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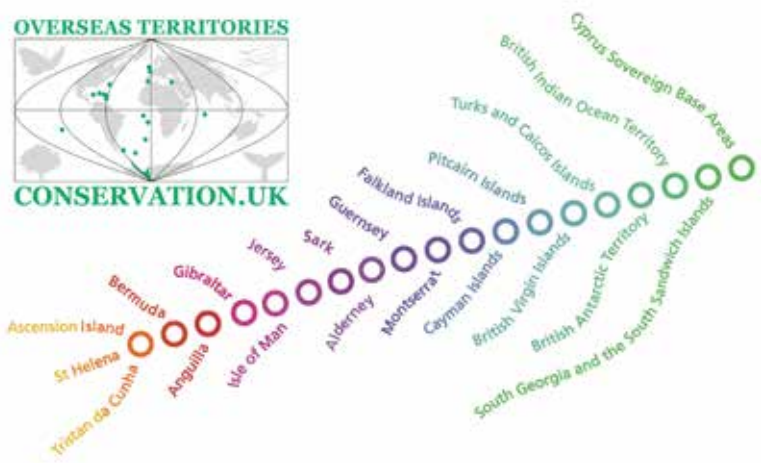
In this special issue of *Forum News*, we include the first report of our 6th (and first online) conference for conservation practitioners in the UK Overseas Territories, Crown Dependencies and other small island states. The Conclusions and Recommendations from the conference are available at https://www.ukotcf.org.uk/wp-content/uploads/2021/03/UKOTCFconf2021_ConcRec_210311.pdf . The proceedings with full papers will be published in a few months' time. Here, we publish summaries of these, with the full texts of the opening address by Hon Prof John Cortés (pages 3-4), the first Sir Richard and Lady Ground Lecture on conservation in the UK Overseas Territories and Crown Dependencies, by Gina Ebanks-Petrie (pages 21-27), and poems by Shakira Christodoulou, inspired by the conference (pages 28-29). We include also important non-conference items, including an obituary of Bruce Dinwiddy (page 32), followed by notes on new team members, updates on the giant iceberg, Stony Coral Tissue Loss Disease and the Blue Belt, and the Statement from the UKOT/CD Environment Ministers' Council meeting (pages 39-45), which followed the conference.



Staying Connected for Conservation in a Changed World:

UKOTCF's 6th conference on conservation and sustainability in UK Overseas Territories, Crown Dependencies and other small island states

By Zoom

2nd, 3rd, 9th & 10th March 2021

UK Overseas Territories Conservation Forum is pleased to acknowledge support for this conference from Peter Flockhart, anonymous donors and the following sponsoring organisations:

Report from the Conference

Tuesday 2nd March 2021

Opening of the conference

UKOTCF's Chairman, Dr Mike Pienkowski, welcomed all to the conference, noting UKOTCF's role as a federation of bodies, from across the territories and beyond, involved with conservation in UK Overseas Territories and Crown Dependencies, and indeed an even wider network of experienced and committed individual supporters. He thanked all for participating and the speakers, poster-presenters, topic-team members, musicians, video-makers, fellow organisers and many others, all of whom had put much work into preparing this conference.

He expressed UKOTCF's thanks to, and named, those who have sponsored the conference in one way or another (see page 1).

He drew attention to the Guidance to participants in the conference, and in particular its Code of Conduct, and outlined other aspects of logistics – and thanked the other three volunteers working alongside him to run the conference: Dr Jamie Males, Catherine Wensink and Ann Pienkowski.

He noted too: "Trying to make recommendations to help drive conservation forward has been a key feature of our conferences over the past 20 years. Responses to the ones from the 2015 conference suffered some distraction. UK Ministers had committed to responding to these, and officials said for several years that they still would. However, the diversion of effort to deal with Brexit eventually prevented them from fulfilling the ministers' commitments. However, we did a quick check recently and found that 54 recommendations had been at least partly fulfilled, and at least 4 fully. We were particularly pleased in seeing a quiet reversal in UK Government's ban on funding environmental education work in the UKOTs – something we had been pushing for since it had been brought in – apparently by mistake – 7 years earlier. One has to be persistent sometimes, and we congratulate UK Government on this restoration."

Dr Pienkowski expressed the pleasure and honour to introduce a statement by the **Right Honourable Lord (Zac) Goldsmith of Richmond Park, Minister of State for Pacific and the Environment at the Foreign, Commonwealth & Development Office, and the Department for Environment, Food and Rural Affairs,** summarised below.

Lord Goldsmith expressed pleasure to be able to speak, noting the UK Overseas Territories and the Crown Dependencies as home to a truly astonishing diversity of life, with countless species found literally nowhere else on earth. "It is hard to exaggerate the importance of protecting these treasures of the natural world, not just because, once lost, they are lost forever, but because, if we continue the current road to destruction, we will all pay a terrible price."

He noted that "Covid-19 is just a small glimpse of that, born, as it almost certainly is, of our mismanagement and abuse of nature. But, notwithstanding the giant human and economic costs of the pandemic, it doesn't compare to the consequences that we know we can expect if we continue to destabilise the world's climate and degrade the natural world around us. And there is no doubt that is what we are doing. Our warmer and more acidic ocean is overfished and choked with plastic pollution. Deforestation rates are unbearably high and increasing, making it a leading source of emissions. The illegal wildlife trade is now a serious organised crime on a global scale. Populations of key species have plummeted by around 70% since 1970, with a million species currently facing extinction, including 2 out of every 5 plants."

"It should go without saying that this isn't merely a crisis of nature. It's a human crisis as well. Just one example: coral reefs, something of a litmus test for our future and something that we are working hard together to protect; half of the world's warm-water coral reefs have been destroyed… and that spells disaster for the quarter of marine species that are supported by corals and for the hundreds of millions of people who depend on reefs for food, for coastal protection and for their livelihoods. Inevitably, it's the world's poorest to suffer first and worst as the free services that nature provides begin to fail. So, whatever other problems we face and there are many, they pale in comparison with the need to act now to put the natural world on a road to recovery and that means raising our ambition far beyond saving the last members of iconic animal species. It means protecting what remains of the world's intact ecosystems and embarking on a programme of restoration on a scale that we have never before seen. And that's why, as CoP-26 presidents, the UK is putting nature at the very heart of our ambitions for the all-important Climate Change Conference in Glasgow later this year – because there is no path to net-zero or to the sustainable development goals that does not involve protecting and restoring the natural world on a massive scale."

"So, over the next 5 years, the UK will commit to at least £3 billion of our international climate finance to climate-change solutions that protect and restore nature, and we're urging other countries to do similarly."

"At the same time, we are working with China as host of the Biodiversity conference, pushing for the highest possible ambition. We are campaigning to secure global agreement to protect at least 30% of the world's land and ocean by 2030, alongside a range of ambitious targets to reverse nature loss. And, crucially, we are pressing for adoption of mechanisms for holding governments to their promises."

"If we really are to build back better, we need to work together, governments, businesses, NGOs, civil society alike, so we can

shift the immense power of the market from destruction towards sustainability. On the back of our commitment to double our international climate finance and to spend nearly 1/3 of that on nature-based solutions, we are developing an exciting pipeline of new programmes all around the world. For example, this year we are launching a new £500 million Blue Planet Fund to help developing nations and eligible Overseas Territories[1] to protect and restore valuable marine environments."

Lord Goldsmith referred to the Darwin Plus programme "supporting work across the Overseas Territories" "For 5 years, we have also been building and supporting the amazing Blue Belt of marine protected areas around the Overseas Territories, and I couldn't have been happier or more grateful when, just a few months ago, Tristan da Cunha islanders in the South Atlantic announced a new marine protected area 3 times the size of the UK. In total, that's now over 4,000,000 km² of ocean, an area larger than India, an astonishing achievement that will benefit the entire world.

"So before I leave you to the conference. I want to thank you so much for all you do. Almost every day, I point to your pioneering work when I want to try and inspire others to raise their ambition. We are absolutely committed to supporting the Overseas Territories and the Crown Dependencies to protect their unique environments. There isn't a government in the world whose actions truly match the scale of the crisis today, but we are stepping up. We each have a duty to make this the year we catalyse a decade of action to profoundly reset our relationship with the natural world. I wish you well and I thank you very much what you do."

Mike Pienkowski thanked the Minister for a clearly deeply felt expression of concern and enthusiasm for the UK Overseas Territories and Crown Dependencies, and noted that UKOTCF looks forward to further constructive engagement with the Minister and his team.

He continued that we are pleased to maintain and build on our traditions of these conferences, and particularly that we are joined today by **Professor John Cortés** who hosted the first in Gibraltar in 2000 as General Secretary of GONHS and Director of Gibraltar's Botanic Gardens, and the fifth there in 2015 as Minister of the Environment. He is currently **Minister for the Environment, Sustainability, Climate Change, Heritage, Education and Culture, as well as Chairman of the UK Overseas Territories & Crown Dependencies Environment Ministers' Council.** Prof Cortés' speech is below.

"Thank you, Mike. How time flies! Yes: almost a decade as Minister for Environment; I don't know how many decades as the head of GOHNS and two decades in the Botanic Gardens. But of course I am here; where would I rather be than with friends and colleagues. So, hello to everyone and especially those old friends I haven't seen in person for a while. It is good to be here and it's a real pleasure for me to be able to address during the opening of this conference – webinar for the first time – an event that now spans two decades, and that serves perhaps more than others to focus on the importance of, and challenges to, the biodiversity and sustainability of the OTs and the CDs. I'm honoured too to follow the welcome from Lord Zac Goldsmith, who I know personally is totally committed to the protection and enhancement of the environment in all its forms and to support the territories in achieving our environmental and sustainable development aims.

"These conferences also served as inspiration for the setting up of the OT/CD Environment Ministers' Council, which I have the honour to co-chair with the Minister for Environment of the territory hosting each particular session. The Environment Ministers' Council, which will meet again – virtually – next month, serves to keep political leaders in the territories in touch with each other and aware of challenges and possibilities in each other's jurisdictions, allowing us to learn from our combined experience. Of course, while we have much in common, we are all different, with different aims and challenges, albeit with common threads. By meeting in this way we better understand these differences and so better move forward with the strength of our diversity. By working together with Her Majesty's Government, and with the support of UKOTA (the UK Overseas Territories Association), we have, for example, been able to ensure that the OTs are directly represented in international meetings, such as the Conferences of the Parties following the Paris Agreement.

"The conclusions and recommendations of the conference this week and next will be considered as a major agenda item in next month's Council meeting, so providing a direct link between this event and its participants and the territories' executives.

"This approach worked well at the last Gibraltar UKOTCF conference in 2015 and enabled several things to happen, including the Blue Islands Charter, inclusion of territories in the UK delegation to international conventions which I just mentioned, the Council's adoption of the Forum's review of progress against Environmental Charters and more.

"A particular feature of these conferences is a very close interaction between government bodies and NGOs which, to my mind – and I been active in both many years now – often holds the key to success in promoting and ensuring sound environmental governance. It is one of the positive features of small communities that such interaction is so often between people who know each other and can trust each other. Our small size will also mean that there will likely be a better understanding of specific issues and are more focused range of views and solutions to consider. In Gibraltar, this cooperation has worked extremely well. While it in no way limits the independence of NGOs nor the possibility of disagreement, even in public, it has certainly led to a great deal of mutual respect and practical and operational cooperation in many initiatives, from preparing of surveys and reports by the NGOs on behalf of the government to practical collaborative projects like re-introductions and wildlife monitoring. NGOs, particularly in small territories, which may have few scientific institutions, hold a vital wealth of knowledge and experience of critical value in progressing our common agenda. This knowledge has to be recognised and accepted without embarrassment or hesitation by governments, while the NGOs have the obligation of pursuing their environmental aims while not falling into the trap of appearing to

[1] Editorial note: "eligible Overseas Territories" is thought to refer to those UKOTs that are eligible for Overseas Development Assistance, as defined internationally (*i.e.* currently Montserrat, St Helena, Tristan da Cunha and Pitcairn). However, there would probably be a need to show poverty alleviation benefits as well as biodiversity ones, which is unlikely to be possible for the most biodiversity important islands, which are uninhabited.

have a political agenda. It can feel like a tightrope, but often it's more like a bridge. NGOs can often bring a touch of reality to the discussion. They are often made up of people on the ground within our lands, very likely volunteers who feel the loss of a patch of scrub or a rocky coastal outcrop in their hearts. I know I still do. I'm sure that many of you listening to me now know exactly what I mean. And so it's people here in this conference from NGOs, political government and officials who will have the opportunity – nay, the duty – to set out the aims and recommend the directions we need to follow.

"One important fact that follows from this, of course, is a need to redress the balance in the recent shift away from what used to be funding to or via NGOs in territory or umbrella bodies. Long-established links and partnerships are key to ensuring value for money, long-term capacity building, and long-term conservation successes. The UKOTs have a wealth of expertise and, most importantly, the local knowledge of their own environments to know what the priorities are. Support by technical expertise from outside, like from UK NGOs and the UK Government, adds value but cannot replace in-territory expertise. It's imperative that any outside technical expertise comes about because it is a priority for the territories and not as a way to implement other agendas or to resource others. Environmental colonialism is not welcome. To put it another way, access to funding must also be territory-sensitive, and not just be a rollout of a, usually very sound, wider UK policy.

"Let me explain as an example. The recent change, already applied to ODA-eligible territories like Montserrat and St Helena, Tristan and Pitcairn, means that the only remaining biodiversity grant fund, the Darwin initiative, with all its benefits, now requires poverty-alleviation objectives on a par with biodiversity ones. I've nothing against poverty alleviation; indeed, I would like more spent on it. However, the consequence of imposing this on Darwin means that many potential projects would no longer be fundable by it, and most others will be more difficult and involve even more work diverted from conservation effort to put in proposals. And so biodiversity work suffers from being the victim of the policy's own good intentions.

"This is relevant to the conference theme, staying connected in a changed and changing world. To connect well, we have to communicate well. Connection in itself is not enough and, in communication, we will be better able to understand our needs and aspirations and so to resource them and act upon them. It is also vitally important that some aspects of what we need to do don't disappear under a flood of good intentions. For example, the very welcome and critically important drive in looking after our oceans – and most of us are, after all, surrounded by the sea – must not allow us to forget the plight of our terrestrial habitats and species.

"I did not want to open my address with talk of Covid-19, not because I in any way belittle its significance or the tragedy in terms of human suffering and loss of life that it has brought the world, including our own communities. Not at all. As minister with responsibility also for public health, I have been in the eye of the storm and know so well the difficulties, the hard work this has involved, and the human and economic impact that it's had. It's because I'm convinced that we have to look ahead and look forward, not having forgotten the many lessons we must surely have learnt and aware of the challenges that lie ahead – because there is one particular potential legacy of the pandemic that I must highlight because it is very relevant to this meeting. Call it "Covid versus the environment" or "Covid versus sustainability" or, as I like to know it – or don't like to know it – "Environmental long-Covid." There is a real danger that the world, as governments and businesses concentrate on getting the economy going again – important, vital, as that of course is – that we may forget, or at least push to one side, our hard-fought environmental principles, our fight for biodiversity, for sustainability, our actions against scourges such as single-use plastics. In small territories, this could have a huge impact. Positive environmental projects can drop in priority. Planning decisions could take a change in direction, like an urban development on a wildlife site that would not have been considered in the past suddenly being pushed through because it might bring in a premium of a few million pounds. We really must be on our guard. We must do what environmentalists have always done, and what politicians with an environmental conscience must do: think long-term; think of the day after tomorrow. Realise the pandemic could one day be but a distant memory, minimised by the effects of the passage of time, while our shores and communities are devastated by climate-change-inspired storms and by the plight of thousands of climate refugees. Now, more than ever, we must find those nature-based solutions, enact those climate-change laws, invest in developing green finance in revolutionising economics, as so brilliantly set out by Sir Partha Dasgupta.

"We must gain popular support for what we know to be right and green and sustainable. Elections can be won on a green ticket. My own government did that just a little over a year ago. And for all this in our territories, we have huge potential for success. The added value of committed NGOs working with nimble governments means that we can re-wild, we can energy-transition to zero-carbon. We can do so much, much quicker and better than bigger states. And we must also engage with the private sector. They have expertise and resources that can be of value, and don't need to be in conflict. Once again, the size of our communities are such that we can find ways of maximising involvement of, and resources from, the business community.

"And I cannot end without reminding ourselves of our obligations to those environments in the territories without a resident human population, for which we must carry a common and shared responsibility.

"So as I look forward towards CoP-26, I see it as one of our last opportunities, after the relative disappointment of CoP-25. Maybe, once again, the world fails to take the steps it needs to take. I sincerely hope not but, whatever happens there, those of us here have the very real possibility of showing the way of making a difference, in our own way, in our own homes, in our own small jurisdictions – because small can be effective and efficient as well as beautiful. Because we can. So let's. Thank you"

The Minister kindly agreed to answer some questions after his stimulating and thoughtful address, which led to enthusiastic discussion.

Mike Pienkowski alluded to a sort of pilot conference in 1999. This was actually organised after the Gibraltar 2000 one, by FCO with help from UKOTCF, but held at short notice in 1999. For the next 3½ minutes at the start of the interval, was a reminiscent moment for those few attendees who had been at the 1999 London conference. The organiser, Iain Orr, then at FCO and now one of UKOTCF's Council, had arranged for an educational video to be based on the conference. So, there followed a musical extract from that, with the London Gospel Choir (see pictures on page 5), directed by a Montserratian, Basil Meade, in his arrangement of that early conservation song by Joni Mitchell, "Big Yellow Taxi".

Main topic 1: Progress (or otherwise) in reaching environmental targets

Session Topic Team: Catherine Wensink (UKOTCF; Coordinator & Question-master); Leigh Morris (Manx Wildlife Trust; Rapporteur); Joan Walley (UKOTCF; former chair, House of Commons Environmental Audit Committee; Chairing); Dr Mike Pienkowski (UKOTCF).

Introduction

Joan Walley thanked participants, sponsors, including Defra, and encouraged all to view the posters on-line.

She outlined that this session was concerned with trying to set

sensible, reasoned targets for progress (without sinking into box-ticking) and assessing progress towards them in an appropriate way, without arbitrary measures. We would look at this both across territories and within some interesting territory examples, one from a Crown Dependency and one from a UK Overseas Territory. We are also pleased to have a presentation from UK Government's lead on the Convention on Biological Diversity, to hear how the needs of the territories are being taken into account.

UKOTCF assessments of progress in Environment Charter implementation, Aichi Targets & Sustainable Development Goals: setting the scene for the future (Catherine Wensink, Mike Pienkowski, Sarah Barnsley & Emma Cary, UKOTCF)

Catherine Wensink noted that, since the Environment Charters were signed in 2001, UKOTCF started, at the request of UK Government and the territories a review of implementation of

international conventions in the UKOTs and CDs. It has done this 3 times so far, the latest in 2015-16, which incorporated assessment of progress towards the 2011-20 Aichi Biodiversity Targets (a set of 5 strategic goals and 20 targets) and the Sustainable Development Goals. With a variety of big/small projects, some progress was evident in most elements, but varied across territories. Progress depended on cooperation between governments and NGOs, with some support from UK Government and UK NGOs. Progress on sign-ups to international conventions is encouraging, as is the agreement that environmental education and awareness is key and progress on this good. The UKOT/CD Environment Ministers' Council has adopted the 2016 review and asked UK Government (so far unsuccessfully) to fund UKOTCF to undertake a 20-year review in 2021.

A biodiversity strategy for the Isle of Man (IOM) and a mid-term assessment of its implementation (Dr Richard G Selman & Aline Thomas, Department of Environment, Food & Agriculture, Isle of Man)

The Isle of Man joined UK's ratification of CBD in 2012 (with some help from UKOTCF), and then developed a 2015-25 Biodiversity Strategy, Managing Our Natural Wealth. A mid-

term audit of the strategy, carried out in 2020, is available here. There were good results to-date, with strong Government/NGO collaboration, in biodiversity-recording, Biosphere status, marine nature reserves across >50% of 0-3nm zone, remote sensing habitat map complete, with terrestrial protection, single-use plastics group and wildflowers project established. Next key steps include: a Biodiversity Delivery Group (Government and NGOs), Action For Wildlife initiatives, upland peat surveying & restoration and a new Agri-Environment Scheme.

Restoring St Helena's Internationally Important Cloud Forest for Wildlife, Water Security and Socio-economic Development through developing and implementing an integrated Management Plan (Peaks Project Development Group: Isabel Peters, Vanessa Thomas-Williams, Steve Coates, Dr Rebecca Cairns-Wicks, St Helena Government; Martina Peters, St Helena National Trust; Lawrence Muranganwa, Connect St Helena; Sarah Havery, RSPB)

Isabel Peters noted that the Peaks of St Helena (STHL) have a great biodiversity value and are an attraction for locals and visitors, and are managed by STHL Government, with close collaboration with STHL National Trust. A Peaks Management Plan 2018 was developed by a collaborative approach led by RSPB. The implementation plan has 4 pillars: Management, Biodiversity, Water Security & Socio-Economic. Aiming to link intrinsically the 4 pillars is a 3-year project costed at £3.95m, of which £970k has been secured. It is too soon to assess effectiveness, but the Peaks Project Development Group is key to future work.

Producing and maintaining a dynamic catalogue of the endemic taxa of the UKOTs and CDs (Dr Jamie Males, Dr Mike Pienkowski, Catherine Wensink, Ed Lim & Ashleigh Atkinson, UKOTCF)

Dr Jamie Males noted that UKOTCF has always been interested in recording the unique and other special features of UKOTs and CDs, including an updatable classification (and clearer definitions) of endemics and near-endemics. Using qualified unpaid volunteers,

UKOTCF had completed reviews of plants and several other taxonomic groups. For example, plants include 538 taxa, with 287 endemic to UKOTs and 251 near-endemic. 201 have no documented conservation actions. Following the good progress to date, work was continuing with other groups. This will underpin future conservation work, and summaries will soon be published, with the data-base eventually being made openly available.

Taking UKOT & CD needs in mind in negotiating future target-setting, in the context of the Convention on Biological Diversity (Dr Jane Stratford, Head of UK Delegation to the CBD, Defra)

Biodiversity is crucially important for nature and ecosystems. 2021 is a key year, with COP-15 of CBD, COP-26 on Climate Change, and UK as President of G7, where biodiversity will be a crucial thread. The new Global Biodiversity Framework (GBF) until 2050 will be launched, and all need to engage/champion. Input from the UKOTCF network would be welcome.

Related posters were:

The Importance of Marine Biodiversity across the United Kingdom's Overseas Territories (Owen Hallett, University of Exeter)

Cayman Islands Red-listed endemic plants: rediscovery and research towards conservation goals (Christine Rose-Smyth & Stuart Mailer, Verdant Isle Orchid Research)

Following discussion, the conference photo was taken, in an interesting process, requiring patience and cooperation from the participants, which was kindly given (see end of report, page 31).

Main topic 2: Engaging people; the wider benefits of conservation and healthy ecosystems

Session Topic Team: John Pinel (Jersey; Coordinator, and in the Chair); Jake Kuyer (Economics For The Environment Consultancy Ltd); Dr Keith Bensusan (Gibraltar Ornithological & Natural History Society; Question-master); Camilla Nichol (UK Antarctic Heritage Trust); Iain Orr, Dr Mike Pienkowski &

Catherine Wensink (Rapporteur) (UKOTCF)

Due to technical and other problems, this session started with the programmed third talk, followed by the second and then the first, before working in planned sequence from the fourth (although they are described below in the planned sequence). For the same reasons, Mike Pienkowski chaired the start of the session before handing over to John Pinel after the second presented talk. In introducing the session, Mike noted that this topic is concerned with both engaging more people in conservation, and in securing better understanding of the benefits to people of conserving wildlife and native ecosystems – inter-related topics, of course. Education also forms part of this but, quite properly, it occurs in several other topic sessions too.

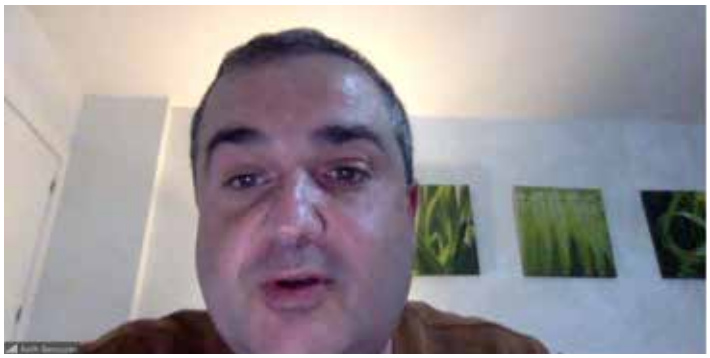
He noted that the programme started with two wide views from different perspectives, the second bringing in the concept of natural capital accounting. It then turned to the long-term dependence of our subject on people who study for love – the derivation of the now somewhat abused term "amateur", which is the opposite of "professional" only in that they are unpaid, not in the quality of the work. Then there were two more examples of ways of engaging various forms of public support, one from a UK Overseas Territory and the other from a Crown Dependency – and, finally, a presentation on involving more Parliamentarians and other public figures.

John Pinel, a ***Jersey ecologist*** set the scene with ***Nature conservation priorities in a changing world***. Two main problems contribute towards biodiversity loss: increasing human population and use of natural resources. Linked to the 2030 Sustainable Development Goals, a decline in global population is likely with more women in education, access to health care and employment. We must stop destroying our natural habitats. Nature-friendly agricultural systems are needed. Fossil fuels should be consigned to the past, with investment re-directed into renewables. CoP-26 is an opportunity for us to tell our politicians that they have a chance to save humanity; representation from territories will be possible through the UKOT/CD Environment Ministers' Council. Damaging the environment should be prosecuted as a crime, ecocide. We need to factor in the environment into other indicators than GDP. The wider benefits of conservation and healthy environments include our survival and that of the abundance of life on earth. Solar panels, wind turbines, tidal and wave energy capture should be utilised. Restoration of woodlands is important, but should not be in place of protecting what we have. There is enormous potential for carbon-sequestration in the coastal zones, e.g. on Jersey with eelgrass-beds and other wetlands.

Jake Kuyer from ***Economics For The Environment Consultancy Ltd (eftec)*** outlined some of the work on ***Natural Capital Accounting (NCA), a tool to help decision-makers understand the financial and societal value of natural resources***. The United

Nation's System of Environmental-Economic Accounting – Experimental Ecosystem Accounting (SEEA EEA) guidelines (to be updated in 2021) provides a framework for countries to report their NCAs. A Darwin Plus funded project is planning to produce accounts and capacity building in five Caribbean UKOTs, to be available in 2022. Whilst not perfect, NCA enables policy and planning decisions, which impact the environment, to be based on sound evidence and an understanding of the economic and social consequences of these. Emphasis was placed on the importance of NCAs being accessible and cost-effective without diverting significant resources from practical conservation.

