ANNUAL REPORT







FAUNA & FLORA INTERNATIONAL

Halcyon Land & Sea

2018

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Executive Summary



HALCYON LAND & SEA KEY STATISTICS



Portfolio includes 52¹ projects across 26 countries



Supports an additional 38 sites through the Rapid Response Facility



Actively secured around 9.4 million hectares of critical habitat



Directly contributed to the conservation of 60.5 million hectares (larger than Ukraine)

This report provides an update on all Halcyon Land & Sea projects supported since 1998, with a focus on activity in 2018, relating to grant AE 3981.

Fauna & Flora International (FFI) is extremely grateful to Arcadia for the opportunity to undertake such strategic and long-term conservation. We are delighted that Arcadia has decided to renew and extend its support to Halcyon Land & Sea, and are very grateful for the opportunity that this presents to increase our conservation impact.

The review commissioned by Arcadia, which took place during 2016, provided us with an incredibly valuable opportunity to reflect on the progress, achievements, and approaches used in Halcyon Land & Sea and across FFI more widely. We were extremely grateful to Arcadia for providing us with this opportunity for self-examination and reflection and continue to apply the learning from this process.

Halcyon Land & Sea supported four new initiatives in 2018, but focused on consolidating work at sites where we are already active.

Highlights and key achievements in 2018 have included:

- Thanks to improved security in South Sudan, we are extending our work into a second site within the Western Equatoria region where we have trained government and community rangers to enhance protection of critical forest sites.
- Building relationships with new government staff in Mozambique and highlighting the plight of elephants in Niassa Reserve in the press, contributed to the government's deployment of 60 Special Forces members to Niassa reserve. This has led to a 73% reduction in elephant poaching compared with 2017 and has had a positive impact on our anti-poaching efforts in Chuilexi Conservancy.
- In Tânarva Mare, progress towards financial sustainability is being made, with significant funding being received in subsidies from land bought and managed thanks to Halcyon Land & Sea.
- Conservation easements were used to secure a further three properties, totalling 648 hectares of vital renosterveld, for conservation in perpetuity, an approach that was trialled as a result of Halcyon Land & Sea funding. This included Klipfontein, which is part of one of the largest surviving patches of renosterveld.

¹ Another donor to Halcyon Land & Sea chose to support four additional marine projects, but these are also listed as part of the Arcadia Marine Programme. They are not reported here, but are instead reported as part of the Arcadia Marine Report. The finance from Halcyon Land & Sea has not been included in any report of co-financing for these projects.



- An aerial survey of the Kazakh Ustyurt saiga population suggested a 37% increase in numbers between 2017 and 2018 (from 2,700 to 3,700 individuals). This is in line with the population increase recorded between 2016 and 2017 and demonstrates the significant potential for population recovery in this species.
- The highly effective surveillance efforts for black rhinos were maintained within OI Pejeta Conservancy this year, and as a result the population rose from 113 to 120, with only one rhino death recorded (due to predation). therefore there were no losses to poaching this year.

Challenges encountered in 2018 have included:

o The political unrest in Nicaragua has proved challenging for our conservation efforts in Chacocente, and has prevented the full deployment of agencies to protect the olive ridley mass nesting this season. Nonetheless, some protection remained through a combination of MARENA staff, community patrollers and the presence of the army. Negotiations with the landowner to secure Punta Venecia have also been postponed as a result of this political unrest, however this site continues to be managed for conservation.

- o FFI reluctantly decided to withdraw from the project that aimed to develop a new conservancy in south-central Namibia, as negotiations between the proposed partners in the venture broke down.
- A formal assessment of the partnership between Zarand Association and FFI conducted during 2018 concluded that it would be premature for FFI to undertake the planned step back from the partnership in 2019. However, despite changes to our exit strategy, there is a clear improvement in the capacity on the ground for conservation in this area.
- Overall, while significant progress has been made in securing and managing key sites across the portfolio, achieving financial sustainability for these is, as always, a much greater challenge.

HALCYON LAND & SEA - BACKGROUND

Halcyon Land & Sea is a fund established in 1998 by Dr Lisbet Rausing to find innovative and entrepreneurial ways to secure threatened habitats.

The aims of Halcyon Land & Sea are to:

I. Secure areas of exceptional biodiversity that are unprotected or under-protected, and are at risk of destruction or degradation, using the most locally appropriate approaches;

II. Build the local and national capacity to manage these sites into the long term, engaging the local community in this process wherever possible;

III. Develop mechanisms to underpin the long-term financial sustainability of these sites; and

IV. Develop an improved enabling environment for site conservation, through strategic interventions at both policy and practice levels.

PROTECTING LAND

Through Halcyon Land & Sea, FFI secures areas of critical biodiversity through a number of diverse approaches, developed to fit the needs of individual sites and projects. These include:

- o purchasing or leasing sites,
- developing local land stewardship or site management agreements, and
- implementing conservation management where this has been absent or weak.

We always work in partnership with local conservation agencies and local communities.

Halcyon Land & Sea is extremely selective in its acquisition of sites; it acts strategically by securing key habitats, creating wildlife corridors, and bridging essential gaps in site ownership. To date, Halcyon Land & Sea has actively secured almost 9.4 million hectares of critical habitat, and has directly contributed to the conservation of almost 60.5 million hectares², an area larger than Madagascar.

Halcyon Land & Sea sites are not only important in terms of the wildlife they protect – they also protect important stores of carbon that, if released, could contribute to global warming. Initial calculations made in 2007 indicated that the habitats and soils within the sites at that time had secured around 260 million tonnes of carbon. If key sites had been destroyed or degraded, up to 204 million tonnes of carbon dioxide could have been released – equivalent to 37% of the UK's annual CO_2 emissions.

We also award Strategic Small Grants in areas where traditional funding is unavailable, but the threat to priority conservation lands is immediate.

This does not include the Chagos marine reserve; Halcyon Land & Sea funding provided to BLUE Foundation helped to secure this area, covering some 54.5 million hectares.

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BUILDING CAPACITY

These projects ensure local, sustainable management by empowering local groups to address conservation needs themselves. Halcyon Land & Sea projects always work towards handing over site management or ownership to an appropriate in-country group, with a commitment to providing support until the project is sustainable.

EMPOWERING COMMUNITIES

Halcyon Land & Sea projects also work to ensure equitable benefits to local communities through an improvement in the standard of living and through their inclusion in land planning decisions. Where appropriate, the sustainable use of biodiversity and the development of innovative community-based enterprise schemes are encouraged.

SEEKING SUSTAINABILITY

Building local capacity and support are important components of project sustainability, as is the promotion of conservation finance. To this end, projects develop innovative approaches to ensure the running costs of Halcyon Land & Sea sites can be underpinned in the long term, realising the inherent values of natural resources where possible, with the aim that biodiversity can in effect fund its own conservation.

LEVERAGING FUNDS

As a result of the US \$20 million funding granted from Arcadia since 1998, we have leveraged an additional US \$145 million to date from other sources.

2018 REPORT

This year we have structured the report differently. Previously we organised reports by the type of grant given and by geography. However, this year we have grouped projects by their stage of implementation, including:

- new projects projects that Halcyon Land & Sea has supported for the first time this year;
- active projects projects that have received ongoing or consolidation finance from Halcyon Land & Sea this year;
- ongoing projects projects that FFI is still active in delivering, but that didn't receive Halcyon Land & Sea funding this year;
- legacy projects projects where we track ongoing progress, although are no longer actively engaged, except in cases where support is specifically requested; and
- historical projects projects where FFI is no longer actively engaged and it is no longer appropriate to expect ongoing updates.

Within each category, project reports are organised by the date of the most recent Halcyon funding. Projects are categorised by type (Main Grant for land acquisition or management, Strategic Initiative or Strategic Small Grant), and by habitat type, with a standard icon for easy reference. A general location map is also included for each site.

A full list of the projects supported during the lifetime of Halcyon Land & Sea is included in Table 1 overleaf.

KEY FOR PROJECT SUMMARY ICONS



New Projects 2018

During 2018 Halcyon Land & Sea supported four new projects, in Namibia, Kenya, Mozambique and Vietnam.



Securing key karst forests in northern Vietnam

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

BACKGROUND

The Khau Ca Species and Habitat Conservation Area and the Tung Vai Watershed Protection Forest are two sites in Ha Giang province, northern Vietnam, which together cover some 5,000 hectares of limestone karst forest. This habitat type is among the most important for conservation globally due to its exceptionally high levels of biodiversity and endemism. This project builds on FFI's long-standing engagement in Ha Giang province, where we have been working for over 15 years on forest conservation with a focus on threatened, endemic and highly range restricted trees and primates. The remnant limestone karst forests in Ha Giang, now limited to slopes and high elevations, provide vital refuge for the region's unique wildlife, as the surrounding lowland areas have been all but cleared for agriculture. These areas are also important watersheds and provide vital resources for local ethnic minority communities. However, these fragile forest fragments are highly threatened by infrastructure development, fuelwood and timber harvesting and further agricultural conversion, making it increasingly important to secure the last remnant forests in order to prevent their loss, and with them, the globally important species assemblages that they support.

HABITAT



LOCATION



AREA TO BE SECURED

5,000 hectares

POTENTIAL AREA OF CONSERVATION IMPACT

25,000 hectares

Despite their status (as a Species and Habitat Conservation Area and Watershed Protection Forest respectively), neither Khau Ca nor Tung Vai is under any form of active or effective conservation management. Although Khua Ca is formally a protected area, and is part of a wider designated national park, in practice, the lack of effective management or enforcement at Khua Ca has allowed a rise in illegal logging in and around the forest, impacting the integrity of the habitat and key species. Additionally, the last remaining forest corridor connecting Khau Ca and neighbouring Du Gia National Park has no formal protection and is at risk of imminent agricultural conversion by illegal settlers. Tung Vai has no state-supported active management or law enforcement on the ground, and thus hunting and logging have become persistent threats. In addition, unchecked expansion of shade-grown cardamom (a government-supported industry) has become particularly problematic as it is associated with active thinning of the canopy, clearance of understory vegetation and has high fuelwood

requirements (for drying the pods), all of which are detrimental to the integrity and future regeneration of the forest.

The project will tackle these threats by (i) ensuring that Khua Ca is actively managed as part of the wider Du Gia-Dong Van National Park (with clear management plans, capacity and on the ground patrols), (ii) protecting and restoring the habitat corridor connecting the Khau Ca and neighbouring Du Gia National Park, and integrating its management into theirs, (iii) establishing and operationalising a new protected area that would encompass Tung Vai Watershed Protection Forest, and (iv) maintaining forest connectivity between Tung Vai and Phong Quang Nature Reserve, a neighbouring protected area to the south. The project will also investigate options for developing sustainable cardamom production and diversifying income opportunities in Tung Vai, to identify solutions that promote forest integrity whilst maintaining local livelihoods.





R5 Concession, Niassa, Mozambique

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

BACKGROUND

We have been working to protect the vast wilderness and associated wildlife populations of the Niassa National Reserve since 2008. Support was initially delivered directly to the Reserve Authority, and more recently through the establishment of a well-managed and effectively protected conservancy (Chuilexi) in the heartland for Niassa's wildlife. However, adjoining concessions also hold important wildlife populations, and if not effectively managed these areas could not only be irreparably damaged, but also undermine the effectiveness of Chuilexi's existing operations by providing an entry point for poachers. R5 is a vacant concession directly to the west of Chuilexi, and currently provides a key destination and through route for poachers entering from its border with Tanzania. Chuilexi's long western border adjoins R5, and a lack of effective management in this concession creates the risk of ongoing poaching incursions into Chuilexi. R5's unprotected northern border into Tanzania provides a key route for international poachers to cross into Niassa. R5 also shares a border with Mecula Mountain, a hotspot for biodiversity within Niassa, and a key watershed for Niassa's river systems.

HABITAT



LOCATION



AREA TO BE SECURED

147,000 hectares

POTENTIAL AREA OF CONSERVATION IMPACT

147,000 hectares

The lack of management to date in R5 has resulted in notable impacts on its wildlife populations. R5 is a concession known to be targeted by poachers due to a combination of a historically large elephant population, and no current management and/or law enforcement. While elephant numbers were once high, aerial surveys have shown significant numbers of carcasses in recent assessments, with one carcass being spotted per 7km², compared to one per 101km² in Chuilexi. The presence of this high level of poaching threat in an area directly adjoining Chuilexi is a major concern, as the long border between the two can be difficult to patrol effectively. The introduction of management and enforcement into R5 would not only allow recovery of its own wildlife populations (such as elephant, lion, wild dog and ground pangolin), but would also create an important buffer for Chuilexi from external poaching threats.

Securing the concession for R5 would protect an additional 1,470 km² of Niassa's heartland and would effectively manage a key border for Chuilexi. The concession is currently out for tender, and we are proposing a two phase process: firstly to further extend and strengthen Chuilexi's operations along the border with R5, in preparation for potentially extending management into this area; secondly, if the tender is successful, to pay concession fees and develop conservation infrastructure and initiate patrols within R5.

