

Saving Our Special Nature of Montserrat

Newsletter 9, November 2019

Foreword

Welcome to the 9th issue of the newsletter about the current joint programme of work by Montserrat National Trust and UK Overseas Territories Conservation Forum, in conjunction with the Government of Montserrat. The first two years of this current programme were supported in part by a grant from UK Government's Darwin Plus fund, under the title *Maximising long-term survival prospects of Montserrat's endemic species and ecosystem-services*. At present, the programme is not in receipt of outside funding but this is being applied for. Meanwhile, UKOTCF and MNT are keeping the programme going at a maintenance level using just their own limited resources – because it is important to maintain the excellent momentum built up and support the committed and effective efforts of local partners.

We are very grateful for the many kind and encouraging comments from people welcoming the first eight newsletters. We hope that you enjoy this one too. One comment we received was that the reader liked the newsletter but thought that it was too long. So, we are trying a shorter issue this time. Comments are always welcome.

In this issue, we outline some continuing progress by *Adopt a Home for Wildlife* teams, in conjunction with new partners. We touch on other collaborations, including a continuing

initiative with H.E. the Governor. We also bring back the popular series of *Did You Know...?*, and look at work in UK and elsewhere to support conservation in Montserrat.

Please feel free to show or forward these newsletters to others. If anyone sees these and would like to be added to the circulation list, please send your email address to cwensink@ukotcf.org. For more information on the project, the main contacts are:

Dr Mike Pienkowski & Mrs Catherine Wensink, UK Overseas Territories Conservation Forum: m@pienkowski.org cwensink@ukotcf.org. See also www.ukotcf.org.uk. Mrs Sarita Francis, Montserrat National Trust: mnt@montserratnationaltrust.ms

Did You Know?... Rare sighting of the Critically Endangered Montserrat Galliwasp lizard

The Montserrat galliwasp *Diploglossus montisserrati* occurs only on Montserrat and was discovered and described formally as recently as 1964. However, sightings are very infrequent, and it was thought to be extinct, with no sightings from the time of its formal description in 1964 until 1998. The species is thought to have suffered further from loss of its woodland habitat and ash-fall resulting from the Soufrière Hills volcanic eruptions from 1995. It is classified as Critically Endangered and may be one of the most endangered lizards in the world.

Animals can reach 180 mm snout-to-vent, or 400mm (15 inches) overall, and have short legs. With very few sightings, their distribution, population size and behaviours are largely unknown, though they are believed to prefer moist woodland habitats,



especially montane forest. They spend much of their time in holes underneath large rocks. They are most active in the early mornings and late evening, and possibly during the night, when they emerge to feed on insects.

Dr Bridget Beattie and her husband lived on Montserrat from 1975-85, and the family still has a small house there, which she visits in the winter. This winter, the family saw a Montserrat galliwasp, which obligingly stayed around for Bridget's daughter Emma and son-in-law Stuart to photograph. They have kindly made these rare photographs available and a selection of them are shown here.

This is a delightful series of pictures. Long may the galliwasp survive – and, we hope, increase – on Montserrat.



All photos in this article: Beano

SOS Nature of Montserrat in the region and beyond

There has long been great interest, within the region and beyond, in the novel work forming parts of our *SOS Nature of Montserrat* programme. Part of UKOTCF's role is to spread awareness of this, both through its extensive network of conservation bodies in and supporting UK Overseas Territories & Crown Dependencies and via other opportunities.

As part of this, Mike and Ann Pienkowski visited nearby Guadeloupe, immediately following their visit to Montserrat in July. There, Mike (on behalf of Ann, Sarita Francis, James "Scriber" Daley and Catherine Wensink) gave a presentation on this programme (*photo to the right*). This was very well received, with questions particularly on *Adopt a Home for Wildlife* and the *Montserrat Virtual Museum of Natural History*. It was obvious to participants from across the region that the experience gained by Montserrat could be very useful elsewhere.

