

FORUM NEWS 61

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We celebrate and thank the *Adopters of Wildlife Homes in Montserrat's Adopt a Home for Wildlife project*

Celebration

In the first week of an intense nine weeks of overlapping activities on all joint projects, a public event was held at Montserrat National Trust on the evening of Thursday 27th June to celebrate the commitment and work of the *Adopters* (local people, schools, companies and community groups who had volunteered to manage their land in a way to support nature under the guidance of the project), in some cases over several years.

After Mrs Sarita Francis's prayer and welcome from MNT, Mike Pienkowski (UKOTCF) gave a very brief background to the project, mentioning also its support for the important educational work started (higher education evenings) and re-started (Monty's Messengers, the group for primary-school-age children, suspended since the 1990s because of volcanic activity).



Mrs Sarita Francis, MNT Executive Director, welcomes all. (All photos in this article, unless otherwise indicated: Dr Mike Pienkowski)

Then Chris Sealys (MNT Conservation Officer) spoke about the two *Wildlife Homes* (WH04 at Pipers and WH05 at EcoPlay) that the Trust team manage themselves. Carol Osborne (WH12 at Cassava Ghaut) and Tim Orton (WH01 at Garibaldi Hill) followed with short and clear messages, demonstrating the enthusiasm, enjoyment, challenges and successes involved with their *Wildlife Homes*.

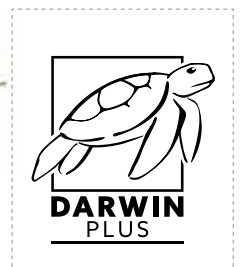


Adopter Mrs Carol Osborne

Mike then briefly mentioned the plaques that would be provided to *Adopters* to display if they wished, and also spoke of ideas for keeping the *Adopt a Home for Wildlife* project going beyond the end of grant funding.

Jodey Peyton (standing in for project leader Catherine Wensink, who could not attend due to a family bereavement) then spoke about the Biodiversity Toolkit project.

Norman Cassell (WH13 at Hibiscus Dive) then made a helpful intervention to say that *Adopters* should keep *Adopt a Home for Wildlife* going as a section of MNT, building on the group that





Mr Norman Cassell and part of the audience.

they had – before going on to give his enthusiastic, informative and humorous presentation.

In questions, Veta Nicholas (WH10 at Lawyers Mountain) raised the problem of the steep slopes (steeper than she had requested) at her *Wildlife Home*, and Norman spoke about sharing expertise, through the continuing *Adopt a Home for Wildlife* project – and further ideas were put forward to Veta later in informal discussion.



Ms Veta Nicholas outlines some challenges at her Wildlife Home, where the cliff above her house was cut far more steeply than she had requested.

Norman continued his presentation from his impressive vegetation display at the back of the hall, and then Jo-Diaz Tye, at the request of Mrs Francis, gave an impromptu lecture on the medicinal plants display (related to the new jointly produced book published by



Mr Norman Cassell talks at his display of plants on the opportunities for securing income from encouraging native and culturally important vegetation.



Ms Jo-Diaz Tye speaks at the display on the traditional medicinal plants book.

UKOTCF), also at the back of the hall, before participants moved outside for refreshments.

The meeting was attended by several *Adopters*, some prospective *Adopters*, several MNT Council and staff members, project personnel from other organisations, and others. In addition, the meeting was live-streamed and available for replay, so that participation was even higher.

That week also, some of the team visited WH04 at Friths, to walk along the Pipers Trail through the site from the lowest point, seeing some of the plant signs that have now been erected as they walked up the new trail that had been constructed, putting steps and side-ropes up the steep slope. From the top of the lower trail, we walked along the quiet roads to the lower part of the upper plot. At the bottom of the upper plot, the first small distance of the track had been widened so that it can eventually take school-buses to a safe parking place. An area had been levelled to provide car-park and a building with an area behind that, to provide a camp-site, with wash-rooms and showers. Work on surfacing the track and parking area and the building was due to start shortly. The siting



Above: Some young people join members of the project team and colleagues on Pipers Trail. Below: Some of the new steps on the lower part of the site, making ascent out of the valley practicable.





Above: one of the new signs on the trail. Below: collecting insects and recording wildlife during the trail walk, and some of the wildlife.



of this area near the edge of the plot prevents the loss of a much larger area of land had the site been further into the plot. This will provide a great facility for educational and fun engagement of young people, including participation in study and conservation.

Continuity

To build on the enthusiasm of *Adopters* (and potentially additional ones) to continue the work beyond the grant end, a core team met, including Norman Cassell (*Adopter*), Tim Orton (*Adopter*), Elvis



Mr Norman Cassell speaking at the public event



Mr Tim Orton speaking at the event

Gerald (Department of Agriculture; *Adopt a Home for Wildlife* project officer), Chris Sealys (MNT conservation officer), Mike Pienkowski (UKOTCF; *Adopt a Home for Wildlife* joint project leader) and Jodey Peyton (UKOTCF; *Biodiversity Toolkit* project). Apologies had been received from Catherine Wensink (UKOTCF; *Biodiversity Toolkit* project leader (see above).

Mike noted the enthusiasm, evident both in the event the previous day and the *Adopters'* meeting in March, amongst *Adopters* to keep the project going beyond the end of the grant period in September. He noted that there are several elements which could contribute to this, including (but not limited to):

- The community of *Adopters*.
- UKOTCF has had a long-term relationship (some 30 years) with MNT and that will not stop.
- The *Biodiversity Toolkit* project (DPLUS192) had been designed to build on aspects of *Adopt a Home for Wildlife*.
- Notable also is the existence now (after years of lobbying by UKOTCF and others) of the Darwin Local grants, limited to applications by territory bodies and individuals.

All agreed that it is important to continue this initiative to support native species and biodiversity generally, by removing invasives and planting and encouraging native species. In building on this, it is important to capture systematically information on what worked and what didn't, while maintaining the shared passion for biodiversity.

Norman stressed that the project and follow-on have to be about sustainability, carrying things on and having identifiable success factors. Even just recognising individual experiences and the importance of sharing these experiences in detail is vital. He underlined also the importance of noting the value the group of experts generated by the *Adopt a Home for Wildlife* project, and the value in *Adopters* visiting each others' sites.

Tim said that *Monty's Messengers* would be an important outlet for the information as he reported some people behaving as if there was no consideration for nature, by e.g. just chopping down a tree that was in the way of another tree someone was trying to get to; education is a key for the future. Norman agreed, noting that, post-volcano, the housing situation had changed; motivations and priorities were different. In those 25 years, less connected to the land and farming, many in the the younger generation had lost the sustainable background. For example, young children from the secondary school were looking, during a radio programme, for ideas on how to raise money. Norman had called in and suggested getting some seeds from the Department of Agriculture and growing string beans, but they had told him they don't know how to grow vegetables. After the eruptions at this time, the schools were being used as shelters and then when they reopened they



Mr Chris Sealys speaking at the event

initially didn't offer agricultural subjects at the secondary school. Tim spoke about soil-fertility in exclusion zones; and asked, when these open, how will soil be made fertile for the farmers? Jodey confirmed that some of the farmers on the island are also keen to get young people involved with farming, cropping, managing community plots, etc.

Norman reiterated that there was volcanic fallout from a social standpoint as well as physical one that has changed the culture on Montserrat and the awareness about the environment. So, the bioblitzes with the young people are critical to start reshaping the minds and reconnecting people with nature. This information and awareness are otherwise being lost. For example, one of the knowledge-holders for the 30 medicinal plants booklet had recently died. It is so important to capture this information while they are still with us – the documentation is critical.

MP said how pleased he was that *Adopt a Home for Wildlife* had been able to help MNT set up three levels of environmental education. *Monty's Messengers* (for primary-school age) and now *Monty's Ambassadors* (newly implemented for high-school age) are really useful for promoting the importance of the environment. Also the Higher Education evenings provide an opportunity to show other possible careers.

Norman remarked about former project officer Ajhermae White currently doing her Masters degree, and how helpful it is to have people like Chris here to learn from. Jodey noted that we are also learning a huge amount from Norman and his colleagues!

Mike then mentioned about knowledge-sharing opportunities and that there were entomologists and botanists here now in the current team. Also, within a few weeks, David Clement (entomologist) and Leigh Morris (horticulturalist and CEO of Manx Wildlife Trust) would also be here again. David has been working on material collected on his previous visit and from that collected in our earlier project by Professor Mike Ivie and colleagues. Both would be very happy to have people with them during their visits. Mike had asked both to visit as many *Adopters/Wildlife Homes* as possible (see pages 5-8).

Norman said that he would like to learn how to do surveys as he would have liked to have seen survey differences in his land before and after the volcano and his work. Tim confirmed the value of training from the project. Tim brought the land in 2010, after the volcano, and there were no pollinators, but now they are quite common.

Tim said that a key lesson he learnt is not to cut back *Acacia* at the very beginning. He feels this cost him 3-4 years of progress. This is because forest trees grow as saplings in cover and cannot develop well in open sunlight. Tim also shared that ring-barking of shading invasives worked very well. Ring-barking is good as

it means the plants can continue to stand for a few years, which means that the new plants underneath can grow while the large tree slowly dies. Tim was asked which species he ring-barks, and answered Neem and Tamarind. Neem is strange as the trees look fine but after 2 years they die within a few weeks. Tamarind shows noticeable signs of decline immediately. Norman said Neem suckers if cut but ring-barking works well. Chris noted that care is needed with ring-barking if falling branches could fall on people in areas of public access. Jodey commented that these were just the sort of things to put in a booklet.

Main action points

1. The community of *Adopters* to be maintained.
2. UKOTCF will continue to engage remotely and, when practicable, on-island.
3. The possibility of applying for particular small grants under Darwin Local was noted.
4. Mike would circulate the draft simple spread-sheet to gather information on successful and unsuccessful treatments; the *Adopters* were asked to try this out and comment back to Mike and Jodey, so that this could be amended.
5. Similarly, Elvis would try the form and comment, and also invite other *Adopters* to either try the form or else write some notes on their experiences and send them in.
6. Mike and Jodey would try to collate all that came in and make it available, both by database and possibly a booklet.
7. UKOTCF to include in the final grant report the setting up of this continuity group.
8. The group would try to set up a programme of visits to each other's sites.
9. The group noted the importance of passing information through *Monty's Messengers*, *Monty's Ambassadors*, Higher Education evenings, bioblitzes etc.
10. Jodey would explore the situation of a UK university which had not made available the results of their study on the uses of ash.
11. Mike would link the group up with revisiting Leigh Morris and David Clements.
12. All *Adopters* to be advised to collect their plants etc by September when project-funding ended.
13. Tim to try out the cutter for leaves and palm-fronds when it arrives, and MNT to set up a logging system for *Adopters* to borrow it.
14. There was also a discussion about funding trail maintenance but that should be taken forward by MNT outside this project.
15. Jodey and Catherine would discuss the *Biodiversity Toolkit* with Norman and others interested.
16. Mike thanked all for participating and Norman for agreeing to chair the group, and Norman, on behalf of the local team, thanked Mike, Elvis, Chris and their colleagues for sharing their knowledge.
17. The group could meet online, as well as physically in future.

Dissemination

In addition to the public meetings, an overview of the project was the subject of a 40-minute radio broadcast (with streamed video also) on national radio ZJB on their *MNT Heritage* programme, hosted by Mrs Delmaude Ryan, with Dr Mike Pienkowski, Mrs Carol Osborne (as an *Adopter*), Ms Ajhermae White and Mr Elvis Gerald (as the original Field Project Officers), Mr Chris Sealys (MNT senior conservation officer) and Mr Sandrae Thomas (MNT

youth officer).


This overviewed the *Adopt a Home for Wildlife* project and its origins, with some of the different roles explained. Mike outlined the origins of the project, which builds on part of a previous project looking to conserve native species by tackling invasives. He said there had originally been an exploration of the possibility of removing some invasives across the island but the constraints in respect of the restricted area made that impracticable at present. That project then developed what are now called *Adopters* and *Wildlife Homes* to create small virtual islands within the land area of Montserrat. Within these, invasives could be eliminated or managed, allowing native plants and animals to survive and

thrive. He said that a main theme among the outcomes is mutual learning, both as regards of *Adopters* but also the assistance to MNT in re-starting *Monty's Messengers* and initiating the higher education events.

UKOTCF's Ann Pienkowski had also set out to film and edit to produce one or more videos on each of the first round of *Wildlife Homes* and their *Adopters*. This has now been achieved with a total of 28 videos available at <https://www.ukotcf.org.uk/adoptahomeforwildlife/> (scroll down to below "Project Updates"). Videos from the pilot project and the interval before the start of the current project can be seen at <https://www.ukotcf.org.uk/key-projects/sos-montserrat/> and <https://www.ukotcf.org.uk/videos/>.

Montserrat Wildlife Home 01 Ventana: progress and lessons learnt.
Ventana was one of the sites in the pilot Adopt a Home for Wildlife project in 2017. In this 2024 video, Tim reflects on some of the lessons learnt, and showcases some remarkable achievements in restoring tropical dry forest. Videos run for 12min36.

Montserrat Wildlife Home 02 Belham River Mouth. This was one of the first sites to join *Adopt a Home for Wildlife* during the pilot project in 2017 (see <https://www.ukotcf.org.uk/videos/>). In the first 2 videos, from December 2022, Dwayne Hixon and project officer Ajhermae White describe the site and challenges. The third, from



A small section of the selection of videos at <https://www.ukotcf.org.uk/adoptahomeforwildlife/>

More Montserrat Moths, and More

By David K. Clements

I first visited Montserrat as an entomologist in 2022 to collect and document the insects and invertebrates, and that in 2023 I was subsequently able to visit the West Indian Beetle Fauna (WIBF) project at Montana State University (MSU) in the USA in order to identify and photograph examples of many of the island's species (see *Saving Our Special Nature of Montserrat* 13 & 16 – September 2022 & June 2024: <https://www.ukotcf.org.uk/newsletters/project-newsletter-1/>).

This work has resulted in the development of a baseline *Field Guide to the Insects and other Invertebrates of Montserrat* for use by conservation and environmental staff on the island, a project which is now nearing completion. My work on the island was made possible under the Darwin Plus grant DPLUS155, together with additional input from Buglife UK and the UK's Species Recovery Trust (SRT), and coordinated through the UK Overseas Territories Conservation Forum (UKOTCF). As the three-year DPLUS grant comes to an end, I was invited to return to Montserrat to carry out further fieldwork, particularly in regard to the moth fauna, and also to fill gaps in the *Field Guide* wherever possible. This I was very pleased to do and, as a result, I returned to the island for six weeks in July and August of 2024.

Work on the beetle (Coleoptera) fauna of Montserrat has proceeded

apace at the WIBF over the last 25 years or so, with over 730 species now being confirmed for the island by Prof. Mike Ivie and



A typical entomologist's pose – removing insects from the net at Upper Barzey's. Photo: Leigh Morris



Moth-trapping near the forest edge at the 7th Day Adventist Church on Mingo Hill. Photo: Chris Sealys.

his colleagues. Work on the larger moth ('macrolepidoptera') fauna has also progressed significantly in recent years, mainly thanks to past work by visiting specialists such as Matthew Barnes, Marc Botham, Steve Bird, the late Bernard Lalanne-Cassou and others, together with Montserrat resident Ajhermae White who has done so much to document both the fauna and flora of the island over the last few years. Indeed, Ajhermae's contribution has been so wide-ranging and significant that she has now become a co-author for the forthcoming *Field Guide*.

Arriving in mid-July, I immediately started trapping for moths at night, using light-traps brought over specially from the UK. In contrast with my previous visit where captured moths were only photographed, the intention this time was to collect actual specimens which can be subject to detailed laboratory investigation including, where necessary, by means of dissection and DNA analysis. The moth fauna of the West Indies contains many taxonomic and nomenclatural conundrums, and it is likely that a significant proportion of the species currently recognised from Montserrat are misidentified, represent unresolved species complexes or are, in several cases, completely undescribed species. Many of these 'hidden' species are likely to be endemic in nature, being confined either to Montserrat alone, or to Montserrat and few adjacent islands, or to some other subset component of the Windward Islands, Lesser Antilles or the wider West Indies region. Such endemic species are found nowhere else in the world and therefore represent a globally significant scientific resource, responsibility for the conservation of which rests with the authorities tasked with management and protection of the island's ecological treasures.

At a time when natural habitats are fast disappearing, on Montserrat as in every other part of the world, the need to research and document the biodiversity of the island has never been more urgent and yet the published literature for much of the less charismatic fauna of the island is scattered, obscure and difficult to find. The *Field Guide* project is therefore a first step towards the creation of an easily available and readily usable identification resource to these groups.

There is, however, still much work to be done, even in a group as well-known as the butterflies for example, where three species have been added to the known Montserrat fauna in just the last two years. These are the gray hairstreak *Ministrymon azia*, a cracker butterfly *Hamadryas* sp. and an as-yet unidentified member of the skipper family Hesperidae. The cracker butterflies, the precise identity of which has still to be established, are a large and conspicuous species. It seems rather unlikely that they have



A cracker butterfly, Hamadryas sp., recently found to be well-established at Garibaldi Hill. First found on Montserrat by Ajhermae White earlier this year. Photo: Ajhermae White

been overlooked in the past and it is therefore possible that they have only recently colonised the island, although they do tend to be a denizen of dense dry forest habitats and so may have escaped detection previously. Be that as it may, my most recent visit has shown this species to be well established in the dry forest around Garibaldi Hill, where at least a dozen individuals were seen over several weeks. The butterfly shows a distinctive and characteristic territorial behaviour in which males patrol an area of forest from one or more chosen lookout or 'master' trees. These are typically large trees standing on a trackside or in a clearing, in a pool of sunlight. The butterflies perch high up on the trunk, head down and with the wings spread out, hastening off to intercept any other butterfly which looks like it might be another of the same species. If it is a female, a mating is attempted; if it is a male, an aerial battle ensues. Since I was there quite late in the season, most of the individuals I saw had very battered wings as a result of these frequent aerial tussles.