This project aims to:

- establish improved infrastructure and antipoaching presence along the Chuilexi-R5 border, to address movement of poachers between concessions, and thereby increase protection of both Chuilexi and R5;
- (ii) tender for the management of the R5 concession, submitting a bid on behalf of Chuilexi in line with requirements and deadlines as advertised;
- (iii) should the management contract for R5 be secured, expand law enforcement operations and infrastructure into R5 and address the significant poaching and weaker law enforcement presence in R5.





Applying conservation easements in Laikipia, Kenya

STRATEGIC SMALL GRANT

BACKGROUND

Conservation easements have been employed in other Halcyon projects as a way to ensure lands are secured for conservation in perpetuity. We have identified two wildlife-rich concessions in Kenya that would benefit from long-term legal arrangements to secure current conservation use. One important private ranch that supports large mammal migration and connectivity in the Laikipia landscape will shortly be coming up for sale, and the owner has requested that FFI design an easement mechanism to put the land under conservation management in perpetuity prior to sale. Without this there is a risk that the land could be sold for sub-division. In another conservancy, due to the way that the current landholding trust is structured, there is a potential risk that in future the land could be divided and sold, with no security for ongoing integrated conservation management. However, we are not aware of any existing mechanisms in place for land easements in Kenya. A first phase of this project will determine the scope for using conservation easements (or an equivalent mechanism) in Kenya to secure conservation land use in perpetuity in critical areas. A further phase of work is envisaged to put easements in place in the two land units to test the mechanisms in Kenyan law and, importantly, establish precedence for wider use in Kenya.

Firstly, the project plans to review the legal background relevant for easements in common law countries (such as Kenya), identify options (recognising the potential need for new legislation), and develop a template, with legal wording, for a "pilot" easement. This work will be undertaken jointly by legal experts from the UK and Kenya.

PROGRESS IN 2018

So far the work has identified that the Kenyan Wildlife Conservation and Management Act 2014 created the concept of a wildlife conservation easement, however no wildlife conservation easements seem to have been created to date. Based on this, we are preparing a draft easement that could be applied to the two land areas in question. The draft easement will propose prohibitions or limitations on, for example, infrastructure development and commercial activity (with the exception of ecotourism), in addition to activities that impede water flow or negatively affect biodiversity (e.g. destroying native species or introducing non-native species) in the conservation area. The easement will however emphasise the landowners' ownership of the property, the right to use it recreationally and to retain any revenues.







Securing Omkyk and Swaartmodder, Namibia

STRATEGIC SMALL GRANT

BACKGROUND

As a result of a scoping grant to explore new project opportunities in Namibia, FFI was invited to develop a new conservancy in south-central Namibia. This area supports rare and unique habitats and species associated with the southern Namib Desert and central plateau. However, these vulnerable habitats are under threat from overgrazing and land degradation, as well as illegal poaching. The project area supports an intact assemblage of larger wildlife species, including birds, small antelopes, predators and large antelopes, being a notable hotspot for mountain zebra and oryx.

The wider project aimed to use strategic land purchase and collaborative management agreements with neighbouring land owners to establish a new 56,000 hectare wildlife conservancy adjoining the Namib-Naukluft National Park. This would protect rare and vulnerable biodiversity of the arid and semi-arid Nama-Karoo biome, restore corridors for wildlife and ecological connectivity within the surrounding landscape, and provide a basis for future reintroduction of desert adapted black rhinos. In the longer term, there would be an option to further extend the Conservancy by creating a corridor with the neighbouring NamibRand Reserve, thus creating a conservation landscape of over 300,000 hectares.

The plan was to initially purchase two farms totalling 18,000 hectares – Omkyk and Swaartmodder – to provide the core for a new conservancy, which would be linked into the privately-owned Neuhof Reserve. A sale option agreement had been agreed for these properties, and a coalition of other co-financing investors was identified. However, prior to proceeding with purchase, all parties agreed to undertake a series of scoping and due diligence activities. To support this, a Strategic Small Grant from Halcyon Land & Sea was used to determine the required legal process for transfer of ownership to a new conservancy structure, to develop plans for the joint conservancy (including business and financial sustainability plans), and to undertake further baseline biodiversity assessments to confirm the conservation value of the properties.





PROGRESS IN 2018

Work to gather information demonstrating the overwhelming biodiversity value of the area progressed this year. This showed the proposed conservancy would provide critical resources, migratory corridors and refugia for many important and conservation dependent species and highlighted the value of wildlife dispersal routes through this corridor. Assessments have documented around 240 plant species in this area, along with 64 reptile species, more than 170 bird species, 65 mammal species and a host of invertebrates, many of which are desert adapted and range-restricted.

Work to review potential business models and financial sustainability options also progressed. However, after these plans had been produced, the proposed venture did not proceed. However, on a positive note, another local land owner has now come forward to purchase at least one of the farms specifically for conservation management. This purchase directly applies the knowledge, data and plans generated during the preparation phase (these were specifically requested by this investor as a basis for making his bid). Thus, the investment by Halcyon to date has still achieved the original goal (of ensuring these farms will be managed for conservation), although this will not be achieved through Halcyon purchase, as originally planned. This small grant has effectively achieved the planned conservation success despite the ultimate decision not to invest any further Halcyon Land & Sea funding.

Active Projects

These are projects that received ongoing or consolidation finance from Halcyon Land & Sea in 2018.



Punta Venecia, Nicaragua

STRATEGIC SMALL GRANT

BACKGROUND

Punta Venecia is a 28 hectare plot of land, with 900m of coastline, covering beach, riparian dry forest and mangrove habitats. It lies within the 9,200 hectare Estero Padre Ramos Natural Reserve, on the Pacific coastline of Nicaragua. The beaches at Punta Venecia, and adjoining areas, represent the single most important nesting site for Critically Endangered hawksbill turtles in the Eastern Pacific. There are thought to be less than 500 nesting female hawksbill turtles remaining in the Eastern Pacific, and poaching of eggs remains a major threat to the population – with all eggs being poached at some beaches. Around 50% of all Eastern Pacific hawksbill nests are laid on beaches within the Estero Padre Ramos Natural Reserve. FFI has been working in this area since 2010, however the long-term future of this main nesting area within the reserve is threatened. The area called Punta Venecia has recently been sought out by property developers and tourism entrepreneurs, who have expressed their interest in developing the area for tourism, with no regard for the future of this vital hawksbill habitat. This project aims to seek ways to intervene and secure this property to avoid its development and the consequent destruction of the key hawksbill turtle nesting beach and associated coastal habitats.

HABITAT



LOCATION

AREA TO BE SECURED

28 hectares

POTENTIAL AREA OF CONSERVATION IMPACT

9,200 hectares

ACHIEVEMENTS IN PREVIOUS YEARS

The rights to the land in question are held by a local entrepreneur who allows FFI and its partners to run the turtle hatchery and associated field station in his buildings. FFI investigated possible legal mechanisms to secure the land for long-term conservation, including options for a "conservation easement", and established the precise status of the current property rights, boundaries, tax status, and development regulations that might affect the land.

PROGRESS IN 2018

An experienced Nicaraguan attorney assessed the viability of alternative legal instruments for securing this property for conservation, and identified three potential avenues (including (i) a 25 to 90 year extension of the existing rent-free loan arrangement; (ii) a multiparty covenant over the land, making explicit the municipal authority's commitment to securing the site for turtle conservation; and (iii) a legal document passing the rights over, and fiscal obligations for, the land from the landowner to FFI, or another environmental institution). Plans to meet the landowner to discuss these routes (due to be held in April 2018) were postponed due to the outbreak of civil unrest in Nicaragua. Negotiations will be

reinitiated once the security situation has stabilised, and the lawyer remains engaged to finalise the necessary contracts.

In the meantime, the land at Punta Venecia continues to be managed for conservation under a short-term agreement between FFI and the landowner. FFI's marine turtle conservation programme has continued hawksbill turtle monitoring and protection activities at the site throughout the 2018 nesting season (April -November), and the status of the area's mangrove, beach and coastal forest habitats has been maintained. This year 287 hawksbill turtle nests were protected and 8,751 hawksbill hatchlings successfully released to the sea; more than 90% of hawksbill turtles and their nests are now protected at this site, whereas previously nearly 100% of eggs would have been be poached. Local communities are directly involved in turtle protection and in livelihood diversification activities (to reduce reliance on turtle eggs), and also benefit from a novel mangrove concession programme which granted local rights for sustainable mangrove management (including sustainable collection of cockles, and fishing of captive reared snapper). In parallel, an innovative volunteertourism initiative provides an additional income stream to the project.





Protecting key forest landscapes at Zarand, Romania

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

BACKGROUND

Romania still has one of the largest areas of undisturbed forest in Europe, and within this the Transylvania region supports some of Europe's most threatened landscapes. The remaining tracts of forest in the Carpathian Mountains support a wide range of native biodiversity, including carnivore populations of European significance (Romania is thought to support 40% of European brown bear and 35% of European wolf populations). The forests are also important in their own right, as large-scale and representative blocks of native European broadleaved and coniferous woodlands. These forests represent part of a beautiful and culturally rich landscape, where traditional Romanian life is still maintained. The region's valleys have been used for centuries for small-scale agriculture, nestled between heavily forested hills and mountains. However, over recent years the growth of unsustainable forest management coupled with inappropriate development and agricultural intensification (following the large-scale purchase of smallholdings) has affected the integrity of these forests and of the landscape itself. The fragmentation of key forest corridors is also affecting the integrity of carnivore populations and is resulting in increased incidences of humanwildlife conflict, as carnivores are forced to cross agricultural areas. Following a Strategic Small Grant in 2012, a full Halcyon Land & Sea award

was made in 2014. This landscape-scale project will secure and maintain key areas of forest, ensure site designation under the Natura 2000⁵ network, and promote sympathetic land management, while also addressing livelihood issues for small-scale traditional farmers in the area.

The project focuses on a key 150km forest corridor (the Zarand landscape corridor), which connects the Western Carpathians and the Southern Carpathians, two significant forest landscapes, and provides the only zone through which large mammals and other forest-dependent fauna can move between these areas. This connection maintains linkage of the Romanian Western Carpathians into a chain of forest landscapes north into Ukraine and south-east into the former Yugoslavia. Around 80% of the Zarand landscape corridor is forested, including substantial stands of old growth forests, and these support a diversity of wildlife, representing the species assemblage that once occurred throughout Europe's forests. As well as wolf and bear, these forests support European lynx, wild boar, stone martens, eagle owls, lesser spotted eagles, black woodpeckers and capercaillie.

⁵ The EU-level network of protected areas established under the Habitats Directive and Birds Directive. As a recent member of the EU, Romania is committed to establishing protected areas under the EU Natura 2000 framework.

HABITAT



LOCATION



AREA TO BE SECURED

20,862 hectares

POTENTIAL AREA OF CONSERVATION IMPACT

734,935 hectares

ACHIEVEMENTS IN PREVIOUS YEARS

Working with a local partner – the Zarand Association – the project is maintaining forest connectivity within this landscape by restoring habitats at key bottlenecks within the forest, through strategic land purchase and managed restoration of these and other sites. To date, a key forest block (Vorta Forest, 414 hectares) has been purchased for conservation, along with a series of small land parcels (together totalling 133 hectares) to create micro-corridors within a key bottleneck in the main corridor.

The project has taken on direct management of a Natura 2000 site within the corridor (Zarandul de Est, which covers 20,315 hectares) for a 10-year period, and this now serves as a demonstration model for effective habitat and wildlife protection to inform other land managers and agencies in the region. The project brings together 19 different state institutions to work collaboratively across the landscape in a consultation group (a first for Romania, where agencies rarely collaborate).

The project also includes a strong emphasis on maintaining traditional land use (a key underpinning of the mosaic landscape and high biodiversity values), strengthening cultural heritage and diversifying local livelihoods, and on reducing conflict between human communities and wildlife (such as through the erection of fences, and provision of sheepdogs to prevent crop raiding and livestock killing). The project's ranger team works directly with the local gendarmerie to tackle wildlife crime across the corridor. Eight bear dens were located in 2017 within the Zarand corridor (and will be monitored over coming years), while camera traps confirmed the presence of a breeding wolf pack.

PROGRESS IN 2018

The Zarand Corridor remains under active management, with improvements to habitat management underway, conservation activities integrated into existing land management plans, key areas under restoration, and regular, proactive enforcement of environmental regulations. There is evidence that some key threats are reduced (for example, there has been a marked decline in illegal timber movements in the area). However, it is too soon to observe a response in terms of biological data to demonstrate improved conservation status for the area.