In addition, there was much local interest amongst the hosts from Guadeloupe in the well-being of their neighbouring island of Montserrat, as well as the conservation activities that the presentation exemplified. Even the local simultaneous translator sought Mike after the session to say that he kept an eye on



Montserrat from his home on the side of Guadeloupe facing that way, and his enthusiasm for what is happening in conservation.

The BirdsCaribbean conference also gave the opportunity for a rare physical meeting (as opposed to the normal Skype one) of UKOTCF's Wider Caribbean Working Group. There was representation in person from four of the six UKOTs in the region, as well as UK, Canada and St Lucia.



Wider Caribbean Working Group Secretary, Ann Pienkowski, in front of a welcome rainbow at the BirdsCaribbean conference in Guadeloupe, July 2019. Work continued despite several torrential storms which flooded parts of the meeting rooms and a “wake-up” 4.7 earthquake one morning.

Topics included the current review by UK Government of its funding for conservation in the UKOTs, and the importance of UK Parliamentary Inquiries. For both, appreciation was expressed for UKOTCF’s role in making these opportunities known to UKOT bodies and incorporating in its own evidence information from them – especially important as many territory bodies do not have the time or resources to make their own submissions. Participants identified the need for a web-based facility to help identify synergies between projects, active and proposed. The existence of a module on UKOTCF’s existing website that had been designed for this sort of role was noted, and UKOTCF agreed to explore this further.

The need for identification aids for native and invasive plants for volunteer participants in conservation was noted, and several possible lines to follow up identified. Great concern was expressed when Kathleen Wood from the Turks & Caicos Islands described stony coral tissue loss disease. This is a bacterial infection, first identified in Florida in 2014. 22 species of coral had been identified as being susceptible, including reef-building corals. It was spread by fish (and divers). It had been found in South Caicos in early 2019; by June, it had affected West Caicos, and had now spread to Providenciales, the main tourist island. It could be treated effectively with antibiotics, and the Turks and Caicos Reef Fund (TCRF) were trying to raise funds to undertake this treatment. It was agreed that it is really important to get this message out to other UKOTs and Caribbean countries, so that they could be on the alert for its presence.

Also discussed, at the request of the participant from the Canadian Wildlife Service, was the very different traditions in different islands concerning hunting of shorebirds, most of which breed in Canada before migrating to or through the Caribbean.

UKOTCF and RSPB noted the potential overlap of sites in Montserrat between the existing UKOTCF/MNT *Adopt a Home for Wildlife* initiative and a proposed new project managed by RSPB.

Also in the conference, UKOTCF’s Chairman accepted the invitation to provide a short summary in BirdsCaribbean’s Business Meeting of the highlights of UKOTCF’s work in the Caribbean in the four years since the previous such summary.

The *SOS Nature of Montserrat* programme featured also at a meeting in London on 31 May 2019. UKOTCF and the Chartered Institute of Ecology & Environmental Management (CIEEM) took the opportunity of the presence in UK of several Caribbean

UKOT personnel to organise a workshop on *Providing an Evidence Base for Conservation in the UKOTs*. This was held in Gibraltar House, Strand, London by kind invitation of Hon. Prof. John Cortés, HM Government of Gibraltar’s Minister for Education, Heritage, Environment, Energy and Climate Change.

As well as 27 people in the room, 29 online connections were made to the streamed webinar, during which people participating remotely could send questions and comments for answering. In some cases, these remote connections each involved several persons, for example 5 in the case of St Helena.

The joint project work in Montserrat provided the source for a presentation, *Facilitating a science-based approach into policy, procedures and public debate: an example from Montserrat*, by Dr Mike Pienkowski. Other presentations included:

Conservation in the Turks and Caicos Islands, by Lormeka Williams;

Use of satellite imagery to record change following the hurricanes in TCI and BVI, by Dr Katie Medcalf;

Uncovering the value of natural capital for conservation management in the British Virgin Islands, by Nancy Pascoe;

The South Atlantic Natural Capital Assessment project, by Tara Pelembe (South Atlantic Environmental Research Institute);

Conservation Evidence: Bridging the research/practice divide, by Nick Littlewood (Conservation Evidence, Cambridge University);

Role of Fire in Turks & Caicos Ecosystems, by B. Naqqi Manco.