The new skipper is also something of a mystery. It does not appear to be a species which has previously been recorded on Montserrat and yet it is quite common, both in the forests and in the scrubby grasslands of the island. It isn't yet clear whether this is actually an unrecorded species or just a very dark form of another species, possibly the yellow-tipped flasher *Telegonus anaphus*, which has a similar wing shape. If it is the latter then it is possibly a local form, perhaps one which is peculiar to Montserrat, as it is much darker and lacks any of the markings which the flasher normally exhibits.

The moth-trapping has also turned up a number of exciting new



Native dry forest at Garibaldi Hill, a special habitat of Montserrat which supports a number of localised and characteristic invertebrates. Photo: David Clements

species. Recent additions to the island fauna have included several of the large sphinx or hawkmoths (Sphingidae), as well as a number of smaller and less conspicuous species, such as the pretty crambid-moth *Dichogama innocua*. These will all be added to the emerging *Field Guide* in due course.



The moth *Dichogama innocua* found new to Montserrat from the moth-trap in Old Towne and elsewhere. Photo: David Clements

Another area where research has recently advanced concerns the large carpenter-bees which are known locally as ‘bumblebees’ (*Xylocopa* sp.). The large purple-blue females are a well-known sight on the island, and yet it is far from clear what their precise species name should be. Historically they have been referred to either as *Xylocopa caribea* or *X. mordax* – sometimes both – and yet it appears that the Montserrat species is neither of these, and may indeed be a wholly undescribed species. Recent work at the Oxford University Museum and at MSU indicate that the names *caribea* and *mordax* both, in fact, refer to the same species and that, whilst that species is widespread in the region, it is almost certainly not the species which occurs on Montserrat.

While on the island I have therefore been collecting specimens of the carpenter-bees for further research. Male carpenter-bees, which are actually tan-brown in colour and quite different in appearance to the females, do not appear to have been collected from Montserrat although one was photographed just this year at Lookout. The collection of male carpenter-bees was a primary objective of my visit, but unfortunately it looks as though I was too late in the season to actually see these myself this time – a good reason for coming back again in the future!

Other interesting finds include a rather pretty new bee-fly, two examples of which were found amongst the nests of Jack Spaniard wasps *Polistes crinitus* on the bottle-bank at Isle Bay. Many bee-flies are nest parasites of bees and wasps, but whether or not this bee-fly, which appears to be an *Anthrax* sp. or nearby, is actually associated with the Jack Spaniards is not known – it seems unlikely, since the wasps are common on the island and the fly is



A bee-fly, possibly an *Anthrax* sp., found new to the island at Isle Bay. Photo: David Clements



The tailless whip-scorpion *Phrynus goesii*, a ferocious predator of other invertebrates, found at Olveston Bridge. Photo: David Clements

quite conspicuous and therefore unlikely to have been overlooked until now.

There is little information available about the spiders of the island and, whilst this was not a primary objective of the present surveys, samples of the common spiders were collected alongside other invertebrates wherever they were found; these will be sent to a specialist at the Natural History Museum in London for identification. It was also possible to catch a specimen of the large tailless whip-scorpion (Amblypygidi) which occurs on the island, allowing it to be positively identified as the species *Phrynus goesii*. This species was found lurking in the so-called ‘puttock holes’ (timber post-holes) in the walls under the arch of the old Olveston Bridge, amongst members of a curious and so-far unidentified cave-cricket – one of two currently unnamed cave-cricket species found on Montserrat by the present surveys, the other being on the scrub-shaded undercliff at Isle Bay.

I became aware of the fauna at Olveston Bridge as a result of a field exercise which I carried out with MNT for a summer-school event during my most recent visit. About 40 junior school students and their teachers trooped down to the Nantes River by Olveston Bridge to watch me splashing about in chest-waders, in about 95° of heat, with a pond-net trying to catch aquatic invertebrates to show them. The returns were fairly modest: mostly some water-snails, freshwater shrimps and a few mayfly larvae, although we did also get a juvenile crayfish and saw a large aquatic leech and some dragonflies.

Other activities while I was on the island included the deployment of passive wildlife recording equipment which can be left out



The historic Olveston Bridge on the Nantes River – home to tailless whip-scorpions and cave-crickets (and bats!) in the crevices and gaps of the stonework. Photo: David Clements



Above: Hunting for aquatic invertebrates to show to 5-11-year-olds at the summer-school event held by Montserrat National Trust.

Photo: Sandrae Thomas

Below: The Vermillion Saddlebags dragonfly *Tramea abdominalis* seen on the Nantes River near Olveston Bridge. Photo: David Clements



unattended in the field to record the calls of animals such as birds, bats and other mammals, reptiles and frogs etc – and even invertebrates such as cicadas and crickets. Calls can be recorded over long periods of time and the files sent away to be identified and catalogued by AI-driven software operated by specialised wildlife-data analysis companies such as Wildlife Acoustics Ltd. I deployed also a trail-camera at several locations on the island, but all this seemed to record was me setting the camera out and collecting it back in again! This was probably my fault rather than the camera's, however, and it seems likely that such high-tech passive recording techniques will increasingly be a part of the ongoing research efforts being made to document and characterise the special habitats of the island.

Given the recent visit to the island by FERA-UK ant specialist Dr Noel Tawatao, only limited effort was made in finding ants this time around. The ants nevertheless found me! The red fire-ant *Solenopsis invicta* was first recorded on the island in 2022 from specimens which I collected on my previous visit, although clearly it must have been present for some considerable time before that. This painfully vindictive species, and the equally invasive tropical fire-ant *Solenopsis geminata*, are now to be found in many locations on the island and appear to be far more common than when I was here previously. Perhaps they are spreading as a result of climate-change? Certainly, 2024 is widely held to be one of the hottest years anyone on Montserrat can remember and, together with the early onset of the hurricane season, could suggest that the climate is changing on the island. If so, then other changes in the insect and invertebrate fauna can be expected, making the *Field Guide* project all the more timely. The arrival of the invasive



Looking for spiders at the Tropical Mansion Suites hotel, while being attacked by ants! Photo: Leigh Morris

Australasian hammerhead-worm *Bipalium vagum* on the island, a type of flatworm which preys on earthworms and other soil invertebrates, is another unwelcome example of a species which is spreading worldwide as a result of accidental human transfer aided by climate change: an example of this species was photographed on Lawyer's Mountain earlier this year.



The invasive Australasian hammerhead-worm *Bipalium vagum*, a horticultural pest, found on Lawyer's Mountain in 2024.

Photo: Veta Nicholas.

All-in-all, I will have collected well over 1,600 specimens of insects, arachnids, molluscs and other invertebrates during my latest visit, including over 400 moth specimens. These will be taken back to the UK for expert analysis and identification involving a range of helpful specialists. A first draft of the *Field Guide* should become available by the end of 2024 and, although its initial circulation will be confined to the conservation staff on the island due to copyright issues affecting some of the images used, it is hoped that a formally published book version will become available at some point in the future. For the moment, however, I must return to the wet and cold of the UK autumn with only memories of the sunshine and welcome of Montserrat to keep me warm until my next visit, whenever that may be. I hope it may be soon! In the meantime, my thanks especially to Chris Sealys of the Montserrat National Trust for his help in finding and exploring sites, and to everyone at both the MNT and at the Ministry of Agriculture, Lands, Housing & the Environment (MAHLE) on Montserrat, to the *Adopters* of *Wildlife Homes* and others allowing access to their land, and at UKOTCF, SRT and Buglife in the UK, for making my most recent visit possible.

Two spider species new to science found on Ascension

Danniella Sherwood, Yuri M. Marusik, Pedro Peñaherrera-R., Janella Calderón-C and Adam Sharp published in June in the journal *Arachnology* (19(8):1051-1054) a paper on “A new species of *Thallumetus* Simon, 1893, the first dictynid from Ascension Island (Araneae: Dictynidae).” This describes formally a new dictynid spider species with a highly modified male palpal patella and tibia, combined with a unique shape to the epigyne: *Thallumetus ascensionensis* sp. nov. The new species represents the first report of the family Dictynidae from Ascension and also the first Old World record of *Thallumetus*. The northernmost and southernmost limits of the family are briefly discussed.

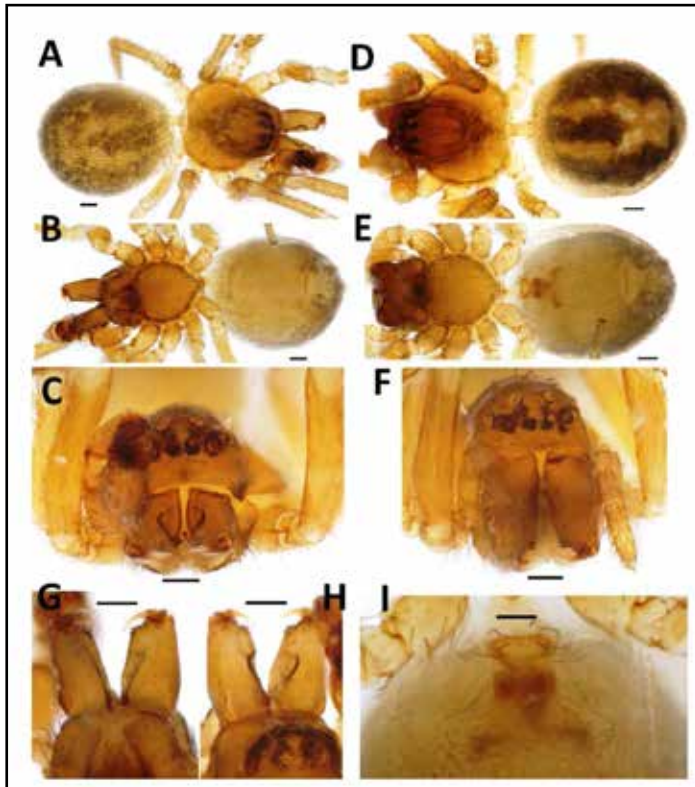


Fig. 1 from the *Thallumetus* paper: *Thallumetus ascensionensis* sp. nov. holotype male and paratype female (ASC F17 3 VB). A male habitus, dorsal view; B same, ventral view; C male eyes and chelicerae, frontal view; D female habitus, dorsal view; E same, ventral view; F female eyes and chelicerae, frontal view; G male chelicerae, ventral view; H same, dorsal view; I undissected epigyne, ventral view. Scale bars = 0.1 mm.

Also in 2024, Danniella Sherwood, Yuri M. Marusik, Adam Sharp and Vicky Wilkins published in *Arachnology* (19 (8), 1139–1142) “First record and new species of the hitherto American endemic genus *Hibana* Brescovit, 1991 from Ascension Island (Araneae: Anyphaenidae)”. This describes both sexes of a new species, *Hibana ascensionensis* sp. nov. of the genus *Hibana*, previously known only from the Americas. Hitherto, the family Anyphaenidae Bertkau, 1878 had not been recorded from Ascension Island, nor any other mid-Atlantic island. The new species is related to, but distinct from, *H. tenuis* (L. Koch, 1866) and *H. talmina* (Brescovit, 1991).

And a new species of centipede from the Chagos Archipelago

In a paper “New Chilopoda from the Chagos Archipelago” in the *Journal of Natural History*, 2024, Vol. 58, Nos. 41–44, pages 1885–1915, George Popovici, Gregory D. Edgecombe and Daniel W. Hall report recent results from British Indian Ocean Territory, including: “The Chagos Archipelago comprises 60 islands located at the southernmost end of the Laccadives-Maldives-Chagos Ridge in the Indian Ocean. Its formation is attributed to volcanic hotspot activity in the Late Cretaceous, representing the oldest section of the Laccadives-Maldives-Chagos Ridge. Despite this,

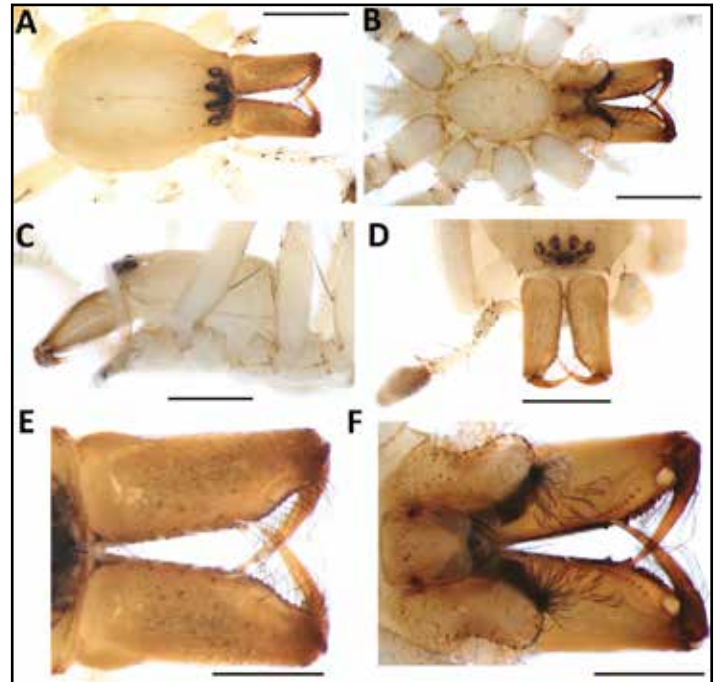


Fig. 1 from the *Hibana* paper: *Hibana ascensionensis* sp. nov., holotype male. A carapace and chelicerae, dorsal view; B labium, sternum, coxae, and chelicerae, ventral view; C carapace and chelicerae, lateral view; D chelicerae and eyes, frontal view; E chelicerae close-up, dorsal view; F same, ventral view. Scale bars = 1 mm (A–D), 0.5 mm (E–F).

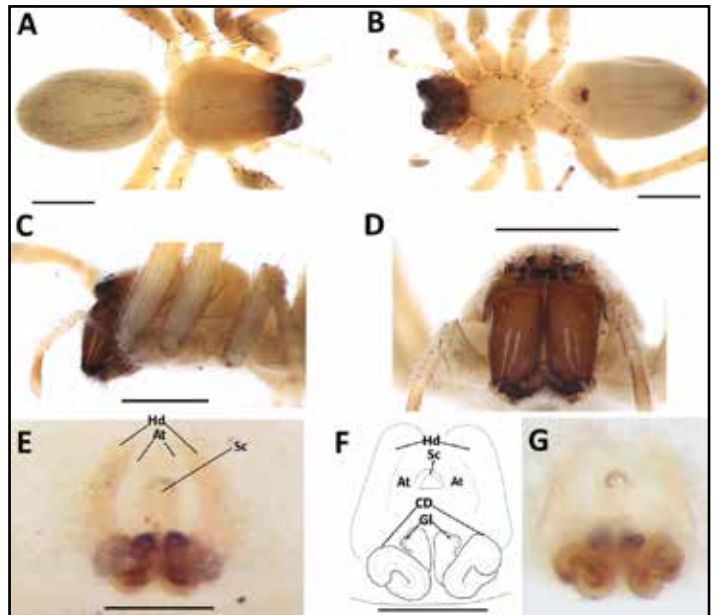


Fig. 3 from the *Hibana* paper: *Hibana ascensionensis* sp. nov., allotype female ASC G16 1 VB. A habitus, dorsal view; B same, ventral view; C carapace and chelicerae, lateral view; D chelicerae and eyes, frontal view; E epigyne (uncleared), ventral view; F illustration of endogyne, dorsal view; G photograph of endogyne, dorsal view. Scale bars = 1 mm (A–D), 0.5 mm (E–F).

the terrestrial sections of the archipelago are estimated to be much younger (ca. 6500 years BP), having emerged with the decline in sea-level following the Holocene sea-level high stand. The nearest landmasses include Addu atoll in the Maldives, located 600 km north of the archipelago, and the Seychelles and Mauritius, located 1700 and 1900 km to the west of the Chagos Archipelago, respectively. Diego Garcia atoll, with the largest dry land area (27.33 km²), supports an extensive arthropod community and has benefitted from broad surveys of its terrestrial fauna.

“Affinities of the Chagos arthropod fauna have been characterised as predominantly southern Indian, but with many putative introductions of species occurring throughout Australia and South and Southeast Asia. More recent surveys of Chagossian insects have identified several endemic subspecies and one endemic species of macrolepidoptera, *Stictoptera hironi*. The majority of insects recorded are, however, ascribed to widespread Indo-Australian or Oriental species, reinforcing the proposed similarity between the terrestrial arthropod fauna of the Chagos Archipelago and that of the southern Indian subcontinent.

“Previous surveys of the Chagos myriapod fauna only recorded the scolopendrid centipede *Rhysida longipes*, a widely distributed Pan-tropical species, likely recently introduced to many oceanic islands. New sampling of soil fauna from Diego

Garcia in 2022, comprising most of the material examined, has revealed a significantly more diverse centipede assemblage, increasing the number of recorded centipede species from one to five. Significantly, this includes the first records of the orders Geophilomorpha and Lithobiomorpha, the latter also represented by a new species of the Oriental-Australian genus *Australobius*, *A. chagosensis* sp. n., and additional records of *Rhysida longipes*. The examined specimens collected in 2022 are described, with remarks and illustrations provided for important diagnostic characters. We supplement these new data with records from material collected in 1971–1972, adding an additional two centipede species to the Chagos biota. Biogeographical considerations are given with regard to the origin and affinities of the Chagossian centipede fauna.”