Modelling of habitat suitability and landscape permeability across the corridor, based on data from a range of sources (including satellite images and species distribution information), confirmed that the corridor remains functional for wildlife movements. This exercise also helped to identify potential bottlenecks that require additional management interventions (one of these bottlenecks is already being addressed through our ongoing land purchase and management in the Mures meadows). An ongoing survey of bear populations in the corridor (based on faecal genetic samples) has indicated that the corridor remains ecologically functional for this species, with levels of gene flow suggesting that animals continue to move across the full range of the corridor. A wide range of other biodiversity monitoring activities continued, including surveys of invertebrates, amphibians, reptiles, bats and deer.

Work continued at Vorta Forest, a key area purchased by the project, to clarify disputed boundaries and to develop a new management plan, which will showcase truly sustainable, conservation-friendly forestry management. The plan received ministerial sign off in October this year. The project team also continued to actively manage the land parcels purchased to create micro-corridors across the Mures valley meadows (a bottleneck in the corridor which carnivores find hard to cross). A significant problem in the valley is posed by impenetrable invasive scrub, which requires clearing by hand. Once cleared the areas are managed to reduce risk of reinvasion, to support natural reforestation, and where appropriate, planting of native trees is underway.



Site protection activities continued (targeting poaching and illegal logging) with over 200 patrols conducted, from which 83 illegal activities were identified and challenged (with fines being issued where appropriate). There was reporting of illegal poaching of red deer, but the one wolf carcass reported was found to have died of natural causes. Use of night-vision equipment has helped detect a new threat – the use of snares and illegal fish traps on islands within the Mures River. It is too soon to analyse year-on-year trends from patrol data, however anecdotal feedback from communities suggests that poaching and illegal forestry have decreased in areas where patrolling occurs.

The project team continue to intervene to reduce human-carnivore conflict, for example through the provision of guard dogs and chemical repellents, erection of fences (in 2018 there was a particular problem with bears raiding beehives, and fences prevented this), supporting compensation processes and capturing and translocating problem animals, as well as undertaking tracking of animals to better understand movement patterns. The project extended its human-carnivore conflict work to a wider area beyond the corridor this year, tackling settlements with high frequency of carnivore encounters (with 20 separate attacks on livestock over the last year responded to by the team). Within the corridor, surveys of over 100 local farmers showed a clear perception that the team's interventions are reducing damage to livestock and crops by wildlife. Further community

assessments are underway to fully determine the impact of the project on human-carnivore conflict and on communities' welfare and tolerance of carnivores, and are anticipated to be completed by the end of the year.

The team continues to share skills with key government agencies, offering training in protected areas management, forest and game management for large carnivores, and maintaining connectivity for large carnivores.

The project also works at policy level, encouraging better alignment of forestry and hunting plans, and better incorporation of conservation actions across 19 forest management areas, with some evidence of success to date across five forest management units. A new best practice manual to improve the harmonisation of carnivore conservation and connectivity into forest sector approaches is being revised to take into account stakeholder feedback.

The most effective way to integrate conservation needs into forest management plans, as demonstrated by this project, has been through direct custodianship on a Natura 2000 site. Custodianship of the Zarandul de Est Natura site has allowed incorporation of conservation activities into 14 forest management plans and eight game management plans within the site. A formal government assessment of the quality of custodianship at the site rated it as "very good".





The project continues to engage communities within the Corridor to develop model sites that help protect traditional farming techniques that underpin floristic biodiversity and habitat heterogeneity. This work focuses on diversifying livelihoods to make it feasible for people to stay and work the land and maintain traditional land management that benefits biodiversity. A dairy processing unit has been established to add value to milk collected from local farms and to provide the small-scale herders in the region market access. Investments have been made to support the expansion of production and marketing of local products (preserves, honey and other traditional foods), including ensuring the relevant food safety procedures are in place for certain products to reach wider European markets. Tourism development in our target villages was supported through a locally-organised event that encouraged tourists to the area and exhibited the attractions of the valley. A promotional video was created of this visit, which was aired on Romanian TV. Efforts continued in parallel to maintain traditions and crafts of the area, to celebrate and develop its potential as a cultural destination. The project has also developed relationships with local schools, providing another route for engagement with the wider community.

FFI still works to build the capacity of the local partner, Zarand Association. There are ongoing challenges associated with retaining suitably gualified Romanian staff in this rather remote region. In addition, the relationship between Zarand Association and FFI is evolving, which required a formal reassessment of the partnership in 2018. This concluded that it would be premature for FFI to undertake the planned step back from the partnership in 2019. Despite these challenges, there is a real difference in the capacity on the ground for conservation in this area - prior to the commencement of the Zarand Initiative, no one was promoting conservation of the area, but there are now over 30 people actively doing this, representing two NGOs and two Government Ministries, all of whom have benefited from relevant training. The project has also significantly built the capacity of, and responsibility awarded to, the Romanian Gendarmerie to directly tackle wildlife crime. Moving forward, we are further investigating land subsidy schemes as a way of offset running costs for lands in the corridor.



Chuilexi Conservancy, Mozambique

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

BACKGROUND

Niassa National Reserve is a significant biodiversity priority; a wilderness for wildlife under immense threat. Following ten years of support up until 2012, Halcyon Land & Sea funding was deployed towards a new strategy of developing a highly protected 'core zone' for wildlife within the reserve. By targeting a core area with the highest wildlife densities and taking over direct management of the concessions in this area, we are able to put in place much stronger controls than are feasible across the whole reserve. This approach acts as a backstop for, and complements, the wider reserve management policies, as well as providing a refuge for key species during the current upsurge in poaching.

ACHIEVEMENTS IN PREVIOUS YEARS

Three adjoining concessions within Niassa were secured in 2013 as the newly established Chuilexi Conservancy, covering 586,800 hectares (14% of Niassa Reserve). Chuilexi Conservancy has been built from scratch since then. The area now covered by Chuilexi Conservancy experienced widespread biodiversity decline prior to 2013, including extensive elephant poaching, snaring, and illegal logging. Since then, and in under four years, Chuilexi has reversed this trend, by establishing the infrastructure, effective logistics, good equipment and men on the ground that are needed for strong conservation management. In addition, in contrast to some other concessions, staff are present all-year round and its leadership is skilled and experienced. A survey in late 2016 showed that whilst Chuilexi represents just 14% of the area of the Reserve, it held over 30% of key wildlife populations in the reserve, including elephants. However, the high concentration of wildlife within Chuilexi makes the Conservancy more attractive to poachers, especially when animal populations have fallen elsewhere in the reserve.

By late 2017 Chuilexi was employing 124 staff, including 62 rangers, and had established an effective infrastructural base, including a wellequipped headquarters, six outposts, water sources, communications, 855 km of permanent and seasonal roads including bridges over key rivers, vehicles, an aircraft and nine air strips.

HABITAT





AREA TO BE SECURED

586,800 hectares

POTENTIAL AREA OF CONSERVATION IMPACT

586,800 hectares

PROGRESS IN 2018

Chuilexi Conservancy continued to operate effectively during 2018, with strong infrastructure, staff capacity and governance all maintained. Management effectiveness is assessed annually and remains largely consistent, although sees some slight year-on-year variations, which are often attributable to changing external threats. In 2018, anti-poaching efforts were increased across Chuilexi, with the recruitment of three additional rangers and a 10% increase in total patrol days (with over 5,000 patrol days completed during 2018). This, coupled with enhanced security activity across the whole of Niassa Reserve, resulted in a significant reduction in elephant poaching during 2018, with only six elephants poached this year compared to 28 during 2017, and 16 during 2016. Furthermore, indications of other threats to the conservancy, including numbers of snares and illegal activities encountered, have shown that levels of threats are declining over time as anti-poaching efforts have been improved. The greatest threat still comes from the eastern border of the conservancy, and work is underway to secure this concession (R5).

Community engagement is an ongoing focus of the work in Chuilexi. In 2018 this included the provision of school bursaries to 18 students, along with ongoing efforts to reduce human-wildlife conflict, such as provision of electric fencing. Small loans were provided to 45 local women, allowing them to develop small businesses, such as buying chickens, establishing small shops, and purchasing small solar panels for charging electrical devices. A survey of the three villages in the conservancy showed that 76% of those consulted supported Chuilexi and conservation initiatives, 70% of households reporting increased food security where fences had been erected, and 22% of consultees reported an increase in income (or product values) within the last year.

In the longer term, the aim is for Chuilexi to generate a proportion of its operating costs through tourism. Following a test safari in 2017, further strategies are developing for designing tourism activities in the conservancy, aligned with the long-term vision of supporting strong wildlife populations and securing sustainable revenue.

At present the concessions within Chuilexi are held across two different companies. The possibility of merging these two companies and incorporating all three concessions under Chuilexi Conservação e Investimentos is being actively explored, with legal advice being taken. This would simplify administration and financial management, and result in significant budget savings.





Southern National Park and adjoining game reserves, South Sudan

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

BACKGROUND

South Sudan once boasted spectacular wildlife, including major migrations of antelopes said to be on a par with the wildebeest migration of the Serengeti. However, the civil wars of recent decades have decimated wildlife populations. During the war years (1962-1972 and 1983- 2005) no conservation agency was present in southern Sudan and its protected areas had no active management for 30-40 years. During this time, intense wildlife poaching was conducted by the Sudanese Peoples Liberation Army, heavily armed local and Arab militias, and the large volumes of displaced people in the region. South Sudan finally became an independent state in July 2011.

South Sudan's oldest and largest national park is Southern National Park in former Western

Equatoria. This 1.6 million hectare park was historically known for its large numbers of elephant, buffalo, giant eland and roan antelope as well as its northern white rhino population. This park, like all other protected areas, was subject to severe poaching during the civil wars, but reports indicated that key wildlife populations – including elephant –survived in the western sector. These remaining populations are still under threat from poaching, including to meet the steady demand for bushmeat at nearby markets and during annual foreign hunting raids. Without timely intervention, the remaining wildlife may disappear, signalling the loss of the park, and surrounding game reserves, as a haven for wildlife.

⁶Anticipated area of impact once activities reestablished at Southern National Park

HABITAT





AREA TO BE SECURED

43,000 hectares

POTENTIAL AREA OF CONSERVATION IMPACT

743,000 hectares⁶

ACHIEVEMENTS IN PREVIOUS YEARS

Grants from Halcyon Land & Sea in 2010, 2011 and 2014 enabled FFI to begin the process of reestablishing conservation management at Southern National Park. We worked to support the new government to re-establish capacity for wildlife protection and developed a specific partnership with the Ministry of Wildlife Conservation and Tourism, which runs the Wildlife Service. The government asked FFI to input into the Wildlife and Protected Area Policy for South Sudan, which was subsequently approved, and FFI also assisted in drafting new wildlife conservation legislation. By the end of 2014 the project had - from scratch supported the establishment of basic infrastructure (roads and outposts), resulting in the first sustained management and anti-poaching presence within Southern National Park for decades. Furthermore, FFI trained a guarter of Western Equatoria's operational Wildlife Service personnel as rangers and others in leadership and management.

In addition, camera traps were deployed in Bangangai and Bire Kpatuos game reserves, which encompass the only dense rainforest habitat within South Sudan and are close to Southern National Park on the border of the Democratic Republic of Congo. These cameras started to collect detailed information about the wildlife species using these forests, some of which had not previously been reported in South Sudan.

The outbreak of conflict in December 2013 and the subsequent civil war in parts of South Sudan has had a profound effect on the project and further destroyed the nascent infrastructure and governance of this new country. During 2016, the security situation in South Sudan deteriorated further. The prolonged and increasingly violent civil war, with subsidiary conflicts spread into the programme's area of operations, limited options for effective engagement on the ground. By maintaining our programme in Western Equatoria (albeit at reduced levels) over the conflict period, FFI demonstrated its commitment to the area at a time when other programmes and government activities were reduced or no longer functioning. This maintained and strengthened FFI's credibility with our partners in country.

In 2017, Halcyon Land & Sea provided additional support to a redeveloped strategy for our engagement in South Sudan, focusing on improved management and protection of Bire Kpatuos Game Reserve, the one project site that remained safely accessible. Ongoing biodiversity surveys have established the value of this site, and analysis of specimens has suggested the presence of a possible three bat species previously unknown to science.

PROGRESS IN 2018

During 2018, the majority (all but 3km) of the boundary of Bire Kpatuos Game Reserve was demarcated jointly with the community - formal demarcation has never been undertaken since the reserve was gazetted in the 1920s. A ranger post was also relocated nearer to the reserve boundary (it had been moved further away for safety reasons during the conflict). On-the-ground management of the reserve was strengthened, through delivery of upgraded management procedures and ongoing training, along with continued provision of basic rations and supplies. Bire Kpatuos is still patrolled by two teams monthly, each consisting of three Wildlife Service Rangers and nine Community Wildlife Ambassadors, all of which have received relevant training. This collaborative model remains unique in South Sudan and creates an unusual example of government-civilian cooperation alongside a general national context of mistrust.





Record keeping and data management have been improved this year through additional training, including on threat and biodiversity monitoring protocols. Data collection forms are have been translated into the local Zande language - and translated back by community representatives, which has improved the quality of information. Patrol records were digitised this year, whereas previously they were paper-based due to technology and local capacity constraints. This new digital database will make it easier to analyse threats and understand impacts on wildlife and habitats.