Floras of Gibraltar, old and new: botany and public engagement on The Rock (Keith Bensusan, Leslie Linares, Michael Grech, Charles Perez, Albert Gonzalez & Rhian Guillem, Gibraltar Ornithological & Natural History Society & Gibraltar Botanic Gardens).



Keith Bensusan outlined some of the ways in which natural history has developed in Gibraltar through its flora collections, stressing the importance of local expertise and capacity needed to conserve nature. Early collections and study of the flora were undertaken by visitors and UK military personnel stationed there. There were few opportunities for local Gibraltarians to become involved and so little interest transmitted locally especially because the cultural and connections were very different to those of the visitors. In the early 1960s, several local individuals began documenting and learning about Gibraltar's flora and, at the same time, others were exploring other branches of natural history, partly as a result of the border being closed in the 1970s. This grass-roots movement led to the formation of the Gibraltar Ornithological and Natural History Society (GONHS) and legislation to protect wildlife. This growing interest accompanied Gibraltar's constitutional development and an appreciation for Gibraltar's natural environment, which is vital to ensure the preservation of Gibraltar's unique and threatened flora. The extensive herbarium, based on photographs and field notes of Gibraltar botanist, Leslie Linares, has now been digitalised using a high-resolution camera. Social media have created an opportunity for sharing of photos/videos etc.

The Buy Back Bermuda (BBB) initiative of Bermuda National Trust (BNT) and Bermuda Audubon Society (BAS), as outlined by ***Andrew Dobson (Past President of BAS)*** has enabled these local NGOs to purchase land, mostly in areas near to natural or semi-natural, important habitat. It was made possible through large financial donations and, in some cases, donation of land of high commercial value. BAS and BNT had to raise funding for restoration and ongoing management maintenance of these sites. They have a good understanding of what species composition should be (cedars and olivewoods, mangrove species at the coastal sites etc.) despite that 95% of the vegetation on Bermuda is introduced. Management of these sites, particularly keeping the invasive species (e.g. Casuarina) under control involves many volunteers including a good way for businesses to deliver on their Corporate and Social Responsibility. BBB has been so successful that there has been no shortage of offers. BAS and BNT have developed several criteria for future wetland area restoration creation. Potential sites must be: of ecological value, contiguous with open space, accessible to the public and provide an opportunity for pond (wetland) restoration.

Leigh Morris, Manx Wildlife Trust spoke about B***ehaviour Change for Conservation - approaches and tactics to inspire/ enable more people to do something positive for nature.*** MWT is part of a federation of 46 Wildlife Trusts across the UK and CDs, with MWT and Alderney WT also being in the UKOTCF network. The Trusts have set a target for 30% of land and sea managed for nature by 2030, by working with key audiences including farmers, the general public, young people, key decision-makers and business. On the Isle of Man, MWT currently manages about 0.2% of the land area (123.2 hectares), with agricultural land covering 88% of the land area. To increase this area, and especially the agricultural land, partnerships are going to be key and the challenge is to inspire the population (about 88,000 people) to do something positive for nature. In the future, MWT work with these various groups (e.g. agri-environmental scheme, school children education tool-kits, open days) needs to expand with social scientists to ensure that behaviour change is factored into conservation, possibly opening more nature reserves to the public, subject to protection of fragile habitats.

Lord (John) Randall (UKOTCF & House of Lords) spoke on ***Championing UK's most special species: the wildlife of the UKOTs & CDs***. On an international stage, the UK Government has a responsibility towards UKOTs' & CDs' biodiversity, so that UK Parliament has an interest. It is therefore vital that UK Members of Parliament and of the House of Lords have an understanding of the 94% of biodiversity that exists in the UKOTs. John Randall is leading an initiative of UKOTCF and conservationists in the UKOTs and CDs, based on a model of Species Champions (an initiative lead by a consortium of UK NGOs as part of Rethink Nature partnership) set up to celebrate biodiversity in the mainland UK. The new initiative is not confined to MPs and Peers, but potentially includes sports and other high-profile individuals linked to the UKOTs/CDs. The pandemic had stalled things slightly, but there had been a lot of interest in the species profiles drawn up with consultation with UKOTs (both governmental and NGO). Lord Randall invited views on whether championing should be on the basis of species/species-groups, territories or cross-territory taxa, with flexibility being favoured. This was encouraged by several participants.

Posters linked to this session:

Learning from networks of wetland educators and NGOs (Connor Walsh, International Engagement Officer, Wildfowl and Wetlands Trust) and

The Invasive invertebrate Project (Natasha Stevens, Liza Fowler, Daryl Joshua & Christy Jo Scipio-O'Dean, St Helena National Trust).

In linking all presentations in the general discussion, there were more thoughts on: whilst it is important to understand the value of protecting our natural resources; there are going to be sectors of society that see the intrinsic value of nature and are concerned at any implication that this can be replaced (*e.g.* pollination services). It is encouraging when the work becomes part of the discourse, *e.g.* through the Dasgupta review, but there is far to go in terms of communicating with society.

Wednesday 3rd March

Main topic 3: Facilitating local leads in conservation

Dr Mike Pienkowski (Coordinator & Rapporteur); Dr Rebecca Cairns-Wicks (St Helena Research Institute); Sarita Francis (Montserrat National Trust; in the Chair); Roland Gauvain (Alderney Wildlife Trust); Catherine Wensink, Catriona Porter & Lord (John) Randall (Question-master) (UKOTCF)

Introduction

Sarita Francis noted that this topic is concerned with building up local capacity in various ways in different territories. Some of these are now well established. St Helena's Millennium Forest is one of the most successful and continuing of many Millennium projects around the world, some better grounded in usefulness than others! The Crown Dependency of Alderney has built up an enviable reputation in deploying volunteers both local and imported; and the UK Overseas Territory of the Falkland Islands is renowned for many things, including its involvement of young people. We also have two examples of projects with successful pilot work taking novel approaches to help empower local communities to take the lead, one with fisher-folk from the Turks and Caicos Islands, and one with a range of local community partners in her own territory of Montserrat. These are both very promising, but also illustrate a very strange point: why, when UK Government and other funding agencies say so much in favour of building up capacity in local communities, is it so difficult to secure grant-funds to build on successful pilots?

Save Our Special Nature of Montserrat – integrated conservation, facilitating local community leadership: Adopt a Home for Wildlife (Ann Pienkowski, Mike Pienkowski, Catherine Wensink, UKOTCF; Sarita Francis, Montserrat National Trust)

Ann Pienkowski outlined work by UKOTCF and partners from Montserrat and elsewhere in a 2-year project 2016-18 investigating and trialling approaches to empower local communities to manage the land and coastal areas on which their economies, welfare, employment and quality of life often depend. Montserrat faces the challenge, following the volcanic destruction from 1995-2010, of two-thirds of the island being inaccessible for safety reasons. One important component was developing and piloting for a year *Adopt a Home for Wildlife*, facilitating local groups, businesses, land-owners, schools etc. to restore and manage globally and locally threatened ecosystems, such as tropical dry forest, wet forest, wetlands, coasts and shallow marine. The project is efficient because most of the work is donated by the local community. However, it does depend on the provision of technical guidance, the employment of a project officer and linking to their largely voluntary specialist advice network. This sort of project is not familiar to funding bodies and, despite positive independent assessment and local support, the UK Government funding body has not yet supported work after the pilot in the three following rounds of applications. Meanwhile, UKOTCF and MNT have struggled to maintain some continuity from their own meagre resources.

Assessing the Viability of Alternative and Improved Livelihoods in Sustainable Tourism at the East Caicos Key Biodiversity Area (Don Stark, Turks & Caicos Reef Fund; and Kathleen McNary Wood, SWA Environmental)

As fish, conch and lobster stocks decline, traditional livelihoods of fishing for conch, lobster and commercially attractive fish species, the primary livelihood of the population of the small island of South Caicos, are under severe pressure, and the viability of the local economy is threatened. Strategies to diversify fisher livelihoods towards ecotourism would reduce dependence on traditional fisheries and improve qualities of life. The project aimed to assess fisherfolk interest, skills, enthusiasm and needs in order to determine the feasibility of diversifying the local economy through ecotourism business opportunities on nearby uninhabited East Caicos, a key biodiversity area. The project team conducted two structured workshops with stakeholders on South Caicos and field studies on East Caicos. The outcomes of this project included five preliminary business plans for ecotourism ventures which were integrated with other research conducted off the coast of East Caicos by TCRF. The addition of stakeholder input to the expanding quantitative inventory of natural assets has also enabled the TCRF to work with local stakeholders and the TCI Government to identify appropriate conservation management and sustainable uses for the East Caicos ecosystem.

Alderney NGO working at all levels; attempting to engage all parts of an island community in the goal of nature recovery (Roland Gauvain, Alderney Wildlife Trust)

Island NGOs are commonly locally grown organisations, formed by islanders and with the specific interests of their natural

environment and community integral to their existence. Often these organisations reach out to become part of wider networks, and seek to become part of federations with common goals. As both a locally formed nature conservation charity and a part of the federation of British Wildlife Trusts, the Alderney Wildlife Trust (AWT) has found itself both responding to local conservation priorities and attempting to bring global issues such as ecosystem decline and climate change into focus within its community. AWT has attempted to engage as much of the island's community as possible, from politicians to businesses and residents, with the ecological challenges they face and to develop an understanding of the importance of natural resources in sustaining island life. This has been increasingly done in the midst of real ecological crisis, societal disturbance and global financial pressures, with AWT charting a pathway to attempt to respond to these challenges, the limitations created by a small organisation maintaining such a broad mandate and the subsequent successes and failures.

Creating and sustaining St Helena's Millennium Forest Project: reflections and aspirations (Dr Rebecca Cairns-Wicks, St Helena Research Institute; Martina Peters & Shayla Ellick, St Helena National Trust)

After 20 years, the Millennium Forest Project is St Helena's only long running and successful community-focused habitat restoration project. In the millennial year, 4,000 trees were planted by the community including one by every school-age child. Initiated and originally managed under the Environmental Coordinator's Office of the St Helena Government, the Millennium Forest Project was handed over to the St Helena National Trust to be managed as one of its inaugural projects in 2002. Sponsored planting by visitors and the public remains a core element. UK Government project funding and airport project mitigation have been the key enablers for large-scale planting and ecological restoration activities. From the initial planting of gumwoods, the Millennium Forest now supports established populations of 8 different endemic plant species, has a rich invertebrate fauna and provides habitat for the islands last remaining endemic landbird species, the wirebird (St Helena Plover). The growth of trees is changing the environment and new opportunities now present themselves, including trails through the forest established for young people to explore nature. The Millennium Forest is a 'happy place' for many different people, for many different reasons. It is a place that the community is proud of and enjoys sharing with others. It is a place that people have become 'connected' to and which does draw people back.

Falklands Conservation's Wild Ambition, Partnerships and local leaders in the Falkland Islands (Dr Esther Bertram, Falklands Conservation)

Following Brexit and COVID-19 we are all going to rely even more heavily on nature to rebuild the economy – further complicated by the global influence of climate change. We are going to need to be ambitious to give nature a fighting chance. We

are going to need to work together, in partnerships to make larger change. In terms of ecological restoration, this ambition will be needed from decision makers and landowners at all levels. This talk discussed the role that will be needed from Government, civil society organisations like Falklands Conservation and community members. Government investment in looking at new approaches which are non-polluting, would pay dividends – such as: Peatlands management and carbon farming (planting to stop erosion for offsetting finance); Developing habitat restoration targets; Exploring what it would take to be carbon-zero and investing in the nation's natural sites to stop them quite literally blowing away. Civil society organisations and individuals: engage and provide hands-on learning about restoration for our future leaders through running the Watch Group and other youth groups who enjoy the outside world; create stepping stones for wildlife; celebrate nature's gems; and restore habitats to safeguard important sites. Working in partnership will be crucial to safeguard nature.

Related poster:

Insects matter: Take Action (I Angelidou, F Mancini, M Botham J Peyton, HE Roy & AF Martinou, Laboratory of Vector Ecology & Applied Entomology, Joint Services Health Unit, British Forces Cyprus; & UK Centre for Ecology & Hydrology)

Main topic 4: Coping with recovery after hurricanes and natural disasters by building resilience

Dr Katie Medcalf (Environment Systems; Joint Coordinator, and in the Chair); Peter Beckingham (UKOTCF; former Governor, Turks & Caicos Islands; Joint Coordinator); Bryan Naqqi Manco (TCI Department of Environment & Coastal Resources; Rapporteur); Farah Mukhida, Anguilla National Trust; Question-master); Dr Stephanie Martin (Tristan da Cunha Government); Susan Zaluski (Jost Van Dyke Preservation Society, BVI); Dr Mike Pienkowski & Catherine Wensink, UKOTCF)

Introduction

Dr Katie Metcalf noted that this topic is concerned with attempting not just to recover from recent severely damaging events but trying to find ways of increasing resilience to future events.

This is of concern to many in the Wider Caribbean – but most certainly not just there. In commenting on the draft conclusions and recommendations, one person was concerned that this session might be considered to overlook the human cost of such disasters, where immediate priorities for health and survival of course lie. However, some of the team were themselves personally impacted by these, and all members were certainly not overlooking these. It is just that the conference remit is environmental, and the people drafting are aware that many environmental aspects were ignored even after human situations were dealt with (first, as they should be). In this session, we hear first from Montserrat which suffers not just from hurricanes but also from a volcano. We then travel to the South Atlantic, where Tristan da Cunha has, in recent years, suffered from several weather events which, had they been in the tropics, would have been described as hurricanes. We then move to the Caribbean to hear of two approaches to building resilience to hurricanes, and one of an approach to wider aspects of helping species survival.

After the volcano – 20+ years on (Sarita Francis, Executive Director, Montserrat National Trust & Vernaire Bass, MNT Board Member in charge of Promotion and Outreach and Director of 664CONNECT)

The authors explained that the impacts of the volcano in Montserrat have degraded or destroyed ecosystems and built and historical/ cultural heritage, and both necessitated movement of citizens geographically and placed pressure on other ecosystems. However, through the use of communications and digital technology, systems are being put in place not only to enhance and rebuild the preservation work of the past but to further engage members of the diaspora to contribute to and connect with the past into the future.

Discussion generated questions on access to exclusion zone (limited to approved tours and research visits to specific sites and the observatory, and for aggregate extraction; getting permission otherwise is difficult), the pathway by which chytrid fungus arrived on Montserrat (currently unknown but suspected to be through produce imports from Dominica), where the majority of the diaspora have settled (mostly Great Britain; secondarily USA and other nearby islands), how involved younger members of diaspora are in historical and cultural affairs (through online radio social media, and for returning for cultural celebrations, they remain involved), and predictions about the future of the volcano (still hot since 2010, with gas vents and occasional rockfalls, but no pyroclastic flow since 2010). There was also a discussion on the possibility of large-scale rodent control but this was considered less feasible due to land accessibility and also of secondary importance to controlling feral livestock particularly around recovering forest near the areas affected by the eruptions.

The authors made recommendations considering heritage register etc: frequency of hurricanes and other hazards; securing, documenting, backing up, and storing data, using the Cloud, and making multiple copies for storage in different areas. It was noted that Montserrat lost a number of important documents, buildings, cultural and historical artefacts and materials, and biological samples due to the effects of the volcano. An idea was proposed to collaboratively seek funding for a digital historical/ cultural data and sample storage project across Caribbean UKOTs.

Tristan da Cunha storms (James Glass, Chief Islander, & Stephanie Martin, Environmental Officer, Tristan da Cunha)

Stephanie Martin described the severe storms, with winds of 107mph, which had impacted Tristan da Cunha twice in 2019, in July and November, as well as another several years earlier. These were the most damaging natural disaster since the volcanic eruption of 1961. There was little damage to homes, but extensive to government buildings and the school. Communications were cut off except for a satellite phone. The Administrator was in UK. The second storm ripped the roof off the administration building. The IT team protected all equipment with plastic sheeting. The thatched house museum, damaged in second storm, was repaired with traditional skills transferred from pensioners to young people. Afterwards, there was a move to stronger buildings, buried cables, communications for approaching storms, stored building supplies for two complete house repairs.

In response to questions, it was reported that, despite the steep hills, landslides had not been severe but there was some threat to the agricultural area. There is only one harbour, which already has constant repair needs; it is useable for only 90 days per year due to swells and its limited nature. Limited communications, including internet, are a hindrance to conservation work on Tristan. For the project removing invasive flax from Inaccessible Island, there are challenges in supporting the team. Tristanians are the experts; they work through those challenges and know what to do. There has not been much research on the sources of these storms. The storms did not bring any unusual species to Tristan – but there has been an unfortunate legacy of shipwrecks and an oil-rig detached from its tow which brought invasive fish species, porgy. (Tristan also has the longer-standing major problem of invasive mice on Gough Island.) Plastics washing up is a big problem on hard-to-reach shores, in looking out for invasives arriving that way. There had been a sustainability design project in 2015, which might have impacted building stability, but funding to implement this did not happen. They were now looking to replace the1940s island store (shop) in the old hospital building. There is a need to rebuild sustainably and improve food security and energy use. This is a huge challenge, especially as shipping increases cost enormously. There are efforts to maintain the port, but it is tiny and very exposed.

Caribbean coastal resilience and restoration: restoring hurricane-damaged mangrove ecosystems in the British Virgin Islands (Susan Zaluski, Jost Van Dyke Preservation Society)

Unfortunately, this talk had not been received. Dr Katie Medcalf (Environment Systems), Louise Soanes (University of Roehampton), Dr Colin Clubbe (Royal Btanic Gardens, Kew) and

Mrs Nancy Pascoe (National Parks Trust of the Virgin Islands) kindly supplied some impromptu thoughts on the BVI situation and experience. Katie noted the similar coastal development on flat areas, replacing mangrove by concrete as in other territories, and consequent storm and other damage. In 2017, Hurricanes Irma and Maria resulted in 90% mortality of remaining red mangrove. Restoration is a priority for government and community organisations. A small number of separately funded projects started in 2019. She noted resilience-mapping, work on mangrove resilience and recovery, flood resilience, suitable mangrove management, training on restoration techniques, scaling up Jost Van Dyke nursery and establishing a Tortola Nursery, mapping where mangroves could be planted in the right slope, water conditions, exposure etc, and maximum benefit for more deprived communities. Louise Soanes, who was involved in one project, noted reaching out to the community, Susan Zaluski's running of planting events for the community, and increasing specific community resilience, as well as talking with ministers, Rotary, Red Cross, replanting efforts, and the Community College. Nursery guidelines had been produced including how to grow, replanting, benefits etc., with publication soon. Colin mentioned work on Tropical Important Plant Areas (TIPAs), with the criteria of (1) presence of globally threatened plants (Red List), (2) botanical richness (important on national/regional/cultural level), and (3) threatened habitats (mangroves, globally threatened). Using distributional data, work was in hand to look at the whole territory, apply criteria, and identify a network of TIPAs. He alluded to the work of mapping, guidebook and plant book by NPTVI and BVI Government. Nancy amplified this outlining also other aspects of the current work-programme, and reflected over 20 years of collaborative work.

Using ecosystem modelling to prioritise nature-based resiliency building actions in Anguilla (Farah Mukhida, Louise Soanes, Anguilla National Trust; Katie Medcalf, K. Naumann, S. Pike, Environment Systems Ltd; Charlie Butt, Lyndon John, Royal Society for the Protection of Birds; C. Rouse, Department of Natural Resources, Anguilla; & C. Samuel, Department of Disaster Management, Anguilla)

Louise Soanes described how Anguilla's coastal and wetland habitats have suffered severe degradation in recent years, primarily due to land development, the impact of hurricanes and sand-mining. To address habitat degradation and in an attempt to reduce flood risk to vulnerable communities, Anguilla has adopted an ecosystem modelling approach to identify and prioritise key coastal and wetland habitats for restoration. With the aim of increasing the resilience of Anguilla's coastal habitats and local communities to climate change, the team used satellite imagery and ecosystem modelling techniques to predict how the re-vegetation of Anguilla's coastal areas and wetland catchment areas can help to reduce the impact of flooding caused by severe weather events, both in terms of hurricanes and ground seas. The initial results highlight the importance of the dune systems, as well as the more understood key roles played by mangroves, wetlands and coral reefs. The project also modelled future land development scenarios and examined the impact that further development may have on increasing erosion risk, surface water run-off and resulting flood risk to vulnerable communities around one of Anguilla's key wetland community. This work should help stakeholders and developers understand the need for careful development that preserves and replaces key areas of natural capital. The cost was $100k, but the benefits outweigh the costs. There was erosion risk at East Pond – which was replanted with landowner support, to generate thicket/ shrubby plants and ground-cover. A nursery was set up for mangrove and dune plants, with school and community groups doing the planting – a long-term process.

In response to questions, it was noted that well vegetated restored dunes can give more protection than mangroves. The importance was noted of good relationships with community groups and schools, which ask what they can do to help. This may help with more unapproachable land-owners. A further question was asked about seagrass for coastal resilience and whether the model could be expanded to include them, to counter the tendency for certain hotels to want to dredge the seagrass for "prettier" beaches but could restore them to protect their investments and for carbon-farming.

Future proofing endangered species conservation in Anguilla (Farah Mukhida, JC Daltry, M Goetz, L John & Louise Soanes, Anguilla National Trust, Fauna & Flora International, Durrell Wildlife Conservation Trust, Royal Society for the Protection of Birds, University of Roehampton)

Louise Soanes noted that Anguilla's biodiversity has declined due to invasive aliens and other anthropogenic pressures, and the changing climate could be the final straw. With a focus on five reptiles and two plant species, this Darwin Plus-funded project aims to increase the resilience of Anguilla's most endangered species. Baseline data on the distribution and ecology of each species were combined with climate change predictions for the region (i.e. increasing likelihood of severe droughts and storms and sea level rise) to (a) assess species climate change vulnerability and (b) develop population viability models using VORTEX. Stakeholder workshops were then conducted to review the findings and identify conservation management options, the potential impacts of which were tested using the population viability models. This culminated in a climate change-informed conservation action plan for all seven endangered terrestrial species. A number of priority actions have already begun to be realised, for example the successful translocation of Critically Endangered Lesser Antillean iguanas to a more secure offshore cay and restoring the vegetation cover of Sombrero island to benefit the endemic Critically Endangered Sombrero ground lizard.

In response to questions, Louise considered that invasive green iguanas probably arrived on driftwood from other islands during storms, and are all over mainland Anguilla now, not as bad as Grand Cayman yet but will get worse. DoE are trying to do local control. The iguanas are possibly arriving from St Maarten, and biosecurity measures are important. There is not the finance or capacity for ranching and captive-breeding some of these endemic reptile species on island now to support any translocation efforts, because of the other major efforts. There is a danger in encouraging eating iguanas because of the potential for impacting instead the Lesser Antillean iguana. Sniffer-dogs at ports of departure to the islands have been considered, but training is needed. Owners of some offshore islands have approved translocation to these of *I.*

delicatissima, but permission would be needed from all privately owned land on other cays. It was difficult to get biological information particularly for the small more cryptic reptile species, such as skink because these come out only in certain humidity or rain conditions and it has not been possible to secure a reasonable population estimate.

Opportunities to export invasive iguanas, for meat to control the numbers, are limited due to increasing international controls of various kinds.

Farah Mukhida, Session Question-master

In general discussion, one theme that came up a few times in the presentations was that island people know resilience well already; it is just needed to tie the science into the connection between human and natural resiliency. Is there an existing forum amongst the Caribbean UKOTs for interested parties to discuss, for example, lessons learned in controlling invasive iguanas? Is this a role for the UKOTCF Wider Caribbean Working Group. The Secretary of that Group pointed out that this is a frequent topic of discussion in WCWG, and also in Southern Oceans WG. This will be explored more, perhaps by a joint meeting or webinar. Some earlier project-based fora of other organisations, including RSPB, ended when project funding ended.

Short session, linked to Main topic 7: Funding mechanisms – carbon capture

Panel: Clare Brook and Sriram Natarrajan, Blue Marine Foundation; James Mansfield, Finance Earth; Rapporteur: Catherine Wensink, UKOTCF

Finance Earth is an FCA-regulated fund manager with knowledge of executing impactful and profitable investment strategies. They work with partners to create funds to accelerate positive impact on the natural environment.

There is spectrum of investment sources. These range from grant/funders which require specific outcomes but no returns and investment. At the other end are investors which are looking for maximising financial return for minimal risk. There are several cash-flow profiles, but most include set-up phase, ongoing operational costs. One model generates revenue streams with equal amounts each year. Other models can generate revenues

Clare Brook

Sriram Natarrajan

unequally. For consistent surplus revenues we would look at suitable debt finance, but for variable surplus we would look at equity finance. Grant funding is mostly used to repay overall investment capital.

Voluntary carbon markets are not tied to specific legislation. There are international laws that support the approaches, however four key aspects that project should demonstrate: 1) real: there must be evidence that the project removes or prevents emissions; 2) additional: you can't sell carbon credits when they are happening anyway. 3) measurable: the volume of emissions reductions can be measured accurately 4) verifiable: a neutral, third party auditor has verified a project's impact.

Blue Marine Foundation has a keen interest in the use of financial investment to fund biodiversity projects, particularly in the marine environment. There are many examples around the world that have been doing this successfully. However, with $120billion being spent on biodiversity worldwide, and with $700billion needed, more investment is needed, especially by the large businesses and institutions. Funding needs to be scalable as livelihoods depend on it.

In 2018, the Republic of the Seychelles introduced the world's first blue bond. The bond, which raised US$15 million from international investors over 10 years, demonstrated the potential for countries to harness capital markets for financing the sustainable use of marine resources.

Debt for nature swaps and impact investment funds are also potential areas to look at. The economic implications of these are important, e.g. better livelihoods and natural beauty for longer, less coastal erosion etc.

In Madagascar, 1200 hectares of mangrove produce1300 carbon credits per year which generate around $30k per year. Today there are much larger projects around the world. Blue carbon is highly relevant to island nations. Blue carbon market is an emerging new asset class. As we see larger projects we will see benefits, however, verification is expensive and there is no transparent way to estimate the costs of carbon credits. As these need to be based on solid science more of this is needed e.g. biomass and sediment.

James Mansfield

This will lead to better systems. Mangroves capture many times the amount of carbon credits than forests do. There are many active investors looking for this. This will inevitably lead to higher price.

There is a consideration about different landscapes and the different levels of carbon and verification programmes. These are viewed in different ways. Some buyers will have preference over time. Mono-culture vs rich, carbon credits trying to capture carbon element. So, as the market becomes more sophisticated, other benefits are sought. IUCN have their Star metric. It will be important to demonstrate the value of species and biodiversity moving from just carbon capture. The way buyers see is it is there is an implicit value on it. But because there is no way of proving this value, there is no consistent approach. In future a breakdown of additional services will be incorporated.