Ascension Island human-shark research project

The Darwin funded human-shark wildlife conflict project on Ascension Island began officially in September 2022. This project is a collaboration between the Ascension Island Government Conservation and Fisheries Directorate (AIGCFD), University of Exeter, Zoological Society of London (ZSL), Plymouth University and the University of Windsor, researching the shark population around the island. The purpose of this project is aimed towards understanding the potential drivers behind the fluctuating numbers of sharks, in particular Galapagos sharks, into shallow coastal

waters around the island. When present in high abundance these sharks often cause conflict with fishers and diminished confidence of the local island population towards water-based activities. A major component of this research involved acoustically tagging sharks with Vemco V16 tags and monitoring the entire island with a very specifically deployed acoustic receiver array. The 31-receiver array has been deployed at various strategic depths to help understand the movements and habitat use in key locations around this very unique benthic structure and habitat.

Additional research is being carried out to collect morphological measurements and biological samples from each observed healthy animal. Samples include a small fin clip and blood sample to assist with understanding the short- and long-term food web dynamics using isotope analysis.

Collectively, the expertise from this collaboration endeavours to not only understand the movement data from multiple years of tracked animals, but also the effects from oceanographic patterns. Key locations have been selected for the deployment of thermistor temperature loggers and Aquadop current profilers (ADCPs), helping to validate theoretical current models around the island and contribute to the overall understanding of shark movements. In addition to the research carried out, the team is evaluating the feasibility and effectiveness of mitigation strategies to help protect beach goers with swimming enclosures and reduce the depredation on the local fishing. The aim is for the Darwin project to be completed by March 2025.

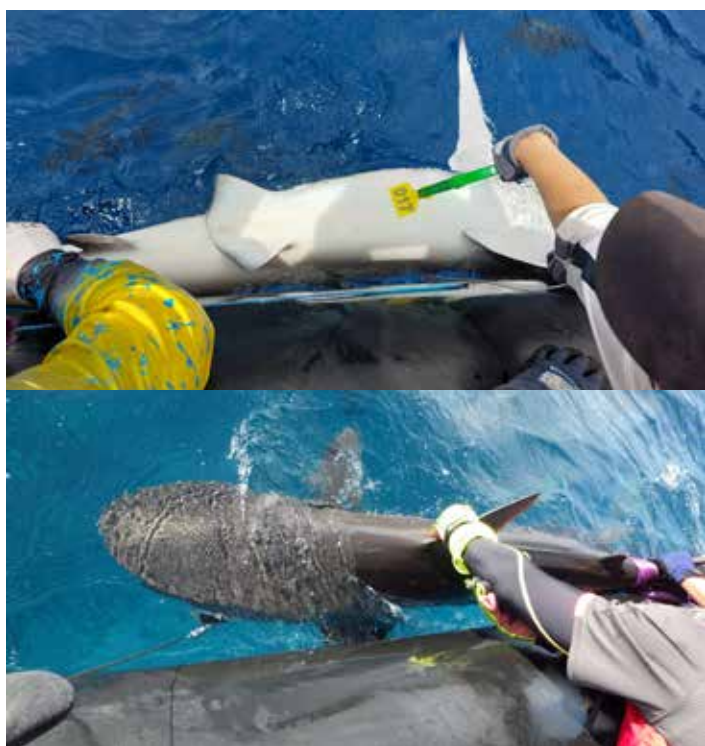


Fig. 1. Non-lethal shark sampling (All images: Ascension Island Government Conservation & Fisheries Department)

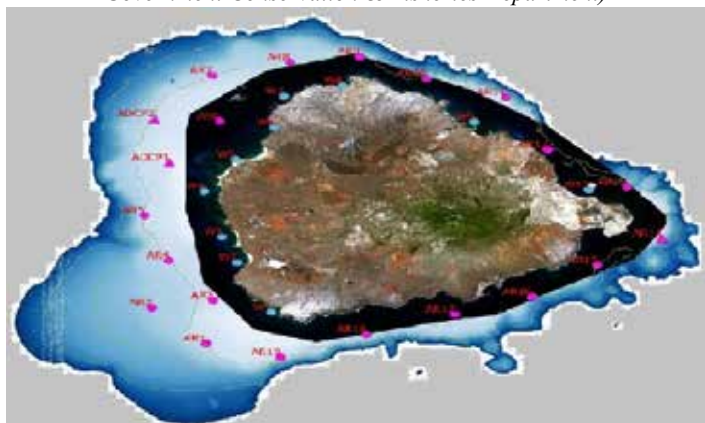


Fig. 2. Oceanographic and Acoustic receiver array around Ascension Island



Royal Naval Birdwatching Society – a UKOTCF Associate organisation

At almost 80 years old, the Royal Naval Birdwatching Society (RNBWS) is one of the world's oldest ornithological societies. It was launched by Admiralty Fleet Order in 1946 after application by a group of enthusiasts, including Lieutenant Commander (later Sir) Peter Scott and, since then, has had members worldwide amongst naval personnel, merchant mariners and interested civilians. Today it continues to pursue its original aims of raising awareness, supporting scientific research and the conservation of seabirds.



The Society also makes available a small number of grants per year, to support projects and conservation related activities, primarily relating to seabirds. Beneficiaries over the last year have included the South Georgia Pipit Project, Curlew Country project, and assisting in the conservation of Zino's Petrel.

New members are always welcome. Please do follow us on Facebook (Royal Naval Birdwatching Society), 'X' @RNBWSBirder or contact secretary@rnbws.org.uk to find out more.

History of the RNBWS

Peter Scott was only 2 years old when his father, Captain Robert Falcon Scott, died whilst returning from the South Pole in 1912. In a last letter to his widow, Peter's father advised her to "make the boy interested in natural history if you can; it is better than games." It clearly worked as soon after his wartime service in the Royal Naval Volunteer Reserve, he established the Severn Wildfowl Trust – which later became the Wildfowl and Wetlands Trust – at Slimbridge and the RNBWS was established in the same year. He subsequently became a celebrated conservationist, a founder of the Worldwide Fund for Nature (WWF) and even designed its panda logo. He may well have designed the original RNBWS logo too, but we can't be sure.

The Society's annual journal, *Sea Swallow* – a complete archive of which is available online (www.rnbws.org.uk) – reveals an interesting insight into attitudes in the naval service of the time. Early articles include: advice on photography: "Shutter speeds as high as 1/200s might be needed"!; a piece on manufacturing a hide from an old golf umbrella; and an illustrated contribution by Peter Scott on the study of wildfowl, in which he suggests that "Members of the RNBWS might be able to help by bringing back live ducks, geese or swans from overseas." Even then, this would have been a challenge for most Royal Navy personnel.

As well as Scott, another celebrated member – and the main driving force for the new society – was Captain Gerald Tuck. He was chairman for 30 years and the author, in 1978, of the definitive guide to *Seabirds of the World*. The book, dedicated to the RNBWS, was reprinted many times and may still be found on Amazon today. It is fascinating to imagine how much of the research for the book was conducted from the bridges of Royal Navy warships.

Science

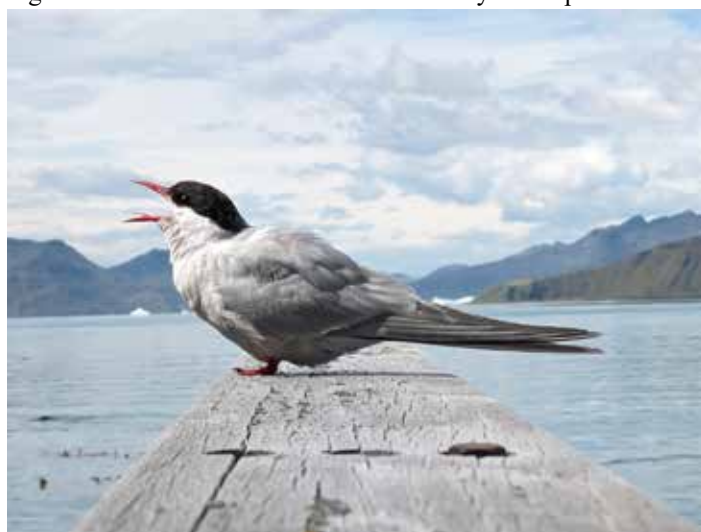
Gerald Tuck was not alone in studying birds from warships. Since the 1940s, the recording of seabirds from ships has been



RNBWS members at Portland May 2024. (All photos in this article: RNBWS)

encouraged by the Royal Navy, and the Society's role has been the collation, moderation, analysis and management of those records, along with those submitted from merchant ships and individuals. With over 70 years of records on their database, this is now an important resource, and accessible to all through application (email secretary@rnbws.org.uk). By their nature, warships frequently pass through waters away from normal shipping routes and this geographical spread makes the dataset distinctive. The unusually long timeline also makes the database valuable to those examining evidence of climate-change. The Society still promotes, encourages and assists in the recording of wildlife, but new shipborne observations and records are now managed by the United Kingdom Hydrographic Office (UKHO).

The Society supports also scientific research by making grants to individuals and organisations. In recent years these have included studies on Albatross feeding patterns in the South Atlantic, the tagging and tracking of Balearic Shearwaters in the Mediterranean and a survey of White-billed Divers in Scotland. The Society also enjoyed an extended relationship with Diego Garcia, conducting the first definitive survey of the birds of the Chagos Archipelago, and significant conservation activities. As a result, the RNBWS logo can still be seen on some of the territory's stamps.



Antarctic Tern. South Georgia, February 2024

Conservation

In the field of seabirds, science and conservation often overlap and the Society is proud to have supported a number of significant



*Above: Common Quail onboard HMS Scott in the mid-Atlantic.
Below: Eurasian Spoonbills onboard HMS Echo July 2013*



projects. Recently they have provided both funding and manpower to the rat-eradication programme on Ascension Island and to ambitious projects relocating petrels and albatrosses in the Chatham Islands (New Zealand). In this case, the populations are at risk as they only nest in one place, and the project aims to spread the nest-sites over several islands to increase the species' resilience.

A long-term commitment for the Society is to support the conservation effort for one of the world's rarest seabirds. Breeding only on the island of Madeira, Zino's Petrel has suffered dramatically from the impact of man and predation by human-introduced cats and rats, with the result that it has been pushed into nesting solely on cliffs at the very summit of the island, at an altitude of 1800m. For many years, Frank Zino, son of the naturalist who gave his name to the species and an RNBWS member, has worked every summer to count, net, ring and measure birds in order to drive a conservation programme with the Portuguese government. For almost a decade, the Society has supplied equipment and volunteers to help with this effort. It is challenging but rewarding work on narrow cliff paths at high altitude and in the dark. With fewer than 100 pairs in the world, it is the best attempt to save the species. Recent developments have included the use of thermal imaging equipment to record the seabirds as they fly high above the mountains at night. Footage obtained by the RNBWS is likely to have recorded never-before-seen behaviour of this species as they carry out elaborate and energetic pair-flying and courtship displays in the dark night skies.

So, after almost 80 years, the RNBWS continues to pursue the founders' aims of awareness, science and conservation. And in wider society, work like theirs is more mainstream than ever before. If there is a challenge, it is to make the link in people's



*Above: Female Kestrel onboard HMS Enterprise
Below: Turtle Dove onboard HMS Echo. Landbirds are regularly encountered onboard warships at sea, taking a well-deserved rest.*



minds about how the "citizen-science" of observation and record-gathering is an essential element of the conservation of the earth's biodiversity. Their part is to do this in the maritime sphere and to knock down the prejudice that sees birdwatching – for example from the bridge of a warship – as just a geeky hobby!

The RNBWS is open to anyone with a genuine interest in seabirds. Please have a look at their website, Facebook page or 'X' to find out more and perhaps look to join.



*Above: Thermal imagery of Zino's Petrels at night May 2023.
Below; Zino's Petrel at sea August 2024.*



The Blue Belt Programme

The *Blue Belt* Programme is the UK Government's marine conservation programme for UK Overseas Territories (UKOTs). Established in 2016, it supports the protection and sustainable management of UKOTs' marine environments. The programme currently works with the 10 UKOTs shown on the map. Together, this group of UKOTs is currently protecting over 4.4 million km² of marine environment across almost every major ocean.

populations. The data collected will inform ongoing management of these areas.

3. Managing human impacts

The *Blue Belt* Programme worked with the governments of Anguilla, Tristan da Cunha and Ascension to identify and minimise risks to the marine environment from pollution, including marine plastics. The team assisted also the governments of St Helena and the Turks and Caicos Islands to manage potential impacts from tourism interactions with marine wildlife.



New debris at Henderson. Photo: Pitcairn Islands Government

4. Assisting compliance and enforcement

Daily remote surveillance conducted by the *Blue Belt* Programme continued across the waters of all of the participating UKOTs to detect illegal fishing activity, analysing over 75 million km² of satellite imagery.

5. Capacity building and ocean literacy

The *Blue Belt* Programme continued to assist UKOTs in understanding and accessing long-term funding and finance to support marine management and sustainable island economies. Training was provided to UKOT personnel in a range of topics, including MPA management and fisheries enforcement. The funding has also supported local community events in Ascension and St Helena, raising awareness of the importance of protecting the islands' unique marine environments.



St Helena marine awareness week. Photo: St Helena Government

To find out more about *Blue Belt* Programme work, please see the *Blue Belt Programme Annual Update 2023/24* (https://assets.publishing.service.gov.uk/media/66c5c8bf6bd4274a15d76623/2655_CEFAS_Blue_Belt_Annual_Report_2024_160824_DIGITAL_ACCESSIBLE_v2_1_.pdf) or follow us on:

@UKGovBlueBelt; @ukgovBlueBelt; @bluebeltprogramme



The *Blue Belt* Programme provides a range of advice and technical assistance to the UKOTs, working across 5 themes. Some key highlights over the past year include:

1. Strengthening governance and management frameworks

The *Blue Belt* Programme assisted the Government of South Georgia and the South Sandwich Islands with the 5-year review of its Marine Protected Area (MPA). The review resulted in the no-take areas (i.e. where all fishing activity is prohibited) being expanded by 36% to cover nearly 450,000 km².

2. Understanding and protecting biodiversity



Whale dives.

Funding was provided for scientific expeditions to the remote islands of Ducie in the Pitcairn Islands and to Gough in Tristan da Cunha. The expedition to Ducie Island studied the important populations of nesting seabirds such as Murphy's petrel. The survey around Gough Island deployed Baited Remote Underwater Video Systems to investigate the fish and shark



TdC: shark at underwater video station



YAP



Open Letter: Youth of Cayman urge Parliamentarians to take action.

Dear Representatives of the Cayman Islands and United Kingdom Government,

We, the youth of Cayman, urgently call upon you to develop a comprehensive plan to prepare our islands for the imminent impacts of climate change. Time and time again, we have all been warned about the effects of climate change, yet virtually nothing has been done to strengthen our climate resilience. The climate crisis is no longer something that we can overlook; failing to prepare our economy is failing our children's future.

The purpose of this letter is not to oppose development on our islands but to advocate for sustainable, innovative, and responsible growth that we, as a country, can achieve. The residents of the Cayman Islands are still looking for a plan for developing climate-resilient infrastructure, diversifying our economy, or protecting our natural barriers of defence against strengthening storms. The truth is that without a clear strategy, the youth of Cayman feel lost in the hopelessness of our future. Twenty years ago, Hurricane Ivan devastated our island, livelihoods, and economy. Recovery took months, and the trauma remains. Facing such destruction every hurricane season is not a question of if but when. Science predicts this scenario will occur within our generation. Rising global temperatures lead to warmer ocean waters, which provide more energy for hurricanes, resulting in higher wind speeds and increased precipitation. The indispensable role of the Central Mangrove Wetlands as a buffer against storm surges and its function to protect biodiversity makes it invaluable in the defence against the climate crisis and global ecocide. The protection provided to our community by these wetlands is constantly undervalued, and with Hurricane Beryl emerging as the earliest high-intensity hurricane on record this year, the protection of our mangrove ecosystems is critical. We call on you to take necessary actions to protect our children, economy, mangroves, coasts, heritage, and futures in our beloved Isles. No amount of promise will ensure our security without action. Our Government must adhere to the Constitution under Section 18 to "secure ecologically sustainable development and use of natural resources."

It is only right that the voices of the youth are heard and included in the decision-making process. The significant infrastructural choices made today will have long-lasting impacts on our environment and economy, shaping the island we will inherit. Integrating climate awareness in schools and universities will build community resilience by providing essential information on climate risks, adaptation options, and disaster preparedness. In other British Overseas Territories, such as Gibraltar, climate education is compulsory in the curriculum and implemented as a necessity through legislation. Raising awareness of our vulnerabilities to climate change and correcting misinformation is imperative to empowering the local populace. Enhancing education programs is essential to brace our livelihoods for the impacts of the climate crisis.

Under the United Nations Convention on Biological Diversity, the Cayman Islands signed on under the United Kingdom in 2009 for a Biodiversity Action Plan. The 2020 targets were classified as "little progress" or "no progress" due to "weak legislation" and mismanagement of the Environmental Management Fund. The Cayman Islands significantly contribute to the UK's biodiversity, and yet, this richness is continuously threatened by unsustainable overdevelopment. Our legislation must be strengthened, and any plans to develop which threaten biodiversity hotspots must be placed through a thorough Environmental Impact Assessment

(EIA). EIAs are necessary for making informed decisions. Making them a necessary process by law can ensure that Cayman develops sustainably, combining anthropocentric and ecocentric mindsets within our local Government.