Ongoing development of a <u>citizen science platform</u> to analyse some 425,000 camera trap images collected to date is proving a cost effective way to undertake data processing, whilst generating profile of the area and of this project. In addition, chimpanzee monitoring will now improve with new funding in place to develop this from simple presence/absence information (as confirmed by camera traps) towards deeper quantification of population dynamics.

There are approximately 150 households in the vicinity of Bire Kpatuos Game Reserve (including seven directly on its boundary). FFI has been holding frequent community meetings to ensure all local people remain fully abreast of the project's progress and the process of reserve management by the wildlife agency. It has also been working directly with the community adjoining the relocated ranger post, establishing consistent access to water, providing interim supplies and helping to reestablish sustainable farming in the area, to ensure effective local support to the out-located rangers. The 18 trained Community Wildlife Ambassadors that patrol the reserve alongside Wildlife Service Rangers have been drawn from the three most significant population centres closest to the Reserve. In addition, a Participatory Rural Assessment process was used to better understand communities' seasonal calendar,

biggest life challenges and barriers, and agricultural practices, based on discussions with some 400 individuals, to help develop future livelihood interventions, to reduce conflicts over local resources and promote sustainable forest management.

During 2018, FFI also began re-engaging with the other reserve in the vicinity - Bangangai Game Reserve. Here, re-establishing a ranger post, which was destroyed during recent conflict, was identified as an initial priority, given no patrols within the reserve have been possible since 2015. A highlight of 2018 was the provision of a weeklong ranger training course, for both Wildlife Service rangers and Community Wildlife Ambassadors, based at Bangangai. Along with specific training (for example, on GPS use and reserve management) and field-based activities in the reserve itself, the participants worked to identify the best location and design for the reestablished ranger post.

FFI continues to play a vital role, while the government's Wildlife Service has been incapacitated by civil war and a lack of any government funding. As a result, work at the game reserves is almost totally reliant on FFI for operational and financial support, as well as for technical assistance. Despite a somewhat improved security situation, working in this environment remains challenging, particularly with regard to accessing the field during the rainy season.

Although evidence of the current habitat and biodiversity status of the forest is not yet available, protected area regulations are now well respected by local communities and the presence of rangers deters poachers from further afield from targeting Bire Kpatuos. Without ongoing patrolling it is likely that these forest habitats and their wildlife would have been significantly degraded and denuded.



Rapid Response Facility

STRATEGIC INITIATIVE

BACKGROUND

The Rapid Response Facility (RRF) is a partnership between the UNESCO World Heritage Centre, the United Nations Foundation, and FFI. It was established in late 2005 to provide timely and flexible resources to address threats and emergencies affecting the ecosystem security of selected Natural World Heritage sites and surrounding areas.

ACHIEVEMENTS IN PREVIOUS YEARS

The fund remains unique in its speed of response: decisions are made within eight days, meaning that funds can be made available within a couple of weeks from the receipt of an application. A <u>legacy</u> <u>report</u> looking at the impact of the fund was produced in 2014. Since 2005 the facility has provided 47 grants, which have supported efforts to protect 38 sites. Follow-up reports from projects supported in previous years have shown:

- No fires were reported in Tikal National Park, Guatemala, during 2017, after an RRF grant to support fire prevention and response; in comparison the Park suffered 16 fires in 2016.
- Anti-poaching activities and CITES enforcement efforts have been strengthened at the Sangha tri-national conservation complex (in the area where Cameroon, the Central African Republic and the Republic of Congo meet) helping to secure a key population of African grey parrots. Improved facilities, handling and veterinary procedures for seized African grey parrots led to a decrease in mortality from 45.5% to 13.5%, and an increase in successful release of parrots to the wild from 24.4% to 42.2%.
- Jaguar killing has stopped in part of the Area de Conservación Guanacaste, Costa Rica, which was experiencing high human-predator conflict, resulting in five jaguars being killed in retaliation for the livestock predation prior to the project in 2016.

HABITAT



LOCATION GLOBAL



AREA OF CONSERVATION IMPACT

30,654,577 hectares

PROGRESS IN 2018

Over the course of 2018, four new grants were awarded by the RRF, all within the eight-day decision window. Grants were made to:

- o Volcanoes National Park, Rwanda a followup grant to address the threat of development on Mount Karisimbi (with impacts on Virunga National Park and World Heritage site). The integrity of this unique habitat, which supports a key population of mountain gorillas, was threatened by a proposal to construct a climate change monitoring station at the top of Mount Karisimbi (within the National Park), accompanied by a cable car to access the mountain top and tourism infrastructure, including a museum at a mid-station. This grant supported work to address inadequacies in the earlier Environmental Impact Assessment, and resulted in a new and properly developed assessment being commissioned.
- Chitwan National Park, Nepal funding to model the impacts of proposed transport infrastructure on tiger populations in Chitwan National Park and World Heritage site. Chitwan National Park was established in 1973 and protects one of the last populations of singlehorned Asiatic rhinoceros along with an important population of Bengal tigers. Several transport infrastructure projects (a railway and several new highways) had been proposed by the Nepalese Government that could have significant impacts on Chitwan National Park and World Heritage site. This project was undertaken to assess the likely impacts of transport infrastructure development on Chitwan's wildlife, specifically the tiger populations. Results from the study showed that upgrading and expanding roads inside the park would result in an immediate and significant decrease in tiger populations. Lobbying of the government continues, based on these findings.
- Brazil Atlantic Islands a grant to address the threat of invasive lionfish. The Fernando de Noronha Archipelago and Rocas Atoll, located approximately 340km from the Brazilian coast, are volcanic peaks of a submerged mountain chain and are part of a wider World Heritage Site. In mid-2018, invasive lionfish were detected in the archipelago for the first time. Lionfish represent a major threat to the ecosystem: they are a predatory species and consume smaller fish which are responsible for maintaining the health of the coral reef ecosystem. Given the lack of natural predators, and the impact this species has had on other marine ecosystems (e.g. in the Caribbean), an immediate response was required to mitigate and control the lionfish invasion before populations establish. The project has implemented a rapid cull and is working with the community and fishers to develop long-term control and monitoring. There are plans to create partnerships with local restaurants to increase the market demand for lionfish, to ensure fishing effort targeting this species is maintained post-project.
- Galapagos Islands, Ecuador funding to address a rat invasion on North Seymour Island. This is vital habitat for breeding seabirds (frigates, blue-footed boobies, Nazca boobies and swallow-tail gulls, among others) and had been rat-free since a successful eradication initiative in 2007. However, in 2018, invasive rats were detected on the island, and by August a state of emergency was declared by the Galapagos Ministry of Environment. Groundnesting seabirds such as those found on North Seymour are particularly vulnerable to the devastating impact caused by rats. A grant from the RRF co-financed an emergency response, enabling rat eradication to commence immediately.





Golden Stream Corridor Preserve, Southern Belize

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

BACKGROUND

Home to Central America's five wild cats – the jaguar, jaguarundi, puma, ocelot and margay – Golden Stream's lowland tropical broadleaf forest was under direct threat of being destroyed by logging and conversion for citrus plantations and shrimp farming.

ACHIEVEMENTS IN PREVIOUS YEARS

In 1998, Halcyon Land & Sea purchased an area of 3,866 hectares at Golden Stream, with subsequent purchases in the period up to 2004 increasing this to 6,057 hectares. This strategic intervention has effectively protected the entire Golden Stream Watershed, which is now conserved from the Mayan mountains to the coast, where it links to the Port Honduras Mountain Reserve. In 2006 a grant from the Global Environment Facility enabled FFI and our partner, Ya'axché Conservation Trust (known as Ya'axché), a Mayan NGO, to continue our work throughout the Golden Stream Watershed. As a result, coordinated management and strategic planning contributed to the conservation of a landscape area of over 113,000 hectares.

Working with Ya'axché, we built a sustainable livelihood programme for local communities involving over 100 families in horticulture, beekeeping and cacao production projects. In addition, Ya'axché ran a scholarship scheme for students from local communities and conducted experiential environmental education tours for local schools. Ya'axché assisted local groups, including women's groups, by providing a range of training from leadership and governance to business management and marketing. More recently, the Ya'axché Protected Areas Management Programme has run courses and training for rangers to continue to professionalise and integrate new techniques for protected areas.

Since the initial work around the Golden Stream Corridor Preserve as a nascent organisation, Ya'axché has grown into an effective grassroots organisation, recognised locally, nationally and even internationally. In 2012, its then director, Lisel Alamilla, was appointed as Minister for the new Department of Forestry, Fisheries and Sustainable Development, a position she held until 2015. As well as managing Golden Stream, Ya'axché has taken on formal co-management for the neighbouring Bladen Nature Reserve (a national Protected Area covering 40,469 hectares), and Maya Mountain North Forest Reserve (14,569 hectares), and is taking a lead in integrated approaches to managing the wider landscape around these sites. Indeed, Ya'axché's appointment as manager of Bladen and other sites is a testament to its experience in protected area management and to the institutional capacity that has been built as a direct result of the Halcyon Land & Sea project at Golden Stream.

HABITAT



LOCATION



AREA TO BE SECURED

6,057 hectares

POTENTIAL AREA OF CONSERVATION IMPACT

113,237 hectares

Monitoring of forest cover and biodiversity within Golden Stream has demonstrated that indicators of forest health, and species abundance and diversity are higher within the protected lands than in surrounding areas. Golden Stream still supports all five of Belize's wild cat species, along with a recovering population of howler monkeys.

Two further Halcyon Land & Sea grants (in 2012 and 2018) have focused on supporting the longterm institutional capacity and independence of Ya'axché, including helping the organisation to adapt to managing additional areas, and establishing enhanced income generation and fundraising skills. During 2015 the Ya'axche Institute for Conservation and Education was legally established as the commercial arm of Ya'axché, and business and marketing plans for its ecotourism programme were developed, with the aim of creating new income streams for Ya'axché. FFI continues to provide occasional strategic planning and fundraising support.

PROGRESS IN 2018

During 2018, additional funding from Halcyon Land & Sea was deployed to build the financial resilience of Ya'axché, and to help improve operations through enhanced enforcement and monitoring.

Support included providing targeted training for key staff in developing robust financial systems, such as ways to ensure full-cost recovery. FFI's Head of Finance has provided direct advice and mentoring to improve methods and structures for the presentation of annual institutional financial reports, making them more accessible to all those that need to use them (including Board members, who include local community representatives). Ya'axché was helped to identify new funding opportunities, with additional training opportunities offered. As a next step, a review will be conducted of the contribution of the Ya'axché Institute for Conservation and Education to the organisation's financial sustainability.

New approaches have been introduced this year to strengthen monitoring and enforcement across the areas managed by Ya'axché, using tablet-based technology to help organise patrols and collect data. Information collected from patrols will be shared as part of a joint database developed with the Toledo Institute for Development and Environment and the Belize Audubon Society, who both operate in the same landscape. Ya'axché undertook joint patrols with these organisations this year, in addition to the Belize Defence Force, and a protocol was developed to enable wellorganised responses to 'hotspots' of threat to protected areas, including increased patrol rates and stakeouts. Further collaboration has been agreed through a number of interagency meetings. Ya'axché's 13-strong ranger team also received training in environmental laws, case filing and prosecution, and six of these rangers were certified as Special Constables, meaning that they are authorised to arrest, detain and prosecute infractions within Ya'axché's protected areas.

Golden Stream Corridor Preserve remains under effective conservation management, although illegal incursions are frequently encountered throughout the wider areas that Ya'axché manages. The greatest threat remains land conversion for so-called 'slash-and-burn agriculture'. The use of this technique has, however, reduced through the Maya golden landscape, in part as a result of Ya'axché's work with these communities for over 20 years promoting sustainable farming practices (including diversification of timber, fruit trees, cacao and other crops, alongside agroforestry), thereby reducing demand for new agricultural land.

The most recent Biodiversity Synthesis Report (from 2016) indicates that forests appear to be in good health, with a high diversity of forest and other indicator species across the areas that Ya'axché manages (including the Golden Stream Corridor Preserve). However, the preserve's forest was severely damaged by Hurricane Iris in 2001, and while species richness has been maintained year-to-year, it has not yet fully recovered from the devastation.

Ya'axché itself is still considered as a strong national NGO within Belize, and is seen to be making headway in achieving organisational and financial sustainability.

Better Jarms Jealthier Forests (Happier Lives

Ongoing Projects

These are projects that FFI is still actively supporting and engaging with, but without additional funding from Halcyon Land & Sea in 2018.



Namibia scoping, Namibia

STRATEGIC SMALL GRANT

BACKGROUND

Namibia's biodiversity is unique and diverse. It supports the world's largest populations of cheetah and free-roaming black rhino, and contains important biodiversity hotspots and unique ecosystems, such as the Succulent Karoo biome and the Namib escarpment. Its national parks cover 17% of the country, and another 19% of the country is protected under community-based resource management, including 76 communal conservancies and 13 community forests. In

particular, its community conservancy system is globally renowned for balancing biodiversity protection with sustainable use, and these areas generate important tourism income.