Each presentation was followed by questions from the local and remote participants. Discussions highlighted the challenges that UKOT conservationists face in their resource-management and conservation work, and identified further ways in which UKOTCF and others might help.

We discussed also the importance of engaging local communities in UKOTs, raising awareness about the importance of managing their environments and the resources that they provide in a sustainable way.

Underpinning this is also the need for the development of policy and legislation so that sustainable management can be effectively implemented.

In addition to stimulating content and exchange of experience, this was an excellent opportunity to reconnect with colleagues working to protect biodiversity in the UKOTs, complementing UKOTCF’s conferences for practicing conservationists – which are less frequent due to the challenge of raising funding.



Some of those from, or presenting on, Caribbean work: (from left) Dr Mike Pienkowski (UKOTCF Chairman, presenting on Montserrat), Dr Katie Medcalf (Environment Systems, and co-organiser), Nancy Pascoe ((Deputy Director, National Parks Trust for the Virgin Islands), Bryan Naqqi Manco (Environmental Officer, Terrestrial Ecologist, Department of Environment and Coastal Resources, Turks and Caicos Islands), Oshin Whyte (TCI student at Oxford) and Lormeka Williams (Director, Department of Environment and Coastal Resources, Turks and Caicos Islands).

Governor Pearce again hosts Montserrat Environment Stakeholders Group



Governor's reception for Montserrat's Environment Stakeholders Group, July 2019.

All photos in this article: Annesta Fergus, Governor's Office

Governor Andy Pearce again took the opportunity of UKOTCF's visit in July 2019 to host a gathering of the Environment Stakeholders Group, this time at the temporary Government House. After informal discussions, he introduced a session of short presentations and shared discussion.

Dr Mike Pienkowski, UKOTCF, first outlined current and planned activities in Montserrat involving UKOTCF. He stressed the long-term approach that UKOTCF adopts with UKOTs, to work out with personnel in each territory what they want, rather than starting with some plan devised elsewhere. The series of stakeholder workshops on the future of the South, and the agreed vision which resulted, were a good example. These local priorities then need to be integrated with the constraints of funding bodies. There are several proposals currently under consideration in this continuous effort. Between periods of grant funding, UKOTCF is trying to continue to give support to the strong local involvement in the *Adopt a Home for Wildlife*: initiative. However, he stressed the need to secure funds to get a project officer in place again, also to relieve the pressure on management on Montserrat National Trust. Our current main proposal would expand *Adopt* to stress native pollinators; and would include more insect work by the Montana State University team, including on the Montserrat Virtual Museum of Natural History.

Later, UKOTCF, MNT and partners hoped to find resources to get back to the feasibility study to take forward the necessary



H.E. Andy Pearce, Governor of Montserrat, introduces the session of short presentations.



Hon. Claude Hogan, Minister of Agriculture, Trade, Lands, Housing & Environment, on his arrival, greets Sarita Francis, Executive Director of Montserrat National Trust, and Ann Pienkowski, UKOTCF

studies requested by local stakeholder workshops which developed a vision for the south.

Mike then turned to the consultation, which would close that week, by UK Government on its funding for conservation in UKOTs. As UKOTCF has called for on several occasions, Defra (the UK Government Environment Ministry) has opened a consultation on the future of UKOT environmental funding. UKOTCF has encouraged partners to submit their evidence or send us material to incorporate in UKOTCF's. The latter is based on the recommendations to UK Government of the 2015 conference, the conclusions of the meetings of the UKOT/CD Environment Ministers Council, UKOTCF's previous evidence to UK Parliament Select Committees, and other information supplied by territory partners, individually or through regional working groups.