Many small island nations are already experiencing the detriments of being low-lying, with the numbers continuing to grow—the foreseen effects of climate change on the Caribbean point to an unpredictable exposure to our national security. As the UK holds inherent liability for climate disasters, it is, therefore, the role of their Government to ensure that its Overseas Territories are making sound climate decisions. The British National Security Strategy's consciousness surrounding climate change and its potential effects across a plethora of factors is a big part of making Britain more resilient. This awareness should be appointed throughout the public and private sectors to ensure sound climate decisions are being made throughout different aspects of the Caymanian socio-economy. We have reached a point in our history where business cannot go on as usual, and now, more than ever, we need the governance of the Sovereign to guide us to a secure, survivable future. The cost of rebuilding Cayman repeatedly is far greater than that of investing in our future resiliency now.

Our financial security enabled our ministers and Premier to aid neighbouring islands after Hurricane Beryl, highlighting our potential to lead the Caribbean in sustainability. To harness this potential, diversifying our economy is crucial. Our heavy dependence on fossil fuels for energy and our economy's reliance on the tourism industry make us vulnerable to climate-related disruptions. In order to enhance our stability in the face of climate change, we must adopt forward-thinking policies. Following the example of the plans detailed in the Labour Government Manifesto intensified efforts and decisive actions are necessary to meet the targets laid out in our National Energy Policy. Evidence from other Caribbean islands, like Barbados, demonstrates that diversification into renewable energy is feasible and beneficial. Securing households' and businesses' energy supplies to be resilient in the aftermath of climate disasters is vital to softening the negative impacts on our livelihoods and economy.

The urgency of addressing climate change cannot be overstated. Immediate action is essential to ensure a sustainable and resilient future for the Cayman Islands. The decisions made today will profoundly impact our environment and economy, safeguarding them for future generations. Government officials, the time to act is now! Prioritise sustainable development and community protection. Every choice you make today shapes the future we will inherit.

We urge our government to take charge in bringing a future that the youth of the Cayman Islands envision, to a reality. Through the empowerment of the United Kingdom, our voices and concerns may influence the government of its Overseas Territory to become leaders of environmental guardianship in the Caribbean region.

We, the future, are pleading with you to take bold, decisive steps to secure a thriving, resilient, and sustainable Cayman for us all. This is our future you are defining. Your actions will determine whether we face a future fraught with climate disasters or one where we can live in harmony with our environment. Make the choice that history will remember kindly. Protect our islands, protect our people, and build a legacy of sustainability and resilience that we can all be proud of. The time is now—our tomorrow depends on it.

Sincerely,

Those that face the consequences tomorrow of your inaction today

Speaker Hoyle explores Blue Iguana Conservation

Speaker of the UK Parliament House of Commons, Sir Lindsay Hoyle, visited the Cayman Islands in summer 2024, with a keen interest in learning more about Cayman's natural environment. Members of the Department of Environment (DoE) senior



Views of the visit. Photos: Cayman Islands Department of Environment

management team, accompanied Speaker Hoyle and Cayman Islands Speaker of the House Hon Sir Alden McLaughlin, to provide some of the scientific background to a number of key environmental sites including the Blue Iguana Conservation facility at Queen Elizabeth II Botanic Park.

DoE Terrestrial Resources Unit Manager, Fred Burton, who pioneered the *Blue Iguana Conservation Programme* (now funded and managed by the National Trust for the Cayman Islands) gave a robust account of the plight of Cayman's Blues which exist only in Grand Cayman and nowhere else in the world. He explained how, although the recovery from just a dozen Blue Iguanas in the

early 1990s to the thousand and more bred and released to date is considered a national conservation success, evidence has shown first-generation hatchlings born in the wild have failed to survive due to human-introduced invasive predators such as roaming, unowned feral cats living deep in the dry forests of East End. The accelerating loss of the native habitat of Grand Cayman's iconic iguana which naturally ranges across hundreds of acres, is another threat to the species' survival despite the best efforts a breeding program can provide.

Cayman Islands Department of Environment #CaymanBlueIguana; #CaymanConservation; #ProtectWhatYouLove

The Nautilus Project – new UKOTCF Associate organisation

The Nautilus Project (TNP), established in 2016, is the main marine conservation charity in Gibraltar. The non-governmental organisation has achieved several important milestones since its inception. These include (but are not limited to):

Habitat restoration: Regenerating lost seagrass beds

TNP actively contributes to the restoration of *Posedonia* seagrass beds in the waters surrounding Gibraltar. These important marine plants serve as new habitats for marine organisms including the iconic seahorse. By strategically placing them on the east side away from bunkering, the project aims to promote biodiversity and bolster fish populations. These important habitats offer shelter, breeding grounds, and feeding areas, mitigating the impact of overfishing, habitat loss and climate change.

Beach Cleanups: Tackling Plastic Pollution Head-On

Since 2017, TNP has orchestrated over 119 beach cleanups along Gibraltar's picturesque coastline. Volunteers, armed with determination and eco-friendly buckets, comb the shores for plastic debris. Their tireless efforts have resulted in the removal of more than 9 tonnes of plastic waste. By preventing plastic from entering the marine environment, they safeguard marine animals and preserve the natural beauty of the coast.

Empowering Citizen Scientists

The project champions a citizen science platform called NEMO (Nautilus Environmental Monitoring Online), inviting the community to actively participate in marine monitoring. Everyday people become environmental detectives, recording important sightings of marine life. From invasive species to endangered ones, every observation matters.

By involving citizens, TNP contributes valuable data to ongoing research and conservation efforts.

Education: Nurturing Stewards of the Sea

Education lies at the heart of TNP. Through workshops, engaging talks, and interactive sessions, they raise awareness about the delicate balance of marine ecosystems. Schoolchildren and adults alike learn about the importance of protecting our oceans. Armed with knowledge, they become stewards of the sea, advocating for sustainable practices and inspiring positive change.



This article and the two following, like those on pages 1-8, are the result of major work in Montserrat in summer 2024. Those on pages 1-8 concerned mainly project DPLUS155 (Adopt a Home for Wildlife), whilst the ones below relate mainly to project DPLUS192 (Biodiversity Toolkit), but some include aspects of DPLUS155 too.

Montserrat Lepidoptera surveys 22nd June to 6th July 2024

By Marc Botham

I was lucky enough to visit Montserrat this year as part of the Defra-supported DarwinPlus-192 project *Delivering biodiversity and human well-being gains for Montserrat's sustainable development*. During the trip I focused recording on Lepidoptera (butterflies and moths) although I did record other taxa on a fairly *ad hoc* basis using the citizen-science recording tool, iNaturalist. For butterflies I would spend 1-3 hours on most days of my visit trying to identify what species I saw and trying to get photographs to help both with identification and for the butterfly guide being developed as part of the *Adopt a Home for Wildlife* project. Due to the high activity of the butterflies in the heat at this time of year, getting photographs proved very difficult. For moths, I ran a LepiLED light with a net-trap on all but the last night of my stay on the veranda of the accommodation at Woodlands. On two nights I trapped in the forest at the start of the Cassava Trail with a fellow ecologist who was also visiting the island at the same time, Wolfgang Rabitsch. The following is a brief summary of the observations I made on butterflies and moths during my short stay.

Butterflies

In total, I saw at least twenty-five species out of around 50 species present on Montserrat, although some of these are awaiting confirmation of identification, and this total is likely to change. This includes at least one species that has not yet been recorded on Montserrat, Gray Ministreak *Ministrymon azia*. Due to the weather, unfortunately I spent very little time in the forest. Locations where I did manage to visit for butterflies included: Jack Boy Hill (road verges leading to observation point), The Cot Trail (including verges around National Trust), Old Towne (road down to Old Road Bay alongside Belham River), Cassava Trail (limited to first 100m of trail) and Lawyers Mountain (first 100m of the Fogarty Trail). Generally, most observations were made around the accommodation in Woodlands, especially for moths.

I benefitted greatly from the flowering of the Noni at this time of



Garden habitat at Woodlands accommodation. Below: Gray Ministreak *Ministrymon azia* – Woodlands June 2024 – new species to Montserrat, attracted to LED light trap. (All photos in this article: Marc Botham)



A selection of some of the butterflies observed feeding on Noni

year, which was very attractive to many butterflies (and many other insects) and we had one in the garden of our accommodation in Woodlands. I could sit and watch this and record easily several species in a few minutes. I found also that, when I was out in forest at night, there were lots of butterflies roosting and easy to see with a head-torch. These included large numbers of Straight-line Sulphur *Rhabdodryas trite* and the only Ruddy Dagger-wings *Marpesia petreus* I saw (three within a foot [30 cm] of each other). This could provide an alternative method for recording butterflies although, like all methods, it is probably limited to a sub-set of species with many species perhaps unlikely to be detected using this method.

The following provides more detailed information on my butterfly observations:

Hesperiidae: I regularly encountered probably two or possibly more species of Long-tailed Skipper, both of which were common, occasionally the Violet-banded Skipper *Nyctelius nyctelius*, many of a golden skipper I am not sure of identity of, as they looked more like Fiery Broken-dash *Polites ophites* than Southern Broken-dash (and someone on iNaturalist has identified one as genus *Choranthus* which also looks incredibly similar), a single Fiery Skipper *Hylephila phyleus* and either one of/both of Manuel's or Hammock Skipper *Polygonus* sp (difficult to tell apart and there may also be other similar species). Looking at some of Dan Janzen's work on tropical skippers, it seems many of these species are incredibly difficult or impossible to tell apart from external morphological features and there are lots of cryptic species that require genitalia determination or DNA analysis. Long-tailed Skippers *Urbanus* sp were common across the island;



Tropical Chequered Skipper, female left and male right – a common species in open flowery habitats

most of which are likely to have been *Urbanus dorantes* but, like the *Polygonus* genus, species of the *Urbanus* genus are numerous and difficult to distinguish from one another. The species of golden skipper I observed frequently, which I am currently considering to be Fiery Broken-dash, was also common across the island in open habitats, but the other species were much less commonly encountered. The commonest skipper species I encountered was Tropical Chequered Skipper *Burnsius oileus*. I saw this species in all open habitats where it was especially fond of Tridax Daisy (generally an excellent nectar plant for butterflies).

Nymphalidae: Zebra Long-wing *Heliconius charithonia* – I saw



Ruddy Daggerwing – observed roosting in forest at night (left) and during daylight the following morning (right).

this species in most places I went around forest-edges and in the forest, but never got close enough to photograph one. They never seemed to stay still and would just disappear into the forest. Most of my observations were of single individuals, with only one occasion when I saw more than one together. I saw no more than ten individuals during my two weeks, but I spent little time in the habitats this species was most frequently seen. Southern Red Rim *Biblis hyperia* seemed to be quite common in some areas. On the Cot Trail for example, I saw five or six in the first 100m. I saw a few around Jack Boy Hill, as well as in other places too. I saw only one fleeting pass-by of Ruddy Dagger-wing during my butterfly surveys but managed to find three individuals roosting, all within 30 cm of one another, at the start of Cassava Trail while I was setting up moth traps there. Either because I disturbed them, or because they were genuinely attracted to the nearby light source like quite a few butterfly species during my trip, one of these was attracted to the LepiLED light we ran in the forest.

I observed Gulf Fritillary *Dione vanillae* relatively frequently but always as singletons and always on the move – with the exception of two. One was in the garden at Woodlands; this spent long periods of time nectaring on planted composites. The other individual I found had recently emerged and therefore actually provided me an opportunity for photographs. Although I cannot be 100% sure, but am fairly confident, I saw one Julia Dryad *Dryas julia* at Woodlands, but this was the only one. The reason I can't be 100% is because it was over 50m away and I didn't have my binoculars on me, but this is fairly easily distinguishable species and unlikely to be confused with other species other than perhaps Gulf Fritillary. White Peacock *Anartia jatrophae* seemed fairly common and widespread in open flowery habitats. Tropical Buckeye *Junonia lavinia* was the first butterfly I encountered on arrival, at the airport. I saw these in several locations but never in huge numbers and always in fairly dry, grassy/scrubby habitats.



Gulf Fritillary Dione vanillae – this individual was found recently emerged in track-side vegetation at Woodlands



Great Southern White – common, and abundant in some places, throughout Montserrat

Pieridae: Great Southern White *Ascia monuste* was fairly numerous at the Noni, but the greatest numbers were along road verges where there were tall reed-like grasses growing; here there would be literally dozens and dozens forming small clouds of butterflies disturbed as we drove past. Tropical White *Appias drusilla* was seen less frequently but small numbers visited Noni and this was another species easily found roosting in the forest. Banded Yellow *Eruema elathea* – I saw quite a few of these and probably under-recorded them, as I noted only those with an obvious band and often relied on catching them first. Seen with confidence on The Cot Trail, and near the reserve, but I am fairly sure I saw this species in other areas too, especially individuals without strong banding. In these case, individuals had clearly yellowish forewings and white hindwings – which I had presumed always to be Pale Yellow *Pyrisitia venusta*. Little Yellow *Eurema lisa* and Pale Yellow I encountered in most open habitats and found roosting in the forest edge. I found these hard at first to separate without catching – and, to my knowledge, from those caught, I never encountered Dina Yellow *Pyrisitia dina* which is supposed to be widespread too. This may be a consequence of not spending so much time in forested habitat and/or a seasonal appearance of this species. Cloudless Sulphur *Phoebis sennae* seemed to be fairly common everywhere I surveyed. I had to catch these to see what they were – which was difficult as this is a very active and strong-flying species rarely settling long enough to see properly. Straight-lined Sulphur, as mentioned above, took me a while to find and then suddenly seemed to be found fairly



Cramer's Scrub Hairstreak Strymon bubastus seen on the road verges outside the National Trust

frequently in most places including good numbers in the forest, again suggesting some seasonality.

Lycaneidae: Angerona Hairstreak *Electrostrymon angerona* seemed to be abundant in all habitats and came to light frequently. It was incredibly numerous on the Noni, often with several per flower and many sitting on nearby leaves, and I found many roosting in the forest when trapping there. Hanno Blue *Hemiargus hanno*, along with Angerona Hairstreak, was the commonest butterfly I saw. This species seemed to be relatively abundant in all open habitats and often in good numbers where it would often be seen nectaring at Tridax Daisy *Tridax procumbens* in particular. This was the only 'blue' I recorded. Cramer's Scrub Hairstreaks *Strymon bubastus* were seen on the verge outside the National Trust where there were three individuals nectaring on *Sida* spp; a female appeared to be testing the plant for oviposition although I did not observe any eggs actually being laid and could not find any on further inspection. This species was also observed near the observatory at Jack Boy Hill nectaring on Tridax Daisy. At the same site, a single Caribbean Scrub Hairstreak *Strymon acis* was observed nectaring on Yellow Balsam *Croton flavens*. Finally, as noted above, a Gray Ministreak, not recorded before on Montserrat, was attracted to the LED light I was running at Woodlands residence.

Moths

There are around 173 species of moth on Montserrat. I became familiar quickly with two moths: *Eulepidotis addens* and



Eulepidotis species (modestula above and addens below) were abundant, often disturbed in large numbers by day, especially in forest habitat, and frequent in large numbers around the light traps.



E.modestula. This was because, by day, they were disturbed from vegetation easily almost everywhere I went. This was especially so in the forest where they were often in very large numbers. They also came in large numbers to light at Woodlands, with dozens and



Black Witch moth: regularly seen on forest trails by day and finally captured at light on the final night of surveys.

dozens on surrounding furniture, ceiling, vegetation etc, although very few actually entered the trap. Similarly, when trapping in the forest with a light over a sheet, I observed only a handful of these two species on the sheet despite seeing large numbers during the day. They were easily seen and disturbed from vegetation walking around with a head-torch, numbers far outweighing those in and around the light traps.

Another species seen regularly by day was the Black Witch *Ascalapha odorata*. I encountered this moth on most occasions that I managed to survey in more forested habitats. However, rather frustratingly, I could never get near enough for a photograph or to catch it, until individuals finally appeared to light traps at the end of the trip. I found remains of one in Angelos supermarket in Cudjoehead and had one fly by the trap at Woodlands. Until the very last night, I had not trapped one to light at all. Individuals seen by day included at The Cot, Lawyers Mountain and Cassava Trail. On the last night of trapping, a total of three came to lights, one in the forest at the start of the Cassava Trail (to LepiLED) and two at Woodlands accommodation (to a 125W MV light source).

Moth traps were generally busy, but notably most busy after approximately 11pm, with much reduced activity before that except when it rained – which greatly increased nocturnal insect activity. As is well known, clear night skies and high levels of moonlight have a large negative impact on moth-trap catches through a combination of cooler temperatures and less effectiveness of an artificial light source under higher levels of natural background light. Each night for thirteen nights between 22nd June and 5th July 2024, a light trap was run at the Woodlands accommodation. It was placed on the upper veranda, under cover from rain. Whilst this inevitably impeded the full extent to which the light could be seen and therefore limit its attractive radius, it did rain most nights and therefore this was necessary to prevent damage to the equipment. On most nights a single LepiLED light, with a net-trap hung 1m above floor level, was left out overnight. On two nights, when Wolfgang Rabitsch and I ran light traps in the forest at the start of

the Cassava Trail, a 20W Compact Fluorescent actinic light with a small net-trap was used instead. On the final night of trapping at Woodlands, a 125W MV light was used, again with a small net-trap with a white sheet placed behind; this was run only until 1am because of an emergence of the winged stage of an ant species which resulted in thousands of ants being attracted to the light source. To document the moths I spent between two and three hours each morning photographing moths, trying to get photos of all the different species.

In addition to the trapping at the accommodation, two LepiLED lights were operated at the start of the Cassava Trail on two nights – one hung from a tree with a net-trap, the other hung over a white sheet. These traps were run until between midnight and 1am.

Photographs were taken of the moths, and other insects, on the night. These photographs, of which I have over three thousand, will all be uploaded on to iNaturalist and identified to the highest level possible using a combination of a provisional list kindly provided to me by a leading expert on Caribbean moths, Matthew Barnes, a provisional guide put together by Matthew, David Clements, Ajhermae White and Vicky Wilkins, based on material collected by David as part of the *Adopt a Home for Wildlife* project, and various websites documenting moths of North, Central and South America and the Caribbean Islands.