However, after decades of large-scale support, notably from USAID and DFID, its designation as an upper income country means that it no longer receives significant official aid, putting these existing conservation systems under threat.







ACHIEVEMENTS IN PREVIOUS YEARS

In 2017 Halcyon Land & Sea supported a scoping project to identify potential new interventions in priority Namibian landscapes, to prevent potential erosion of the community conservancies and associated wildlife, and to find new ways to extend and strengthen the existing protected areas. Specifically, we were invited by potential partners to assess the potential of three landscape areas, and defined project sites within them, with a view to enhancing or extending the protection of these areas. As a result of the trip, four project ideas were explored for further development.

The most promising project opportunity was a request for FFI to support an initiative to extend Neuhof Reserve, and improve connectivity to a proposed NamibRand Protected Area. The concept included the development of a wildlife conservancy on private land for protection of rare and vulnerable biodiversity of the arid and semi-arid Nama-Karoo biome, restoration of corridors for wildlife and ecological connectivity within the surrounding landscape, and the possible future reintroduction of a founder population of the desert-adapted south-western black rhino.

A second potential project identified was to establish a functioning buffer zone for the Southern boundary of Etosha National Park. A third opportunity was identified to secure tenure for community conservancies and concessions on communal land in the Kunene, in order to reestablish a wildlife conservation corridor between the Skeleton Coast National Park and Etosha National Park.

A fourth concept that was explored would involve strategic land purchase and collaborative management agreements to establish a wildlife conservancy with black rhinos and other desertadapted species between Sandfontein and Kumkum conservancies, along the Orange River basin.

PROGRESS IN 2018

During 2018, efforts focused on developing a project at Neuhof Reserve, and securing two key, privately-owned farms (Omkyk and Swaartmodder) within the proposed wildlife conservancy in the project landscape. In 2018, this work developed into a full project, supported by Halcyon Land & Sea and other donors, and full details on this project are detailed in the Omkyk 2018 Halcyon report.

The opportunity at Etosha National Park was further explored in 2018, and a concept note is being developed by a retained consultant in Namibia.



Belize protected area legislation

STRATEGIC SMALL GRANT

BACKGROUND

The protected areas of Belize support significant biodiversity, encompassing large areas of tropical forest as well as the Belize barrier reef. There are currently 103 protected areas in Belize, including national parks, nature reserves, wildlife refuges and private protected areas, among others. However, lack of integration and outdated legislative frameworks undermine the effectiveness of the system of protected areas. Belize also has a growing number of private protected areas (such as Golden Stream Preserve), together covering over 180,000 hectares, but there are no incentives for landowners to manage land for conservation, and private protected areas cannot access financial support from the Protected Areas Conservation Trust, while NGOs co-managing state-protected areas receive only minimal support, putting their sustainability at risk.

The Ministry of Forestry, Fisheries and Sustainable Development (MFFSD) specifically requested FFI's help to drive forward the enactment of new protected area legislation, to identify improved and sustainable financing mechanisms for the National Protected Areas System, and to build support for the reform of protected areas institutions.

ACHIEVEMENTS IN PREVIOUS YEARS

Drafting of the new National Protected Areas System legislation started in late 2014. The project supported work to refine the draft National Protected Area System Act, including provision of: (1) advice on the potential governance and financing of the National Protected Areas System, including the Protected Areas Conservation Trust that finances protected areas; (2) support to a strategic planning process for MFFSD itself, determining its future direction and structure; and (3) advice on media relations and associated building of support for the proposed National Protected Areas System Act and new protected areas financing mechanisms.

As a result of this work a new National Protected Areas System Act and the Protected Areas Conservation Trust (Amendment) Act was gazetted in October 2015. This provided a clear institutional framework for Belize's protected areas as an integrated system, with better planning, monitoring, financing, and accountability that recognised private protected areas as part of the system, with landowners also benefitting from government support and incentives.

HABITAT



LOCATION



POTENTIAL AREA OF CONSERVATION IMPACT

1,150,000 hectares
However, the sudden dissolution of the Government and snap elections in November 2015, and subsequent restructuring of the Ministry, delayed development of the regulations needed to implement the new Act.

During 2017, a study of the links between natural capital and ecosystem services, and economy and well-being in Belize was completed, to help make the case for reform to government. Ya'axché directly lobbied the Government about the need for effective implementation of protected areas legislative reform, as a member of the National Protected Areas System Advisory Council, which serves to inform government officials on important aspects of protected area management based on scientific evidence.

PROGRESS IN 2018

In-country lobbying on this issue continued to be led by Ya'axché during 2018. It has helped to revitalise the Belize Association for Privately Protected Areas, and through this group, has helped review current co-management regulations and influenced key decision-making by government. Specifically, government has now stated the need for a "Special Trust Act" for longterm private protected areas, including dealing with tax exemptions and incentives. In meetings, the government has specifically stated that it recognises the necessary role of private protected areas as a key component of the national network. The government is also working to promote the idea of "protection in perpetuity" for private protected areas, including consideration of easements or covenants. However, the government is now entering a period of restructuring (with forest management and protected areas functions being separated), which may delay progress in 2019.

In the meantime, the Belize Association for Privately Protected Areas continues to identify private protected areas for inclusion in the national protected areas system, and collate the necessary information for each site (such as maps, current and proposed management plans, longer-term commitments to management, and history of landuse). At the end of 2018, Ya'axché was successful in obtaining a grant to help support this work.



Târnava Mare grasslands, Romania

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

BACKGROUND

The Târnava Mare (Saxon Villages) area of southeast Transylvania covers a landscape of some 125,000 hectares. It is a biodiversity hotspot of European importance, and also provides livelihoods for thousands of farming families. This historic landscape incorporates wildflower-rich lowland pastures and meadows, old-growth woodland, and farmed lands. The combination of small land parcels, traditional extensive livestock management systems and low fertilizer inputs creates a complex and unique habitat mosaic, which is dependent on continued traditional management by small-scale farming communities. This landscape supports an exceptional diversity of species, including many that are threatened at a European level, and is an outstanding example of the type of traditional mixed farming landscape that has disappeared in most of Europe.

Within the Târnava Mare landscape, specific areas of exceptional botanical diversity are associated with landscape features called moviles (tumps) these have unique microclimates that support remarkable hotspots of botanical diversity, of European (and potentially global) significance. They are currently threatened by (i) lack of management as smallholdings are abandoned; (ii) purchase of land by outside developers who then degrade or destroy the habitat by practices such as ploughing or agricultural intensification; and (iii) extraction of the aggregates from beneath moviles for road-building materials. The current land restitution process in Romania has created a situation open to land purchase, as land is handed back to families or communities who owned it during the Communist era. The rapid purchase of these sites, in advance of land developers, is necessary to protect them from extraction or agricultural development.

ACHIEVEMENTS IN PREVIOUS YEARS

Halcyon Land & Sea provided a grant in 2009 to the project partner – the ADEPT Foundation – to develop their plans. In 2013 we embarked on a new and much more extensive intervention at this site, focused on land purchase for moviles and surrounding hay meadows with co-finance, including a significant investment from the Grass Valley Trust.

Land purchases started in 2014 and included the purchase in 2016 of a 162-hectare farm called Angofa, which has protected exceptionally biodiverse grassland from intensification. A total of 237 hectares have been purchased to date across five sites. Once purchased, the land was handed over to ADEPT to own and manage in perpetuity. Purchasing the land has protected it from being ploughed, intensively grazed, burned, or exposed to substrate extraction.

HABITAT







AREA SECURED

237 hectares

AREA OF CONSERVATION IMPACT

1,500,000 hectares

Introducing appropriate grazing regimes has maintained the biodiversity value of these sites in the long term; ADEPT's staff team actively manage the sites, including planned grazing, mowing or clearing and hay-making as appropriate. In addition, these sites are eligible for EU subsidies and have started to generate income for managing the area. It is anticipated that once all planned purchases are made, this will generate sufficient funding to cover 50% of ADEPT's running costs.

ADEPT has also run a pilot agri-environment scheme with local farmers to promote biodiversityfriendly management of hay meadows. ADEPT's wider policy work with the Government of Romania helped to improve subsidy access for small farmers (in High Nature Value farmland) and has resulted in eligibility of over 100,000 hectares for this scheme, thus improving the sustainability of these important farm areas. ADEPT also successfully lobbied the Government to establish an agri-environment scheme supporting smallscale low-input arable lands - also an important component of mosaic landscapes.

ADEPT work with members of local communities to re-establish traditional livelihoods and tourism opportunities that will help to make it economically viable to maintain local smallholdings under the traditional management that the rich biodiversity depends on. These include a pottery studio, a range of local produce marketed under the Târnava Mare brand, and a tourist mountain biking route and associated mountain bike race. In 2017 ADEPT's initiative won a European Cultural Tourism Network award.

PROGRESS IN 2018

Work continued to secure further land purchases, with progress made towards buying two additional

land parcels (totalling 8.5 hectares), and two more potential land parcels coming up for sale (totalling a further 9 hectares) have been identified. Three further potential purchases were investigated but rejected for various reasons, such as the quality of the habitat or the price requested. Once these planned purchases proceed, it is anticipated that around a further 60 hectares will be purchased for conservation in due course.

During 2018, ADEPT will receive subsidies from the land it already manages for conservation. This year, ADEPT decided to adapt its grazing practices, and replaced its existing sheep flocks with a cattle herd, which will improve meadow habitat quality on grazed land. In addition, sales of calves are likely to realise further income for ADEPT each year. Initial assessments by a botanist have already shown encouraging signs that the grassland is recovering further since the sheep were removed.

Work continued to renovate an abandoned school at Angofa farm, which is being developed as an education and tourist centre. In addition, various tourism and livelihood promotion activities continued, and the project won another award, this time for the mountain bike trail, which gained first prize as best Rural Development project in Romania as part of the Romanian Insider and Credit Agricole Awards.

FFI continued to provide a range of capacity support to ADEPT in 2018, including training in project management and leadership and mentoring in fundraising and grant applications. We were delighted to see ADEPT apply their fundraising skills successfully, including securing a significant grant from Deutsches Bundesstiftung Umwelt.





Securing areas of Renosterveld, South Africa

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

BACKGROUND

Renosterveld represents a specific type of speciesrich fynbos heathland only found in the South African Cape. Botanical surveys have revealed additional rare and new plant species in these botanically-rich fragments. This unique, but fragmented, habitat is at immediate risk of destruction. Less than 4% of the original coverage of renosterveld now remains, putting many of the endemic plant species it supports at risk of extinction. Most of the remaining tracts of renosterveld occur on private land and are at risk of being ploughed up for agriculture or degraded as a result of overgrazing. The project aims to secure key areas of renosterveld, in collaboration with WWF-South Africa, which has secured funds for land purchase with Halcyon Land & Sea funding covering associated legal and short-term management costs.

ACHIEVEMENTS IN PREVIOUS YEARS

In 2012 Overberg Renosterveld Conservation Trust was established as a local organisation devoted to conservation and sustainable management of renosterveld habitats. In 2014 Haarwegskloof Farm, a 500-hectare property with some of the largest areas of intact renosterveld, was purchased. This was declared as a formal nature reserve under WWF ownership, Cape Nature stewardship and management by the Overberg Renosterveld Conservation Trust, under a 30-year management agreement with WWF. Surveys of the site showed it supports some 550 plant and 125 bird species, including some plant species that were new to science. Active management of the site began - including the first controlled burn for 20 years, an important aspect of fynbos ecology releasing a spectacular flowering across a wide range of characteristic renosterveld plant species. A management plan has been developed and adopted for the site, along with a business plan outlining how the site might generate sustainable conservation finance through tourism.

Innovative conservation easements (where a legal deed on the property restricts its future use to conservation in perpetuity) have been used to secure a key area of renosterveld at a site called Kykoedie (206 hectares). This builds on a model funded by Halcyon Land & Sea in 2006 and has now been used as a template for other conservation easements for fynbos habitats in the region. In addition, plans have been developed to create a "fynbos corridor" to link this area to conservation areas in the wider Agulhas National Park. A conservation easement and management plan have been developed for Farm 215, a critical connecting property of 722 hectares within the Agulhas-Walker Bay Corridor.

HABITAT



LOCATION

AREA SECURED

2,130 hectares

AREA OF CONSERVATION IMPACT

2,130 hectares

A Renosterveld Research and Visitor Centre has been established, including a guest house, which also generates income. The Overberg Renosterveld Conservation Trust is now a wellestablished, dynamic organisation, with the capacity, human resources, planning, relationships and partnerships in place to underpin its future sustainability. It has already proved successful in raising its own funds. Despite this, FFI envisages a long-term (c. 10-year) engagement with this partner to ensure their lasting stability and effectiveness.

