Association, 16 or so vessels took off from the harbour at Lauwersoog for the sandbanks of Het Rif, west of the island of Sciermonnikoog. Here guests and sailors spent a beautiful afternoon collecting over 240 kgs of marine litter, including glass, plastic containers, and much litter from the fishing industry.



The Watvaarders is a special interest organisation, with over 2000 members, which has worked for over 30 years as an ambassador for the sustainable use of pleasure craft in the Wadden Sea. The group is committed to treating the nature of the Wadden Sea with respect and are co-instigators of the Code of Honour for pleasure sailing in the Wadden Sea. They often consult with management parties on the development and protection of

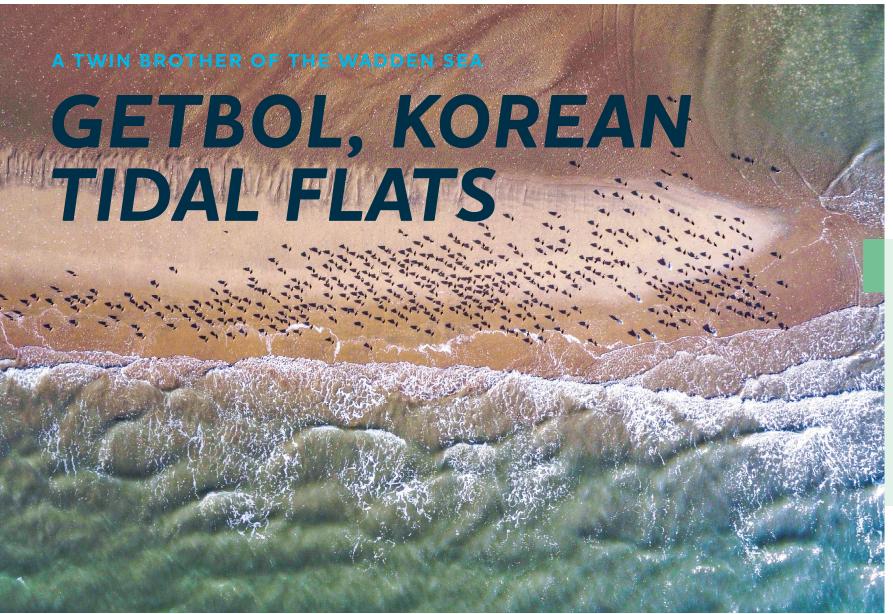


the Wadden Sea, in relation to water sports and sailing.

The group was also introduced to the harbour of Lauwersoog, which is currently working towards becoming a sustainable harbour, and several other local initiatives where highlighted, including the Great Plastic Bake Off and the yet to be built Wadden Sea World Heritage Centre. Participants were particularly impressed by the "Ecolution", a sailing vessel that runs on hydrogen instead of diesel. Lunch was enjoyed at 't Ailand, a restaurant run by two local fisherwomen. The event was concluded with a Dark Sky Park excursion where the group learned about the interaction between humans and darkness.

The event was supported by the Prowad Link project and was intended to show how the project partners can engage with SMEs in order to improve in opportunities for brand campaigning.









well as migratory waterbirds."

© World Heritage Promotion Team of Korean Tidal Flats

he Getbol was finally inscribed in World Heritage List this July. It is not too much to say that the history of Getbol's World Heritage inscription process has the same history as the co-operation with the Wadden Sea. The Memorandum of Understanding between the Republic of

Korea and the Wadden Sea was signed in March 2009. Based on this, the 1st international Joint Workshop was held in Korea in October 2009. The World Heritage Inscription of the Waden Sea in 2009 served as a good stimulus to the Getbol, and in 2010, the Getbol was listed on the Tentative List.