At this point it is difficult to estimate how many species were recorded but I expect it to be well over a hundred, and more likely between 150 and 200, although many are unlikely to be determinable to species level. Already, this includes a good number of species not previously recorded on Montserrat based on the material currently available, although moth surveys have been run by Montana State University, Montana, and so lists from these surveys may well contain at least some of these species. Currently, as of 8th August 2024, having uploaded over 800 images, identifications to some level have been made for over 120 different species of moth from the trip. You can see all my iNaturalist observations at https://www.inaturalist.org/observations?place_id=10304&subview=table&user_id=msbotham.



A small selection of some of the moths caught during light surveys between 22nd June and 5th July 2024. From left to right, top to bottom current identifications, some of which are still awaiting confirmation so may not be correct (= species likely to be new records for Montserrat): Synclera jarbusalis*, Perasia garnoti, Cydosia nobilitella, Pheia daphaena*, Synchlora sp., Callopietria floridensis, Agathodes designalis, Xylophanes pluto, Epimecis detexta*, Pheia haemapleura*, Protambulyx strigilis, Gonodonta sp (possibly nitidimacula*), Streptopalpia minusculalis*, Anticarsia gemmatalis, Rhuda focula**

They stink and suck!

By Wolfgang Rabitsch

The true bugs, or Heteroptera, are a fascinating and very diverse group of insects with more than 40,000 described species worldwide. They come in very different body-shapes, life-styles and colours. So far, there has been no comprehensive list of the true bugs of Montserrat and my plan is to write up one. This requires going out in the field looking for them. They can be found on plants, on the ground, in the litter, but also in ponds and brooks as the group includes aquatic species. Different techniques are required to find them. You can look at the plants directly or hunt them on the ground by visual inspections, but it is more efficient to use a sweeping net and beating tray. Care is necessary when sweeping or beating thorny or sticky plants for the sake of the equipment and your own safety. Some true bugs are nocturnal and attracted to light and, while this is not as spectacular as for the moths in terms of numbers and diversity, it is sometimes the only technique to find particular species. The same is true for other specialist species, living in the leaf-litter or high up in the usually unreachable canopies of trees. For the aquatic species, you need a pond-net to collect them from standing or running waters, although some aquatic species come to light as well. True bugs are the only insects that have conquered marine habitats, with a few species of water-striders living on the open sea, in mangroves and coastal habitats.

Producing a list of true bugs of a certain area therefore requires applying different techniques in different habitats and, because species are present only during some times of the year, you have to go and find them at different times of the year. The scientific identification of the species can be a time-consuming task. While



Zelus longipes, the milkweed assassin bug, is a generalist predator feeding on other insects. (All photos in this article by Wolfgang Rabitsch)



some species are easy to identify in the field or on pictures, for others you need a hand-lens or microscope and, for some, you have to study internal anatomical structures. The easy identification of some species on pictures means that platforms such as iNaturalist can help and provide useful data of the occurrence and distribution of these species. For the more difficult ones, comparison with previously collected material in adjacent areas of the Caribbean in museum collections is necessary. Considering the geological history of Montserrat, despite its relative proximity to other islands, it is likely that there are endemic species of true bugs that do not occur anywhere else on the planet.

Heteroptera is Greek and means “different wings”, describing a characteristic feature of the forewing, having both a membranous and a hardened portion, which helps (among other things) separating true bugs from other insects. Contrary to beetles or butterflies, and similar to e.g. grasshoppers, they go through consecutive (usually five) larval stages that look similar to adults, but lack the wings and reproductive organs. Some true bugs are very small (< 1 mm) and some are quite large (the so-called giant water-bugs can reach up to 10 cm in body size).

All true bugs suck food through their straw-like mouthparts, so they can only live on liquid food. Most species feed on plants, sometimes with a preference for specific plant species or family; some are predators feeding on other insects; and there are species that suck on fungi and a very few species suck on blood, such as the infamous bed-bugs feeding on us (other members of this family feed on bats or birds), and kissing bugs, who can transmit diseases (but are not present on Montserrat). While some of the



Tetyra pinguis belongs to the Jewel bug family (Scutelleridae) and comes in different colour varieties. This reddish one is less often seen.



A larva of *Arvelius albopunctatus*, the tomato stink bug. It feeds on different nightshade species, including tomato, beans, pepper and eggplant.



Pseudacysta perseae, the Avocado lace bug, is only 2 mm in body size. It can cause damage to avocado leaves, often caused by subsequent fungal infections.

plant-feeders – such as the introduced black bean bug – can be pests in gardens and orchards, some of the predatory species are beneficial by keeping under control other plant pests, including aphids, scales and thrips.

Most true bugs can produce odours from specific glands for protection against predators, and most people would say they stink. I consider the smell not particularly unpleasant (although I might be biased), and indeed they have been used as perfume substitutes in Europe in the 18th century. Also, some aquatic bugs



The Saint Andrew's cotton stainer *Dysdercus andreae* feeds on the Portia tree *Thespesia populnea*. It can be found abundantly on Woodlands beach.

are still being used to spice up certain dishes in Asia and Central America today, giving a corianderish flavour.

This was my second visit to Montserrat searching for true bugs and, beside the sometimes strenuous field work and the complex process of identifying the species, it is an absolute pleasure and privilege to do this in such a fascinating and beautiful place and I cannot wait coming back and exploring more of Montserrat (and its true bugs)!

Reviving Montserrat's botanical heritage: Montserrat National Trust's effort to restore the National Herbarium

By Sofie Meeus and Quentin Groom

The Montserrat National Trust has taken a leading role in an important initiative to restore and revitalize the island's National Herbarium, an essential resource for preserving Montserrat's botanical heritage. The Trust's work is central to this effort, driving a resurgence in the herbarium's significance through key projects like *From Blue Iguanas to Blue Vervain* and the DPLUS192 project *Biodiversity Toolkit*.

The Montserrat National Trust recognized the need to preserve the island's rich botanical legacy, and this vision catalysed a partnership with Meise Botanic Garden in Belgium. Meise's extensive herbarium, with over 4 million specimens, provided a model and partner for Montserrat. Botanists Quentin Groom and Sofie Meeus joined the Trust in their mission to establish a reference collection of medicinal plants, integral to the use of traditional herbal medicines. This initiative aimed to ensure that the knowledge passed down through generations would not be lost but instead preserved and accessible.

From the outset, the Montserrat National Trust played a pivotal role, facilitating training in herbarium management and specimen mounting. However, a crucial component was missing—a specialised metal cabinet necessary to protect the dried plant specimens from insects and deterioration. Recognizing the importance of this cabinet, the Trust worked with its partners to overcome this challenge.

The breakthrough came when the International Association for Plant Taxonomy (IAPT) announced funding opportunities for botanical projects. The Montserrat National Trust, with the support of Meise Botanic Garden and the Royal Botanic Gardens, Kew, successfully applied for a grant to secure the cabinet. Despite the logistical difficulties, the cabinet arrived on the island earlier this year, marking a significant step forward.

In July, the Trust once again collaborated with the Meise team, who returned to the island to assist in the critical work of cataloguing and properly storing the herbarium's collections. This included specimens collected by Richard Howard in the 1970s, a key figure in Caribbean botany, as well as specimens that had been held in storage for nearly two decades. The Trust's dedication to

this project ensures that these valuable collections are available for future generations.

The Montserrat National Trust's leadership in this endeavour has been instrumental in not only reviving the herbarium but also in making it a recognized part



Quentin Groom and Chris Sealys at the special herbarium in a room air conditioned to protect the plant material. But a herbarium is more than a cabinet. Each folder is the result of much careful work, as outlined in this article. (All photos: Sofie Meeus and Quentin Groom)



Some of the team and their specimens at one of the workshops on herbarium techniques



Chris Sealys and Sofie Meeus oversee a group of enthusiastic children learning hands-on about plants and herbaria.

of the global botanical community. The herbarium has now been officially registered in the Index Herbariorum, joining a network of scientific collections that enables researchers worldwide to access and reference Montserrat's botanical specimens.

This project exemplifies the Trust's commitment to safeguarding Montserrat's natural heritage. Through careful management, the Trust is not just preserving the island's past but also laying the groundwork for future research and conservation efforts. The revival of the Montserrat National Herbarium is a testament to what can be achieved when local leadership, international collaboration, and a deep respect for tradition come together.



Hard work in the workshop – but fun too!

Montserrat EcoPlay

Donations to fund the EcoPlay building to provide a base for environmental and other activities for young people in Montserrat are going well but more are needed. UKOTCF continues to assist by providing a route for donations. Whilst donations from Montserrat can be paid directly to MNT, this is difficult for payments from overseas. Accordingly these can be made via UKOTCF's website, where contributions can still be received via PayPal at <https://www.ukotcf.org.uk/eco-play-montserrat/>.

Pro-bono architect's (Dennis Sharp Architects) impression of the completed EcoPlay building, horticultural practice area and surrounding natural area.



Special offer on UKOTCF-published book on major conservation success.

From 12th November to the end of December, UKOTCF is again offering a discount on *When the kite builds... WHY and HOW we restored Red Kites across Britain*, by our Chairman, Dr Mike Pienkowski. The price from www.ukotcf.org.uk/kite-book/ is £24.95 + P&P (a £5 discount). All proceeds go to UKOTCF's charitable work.

As one independent reviewer said: "This is a comprehensive account of the science behind the reintroduction of the Red Kite to England and Scotland, but written with very gentle humour, and so easy to read... It is also an engaging personal account from the man who co-ordinated the whole project. The book is full of photographs of Red Kites behaving in different ways, many of them taken by the author. **Treat yourself or give it as a present, or both!**"

Earlier in Mike's career in the 1980s, he set up the experimental project to restore Red Kites across Britain, these previously common birds having been almost totally exterminated over a century earlier. With the programme's success, UK Red Kite numbers now constitute about 25% of the world population. The book tells the story of how this was achieved. Here are a few quotes from other independent reviews; more were cited in *Forum News* 58 and 59.

"This book begins by reminding us how ubiquitous these birds were in early times with their role as scavengers evidenced by the quote "when the kite builds look to lesser linen", from *A Winter's Tale* Act 4, Scene 3, William Shakespeare. This explains the book's title and it includes many photos of kite nests decorated with odd items including pillaged underwear. The rationale for the Red Kite introduction initiative was not simply to restore a species lost to most of the UK but rather due to concerns regarding the viability of the global population, with increasing distribution considered as a conservation priority to increase species resilience. Despite the small remnant population in mid Wales this was plagued by very low breeding productivity combined with persistent egg collecting making spread highly unlikely... Extracts from meeting notes are provided enabling the reader to see just how seriously all aspects of this introduction were considered, from examination of the requirements for success based on the experience of earlier projects, notably of white-tailed eagles, to the handling of public relations... Evidence of the impact for global species conservation is the dispatch of young birds to Spain, one of the original source countries, in 2022. ...The latter part of the book focuses on evaluation, repeating the assertion that it is far more important to prevent loss of species and habitats than to take heroic steps to reinstate them. The author cautions against well-meaning but inappropriate reintroductions, with discussion of the impact of changes in agricultural practice on likely success. Additional benefits from the successful kite project have been greater acknowledgement of the effects of poisoning, both direct (intentional) and unintentional, introduction of specific funding allocation for species recovery programmes, and greater public awareness of these magnificent birds of prey... Altogether a fascinating read with many excellent photographs. Hopefully those involved in current reintroduction projects will be able to learn from this book and provide similarly detailed accounts and evaluations in future..." **Chartered Institute of Ecology and Environmental Management (CIEEM in practice** 121: 81-82, September 2023)

"This is a welcome book on the restoration of the Red Kite in the UK. It details its recovery in forensic detail, giving a blow-by-blow account of the project. Its author, Mike Pienkowski (former Nature Conservancy Council, Head of Ornithology Branch, and later Assistant Chief Scientist), is well-qualified to write this book since he was the chair



(1987–1995) of the group that planned and implemented the restoration. The recovery was initially a collaboration between the NCC and the RSPB although many other organizations and individuals contributed: the acknowledgements section in the book covers four dense pages. The main bulk of the book is on the intricacies of delivering the project and the results of the reintroductions. There is good detail on population biology and movements, which is summarized in clear tables, graphs and maps. We also get a smattering of autobiographical details giving us a glimpse of the man, his history and passions. This book is a clearly written cornucopia of detail – obscure, useful and critical – that illustrate the complexities of the project.

"There are twelve chapters that go through the different project stages. The introduction makes the important observation that it is individuals and small groups of people that drive projects rather than the initiatives of big organizations..."

"In 1987 it was realized that the Red Kite was a suitable candidate for reintroduction, and a project was initiated. After a review of the species' world distribution, it was discovered that it was in worse shape than generally considered. There had been widespread declines in numbers and distribution during the 19th century and the species was still absent or patchily distributed in some countries where it had formerly occurred. The main populations were in Spain, France and Germany where the birds could possibly be sourced from. It was clear that the restoration of the species in the UK would improve the global status of the species, which in the 1980s was estimated at 17000–21000 pairs... a project justifiably called the biggest species success story in UK conservation history.

"I enjoyed reading this book, it is refreshing since we get an honest account of the complexity of a large reintroduction programme: the intricacies of Government departmental politics, interactions with other organizations (which were apparently mostly amicable) and some of the personalities involved. ...The book is a rare account showing how projects

really work. All too often the accounts of conservation projects are sanitized, and the facts retrofitted into a story. The book is one I shall be dipping into regularly to enjoy its content and to learn some of the lessons on the benefits of collaborations and how we can restore populations and how these can contribute to rebuilding ecosystems. **Carl G. Jones** (November 2023) *Ibis* (Journal of the British Ornithologists' Union): vol. 166.”

First confirmation of Whiskered Bat on Guernsey



Photo: Piers Sangan

Piers Sangan, Director at Sangan Island Conservation Ltd, Guernsey reported in August: “What an amazing result last night, after years of detecting whiskered bat on Guernsey from the fantastic Bailiwick Bat Survey project run with the British Trust for Ornithology, we finally managed to catch an individual to verify the results. This is the first in-the-hand record for Guernsey. Thanks to Richard Crompton, we were able to tag

the individual and this morning have confirmed the first known roost for whiskered bat on the island. All this research would not be possible without the support of various organisations such as Guernsey Nature Commission, La Société Guernesaise Bat Section - Guernsey Bats, the States of Guernsey and a big thank-you to Jersey Community Foundation – whose funding of our projects on Jersey has meant we have the equipment and expertise to assist our colleagues on Guernsey.

Save the dates: 27 & 28 Nov 2024

St Helena: A Unique Environment, A Rich Tapestry, an online conference: free; hosted by St Helena Research Institute and University of Manchester. This aims to unite researchers and stakeholders from St Helena itself, visiting (including remote) researchers, and anyone interested in the island's fascinating history and environment. 30 presentations on 4 key themes:

- Natural Sciences: Explore St Helena's biodiversity;
- Humanities and Social Sciences: Uncover the island's colonial history, its role in the slave trade, and more recent;
- Medical Science: Discuss the health of St Helena's aging population, and other issues;
- Cross-disciplinary Approaches for St Helena's future.

The call for registration to attend the conference will be sent out shortly. If you are interested in attending or would like further information please contact Rebecca Cairns-Wicks by email rebecca.cairns-wicks@sainthelena.edu.sh or Drew Whitworth via email drew.whitworth@manchester.ac.uk or by telephone on +44 7501 963630.

Mr Cedric Osborne OBE, OM



We reprint below Montserrat National Trust's celebration of the remarkable life and contribution of the Late Mr Cedric Osborne OBE, OM

We, at the Montserrat National Trust, are deeply saddened by the passing of Mr Cedric Osborne. Cedric was one of the founder members of the Trust as he was part of the preparation Committee led by the Administrator, Mr Dennis Gibbs. He became a Life Member of the Trust and joined the Council in 1979 where he began serving as the 1st Vice President and then as President from 1981 to 1983. From 1984 he continued to serve on the Trust's Council as 1st or 2nd Vice President until he stepped down in 2005, after giving over 26 years of unbroken service in the governance of Montserrat National Trust.

Therefore, Cedric has the record of being the longest serving member of the Trust's Council.

He also worked on the Wildlife and Vegetation Committee to promote the awareness of the flora and fauna and was integral in the selection of Montserrat's National Bird and Flower and assisted in the establishment of the Fox's Bay Bird Sanctuary as a nature and tourism site. He identified historic places of interest and the erection of informational signs throughout the island.

Cedric represented the Trust on several local Boards and Committees including the Montserrat Tourist Board and the Forestry Board.

In addition to his Committee contributions, Cedric was also called upon to provide construction advice and supervision for the projects of the Trust, whether it was the Galways Project, the Brandsby Point Gun Battery, Carr's Bay, St Georges Hill Gun Batteries; the Sugar Mill Museum, the Fox's Bird Sanctuary, the Woodlands Beach facility or the addition of the Natural History Centre and Gift Shop at the Trust. Therefore, much of the legacy of the Trust facilities is due in part to Cedric's knowledge of building and construction.

In 2005, when Cedric stepped down from serving on the Trust's Council, we decided to host a ceremony to honour him for his contribution, but we had to go through Carol [Cedric's wife] to do some arm twisting for Cedric to eventually consent to a small affair. He did not want a plaque, a trophy nor a gift, however we did convince him to plant a tree in his honour at the entrance to the Trust Botanic Garden. The pink *Mussaenda erythrophylla* (Ashanti Blood) found at the entrance to the Trust continues to bloom in his honour 20 years after.