PROGRESS IN 2018

During 2018 the use of conservation easements to secure areas of renosterveld under conservation in perpetuity (as trialled previously at Kykoedie) was further rolled out. Conservation easements were applied to three further properties, to secure an additional 648 hectares, including:

- Klipfontein 360 hectares and part of one of the largest surviving patches of renosterveld;
- Dasberg Farming Conservation Easement covering a 212-hectare patch of renosterveld;
- An easement at Swaynekloof secured 130 hectares of renosterveld.

Conservation easements have been targeted strategically, under a landscape conservation plan to develop interlinked clusters and corridors of renosterveld, and other fynbos vegetation.

The condition of the renosterveld habitats secured to date has been improved as a result of management actions undertaken (e.g. fencing, controlled burning, etc.). A new field guide detailing the flora, birds, mammals, reptiles, amphibians and insects of Overberg renosterveld habitats is currently being compiled.





Implementing carbon finance for Aceh's forests, Indonesia

STRATEGIC INITIATIVE

BACKGROUND

The forests of Ulu Masen cover some 738,000 hectares and contain some of the highest levels of biodiversity in the world. Rapid biodiversity assessments conducted during 2007 identified 329 bird species and 87 amphibian and reptile species (including 15 endemics and 11 species that may be new to science), along with globally important populations of the Sumatran tiger, Sumatran orangutan and Sumatran elephant, all three of which are Critically Endangered. The forests of Ulu Masen are under ongoing threat from large-scale logging and conversion into agricultural land and have been disappearing at a rate of 1% a year. One potential mechanism to protect the forests of Ulu Masen would be to develop economic benefits from them as an intact resource, rather than from more damaging exploitation such as logging and conversion to oil palm. Carbon finance linked to Reduced Emissions from avoided Deforestation and Degradation (REDD+) initiatives provides a mechanism to change the economic drivers of forests from destruction to favouring protection.

HABITAT



LOCATION



AREA TO BE SECURED

11,281 hectares

AREA OF CONSERVATION IMPACT

738,000 hectares

ACHIEVEMENTS IN PREVIOUS YEARS

In 2007, FFI started working with the Government of Aceh to develop a pilot REDD+ project for the forests of Ulu Masen. However, due to a change of governor, the project subsequently refocused to ensure that local communities could benefit from local carbon finance projects. Support of local communities is vital for future protection activities, and thus the sustainability and effectiveness of the project. In 2012 the project (in collaboration with the Legal Aid Institute) helped to draft Aceh's first land tenure policy, which specifically aims to resolve conflicts over land and natural resources. In addition, Halcyon Land & Sea funding helped to leverage a substantial European Union Climate Change grant in 2014.

As part of a multi-stranded approach to securing key areas of Aceh's forests, the project focused on securing community tenure and management rights for some 15,000 hectares of forest, while tackling illegal logging around the Ulu Masen ecosystem (738,000 hectares), as well as at provincial level (3.5 million hectares). FFI supported the development of village forests - a new approach to forest protection that included both community and biodiversity targets. Five village forests ('hutan desa') were developed by the project, covering 11,281 hectares of forest and benefiting 5,000 community members. Management plans have been put in place for all these sites, and work has been conducted to map and demarcate these areas and collect the information needed for the

certification of carbon credits. Community rangers were recruited and supported to regularly patrol the forests, while communities were supported to develop new sustainable livelihood opportunities linked to non-timber forest products. FFI also supported three forestry management units to develop management plans that cover an area of 1.23 million hectares, encompassing the Ulu Masen ecosystem and its 12 districts.

In 2017, FFI also started to develop village forest schemes for additional villages, thus replicating and widening the impact of the project to date.

PROGRESS IN 2018

Work continued in 2018 to support village forests, Forest Management Units, and also to work with a neighbouring nature reserve, where we supported improved monitoring and law enforcement. Three of the village forests previously supported now receive local government funding to maintain community ranger patrols, community forest enterprise and wildlife conflict mitigation. Work also continued to establish new village forest schemes at four additional villages. These will secure an additional 21,594 hectares of forest under conservation management. The proposed management plans for these forests will include protection zones for habitats required by key threatened species, such as Asian elephant and Sumatran tiger.





Awacachi Corridor, Ecuador

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

BACKGROUND

The Chocó bioregion is a global conservation priority due to its exceptional species diversity and endemism. The region is extremely poor and the Chocó forest is under threat from commercial interests and unsustainable development. This threat has increased following the building of new roads and the expansion of the oil palm industry.

ACHIEVEMENTS IN PREVIOUS YEARS

Some 11,500 hectares of highly threatened Chocó forest was purchased to create a biological corridor between two existing reserves, thus conserving a total area of 354,000 hectares and preventing its conversion to oil palm plantations. Communities were engaged in sustainable livelihood projects such as native bamboo production, butterfly farming, cacao growing and animal husbandry to provide income support to local communities and encourage them to cooperate with conservation efforts.

A further 2,230-hectare area of Chocó rainforest (the Endesa concession) was purchased in 2010 to strengthen the narrowest part of the Awacachi Corridor. Without intervention, this area would have been clear felled, and was likely to have been converted to oil palm plantations - a development that could have threatened the integrity of the corridor. Further grants in 2013 and 2014 addressed the emerging threat of gold mining and focused on the future sustainability of the corridor. The local manging partner (Fundación Sirua) was able to overturn the claims of a governmentbacked mining group for rights to mine within the corridor, while alternative, long-term management opportunities for the Awacachi Corridor have been explored, including incorporating it into a Stateprotected area.

HABITAT







12,489 hectares

AREA OF CONSERVATION IMPACT

354,000 hectares

PROGRESS IN 2018

2018 proved another challenging year for this project, with the security situation in the region deteriorating further, resulting in a state of emergency being declared and a ban on travel to the area. This has delayed the development of some new partnerships for Awacachi, as field visits could not be organised. However, a promising relationship with Nature and Culture International was maintained.

Despite the limitations, efforts were made to implement a project (funded by the Critical Ecosystem Partnership Fund) to develop a Municipal Protected Areas System for the local area (San Lorenzo), linked to watershed protection and including the Awacachi Corridor. The proposed protected area was approved by the local Municipality and has been officially registered. This will provide some formal conservation designation for the Awacachi Corridor.

However, personnel and funding issues, combined with ongoing conflicts within the corridor and a challenging legal operating environment, have necessitated FFI's ongoing active support to Fundación Sirua and the Awacachi Corridor project. Combined with a recent upsurge in threats to the corridor, the current situation means that Fundación Sirua needs ongoing financial and institutional support to adapt to what is a dynamic and dangerous operating environment. The weakness of the managing partner, coupled with the poor security situation, has increased the vulnerability of the corridor to incursions and degradation, although three rangers remain active on the ground.

Despite ongoing threats, Awacachi remains an area of global biological value as one of the last remnants of Chocó forest at the southern end of its distribution in Ecuador and continues to provide connectivity between the Cotacachi Cayapas and Awá reserves. However, with the current security challenges it is not possible to determine the overall current status of biodiversity in the corridor or to what extent ecological connectivity is still maintained.





Northern Rangelands Trust, Kenya

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

BACKGROUND

Kenya's northern rangelands harbour around a quarter of the country's remaining wildlife. The Northern Rangelands Trust (NRT) supports 31 community conservancies and has effectively reestablished a wildlife landscape of approximately 4.2 million hectares from Mount Kenya to the Mathews Range and beyond. Within these conservancies, communities have autonomy of management and apply their own norms and rules, retaining their ownership of conservation. The conservancies are also providing a way for the communities to address wider issues, such as rangeland and livestock management and conflict resolution, and to develop new income streams from tourism and other nature-based enterprises. In addition, with support from Halcyon Land & Sea and FFI, NRT itself has developed into a functional and fully independent organisation.

ACHIEVEMENTS IN PREVIOUS YEARS

Grants from Halcyon Land & Sea in 2010 and 2011 enabled NRT to support four new communities to develop conservancies, and to support the development and operations of NRT itself, including reviewing its business model, developing a new five-year strategic plan and supporting implementation of an NRT Growth Strategy, with the successful establishment and registration of North Coast Conservation Ltd as a satellite operation.

Security in NRT areas is maintained by conservancy rangers who play a vital role in protecting wildlife, people and property. The rangers are recruited from the communities within the conservancies, which allows them to more effectively raise awareness on wildlife conservation in their areas, as well as gather intelligence. The rangers continue to work closely with Kenya Wildlife Service, county governments, and Kenya Police in maintaining peace and security. As a result, illegal killing of elephants in NRT conservancies has dropped since 2012. A Conservancy Management Monitoring System collects data within community conservancies. Results have shown improved conservation and protection of species and habitats, with individual conservancies reporting increased incidence of wild dog, giraffe, elephant and lions, and the return of species such as eland to areas from which they had previously disappeared.

⁷ Excludes area of conservancies reported elsewhere.
⁸ Excludes area of conservancies reported elsewhere.

HABITAT





AREA SECURED

3,859,080 hectares⁷

AREA OF CONSERVATION IMPACT

3,859,080 hectares⁸

NRT and community conservancies continue to implement an innovative rangeland management programme across two million hectares, combining traditional approaches to rangeland management with new techniques including land-use planning, rotational grazing, bunched grazing, land rehabilitation and the development of effective community institutions. In addition, a number of sanctuaries to support recovery of threatened species have been established within community conservancies, including Sera Black Rhino Sanctuary, Ishaqbini Hirola Sanctuary, and Reteti Elephant Sanctuary in Namunyak Conservancy.

As a community conservation initiative, NRT also aims to bring benefits to the people that live within its conservancies. NRT Trading works to seed fund and grow sustainable businesses within the NRT Conservancies and has developed local enterprises such as Livestock to Market (Beef WORKS), BeadWORKS, Fish to Market, tourism enterprises, and a mango business, thereby improving financial sustainability within conservancies. Over the years of FFI's support, NRT's capacity in delivering biodiversity management has continued to strengthen, as is evident from the improving rangelands in areas under management, increasing wildlife population trends, and successful species recovery projects. Competent and experienced staff members have been recruited to deliver effective programmes, and FFI's support is now limited to more targeted technical input and board membership. NRT has continued to develop its organisational and technical capacity and is largely independent, forging partnerships with donors, government, international organisations, and NGOs on its own. NRT has since raised significant funding independently. NRT now has a well-diversified income base, including from tourism, livestock, craft production and a Payment for Ecosystem Services scheme, as well as from a range of external funders. County governments have also contributed to conservancy running costs for the past couple of years.



PROGRESS IN 2018

During 2018, the decision was made for NRT to consolidate somewhat, and it withdrew from four proposed conservancies in the Turkana region. NRT now represents and supports 31 conservancies covering 42,000km² and about 320,000 people. In addition, various changes to the structure and management of conservancies were undertaken this year, including the first conservancy that has a direct cost-share with a county government (where the local government is formally co-funding its operations). Together the conservancies employ 952 people, including 748 community rangers and 69 rapid response team rangers, which work across conservancies.

Security in NRT areas has been maintained, despite the political challenges following the 2017 elections which saw a peak in civil disobedience and livestock theft, and all conservancies are considered to be under effective conservation management. However, the conservancies continued to be impacted by the poor rains experienced in 2017, with some conservancies receiving no rain over the course of 2017, resulting in increased pressure from pastoralists travelling substantial distances to find grazing.

People within the conservancies continued to benefit through associated livelihood activities, as well as employment. Significant funding was generated for Conservancy Community Funds, with the majority benefitting seven conservancies that generated significant tourism income. The majority of this income was invested into education, including school bursaries for 1,942 students. NRT also provided funding for other development projects, mainly focused on improving access to clean water for some 62,000 people.

NRT continues to generate a substantive portion of its own operating costs, predominantly from tourism. Results from the 2017 wildlife surveys (which were analysed during 2018) showed that most key species are stable or increasing in the majority (>50%) of conservancies, apart from common zebra, which showed a decrease in abundance in more than half of the conservancies in which they occur. Eland, oryx, giraffe and gerenuk appear to be doing well (only declining in three or fewer conservancies). Wild dogs are stable or increasing in several conservancies, even despite the recent disease outbreak that had threatened to wipe out most of the wild dogs in Laikipia. The monitoring data highlighted five conservancies where wildlife was faring least well, and additional management regimes will be instigated at these sites. An aerial survey conducted by the Kenya Wildlife Service was also encouraging, showing the lowest number of elephants poached in the last 10 years, and an increase in elephants and reticulated giraffe populations across the Laikipia-Isiolo-Samburu ecosystem between 2008 and 2017.



Halcyon Climate Change Initiative

STRATEGIC INITIATIVE

BACKGROUND

One of the greatest emerging threats to global biodiversity is climate change. The sites that we are protecting are likely to be subject to significant changes in the habitats and species they support over the coming decades. At the same time, the importance of natural habitats in locking up carbon is becoming increasingly recognised, with the destruction of such habitats (particularly forests) estimated to release around 20% of total annual global greenhouse gas emissions. Halcyon Land & Sea effectively provides a central mechanism for the 'avoided destruction' of natural habitats and has successfully locked up significant stores of carbon that would have been released if sites had been destroyed.