Because UK Government called for evidence, rather than a wish-list, UKOTCF's submission is quite lengthy. However, some common themes are:

- to take more account of the priorities worked out with territory personnel, rather than favouring projects dreamt up remotely by bodies in UK, and thereby also reduce duplication of work already done;



UKOTCF Chairman, Dr Mike Pienkowski, (second from right) gives a short presentation to lead into a discussion. He is flanked by (from right) Adopt a Home for Wildlife partners, Dwayne Hixon and Tim Orton, James 'Scriber' Daley and (far left) Ann Pienkowski.



Luke Jones, Montserrat Mountain Chicken Recovery Project local officer, (with Minister Hogan and Mike & Ann Pienkowski) shows a short film on encouraging progress with the mountain chicken frog restoration project.

- to be aware that projects which restore ecosystems or threatened species, and those which address building local capacity, require continuity of funding over several years, and therefore to remove the bias against grants which build on previous or current work;
- prevent the current favouring of marine projects from squeezing funding on terrestrial projects (where most endemic species occur);
- to be aware of the long-term relationships of NGOs like UKOTCF in helping UKOT bodies with limited capacity to develop appropriate proposals and to provide support, which (unlike those from external research bodies) include resourcing for extra capacity in UKOT bodies, such as MNT;
- to recognise that experienced NGOs provide, through skilled volunteer effort, extremely high value-for-money to the grants, but that grants are needed for this to be deployed
- to reverse the recent tendency to fund UK Government's own agencies through granting programmes previously intended for NGOs and UKOT bodies;
- There is a clearly urgent and important need for UK Government to increase drastically financial support for the excellent work by NGOs and UKOT bodies which have achieved so much over the years, but which struggle to survive with the current dearth of funds, and the reduction of UK Government funding to one scheme (increasingly being diverted to funding other bodies). This contrasts with the many conservation needs, widely agreed – and necessary also to meet UK's international commitments.

These comments generated encouragement and support.

Finally, Mike mentioned the new small coffee firm (Halo) which had approached UKOTCF about its new product: coffee capsules with the entire packaging biodegradable domestically – unlike most packaging labelled “biodegradable” which generally requires industrial equipment for the degrading, or else applies to only parts of the packaging. This firm thought that this product might be particularly interesting for UKOTs because of these being at the ends of supply lines, limited disposal facilities, and high costs to export. The firm is looking for partners in territories to develop as suppliers.

Then, Luke Jones, Montserrat Mountain Chicken Recovery Project local officer, updated on the project and showed a short film on encouraging progress with the mountain chicken frog restoration progress (see page 6).

More informal discussion followed.

Future funding prospects and partnerships



Ann Pienkowski and Tim Orton join Mike Pienkowski and Rose Willock at ZJB's new studios in Montserrat for Rose's Saturday programme, to update listeners on progress, especially at Tim's Adopt a Home for Wildlife site in globally threatened dry forest at Garibaldi Hill.

Photo: Dr Mike Pienkowski

As outlined in the previous issue of *SOS Nature of Montserrat Newsletter* (8, page 4), UKOTCF and MNT have been trying for some time to secure funding to restore the position of Project Officer needed to help and advise participants in *Adopt a Home for Wildlife*, and encourage others (some of whom have already expressed interest) to join. In the interim, Mike Pienkowski has been trying to visit Montserrat whenever in the region, in order to try to maintain continuity. The most recent visit was in July 2019, accompanied by his wife Ann, who has also been heavily involved in conservation and environmental education for Montserrat.

The initiative has been very successful and ground-breaking, and was highly rated by the Darwin Initiative's independent assessor. MNT, UKOTCF and several other partners put together a bid to the Darwin Plus fund which would see efforts made to raise awareness of the importance of pollinators (bees, hoverflies etc) to ecological balance as well as providing a vital service to the community for free, especially to the farmers. If successful, it will be a 3-year programme and would lead to more knowledge about insects and opportunities for the community to get involved in protecting these important islanders. UKOTCF is also exploring bids to other funding bodies, to continue and build on this exciting and successful start to work that Montserrat partners consider of high priority.