UKOTCF knowledge sharing webinar, 30 September 2024: *The status and impacts of Avian Flu in the UK Overseas Territories and Crown Dependencies*

Avian 'flu has caused the death of millions of birds since its first emergence in 1996. Given the incredible importance of bird diversity and abundance across the UKOTs and Crown Dependencies, and at the suggestion from the UKOTCF Southern Oceans Working Group, UKOTCF organised this webinar. The idea behind the webinar was to help support territories that had not experienced the impacts of avian 'flu on their territories to learn about how they can test, manage and protect themselves and their biodiversity by sharing the experiences from others. The webinar also offered an opportunity for participants to ask speakers questions about practical steps that can be taken.

This webinar brought together global experts in avian flu, ranging across virologists, conservationists, vets and NGOs, to share their knowledge and best practice. Please see the abstracts and biographies and the anonymised questions of the speakers below.

The webinar, which had more than 100 registrants, was attended by more than 50 people and is available for free to view from UKOTCF. If you would like to watch this recording, please contact cwensink@ukotcf.org.

UKOTCF would like to thank the Garfield Western Foundation for sponsoring this webinar and making it possible, as well as Jodey Peyton and Catherine Wensink for undertaking most of the organising.

Welcome and opening remarks: Mike Pienkowski (Chairman, UK Overseas Territories Conservation Forum; <https://www.ukotcf.org.uk>; @UKOTCF)

Chairing first session: Nigel Haywood (Chairman, UKOTCF Southern Oceans Working Group) - below on Zoom



World-wide outbreak of H5N1 highly pathogenic avian influenza: wildlife, domestic animals, and humans at risk: Thijs Kuiken (Erasmus University Medical Centre)

Highly pathogenic avian influenza (HPAI) virus of the subtype H5 causes illness and death in wildlife and domestic animals, as well as in humans. This virus evolved from the Goose/Guangdong lineage of HPAI H5 virus, which emerged in commercial poultry in China in 1996. This virus subsequently spilled over into migratory birds and has so far spread through Asia, Europe, Africa, North and South America, and Antarctica. Regarding wildlife, some species of seabirds and marine mammals have suffered high levels of mortality in recent years. Response options for wildlife in the short term include accurate monitoring of the virus and associated wildlife mortality, and, where appropriate, coordinated removal of infected carcasses from affected sites to limit virus spread. Long-

term recommendations include enhanced protection of wildlife sites, vaccination of poultry against HPAI, reduction of poultry farm size and density, and avoidance of waterbird-rich areas as a location for poultry farms.



Thijs Kuiken (above) is Professor of Comparative Pathology at the Department of Viroscience, Erasmus MC, in Rotterdam. He graduated as a veterinarian at Utrecht University in 1988, obtained his PhD in 1998 from the University of Saskatchewan on Newcastle disease virus in cormorants, and qualified as a Diplomate of the American College of Veterinary Pathologists in 2002. His current research interests include highly pathogenic avian influenza at the interface between poultry, people and wildlife; the pathogenesis, pathology and epidemiology of virus infections in bats compared to humans; and implementation of transformative changes in the health sciences to make the transition to a sustainable human society. @thijskuiken

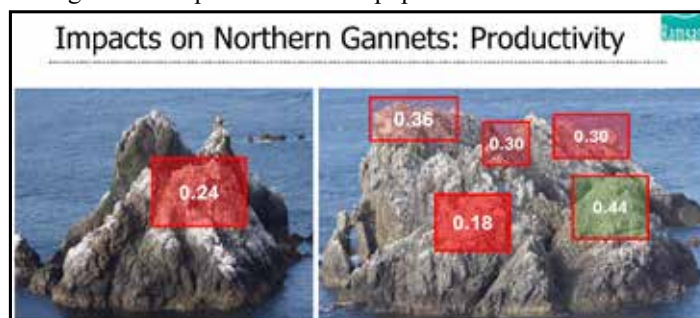
You can read more about Thijs Kuiken's work here:

<https://scholar.google.ca/citations?user=EQQf0RwAAAAJ&hl=en>

<https://www.erasmusmc.nl/en/research/researchers/kuiken-thijs>

The status and impacts of avian flu in the UKOTs and Crown Dependencies: An update from the Channel Islands: Tara Cox and Alex Purdie (Alderney Wildlife Trust)

The 2022 HPAI outbreak severely impacted the internationally significant seabird populations across the Channel Islands, leading to the tragic loss of thousands of birds. This presentation focuses specifically on the response to HPAI in Alderney, while also providing a broader overview of the disease in wild birds in both Jersey and Guernsey. Additionally, it delves into the ongoing efforts and initiatives that have been implemented since the outbreak in 2022 in Alderney, with the aim of mitigating the risk of future outbreaks and further investigating the long-term ecological consequences on these populations



Local differences in impacts across Alderney's colony (from the presentation)

Dr Tara Cox is a senior ecologist for the Alderney Wildlife Trust. She is actively engaged in the Trust's seabird monitoring and research initiatives, and is working to integrate data and trends from these ongoing efforts into the Alderney Wildlife Trust's Alderney State of Nature assessment.

Alex Purdie is a consultant ecologist for the Alderney Wildlife Trust and is the Alderney Ramsar Secretariat on behalf of the States of Alderney. He carries out monitoring work on the island's seabirds and is responsible for administration of the island's Ramsar Site, designated for its large seabird populations.

<http://www.ci-ramsar.com/publications/>

<https://www.alderneywildlife.org/wildlife/hpai>

High pathogenicity Avian Influenza at Bird Island, South Georgia: *Ash Bennison* (British Antarctic Survey)



Collecting specimens and part of the planning (from the presentation)

Ash is the Science Manager for Bird Island. He joined the British Antarctic Survey (BAS) in January 2021 and, prior to this, was working in Ireland undertaking a variety of research on seabirds and marine mammals.

Ash specialises in the spatial ecology of higher predators. Movement is a trait shared by all life on Earth, and Ash's work looks to understand how the behaviour of individual animals can inform the distribution of species. Ash's doctoral research focused on seabirds, primarily northern gannets and puffins, and used tagging technologies to track the movement paths of animals. He has also worked on sharks, sea bass and cetaceans.

<https://www.bas.ac.uk/>

recent paper with Zoe Fowler: <https://www.nature.com/articles/s41467-024-51490-8>

Protecting the Penguins - avian flu in Antarctica: *Sophie Montagne* (UK Antarctic Heritage Trust)

Avian flu first arrived on the Antarctic mainland in February 2024 and we tracked its progress across the Peninsula. Fortunately it didn't strike UK Antarctic Heritage Trust's main base at Port Lockroy that season, but we are preparing action plans and contingencies for possible wildlife mass mortality events this season. The impact of this would be devastating, both for our local gentoo penguin colony, and for the work of the Trust.

Sophie Montagne is Head of Operations for the UK Antarctic



Port Lockroy Station surrounded by gentoo penguin colonies (from the presentation)

Heritage Trust (UKAHT). UKAHT is responsible for the conservation of six historic sites on the Antarctic Peninsula including Port Lockroy, where visitors are welcomed throughout the Austral summer to explore the museum, the world's southernmost post office, and observe the penguin colony. Sophie runs all of UKAHT's activities in Antarctica, including conservation teams operating out of field-camps while they repair and restore the buildings, and managing the seasonal team at the Port Lockroy museum and post office. She spent three months skiing across Antarctica in 2017/2018 as part of an all-female British Army expedition, and is a former Director of the All-Party Parliamentary Group for the Polar Regions..

<https://www.ukaht.org>; YouTube: @ukantarcticheritagetrust

Instagram: @ukantarcticheritagetrust;

Facebook: @UKAntarcticHeritageTrust

X/Twitter: @AntarcticHT; TikTok: @ukantarcticheritagetrust

Bird Flu in Falkland Islands: delivering action to protect biodiversity: *Zoe Fowler* (Falkland Islands Government) – below



The Falkland Islands are home to several important bird and marine mammal populations, notably black-browed albatross and rockhopper penguins. Tourism and biodiversity rely heavily on all our other wonderful wildlife, therefore an efficient, well communicated and measured response to cases of HPAI is essential and this is what FIG are striving to deliver.

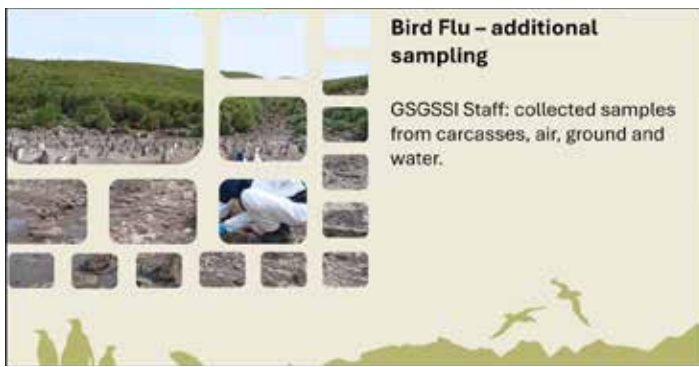
Zoe Fowler was born in the Falkland Islands and graduated from the Royal Veterinary College in UK in 2001. She returned to work as a veterinary officer for FIG in 2007. She has a post-graduate diploma in Epidemiology and Public Health, is a qualified Official Veterinarian for public health regulatory duties and became Senior Veterinary Officer in 2022.

<https://www.veterinary-practice.com/article/a-day-in-the-life-of-a-vet-in-the-falkland-islands>

recent paper with Ash Bennison: <https://www.nature.com/articles/s41467-024-51490-8>

Bird Flu in South Georgia: balancing thriving tourism and biosecurity needs: *Denise Blake* (Government of South Georgia & the South Sandwich Islands)

South Georgia's tourism recovered quickly following the Covid-19 pandemic and, by the 2022-23 tourism season, visitor numbers had exceeded pre-covid numbers. Unfortunately, at the start of the 2023-24 tourism season, the first report of Highly Pathogenic Avian Influenza (HPAI) having reached South Georgia was received. Careful planning meant that an appropriate response was in place; this included additional biosecurity measures, sampling protocols, a system of reporting, monitoring and site-closures. Cruise tour companies operating in and around South Georgia were key to this response but were also the ones affected by it. This industry not only worked hand-in-hand with the Government of South Georgia and the South Sandwich Islands but also showed resilience to this impact. The lessons that the Government learned during that



(from the presentation)

season were key to shaping the future response to HPAI on South Georgia.

Denise is the Visitor Manager for the Government of South Georgia and the South Sandwich Islands. Her role encompasses both biosecurity and managing tourism on South Georgia. Denise has a varied background, having worked for other Overseas Territory governments in environmental and fisheries management. She is a Fellow of the Royal Geographical Society and holds an MSci in Marine Biology.

<https://gov.gs>

Chairing second session: Denise Blake (Government of South Georgia & the South Sandwich Islands) – below



The role of biosecurity in disease and vector prevention: James Millett (GBNNS)

James works for the GB Non-native Species Secretariat as the UK Overseas Territories Biosecurity Project Officer. The GBNNS has been implementing the UKOTs Biosecurity Project, which helps UKOT governments and organisations strengthen biosecurity and management of invasive non-native species.

<https://www.nonnativespecies.org>



(from the presentation)

Investigating exposure to High Pathogenicity Avian Influenza Virus in a multi-species assemblage of UK seabirds: Fiona Greco (University of Edinburgh / UK Centre for Ecology & Hydrology)

Increasing global trends in emerging infectious disease are of urgent multi-disciplinary concern to both animal and human health, with severe ecological and economic costs. The recent emergence of H5Nx clade 2.3.4.4b high-pathogenicity avian influenza virus (HPAIV) exemplifies this, with unprecedented mortality of novel hosts across an extensive geographical scale. Associated mass mortality of previously unaffected colony-nesting seabird species across Europe raises particular conservation concern, with 30% of seabird species already listed as globally threatened. While existing surveillance employs passive sampling of found dead birds to identify HPAIV, there is urgent need for epidemiological understanding of avian influenza virus (AIV) within previously unaffected species groups. Understanding whether birds have been exposed, act as asymptomatic carriers or have antibodies which may or may not prove protective following recovery are essential in understanding the impacts and persistence of infection across populations. To provide such insight, we tested for evidence of active viral infection and previous exposure to both high- and low-pathogenicity AIV in apparently healthy individuals of five seabird species on the Isle of May, Scotland, between May-July 2023, following observed mortality during the preceding summer. We detected low levels of AIV in asymptomatic individuals and marked species variation in the presence of antibodies to AIV, yet found no evidence to confirm active virus as HPAIV H5N1. Such results contribute novel data to the understanding of AIV across different species of conservation concern, and suggest variation in species exposure to avian influenza within breeding assemblages.



(from the presentation)

Fiona Greco is a final year PhD researcher at the University of Edinburgh, co-supervised by the UK Centre for Ecology & Hydrology. Fiona has a background in veterinary medicine, graduating from the Royal (Dick) School of Veterinary Studies and working for several years in companion animal veterinary practice, before returning to academia for a Master's degree in Conservation Medicine. Fiona has a strong interest in infectious disease as a driver of biodiversity loss, and in the development of testing strategies in the face of novel disease outbreaks. Fiona's thesis focusses on both individual and species differences in parasitism, particularly assessing variation in exposure to avian influenza virus across multiple species. Fiona witnessed first-hand the impacts of avian influenza while living as a researcher on the Isle of May National Nature Reserve in Scotland, and has considerable practical experience of sampling for evidence of avian influenza within UK seabird and geese species.

Fiona Greco (@FionaG_08) / X

<https://www.ed.ac.uk/roslin/news-events/latest-news-2023/ps3-3m-award-supports-research-into-tackling-bird>

Highly pathogenic avian influenza in European seabirds in 2022-2024: a short overview: *Wouter Courtens* (Research Institute for Nature and Forest)

In 2022, the emergence of highly pathogenic avian influenza caused widespread devastation among seabirds in Europe. Breeding colonies of several species, including the Sandwich tern *Thalasseus sandvicensis*, northern gannet *Morus bassanus*, and great skua *Stercorarius skua*, were particularly affected, resulting in significant population declines. In 2023, the virus reemerged in seabird colonies, with small gulls *Larus* spp. being the primary, though not the only, victims.

Over the past two years, various containment strategies, such as the removal of carcasses, have been evaluated. Additionally, the spatial and temporal spread of the virus among certain species has been assessed, and the presence of antibodies in affected species has been established. For some species, the impact on their population dynamics and demography has been analysed.

These efforts provide valuable insights into the implications of avian influenza on seabirds, both in Europe and globally.



(from the presentation)

Wouter Courtens has worked as an ornithologist in the seabird team of the Institute for Nature and Forest Research (INBO) since 2003. His team studies the occurrence of seabirds on the North Sea and the impact of food availability and human activities, such as wind turbines, oil pollution and plastics, on seabird populations. The research includes also monitoring coastal breeding birds (such as gulls and terns) and the population dynamics, food ecology and habitat use of these species. Initially these were mainly Belgian projects but in the meantime a lot of research is also being done in the Netherlands. Furthermore, *Wouter* has extensive expertise in breeding bird monitoring, including long-term projects on meadow, marsh and reed birds. In 2023, *Wouter* started his PhD on Sandwich tern feeding ecology and population dynamics, including the impact of avian influenza on their populations.

<https://pureportal.inbo.be/en/publications/impact-of-high-pathogenic-avian-flu-on-sandwich-terns-the-belgian>

<https://pureportal.inbo.be/en/projects/sumo-survival-and-movements-of-the-nw-european-sandwich-tern-popu>

Recent High Pathogenic Avian Influenza Activity in the United States: *Dr Sarah Bevin* (United States Department of Agriculture, USDA)

In the United States, large-scale influenza surveillance is conducted in wild bird populations every year. Resulting datasets provide insight into new virus introductions into the North American continent and help understand where the virus is on the landscape. A primary goal of yearly surveillance is to characterize the risk of spillover from livestock/poultry to wild birds and from wild birds to mammals.

Dr Sarah Bevin is the Assistant Coordinator of the USDA



(from the presentation)

National Wildlife Disease Program in the United States. The National Wildlife Disease Program coordinates wildlife disease monitoring and surveillance for multiple pathogens and responds to outbreaks involving wildlife. Much of her research has focused on diseases that can move between wild animals and humans or domestic animals.

<https://www.aphis.usda.gov/livestock-poultry-disease/avian/avian-influenza/hpai-detections>

Additional panel guests

Ben Stading (Associate Prof. Of Virology at St Mathews University Cayman Islands)

Ben Stading, DVM, MPH, PhD received his bachelor's degree in Ecology, Evolution, and Behavior from the University of Minnesota in 2003, followed by an internship in zoo husbandry. He went on to obtain his Doctorate in Veterinary Medicine from the University of Wisconsin in 2008, and the following year completed his Master's in Public Health through a dual degree program in Wisconsin. He subsequently went into small animal practice in the Tampa area of Florida for two years before returning to the University of Wisconsin to start a PhD program focused on virology and immunology. His research involved the development of oral vaccines for topical use in free-ranging bats, developing novel rabies vaccine biologics, and assessing protective immunity against white-nose syndrome in bats. He became actively involved in bat conservation during this time, and regularly gave educational talks to the public. After completing his PhD in 2017, he spent two more years in small animal practice and then joined the St. Matthew's University School of Veterinary Medicine team. *Dr Stading's* professional interests include infectious diseases, wildlife health, veterinary public health and one-health medicine, and small animal clinical practice.

Susie Gold (Royal Society for the Protection of Birds, RSPB)

Susie is a Senior Conservation Scientist at the RSPB, leading on their work around HPAI and other wildlife diseases. Current areas of research include understanding the longer-term impacts of HPAI on wild bird populations, modelling the spread of HPAI through tern colonies, and understanding how Avian influenza mortality varied between different UK seabird colonies.