Scale is a very interesting point. The key barriers for investing in nature and nature-based solutions are the uncertainty of revenue streams, and the scale. The reason is that it costs money for investors to carry out due diligence and it is very expensive for them to understand something which is too small. This becomes a limiting factor.

Carbon credits and offsetting is in transition; it is merely a path towards reduction in emissions. The intention is that with all net-zero commitments there will be a rise in demand and make them more expensive. At that point companies will then be forced to reduce their emissions. If all largest companies wanted to find them, they would not be able to. This will drive buyers towards change and emission reduction. Who owns the credits? This is usually the freeholder of the land.

Tuesday 9th March

Main topic 5: Nature-based solutions for the UN Decade of Ecosystem Restoration: Terrestrial

Kathleen McNary Wood (SWA Environmental; Joint Coordinator, in the Chair); Dr Jamie Males (UKOTCF; Joint Coordinator; Question-master); Frederick J Burton (Cayman Islands Department of Environment); Julia Henney (States of Guernsey; Rapporteur); Alison Neil (South Georgia Heritage Trust); Dr Mike Pienkowski & Catherine Wensink (UKOTCF)

Introduction

Kathleen Wood noted that this session starts with a look at the outstanding Grand Cayman blue iguana operation of recent years, but the increasing threats to Cayman's endemic iguanas and from the introduced green iguana. We then look at rewilding experience in Europe which is raising interest in the Crown Dependencies. Then back to the Caribbean, where the harnessing of natural processes is being discovered as the key to recovery of the Caicos Pine, after its reduction by over 90% by an introduced alien. After a short break, we look at the biosecurity operation protecting South Georgia following the successful introduced rodent eradication. Finally, we have two short talks looking at several aspects of human and biodiversity interaction in the Cyprus Sovereign Base Areas.

Iguanas, invasive species and the tide of humanity (Frederic J Burton, Department of Environment, Cayman Islands Government and formerly Blue Dragon Recovery Program)

Following a successful conservation initiative, native Grand Cayman blue iguana populations, which had been functionally extinct, were established in three areas covering 1,000 ha – a huge success story which was only possible through science-based work and huge public support. Like so many inspirational

recovery efforts for critically endangered animals, the Blue Iguana conservation effort still faces a very challenging future. At the same time the Sister Isles Rock Iguanas on Cayman Brac and Little Cayman, are now critically endangered and likely to have to follow the same path of emergency rescue.

A plague of invasive Green Iguanas combined with the crisis of unsustainable human population growth with all that brings in terms of deforestation and traffic, are all compounding longer-established but equally existential threats from invasive feral mammals. The arrival of a novel helicobacter pathogen, apparently carried by green iguanas, that is lethal to the Grand Cayman blue iguana places extreme urgency in preventing a green iguana population explosion in the Sister Isles. If unmanaged, this could mirror Grand Cayman, which reached 1.3 million before an island-wide cull was launched. There is no reason to suppose other West Indian rock iguanas will not be equally susceptible to this pathogen, and the green iguana invasion is marching through the Caribbean and on to the tropics globally. There is a long-standing but increasingly urgent need for cost-effective, sustainable options to reduce substantially the populations of these increasingly diverse invasive species, so that landscape-level restoration can be possible in settings like Cayman where small offshore cays are not available for restoring refugia. Failing this, the only remaining option is turning protected areas into habitat islands with biosecure fences at immense cost.

Rewilding as a tool to restore the biodiversity of UK Overseas Territories and Crown Dependencies (Rob Stoneman, Rewilding Europe)

Rewilding isn't there to replace traditional conservation measures – it is an additional tool. Traditional conservation is very target-focussed, whereas rewilding is process-focussed, and may be more appropriate when we take account of climate change. Restoring natural processes can allow whole ecosystems to recover. Across the popular media, the word is consistently used from everything from planting trees to reintroducing lost species. In the science literature, rewilding is gradually emerging as distinct discipline or tool within a range of techniques to help us conserve and restore biodiversity across the globe. For example, if one removes

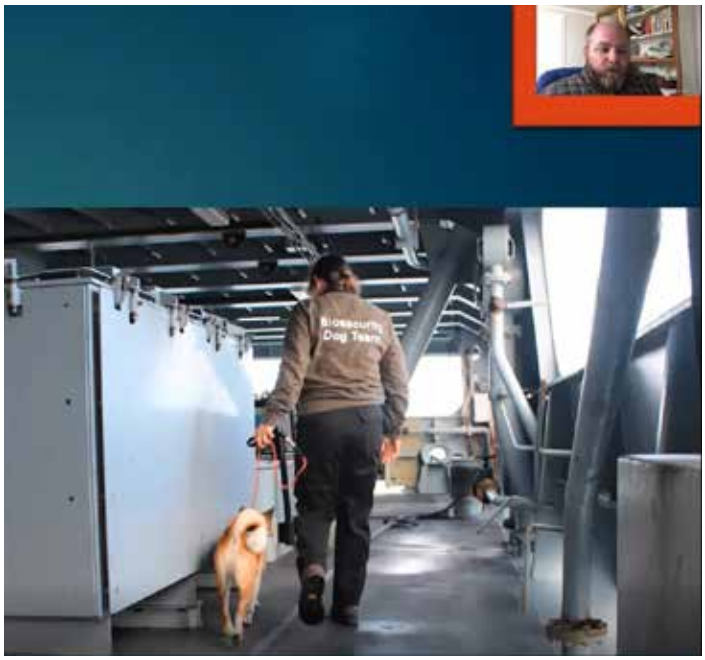
starfish from a rock-pool, the ecology of that rock-pool will collapse. In reverse, the reintroduction of wolves in Yellowstone NP allowed the whole ecosystem to recover: wolves -> wetlands -> more salmon -> more bears -> fewer coyotes -> more voles: the keystone predator factor.

Rewildling in Europe has focussed on large herbivores (*e.g.* wild horses and cattle), rather than carnivores. Half of wildlife in Europe is of open grassland habitats, and half is woodland wildlife. So it is unlikely that Europe would have been wall-to-wall woodland. Experimental introduction of large graziers on acquired land led to huge increases in wildlife. Rewilding has a particular resonance to islands (*e.g.* potentially the Channel Islands) as a cost-effective and climate-resilient tool. Some nature reserves should be managed appropriately with traditional management, e.g. hay meadows; for others, it is much more appropriate to restore natural processes.

Balancing the Scale: Fifteen Years of Pine Rockland Conservation and Restoration in Turks & Caicos Islands (B Naqqi Manco & Junel Blaise, Department of Environment and Coastal Resources, Turks and Caicos Islands Government)

Caicos pine is found on 3 islands: Pine Cay, North and Middle Caicos, Turks and Caicos Islands. It is a variety distinct from other subspecies (found only in northern Bahamas), and restricted to small areas on each island. On the larger two, grows on hard limestone pavement with shrubs and pines establishing in the gaps; in Pine Cay it grows on sand, rather than rock – so dune scrub with pine trees. In 2005, the invasive pine tortoise scale *Toumeyella parvicornis* was identified on pine yard ecosystem foundation species *Pinus caribaea* var. *bahamensis* in Middle Caicos. A series of hurricanes with sea surge intrusion in 2008 and catastrophic dry-season wildfires in 2009 further impacted the ecosystem. Within ten years, the population decreased by over 97% and the species and its habitat were not recovering. With partnership assistance originally initiated through UKOTCF, from Royal Botanic Gardens, Kew's United Kingdom Overseas Territories Programme; the United States Forest Service; The Nature Conservancy; Bahamas National Trust; Bahamas Forestry Unit; US Department of Defence; University of the South, Sewanee; local partners Department of Environment and Coastal Resources and Turks and Caicos National Trust were able to build capacity to manage many components of a species survival programme locally. Further ecosystem management techniques have been developed with partners including ex situ seed storage, nursery growth of pines, genetic analysis, ectomycorrhizal fungi studies (pine roots found to require 7 different species to survive), biodiversity profiles for pine-yard ecosystems, plant pest identification, tree stress levels, volatile chemical production, a controlled burning programme, and habitat restoration. While much of the pine-yard habitat has been lost, habitat recovery in managed areas and restored areas is observable and work continues despite challenges in securing long-term funding.

Biosecurity: the key to safeguarding South Georgia's ecology (Ross James, Government of South Georgia & the South Sandwich Islands)



In South Georgia, human activity has been hugely damaging, from sealing and whaling and unregulated fishing, to the introduction of invasive non-native species. There has been slow recovery from the 1960s in the sea (ending unregulated fisheries, now exemplars of sustainable use). Now recovery has begun on land. The last decade has seen reindeer, rats and mice successfully eradicated from South Georgia. An ambitious invasive weed programme continues to control and remove invasive plant species. These large-scale habitat restoration projects have provided the conditions for ecological recovery: areas once overgrazed by reindeer are now biodiverse resilient habitats; species that were pushed to the brink of extinction in the presence of rodents are now increasing in number. As we embark on the UN Decade of Ecosystem Restoration, South Georgia may stand as an exemplar of ecosystem restoration and environmental management, and bear testament to nature's capacity to recover when given a chance. How do we maintain this incredible legacy? Biosecurity is key to preventing invasive species and pathogens from establishing, and therefore safeguarding South Georgia's ecology. Biosecurity is not a short-term project, it is an ongoing effort and can only be properly achieved when it becomes an intrinsic part of operations. Biosecurity measures are not static and must be able to keep pace with emerging threats. This presentation discussed how to achieve a biosecurity system sufficiently robust to safeguard South Georgia's ecology, looking at work across the biosecurity continuum from pre-border (ensuring vessels, cargo and people are low risk; rodent mitigation and monitoring on vessels; biosecurity detector-dogs working in Falklands; education briefings for all visitors), to border (biosecurity checks on every single visitor; biosecurity checks and inspections; audits to check the pre-border policies have been followed; legislative tools to ensure compliance; education and outreach to make sure visitors are aware of their responsibility to help keep the island special) and post-border (monitoring programmes for invasives; management of these if they are found; incursion response; eradication; control). Focusing resources to ensure invasive species and pathogens don't reach South Georgia, and keeping a close watch so that effective action can be taken when they do.

Managing the mosquito problem while protecting biodiversity at the Akrotiri wetland, Sovereign Base Areas, Cyprus (Kelly Martinou, Chris Taylor, Laboratory of Vector Ecology & Applied Entomology, Joint Services Health Unit, British Forces Cyprus; Jodey Peyton, Marc Botham, Helen Roy, UK Centre for Ecology & Hydrology; Ioanna Angelidou, both previously named organisations; Pantelis Charilaou, Graham Johnstone, SBAA HQ Environment Depatment)

Akrotiri is the largest wetland complex in Cyprus. It is a migratory stop for birds flying from Africa to Europe with over 200 bird species visiting and another 120 species finding a refuge during the winter months. Mosquitoes are a natural component of the biodiversity of the wetland. However, managing their populations is imperative due to the high degree of urbanization and interest in development around the wetland and the risk for mosquito borne diseases. These two talks provided an overview *(by Jodey Peyton, left)* of collaborative work undertaken during the last 5 years, and a summary *(by Kelly Martinou, lower left)* presenting the integrated vector management programme run by the Joint Services Health Unit, British Forces Cyprus and research projects funded by the Darwin Plus initiative, addressing drivers of change such as invasive alien species around the Akrotiri wetland. It presented also recent efforts regarding two citizen-science initiatives dedicated to raising awareness about vectors of disease such as invasive alien mosquitoes and aiming to familiarise the public regarding pollinators and other beneficial insects. Kelly was not able to attend because of family illness, but co-author Prof Helen Roy *(right)* dealt with questions.

Related posters:

Manx Mires Partnership (Sarah Hickey, Manx Wildlife Trust)

War of the Green Horde: Novel Control Strategies for Iguana spp. ***(Joshua Smith, Jersey International Centre of Advanced Studies)***

Iguanidae as a flagship taxon for the Caribbean UKOTs, a collaborative approach to invasive species management across the Caribbean UKOTs ***(Joshua Smith, Jersey International Centre of Advanced Studies)***

The connecting link between wetlands and mosquitoes ***(Katerina Athanasiou, BSc student, Joint Services Health Unit, British Forces Cyprus, BFPO 57, RAF Akrotiri / Department of Agricultural Sciences, Biotechnology and Food Science, Cyprus University of Technology, 3603 Limassol, Cyprus)***

Main topic 6: Nature-based solutions for the UN Decade of Ecosystem Restoration: Marine

Amdeep Sanghera (Marine Conservation Society; Joint Coordinator, and in the Chair); Dace Ground (UKOTCF; Joint Coordinator); Don Stark (Turks & Caicos Reef Fund); Dr Nicola Weber (Exeter University; formerly Ascension Island Conservation Officer; Rapporteur); Michele Christian (Pitcairn Island Divisional Manager of Environmental, Conservation & Natural Resources); Clare Brook (Blue Marine Foundation & Question-master); Dr Mike Pienkowski & Catherine Wensink (UKOTCF)

Introduction

Amdeep Sanghera highlighted that the UKOTs host globally important populations of marine biodiversity, including threatened turtles, sharks, penguins, whales and seabirds that are found in habitats ranging from coastal mangroves, deep seamounts to polar seas and the world's largest coral atoll. However, these marine environments face a host of threats, including over-exploitation, illegal, unregulated and unreported fishing, pollution, invasive species and the ever-evolving threats posed by climate-change. He introduced the speakers for this session who will provide insights into a variety of nature-based solutions being used to safeguard these vital habitats and biodiversity that are also key to the livelihoods and wellbeing of Territory communities, their national economies, and the fight against climate change.

Stony Coral Tissue Loss Disease, Turks & Caicos Islands – A UKOT's Outbreak Case Study (Alizee Zimmermann & Don Stark, Turks and Caicos Reef Fund)

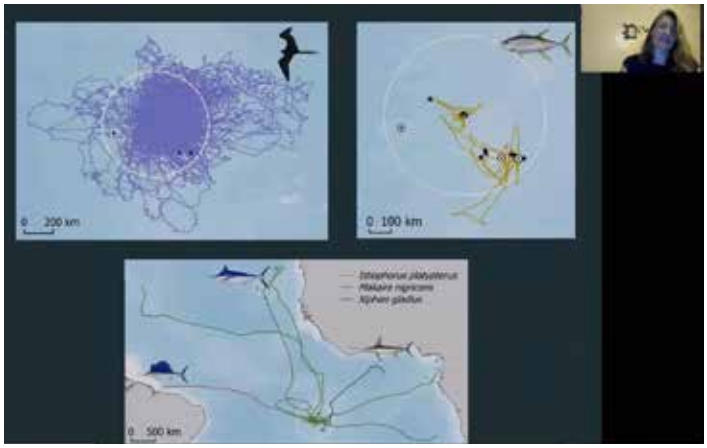
Alizee Zimmerman left no doubt in the participants' minds that the devastating and lethal Stony Coral Tissue Loss Disease is an immediate and significant threat to marine biodiversity, both in the Turks and Caicos Islands, where it was first observed in 2019, and also the Caribbean region more widely. She presented a number of recommendations for management from pre- and post-establishment monitoring through to aggressive intervention including the administration of amoxicillin and chlorine

treatment. Alizee highlighted that the rapid spread has become a regional problem and has elicited regional collaboration between Governments and NGOs at an unprecedented level, which is what is needed to halt this disease, as well as land-based rearing facilities for eventual re-population.

The Nature of Ecosystem Restoration: Smaller steps towards bigger solutions in the British Virgin Islands (Shannon Gore, Association of Reef Keepers, British Virgin Islands)

Shannon Gore introduced case studies from the British Virgin Islands, including Cane Garden Bay, an important tourist destination that has suffered increasing beach erosion and flooding, following substantial terrestrial development and post-hurricane damage of the fringing reef. Using these, she highlighted that those restoration projects most likely to be approved, funded or successfully implemented are those that study the environmental history of an area, are clear in why restoration is needed in the first place and that have local "buy-in". Highlighting the need for increased public environmental awareness campaigns and social entrepreneurship, Shannon emphasised that while some projects may be small scale, they may be the ones that ultimately have a more significant and lasting impact.

Ascension Island marine spatial planning (Diane Baum, Ascension Conservation Department)



Diane Baum highlighted that Marine Spatial Planning (MSP) may not always follow a text-book rule as she described the "sometimes convoluted path" by which Ascension Island established its large scale Marine Protected Area (MPA). Dee stressed that the situation and processes may differ widely between Territories, and ultimately it is the final outcome that is important, and that the local communities are consulted at the right time and in the right way on a case-by-case basis. She detailed the evidence-based plans and structures being put into place to manage this MPA in a rapidly changing world and the need to adapt spatial-planning paradigms developed in terrestrial and coastal settings.

Stakeholder Engagement in Marine Spatial Planning at Bermuda (Dr Tammy M Warren, Sarah A Manuel, Department of Environment and Natural Resources, Government of Bermuda; Cheryl-Ann Mapp, Vanessa L Dick, Waitt Institute, USA)

Tammy Warren further reinforced and expanded on some of these points, in detailing the comprehensive methods of stakeholder-engagement during the on-going development of a MSP for Bermuda. Tammy described how the stakeholder-engagement is centred on 8 stakeholder focus groups (the 'Ocean Village') that each represent different ocean-use sectors and are tasked with providing input into the MSP objectives and the use and value of Bermuda's waters through participatory mapping applications. Tammy provided insights into challenges posed by the Covid-19 pandemic with the launch of the stakeholder engagement process having to be virtual and the limitations and benefits of the use of social media to facilitate feedback.

Establishing the Tristan da Cunha marine protected area (Fiona Kilpatrick, Administrator, Tristan da Cunha)

Fiona Kilpatrick provided a comprehensive account of the establishment of the Tristan da Cunha MPA. This remote Territory with a population of around 250 people relies heavily on its marine environment both for local subsistence fishing and also as a revenue stream. Thus, while the Islanders support and led the establishment of the MPA for marine conservation, they were also acutely aware that there may be an economic impact for them. Fiona highlighted the importance of the external support provided to mitigate these challenges so that both the needs of biodiversity and also the local community are met.

The session concluded with thought-provoking final remarks initiated by the Question-Master, Clare Brook, on the topics of ensuring marine conservation initiatives meet and support local needs, in particular ensuring that the views of the fishers are also considered – and also ensuring the sustainability and viability of marine conservation actions in the UKOTs. Participants discussed ways in which this could be ensured, including financial, logistical and expertise support from organisations such as the

UK Government (currently through the Blue Belt Programme), territory governments, and local and international NGOs and academic institutes, as well as philanthropic donors. The content and tone of the session left participants with a fuller understanding and appreciation of marine research to date in the UKOTs, and the many challenges that still remain, but also a feeling of marine optimism and the potential for targets to be met.

Poster session

Posters were available for viewing throughout the conference, with the capacity for participants to post questions and the authors to post answers. In addition, for this one hour, poster-authors were asked to be available online, so that question- and answer-posting could be live. See each topic session for related posters; posters unrelated to main sessions were:

A review of pupping and site-fidelity trends in the grey seal *Halichoerus grypus* on the Calf of Man from 2009 – 2020: implications for population structure and dynamics in the wider Irish Sea region and future management strategies ***(Dr Lara Howe & Breeshey Harkin, Manx Wildlife Trust)***

Researching for Sustainable Solutions for *Sargassum* Inundations in Turks & Caicos ***(Dr Debbie Bartlett, Dr J James Milledge, Birthe Nielsen, University of Greenwich; Dr Heidi Hertler, School for Field Studies, South Caicos)***

The impact of *Sargassum* brown tides on native seagrass meadows in Anguilla ***(Anna Smith, MSc student, Jersey International Centre of Advanced Studies)***

Recreational fishing of Atlantic Bluefin Tuna *Thunnus thynnus* in the Strait of Gibraltar: recommendations for implementing a catch-and-release fishery via stakeholder engagement ***(Francine R. Pons, Darren A. Fa, Stephen Warr, Clive Crisp & Awantha Dissanayake, School of Marine Science, University of Gibraltar & Department of Environment, Sustainability, Climate Change and Heritage, Gibraltar)***

The use of a fixed-point underwater camera, to promote stakeholder engagement as a method to increase marine citizenship and effective marine management practices at a local level ***(Maïté A. S. Kesteleyn, Darren A. Fa, Stephen Warr, Clive Crisp and Awantha Dissanayake, School of Marine Science, University of Gibraltar & Department of Environment, Sustainability, Climate Change and Heritage, Gibraltar)***

Identifying the importance of cultural ecosystem services provided by Gibraltar's marine environment (Luisa Haasova, Emma McKinley & Awantha Dissanayake, S*chool of Marine Science, University of Gibraltar. & School of Earth and Environmental Sciences, Cardiff University)*

Flowerpots at sea: a proof-of-concept study for nature-based solutions to retro-fitting artificial shorelines ***(Ken Ruiz, Darren A. Fa and Awantha Dissanayake, School of Marine Science, University of Gibraltar)***

Wednesday 10th March

Main topic 7: Funding mechanisms – tourism and alternatives

Nancy Pascoe (Deputy Director, National Parks Trust of the Virgin Islands; Joint Coordinator & Question-master); Dr Howard Nelson (Fauna & Flora International & University of Cambridge; Joint Coordinator & in the Chair); Lord (John) Randall (UKOTCF; House of Lords); Catherine Leonard (International National Trust Organisation); Mike Jervois (St Helena National Trust); Dr Mike Pienkowski & Catherine Wensink (Rapporteur) (UKOTCF)

Howard Nelson

A Rock, a hard place and uncharted waters: Brexit and Gibraltar (Stephen Warr, Department of the Environment, Sustainability, Climate Change & Heritage, HM Government of Gibraltar; & Keith Bensusan, Gibraltar Ornithological & Natural History Society & Gibraltar Botanic Gardens)

Stephen Warr looked at some of the impacts on environmental protection as a consequence of the UK's departure from the EU, most notably the super-national element of environmental enforcement which, without the EU courts, Gibraltar lacks. Gibraltar and other UKOTs have also lost access to EU funds, specifically those which allowed environmental projects to be far reaching and transformational, while other UKOTs and CDs are suffering other losses.

Can UK Government grant-funding be made more effective for UKOT conservation? (Dr Mike Pienkowski, UKOTCF, bringing together comments from territories)

Dr Mike Pienkowski looked at how UK Government grant-funding could be made more effective for UKOT conservation. It is the only dedicated fund for UKOT biodiversity, but also includes a wide range of environmental concerns such as waste, climate change etc. There has been a shift over time so that less funding goes to non-government bodies, where it is so effectively used, but more to UK Government's own agencies, which were previously funded through other budgets. Furthermore, there seems to be no attempt to consult UKOTs on priorities for funding and instead these are priorities set by UK personnel, perhaps to

meet their international targets. An effective way to make best use of limited finding would be to address these. In addition, there may be a case to suggest restoration of NGO persons experience in UKOT conservation representation on the Darwin Plus Panel. Comments were strongly supportive of the talk.

Rethinking tourism – experiences from the INTO family (Catherine Leonard, International National Trusts Organisation; & David J Brown, Bearden Brown LLC)

Catherine Leonard provided an insight into some of the work being done within the International National Trusts Organisation family to rethink tourism, particularly when the impacts of the global pandemic are likely to continue for some time. Authentic, meaningful experiences are likely to be those that draw people back, particularly when they are likely to put effort in to planning visits and trips. Things like cultural experiences, food, nature will all combine to provide what visitors are looking for.

Alternatives to tourism income for conservation bodies (Nancy Pascoe, Deputy Director, National Parks Trust of the Virgin Islands & Dr Howard Nelson, Fauna & Flora International & University of Cambridge)

Nancy Pascoe provided some results of a consultation on alternatives to tourism income for conservation bodies. One of the most important elements of generating income to protect the environment could be from local communities and not just visitors/tourists, be this through experiencing and enjoying nature or through business opportunities and levies. Harnessing this new found appreciation of nature, from those that may have had a 'staycation' or had utilized their permitted outdoor exercise to experience nature in their local surroundings, lends itself to a long-term sustainable funding model rather than those that are vulnerable to events (e.g. tourism heavily impacted by hurricanes, pandemics etc).

Funding models for remote UKOTs (Clare Brook, Blue Marine Foundation)

Clare Brook provided a summary of some of the funding models for remote UKOTs, which was also linked to the short session given on Tuesday 9th March including Blue's economic advisor and Finance Earth. These include bonds, biodiversity and endowment funds. Ideally some sort of blended funding model, including grants, investment with a return and sale of carbon credits is an option which could prove valuable to long-term financing of conservation. Clare provided encouragement that there are donors out there ready to fund interesting/captivating projects and there should not be a reluctance to ask. It was surprising how disconnected NGOs and businesses are when each have what the other needs.

Main topic 8: Plugging the gap: innovative approaches and capacity-building

Helen Pitman (Chagos Conservation Trust; Joint Coordinator & Question-master); Dr Nigel Haywood (UKOTCF; Joint Coordinator & in the Chair – and sporting South Georgia's penguin tie!); Alison Copeland (Government of Bermuda Department of Environment and Natural Resources; Rapporteur); Graham Johnstone (Cyprus Sovereign Base Area Administration); Dr Mike Pienkowski & Catherine Wensink (UKOTCF)

Dr Nigel Haywood & Helen Pitman

New research and higher education facilities in the territories (Dr Sean Dettman & Dr Amy Hall, Jersey International Centre for Advanced Studies; Dr Rebecca Cairns-Wicks, St Helena Research Institute; Dr Darren Fa, University of Gibraltar)

The first talk featured representatives of three higher education institutions which had developed since the last conference. Dr Darren Fa outlined the opportunities to study marine science afforded to the University of Gibraltar from having the open

From top: Sean Dettman, Dr Darren Fa, Dr Rebecca Cairns-Wicks

ocean and gateway to the Mediterranean on its doorstep. Since 2015, the evolving Masters programmes have trained local government personnel and students from all over the world, in collaboration with Gibraltarian institutions. Sean Dettman, from the Jersey International Centre of Advanced Studies (JICAS), outlined the opportunities offered on Jersey at JICAS and at its partner institution, the University of Exeter. Practitioners, career switchers and life-long learners have taken advantage of offerings focused on islands biodiversity and culture since 2019. Dr Rebecca Cairns-Wicks showcased the work of the St. Helena Research Institute (SHRI). SHRI opened in 2019 as an on-island, multidisciplinary centre and coordinating body, along with the research council, for the growing research community on St. Helena.

Detecting patterns of marine wildlife around islands with and without invasive rats, using long-range UAV images (Melissa Schiele, Loughborough University's Wolfson School of Mechanical, Electrical and Manufacturing Engineering; and the Zoological Society of London)

In the second talk, Melissa Schiele generated enthusiastic discussion with a presentation of her work using fixed-wing, water-landing aerial vehicles to survey sharks, rays, turtles and seabirds at islands in the British Indian Ocean Territory. Crucially, elasmobranchs were 85% fewer around islands infested with rats.