Dwayne Hixon discusses with Dr Mike Pienkowski the further work planned to restore wetlands at his Adopt a Home for Wildlife site in the lower Belham Valley. Photo: Ann Pienkowski

Experimental release of Mountain Chicken frogs



Mountain chicken in the wild, in the Centre Hills, before the accidental introduction to Montserrat of the deadly chytrid fungus. Photo: Dr Mike Pienkowski

UKOTCF and MNT are delighted that, following Tim Orton's joining as one of the first participants in their *Adopt a Home for Wildlife* initiative and with his continuing strong involvement in that, he has also hosted the *Mountain Chicken Recovery Project's* experimental reintroduction work on his *Adopt a Home* site. The early stages of this experimental work are described in a video now available in our series about the *Adopt a Home* initiative (<https://youtu.be/7KH6kqG6Vhk>). UKOTCF has been pleased to facilitate this project and its predecessors in several ways over the past 20+ years.

During their visit in July, Mike and Ann Pienkowski were pleased to be shown around the *Project's* insect-breeding facility, where species occurring in the wild are reared. This is run jointly with Montserrat's Department of Environment, to provide supplementary food for the frogs during the establishment phases. Later Mike and Ann joined the Governor and his wife, to be shown around the frog release site by Tim Orton and Luke Jones, the *Project's* local officer. They heard the frogs giving mating calls in the evening – an excellent sign.

The experimental release was announced locally in July and the *Mountain Chicken Project* made a wider public announcement in September. The *Project* is a collaboration between Durrell Wildlife Conservation Trust (Durrell), the Zoological Society of London (ZSL), Chester Zoo, Bristol Zoo Gardens, Nordens Ark and the Government of Montserrat. The team has released 27 mountain chicken frogs into a safe area created by environmental manipulation techniques.

Mountain chicken frogs are a species which is listed as Critically Endangered on the IUCN Red List. Native to the islands of Montserrat and Dominica, these frogs have survived hurricanes,

volcanic eruptions and being hunted for centuries but were driven to the brink of extinction by the deadly chytrid fungus. Chytridiomycosis is a microscopic fungus *Batrachochytrium dendrobatidis* (Bd.), more commonly known as chytrid, and is believed to have caused the extinction and decline of over 500 amphibian species around the world. Chytrid reached Dominica in 2002 and Montserrat in 2009, and nearly wiped out the mountain chicken frog.

The semi-wild enclosure on Montserrat includes artificially heated pools that are uninhabitable for the chytrid fungus, which cannot survive in temperatures above 30°C. The pools are partly solar powered and regulate their own temperatures to ensure



A mountain chicken frog during a health check. © Jennifer Parker

they remain hot enough to maintain a chytrid-free environment.

"Currently, there is no known method for eradicating chytrid from the wild. We have had to think outside the box and come up with a mechanism for enabling frogs to survive alongside the fungus in their natural environment," says Dr Mike Hudson, who leads the project for Durrell and ZSL. "In this world-first attempt at using environmental manipulation to mitigate the disease in the wild, we are hoping to not only make steps towards saving the incredibly threatened mountain chicken frog, but also to provide a model system that can inspire conservation action for hundreds of other species affected by the disease globally."

As the project continues, the frogs will be monitored and tested regularly for signs of infection. It is hoped that this environmental

manipulation technique will be successful and can be expanded to create a network of safe refuges for mountain chicken frogs.

"The solar-powered ponds were trialled with mountain chicken frogs in carefully designed facilities within zoo settings before the release – and so far, it looks promising," says Ben Tapley, curator of reptiles and amphibians at ZSL London Zoo.

"It's an enormous privilege to be part of such a ground-breaking project that really demonstrates the importance of conservation breeding in zoos in response to chytrid mediated amphibian population declines."



A semi-wild enclosure. © Durrell/ZSL

Pursuing Montserrat's interests in Britain and elsewhere

In order to achieve conservation in Montserrat, it is often necessary to undertake supporting work in UK and elsewhere, often in relation to policies on funding, international commitments or other issues. Here are some flavours of some recent and current examples.