Panel discussion questions (Q) and answers (A)

Q: Hi, the numbers of die-offs seem quite dazzling. Is there, however, knowledge on the population level impact? Have any extinctions been documented for instance?

A: No extinctions recorded to my knowledge. There are estimates starting to be published on population level impacts in species like northern gannets, sandwich terns and common terns. There is a special issue of *Bird Study* coming out soon on that.

Q: What do they do with carcasses?

A: I think you mean the site-managers. In Western Europe, the carcasses of wild animals are incinerated, as are dead food animals. In the USA, composting carcasses on site is done, which renders the carcasses non-infectious after a couple of weeks. In some South American countries, I believe that bird carcasses were buried in some locations.

Q: Is there some factors that might explain why certain species rebound and other don't (links with other threats)?

A: I don't think we know enough about that yet.

Q: Does HPAI circulate in the wildlife trade?

A: It has circulated in the past. There have been songbirds arriving in the UK with HPAI H5N1, and raptors in Belgium. As a result, the EU forbade importation of wild birds from Asia. I do not know any recent records of HPAI in the wildlife trade, and no evidence of HPAI spreading geographically in that way.

Q: Do you think that initial peak has passed and expect low mortality infection in future?

A: Looking at the global spread, it looks like there is high mortality in the first year or years, and lower mortality after that. A logical explanation is that flock immunity is both protecting animals and is making it more difficult for the virus to spread, but it has to be measured whether that is correct.

Q: In the Cayman Islands, we have the Booby Pond Nature Reserve, with around 10,000 red-footed boobies and frigate birds nesting in the mangroves, as well as hundreds/thousands of migratory birds each winter. It is fairly unique in that it is located in a relatively busy tourist area right next to resorts and condos. We also have a feral chicken problem. I am working on the management plan for the protected area and want to ensure to convey appropriately the level of risks but not sure how to go about it.

A: Difficult to answer. Can you send it to me to read through, if you wish: [email given to questioner]

Q: Thijs or anyone, I was not sure if it was mentioned: how long does the virus persist in warmer waters, such as tropical waters at 30 C?

A: There is a lot of literature on how long influenza virus remains infectious. At 30 C the duration of infectiousness is much shorter than at 4 C, I think around a couple of days instead of several weeks or months.

Q: Thank you very much. I worry about a migratory bird bringing the disease and affecting the colony and want to prepare for the risk to the birds. I then worry because the chickens will roost around in the area under the nests and walk back to areas among people and a large amount of the nests are along the roadside and birdwatchers will walk right below them as well.

A: A valid concern is that chickens become infected by (indirect

contact with wild birds and people are more likely to come into contact with the virus from infected chickens than from any infection in wild birds.

Q: What labs are you using for diagnostic work-ups, swabs etc? - this to all presenters

A: Ash is better to answer on the UK sites. Jodey asked me to write something about a point of discussion in preparing this webinar: the use of rapid antigen tests. Wildlife rehab centres in the Netherlands started using an influenza rapid antigen test, and the Dutch government lab responsible for avian influenza tested this further. Apparently, some tests work well, at least in chickens, it appears (from the field to work in wild birds). This is a big advantage in getting an idea whether a particular mortality may be due to bird flu, but still requires confirmation by a more specific test, e.g. PCR. Here is the reference on evaluating rapid antigen tests: <https://www.wur.nl/en/research-results/research-institutes/bioveterinary-research/show-bvr/rapid-tests-bird-flu-support-pcr-analysis.htm>

Q: What labs are you using for diagnostic work-ups, swabs etc? - this to all presenters

A: The Animal and Plant Health Agency (APHA) are one the main reference laboratories for the UK and have been great for working with internationally.

They have been able to provide support to us and others in UKOTs for getting diagnostic swabbing via PCR and qPCR.

I know they are able to look at helping provide support for those in UKOTs and I highly recommend dropping the avian influenza group there a line.

Q: Denise, in your Tiered Response, what PPE was used at Tiers 0, 1, 2? Were tourists alarmed seeing researchers in PPE while monitoring birds?

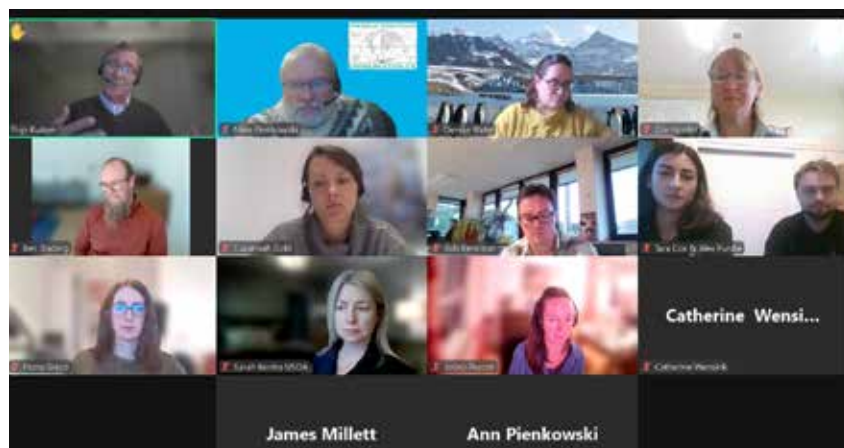
A: Hi, we had different PPE levels across the different responses. Tourists never actually saw any of the sampling as it wasn't done when tourists were nearby.

Q: Would it be possible to share the EFSA (2022) document which advises to vaccinate humans against human influenza (when they had contact with potentially infected animals)? (Is the group, of wildlife rehabilitators included in this advice?) Thank you in advance

A1: Just had a look at this, but there is so much information on <https://www.efsa.europa.eu/en/topics/topic/avian-influenza>.

A2: In this EFSA report (<https://doi.org/10.2903/j.efsa.2024.8754>), it states: "Vaccination against seasonal influenza can be offered to individuals who are occupationally exposed to avian influenza to reduce the risk of re-assortment between avian and human influenza viruses. Furthermore, vaccination against A(H5) virus can be considered for protection of those at higher risk of exposure to A(H5N1) as a component of a wider, comprehensive approach to prevent human infections. Specific vaccination recommendations are under the remit of national authorities (EFSA, ECDC and EURL, in press)."

A3: Since that report, the 'in press' article has been published as: "EFSA (European Food Safety Authority), ECDC (European Centre for Disease Prevention and Control), Melidou A, Enkirch T, Willgert K, Adlhoeh C, Alm E, Lamb F, Marangon S, Monne I, Stegeman JA, Delacourt R, Baldinelli F and Broglia A, 2024b. Drivers for a pandemic due to avian influenza and options for One Health mitigation measures. *EFSA Journal*; 22(4);e8735, 24 pp. <https://doi.org/10.2903/j.efsa.2024.8735>"



The panel and organisers

Bob Conrich legacy

UKOTCF Council would like to express thanks for the generosity of the late Bob Conrich who, in addition to his strong support in life for UKOTCF and its important work, has supported the Forum in his will. This specifies that the net proceeds of the sale of assets be passed to UKOTCF to support its work. For various reasons, it has taken some time to receive the first part of this income but this recently happened. UKOTCF Council has decided that the best way of honouring Bob's wishes is to invest these funds so that the interest from these can be used for many years to contribute to funding of some of the key activities for which other funding has proven not possible to source. We reprint below the appreciation of Bob which was first published in *Forum News 55* (December 2021).

We were very sad to hear from local friends news of the death in July this year of Bob Conrich, a US citizen resident in Anguilla and someone with a long involvement in UKOTCF, which he supported strongly until his death. In addition to his long involvement in Anguilla and its conservation, Bob was interested in and informed about several other UKOTs. Bob provided a most valuable service for conservation, both by his own interventions in several UK Overseas Territories and via what we nick-named the "Bob News Service", often providing us with the first notice



Bob on the beach and with dog. Photos: John Maton



(or spotting things we had missed) on important issues across the UKOTs. His amazing collation of material from the web and his own network of contacts were well informed – and often entertainingly highly opinionated in ways that we could not pass on! Mike and Ann Pienkowski, of UKOTCF, had the pleasure of meeting him in person some years ago during a visit to Anguilla.

A resident of Anguilla for over 25 years, Bob Conrich was a retired member of the National Panel of Arbitrators of the American Arbitration Association, where he specialized in hearing contract law and major construction disputes. He was a pioneer in the utility-scale wind-energy sector and a founding board member of the California Wind Energy Association in the 1970s. He had a background in law, business, construction, public works, government, history, journalism and politics. In this context, Bob did consulting work on issues in the UK Overseas Territories, primarily those in the South Atlantic and Indian Oceans.

Issues of interest to him included also parliamentary relations, governance, democratic institutions, open government, the environment, education, and corruption. He published several books and articles on these topics. He was a member of the American Public Works Association and served on the board of the Anguilla Archaeological & Historical Society.

Bob was a stalwart conservationist. We will miss him greatly, and have sent our sympathy to his geographically closer friends. UKOTCF officers and Council are hugely touched, honoured and grateful that he should value UKOTCF so highly, as became even clearer from some documents of which his executor advised us.

UKOTCF Ant Working Group

Invasive non-native species are those introduced into new places by people and which go on to have negative impacts on biodiversity, ecosystems, human health and or the economy. Invasive non-native ants are renowned for having detrimental impacts, whether these be on nesting turtles and seabirds, their painful stings to people or the damage to infrastructure through damaging cables etc.

UKOTCF has established an informal network of ant specialists from across the UK Overseas Territories (UKOTs) and Crown Dependencies (CDs) – and wider, including UK, Australia, Austria, Guyana, Greece, Hong Kong, Poland and USA. This working group seeks to share ideas and best practice around ant management, including establishing early-warning and surveillance systems. It will also discuss taxonomic challenges, identification needs and support and funding opportunities.

The first meeting, which was held on 18th September, featured 24 people from 17 organisations in 16 countries, CDs and UKOTs – which was a fantastic turnout. This meeting focussed on understanding the community needs, and future meetings will start to plan out how to deliver these.

By bringing together these experts, we hope to support UKOTs and CDs increase their resilience to the negative impacts of invasive ants in some of the most important biodiverse areas in the world.

If you would like to know more and join this group, please contact Jodey jpeyton@ukotcf.org.

The future of the Chagos Archipelago

As this issue of *Forum News* was being edited, UK Government announced that it was transferring sovereignty of the Chagos Archipelago (British Indian Ocean Territory) to Mauritius.

The history of UK's involvement in the Chagos has not been glorious, especially over the last 60 years. The island groups of Mauritius and the Seychelles in the Indian Ocean transferred from France to UK about 200 years ago as a result of the long and almost continuous wars of that period. The outer islands of the group tended to be used as coconut plantations for the production of copra fibre, which has virtually no market now.

In the 1960s, as many former colonies of European nations and the USA moved towards independence, the governments of the United States and the United Kingdom came to a deal (which the governments have more recently admitted as unsavoury) whereby the US would acquire a strategic base in the Indian Ocean in return for a large discount in the supply of nuclear missiles for submarines supplied to UK by the USA.

As the UK government negotiated with Mauritius and the Seychelles for their independence, it detached many offshore islands from both and combined them into the new British Indian Ocean Territory. Perhaps illustrating the ignorance which seems to imbue some politicians and officials at such times, it was initially proposed that the phenomically biologically rich formerly-Seychelles island of Aldabra became the base. So outrageous was this that the outcry not just from conservationist but also scientists and others was enormous. The Aldabra plan was abandoned and Diego Garcia, the largest island of the Chagos was chosen instead. UK government detached the former Seychelles islands from BIOT and returned them to Seychelles.

It seems that the Americans did not want any locals on their base. Therefore, UK government forcibly deported all the Chagossians to Mauritius or the Seychelles – or simply prevented those away from the islands from returning. UK government claimed that they were not citizens but contract workers, but did not explain how “contract worker” status could be inherited over several generations. Neither was it clear why the US government wanted the whole huge archipelago depopulated, rather than just Diego Garcia - nor why, rather than offering Chagossians work at the new bases, they instead imported workers from other Asian countries. The UK did pay some compensation, but rather little of it seems to have reached the Chagossians, then in Mauritius or the Seychelles.

UK government has come under increasing pressure in international courts from actions initiated by Mauritius in recent years, and this seems to have triggered the latest announcements.

On 3 October, the BBC reported the views of some of the community of 3000 Chagossians settled in Crawley, UK, who were very concerned about the joint announcement by UK and Mauritius governments:

Chagossian Kenny Thede said he wanted to go back to the islands, but did not know if life under Mauritius was going to be better. “We know that it’s our islands, and that’s why we want to go back.” Jason Melisse says he does not have trust in the Mauritian government. “I think they will do the same as in Mauritius. They will put [in] their own law and that will affect us.”

Crawley’s Labour MP, Peter Lamb, said the decision to hand over the islands was “very disappointing” as Chagossians had been “let down again. The decision over the future of the islands belongs [to] the Chagossian people, it’s not for the UK to bargain away.” He said there was “no guarantee” that Chagossians would be able to return home.

Lamb said in the last 16 years he had not heard “a single voice” in the local Chagossian community saying they wanted the islands

to go to Mauritius. “They want to go home. They want it to be their home.”

It does seem surprising that a UK government headed by a prime minister who spent his earlier career as a human-rights lawyer has excluded the Chagossians from the negotiations. A UK government minister said that negotiations had to be between governments. However, UK created the separate entity of BIOT, then deported the nationals of this territory and deprived them of their rights. To expect another country to look after their rights, rather than its own interests seems disingenuous. A local community would be more likely to safeguard its environment.

The UK government minister indicated that UK's interest in the negotiations is to safeguard the US [mainly] and UK [nominally] naval and air base, not mentioning the interests of the Chagossians nor the exceptional natural environment.

The latter is surprising too. One of the last acts of the previous Labour government was to establish one of the world's largest marine protected areas consisting of BIOT's entire Exclusive Economic Zone. It does seem surprising that one of the first acts of this new Labour government is to abandon this.

Many had hoped that the new UK government's pre-election statements about long-term views, including on the environment, might actually be followed. However, it would seem that this does not extend even to the 14 years since the previous Labour government.

Following immediate criticism, a statement appeared from UK government that tried to address these criticisms. However, it makes clear that the possibility of return of Chagossians to the islands will not include Diego Garcia – where by far the majority lived. And continuity of the marine protected area is not mentioned, but replacement is implied.

It would seem that the traditions of the way some past UK governments have treated the Chagos is being maintained. Indeed, it is reported that several Chagossian groups have pooled their resources to take legal action against UK government for breach of UN commitments in respect of the rights of indigenous people.

The timing and details of any transfer of sovereignty remain to be worked out, and the announcement seems to have been accelerated for political reasons. Optimists may hope that the UK government will recover some of the backward steps as details are worked out. It will be important to enable continuity of management of the marine protected area whoever is running it. As important will be proper protection of those islands now rat-free, including those with remaining native forest. Better biosecurity arrangements for the US/UK base are also important, especially given the huge volume of imports.

The Chagos Islands are a remarkably valuable natural resource, vitally important not just locally but for biological productivity across the Indian Ocean. The governments involved should



Aerial view of part of the Chagos Archipelago.

© Blue Marine Foundation

engage all the Chagossian community to maintain this to ensure conservation and, where appropriate, sustainable use. As ever, UKOTCF remains ready to help all parties in any way it can.

Update on plastic pollution

The UKOTs and CDs Plastic Pollution Network met online on 18th September, with 24 organisations represented. Updates were given on several current projects involving St Helena National Trust, Defra, Zoological Society of London, and Isle of Man Beach Buddies.

DEFRA reported that, in February 2022, at the fifth session of the United Nations Environment Assembly (UNEA-5.2), a historic resolution (5/14) had been adopted to develop an international legally-binding instrument on plastic pollution, covering the full life cycle of plastic, with the ambition to complete the negotiations by the end of 2024. More information on the treaty can be found on the UNEP website: Intergovernmental Negotiating Committee (INC) on Plastic Pollution | UNEP - UN Environment Programme (<https://url.uk.m.mimecastprotect.com/s/aACiCqZMNhLvK06tZf8CEs9Fd?domain=unep.org>). The UK is a founding member of the High Ambition Coalition to End Plastic Pollution, a coalition of like-minded countries committed to achieving an ambitious international legally binding instrument on plastic pollution.

The Treaty includes draft provisions on:

- Production of primary plastic polymers
- Problematic plastic products and chemicals of concern
- Product design
- Waste management
- Trade and subsidies
- Just transition
- Financial assistance, technology transfer and capacity building
- Implementation and compliance

Meeting INC-4 took place in Canada in April 2024. After that, the UK took part in two intersessional expert meetings in August, covering chemicals, problematic and avoidable products and product design, and means of implementation, including financing. The co-chairs will produce summaries of these meetings that will be available on the INC website.

The fifth round of negotiations will take place in Busan, Republic of Korea 25 November to 1 December.

Defra were meeting with UK Overseas Territories and Crown Dependencies officials the same week as the Plastics Network meeting; this was expected to provide an opportunity for them to input to the UK preparation in advance of INC-5.

The participants in the Network meeting agreed unanimously that the Network should continue, and discussed future needs. Among those mentioned were:

- Knowledge sharing across the UKOTs
- Case studies across the UKOTs and CDs
- Knowledge sharing from other plastics groups
- Linking with other initiatives, e.g. PROMAR Prevention of Marine Litter in the Caribbean Sea
- Developing a toolbox for a more standardised approach across the network of UKOT and CDs to tackle plastic pollution, e.g. monitoring tools
- Financial sources of potential funding streams
- Techniques that other UKOTs have found successful to reduce, reuse or recycle single-use plastics
- Reducing impact on wildlife; understanding and addressing community priorities; knowledge sharing across UKOTs.