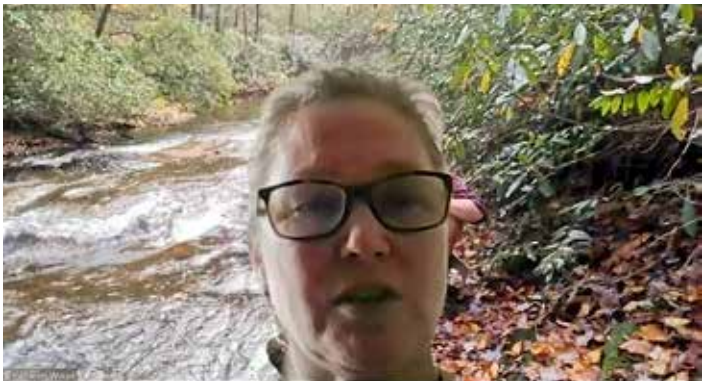
Channel Islands pollinator project – Guernsey and beyond (Dr Miranda Bane, Pollinator Project and University of Bristol)

Dr Miranda Bane demonstrated the bumble bee reporting app Bumblr, developed by the Guernsey Pollinator Project. Citizen scientists using the app, and malaise traps, have built up a database of pollinators, and more collaborations across the Channel Islands are planned.

Plugging the Gap: With Professional Volunteers in the Cayman Islands (John Bothwell, Cayman Islands Department of Environment)

John Bothwell explained how the Cayman Islands Department of Environment uses volunteers successfully to plug gaps in capacity. He highlighted the turtle programme, grouper moon project, blue iguana recovery, and invasive green iguana and lionfish culling as examples of success. Lessons learned included focusing on one thing for success, getting one generation of volunteers to train the next, engaging "professional" volunteers with valuable skill sets, and refreshing goals to build on successes.

Recent innovations in conducting co-operative research with more-than-humans (Kathleen McNary Wood, SWA Environmental, Turks & Caicos Islands & USA)



In the final talk of the session, Kathleen McNary Wood challenged the perceived need to separate researchers from their subjects. She encouraged cooperative research 'with' rather than 'on' other species, and making what matters to them equal to our own wants and needs. Through examples from the TCI, she demonstrated how mankind must allow nature's landscape design intelligence to work for us.

Posters in this Session

The Jersey International Centre of Advanced Studies (Dr Amy Louise Hall, Programme Coordinator & Senior Research Fellow, JICAS) outlined the Jersey International Centre of Advanced Studies offerings, including bursaries for UKOT and CD students to work with three research groups on island ecology, climate change and invasive species, toward an MSc in Island biodiversity and Conservation.

Understanding responsibility for biodiversity in the UK Overseas Territories (Dr Jasper Montana, Research Fellow, University of Oxford) offered some insights into who is responsible for biodiversity in the UKOTs following preliminary analysis of qualitative interviews with 45 scientists and members of civil society organisations, UKOT and UK government departments.

Developing our understanding of St Helena's Bone Sharks and

the threats they may face (Beth Taylor, Kenickie Andrews & James Wylor-Owen, St Helena National Trust) St Helena National Trust's marine team showed innovative methods for continuing baseline research on whale sharks (locally known as bone sharks), funded by Blue Marine Foundation. Equal numbers of adult male and female sharks visit St Helena's waters, suggesting the MPA could contain globally important reproductive habitat.

Sir Richard and Lady Ground Lecture on Nature Conservation in UK Overseas Territories and Crown Dependencies, and conference closing

Introduction to the series

Dr Mike Pienkowski reported that UKOTCF is honoured to be able to initiate a series of occasional high-level lectures on nature conservation in the UK Overseas Territories and Crown Dependencies named after the long-term supporters of such conservation and of UKOTCF, Sir Richard and Lady Ground. He summarised the full background (available at https://www.ukotcf.org.uk/sir-richard-lady-ground-lecture/).

After working mainly in media law, Richard Ground left London in 1983 for the Cayman Islands where he served as Crown Counsel, and from 1987 as Attorney General. In 1986 Richard married Dace McCoy, whom he had met in the Cayman Islands. Richard and Dace continued to live in Caribbean UK Overseas Territories until 2012. Dace McCoy Ground is a Harvard-trained American lawyer, who worked for City governments in Los Angeles and Seattle. After a further degree in marine studies, she was hired in 1985 by the Cayman Islands Government as Marine Parks Coordinator, responsible for establishing a marine parks system for those islands, a pioneer for the region. She worked closely with Gina Ebanks-Petrie. Dace then became founding Executive Director of the National Trust for the Cayman Islands.

Outside his legal and judicial work, Sir Richard was a keen and talented wildlife photographer and became passionate about the natural world. He published his first book of photographs in Cayman in 1989, *Creator's Glory*. As part of a productive partnership, Dace undertook the layout and publication of the book, and such combined and complementary efforts continued throughout. Sir Richard became Judge of the Supreme Court of Bermuda, from 1992 to 1998. In Bermuda, Dace worked for the Bermuda National Trust as Director of Development. In 1998, Sir Richard was appointed Chief Justice of the Turks and Caicos Islands. At the time of the Grounds' arrival, UKOTCF had recently started a major programme of work over several years to help the Turks & Caicos National Trust recover from an almost impossible position that it had been left in by a previous mentoring organisation. Dace's history brought them into contact with UKOTCF around this project, and much subsequent conservation progress has flowed from this coming together. The Richard and Dace publishing team leapt into action again, with the production in 2001 of the superb photographic *Birds of the Turks and Caicos Islands* – a book which still sells today, with proceeds donated to TCNT.

Dace worked with Mike Pienkowski of UKOTCF and Michelle Fulford-Gardiner, TCI's Acting Director of Environment and Coastal Resources, to facilitate cross-sectoral workshops and related consultations and analyses to help local players produce TCI's strategy to implement the 2001 Environment Charter between UK and TCI. This served as the pilot for similar exercises in other UKOTs, until UK Government ended funding, only having to restart it in another guise some years later. Dace joined UKOTCF Council and, working with UKOTCF, also undertook the design and layout for FCO and DFID for their then new Overseas Territories Environment Programme (OTEP), the then funding mechanism for the Environment Charters. Following their departure from TCI, Dace (with Richard making his excellent photographs available) continued support for TCI. This included layout of the pioneering trail guides and environmental information centre display-boards, developed and implemented by UKOTCF for the Turks & Caicos Island.

From 2004 until 2012, Richard was Chief Justice of Bermuda. While still maintaining her voluntary work for UKOTCF, back in Bermuda, Dace again became very active volunteering for Bermuda National Trust and other conservation bodies on the island. In 2011, the Bermuda National Trust awarded her its Silver Palmetto Award, the Trust's highest honour, to acknowledge her many years of exemplary service. Richard and Dace moved to live in Derbyshire, UK, an area they had come to know and love during many vacations spent trout fishing in the Derbyshire Wye, and not so far from Richard's original family home in Lincolnshire. Their support for UKOTCF continued, including participation at several high-level events. Richard was made a Knight Bachelor in the

Sir Richard and Lady (Dace) Ground at the Haulover Field-Road (nature trail), set up by UK Overseas Territories Conservation Forum and Turks & Caicos National Trust. They are holding copies of the trail guides designed by Dace for UKOTCF and featuring Richard's bird photographs. Photo: Dr Mike Pienkowski

Birthday Honours list 2012 for his services to justice in Bermuda. Tragically, Richard died in February 2014 after an illness. By 2015, Dace felt able to take on the Chair of UKOTCF's Wider Caribbean Working Group, a well as resuming her Council duties, and continues in that role.

For all this support, maintained over many years, to conservation in the UKOTs and CDs, UK Overseas Territories Conservation Forum is pleased that Dace has allowed UKOTCF Council to name this series of lectures by distinguished speakers, and achievers of conservation progress, the Sir Richard and Lady Ground Lectures on Nature Conservation in the UK Overseas Territories and Crown Dependencies. UKOTCF Council also welcome and thank the Grounds' long-term friend and colleague and outstandingly effective conservationist, Gina Ebanks-Petrie, the Cayman Islands' Director of Environment, to give the first Sir Richard and Lady Ground Lecture.

UKOTCF is most grateful to Dace for introducing the first Ground Lecturer.

Introduction, by Lady (Dace) Ground, to the first Ground Lecturer

For a number of reasons, I'm very, very delighted to be here with you today. First, this is the primary lecture in the series named for my late husband, Sir Richard Ground, and me. We both began working with the United Kingdom Overseas Territories Conservation Forum in the mid-90s, as Mike has just told you, when Richard was Chief Justice of Turks and Caicos Islands, and I was a volunteer adviser to the Turks and Caicos National Trust. We believe fervently in the Forum's ethic of supporting local NGOs and local public conservation organisations, and I continue to work with and support the Forum in the years since Richard's death in 2014. For me, this lecture series constitutes a touching and meaningful tribute to Richard's work and to his memory.

Second, I have the privilege of introducing someone I deeply admire and have known for more than 35 years (sorry, Gina!) Gina Ebanks was fresh from university when she was assigned to meet me at the Grand Cayman Airport in September 1985. Having heard nothing about each other, we were embarking on a mission to draft regulations for a new marine parks system, and to gain public acceptance of the concept. The conservation legislation had already been passed by the government, and regulations were needed in order to implement the actions that legislation contained, a variety of conservation measures, such as marine parks, controls on fishery methods and the like. A proposed licensing scheme for spear-guns had already been met with considerable hostility by the community. In fact, the opposition was so strong, it could easily have heralded the end of any hope of establishing marine parks. The government was worried and they needed a new approach.

As a result, I was recruited by the inveterate Caribbean conservation campaigner Tricia Bradley, and I was hired as Marine Parks Coordinator of the Cayman Islands. By the time I arrived in Cayman, Gina and the team at Natural Resources had already outlined the plan for three basic marine park zones. Our task was to refine the boundaries, refine the rules within the zones and, most critically, to gain public acceptance of the scheme. We ran an extensive public consultation programme in which we actually consulted the stakeholders – and, with some notable bumps in the road, they mostly came on board.

Gina's skills in speaking and persuading were more than valuable in doing that, I must say. But marine parks were established, with the input and buy-in of the key community stakeholder groups. Once they knew the impact the initiative would have on their livelihoods and their heritage, Caymanians actually became eager to establish the parks. It felt like a miracle.

Gina's involvement was crucial to the whole marine parks enterprise. She is above all else, a daughter of the soil. Her heart, soul and passion for the environment are rooted in the islands where she was born and raised. When many young Caymanians were focused on careers in the burgeoning finance industry, Gina's unwavering commitment was to become the kind of trained scientist needed to credibly accomplish the work of conservation in her homeland. Study time and vacation internships were directed towards this end. Her Master of Science degree, with distinction, from the University of Guelph was environmental management. That was followed in 1996 by her appointment as Director of the Department of Environment. Her work in this position has achieved a tremendous amount, and she is going to talk to us today in detail about what's been accomplished and how. I can't wait to hear more about her challenges and successes.

On a personal note, I would like to give you an idea of who Gina is. As already noted, she's passionately committed to her work, her community and her Island's environment. This has given her an unassailable authenticity in all that she does. Her love of community looks to the future. She has always mentored, coached and nurtured young Caymanian environmentalists, so the work is guaranteed to continue. Young John Bothwell, as he once was, whose impressive talk we heard earlier was just such a one.

Gina's super-power is a blend of natural charisma with strong technical skills and knowledge. This combination engages her fellow Caymanians in the campaign for environmental conservation. They've learned with Gina that conservation is not something which is being done to you, but rather with you. Obviously not everyone is always on board. There are always special interests to play, and there are always people who just disagree with you. But Gina has another gift. She's fearless – and this enables her to face the opposition with candour and authority, backed by outstanding technical skills. Inevitably, this builds trust and confidence. Gina understands the global nature of conservation, and that it will only be effective if applied locally. If think global, act local is a basic principle of environment conservation, Gina embodies that principle.

Cayman holds a special place in my heart, as it is where I met my wonderful husband all those years ago. I also treasured the time I spent working with Gina on the marine parks project, and later on establishing the National Trust for the Cayman Islands with its powerful focus on terrestrial conservation. Today, Gina is generously sharing with us how the Cayman Department of Environment has been developed and what it has accomplished for the Islands. It's my honour to introduce Gina to you now, so that we can all learn from her success story. Thank you very much.

The first Sir Richard and Lady Ground Lecture on Nature Conservation in UK Overseas Territories and Crown Dependencies: Three essential elements for conservation success in the Overseas Territories, by Gina Ebanks-Petrie, Director, Cayman Islands Department of Environment

Thank you Dace for that very kind introduction. I can only hope that I can live up to the promise. Distinguished members of the audience, colleagues and friends, good afternoon from the Cayman Islands. It is my distinct honour and privilege to have been asked to deliver this first in a series of the Sir Richard and Lady Ground Lectures, which you have all heard was conceived as a way of recognising the significant contribution of the late Sir Richard Ground and Lady Dace Ground, not only to the important work of this Conservation Forum, but also to the conservation efforts of each of the Caribbean Overseas Territories in which they have lived and worked for many years.

I had the pleasure and good fortune to meet both Dace and Richard some 36 years ago in Grand Cayman, not even a full year after completing my undergraduate degree and joining the Natural Resources Laboratory, which eventually grew into the Department of Environment, which I now lead. Dace had come to Cayman, as you have heard, to work on the regulations that would create Cayman's marine parks, and I had been seconded, rather unwillingly I have to say, to the Ministry of Natural Resources to provide a temporary replacement for a staff member who was on study-leave.

However, it did not take me long to appreciate the amazing opportunity that had been presented to me, and I was soon happily and enthusiastically engaged in the marine parks project, under Dace's able leadership. My involvement in that project taught me many important lessons, but especially about the importance of identifying and working cooperatively with stakeholders in the significant role of public consultation, community buy-in, and project champions to a successful project outcome. I have no hesitation in saying that the experience of working with Dace throughout that project was the single thing that prepared me more than anything else for the journey that would lie ahead for me. So thank you Dace.

When I was first asked to deliver this talk, I was a bit apprehensive about my ability to speak on a topic that would be relevant and of interest to as wide a cross-section of people as possible. However, when I talked this through with Mike and his team, I was reassured that our work in Cayman over the past 3+ decades could and would be able to provide some useful insight for colleagues in other territories. So, I do hope very much that you will find the talk interesting and that the information will be useful and provide some helpful pointers as you all continue to engage in the excellent conservation work that is going on today across the UK Overseas Territories and Crown Dependencies.

So, what are the essential elements of conservation success in the Overseas Territories? Reflecting on my almost 37 years of conservation work in one of the territories, the Cayman Islands, I concluded that all of the factors that have acted together to produce conservation gains and successes press can be assigned to these three elements: people, planning and perseverance.

People

It goes without saying that having the right people in the right roles is key to any successful endeavour, and that has certainly been the case for conservation work here in the Cayman Islands, right from the beginning until today. As I mentioned earlier, the Department of Environment, which I now head, started as a Natural Resources Lab that was established under the Mosquito Research and Control Unit, or MRCU as we call it locally. As strange as this may seem, MRCU, which was established in 1965 and led by the late Marco Giglioli, was the earliest government institution in the islands to collect scientific data and use it to inform its working decisions in relation to the abatement and control of the enormous swarms of pest mosquitoes produced in the vast areas of mangrove wetlands that once covered almost 2/3 of Grand Cayman.

Dr Giglioli soon realised that MRCU's success in controlling mosquitoes was beginning to produce other issues for Cayman's natural environment, due to the growing interest in the islands as a tourism destination and a financial centre, and the accompanying development pressure. In response to this, in the early 70s, the Cayman Islands Government, together with the UK Government's Overseas Development Agency, organised a consortium of UK academics and institutions to undertake studies to document and assess baseline environmental conditions, and make recommendations on conservation strategies, such as protected areas.

Only the first part of this work, the studies on the marine environment, was actually completed, and today the Wickstead Study, as it is known locally, still forms part of the baseline understanding of our Islands' marine environment and resources. Part of the legacy of this work was the establishment of the Natural Resources Lab and the 1978 Marine Conservation Law and Regulations, which Dace pointed out allowed the establishment of marine parks in 1986, and provided the legal framework for all marine conservation activities up until the passage of the National Conservation Law in 2013. Dr Giglioni's untimely passing in 1984, some 7 months before I joined the Natural Resources Lab, left a huge void, and it took until 1996 before the current Department of Environment was formally established.

Today, the DoE has a complement of 43 staff, split roughly 50-50 between the research and assessment section and an operations and enforcement section. At last count, 84% of our staff are Caymanian, and this includes the majority of our scientific staff. For us, having a cadre of well qualified, committed local staff has been a key, if not the main factor driving many other conservation successes. Among the numerous benefits of our efforts to build, develop and retain local scientific capacity is that it has allowed us to communicate key conservation messages in culturally appropriate ways, and that it creates significant institutional memory which promotes a deeper understanding of the issues and helps to deliver consistency in the provision of advice and decision-making.

However, as critical as it is to develop a core group of competent environmental professionals within the Department of Environment, I would not wish to downplay or undervalue a significant role of local and international partnerships in conservation outcomes for the Cayman Islands. A wide range of individuals, such as environmental advocates, specialists, scientists, volunteers, interns and even local and UK parliamentarians, as well as organisations such as academic institutions, NGOs and funding agencies, have all played an important part.

Cooperation between stake-holders to deal with an introduced invasive species: lion-fish competition and cook-off. Photo: Cayman Department of Environment

While time will not allow me to list and describe all of the people and institutions that, together with the DoE, have been, and in some cases still are, involved in conservation work in the territory. I would like to highlight a few examples to illustrate the value and importance of key individuals and partnerships to Cayman's conservation success over the years. As I'm sure she would agree, Dace's involvement with the project to establish marine parks in Cayman was partly serendipitous and partly the result of the good judgement and leadership of two individuals, respected Caribbean ornithologist Patricia Bradley, and former Permanent Secretary in the Ministry of Natural Resources, Mr Kearney Gomez. Patricia met Dace in Cayman Brac where Dace was on a dive-trip and Patricia was carrying out bird-surveys. The two got to talking, and Dace's passion for the marine environment, which had caused her to begin a Masters in maritime law, together with Patricia's ability to recognise an excellent conservation opportunity when it presented itself, led to a proposal for Dace to be attached to the Ministry of Natural Resources for the purpose of establishing marine parks in creating the new regulations that would be needed to give effect to them. Mr Gomez secured the funding to make this happen, provided leadership and guidance throughout the project, and worked alongside his Minister, the late Sir Vassel Johnson, to pilot the regulations through Cabinet.

As I mentioned earlier, long before public consultation and community buy-in were widely recognised as integral to the success of conservation initiatives, the marine parks project also utilised a large working committee, comprised of a variety of stakeholders, and identified local project champions who accompanied our small team to district meetings and other public consultation venues, to provide personal statements of support. Many of those same project champions continue to defend and support the work of the DoE and other local conservation organisations today.

Another example of the power of committed people draws on my experience with starting and growing the DoE's marine turtle monitoring programme. By the time the Department of Environment was formally established in 1996, it was already evident that we needed to understand much more about the status of our nesting populations of marine turtles on the three islands. Knowing very little about where and how to begin this task, my team and I started searching for people who had done this before, and ended up in contact with Dr Brendan Godley and Dr Annette Broderick, whose Marine Turtle Research Group at that time were affiliated with the University of Swansea. With a very small grant, which the DoE managed to secure from the UK AUSPB funds (this was obviously pre-Darwin), Brendan and Annette travelled to Grand Cayman to evaluate the situation on the ground and train our small team. Although initially focused on Little Cayman, the programme has been operating in the three Cayman Islands now for over 20 years. The DoE's marine turtle nesting programme enjoys tremendous community support and relies on a fairly large group of dedicated interns and trained volunteers who, together with the DoE, literally walk hundreds of miles of beaches throughout each nesting season. One of our volunteers has even developed, at no cost to us, a bespoke app which allows nesting data to be recorded in real time, cutting- down on the amount of effort required to transcribe field notes in the office. In collaboration with Brendan and Annette in their new roles at the University of Exeter, the marine turtle programme also resulted in PhDs for two DoE staff, one of whom, Dr Janice Blumenthal, now runs a programme for the DoE, and several peer-reviewed journal articles. Perhaps more importantly, the data collected through our marine internal programme directly contributed to legislative changes in 2007 that we believe are at least in part responsible for the trend of increasing numbers of nests that we are witnessing today. The DoE's relationship with Brendan and Annette has also meant that we've been able to readily access their expertise on a wide range of issues related to sea-turtle conservation including, through a Darwin Plus grant which the DoE was awarded in 2014, to investigate socio-economic aspects of turtle conservation in the Cayman Islands.

Cayman's Turtle Programme. Photo: Cayman Department of Environment

We have been extremely fortunate to have similarly productive and mutually beneficial relationships with other UK institutions, academic institutions. For example, between 2009 and 2012, Dr John Turner, from Bangor University, worked with the DoE and a three-year Darwin Plus project that assessed the effectiveness of our current system of marine parks in the light of the increasing number and level of threat to our marine environment. This programme has resulted not only in proposals for enhancing our current system of marine protected areas that will see somewhere between 40 and 50% of our narrow coastal shelf under no-take protection once the regulations which give effect to the proposals have been approved by Cabinet, but it also produced a PhD for a DoE staff member and several MSc projects for Dr Turner's students, who helped collect data for various aspects of the project.

Before wrapping up this section and the 'people' element, I would like to say a few words on the vital relationship between local and international non-governmental organisations and local government environment departments, as I know that these relationships can present challenges for those involved on both sides. In fact, I first spoke about this at the 2009 UK Overseas Territories Conservation Forum conference here on Grand Cayman in a session entitled "Joined-up thinking: institutional arrangements for environmental management." At that time, I noted that good, and even great, things get done when conservation partners work well together, and concluded that the prerequisites for functional government and NGO partnerships were constant open and honest

communication, practical mechanisms to assess the relationships, and that at least one, but preferably all, pioneers need to care more about the result than the means. Some 12 years later, I stand behind these conclusions. I can think of no better examples of good, or even great, things getting done when collaborative relationships exist between government and NGO partners than the National Trust for the Cayman Islands blue iguana recovery programme, now known as our Blue Iguana Conservation (BIC) and the DoE's Grouper Moon project.

From its inception, BIC which, under the inspirational leadership of Fred Burton, literally brought the endemic blue iguana back from the edge of extinction, has enjoyed the support and involvement of the Department of Environment in various ways. Today the DoE plays a significant management and governance role in the programme, which is coordinated through a steering committee that involves the Trust, the DoE and several international partners. In fact, this group which only last month completed the programme's most recent conservation planning exercise, via Zoom, has concluded that, although the programme has had notable successes, sadly the threats which originally acted to deplete wild populations of this iconic lizard still exist, with other equally concerning issues looming on the horizon, making it imperative that these collaborative relationships continue to thrive.

Blue iguana. Photo: Fred Burton

In relation to the overall conservation agenda for the country, the DoE and the Trust – which have overlapping mandates – continue to agree on and align priorities through the DoE's membership on the Trust's Environmental Advisory Committee, and the Trust has a designated seat on the National Conservation Council, which guides the implementation of the National Conservation Law, under which the DoE now operates.

The DoE's Grouper Moon project is a partnership between the Department, which carried out the early research and monitoring work on Nassau grouper spawning aggregations around three islands, and the Reef Environmental Education Foundation, Scripps Institution of Oceanography and Oregon State University, who joined the project around 2002 to provide additional scientific expertise and manpower, after significant overfishing events in 2001 and 2002 removed some 4000 fish from the Little Cayman spawning aggregations, leaving about 2000 fish behind. Today, and as a direct result of this partnership, the Little Cayman spawning aggregation of Nassau groupers is the largest known in the world, with an estimated population of about 8000 fish, and we collectively know much more about the ecology and life-history of these important marine creatures. This has led to changes in conservation regulations which prohibit all fishing at

Nassau grouper aggregation and project work. Photo: Cayman Department of Environment

the aggregation sites during the spawning period, and protect the fish at other times of the year through the introduction of a daily catch-limit and size-limit.

As I hope I've been able to demonstrate through the provision of examples, effective conservation requires a community of individuals and organisations, people working together toward shared goals. While this may sound wonderful, it is not always easy. Competing agendas, turf-wars and egos all can and do impede progress. This is why it is so important that those with local responsibilities and mandates find ways to work collaboratively to develop a national conservation agenda and agreed national priorities. Although this is likely a good idea at whatever scale you are working, it is critically important in the context of the mostly small islands that make up the UK Overseas Territories and Crown Dependencies.

Planning

This leads me conveniently from what I have proposed as the first essential element of conservation success in the territories, people, to what I consider to be the second essential element, planning. I deliberately chose to use the verb "planning" instead of the noun "plan" because, for me, this element is not about creating a document or plan that will likely be relegated to a dusty shelf in some office, but rather it is about a continual ongoing process of taking stock of the current reality, scanning the horizon for potential threats and opportunities, and developing appropriate response strategies.

Earlier I mentioned the importance of agreeing a national conservation agenda, and priorities of local stakeholders and partners. An integral part of this process is developing an overall vision of what conservation success would actually look like in your territory. Shortly after the passage of the National Conservation Law 2013 which, for the first time, provided the country with the legal basis for creating a national system of terrestrial protected areas, the DoE engaged The Nature Conservancy to take us through a national protected area planning exercise. The National Trust, whose mandate also allows them to protect land, and members of the National Conservation Council were invited to participate in this exercise, which involved agreeing targets for the percentage of all native habitats that we wish to see protected, and identifying threats or obstacles to that protection.

Once the areas were mapped, the group later agreed criteria which would allow us to score and prioritise areas for protection. These scoring criteria have become an extremely important tool for us since the National Conservation Law also provides any member of the public with the right to nominate land for protection. Given that any land protected under the NCL must first be acquired by the Crown from a willing seller at fair market value, it is critically important that we are able to apply our limited funding to the purchase of land with high ecological value, instead of someone's artificially created garden pond where whistling ducks congregate

Habitat monitoring. Photo: Cayman Department of Environment

because they are fed daily. (This is a true scenario.)

Agreement and priority land for protection has permitted both the National Trust and the NCC to work in a coordinated way towards achieving national protected area targets. Additionally, we have both seen that local and international donors are far more comfortable contributing money for the purchase of conservation land which they know has been through a rigorous process of assessment and prioritisation.

As you will likely have surmised, funding the acquisition of land for conservation is a significant constraint to achieving our national conservation goals in the Cayman Islands. It is for this reason that, as early on as 1997, when the Cayman Islands budget team sought our input on possible revenue streams for the environment, the DoE recommended the creation of a conservation fund with fees collected on the departure tax levied against all outgoing airline and cruise-ship passengers. We were only able to do this because, together with the National Trust and the former Solicitor General Michael Marsden, we had already for a couple of years been looking into the feasibility of using that mechanism as a means of funding the purchase of conservation land once we were able to achieve the passage of National Conservation legislation.