UK Government's *Call for Evidence* on the future of its funding support for UK Overseas Territories

In May, the UK Government put out a call for evidence which aimed to look at its future support for nature in UK Overseas Territories. UKOTCF encouraged bodies in the UKOTs to respond and made a detailed submission of its own – the latter based closely on information from the UKOTs gathered in UKOTCF-organised conferences, its regional working groups, and direct conversations. The UKOTCF evidence highlighted the challenges faced by the UKOTs in protecting their unique but fragile nature and provided some recommendations on where future support might be directed, recognising that local bodies, and those NGO organisations which work closely with them on their priorities, must be supported to enable long-term impacts of any investment to be felt. It is understood that UK officials had hoped to analyse the results and make recommendations to ministers by the autumn of 2019, but that the seemingly endless Brexit situation has delayed this due to its soaking up such a high proportion of officials' time.

Invasive species and Montserrat

UK Parliament Select Committees are made up of Members of Parliament from all political parties. They check and report on the work of UK government departments areas ranging across all areas. Most House of Commons Select Committees concentrate on single ministries, but a small number range across ministries. One of the most active and well-respected Committees is the Environmental Audit Committee (EAC). Through its inquiry system, it has an influence over UK Government thinking. For example, last year it was instrumental in getting the UK Government to ban micro-plastics in cosmetic products.

Quite frequently, the EAC looks at issues which are directly relevant to UK Overseas Territories. In April, one such inquiry was launched to consider the impact and threat to biosecurity from invasive species. The inquiry page is at: <https://www.parliament.uk/business/committees/committees-a-z/commons-select/>

[environmental-audit-committee/inquiries/parliament-2017/invasive-species-17-19/](#)

As UKOTCF is UK-based and tries to keep in touch with what is happening across the UKOTs/CDs, it is often invited to provide additional oral evidence. UKOTCF's Executive Director, Catherine Wensink was asked to attend a session and was questioned alongside various other experts.

In her evidence when asked by the Chair, Mary Creagh MP, why fire ants were bad, she said: *"Okay, I can tell you first hand. I have been stung by fire ants. It is very painful. We were doing a site visit in the school on Montserrat, where there was a colony. They are a big problem in the US. They can get into electrical generators – apparently they really enjoy building their colonies or nests in there – so there is a huge economic consideration. Also, I know from visiting with colleagues from Ascension that there is a real worry about them invading turtle nesting sites. That has the potential to really impact some of our territories, which are important for many species, not just the turtles."*

Blue Belt Symposium

The Blue Belt Symposium hosted at the University of Exeter's Penryn campus took place on 29th-31st July. This formed part of a Darwin Plus project to gain evidence on the impact of marine protected areas around Ascension Island – one of the UK's Overseas Territories in the South Atlantic (http://www.ukotcf.org/1_vTours/tour.cfm?locn=ASC&tourType=FULL). UKOTCF, together with Alwyn Ponteen from Montserrat, attended the meeting which allowed those striving to protect the oceans and seas around the territories to meet and share knowledge and ideas on how to overcome some of the challenges.

Wilder Islands and the Blue Islands Charter

In September, UKOTCF, along with Montserrat's Minister of Agriculture, Trade, Lands, Housing & Environment, Hon Claude Hogan MLA, attended the Inter Island Environment Meeting (IIEM) on Alderney. This was organised by the Alderney Wildlife Trust (AWT), supported by the States [Government] of Alderney. The IIEM is an annual meeting and takes place by rotation on one of the Crown Dependencies in the Channel Islands (Alderney, Guernsey, Jersey and Sark). The theme of the meeting, extended by special funding to wider participation was *Wilder Islands*. Minister Hogan, and UKOTCF's Dr Mike



UKOTCF Executive Director, Catherine Wensink, (left) answers questions from Mary Creagh MP, Chair of the House of Commons Environmental Audit Committee (centre, right). The Chair is flanked by Anna McMorris MP, Committee Clerk Laura Grant, and John McNally MP. Other Committee members on the panel (out of picture) were James Gray MP and Alex Sobel MP. Photo: Parliament TV

Pienkowski and Catherine Wensink all gave presentations, with the former two also forming part of the final panel discussion.