For the Getbol, the Wadden Sea has always been a good role model and friend. In 2012, a delegation of the Getbol World Heritage Preparation Committee toured the entire Wadden Sea area, and the delegation was able to learn about the high-quality conservation and management system of

the Wadden Sea. At that time, many of the Wadden Sea colleagues, including Jens Enemark and Harald Marencic. welcomed and cheered for the Getbol's work towards inscription on the World Heritage list. During the promotion process, many scientists such as Burgard Flemming, Martin Baptist, and

Hubert Farke shared their experiences and scientific knowledge and helped fill out the World Heritage nomination of the Getbol. Without the co-operation of friends from the Wadden Sea, who supported the Getbol as if it were their own business, the Getbol World Heritage inscription would not have been successful.

The Getbol's World Heritage Inscription will be an important milestone to take further steps towards a closer relationship, including exchanges and co-operation, between the Getbol and the Wadden Sea. The Korean government and the Common Wadden Sea Secretariat are preparing to sign a more comprehensive and practical Memorandum of Understanding, including the World Heritage Sites. Through this, it is expected that not only exchanges between scientists and managers, but also exchanges between future generations will be more active. In particular, like the twin towers of World Heritage sites towering to manage tidal flat habitats in both the East and the West, the future co-operation will greatly contribute to global conservation for tidal flat habitats and ecosystems as well as migratory waterbirds. ~~~





# **WADDEN SEA FACES**

# CHRISTIAN BUSCHBAUM

"This is also my message for the next generation: I believe that we must live a lot more WITH the Wadden Sea"







I kind of grew up in the Wadden Sea science and protection community, which, to my perception, always served a specific cause: within this community I discovered the rather unique fact that research and protection were brought together. This is slightly different from my usual, purely scientific-orientated work environment. Science and research served the overall goal of protection. As this is quite valuable for me, and since I have benefitted a lot, also in my personal development, I would like to give something back by supporting the cooperation.

# What does the Wadden Sea mean to you?

It is my sandbox! I can live out my enthusiasm in an environment which I had already admired as a kid. And I can gaze into the distance. Sounds awkward, but it really means personal freedom to me if my view is not blocked by houses or trees or anything else. I am aware that this is a rather emotional statement, even if this also counts for other marine regions to some extent. But another, rather unique, fact about





the Wadden Sea is that for some hours each day the sea bed is exposed and largely accessible which also has a major influence on my work.

# What is the image in your mind when you think of the Wadden Sea?

Changeability. Games of light. Nowhere else is the scenery as changeable and multifaceted, with great light dynamics, as in the Wadden Sea. If you look from the beach towards the dunes, it starts with bright yellow sand, towards the green of the dunes, blue sky, white clouds, then turning to the sea with almost infinite colours. That's a decent panorama for a proper photographic wallpaper. Simply great colours and due to changing light conditions it is never boring.

# What is the most special place for you in the Wadden Sea?

At sea, on board of my little sailing boat. It is a classic, built in the Netherlands in the 60s. I can think of no better place. Full stop.

# In your eyes, what will the Wadden Sea look like in 2050? What message do you want to give to the next generation?

I definitely expect a faster change than during the hundreds of years before. Due to climate change, alien species and sea level rise, the Wadden Sea will look very different from today. Which is okay. It will be exciting to experience this change, to accompany these processes and to develop adaptation strategies. This is also my

"Nowhere else is the scenery as changeable and multifaceted, with great light dynamics, as in the Wadden Sea"



message for the next generation: I believe that we must live a lot more WITH the Wadden Sea. The inscription on the World Heritage List resulted in a slight change of people's reception of their own area and also the softening of the almost historical controversial view of people either trying to make use of the Wadden Sea and the protection community. A common ownership became noticeable. To my mind, there is even more potential, and I wish for the different positions to go further to develop a common understanding and a sense of well-being, also under consideration and integration of economic interests. All this while safeguarding the natural dynamics and positive effects for the local society. ~~~

# A LOCAL STORY

# **WEST BREW**

ommy Bagger has been home brewing beers for many years, but in 2019 a dream came true when he was able to open his own brewery in Kjelst, in the northernmost part of the Wadden Sea World Heritage Site. Today, his brewery has partnered with the Danish Wadden Sea National Park in brewing a beer which supports the endangered black tern and is also a key SME partner in the Prowad Link - Protect & Prosper beer project.