Out of this recommendation was born the Environmental Protection Fund, which was created by Parliament in 1997 [says 1977 but probably reading error], and ultimately embodied in the National Conservation Law some 16 years later. During that period of time, it took the commitment and several Governors, probing questions from this Forum as well as UK and local Members of Parliament, and significant local pressure, to ensure that the Fund did not become subsumed into the general revenue of the Cayman Islands Treasury.

I still consider the matter of the Environmental Protection Fund to be a work in progress, for two reasons. First is the fact that clauses 46 and 47 of the National Conservation Law, which provide for the continuation of the EPF as a dedicated fund under the management of Parliament's Finance Committee, remain the only two clauses of the Law which have not yet commenced by Cabinet. This has meant that, although the National Conservation Council has gazetted guidance on the appropriate use of the Fund, in recent years it has been utilised to finance national infrastructure projects, such as the integrated solid waste management system. Whilst projects like these clearly have a net positive environmental benefit, it was always envisaged that the Fund would primarily support the establishment and management of protected areas and species and other core conservation initiatives. Additionally, although we have been able to obtain a modest amount of funding to support the purchase of land within our protected area targets, in the last couple of years the funding for the purchase of conservation land has not been forthcoming.

The second reason relates to the same reason that we are gathered on a Zoom platform for this conference, rather than meeting in person. As we are all painfully aware, the global Covid-19 pandemic curtailed all discretionary travel for the past 12 months. This has meant that the primary source of revenue for the Fund has dried up for the time being, and that the National Conservation Council, in addition to advocating for the commencement of the remaining clauses of the law, will likely need to give careful thought as to how to future-proof revenue sources for the Fund.

It should be evident from the above examples that a very important aspect of the conservation planning process in our territory, and I suspect this applies to several others, is the need for local conservation agencies to be prepared to take the initiative and to lead. Rarely, if ever, do conservation policies or plans get delivered from above and, if they are, it is entirely possible to find oneself being asked to switch directions in the next election cycle. In these circumstances, having an overall vision of conservation success and agreed national priorities can help to clarify difficult issues, such as when does compromise become helpful to achieving conservation success, and when does it not. The requirement to constantly be able to pivot and adjust strategies can be extremely time-consuming and tiring, so this ties in nicely with what I consider to be the third essential element of conservation success, perseverance.

Perseverance

Anyone who works in conservation will likely agree that, to achieve success, necessarily means that you are in it for the long haul. For a start, there are often crushingly long timescales required to be able to detect and measure reliable and statistically significant indicators of success – timescales which usually do not conform to other known or more traditional frames of reference, like election cycles and funding cycles. And then there is a significant effort and time that it takes to build your community of people, develop productive relationships, and nurture partnerships. Added to this can be the time it takes to garner political support and community buy-in for specific conservation initiatives, particularly if they involve restricting access to environmental resources.

In the Cayman context, nowhere was this more evident than in the journey towards the passage of the National Conservation Law which, as I previously mentioned, took some 16 years. In addition to tens of working drafts, many presentations to Cabinet and caucus, multiple rounds of district meetings and stakeholder consultations, and one brave minister who spent the vast majority of his political capital on bringing a bill to Parliament that was still amended some 30+ times at committee stage, but ultimately passed unanimously.

Not everyone who starts out as an enthusiastic conservation partner has the temperament to take defeat and turn it into a learning opportunity, but it is critical that we find ways to do this. I have a wall-hanging in my office with the quote attributed to the Dalai Lama to remind me on a daily basis of how important this is; the quote goes "when you lose don't lose the lesson." In fact, from where I sit, failing to do this is not an option, and especially at this time when the entire planet is in crisis. It is also vital to buoy and uplift the spirits of supporters and conservation champions, who sometimes really need to be able to see tangible results of their efforts and involvement, by recognising and celebrating the small wins, the acquisition of the building blocks of your overall vision.

I could go on but it's getting late and we need to leave some time for questions. So I sincerely hope that each of you has been able

Shark monitoring. Photo: Cayman Department of Environment

to take away something helpful from this discussion of what I consider to be the three essential elements of conservation success in the UK territories: people, planning and perseverance. While the Cayman Islands is able to claim several notable conservation successes, I am certain that significant challenges lie ahead. Climate-change and the relentless pace of unplanned development are but two. There is also the reality that, while the level of community awareness of environmental issues and support for the conservation measures are orders of magnitude greater than when we started on the marine parks project in 1986, there is regrettably still not wide political support for conservation and environmental initiatives in Cayman. However, our collective ability to make significant progress in the past in the face of what often seemed to be insurmountable obstacles leaves me hopeful that we, working collaboratively and effectively with our conservation community and partners, will be able to build on, amplify, and expand our conservation successes in the future. In the words of Margaret Mead, "never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it is the only thing that ever has." Thank you and I'm now willing to take any questions.

A long and lively question-and-answer section followed this most inspirational lecture.

Closing of the conference

Dr Mike Pienkowski commented that it was really difficult to follow that – so he was not going to try, except to add his thanks to everyone else's for Gina's bringing our conference to an outstanding climax.

He did, however, need – on behalf of UKOTCF and he suspected all participants – to thank a lot of people, without whom this would not have worked.

First of all, to all participants – there is no conference without them. At the latest estimate, there were 184 participants from 25 countries or territories, including all 5 Crown Dependencies, 15 of the 16 UK Overseas Territories, UK, USA, Europe, S America and elsewhere – who have been S*taying Connected for Conservation in a Changed World*. That does not include all the co-authors of talks and posters, and some others who helped in the preparation.

Thank you all for participating and to the speakers, including the first Ground lecturer, poster-presenters, the cross-territory topic-team members who put together the first drafts of the conclusions, those who commented on the successive drafts, musicians making their recordings available, video-makers, questioners, answerers, and many others, all of whom have put so much work into preparing and participating in this conference.

We would like to thank again those who sponsored the conference in one way or another, and welcomed that some of these are looking to a continued involvement with UKOTCF, and invited the others to explore that too.

He thanked the session coordinators, especially the chair-persons and question-masters – who, unseen by most participants, have had to put up with strings of messages from him; he was sure that they now have sympathy with newsreaders and the like suffering their directors' voices in their ears!

He thanked particularly the rest of the organising team: Dr Jamie Males, Catherine Wensink, and Ann Pienkowski, and added to those our other volunteer Conservation Officer, Catriona Porter. Those who are involved with our Southern Oceans Working Group will know her as the very effective Secretary of that Group. She did a great deal of work in the preparation of the conference, but was not able to join us live. Her day job – although it is also often an overnight job, and always with horrific 12-hour shifts – is involved in Covid testing. Unfortunately, these shifts happened to include the hours of every day of the conference. However, he was pretty sure that she was the first person to read all the posters, and has probably also been looking at the session recordings. He offered apologies for when hiccups occurred and, in mitigation, the information that this was the first webinar or online conference that our team has ever run – but suspected that it would not be the last.

Many thanks to the Ministers who opened our conference: Lord (Zac) Goldsmith of the Foreign, Commonwealth & Development Office, and the Department for Environment, Food and Rural Affairs; and Professor John Cortés, HM Government of Gibraltar's Minister for the Environment, Sustainability, Climate Change, Heritage, Education and Culture, as well as Chairman of the UK Overseas Territories & Crown Dependencies Environment Ministers' Council. He knew that Professor Cortés also managed to drop in for several periods of the conference to experience presentations and discussions.

Of course, both these ministers would be receiving copies of the conference conclusions and recommendations, as will others including the environment ministers (or equivalents) in territory governments. As Minister Cortés had said, these would be on the agenda for the UK Overseas Territories and Crown Dependencies Environment Ministers' Council online meeting the following month.

UKOTCF would be circulating to participants, and wider, the tidied final version of the conclusions and recommendations, and making the recordings of the conference available to booked persons as soon as possible over the next few days, as we would be doing our best to tweak the technical quality. UKOTCF would also be working on the proceedings. This will take a few months.

We would be following up on other matters, in some cases via our regional working groups, each of which tend to meet on Zoom, 4 or more times a year. These cover the Wider Caribbean, the Southern Oceans and the Europe Territories (the last including the Crown Dependencies, Gibraltar and Cyprus Sovereign Base Areas). Anyone not involved but who would like to be, should email the Working Group secretary – email addresses on our website contact page in ukotcf.org.uk

He thanked all those who had emailed messages of congratulations to the team. The music had been a very popular feature, and he thanked the musicians and other territory partners who have facilitated access. There were just two pieces of music not yet used; so we would close with them after another cultural interlude.

Shakira Christodoulou, of La Société Sercquaise on the Crown Dependency of Sark, in the Channel Islands, has kindly met our request to write some poems for the conference. Here they are:

Shakira Christodoulou, of La Société Sercquaise on the Crown Dependency of Sark, in the Channel Islands

Engagement
Even if we cannot hold back the storm, all hands
can nail down the roof over our heads, floodproof our lifelines,
buy back space for nature and stem the rising tide with a mangrove army.
Our communities reclaim their flowers and show us how to value them,
experts and decision-makers, home-grown and strong-rooted.
And in return, we teach nature's value to communities emerging,
magnetised together by hopes for regeneration.
We sow the seeds and forge the links,
fish out bottles and put back the fish, trailing nature between people
to nourish joy in what they bought. Names on a wall,
memories in young heads, new nesting-sites and possibilities.
Many hands make light work.

Above: Shakira Christodoulou (Image: UKOTCF); below: primary school students expand Millennium Forest, St Helena,; part of the Forest itself (Photos: Dr Rebecca Cairns-Wicks, St Helena Millenium Forest); Critically Endangered mountain chicken frog, on Montserrat after first volcanic eruptions but before chytrid fungus invasion; Grand Cayman blue iguana, back from the brink but needing continued safe-guarding; aerial view of Leeward Going Through, Turks & Cacos Island, with nature reserve cays with wetlands, beaches and other natural ecosystems on the left, and the intensivly developed Providenciales to the right, which development has since expanded into the channel (Photos: Dr Mike Pienkowski, UKOTCF)

Regeneration in Three Parts
Imagine a forest into being.
Into a stripped expanse, ideas drip like moisture,
seeding recovery in a waterless waste fed on waste-water
and buy-in; multilateral, polyvocal, trees planted by every child
for their own children, when parents had never seen a gumwood.
Now a gumwood forest greens regenerating soil, erosion held back,
degradation changed for a new millennium.

Change a millennium, and turn back the waves.
Diaspora, a beautiful name for grief set in motion
when pyroclastic waves washed half an island away. People dispersed,
its heart swamped roof-high in pumice, swamps sacrificed to a city never-like-it-was.
National memories locked up in fragments and old photos,
locked out of the lush, inaccessible wild. Overrun.
But a people can adopt new homes, write new books.
With reserves protected, a wave of special froglets slip out,
while waves of youth surf back in on a tide of proud hope
from places that were harbours, never home.

Now, nature's home was never more precarious.
Models pushed, at the edge of resilience, projected to the flatlining bleakest;
until we stop the vortex and take a stand. Transplant the tree of life,
catch up the critical few, and we will move things lesser but no less unique
to higher ground. Gather the racers, the scuttlers and scramblers, the slitherers,
before time races out, and the rising water
and green horde sweep them from our hands.
The model is what we make it.

Two Lessons Learned

History:
Before the floods, the reef shielded a turquoise bay,
coral jungles thriving beneath waves held back, sands kept safe.
A gleaming sugar-soft smile at trees above, velvet-draped
to cover the bay's back, the wetlands a folded umbrella

over its shoulder, waiting for the rain.
The lesson's there in black and white,
half a century ago, before the water turned to mud.
And so, back to the schoolyard: for every stretch of concrete, a rain garden.
For each classroom, cheerful plants, deep-rooted and thirsty
mopping up our spillages, a children's umbrella
unfurled to shield the reef.

Arboriculture:
What does it take, to balance the scales
that should never have been there? A community,
gathered at Christmas around a pine, instead of a Trojan Horse?
Or a flash of fire, just enough to turn a corner
and give pines a second chance. And who'd have thought
trees need their neighbours no less than we do,
ectomycorrhizal confidences shared over a handful of soil:
it takes a village to raise a seedling,
to flush a pineyard green again.

I felt very bad for not coming up with something about the remarkable establishment of the MPAs, and the brave choices of communities from Bermuda to Tristan. Besides, I couldn't top the very moving words of Tristan's people on leading the way among bigger nations. All I could think of was this little bit of silliness:
'Selfish' ends
Maybe the best humans can do for the sea
is to cut out the self, and leave the fish be.

From top: Part of Middle Caicos Pine-yard, October 2020, eventually recovering well after work by the Caicos Pine Recovery project team, with international collaboration (Photo: Bryan Naqqi Manco, DECR); bottlenose dolphin, off Ascension, in what is now Ascension's Marine Protected Area (Photo: Dr Mike Pienkowski, UKOTCF).

Student poster competition at UKOTCF conference

In partnership with RSPB, UKOTCF organised a student poster conpetition as part of the online poster component of the conference (see above). Jonathan Hall of RSPB and Catherine Wensink of UKOTCF announced the winners, who have since received their prizes, a cash prize from RSPB for the winner and a field-bag made from recycled materials by Lefrik Eco Friendly Fabric for each of the winner and the two runners-up..

We thank the poster authors, the widely-drawn panel voting on them, the teller, and those involved in discussions on the posters.

All the student posters were highly regarded, and many voters said that it had been a very hard job to pick one. In fact, the comments show that, if we had given each voter more than one vote, then the results could have been different.

Some of the comments on the high standard achieved by all were:

"Having reviewed the posters, I was really impressed by all of them."

"Some great posters. Difficult to judge, as they have different purposes."

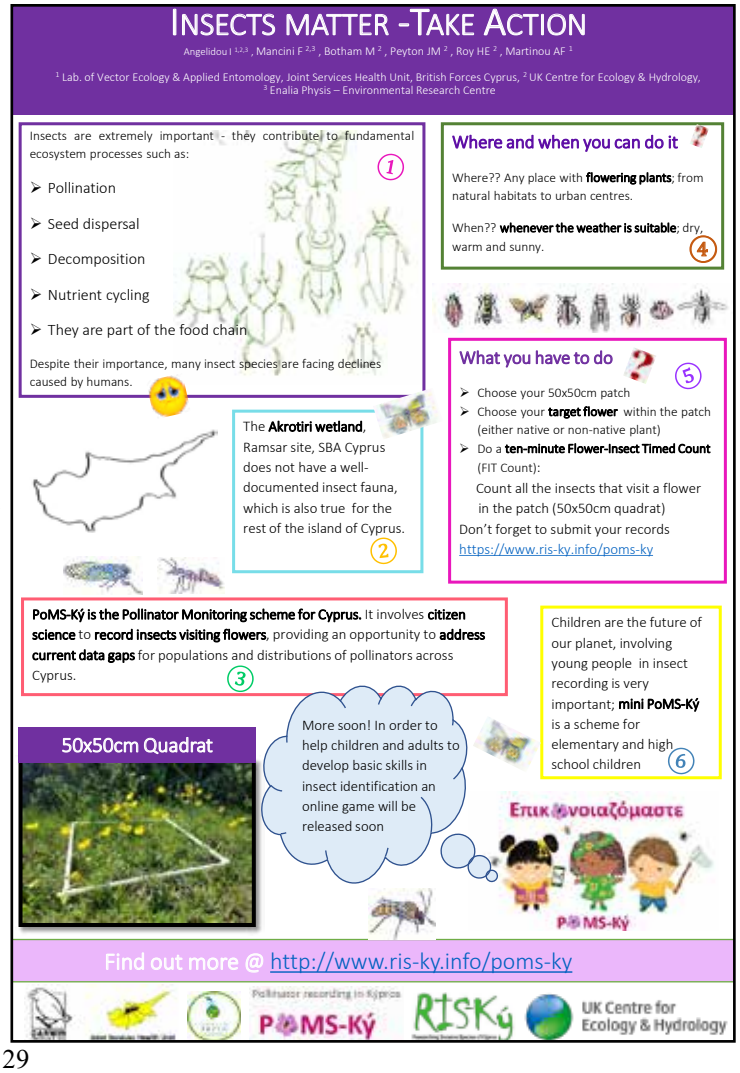
"I've had a good look at them and they are all lovely."

The winner was:

Ioanna Angelidou with her poster (jointly with F Mancini, M Botham, J Peyton, HE Roy & AF Martinou) 3.06P. **Insects matter: Take Action** – of Laboratory of Vector Ecology & Applied Entomology, Joint Services Health Unit, British Forces Cyprus, and UK Centre for Ecology & Hydrology).

Here are some of the comments on this poster:

"It sets out the problem, puts it into context, and gives real practical suggestions about what the poster's target audience can



do. It's firmly aimed at the next generation (well, in my case next-but-one), has a good illustration/text balance, good graphics, contains links and looks-ahead. Super."

"A very engaging and clearly presented poster – motivating, especially to get young people involved."

"What I liked about this one was that it really was a poster! It was clear, visually appealing and had a great call to action. (And I love an education / citizen science project.)"

The two runners-up were:

Joshua Smith, Jersey International Centre of Advanced Studies, with 5.07P. **War of the Green Horde: Novel Control Strategies for *Iguana* spp.**

Some of the people who voted for this poster commented:

"Presents a good summary of the various actions – particularly liked 'Tucker' the detection dog."

"Really informative and creative"

"Clear; well researched and collated; positive ideas for action, based on studies"

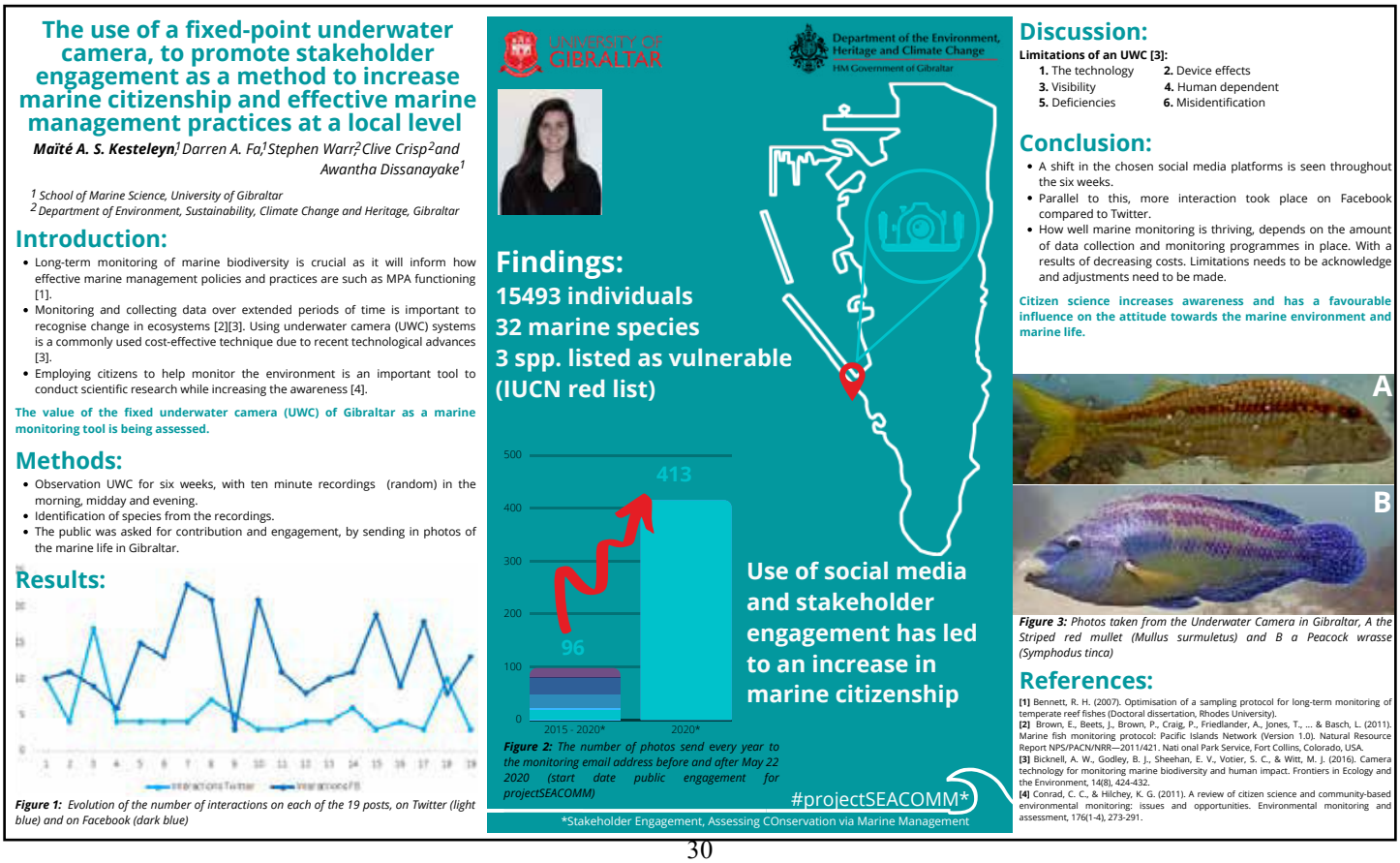
and:

Maïté Kesteleyn (with Darren A. Fa, Stephen Warr, Clive Crisp and Awantha Dissanayake, School of Marine Science, University of Gibraltar & Department of Environment, Sustainability, Climate Change and Heritage, Gibraltar) with 9.05P **The use of a fixed-point underwater camera, to promote stakeholder engagement as a method to increase marine citizenship and effective marine management practices at a local level.**

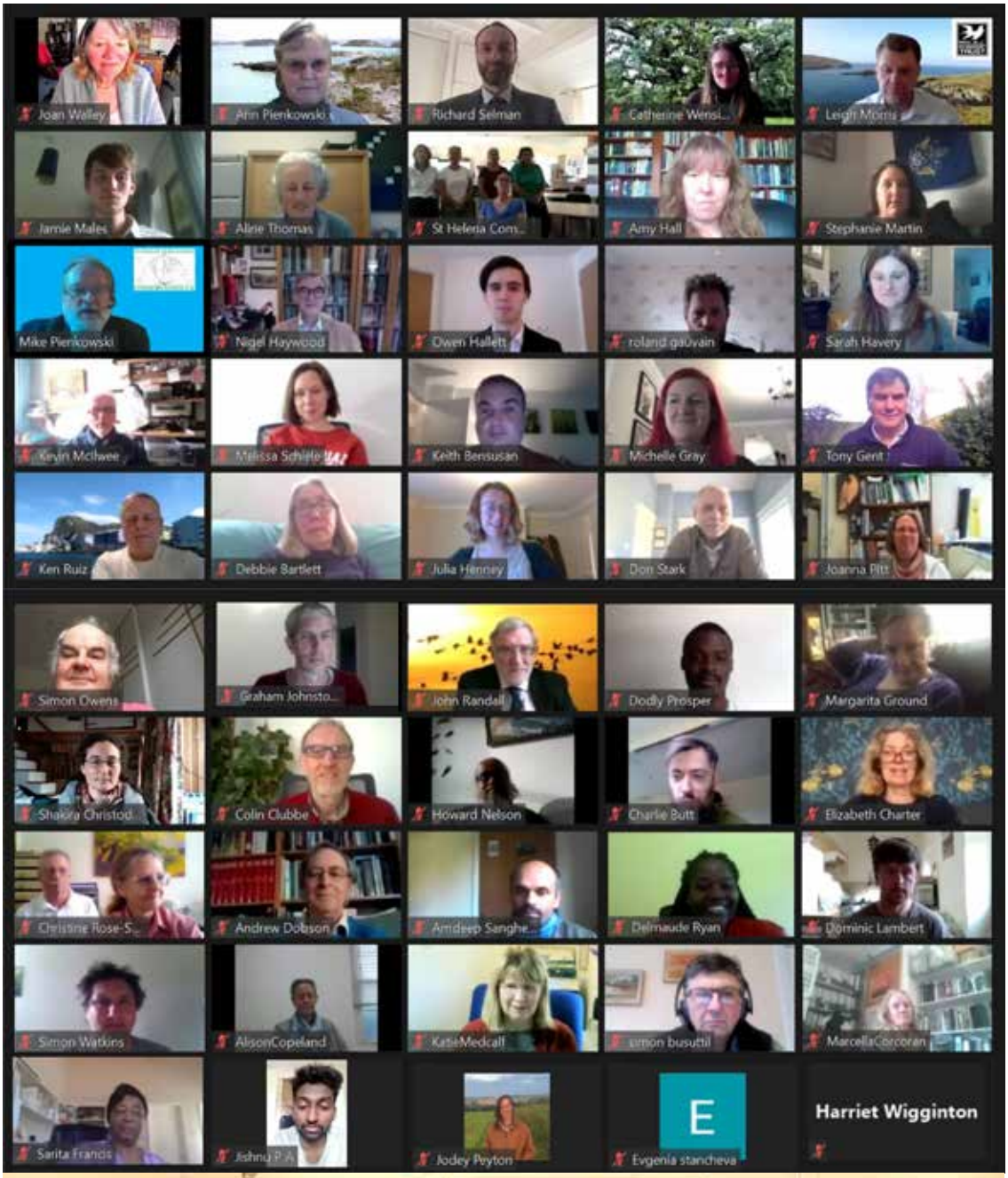
Some of the people who voted for this poster said:

"I thought the design had the best balance out of all between being visually engaging yet not too busy (and so a bit hard to read), the information itself was put across clearly and I found it all round a very interesting read."

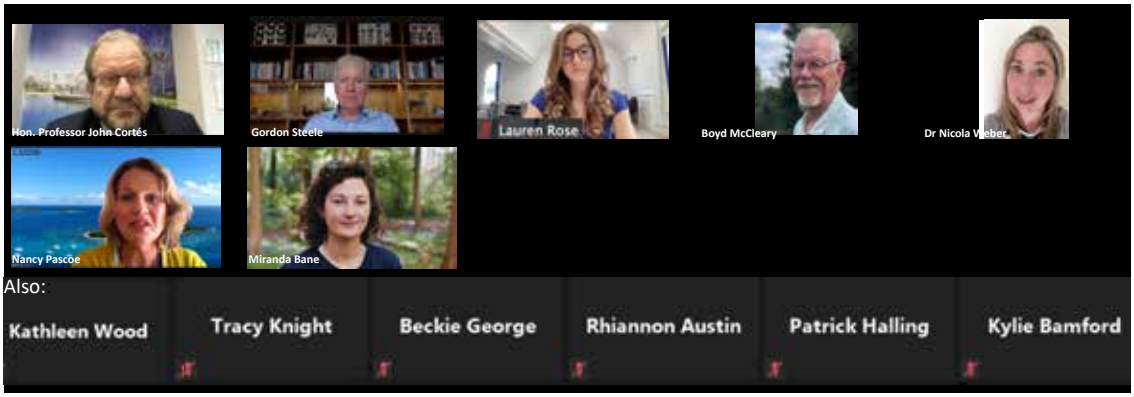
"Great involvement of local, possibly non-specialist, stakeholders."