HABITAT





ACHIEVEMENTS IN PREVIOUS YEARS

Since 2007 three Strategic Small Grants from Halcyon Land & Sea have been used to:

- Develop a methodology to assess carbon stored within Halcyon Land & Sea sites, and to estimate avoided emissions as a result of this protection. In 2010 we were approached by Rio Tinto and asked to apply this learning to assess the carbon stored within its land holdings.
- Assess how Reduced Emissions from avoided Deforestation and Degradation (REDD) schemes could be applied as a key mechanism to secure large tracts of forest habitats. Two publications were publicly disseminated in 2011: a review of how biodiversity underpins carbon storage in forest systems, and lessons learnt from Halcyon Land & Sea projects that could be applied to emerging REDD initiatives. Finance from Halcyon Land & Sea was central to us securing an innovative partnership with the Australian bank Macquarie Group, to jointly develop a series of REDD projects.
- Review the potential for new (non-forest) carbon markets, including markets based around grassland carbon, and so-called 'blue carbon' in marine habitats.
- Develop the tools to undertake climate risk assessment and climate foresight planning for Halcyon Land & Sea sites. Between 2011 and 2015 we received external funding to apply the climate adaptation planning tool to more projects – with a focus on sites in agricultural landscapes. This has enabled us to continue to provide further publicly available guidance on

the interface of biodiversity, agriculture and climate change, and the adaptation planning toolkit and case studies were made widely available.

Bespoke 'climate foresight planning' has now been conducted for a range of FFI projects, particularly those identified as being within high risk regions for climate change, such as Central Asia, Central America and South East Asia. Work to increase climate resilience in one site in Nicaragua showed that the sites we had been supporting suffered less impacts from severe storms than other surrounding farms, perhaps as a result of the use of agroforestry, crop diversification, staggered planting, and adopting more appropriate crop varieties.

PROGRESS IN 2018

Building on the initial investment made by Halcyon, FFI continues to engage both in REDD projects (five active projects) and work on climate adaptation (seven active projects). Over the year, a scan of climate issues across FFI's wider portfolio was completed, and high-risk projects have been offered climate foresight planning. During 2018, FFI also partnered on a CCI project, which is reviewing evidence on the effectiveness of different adaptation interventions. Climate change seems likely to be a stronger focus in FFI's new business plan, so we expect to see additional attention given to this strand of work from 2019 onwards, with an ongoing focus on increasing resilience of our project sites to future changes in climate.





Kachin Highlands, Myanmar

STRATEGIC INITIATIVE

BACKGROUND

The highly biodiverse forests of north-east Kachin State in the Myanmar Himalayan border region with China are populated with rare magnolias and primates, including a monkey species previously unknown to science – the Myanmar snub-nosed monkey. This species has now been formally described but it is immediately considered to be Critically Endangered, given its small population size and limited distribution.

Surveys revealed a number of immediate threats to the region's forests, including destructive logging by Chinese timber companies, leading to severe habitat degradation and hunting for local use, as well as for the wildlife trade to China. One of the greatest threats to these forests was the proposed development of hydro-power projects that would result in the in-migration of a large Chinese workforce (thus increasing demand for firewood and wildlife products), coupled with increased forest conversion as the valley floor agricultural lands would be flooded. Without careful planning these large-scale infrastructure projects will decimate the wildlife of these exceptional forests. Our original surveys provided the understanding and rationale to develop a proposed protected area to safeguard the range of the Myanmar snub-nosed monkey, important forest areas that also support a host of other threatened species.

HABITAT



LOCATION



AREA SECURED

156,300 hectares

AREA OF CONSERVATION IMPACT

400,000 hectares

ACHIEVEMENTS IN PREVIOUS YEARS

Following work in the area since 2010, the proposal to establish Imawbum National Park was approved in principle by the Ministry of Forestry and Environmental Conservation in 2013. This park would secure over 150,000 hectares of forest under conservation management and will protect the watershed of the main tributary of the Ayeyarwaddy River, the biggest and longest river in Myanmar.

In addition, a Community Protected Area was developed with local villages within the proposed core zone of the new national park, and a series of 36 village conservation groups were established, along with two community patrol groups, which each consist of five "community rangers" drawn from villages that have set up conservation groups. Despite delays to field activities due to an upsurge in violence in the region (fighting between the Kachin ethnic army and the Myanmar military), the project team have continued to move forward planning for the national park. In addition, monitoring of illegal logging along the Myanmar-China border, next to the project site, has shown there has already been a significant reduction in this activity. Staff participated in a high-level forest sector reform workshop in Myanmar, and as a result, the government announced a log export ban, starting in 2014, which has helped to prevent further Chinese logging in the Kachin highlands.

A biodiversity report of the Imawbum area was completed in 2015, to inform the nomination of the new national park, a public consultation process was initiated, and monitoring of the forests have continued to provide data on species presence and levels of disturbance. By 2017, surveys showed reduced human disturbance to these forests following the cessation of illegal logging.

UPDATE IN 2018

The final processes to enable gazettement of Imawbum National Park were undertaken during 2018, with submission of final reports to the government. A change in the law during the year saw the need for one further round of high-level approvals prior to cabinet approval of the park, which we are still awaiting.

In the meantime, the protection of the forest has been maintained through the action of the village patrol groups, and FFI has continued to invest in the operation of these groups through the provision of training, supporting awareness activities, village meetings and the provision of grants to support livelihood activities. In addition, monitoring of the forest's biodiversity continued through use of camera trapping.





Sera Wildlife Conservancy, Kenya

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

BACKGROUND

Lying approximately 250km north-east of Mount Kenya, Sera is a vast and remote semi-arid wilderness. With a remarkable system of permanent springs, it supports a diverse range of wildlife, including elephant, wild dog, gerenuk, beisa oryx, buffalo and Grevy's zebra, and it is an important dispersal area for migrant species during the rains. However, the location of Sera in the northern Kenya borderlands means that it has been affected by the impacts of civil disturbance in neighbouring Somalia. Incursions of Somali bandits, cattle rustlers and organised gangs of poachers into the area remain a key threat to wildlife, particularly to the remaining elephant population. Communities requested the assistance of local conservation organisations (the Northern Rangelands Trust and Lewa Wildlife Conservancy) to promote both conservation and development in the area. Through a partnership with FFI, these NGOs have developed a project to secure 51,000 hectares of the Sera wildlands (33,000 hectares of core area plus a buffer zone of 18,000 hectares).

HABITAT





AREA SECURED

339,336 hectares

AREA OF CONSERVATION IMPACT

339,336 hectares



ACHIEVEMENTS IN PREVIOUS YEARS

The Sera Wildlife Conservancy has been successfully demarcated and is patrolled daily, and a controlled grazing regime has been implemented. In addition, a formal management structure has been established and resourced with key equipment, and a strategic plan has been developed, both of which have the support of local communities. In an area that was once prone to banditry and poaching, Sera has become a stable focal area where security has been restored, with poaching and cattle rustling much reduced. Evidence over the last few years has shown that elephant poaching has been reduced in contrast to the trends in other areas. Elephants have now taken up residence throughout the year and Sera Conservancy has been transformed from a former poaching hotspot to a safe haven for this species.

During 2014 Kenya's first ever communitymanaged rhino sanctuary was established at Sera. This is surrounded by a 45km perimeter fence, with active protection and monitoring of the founder population of translocated rhinos by the ranger force. The sanctuary is also being used to secure populations of other key species including beisa oryx.

PROGRESS IN 2018

In 2018 Sera Wildlife Conservancy remained an effective community institution and the area is considered to be under strong conservation management.

The wider conservancy is patrolled daily by teams drawn from a staff of 25 rangers, who maintain general security and undertake targeted antipoaching patrols in poaching hotspots. During 2018, there were no incidences of poaching in the conservancy, and specifically no loss of elephants or rhinos to poachers. Rangers also collected wildlife sightings data to feed into the NRT Conservancy Monitoring and Management System (CoMMS) database, which tracks wildlife populations across the conservancies. This data shows positive trends in terms of sightings data for the majority of species, with only lions declining in sightings.

Sera Sanctuary now supports 15 black rhinos, with another calf born this year. Tight security is maintained for the Sanctuary along with regular monitoring of both the rhinos and the 45km perimeter fence by 16 dedicated rhino monitors. The sanctuary also supports some 45 beisa oryx.

Tourism is increasing at Sera, with the opening of a refurbished lodge, generating conservation fees last year that are split between conservation operations and community projects, whilst local women generated income from making traditional bead-based handicrafts.



Emergency response for saiga antelopes, **Kazakhstan**

STRATEGIC SMALL GRANT

BACKGROUND

The Ustyurt Plateau is a vast and remote wilderness covering some 20 million hectares straddling Uzbekistan and Kazakhstan and is considered to be a globally important site for steppe biodiversity. Over the last 70 years the plateau ecosystem has been increasingly affected by human activities. A number of species or subspecies have since declined or become extinct, including the wild ass and the Central Asian cheetah. One of the species to have suffered the most dramatic decline has been the Critically Endangered saiga antelope - a key species of the plateau. The trade in saiga horn for traditional Chinese medicine has brought this species to the

edge of extinction, with steep population declines reported since the 1980's, and a further decrease in saiga numbers in recent years. From a population that once numbered in the millions, only an estimated 1,700 individuals remain in the Ustyurt region. Similarly, the numbers of other key ungulates, such as the goitered gazelle and urial, have also declined markedly. Such significant decreases in the main grazing species are likely to result in changes to the structure of the steppe and associated species (including a number of globally threatened birds).

HABITAT



LOCATION



AREA OF CONSERVATION IMPACT

6,394,800 hectares

ACHIEVEMENTS IN PREVIOUS YEARS

In 2011, an initial award was made from Halcyon Land & Sea to strengthen law enforcement capacity through the provision of vital equipment and training, initially in Uzbekistan, but logistical problems resulted in the decision to transfer this work to Kazakhstan in 2012. The grant provided vital vehicles to enable rangers to access this vast area, whilst the Kazakh government committed further investment into the Ustyurt ranger force. FFI and our partners led training for rangers from across the saiga range states, and successfully lobbied for the 150km border fence between Kazakhstan and Uzbekistan to be modified to include 125 animal-friendly gaps, thus enabling the continued cross-border migration of saiga and other wildlife. The project also put in place eight sniffer dogs that patrol key points along the Kazakhstan border in order to reduce illegal wildlife trade in saiga horn.

PROGRESS IN 2018

During 2018 ranger teams that were in part mobilised by previous Halcyon funding patrolled and monitored key areas of the Ustyurt Plateau to track saiga and deter poaching. In addition, an informant network has been established among the local population to help inform the rangers of emerging poaching threats. A drone has now been deployed as a further tool to help detect poaching and other illegal activities. Four cases of poaching were discovered this year, and work was undertaken to detain suspected poachers. Work continued to provide additional training for rangers, and specifically to increase their capacity in key law enforcement techniques. In addition, local communities were engaged through a series of surveys to explore their knowledge and perception of saiga, and educational activities.

An aerial survey of the Kazakh Ustyurt saiga population suggested a 37% increase in numbers between 2017 and 2018 (from 2,700 to 3,700 individuals). This is in-line with the population increase recorded between 2016 and 2017 and demonstrates the significant potential for population recovery in this species.





Chacocente Wildlife Refuge, Nicaragua

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

BACKGROUND

Chacocente, on the south Pacific coast of Nicaragua, is one of the largest and most important remaining examples of dry tropical forest in the country. It is also one of the region's four mass-nesting sites for the Endangered olive ridley turtle, and a primary nesting site for the Critically Endangered Pacific leatherback turtles. Poaching of turtle eggs has been a major threat to the species. The local communities are poor, and previously relied on the income earned from selling eggs.

ACHIEVEMENTS IN PREVIOUS YEARS

In 2001, Halcyon Land & Sea bought eight hectares of coastline, including beach and dry tropical forest. Our engagement at Chacocente helped to develop effective management of the area, involving both private (landowners) and public (local community) stakeholders. The area purchased at Chacocente is now integrated as part of the Rio Escalante-Chacocente Wildlife Refuge, and is managed within Nicaragua's Protected Area system by the Nicaraguan Ministry of Environment, with FFI leading and advising on marine turtle conservation efforts at the nesting beaches. In 2015, FFI provided additional support to develop a new governance structure for the refuge, which formalises a level of co-management by the community and other stakeholders at this site.

To help local people to find alternative sources of income, FFI worked with farmers to increase their crop diversity and yields by introducing basic irrigation, and helped local people to set up and run turtle tourism and other livelihood initiatives (such as 'weaving for nature', which recycles plastic waste into handicrafts).

⁹ The project also acts to protect some 11,100 hectares of important marine habitat, but this is reported separately in the Arcadia marine initiative report.