"It is important for the brewery to be located within the National Park and so close to the Wadden Sea. We are inspired to use local ingredients and the story of the Wadden Sea in our work" Says Tommy Bagger. All of West Brew's beers are created using organic malt grown by his neighbour, Ole Andresen of Bakkegården, whose

fields are also within the National Park boundaries.

For Tommy Bagger the Wadden Sea is special because the nature of the World Heritage Site is without boundaries or borders, a concept which he finds very inspiring, and which in turn has influenced his way of developing new beers. Crafting new beers is a very creative process that allows for traditional boundaries to be crossed, something he feels reflects the dynamic and free processes of the Wadden Sea.

In partnership with the National Park, West Brew has developed a completely new beer by the name of Black Tern, inspired by the current project in the southern end of the Danish park aimed at improving the breeding success of the endangered black tern. Parts of the proceeds from the sale of the



"It is something special to work with people who are just as passionate about their work as we are"



beer will go towards helping pay for new artificial nesting rafts in the Tøndermarsk, an initiative which has seen nearly a 100% increase in the number of flight-ready young in just five years.

And when the Prowad Link – Protect & Prosper project commenced working with breweries across all five partner sites, joining another transnational project was an easy decision for Tommy Bagger: "It is exciting to be a part of a borderless project, I really enjoy the different cultures that we meet within the project. It will be great to eventually be able to visit the other breweries and perhaps develop a Wadden Sea Beer Box".

For Tommy Bagger, the collaboration with the Wadden Sea has been a fantastic experience: "It is something special to work with people who are just as passionate about their work as we are."





2022

# OUTLOOK

August 2022

March, August, September, October and November 2022 July and October 2022

After the pandemic hiatus, the Wadden Sea Day returned with great success in 2021, as organised by the Wadden Sea National Park Authority of Lower Saxony, with presentations from all along the East Atlantic Flyway. In celebration of the success and in recognition of the work still ahead for the Wadden Sea Flyway Initiative, global organisations such as Birdlife International and AEWA-UNEP presented their views on the important work carried out by our many partners along the route.

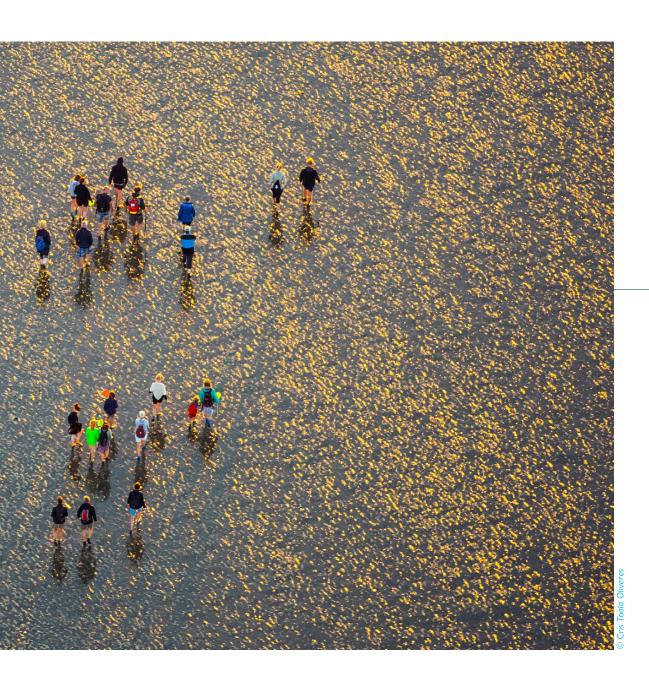
The Wadden Sea Day is not only a chance to do a deep-dive into a specific area of work related to the Wadden Sea, it is also an exceptional opportunity for networking. In 2022 the event will as usual be held on the last Thursday in August, and once again the event will be held in Wilhelmshaven.