Conference photo



Gathered immediately above are some of the St Helena participants who (with Covid-19 absent from the Island) can still gather together. Photo is by Vince Thompson (*St Helena Independent* and Member of the St Helena National Trust Council) – so his image is not captured.



*Nearly half of the conference participants. Photo and compilation: Ann Pienkowski (UKOTCF), and Vince Thompson (*St Helena Independent *and St Helena National Trust).*

Bruce Dinwiddy CMG, 1946-2021

UKOTCF learnt, with great sadness, of the death on 1st April 2021 of Bruce Dinwiddy. Bruce was a member of Council and Chairman of the Wider Caribbean Working Group (WCWG) from 2006 to 2015.

Bruce was previously Governor of the Cayman Islands (2002-05). His interest in environmental issues dates from his time as Overseas Development Institute Fellow in Swaziland (1967-69) and ODI Research Officer in London (1970-73). He edited ODI's book *Aid Performance and Development Policies of Western Countries: Studies in US, UK, EEC and Dutch Programmes* in 1973 and authored *Promoting African Enterprise*, published in 1974.

After joining the FCO, he spent two years as desk officer for Hong Kong, then Britain's most important remaining Colony. His early foreign postings were in Vienna (First Secretary), Cairo (Head of Chancery), Bonn (Counsellor) and Ottawa (Deputy High Commissioner). Between overseas postings, he worked in the Permanent Under Secretary's Department, Personnel Operations Department, as Assistant Head of Personnel Policy Department, Counsellor on loan to the Cabinet Office.

During 1995-98 he was Head of the FCO's African Department (Southern) and non-resident Commissioner of British Indian Ocean Territory. He was High Commissioner to Tanzania (1998-2001) before being appointed Governor of the Cayman Islands.

While in Cayman, Bruce was acutely conscious of the delicate balance between development and environment in a fast growing small island economy. He took an active interest in environmental issues, including the Blue Iguana programme and conservation of other endangered species. In September 2004, Grand Cayman was ravaged by Hurricane Ivan, the worst storm to strike the islands in living memory. His last year as Governor was much taken up with various aspects of the recovery.

Bruce was a UK Friend of Cayman and was pleased also to remain involved in UKOTCF, after his time on Council, as an Advisor to the Forum, with wider Caribbean and other Overseas Territories. Until shortly before his death, he frequently kept the Secretary of WCWG up to date with information on the Cayman Islands and other matters.

The present Governor of the Cayman Islands, Martyn Roper, said "I was very saddened to hear about the passing of former Governor Bruce Dinwiddy CMG who served as the Governor of the Cayman Islands from 2002 until 2005. Governor Dinwiddy's tenure in Cayman coincided with the difficult period of Hurricane Ivan and its aftermath, an incredibly challenging period for him and everybody on our Islands. Governor Dinwiddy did much to develop the UK/Cayman partnership, particularly on preparation for future natural disasters.

"I know from discussions with many people across our Islands that he is fondly remembered for his kindness and affection for these Islands. He continued to support Cayman after his departure working closely with the Friends of Cayman (I met him at their London dinner in 2018 shortly after becoming Governor). He was also part of the UK Overseas Territories Conservation Forum.

"He will be greatly missed. I am sure I speak for everyone on our Islands in expressing deepest condolences to Governor Dinwiddy's wife Emma, his family and friends at this sad time."

Cayman Premier Alden McLaughlin followed suit with his tribute, stating "The people of the Cayman Islands will always remember him for his many contributions to assist our community after the passage of Hurricane Ivan in 2004. His compassion, humility and commitment to serving the Cayman Islands will never be forgotten." He added that Mr Dinwiddy continued to be a "friend of the Cayman Islands long after his tenure as Governor ended, making many trips back to our shores."

Bruce and Emma Dinwiddy, on the boat field-trip at the end of UKOTCF's conference in Grand Cayman in 2009, during one of their return visits to the Cayman Islands. Photo: Dr Mike Pienkowski

UKOTCF's Chairman, Dr Mike Pienkowski, said "Bruce Dinwiddy was a great friend to UKOTCF and to his fellow Council-members, including myself. He had thought deeply about the role of a Governor, and had the gift of being able to explain this, and how it could help conservation, to a wide range of parties, including conservationists and MPs, amongst others. Over the 9 years he donated his time to UKOTCF's Council and WCWG – and since, as an Advisor – his wise counsel and gentle and friendly advice provided us with great help, allowing UKOTCF to be as effective as possible. He was a stalwart in building up the UKOTCF's Wider Caribbean Working Group and his diplomatic skills helped us in all sorts of other ways, which will have long-lasting effects.

"We will miss Bruce greatly. We have lost a true friend, and send our deepest sympathy to Emma and the family."

The Cayman Islands flag was flown at half mast, alongside the Union Flag on all Cayman Islands Government buildings until Tuesday, 6th April, to mark his passing.

New UKOTCF Volunteers

UKOTCF is pleased to welcome two new volunteers, Josh Smith and Callum Waldie. In the first instance, they are working with present Voluntary Conservation Officer, Catriona Porter, on a new review of progress in the UK Overseas Territories and Crown Dependencies in implementing the commitments under the Environment Charters and international conservation conventions.

Josh Smith

Josh graduated from the University of Birmingham with a BSc in Biological Sciences (Zoology). Through his Bachelors, Josh specialised in zoology, focusing on animal behaviour, conservation and evolution as his mainstay topics. For his dissertation project, he developed a foraging enrichment strategy for captive Asian small-clawed otters *Aonyx cinerea*. The foraging strategy encouraged wild-type behaviours that emphasised the species' adaptations as a crab-specialist.

He is currently enrolled on a MSc course in Island Biodiversity and Conservation, at Jersey International Centre of Advanced Studies (JICAS) and the University of Exeter. For his MSc research project, Josh and his partner, Anna Smith, journeyed to the UKOT of Anguilla. Part-funded by the Government of Anguilla, the pair conducted two research projects focused on invasive green iguanas *Iguana iguana* and *Sargassum* brown tides.

They now hope, from their collected data, to produce:

1) A distribution model for the native *Iguana delicatissima* and invasive *Iguana iguana* on Anguilla. The distribution model aims to extrapolate *Iguana* spp. distribution patterns across the main island of Anguilla to its offshore islets. Thus, the prediction of distribution patterns across the offshore islets, under post-invasion and post-translocation scenarios, will inform conservation practitioners on future control and reintroduction initiatives.

2) An impact assessment of Sargassum brown tide decomposition on Anguilla's native seagrass meadows. Their data has found that, in sites of high disturbance and/or Sargassum abundance, there was an exhibited species turnover from the native T*halassia testudinium* to the invasive *Halophila stipulacea*. Sites with high *Sargassum* abundance also correlated with a reduction in shoot density of *Thalassia testudinium*, a valuable indicator of poor meadow health.

Callum Waldie

Callum is a passionate wildlife conservationist. He has been lucky enough to have a wide range of voluntary experience in the sector since 2013, ranging from the savannahs of South Africa, through the Rainforests of Costa Rica, to the underwater depths of the Honduran coral reefs.

After graduating from the University of Exeter with an MSc in Conservation and Biodiversity in 2019, Callum found himself working in the Seychelles on an extremely small island called Fregate, as a conservation biologist. He thoroughly enjoys being out in the field collecting primary research, and the feeling of contributing to science is his biggest motivation. Callum loves collaborating with other people and organisations, and is very much looking forward to his next conservation adventure.

Callum has previously volunteered through UKOTCF for work in particular territories.

Update on the threat to South Georgia's wildlife from giant iceberg A68

In F*orum News 53* (November 2020, page 14), we reported the threat to the wildlife of South Georgia from an iceberg, about the same size as South Georgia itself, which –with global warming – had broken from the Larsen C ice-shelf, on the east side of the Antarctic Peninsula (and part of British Antarctic Territory).

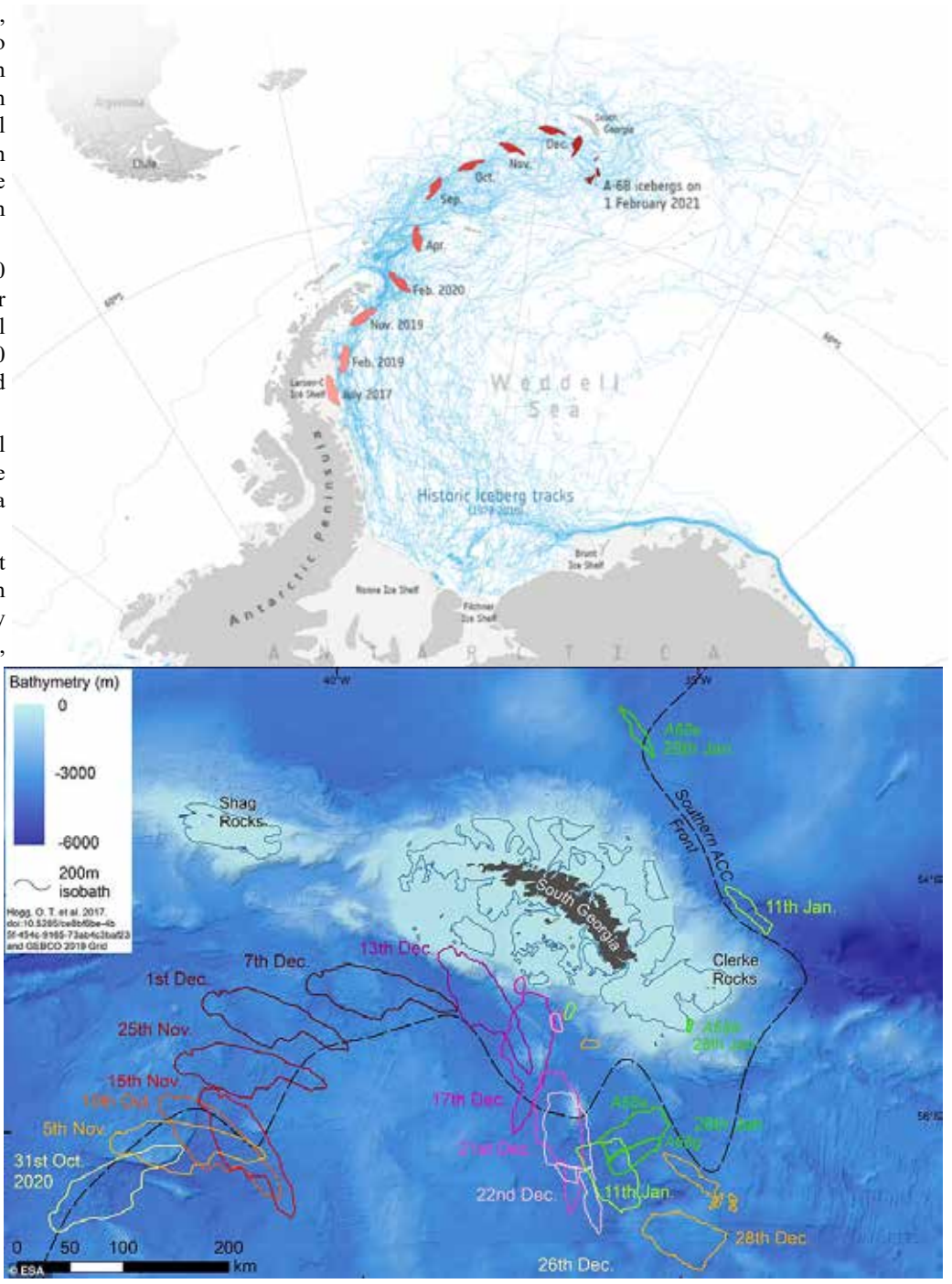
A68, when first detached was 5,800 km^2, one of the biggest icebergs ever recorded. The only three larger, and all from Antarctica, were calved in 2000 (88% larger), 1998 (19% larger), and 2002 (10% larger).

As it aproached South Georgia, a small piece broke off, becoming A68b, while the still-huge main piece became A68a and continued its drift.

In late December and throughout January, more break-up occurred, with the larger pieces grounding in relatively shallow seas south of South Georgia, with the smaller pieces drifting around the east of the island and off to the north-east in the Southern Antarctic Circumpolar Current. By 30th January 2021, after 3 days of rapid break-up, there were 12 fragments, labelled 68a-l, as well as countless bits of floating ice.

Whilst this melting of the iceberg reduces the earlier concerns, such as blocking the feeding journeys of penguins and seals, the impact of the melting water on salinity levels, and hence on algae, plankton etc, is not clear. Fish, penguins and whales could be affected. Equally, there could be nutrient release; icebergs tend to be centres of wildlife activity due to nutrients and shelter.

British Antarctic Survey is using robot submarines to investigate the iceberg to give information about how the melting of icebergs impacts local sea conditions and marine life.



Track of Iceberg A68 (top) from its breakaway from the Larsen C Iceshelf in 2017 (along with routes taken by previous icebergs), and (above) as it approached South Georgia in October 2020 to January 2021. Icebergs often follow the Southern Antarctic Circumpolar Current front, shown on the map as the dashed black line. Images: modified Copernicus Sentinel data (2021), processed by ESA; Antarctic Iceberg Tracking Database; and © ESA

In mid-April 2021, the US National Ice Center reported that A68 had fragmented into pieces too small to track, the largest being about 5 km long.

Left: A view of the A68a iceberg from a Royal Air Force reconnaissance plane near South Georgia, 18 November 2020

A marine camera network across the UKOTs and aspects of ODA-eligible UKOTs included in new Blue Planet Fund but with constraints

Scientists from the UK Government's Centre for Environment, Fisheries and Aquaculture Science (Cefas), the University of Western Australia and partners in the UKOTs are working with Blue Abacus, to supply and analyse the data collected from Baited Remote Underwater Video Systems (BRUVS), which will be deployed at various sites across several UK Overseas Territories. They will form part of a wider network of cameras across the world capable of providing information on a variety of marine habitats and species.

Timothy Austin, Deputy Director, Research and Assessment, Cayman Islands Department of Environment said: "The Cayman Islands Department of Environment is very excited at the opportunity to participate in the Global Ocean Wildlife Analysis Network that will bring the BRUV network into the Caribbean region for the first time.

"Nearshore benthic BRUVs have been an important research tool for informing marine species and protected area management in the Cayman Islands. The opportunity to take this technology further offshore will greatly enhance the Cayman Islands' ability to implement meaningful and effective conservation regimes for this data limited, poorly understood, but crucially important ecosystem."

Silky shark at Ascension Island baited camera. Photo courtesy of Blue Abacus

Diane Baum, Director of Conservation and Fisheries, Ascension Island Government said: "Ascension is committed to safeguarding its vast 445,000 km^2 Marine Protected Area, but we recognise how challenging this will be. The support of the Blue Belt Programme and the opportunity to join Global Ocean Wildlife Analysis Network will help us to meet that challenge.

"Our previous use of BRUVs has given us an insight into the amazing diversity of our open ocean ecosystems and enabled us to identify hotspots of biodiversity that need special protection. Being part of this initiative will provide Ascension with the information we need to take good local management decisions.

"It will also strengthen the network of UK Overseas Territories that is driving improvements in marine conservation at a global scale. Ascension aspires to be the best MPA in the world by basing its management on sound evidence, adopting new technologies and seeking inspirational international partners; this project achieves all three."

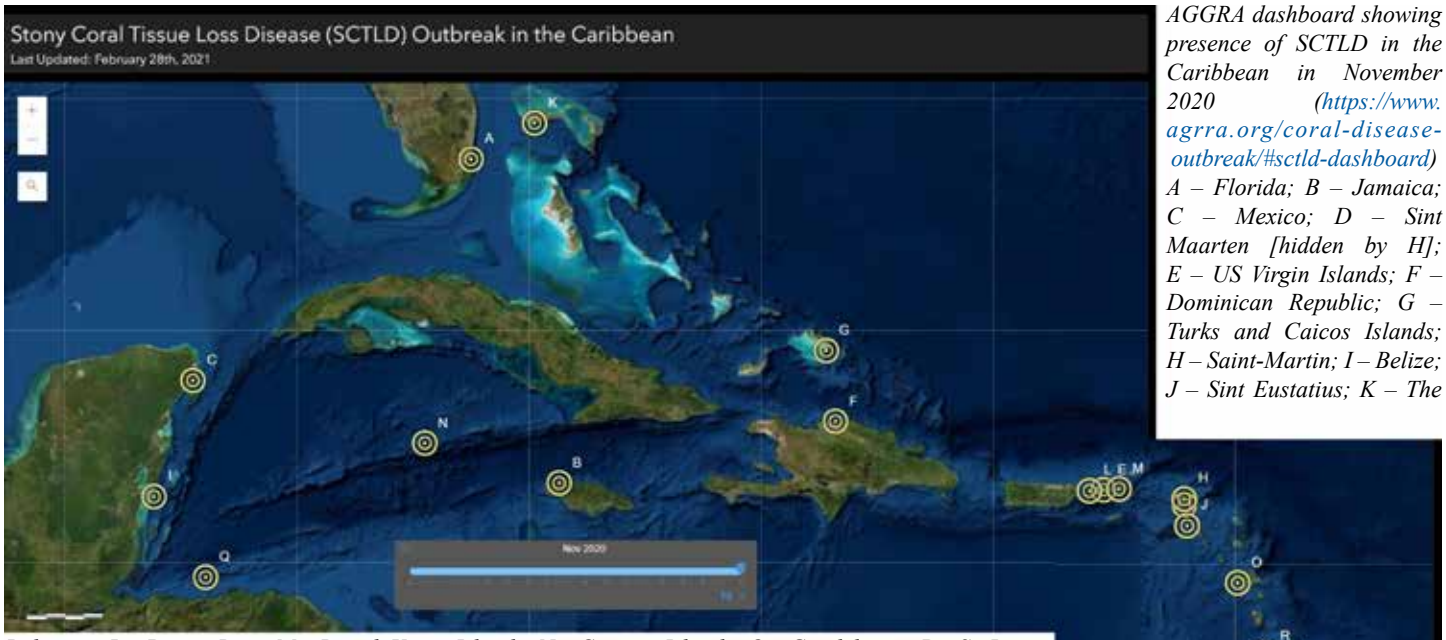
The story received a lot of press throughout the world for the full press release see: https://www.gov.uk/government/news/extensive-underwater-camera-network-to-monitor-and-protect-ocean-wildlife-and-blue-economies-launched-across-ten-uk-overseas-territories

French Angelfish, an important part of the reef ecosystem. Copyright TheOceanAgency XL Catlin Seaview Survey IYOR2018

In May, the UK Government held an information session for those interested in the Blue Planet Fund. Named after the stunning documentary from the BBC Natural History Unit fronted by David Attenborough, the £500 million fund aims to "support developing countries to protect the marine environment and reduce poverty". It is financed by the UK Official Development Assistance budget and so it is understood that those UKOTs in receipt of Official Development Assistance will have access to this funding through FCDO offices. It will be managed by the Department for Environment, Food & Rural Affairs (Defra) and the Foreign, Commonwealth and Development Office (FCDO) and launched later in 2021. At present there are no details on whether there will be open tendering process. However, it is understood from the session that successful applications will need to meet poverty-reduction targets, as well as biodversity ones. It therefore seems unlikely that the fund will be able to help conservation of some of UK's most globally important islands, including the World Heritage Sites of Henderson Island (Pitcairn Group) and Gough and Inaccessible Islands (Tristan da Cunha Group). As these have no human populations, they cannot meet the poverty-reduction objectives. UKOTs have expressed disappointment also that support for terrestial conservation, on which most endemic species depend, is also apparently excluded.

Coral reef in the Chagos Archipelago. Copyright TheOceanAgency XL Catlin Seaview Survey IYOR2018

Stony Coral Tissue Loss Disease – update May 2021



AGGRA dashboard showing presence of SCTLD in the Caribbean in November 2020 (https://www.agrra.org/coral-disease-outbreak/#sctld-dashboard) A – Florida; B – Jamaica; C – Mexico; D – Sint Maarten [hidden by H]; E – US Virgin Islands; F – Dominican Republic; G – Turks and Caicos Islands; H – Saint-Martin; I – Belize; J – Sint Eustatius; K – The Bahamas; L – Puerto Rico; M – British Virgin Islands; N – Cayman Islands; O – Guadeloupe; P – St. Lucia; Q – Honduras; R – Martinique.

In *Forum News 53,* we presented a summary of the Stony Coral Tissue Loss Disease in the Caribbean, highlighting the research and actions being undertaken by scientific organisations in Florida, where the disease was first discovered in 2014. The disease was first discovered in TCI in January 2019, and since then has spread rapidly, as the image above shows. The UKOTs affected to date are Turks and Caicos Islands, British Virgin Islands and the Cayman Islands. There is currently no information for Montserrat and Anguilla.

This is clearly a regional problem, and requires collaboration amongst all involved. This collaboration is growing and being effective. For example, in the British Virgin Islands, the Department of Conservation and Fisheries and the NGO Association of Reef Keepers are working with colleagues from the US Virgin Islands and MPAConnect (a partnership between the Gulf and Caribbean Fisheries Institute and NOAA's Coral Reef Conservation Program) and the Atlantic and Gulf Rapid Reef Assessment Program (AGRRA). Support given has included comprehensive training. Additionally, the BVI Governor's Office provided a grant of $75,000 for SCTLD monitoring, much of this funding going to dive boat operators for SCTLD monitoring.

In TCI, the Turks & Caicos Reef Fund (TCRF), with other stakeholders and partners, has been monitoring and treating SCTLD with amoxicillin in Base2B paste (with permits from the Department of Environment and Coastal Resources, DECR) as shown below.

The TCI DECR has recently supplied TCRF with a further research permit to enable them to continue their work.

In the Cayman Islands, the Department of Environment, working with its network of local volunters and NGOs, has tried to control the spread of the disease by providing training workshops and setting up "firebreaks". The latter initially

SCTLD (red line) has spread rapidly along the north coast of Grand Cayman. The disease was first found at the Penny's Arch dive site near Rum Point last summer. DoE closed down dive sites along the North Wall for several months and created a 'firebreak' at the Ghost Mountain site, but in February 2021 the disease spread beyond that point. The Department of Environment (DoE) has appealed to divers and snorkellers to ensure they disinfect their gear in a bid to help stop the spread of the disease, as it is suspected that one of the modes of transmission is particles being spread by divers, as well as by discarded boat bilge water. DoE and a group of trained volunteers have been administering an antibiotic to infected corals, in a bid to stop the spread of the disease.

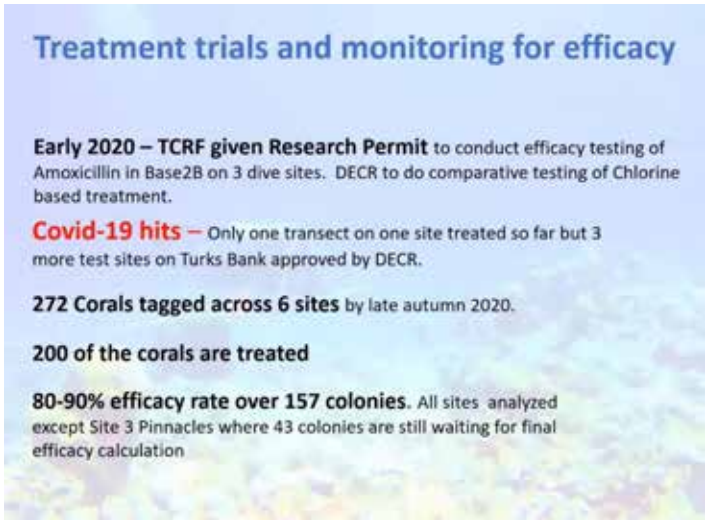
Timeline showing the progression of SCTLD in TCI. The warmer water causing the bleaching event in September 2019 temporarily slowed the progression of the disease, but as water temperatures dropped the SCTLD started to spread again. Image courtesy of TC Reef Fund.

slowed the spread of the disease, but the disease has now infected corals beyond the firebreaks.

The *Forum News 53* article included also brief discussion on the two treatments being used and evaluated at that time, namely chlorine in an epoxy base and antibiotic (amoxicillin) in a special base (Base2B). Our *WCWG eBulletin 28* presented a more detailed review of the various treatments. The UK Government provided funding to TCI Government to conduct trials on affected corals in TCI with the chlorine epoxy base. Covid restrictions prevented full implementation of this trial, but what results were obtained did not disagree with the findings of researchers based in Florida, as referenced in *Forum News 53*, that this was not very effective.

The amoxicillin treatment was demonstrated by many examples to be effective, *e.g.* Aeby GS, *et al* (2019) [https://www.frontiersin.org/articles/10.3389/fmars.2019.00678/full].

The use of antibiotics in the marine environment is not ideal, and generated considerable criticism from some quarters. However the rapid spread of this fatal disease required a rapid response with the treatment which had been demonstrated to be effective and resulting in no detectable adverse side effects to the environment, namely amoxicillin in Base2B, as demonstrated by these results from the work in the USA and byTCRF.



Summary of the efficacy of the amoxicillin trial conducted by the Turks and Caicos Reef Fund.

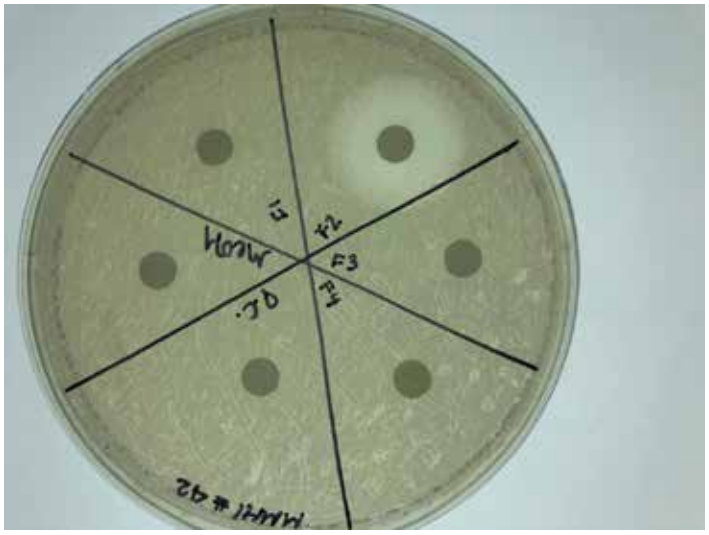
However, this treatment cannot be a long-term solution. It is very time-consuming, and requires much manpower. For example, the NGO TCRF, with no external funding, has been able to conduct their SCTLD work only with support from many volunteers and local dive shops, namely over 750 hours of in-water volunteer time and over 750 tanks filled by dive-shops (a donation worth $10 per tank retail).