UK Overseas Territories Conservation Forum online conference 2025 – *save the dates*

Probably the most frequent question that UKOTCF is asked by partners in the UK Overseas Territories and Crown Dependencies is “when is the next UKOTCF conference?”

The conferences bring together governmental, NGO and other organisations in UK Overseas Territories and Crown Dependencies, and other stakeholders in conserving the environment in these and some similar small countries. They draw on similarities and differences in experience, to provide insights into common challenges, leaving participants better equipped to address local needs, and to build a sense of collective identity and endeavour across the territories. The conferences are working meetings to develop capacity, exchange information on best practices, to take forward conservation issues that have already been identified and to plan positive actions, as well as integrating conservation into other sectors of the economies, especially in the context of sustainable development and international commitments.

The conferences have become recognised as a key element in the delivery of international commitments and local conservation needs. The first such conference was held in London in 1999, the second in Gibraltar in 2000 (although this was the first to be organised), the third in Bermuda in March 2003, the fourth in Jersey in October 2006, the fifth in Grand Cayman in May/June 2009, the sixth in Gibraltar in 2015 and seventh held online during the pandemic in 2021. The proceedings can be seen at <https://www.ukotcf.org.uk/our-conferences/>.

As some know, we had investigated the possibility of a hybrid physical/online conference in autumn of 2025. Unfortunately, after some positive initial indications, it has proved impracticable to raise the very substantial funds needed for this at present. However, our online conference in 2021 proved very successful and we now plan to hold our eighth conference, again in online mode. Subject to confirmation, the UKOTCF conference will be in the period **Monday 13 to Thursday 16 October 2025**. Because of time-zone differences across the territories, the main conference sessions are likely to run from about noon to evening in UK. (At that time of year the time-zones of most territories range from 2 hours ahead of UK time to 6 hours behind – with apologies to Pitcairn: we cannot really cope with a 9-hour time-difference, but hope for participation somehow)

We have been consulting territories widely over the last couple of years, especially via regional working groups, on preferred session topics. As a result, we currently expect the main topics to be: Sharing Experiences across territories; Funding/resourcing; Using technology; Handling & using data; Biodiversity strategies; and Horizon scanning

In addition, there will be scope for poster presentations, and the 3rd Sir Richard and Lady Dace Ground Lecture.

We hope to raise some sponsorship support to assist some from the UKOTs to participate. Anyone aware of potential sources of such financial support are asked to contact UKOTCF (hello@ukotcf.org) as soon as possible.

Further announcements will be made as more information becomes available. These will be made available on <https://www.ukotcf.org.uk/our-conferences/>, <https://www.ukotcf.org.uk/news/>, and the via circulations through UKOTCF Working Groups and those on the circulation list for *Forum News*. If anyone wishes to be placed specifically on a conference information circulation list, please use: <https://www.ukotcf.org.uk/ukotcf-conference-2025/>

Experiences in the Pitcairn Group

In this article, Luke Hosty describes his experiences at Pitcairn.

My work in the Pitcairn Marine Protected Area (MPA) started back in 2019. A friend of mine, Jon Slayer, and also former Royal Marine, had been working in the Pitcairn Islands since 2013. The Google Street View that he captured on Henderson and Pitcairn kicked off a whole chain of work that allowed Jennifer Lavers and Alex Bond to begin research projects focused on seabirds, crustaceans and the accumulation of plastic on the beaches of Henderson Island. In 2019 I was asked to join the Henderson Island Expedition. The mission was to clean up East Beach and enable scientists to collect data on-island and below water, and establish Mandy Barker (resident artist) with a studio on Henderson. My other role was to capture content (underwater, aerial & terrestrial) of the MPA, create a media archive for use by the community and all stakeholders, and of course, storytelling about the expedition itself.

Since then, we've been working with the community to help bring the science to life and enable them to step into the role of guardians of the MPA. In September last year, I went back to Pitcairn for the opening of the newly built Marine Science Base and spent the majority of my time on island, running community workshops on storytelling and sharing the work that we'd done remotely with Michele and Melva (Pitcairn Natural Resources team). We were able to engage in conversations about the concept of branding the MPA – co-designing the strategy with the community. It was an absolute privilege to spend time with everyone in person, build rapport and deepen the relationships.



Community workshop - marine science base, 20 September 2023

Shooting video content in Pitcairn is like no other destination. Firstly, just because it's so far away – you have to consider what kit you're taking with you and what kit you don't want to get damaged or lost through a whole handful of long international flights, another handful of really small island-hopping flights and then having to consider getting stuff on to ship and off ship and on to the islands, and it all surviving the trip before you even start capturing material. That's why our approach is: if it doesn't fit in your backpack, it's not going. I try to keep things light and robust.

Then the other side is considering where and how you'll be filming. Most of this involves filming on boats and by running a self-sufficient 2-person scuba-diving operation with no emergency medical evacuation support. This is also a place where you don't have signal on your mobile phone or any other Wi-Fi that a lot of our tech can rely on for GPS services; then there is the local sea life. I'd say the biggest concern when it comes to gear is either losing your drone to the sea or having it taken out of the sky by a petrel!

One of my favourite Pitcairn travel stories comes from my first expedition. We arrived at Henderson Island with the *Silver*



Above: Travel gear en route;

Below: Longboat, with Silver Supporter in the background.



Supporter on World Ocean Day. We'd had to do all our pre-expedition planning without doing a recce (not ideal!). So basically we were doing our recce by trial and deploying to shore for the first time. This can be super challenging anywhere in the South Pacific Islands because a lot of the islets or the raised coral atolls have a reef crest that runs the full length of any coastline. If you know where to look on the north side of Henderson, you've got these really nice channels that take you all the way to the shore. East Beach isn't like that - you've got a crest without any breaks, stretching the whole length of the coastline, all the way to the cliffs.

The Pitcairners' boat skills are next to none when it comes to wild ocean, given that they operate the Long-boats year round to ferry essential supplies and people from the *Silver Supporter* into the stronghold of Bounty Bay. So our plan was to do daily work trips with beach landings on East Beach via rigid inflatable boat (RIB). Jay Warren was our trusted skipper, and he was the best person to navigate these waters. So Jon, Jay and I jumped on the RIB and took the Stuff Media crew to get set up on island and film the arrival of all the scientists. Arriving at the beach wasn't straightforward, but at least it was a success.

That was only the first of three trips we needed to make to get the full team ashore. We put the drone up for a birds-eye view but we found absolutely no channels the whole way along. Jon and Jay had no choice but just to get back on to the water, time it right and ride the RIB over the reef crest. Two elements created the next unfortunate turn of events -the RIB had a fixed outboard motor with no hydraulic lift to navigate shallow waters (we've since updated the craft to a jet-boat) and the bay was a minefield of marine plastic debris. As they found their best alignment and went for it, a fishing rope attached to a coral head entangled itself around the propeller head. As Jay accelerated into a breaking wave the RIB literally went up in the air and landed Jon and Jay backwards on to the reef ...they were both super lucky to get to



Above & below: Stranded on Henderson, 9 June 2019



the surface conscious and relatively unscathed, but the boat was now upside down in the crashing waves.

I was spotting from the shoreline, so I immediately swam out to the RIB. Both Jon and I have worked as safety kayakers for whitewater rafting in Africa, so we got on to the hull and started a two-man flip drill, by building momentum through a seesawing action we were able to upright the RIB and get back to the beach – again super lucky no one was severely hurt because for now we were stranded and the swell was picking up.

We had no choice but for Jay, Jon, myself and the Stuff team to camp out on the beach. We ended up sending the drone to the *Silver Supporter* and having the crew attach a lighter to it so we could start a fire. We chose radio silence to conserve battery life. What actually kept us all going was a tub of breadsticks that Meralda Warren had made Jay to keep as backpack snacks for the expedition. Grateful for local breadsticks, we repurposed the marine plastic that we had come to clean up into a make-shift camp shelter and huddled round the burning fire to keep us warm. We made it through the night and, 48 hours later, we finally timed the swell and got ourselves back to the *Silver Supporter*. The next day we went north, cut a new path across the plateau and roped down the cliffs to East Beach and started the work.

In the last 18 months, we've been fortunate to work alongside the Pitcairn community to help build awareness, engagement, and local stewardship for the MPA. The Pitcairn community is protecting some of the most precious ecosystems we have on our planet.

It's easy to assume that all communication about the MPA should be fact-based – that we should be sharing scientific research, statistics & news. But research shows that stories are one of the most effective ways to connect people and catalyse change. It's the process of telling, hearing and sharing stories of people's lived experiences that engages us emotionally and enables us to feel, connect and respond to issues – and each other – more deeply.

Much of our work now with Pitcairn is about creating story



*Above: Daily commute from N to E on Henderson, 10 June 2019;
Below: Torika driving longboat, 18 September 2023.*



sovereignty – enabling the Pitcairners to shape the narrative of the MPA. We're working with Torika, the new Comms Manager for the MPA to define a strategy that makes it easy for her to create engaging content and share local stories with the world.

Below and next page: photos of the Marine Protected Area.



*Above: East beach at Henderson, 10 June 2019;
Below: South Pacific Humpback Whales, 11 September 2023.*



Right: Oceanic Black-tip Sharks, 27 June 2019;
 Below: Corals and photographer;
 Lower right: Marine science base opening, 22 September 2023.



Awards under Darwin Plus main projects Round 12 and the first strategic project

The outcomes of the amazingly laborious and slow Darwin Plus main applications procedure have at last been announced for Round 12, with work which started in April 2024. We list these below. More information on individual projects are available at

<https://darwinplus.org.uk/project/project-round/12>.

At the time of writing, the results for the Darwin Local applications for the current financial year are still not available.

Ref.	Title	Dates	Locations
DPSTR001	Enabling effective biosecurity in the Caribbean UK Overseas Territories (£2,572,235) Royal Society for the Protection of Birds (RSPB)	01/04/2024 - 31/03/2028	Anguilla, British Virgin Islands, Cayman Islands, Montserrat, Turks and Caicos Islands
DPLUS220	Fellow: Sophia Economides (£49,900) Cyprus University of Technology	01/04/2024 - 31/03/2026	SBA's of Akrotiri & Dhekelia (Cyprus)
DPLUS219	Fellow: Devon Carter (£28,651) ANT - Anguilla National Trust	01/01/2025 - 31/12/2025	Anguilla
DPLUS218	Fellow: Giovanni Hughes (£23,571) ANT - Anguilla National Trust	01/04/2024 - 31/03/2025	Anguilla
DPLUS217	Fellow: Lillianne Hawkins (£99,387) University of Gibraltar	01/06/2024 - 31/05/2026	Gibraltar
DPLUS216	Supporting Atlantic territories invertebrate conservation (£399,173) Buglife	01/04/2024 - 31/03/2027	Anguilla, Ascension Island, Bermuda, Falkland Islands
DPLUS215	Assessing BVI habitat recovery from soil seedbanks following invasives removal (£458,225) Royal Botanic Gardens, Kew (RBG Kew)	01/04/2024 - 31/03/2027	British Virgin Islands
DPLUS214	Southwest Atlantic Elephant Seal Population Assessment (SAESPA) (£432,459) BAS - British Antarctic Survey	01/04/2024 - 31/03/2026	British Antarctic Territory, South Georgia and South Sandwich Islands
DPLUS213	Building baseline knowledge of mesophotic ecosystems in Ascension Island MPA (£375,153) Plymouth Marine Laboratory	01/04/2024 - 31/03/2026	Ascension Island
DPLUS212	Restoring Road Salt Pond, Anguilla: biodiversity conservation through community collaboration (£348,854) ANT - Anguilla National Trust	01/04/2024 - 31/03/2027	Anguilla
DPLUS211	Big trouble for small populations: saving Anguilla's Critically Endangered iguanas (£438,790) ANT - Anguilla National Trust	01/04/2024 - 31/03/2027	Anguilla
DPLUS210	Harnessing AI to prevent biodiversity loss in Anguilla (£385,544) Re:wild	01/04/2024 - 31/03/2026	Anguilla
DPLUS209	Tracking terns for conservation in BIOT (£307,730) Heriot-Watt University	01/04/2024 - 30/09/2026	British Indian Ocean Territory
DPLUS208	Conserving cetacean biodiversity in the Falkland Islands (£258,416) Falklands Conservation	01/07/2024 - 31/03/2027	Falkland Islands
DPLUS207	Empowering and preparing Cayman's Sister Islands to tackle invasive mammals (£599,303) Royal Society for the Protection of Birds-RSPB	01/04/2024 - 31/03/2027	Cayman Islands

DPLUS206	Climate impacts on FI past, present and future freshwater dynamics (£184,302) SAERI - South Atlantic Environmental Research Institute	01/07/2024 - 31/12/2026	Falkland Islands
DPLUS205	Creating a sustainable framework for monitoring whales at South Georgia (£403,900) BAS - British Antarctic Survey	01/10/2024 - 31/03/2027	South Georgia and South Sandwich Islands
DPLUS204	Enhancing resilience of the Akrotiri salt lake ecosystem (£396,103)	01/06/2024 - 31/05/2027	SBAs of Akrotiri & Dhekelia (Cyprus)
DPLUS203	Shining a light on Anguilla's moths using Artificial Intelligence (£154,682) UK Centre for Ecology & Hydrology (UKCEH) - Wallingford	01/04/2024 - 31/03/2026	Anguilla

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 umbrella bodies for their territories (but now lost to UKOTs because of Brexit). 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 a few years ago. We were shocked when *Arkive* closed down due to lack of funding. This had 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 advisors 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 few paid personnel donate extra unpaid time.

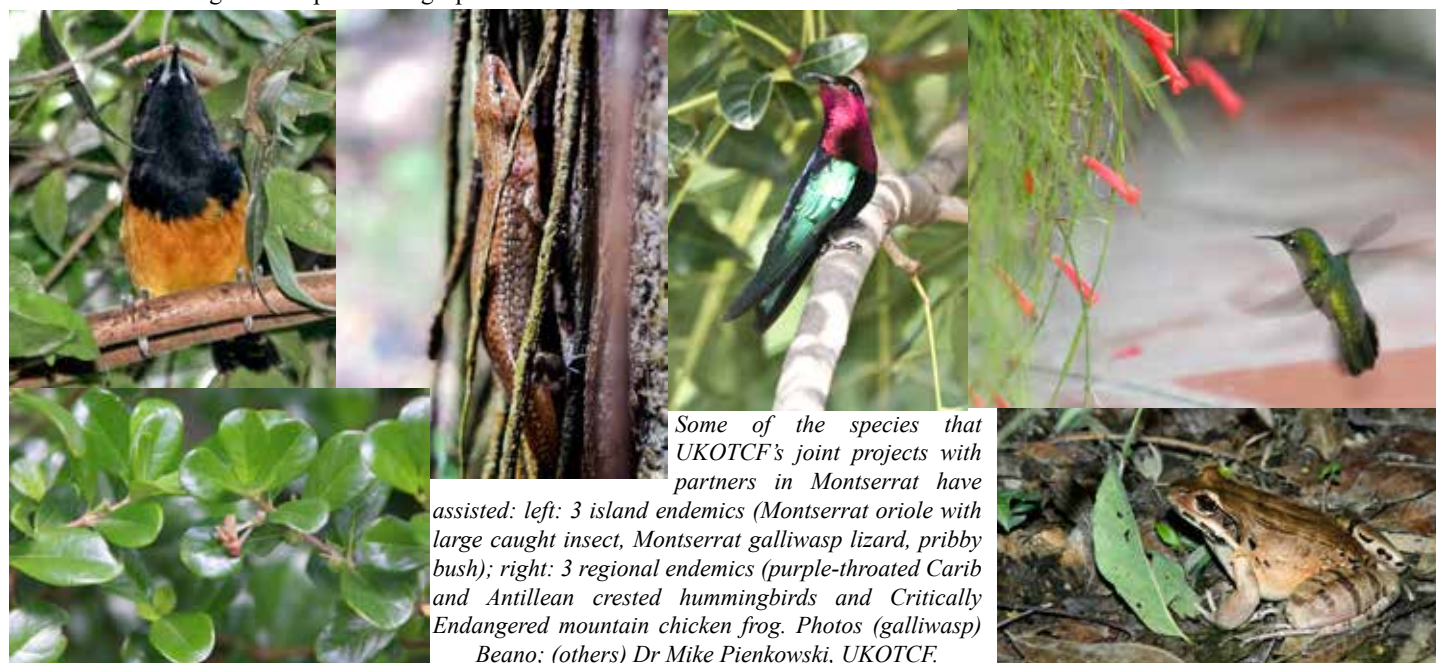
However, some things still need paying for. This was well recognised by UK Government officials in the early part of this millennium, when they recognised that UKOTCF provided support for UKOT conservation that UK Government might be expected to provide (and is done by some other states with overseas 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 that financial crisis ended (well before the next started), this funding was not restored – and, in fact fell further, so that the decline in UK Government support via UKOTCF for UKOT conservation declined for several years by 100%. We appreciate some project grants awarded in the last few years which restore part of this.

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 some very generous donations from certain Council members and others which helped hugely in recent years.

How you can help

Clearly, if you have links with funding institutions, an introduction would be welcome! Please contact Catherine Wensink (cwensink@ukotcf.org). However, even if you do not, there are several ways in which you could help: see <https://www.ukotcf.org.uk/donate/>.



Some of the species that UKOTCF's joint projects with partners in Montserrat have assisted: left: 3 island endemics (Montserrat oriole with large caught insect, Montserrat galliwasp lizard, pribby bush); right: 3 regional endemics (purple-throated Carib and Antillean crested hummingbirds and Critically Endangered mountain chicken frog. Photos (galiwasp) Beano; (others) Dr Mike Pienkowski, UKOTCF.