One output of the meeting was the signing by the first territories of the *Blue Islands Environment Charter*, which is a series of commitments towards protecting terrestrial and marine environments. The Charter is an initiative of Professor John Cortés, Gibraltar's Minister for Education, Heritage, Environment, Energy & Climate Change. This was signed by the governments of the four Channel Islands, Gibraltar and some other UKOT governments represented,



Initial signing. From left: Assistant Minister (Deputy Gregory Guida) & Minister (Deputy John Young) Jersey, Minister Montserrat (Hon. Claude Hogan), President States of Alderney (Mr William Tate), Representative Tristan da Cunha (Dr Stephanie Martin), Minister Guernsey (Deputy Barry Brehaut), Representative Gibraltar (Dr Liesl Mesillo), Representative Sark (Shakira Christodoulou), Secretariat UKOTCF (Dr Mike Pienkowski).

Photo: Lian Camilleri, HM Government of Gibraltar

including Montserrat – making the latter the first Caribbean UKOT to sign. The Charter is intended as a living document, and also will remain open for other signatories, and several other UKOTs and others have indicated their interest in joining. This Charter will be an important complement to the existing Environment Charters of UKOTs.

BLUE ISLANDS ENVIRONMENT CHARTER GUIDING PRINCIPLES FOR THE PROTECTION OF ISLAND COMMUNITIES

The threat to the ocean is intrinsically linked to human activity in Island Nations. This Charter proposes that all Islands commit to the following principles:

1.To control and reduce the negative impacts of the Island's activities on the environment

- 2.To control the risks associated with activities on the Island*
- 3.To promote a rationale of continuous environmental improvement*
- 4.To factor the environment into every day practices*
- 5.To move towards a complete ban on single-use plastic entering the Island and in particular the marine environment*
- 6.To increase knowledge in order to improve and communicate*
- 7.To contribute to the development of scientific knowledge with regards to Island Marine Environments*
- 8.To support other Islands through open communication and education*
- 9.To protect native, terrestrial and marine species and habitats and enhance biodiversity*
- 10.To enhance terrestrial and marine natural environments.*

Montserrat booklet for children on litter and marine impacts

Montserrat's Minister of Environment Claude Hogan, on 14 October 2019, delivered copies of a new children's book on ocean care to students at Lookout Primary School. The Minister, who is one of the founding members of the *Blue Halo Montserrat* project, said the book is an initiative developed through the Commonwealth Secretariat's Ocean Alliance and the *In-Deep Project* in an effort to educate all about the need to reduce plastic pollution in

the ocean. UKOTCF is pleased to have been one of the facilitators of the overall marine programme, in that several years ago it responded to a request from the Government of Montserrat to find help in marine conservation, after UK Government had been unable to assist, by introducing the Waitt Institute to Montserrat.

The Minister has now been immortalised as Claude the Crab in the new illustrated book called *Message in a Bottle*, which seeks to educate children about litter and its impacts on the marine environment. Deep-sea litter is a world-wide problem endangering marine life. The book can be downloaded at <http://discovermni.com/wp-content/uploads/2019/10/Message-in-a-Bottle.pdf>.

A plastic bottle can last 450 years in the marine environment. The harm caused by plastic pollution is wide-ranging. It chokes wildlife above and below the waterline. An estimated one million seabirds and an unknown number of sea-turtles die each year as a result of plastic debris obstructing their digestive tracts, and marine animals of all sorts can become tangled and incapacitated by discarded fishing lines and plastic bags. The effects of plastics carrying toxicity throughout the marine food chain is still being researched, with the implications for human health yet to be understood.

Minister Hogan said he was delighted to share the books with the students and the schools and he hopes the books help to bring further understanding of the environment and will encourage the children to become future ambassadors of the ocean.



Environment Minister Claude Hogan and Principal of the Lookout Primary School Denelta Weekes pose with a copy of Message in a Bottle, produced by the Waitt Institute. Photo: DS Media