Another potential solution is the use of probiotics. These can be considered the "good" bacteria which can boost the health of the corals, and additionally actively combat the SCTLD pathogen.

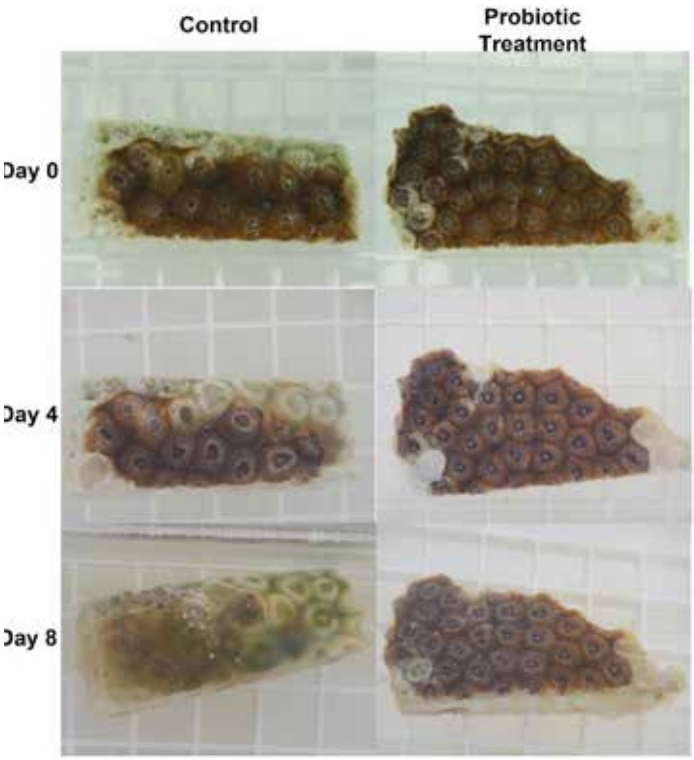
Research on this is being carried out at the Smithsonian Marine Station (SMS) by Blake Ushijima and colleagues– see

https://naturalhistory.si.edu/research/smithsonian-marine-station/news/probiotics-show-promise-coral-disease.

Dr Ushijima, whose previous research involved developing probiotic treatments for the shellfish industry, is working with Smithsonian marine chemist Dr Sarath Gunasekera to identify and test a library of more than 600 coral-derived bacteria on cultures of harmful bacteria collected from diseased corals. After identifying a handful of promising candidates, further experiments revealed that one "probiotic" strain in particular was able to kill a broad range of damaging bacteria.



The white ring at upper right indicates that a probiotic, discovered at SMS, is able to halt or slow the advance of the pathogen affecting the Florida Reef Tract. Photo: Dr Blake Ushijima



Compared with no treatment, samples of M. cavernosa *treated with an experimental probiotic developed at SMS showed much greater resistance against disease. Photo: Blake Ushijima*

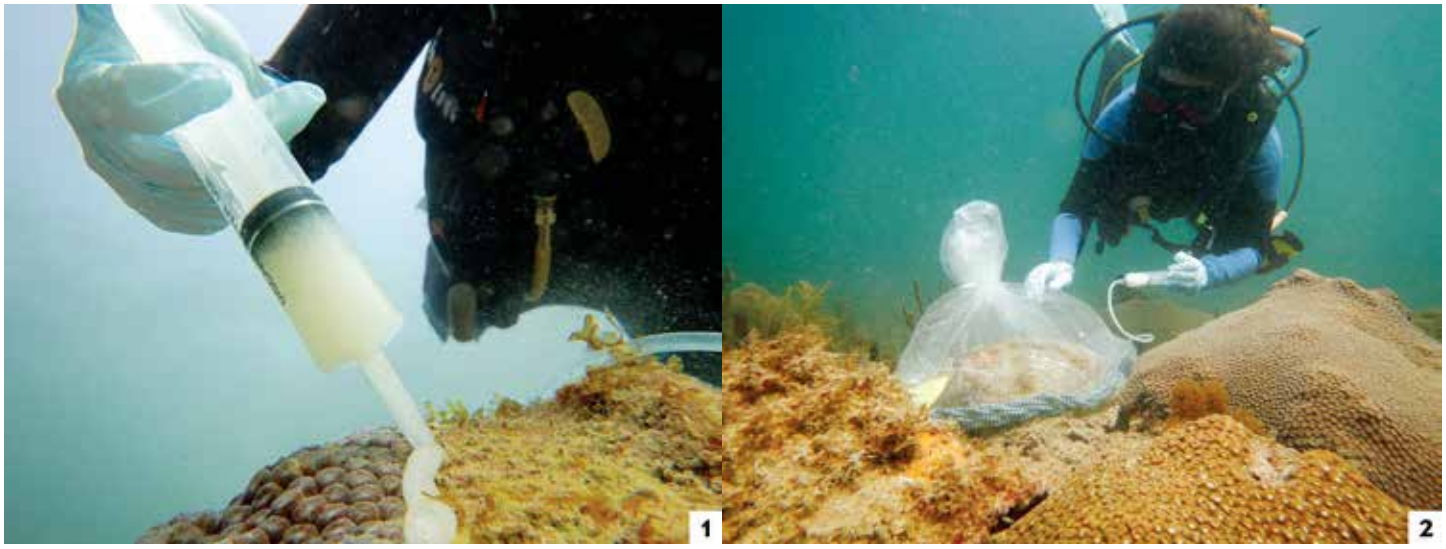
Testing the potential probiotic directly on samples of diseased *M. cavernosa* in the laboratory, Dr Ushijima observed that adding the bacterium to diseased corals in aquaria was able to slow or completely halt the advance of disease.

When diseased corals are put in close proximity to healthy corals treated with the probiotic, the beneficial effects seem to "jump" to the diseased fragment, slowing or stopping disease progression there as well. The probiotic-treated healthy fragments also appear to be more disease-resistant, which could greatly benefit broader attempts to "re-plant" corals in areas where the disease has already ravaged reefs.

The probiotic turned out to produce the antibiotic korormicin, which affects only other marine bacteria and is not a threat to humans or animals.

TCRF have been given permission to trial some probiotic treatments.

Whilst a probiotic treatment could eventually be used in the open reef tract, an immediate goal is to protect healthy corals that are



Probiotic experimental treatment on the reef: (1) researcher Kelly Pitts applies a paste laden with a single probiotic on to corals off the Florida coast in the hope of helping the animals fight stony coral tissue-loss disease ; (2) on a different dive, she pumps a liquid form on to corals nearby Photos: Hunter Noren, NSU, GIS and Spatial Ecology Laboratory.

being harvested and housed in land-based aquaria; a distributed coral "seed-bank" that can eventually be drawn upon to recolonise the reefs once the disease has dissipated or been eliminated. This is also an expensive and long-term prospect.

At present, SCTLD has not spread beyond the Caribbean. Concern has been expressed about the damage that could be caused to coral reefs worldwide if it got into the Indo-Pacific Region. It is hoped that this is very unlikely, but the Caribbean Sea and the Pacific are connected, for example via the Panama Canal. Furthermore, frequent shipping links all the seas and oceans, and is known to transport invasive species and diseases. Also, once the Covid-19 travel restrictions are lifted, divers will be visiting sites in the Pacific, Indian Ocean and the Caribbean, so biosecurity and decontamination of dive gear are essential. The advice from the BVI Department of Conservation and Fisheries that divers should hire dive-gear locally, to avoid cross-contamination, is very relevant to wider biosecurity concerns about safeguarding the health of all coral reefs, which are already under pressure.

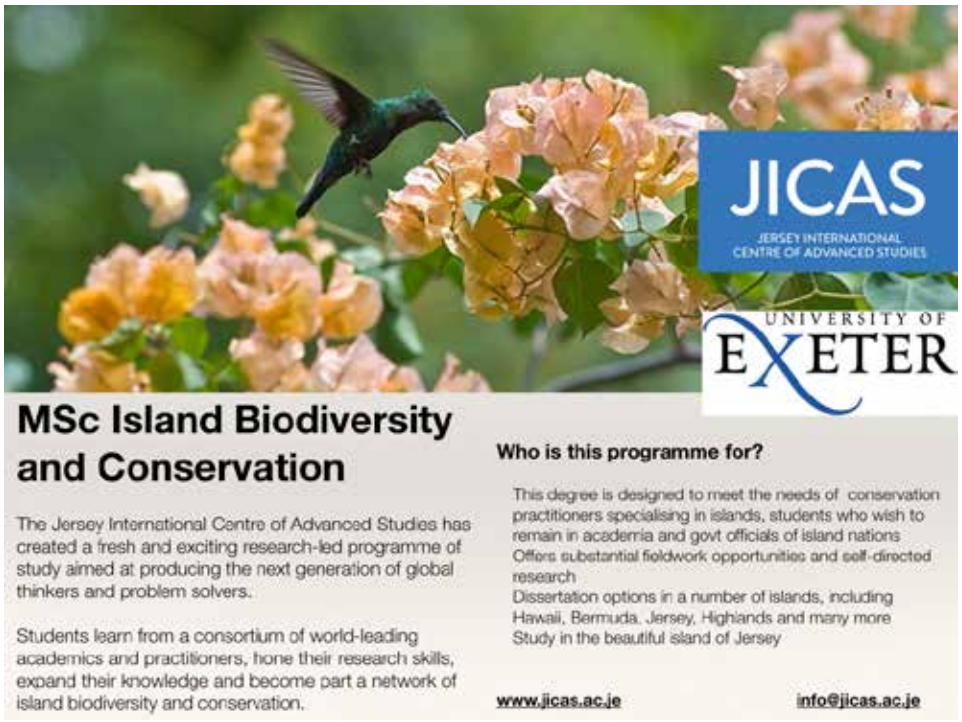
The next generation of conservation practitioners

The conference was a platform to highlight several research institutes operating from some of the UKOTs and CDs and which aim to undertake world-class teaching in stunning settings.

Founded in 2015, the **University of Gibraltar** (https://www.unigib.edu.gi) links the Mediterranean, Atlantic, Africa and Europe, the Straits of Gibraltar, which provide an ideal natural laboratory in which to undertake research in disciplines such as marine science, ecology, palaeoecology and soil science. Within the marine realm, its School of Marine Science currently provides a Master's degree in Marine Science and Climate Change, with several others in preparation.

The **Jersey International Centre for Advance Studies** (www.jicas.ac.je) welcomed its first cohort of students in 2019. JICAS aims to create a suite of niche postgraduate degree programmes aimed not only at importing students and staff to the island, but also exporting knowledge and expertise around the world. Accredited by the University of Exeter it has developed a Master's degree in Island Biodiversity and Conservation and hopes to launch a new MSc in Islands and Climate change (in partnership with the Global Systems Institute at the University of Exeter) for September 2021. A number of bursaries are becoming available on their website.

The St Helena Research Institute (https://sthelenaresearch.edu.sh) was launched in 2019 to create and promote opportunities for research and the advancement of education and learning on St Helena connecting researchers and people on St Helena, across the South Atlantic and beyond. SHRI supports research across all disciplines with a particular interest in research supporting sustainable island development. Founding areas of research focus include: terrestrial ecology, climate change, society, health and well-being, education and ICT.



JICAS is offering a number of bursaries see: https://www.jicas.ac.je/bursaries. They include 2 x £6750 bursaries for a candidate from a UK Overseas Territories for the MSc Island Biodiversity and Conservation. email info@jicas.ac.je

Fourth UK Overseas Territories and Crown Dependencies Environment Ministers' Council Meeting, 28-29 April 2021

UKOTCF was pleased to be asked again by the Chair of the Council of UK Overseas Territories and Crown Dependencies Environment Ministers (and their equivalents in non-ministerial systems) to provide the secretariat for their meeting and, on this occasion, to host it on UKOTCF's Zoom platform. The Council timed its meeting deliberately to follow a few weeks after UKOTCF's conference *Staying Connected for Conservation in a Changed World*, so that the conclusions and recommendations of scientists and conservation-workers could be considered in their discussions.

We show below the image of those lead participants (or their representatives) present when the "group photo" was taken. On the final page of this article, we show an image including some of the supporting personnel.

In the main part of this article, we are pleased to reproduce the Council's Statement issued after the meeting.

Lead delegates (or their representatives), from left to right, then top to bottom:

- *Secretariat: Dr Mike Pienkowski, Chairman, UK Overseas Territories Conservation Forum*
- *Gibraltar: Hon. Prof. John Cortés, Minister for Education, Heritage, Environment, Energy and Climate Change*
- *Anguilla: Ms Chanelle Petty Barrett, Permanent Secretary (Economic Development), representing Hon Kyle Hodge, Minister of Economic Development, Commerce, Information Technology & Natural Resources**
- *Jersey: Deputy John Young, Minister for the Environment*
- *Isle of Man: Hon Geoffrey Boot MHK, Minister for Environment Food and Agriculture*
- *Turks & Caicos Islands: Ms Tracy Knight, Representative and Head of London Office, on behalf of Hon. Josephine O. Connolly, Minister of Tourism, Environment, Heritage, Maritime, Gaming and Disaster Management*
- *Falkland Islands: Hon Teslyn Barkman MLA, Deputy Portfolio Holder for the Environment, on behalf of Hon Leona Roberts MLA, Portfolio Holder for the Environment*
- *Bermuda: Hon. Walter H Roban, JP, MP, Deputy Premier and Minister of Home Affairs*
- *Montserrat: Ms Janice Panton, UK Representative, on behalf of Hon. Cranston Buffonge MLA, Minister of Agriculture, Lands, Housing & Environment*
- *Alderney: States Member Annie Burgess, Chair of Economic Development Committee*
- *Tristan da Cunha: Mr Chris Carnegy, UK representative, on behalf of Councillor James Glass, Chief Islander and Director of Fisheries*
- *St Helena: The team from Environment, Natural Resources and Planning Portfolio (ENRPP), supporting Councillor Cruyff G. Buckley, Chair, Environment & Natural Resources Committee*
- *Sark: Ms Shakira Christodoulou, on behalf of Conseiller Helen Plummer (Chairman, Agriculture and Environment Committee of the Chief Pleas of Sark)*
- *(British) Virgin Islands: Dr Marcia Potter, Permanent Secretary, Ministry of Natural Resources, Labour and Immigration, on behalf of Hon. Vincent O. Wheatley, Minister for Natural Resources, Labour and Immigration**
- *Isle of Man: Hon. Ray Harmer MHK, Minister for Policy and Reform*
- *Guernsey: Deputy Lindsay de Sausmarez, President of the Committee for the Environment & Infrastructure*

**Portfolio-holders who had to be away from the meeting when the group image was taken*

(Cayman Islands: Apologies and best wishes for the meeting were received from Hon Wayne Panton, Premier and Minister of Sustainability and Climate Change, Cayman, where ministerial portfolios were being settled only the same week.)

Fourth UK Overseas Territories and Crown Dependencies Environment Ministers' Council Meeting, 28-29 April 2021 (by Zoom): Statement

Summary

In this Statement, the Council recognises the context of its meeting, stressing the value of, and responsibilities to, the natural environment. It expresses appreciation of the work and outputs of the preceding technical conference *"Staying Connected for Conservation in a Changed World"*, complementing those of the Council's own earlier meetings, and underlines the importance of:

- UN Decade of Restoration, especially in regard to nature-based solutions as cost-effective ways to address many current issues, and to invasive species and biosecurity
- Fighting Stony Coral Tissue Loss Disease
- UK's continuing resourcing of the "Blue Belt" and extending to territories in other situations
- Legislation and best practice for environmental impact assessments and policy
- Fulfilling international conservation commitments and assessing progress
- The support services by territory NGOs and their umbrella body
- Territories' Involvement in international fora and agreements
- Building resilience to climate-change (and Covid-19) impacts, especially through carbon-capture and biodiversity, noting the value of Natural Capital Accounting (NCA)
- The potential of novel types of funding for conservation, including green/blue economy and sustainable financing, alternatives to tourism-based income, and carbon-capture funding
- The vital nature of environmental education and championing.

The Council addresses also representation at CoPs in this important year, as well as the Blue Islands Charter and the *Leaders' Pledge for Nature*. In respect of UK Government's funding of conservation in the Overseas Territories, the Council reiterates the need for this by territory conservation bodies and their umbrella NGO, and underlines some of its earlier calls and raises further ways in which addressing of priorities could make this more cost-effective, including in the context of the loss by the territories of significant EU funding.

Main Text

1. We, the portfolio holders for the environment in our respective territories or dependencies, held our fourth Environment Ministers' Council meeting by Zoom on Wednesday 28th and Thursday 29th April 2021. We continue to fulfil the role recognised by the November 2017 Joint Ministerial Council, which emphasised the importance of meetings of environment ministers in work on environmental management and climate change issues. Since our first meeting, in Gibraltar in 2015, we have faced major challenges. Volcanic eruptions in the Caribbean, followed by the unprecedented hurricanes of 2017, seriously damaged infrastructure and local economies. COVID-19 has had a global impact, but has had a particular impact on those economies, including many represented here, with a high dependence on tourism. The United Kingdom's withdrawal from the EU has led to a reappraisal of future funding arrangements for environmental work. We welcomed the opportunity afforded by this Council to address our challenges through joint and collaborative working, and to develop common priorities and approaches. Unfortunately, circumstances prevented the Rt Hon Lord Goldsmith of Richmond Park, Minister of State for the Pacific and the Environment at the Foreign, Commonwealth & Development Office and the Department for Environment, Food & Rural Affairs, from fulfilling his wish to participate.

2. We express our sympathy and support for St Vincent and the Grenadines in their current tragic emergency, so similar in many ways to that suffered by one of our member territories, Montserrat, some 20 years ago. We feel deeply for our friends and colleagues there.

3. We value the support of our UK Overseas Territories Association (UKOTA) in addressing many of our links with UK Government and of UKOTA and of the UK Overseas Territories Conservation Forum (UKOTCF) in pursuing and facilitating many environmental aspects important to our territories and their natural and human welfare.

4. The biodiversity of the territories and dependencies we represent is considerable. We have 3,300 endemic species, compared with around 90 in the UK. About 75% of these are globally threatened. Our ecosystems contain some of the rarest, and most threatened habitat types: we have, for example, nearly 5000 km^2 of coral reefs, which makes the UK the twelfth largest reef nation in the world. Our environmental capital has underpinned sustainable livelihoods in our populations for many generations, and can help continued growth in our economies and our living standards, as well as public health. But it is increasingly under threat, and needs both safeguarding and management. We recognise the hard spending choices facing UK and Territory politicians post-pandemic, but note the conclusions of the HM Treasury-commissioned report by Professor Sir Partha Dasgupta, and the Prime Minister's comment on it: "This year is critical in determining whether we can stop and reverse the concerning trend of fast-declining biodiversity."

5. We confirm our commitment to conserve our environmental capital, and, recognising its global importance, have chosen to be included in UK's ratification of international environmental agreements. We share with the UK a partnership approach to integrating environmental considerations in government decision-making, marked in the case of most Overseas Territories by individual Environment Charters as envisaged in the 1999 White Paper *Partnership for Progress and Prosperity*, on which the 2012 White Paper T*he Overseas Territories: Security, Success and Sustainability* is explicitly built. The approach is shared by other territories and dependencies through their commitment to the international agreements in which they are included. The Territories are important to the delivery of UK's global environmental promises. For example, Tristan's declaration of a marine protected zone tipped UK over its target of 4 million km^2 of protected ocean. The Territories are a positive asset to be celebrated, and not a cash drain.

6. We recognise that Overseas Territories and Crown Dependencies have materially different relationships with the UK and we further recognise that there are differences between Overseas Territories. These differences are particularly reflected in approaches to funding, which we recognised in our consideration of future aspirations, expectations and obligations. But for all of us, particularly in the light of the major challenges noted above, funding remains the key issue. External funding for initiatives to tackle the priorities we identified in previous meetings, such as unsustainable development, invasive species and the impacts of climate change, remains a challenge. For some of us the EU was a source of considerable funds for project work, technical advice and infrastructure development. While we welcomed Lord

Ahmad's statement, following our 2017 Alderney meeting, that there would be an increase in funding for terrestrial and marine projects in the territories through the Darwin Plus programme, terrestrial conservation, in particular, has seen little benefit.

7. With the additional input of the recent technical conference *"Staying Connected for Conservation in a Changed World,"* whose conclusions and recommendations we welcome, we have considered progress on priority areas we had previously identified, and discussed areas of particular concern. These are set out below.

7 i. UN Decade of Restoration: invasive species and biosecurity

We remain concerned about the environmental, social and economic damage caused by invasive species. We note that the costs of their removal greatly exceed the costs of prevention. Effective action requires wide consultation, stakeholder engagement, especially of active conservation NGOs, and public awareness campaigns. We recognise that long-term biosecurity, together with the development of early warning and rapidly adaptive response systems, needs to be resourced at the local and regional levels to prevent introduction and spread as new threats emerge.

We agreed the great potential for nature-based solutions as extremely cost-effective ways to address many current issues, and exchanged our varied and respective experiences to amplify these.

7 ii. Stony coral tissue loss disease

We note with grave concern that, since our last meeting, the rapid spread of stony coral tissue loss disease (SCTLD) has begun to destroy the structural coral of Caribbean reefs. This is damaging to the biodiversity and economy of our territories, and, ultimately, poses a global threat. Immediate engagement is essential to stem the spread, and to establish land-based facilities for the preservation of genetic samples and the eventual repopulation of reefs when environmental conditions permit. An urgent international response is necessary, drawing on the experience of neighbouring countries, particularly the USA. We appeal to the UK Government and other potential funders to support those governments and NGOs currently addressing the issue, and to play a leading role in facilitating local and regional collaboration.

7 iii. Blue Belt

At our 2018 meeting in the Isle of Man, we welcomed Blue Belt funding for extensive marine protection around oceanic territories, and recognised also the success of co-operative fishery management alongside marine protected areas. We join the participants in the recent technical conference *"Staying Connected for Conservation in a Changed World"* in calling on the UK Government to commit funding to support the continuation and expansion of the Blue Belt programme for the remaining years of the current parliament, in order to (a) provide the necessary financial and technical support to bring about effective and locally-led protection and sustainable management of their large-scale MPAs; and (b) expand the Blue Belt Programme to other territories, including those not in mid-ocean, as required. Safeguarding vital marine biodiversity and enabling ecosystem recovery will sustain the blue economies of tourism and fishing, enable sequestration of 'blue carbon', and improve territories' climate resilience against increasingly frequent and stronger extreme weather events.

7 iv. Legislation, environmental impact assessments, and policy

We continue to welcome sharing of best practice in ensuring environmental considerations form an integral part of development planning. We support government facilitation of early engagement of environmental professionals with developers, and timely and open environmental impact assessments (EIAs) for all major developmental proposals, including Government-funded projects. EIAs should meet best-practice standards and be transparent and open to independent experts and the public in a comprehensive, accessible and non-technical manner, with adequate time for consideration and comment. We welcome the recommendation from the recent technical conference that our governments should ensure environmentally robust planning legislation to help develop resilience to extreme weather events. We support the establishment of effective, properly financed enforcement mechanisms, with provision for the role of NGOs in the assessment process.

7 v. Fulfilling international commitments

We recall our governments' commitments to biodiversity conservation and sustainable development by choosing to be included in various international environmental agreements (see para 5). We note that, in 2021, the UK Government and UKOTs will celebrate 20 years of the existence of the Environment Charters and their commitments, not created under the Charters but brought together from under other international measures. We again note the invaluable role played by the UK Overseas Territories Conservation Forum's (UKOTCF's) *"Review of performance by 2016 of UK Overseas Territories and Crown Dependencies in implementing the 2001 Environment Charters or their equivalents and moving towards the Aichi Targets and Sustainable Development Targets"* which we endorsed at our 2017 meeting. We regret that the UK Government has not provided the modest financial support we sought to enable the updating of this. We are grateful that the UKOTCF is nevertheless undertaking an update using unpaid skilled volunteers, and call on all to assist with this.

7 vi. Target setting and support services

We recognise, as we have done at previous meetings, that conservation workers in our territories benefit from cooperation with NGO bodies experienced in project design and operation, and which can draw on a wide range of expertise. We urge the UK Government to consider supporting such bodies so that they can deploy their skilled volunteer and paid personnel in helping the territories and raising and empowering local capacity. We note that the UK Government has supported working conferences for conservation practitioners, organised by UKOTCF, as an opportunity to share experience and skills; this has led to maximising cost-effectiveness of project funds. We value these working conferences highly, and encourage the UK Government to contribute substantially to UKOTCF's future physical or online conferences for practical territory conservationists, in accordance with its commitment to 'promote better cooperation and the sharing of experience between and among the Overseas Territories and with other states and communities which face similar environmental problems.'

We welcome the UK Government's often-stated recognition that its responsibility for a considerable proportion of the world's biodiversity depends to a great extent on taxa in territories and dependencies which we represent. We call on the UK Government to recognise, in particular, the importance of our endemic taxa, and to provide support for practical steps in their conservation. The facilitation and assistance roles fulfilled by NGOs are important in this, particularly in helping

us to identify the key issues, to establish baselines, and to set ambitious, realistic and achievable targets.

7 vii. Involvement in international fora and the extension of multilateral environmental agreements

We greatly regret UK Government's apparent (unilateral) decision to reverse our earlier agreement, which welcomed the continued inclusion of representatives of our territories and dependencies in UK delegations to conferences of parties to international environmental conventions, at a significant level, and call on UK Government to reverse this retrograde step in sustainability. We note with approval the effectiveness of the previous consultation arrangements both between us and the UK Government, and between ourselves, to agree how we should best be represented.

We recognise that the UK Government makes, and is accountable for, international commitments on behalf of its territories and dependencies. Our position remains that inclusion in the UK's ratification should be a matter for the territory concerned, and that, in this respect, the wishes of the territory concerned should be paramount, and we regret that some requests by a territory to join certain ageements remain unimplemented several years after the requests.

We support the recommendation from the recent technical conference that future target-setting in the context of international biodiversity and climate-change should recognise the needs of territories and dependencies. We would welcome support, including through NGOs and UK agencies, for those territories which have not yet been able to seek inclusion in UK's ratification of international conservation conventions, or which have further needs to be met relating to the conventions in which they are included.

7 viii. Natural Capital Accounting (NCA); building resilience to climate change (and Covid-19) impacts; carbon-capture and biodiversity

We recognise the need to develop and support nature-based solutions to help increase resilience, and the use of both economic and environmental evidence, notably Natural Capital Accounting (NCA), of the benefits that the environment provides. NCA should inform decision-making, helping to conserve and restore natural environments and their ability to support sustainably territories' prosperity and well-being. Examples include the carbon-capture benefits of peatlands, kelp forests, mangrove and sea-grass meadows; the storm-defence roles of the latter two, sand-dunes, coral-reefs and other coastal flats; the many services of terrestrial (including the wrongly disparaged "bush") and wetland ecosystems; developing habitat restoration targets and exploring the potential for carbon-zero economies. Our efforts in this direction should be recognised by the UK Government as part of the overall UK response to such issues, and supported accordingly.