With the Trilateral Governmental Conference (TGC) happening in November 2022, the Wadden Sea Board will meet more times than usual, with meetings currently scheduled for March, August, September (optional), October, and a meeting both before and after the TGC in November.

The Wadden Sea Board is the TWSC's governing body. It runs and oversees the work of the TWSC between sessions of the TGC, preparing, adopting, and implementing the Wadden Sea Plan, as well as policies and strategies.

One of the important duties carried out by the TWSC is the annual counts of grey and harbour seals. Every winter the grey seal counts are carried out trilaterally and a summary report is released at the start of July. Equally, every summer the harbour seals are also counted, with details of their current state being reported in the beginning of November. The work is an integral part of the Wadden Sea Seal Agreement, which in 2021 turned 30.





September 2022

November 2022

2022 will see the first ever Trilateral Youth Conference, organised by the German Presidency, with the express purpose of increasing young people' engagement in the Wadden Sea and its protection. The involvement of young people in the joint efforts of the TWSC is an important factor in continuing the successes and efforts of the Cooperation. The conference will take place in St. Peter Ording, in the German Wadden Sea. ~~

The 14th Trilateral Governmental Conference will be held in Wilhelmshaven on the 29th of November - 1st December 2022.

The TGC is held every four years and signals the transfer of the presidency from one state to the next. The current German presidency will be handed over to Denmark, who will present the Wilhelmshaven Declaration, which will set out the key points for the 2023-2027 period of the Trilateral Cooperation on the Protection of the Wadden Sea. ~~~

# THE TRILATERAL WADDEN SEA COOPERATION

# **BOARD AND ORGANISATIONAL STRUCTURE**

### MEMBERS OF THE WADDEN SEA BOARD



KARIN LOCHTE

CHAIR, Deutsche Allianz Meeresforschung, GEOMAR Helmholtz-Centre for Ocean Research Kiel. Germany



ANNE-MARIE VÆGTER RASMUSSEN

National Representative to the Board, Deputy Director General, Environmental Protection Agency, Ministry of the Environment and Food, Denmark



DONNE SLANGEN

National Representative to the Board, Director Nature, Ministry of Agriculture, Nature and Food Quality, Netherlands



ILKA WAGNER

National Representative to the Board, Head of Division Marine Nature Conservation, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), Germany



JOOST DE RUIG

General Director Rijkswaterstaat North-Netherlands, Netherlands



CHRISTINA EGSVANG FØNS

Representative of the Danish Wadden Sea municipalities, Environmental Manager at Esbjerg Municipality, Denmark



HANS GABANYI

Director, Office for Nature Conservation, Green Planning and Energy, Hamburg Agency for Environment and Energy, Germany\*



INGELORE HERING

Director, Nature Conservation, Water Management, Soil Protection, Lower Saxon Ministry of Environment, Energy, Construction and Climate Protection, Germany



VERA KNOKE

Deputy for Marine Protection and National Park, Schleswig-Holstein Ministry for Energy Transition, Agriculture, Environment, Nature and Digitalisation, Germany



JANNE J. LIBURD

Professor, D. Phil. Ph. D., Department of Design and Communication, University of Southern Denmark, Chair National Park Wadden Sea, Denmark



MARTIN PETERSEN

Head of Department, Environmental Protection Agency, Ministry of the Environment and Food Denmark



HENK STAGHOWER

Deputy Agriculture and Fishery, Landscape and Nature, Province of Groningen, Netherlands



THEO MESKERS

Alderman for Economic Affairs, Municipality of Hollands Kroon, Netherlands

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# **ORGANISATIONAL STRUCTURE**