We further recognise the need to conduct rapid climate-change vulnerability assessments of threatened and endangered species and to ensure species action-plans include climate-change risks, with associated mitigating actions aimed at increasing climate-change resiliency.

7 ix. Novel funding; green/blue economy and sustainable financing; alternatives to tourism-based income; carbon-capture funding

We stress our support for transitions to low- and no-carbon economies and low emissions generally, and exchanged our respective experiences in these regards, welcoming the progress that individual territories have already made and encouraging further progress based on our shared experiences.

We continue to believe that the hypothecation of visitors' taxes for environmental work, including the development of refugia for threatened species, is a valuable tool in conservation, and regret the UK Government's apparent movement away from supporting this approach. We note with interest the recommendation from the recent technical conference that increased national expenditure on protected area management, and securing other benefits from ecosystem-services, could be funded by the creation of an environment levy, given that such services benefit the whole community.

We endorse the recommendations of previous meetings that we should continue to investigate the potential for jointly seeking support from international funding sources and commercially-based bodies to establish a dedicated Conservation Fund. We also confirm our support for exploring the potential for aid funds currently supporting Caribbean projects, e.g. CARICOM, to contribute to an environmental small grants programme. We agree with the recommendations of the recent technical conference that we should explore with offshore finance centres in our territories the possibilities for the creation and management of endowment funds, such as the Bahamas Protected Areas Fund, which can support sustainable financing. We further endorse the conference's recommendations that grants should be approved by independent boards, with majority representation from civil society bodies experienced and actively involved in conservation.

We also believe further recommendations from the technical conference in this area should be explored:

- commercial enterprises should contribute in some way each time a protected area or threatened species appears in their adverts in order to raise money for protected area conservation;
- the UK government could forgive territories' debts by debt-for-nature swaps while mandating local investment in protected areas, where UK loans have been issued, for example disaster relief loans after the 2017 hurricane season;
- while ensuring core funding is maintained, UK grants should provide funds for research and development, fulfilling international agreements, and support for third sector organisations engaged in work at local and regional levels;
- our governments and third-sector organisations should cooperate to develop cross-territory sustainable tourism guidelines, as well as a certification programme for tourism operators (for example, dive operators, tour guides, etc.), and take advantage of the IUCN publication *Guidelines on development in sensitive areas*. Such a certification programme would have more impact than single-territory certification schemes. Rebuilding sustainable tourism in the aftermath of COVID-19 will need the engagement of all levels of civil society, and NGOs should be supported so that they can play a full part in our collective response.

We recall Gibraltar's presentation at our 2017 meeting about the necessity of, and challenges in, accessing large climate funds and other major funding sources, and urge the UK Government to help us explore these where appropriate, as well as remove constraints which impede inward investment in some territories. In this context, we support the recommendation from the recent technical conference that NGOs and other bodies explore, for both climate-change and biodiversity-conservation purposes, blue- and green-carbon funding, bonds

based on natural capital and biodiversity, endowment funding models and other new approaches.

7 x. Environmental education and championing

We agree with the recent technical conference that we need national champions to gain international understanding of our biodiversity and the threats to it, and welcome the initiative by UKOTCF, in association with our territory personnel, in seeking champions amongst UK Parliamentarians and others in the public eye. This should be underpinned by local champions. To enable this to be successful our governments need to address the challenges of education and access to career opportunities, and should press for improved access to UK further educational opportunities, recognising the limited scope and high costs to students of tertiary education and work experience. We particularly call on the UK Government to ensure that its replacement for the EU Erasmus educational exchange scheme will be of equal benefit, and should explicitly include Overseas Territories and Crown Dependencies.

We recognise the importance of training for teachers and of the development of educational material (including on natural disasters and resiliency), as well as the value of specific education officers on environmental issues, and the expertise that NGOs can provide. We encourage integration of biodiversity conservation, nature-based solutions and climate-change adaptation topics into UK and territory National Curricula, and encourage engagement with media and social networks to engage the wider public. We emphasise the need to reach the whole of society: adults should understand the impact of their consumer choices and children should learn how to adapt to a changing world.

We recognise the urgent importance of compliance with our international commitments to regulate polluters and of supporting measures which will halt the biodiversity crisis and mitigate climate-change. We further recognise the value of working with NGOs and individuals to escalate a transition to a green economy, through: ensuring engagement and providing hands-on learning about restoration for our future leaders through running youth groups who enjoy the outside world; creating stepping stones for wildlife – where it can flourish; recognising and celebrating nature's gems; restoring habitats to safeguard important sites; working in partnership; and getting informed and encouraging local community input on public consultations on new developments that would impact on nature.

8. We agree to consult further after the meeting on our representation and presence at CoPs (CBD China 11-24 October; UNFCCC Glasgow 1-12 November), noting the importance of inclusion of our representative in the UK delegation, and noting that 94% of the globally important biodiversity for which UK is responsible depends on the Territories, as well as the considerable in-territory knowledge and expertise which will add value to the UK delegation.

9. We welcome the *Blue Islands Charter*, initiated by HM Government of Gibraltar in consultation with island nations, territories and other administrative levels, and signed by several of these at the Inter-Island Environmental Meeting in Alderney in 2019 and remotely by others. Those who have not yet signed agree to consider doing so.

10. We welcome the 2020 UN Summit on Diversity document *Leaders' Pledge for Nature – United to Reverse Biodiversity Loss by 2030 for Sustainable Development*, representing 84 countries from all regions, together with the European Union, committed to reversing biodiversity loss by 2030.

11. We recall the agreed partnership approach of UK and UKOT governments to integrating environmental aspects into all sectors via international conventions which led to the Environment Charters, a commitment to funding for terrestrial and marine projects in our territories through the Darwin Plus programme, and support through the Conflict Stability and Security Fund. We regret, therefore, that we continue to have concerns over barriers to effective deployment of UK Government environmental funding in our territories. In particular, we consider it important that those experienced in territory conservation work should have the main voice in determining where and how cross-territory funds available should be spent, so that this can be related to agreed priorities, and that the territories should not have to compete for the allocation of such funds through an assessment process external to them and largely removed from local knowledge.

We further regret the recent change, undertaken without consultation, segregating ODA-eligible Overseas Territories from the other Overseas Territories in the Darwin Plus scheme, and placing them with foreign countries in the Darwin Main scheme. This means that, for the first time in 20 years, there is no biodiversity grant scheme for these territories, as Darwin Main requires also poverty-alleviation targets. Whilst in no way opposing poverty-alleviation, we believe this disadvantaging of ODA-eligible Territories is inappropriate. Amongst other consequences, it will mean that the uninhabited islands in these territories, including some of the most important and with no other income, will be ineligible. We call on UK Government to restore ODA-eligible Territories to an equal basis with their fellow Territories with immediate effect. For similar reasons, we regret that the recently announced Blue Planet Fund will require poverty-alleviation targets, thereby excluding support to some of the most important natural ecosystems for which UK is internationally responsible.

12. We welcome the constructive approach by the recent technical conference to identify solutions to other aspects of the situation and highlight their following recommendations:

- support should be given to long-term projects involving knowledge transfer to local NGOs through cooperation with the wider scientific and environmental community. The UK Government and other potential funders should focus resources on provision by experienced NGOs and others of the technical guidance and project officers needed to capitalise on the considerable local enthusiasm for conservation and environmental initiatives. We welcome progress made in the recruitment and deployment of citizen-scientists and citizen-conservationists, organised largely by NGOs, to further public ownership of these initiatives while recognising that costs need to be invested to release this major workforce;
- long-term funding is needed also for projects, such as those involving environmental recovery, that cannot be completed within the usual short time-frame. Sustainability cannot be built in a three-year cycle for habitats that take 30 years or more to come to fruition;
- local knowledge is essential in project-development and grant decisions. UK Government agencies were not funded by earlier UK Government grant funds for Overseas Territory conservation, but they are now. The UK Government needs to reverse its recent tendency to divert the use of traditional sources of grant-funding from cost-effective and experienced local and supporting UK NGO bodies to support instead UK government agencies and institutions, some of which are not experienced with some territory situations, however experienced they may be generally, and pay more regard to experience and proven success in the Overseas Territories, especially NGOs. The UK Government should revert to the

more cost-effective approach of concentrating grant-funding on conservation bodies in the Overseas Territories and their umbrella body, rather than on research institutions and consultancies;

- UK government agencies working in the Overseas Territories should be more open to speaking with other stakeholders, especially NGOs, to avoid duplication of effort. They should recognise the capacity constraints on local NGOs, which in most cases depend on voluntary work, and ensure funding to enable their contributions are built into project budgets;
- a responsive funding programme is necessary for small projects. Modest funding for an NGO to manage it cost-effectively should be considered to alleviate capacity constraints in UK Government structures;
- UK Government funding applications need to be less bureaucratic and repetitive, and consideration of projects should not take many months more than the time for application preparation. The assessments should be by those with Overseas Territories project-running experience and not based on box-checking scores;
- linking organisations help our territories make the best use of science and other information for decision-making, where local government or NGO staff may lack the relevant technical expertise. Whilst the UK government has international responsibility for environmental issues in the Overseas Territories (House of Commons Environmental Audit Committee 2013), in practice that responsibility is devolved to the territories themselves. There is, therefore, little or no overall coordination, or mechanism for sharing expertise, which can lead to waste of resources in addressing problems to which solutions have been found elsewhere, and can fail to identify issues which others have seen as priorities. The further development of a loose, consultative structure of mutually reinforcing institutions, along the lines of the UKOTCF with its regional working groups, is a priority, which would be helped by support and recognition by UK government, as well as territory governments.

13. We recognise with thanks the key role that local conservation leaders play in maintaining community motivation throughout the planning and implementation of long-term conservation projects. Their importance cannot be overstated if we are to ensure that community support for conservation projects does not fade over generations, and that future conservation projects will be embraced as readily as those currently being undertaken.

14. We continue to regret that, whilst there is no legal impediment to funding from the UK National Lottery being used in support of the environment in the Overseas Territories, the policies and procedures of the Lottery funding bodies effectively prevent this. We ask, as we have done in previous meetings, the UK Government to undertake urgently a review of this situation, which would open up new horizons for cooperation, as well as removing what is becoming an irritant in our relationship.

15. At our previous meeting we expressed concerns at the impact of the UK's withdrawal from the European Union on the implementation of our environmental commitments. These included: the consequences of Gibraltar's enforced departure from the EU against the population's wishes and consequent loss of the EU's environmental safeguards; the loss of existing (and potentially much larger) environmental funding from EU sources to territories (which NGOs had fought long to secure); the reduction in co-operative linking with the overseas entities of other EU states; the loss of EU market access for key sustainable natural products; and the loss to some of the Crown Dependencies of landing ports for fishing, because these ports do not have the right designation, status or infrastructure. The issue of access to neighbouring ports of the Channel Islands is a matter of ongoing discussion with the French authorities. Experience over the intervening three years has in the majority of cases done little to reduce our concerns, and the extra bureaucracy and costs, loss of economic opportunities and environmental safeguards have become evident, with no compensatory benefits. The lack of clear progress on other issues continues to concern us. In particular, in respect of the UK Overseas Territories, the UK Government has indicated that funding to replace that from the EU will be forthcoming, but details of this remain unclear. We ask the UK Government to address this, and our other concerns, as a matter of priority.

We regret the failure by UK Government to achieve continuance of the Territories' previous tariff- and quota-free trade with the EU in its negotiations on removing such barriers for the UK itself. As a result, for example, 90% of the market of sustainably managed fisheries of the Falkland Islands has been affected, with consequent major negative impacts on the economy. After a delay due to technical trade factors, 90% of the income of Tristan da Cunha, again dependent on sustainably managed fisheries, could also be lost. We call on UK Government urgently to resume its responsibilities and address these issues within its current EU trade negotiations.

16. We agree to meet again, probably in spring 2022 by remote communications, and ask UKOTCF to continue in the role of Secretariat.

Appendix: List of Ministers and other lead representatives participating

Alderney: States Member Annie Burgess, Chair of Economic Development Committee

Anguilla: Hon. Kyle Hodge, Minister of Economic Development, Commerce, Information Technology & Natural Resources

Bermuda: Hon. Walter H Roban, JP, MP, Deputy Premier and Minister of Home Affairs

(British) Virgin Islands: Hon. Vincent O Wheatley, Minister for Natural Resources, Labour and Immigration

Falkland Islands: Hon. Teslyn Barkman MLA, Deputy Portfolio Holder for the Environment

Gibraltar: Hon. Prof. John Cortés, Minister for Education, Heritage, Environment, Energy and Climate Change

Guernsey: Deputy Lindsay de Sausmarez, President of the Committee for the Environment & Infrastructure

Isle of Man: Hon Geoffrey Boot MHK, Minister for Environment Food and Agriculture; and Hon. Ray Harmer MHK, Minister for Policy and Reform

Jersey: Deputy John Young, Minister for the Environment

Montserrat: Ms Janice Panton, UK Representative, on behalf of Hon. Cranston Buffonge MLA, Minister of Agriculture, Lands, Housing & Environment

St Helena: Darren Duncan, Head of Department, Agriculture & Natural Resources Division, on behalf of Councillor Cruyff G. Buckley, Chair, Environment & Natural Resources Committee

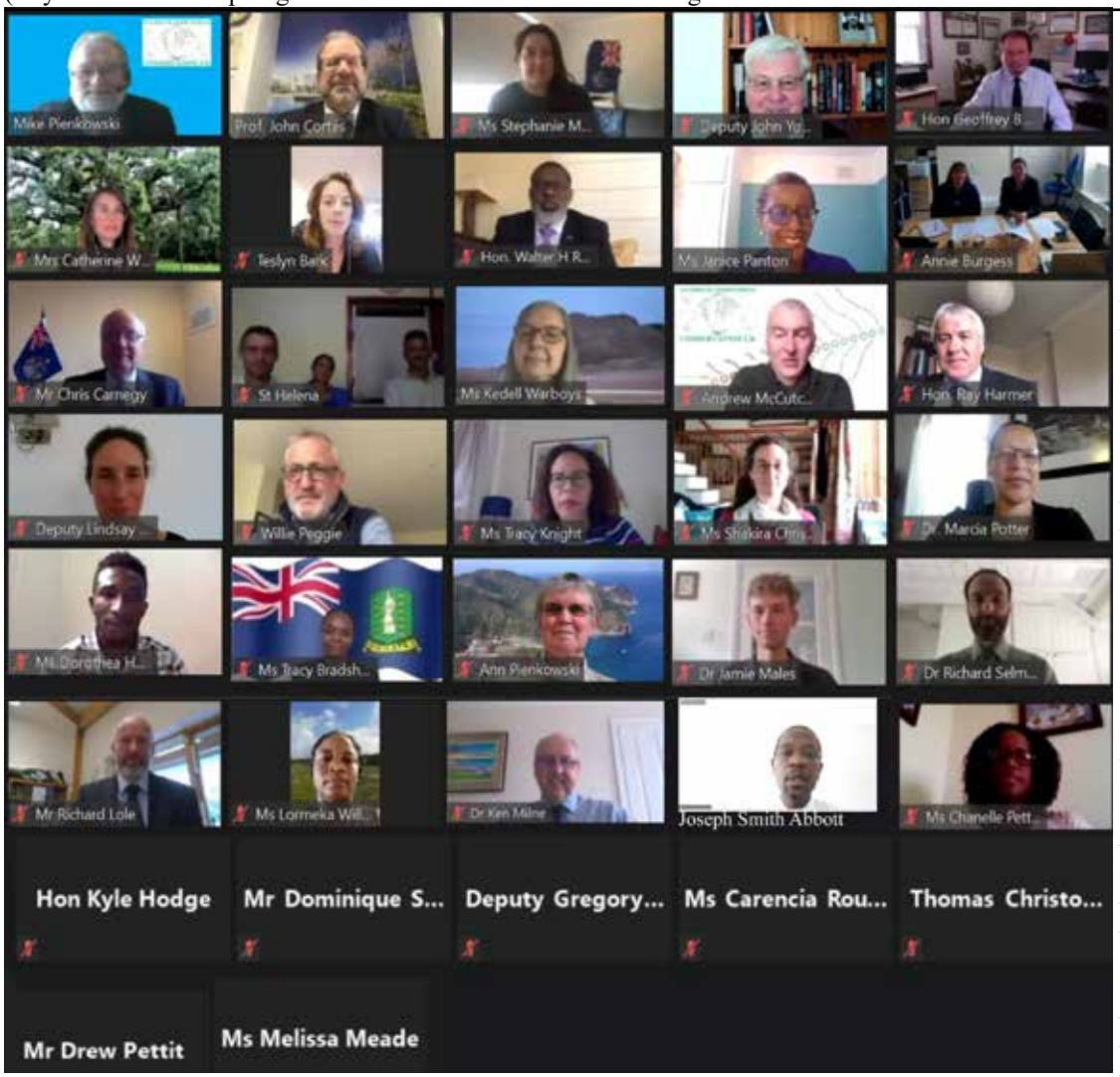
Ms Shakira Christodoulou, on behalf of Conseiller Helen Plummer, Chairman, Agriculture and Environment Committee of the Chief Pleas of Sark

Tristan da Cunha: Mr Chris Carnegy, UK representative, on behalf of Councillor James Glass, Chief Islander and Director of Fisheries

Turks & Caicos Islands: Ms Tracy Knight, Representative and Head of London Office, on behalf of Hon. Josephine O. Connolly,

Minister of Tourism, Environment, Heritage, Maritime, Gaming and Disaster Management

(Cayman Islands: Apologies and best wishes for the meeting were received from Hon Wayne Panton, Premier and Minister of Sustainability and Climate Change, Cayman, where ministerial portfolios were being settled only the same week.)



UK Overseas Territories and Crown Dependencies Environment Ministers' Council meeting, 28-29 April 2021: Zoom group photo of participants (from left to right, then top to bottom):

- *Secretariat: Dr Mike Pienkowski, Chairman, UK Overseas Territories Conservation Forum*
- *Gibraltar: Hon. Prof. John Cortés, Minister for Education, Heritage, Environment, Energy and Climate Change*
- *Tristan da Cunha: Ms Stephanie Martin, Environment Policy Officer*
- *Jersey: Deputy John Young, Minister for the Environment*
- *Isle of Man: Hon Geoffrey Boot MHK, Minister for Environment Food and Agriculture*
- *Secretariat: Mrs Catherine Wensink, Executive Director, UK Overseas Territories Conservation Forum*
- *Falkland Islands: Hon Teslyn Barkman MLA, Deputy Portfolio Holder for the Environment*
- *Bermuda: Hon. Walter H Roban, JP, MP, Deputy Premier and Minister of Home Affairs*
- *Montserrat: Ms Janice Panton, UK Representative*
- *Alderney: States Member Annie Burgess, Chair of Economic Development Committee (left) and Ms Catherine Veron, Policy Assistant*
- *Tristan da Cunha: Mr Chris Carnegy, UK representative*
- *St Helena: Some of the team from Environment, Natural Resources and Planning Portfolio (ENRPP) – (left to right): Rhys Hobbs, Marine and Fisheries Conservation Manager; Isabel Peters, Chief Environmental Officer; and Darren Duncan, Head of Department, Agriculture & Natural Resources Division*
- *St Helena: Ms Kedell Warboys, UK Representative*
- *Guernsey: Andrew McCrutcheon, Principal Environment Services Officer, Agriculture, Countryside & Land Management Services (ACLMS)*
- *Isle of Man: Hon. Ray Harmer MHK, Minister for Policy and Reform*
- *Guernsey: Deputy Lindsay de Sausmarez, President of the Committee for the Environment & Infrastructure*
- *Jersey: Mr William Peggie, Director for Natural Environment*
- *Turks & Caicos Islands: Ms Tracy Knight, Representative and Head of London Office*
- *Sark: Ms Shakira Christodoulou, on behalf of Conseiller Helen Plummer (Chairman, Agriculture and Environment Committee of the Chief Pleas of Sark)*
- *(British) Virgin Islands: Dr Marcia Potter, Permanent Secretary, Ministry of Natural Resources, Labour and Immigration*
- *Anguilla: UK Office*
- *(British) Virgin Islands: Ms Tracy Bradshaw, UK Representative & Director of London Office*
- *Secretariat: Mrs Ann Pienkowski, Honorary Environmental Education Coordinator, UK Overseas Territories Conservation Forum*
- *Secretariat: Dr Jamie Males, Voluntary Conservation Officer, UK Overseas Territories Conservation Forum*
- *Isle of Man: Dr Richard Selman, Ecosystem Policy Manager, Department of Environment, Food & Agriculture*
- *Isle of Man: Mr Richard Lole, Chief Executive for the Department of Environment, Food & Agriculture*
- *Turks & Caicos Islands: Ms Lormeka Williams, Director of Environment & Coastal Resources*
- *Isle of Man: Dr Ken Milne, Director of Environment, Department of Environment, Food & Agriculture*
- *(British) Virgin Islands: Mr Joseph Smith Abbott, Deputy Secretary, Ministry of Natural Resources & Labour*
- *Anguilla: Ms Chanelle Petty Barrett, Permanent Secretary (Economic Development)*
- *Anguilla: Hon Kyle Hodge, Minister of Economic Development, Commerce, Information Technology & Natural Resources*
- *Gibraltar: Mr Dominique Searle, UK Representative*
- *Jersey: Deputy Gregory Guida, Deputy Minister for the Environment*
- *Anguilla: Ms Carencia Rouse, Director of Natural Resources (Environment)*
- *Bermuda: Thomas Christopher Famous MP, Observer*
- *Bermuda: Mr Drew Pettit, Director of Environment and Natural Resources*
- *Anguilla: Ms Melissa Meade, Chief Natural Resources Officer*

Please note that (1) for those participants with their web-camera switched off, Zoom shows their registered name (or part of it); and (2) not all participants were present when the image was captured.

UKOTCF needs your help

UKOTCF's only focus is on helping achieve effective conservation, environmental education and sustainability in UK Overseas Territories and Crown Dependencies. This has a great advantage in that we always follow the priorities of the territories for conservation, rather than having to decide whether their priorities or those from other places, such as domestic Britain, need our attention.

It also has disadvantages, too. Organisations with wider involvement have income streams relating to those activities, potentially giving some buffering at times when funding for UKOT conservation is limited. As well as focussing on particular projects requested by territories, much of UKOTCF's work is coordinating across territories and pushing for their interests with UK Government. Indeed, the UK Government funds for UKOT conservation (Environment Fund for Overseas Territories, Overseas Territories Environment Programme, and the Darwin Initiative's earmarking some funding for UKOTs) all resulted in part from UKOTCF working with UK Government and Parliament. The same applies in relation to European Union institutions in the setting up of BEST, following years of lobbying by UKOTCF and its equivalent French and Netherlands equivalent umbrella bodies for their territories. All this coordinating work is not amenable to fund-raising, as most funders like to focus on local issues and particular projects.

We know our work is valued. For example, two comments we received from UKOTs recently were: "Thanks so very much for keeping us all informed about what's happening across the territories" and "Great meeting... it shows the value of UKOTCF and its WCWG to bring folk together to tackle issues."

This increased current difficulty in raising funds for non-profit organisations providing wide support for others was brought home to us early this year. We were shocked when *Arkive* closed down due to lack of funding. This made available still and moving images of wildlife provided by photographers, and was much used by many organisations, including IUCN's Red-List (which now lacks images). This loss of funding was despite the high profile of *Arkive* and its support by names such as Sir David Attenborough.

UKOTCF tries to keep its costs very low. Personnel work from home, absorbing office costs (thanks to understanding spouses!). Council members and advisers are unpaid. The Chairman works full-time for UKOTCF but is unpaid for this core work, and his wife donates almost as much. Currently, four others routinely donate large amounts of time to UKOTCF core roles, and many others donate time to projects. In addition, our small paid personnel donate extra unpaid time.

However, some things still need paying for. This was well recognised by UK Government officials in the early part of this millennium, when they recognised that UKOTCF provided support for UKOT conservation that UK Government might be expected to provide (and is done be some other states with overseas territories) but which it could not and still cannot, despite some increase by its agencies in work in the UKOTs.

However, at the time of the financial crisis, in 2009, UK Government's average annual funding support for UKOT conservation paid via UKOTCF fell by 76%, and never recovered Although it is said that this financial crisis is now over, this funding has not been restored – and, in fact fell further, so that the decline in UK Government support via UKOTCF for UKOT conservation has now declined by 100%: zero in current years.

Of course, UKOTCF has looked, and continues to look, for other sources of funding – but there are limited opportunities in respect of funding for conservation in UKOTs and CDs. We are grateful for a very generous annual donation from a Council member which helped hugely in four recent years before that had to end.

How you can help

Clearly, if you have links with funding institutions, an introduction would be welcome! Please contact Catherine Wensink (cwensink@ukotcf.org) or Mike Pienkowski (m@pienkowski.org). However, even if you do not, there are several ways in which you could help:

Friends of the UK Overseas Territories

Friends was initiated some 20 years ago, at the request of individuals who wished to contribute to UKOTCF's work. If you would like to join, there is a form on the back of this issue of *Forum News* – but most people will find it easier to do this online at https://www.ukotcf.org.uk/become-a-friend-of-the-ukots/. The minimum annual contribution remained unchanged at £15 for some 20 years, but larger contributions are welcome, and existing Friends may like to consider an increase. Please note that, if you are a UK tax-payer, UKOTCF can increase the value of your contribution by 25% by reclaiming the tax you have already paid as Gift Aid; the forms include an option for this. There is also a version for corporate supporters.

Other donations

Other donations are probably most easily made via our website (https://www.ukotcf.org.uk/donate/) or contact Catherine (see above).

Donate while you shop - at no cost to yourself

UKOTCF is a charity registered with ***easyfundraising.com***. This means that, if you buy from a wide range of traders, a small contribution (at no cost to you) is made to UKOTCF. All you need to do is to register UKOTCF as your chosen charity at easyfundraising.org.uk/ukotcf. Then, when you are shopping, start at easyfundraising.com and select your trader through that site, rather than going directly to the trader's site. There are various settings that you can adjust as to whether or not you want to receive emails from easyfundraising.com

Amazon is no longer in that scheme, but has its own, ***Amazon Smile***. On your first visit to smile.amazon.co.uk you need to select UKOTCF to receive donations from eligible purchases. Then, when Amazon recognises you, it will offer to transfer you to Amazon Smile when you enter their site. The same choices and prices are on Amazon Smile.

Reddish egret in its characteristic hunting poses hunts fish in Red Salina, central Grand Turk, March 2020. Photos: Dr Mike Pienkowski