AREA SECURED

8 hectares

AREA OF CONSERVATION IMPACT

4,800 hectares⁹



Overall. Chacocente remains under effective conservation, and the management effectiveness at the site has grown substantially on the back of the initial Halcyon Land & Sea support. The site now has an operational management plan, a trained park ranger team, improved infrastructure, better management and coordination with other agencies (such as naval patrols), as well as the annual management of the turtle nesting beaches.

Since our work began at Chacocente 16 years ago, nesting numbers of olive ridley turtles have seen a progressive positive trend (despite occasional dips), and some 750,000 nests have been recorded and/or protected. In parallel, a total of 325 leatherback nests have been protected resulting in the release of 4,995 hatchlings to the sea. Despite these local successes, the overall picture for this population of leatherback turtles remains very worrying, with ongoing population declines across the Eastern Pacific. FFI is an active partner in the Eastern Pacific Leatherback Network, which fosters collaboration and information sharing to allow co-ordinated efforts to save this species.

PROGRESS IN 2018

During the 2017/2018 nesting season (November -February) the leatherback nesting beach was again patrolled nightly, and a turtle hatchery established.

This year nine leatherback nests were identified and protected compared to just two in the previous year, which reflects high levels of inter-year variability in nesting, and 137 leatherback turtle hatchlings were returned to the sea. Sadly, the political unrest that affected Nicaragua this year prevented the full deployment of agencies to protect the olive ridley mass nesting this season. Nonetheless, some protection remained through a combination of MARENA staff, community patrollers and the presence of the army.

As a result of the wider political situation it has proved increasingly challenging to support or collaborate with MARENA in managing the Rio Escalante-Chacocente Wildlife Refuge over the past year. In addition, the Chacocente collaborative management committee, which brought the park staff and community members together, has been suspended due to government restrictions on any public meetings, which are seen to risk fostering civil actions and/or political dissent. This current situation risks a reduction of management effectiveness at the site, although this is hard to quantify at the current time.



Ol Pejeta Conservancy, Kenya

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

BACKGROUND

OI Pejeta Conservancy is a vital part of the Laikipia ecosystem in northern Kenya, protecting critical migration corridors and diverse wildlife, including black rhinos and Grevy's zebra. The project is a joint programme between Lewa Wildlife Conservancy, FFI, and the Arcus Foundation and aims to secure and protect the conservancy's wildlife, provide a sanctuary for great apes, and generate income through wildlife tourism, to be reinvested in conservation and community development.

ACHIEVEMENTS IN PREVIOUS YEARS

Ownership of OI Pejeta was transferred from FFI to a Kenyan non-profit entity under a long-term

management agreement. OI Pejeta is also supporting the management of two neighbouring ranches that provide connectivity to the wider Laikipia landscape – the ADC Mutara ranch (25,364 hectares) and Eland Downs ranch (7,024 hectares). In 2006, 27 eastern black rhinos were translocated to OI Pejeta as the basis for a new breeding population. In 2009, four of the world's last seven known remaining northern white rhinos were translocated from a zoo in the Czech Republic to a specially built enclosure at OI Pejeta, in the hope that natural conditions would encourage them to breed. Although mating was subsequently observed, the death of the last male of the sub-species (Sudan) early in 2018 put an end to the hope of breeding.

HABITAT



LOCATION



AREA SECURED

37,000 hectares

AREA OF CONSERVATION IMPACT

150,000 hectares

Security at OI Peieta has been stepped up over recent years in response to escalating rhino poaching across East Africa. OI Pejeta has two wildlife protection squads - The National Police Reservists team and the Rhino Patrol Unit. The two operate independently, but cooperate during key operations and share intelligence. Rangers with official Kenya Police Reserve status have the power of arrest. In addition, unmanned aerial vehicles (drones) are used to observe and track wildlife and identify potential threats. An antipoaching dog unit was established, and in 2014, additional 'multi-role' dogs were trained. Ol Pejeta now hosts East Africa's largest population of Endangered black rhinos – 16% of Kenya's population.

Relations with surrounding communities are strong, as not only are 900 local people employed by the conservancy, but OI Pejeta rangers have also helped to increase security for surrounding villages and created a solid network of intelligence sources.

PROGRESS IN 2018

Ol Pejeta remains under effective conservation management, and its habitats and key biodiversity are secured as far as possible, despite mounting external pressures. This year Ol Pejeta continued to innovate in the development of anti-poaching initiatives, using the latest technology and procedures to outwit increasingly sophisticated poaching gangs. Surveillance efforts for black rhinos were maintained, and the population in the conservancy rose from 113 to 120, with only one rhino death recorded (due to predation), therefore there were no losses to poaching this year. The annual wildlife census depicts a stable system, with increasing populations of herbivores, including Grevy's zebra, Thomson's gazelle, Grant's gazelle, impala and warthog, although numbers of ostriches have declined this year.

FFI continued to provide tailored technical support for the protection and conservation of rhinos in the conservancy, as well as for habitat management, community engagement and specifically for fundraising. FFI also worked to improve the way that the buffer areas around OI Pejeta are managed, encouraging "conservation agriculture" that will be resilient to climate change, and encouraged sustainable water management and restoration of riverine habitats. Specifically, FFI is aiming to resolve the needs of wildlife and local communities in the immediate vicinity of OI Pejeta, including through the development of a management plan for the adjoining Mutara Conservation Area, which will address the needs of all stakeholders. As a result of targeted support to surrounding communities, relationships with the conservancy remained strong.

Ol Pejeta's Conservation Lab is now functional – this is a field-based lab which will enable conservationists, technologists, engineers, data scientists and others to collaborate on the discovery, development and implementation of technology-enabled solutions. This year, work focused on the development of a SMS system to enable communities to report incidents (such as crop raiding) to improve the responsiveness of Ol Pejeta's ranger teams.

During 2018, OI Pejeta was once again able to cover almost all its basic annual operating costs through its own sustainable, commercially generated revenues – primarily tourism and agriculture. However, fundraising partnerships have played a vital role in delivering community support and species-focused conservation initiatives.



Legacy Projects

Legacy Projects are those that FFI is no long actively supporting, but where we remain in close contact with implementing partners, maintaining a watching brief and offering support as requested, while otherwise tracking ongoing progress from a distance.



Strengthening Forest Management in Saint Lucia

STRATEGIC SMALL GRANT

BACKGROUND

Saint Lucia is noted for its extraordinarily high levels of endemicity and its unusually large concentration of globally threatened species, several of which are classified as Critically Endangered. Many of these species are associated with Saint Lucia's forest systems. Forests cover approximately 34,000 hectares - more than one third of Saint Lucia's land area. As well as supporting a range of important endemic and threatened species, these forests are estimated to contain over 5.5 million tonnes of stored carbon. The geography of the island results in the presence of a surprising diversity of forest types, ranging from cacti-dominated dry forests on offshore islands, to lush montane rainforests in the upland areas. Around 30% of these forests are within the network of government forest reserves, which have a total area of around 10,000 hectares. However, the existing reserve system was not representative of all forest types on the island and the most threatened lowland forest types were underrepresented (or in some cases entirely unrepresented) within the reserve system. The most threatened lowland forests are at direct risk from habitat conversion for tourism developments and over-collection of economically important species, such as the lansan tree.

Even within forest reserves, the traditional management systems established to manage forests solely as an economic resource did not include conservation alongside their commercial use. There was a need to tackle escalating threats (such as illegal incursions, increased incidence of erosion and landslides, and invasive alien species), while putting in place direct protection for the most at-risk forest species. The Saint Lucia Forestry Department approached FFI in 2014 to request support in developing a new strategy for the management of its forest reserves, to ensure the long-term future of the critical, globally important biodiversity and natural lands under its custodianship.

ACHIEVEMENTS IN PREVIOUS YEARS

A Strategic Small Grant from Halcyon Land & Sea underpinned the development of a new strategy for the Forestry Department and its new National Forest Management Plan, a process that involved all forestry staff with the assistance of external experts in protected areas management planning. As a result of the plan, tourism partners were engaged to manage key tourist areas within the forest reserves, thus freeing up the time of the Forestry Department staff to focus on conservation. The plan has helped the Forestry Department to develop and plan a series of new conservation projects.

Since its completion, the Forest Department's new strategy has led to improvements in the management of Saint Lucia's protected area and its biodiversity. It has enabled the Forestry Department to bring additional areas under conservation management, especially the dry forests (a highly threatened forest type that was previously barely represented in the Forest Reserve) for which a new 5,000 hectare reserve is now planned.

HABITAT



LOCATION



AREA OF CONSERVATION IMPACT

30,000 hectares

Almost everything the department does is now guided by its strategic plan, which has boosted performance and staff morale, convinced its Ministry and stakeholders that the department (and the forests it manages) has a major positive role for the wellbeing and economic development of the whole country, and enabled the department to articulate its priorities when funding opportunities arise.

Some changes that have been made include:

- forest range management areas have been reorganised to coincide with watersheds, providing more logical operational zones that reflect the new ecosystem-based approach;
- a significant amount of staff time is now being directed at dry forests, with new Global Environment Facility funds sourced to support this;
- staff understand how their activities, which are listed in the new plan, contribute to the overall goals of the department. For example, tree planting to stabilise eroded slope areas, and removal of invasive alien species from offshore islands;
- recognition that younger staff were lacking training opportunities has resulted in retired forest officers being drafted back in to train current staff, and some staff are being sent overseas for training.

Lessons learned from the project were published (<u>open access</u>) in Parks — the journal of the IUCN World Commission on Protected Areas.

PROGRESS IN 2018

The Saint Lucia Forestry Department is continuing to implement its new strategy nationwide, and is satisfied with the framework it has provided for improving its work. The project still has enormous and far-reaching impacts for the Forestry Department and its work. The innovative methods used by the Halcyon project to develop a fit-forpurpose strategic plan are now also being adopted by other government agencies in Saint Lucia.

FFI has continued to provide technical support to implement several priority activities, including projects on specific endangered species (Sustainable Lansan Project, Piton Christmas Tree Project, Saint Lucia Fer de Lance Management, Saint Lucia Racer Project, etc.) and developing plans for a proposed "mainland island" (a predator and pest-proof reserve). The retired Chief Forest Officer has now joined FFI as our first Saint Lucia Country Manager. An important part of his role will be continuing to provide technical and capacity building support to the Forestry Department, including assisting with relevant components of the strategic plan.





Shark Aggregation Sites, Australia

STRATEGIC SMALL GRANT

BACKGROUND

A grant in 2010 supported a new collaboration between FFI, the Burnett Mary Regional Group, the University of Queensland, and the federal government to identify key aggregation sites for grey nurse sharks off the coast of Queensland. One aggregation site is known (Wolf Rock) that supports around 60% of the breeding population of grey nurse sharks, but the location of the remaining 40% of females during their gestation period was unknown. This project was developed to generate data to guide the government in protecting important offshore sites for the grey nurse shark, a species recognised as Critically Endangered off the east coast of Australia. A second Halcyon Land & Sea grant was provided in 2014.

ACHIEVEMENTS IN PREVIOUS YEARS

The project established 'Grey Nurse Shark Watch'– a web-based interface for divers and photographers to upload reports of grey nurse sharks on the east coast of Australia, which involved some 220 volunteer divers collecting images of individual sharks, allowing the project to track their use of different areas. Marine surveys were also conducted to find 'missing' shark aggregation sites, involving shark tagging (with a mix of acoustic and satellite tags) and use of acoustic listening stations at suspected aggregation sites. An array of 25 acoustic listening stations was deployed in 2014-15 across some 600 kilometres off the Queensland coast to detect the presence of tagged female grey nurse sharks entering the area, and 21 sharks were acoustically tagged. Grey nurse sharks were detected as far north as Lady Elliot Island, and as far south as Montague Island off Narooma, New South Wales. Data was also collected on the physical structure and fish assemblages for each of the sites where listening stations were deployed.

In parallel, the government made moves to strengthen protection around the existing known aggregation sites (including Wolf Rock), and the project team has liaised with the Queensland government to ensure protection for other sites located.

PROGRESS IN 2018

Although data collection has now finished, analysis was ongoing during 2018 to characterise habitats and habitat preference of grey nurse sharks, assess species community structure, and produce a robust population estimate of grey nurse sharks in these waters. The data has already provided vital insights into grey nurse shark migratory movements and habitat preferences, particularly during the key gestation period, which will help the Queensland Parks and Wildlife Service to contribute to management of the Great Sandy Marine Park and Queensland's waters more widely, including development of a current zoning plan.





Pamir Mountains Initiative, Tajikistan

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

BACKGROUND

Zorkul Lake Reserve represents an area of 87,700 hectares of high montane habitat (4,000 - 6,000 metres) within the Pamir Mountains. This threatened high-mountain landscape lies on the border between Tajikistan and Afghanistan. The reserve is home to both Marco Polo sheep (a subspecies of the threatened argali or mountain sheep) and snow leopards. It is an important migration stopover, and is known to support some 116 bird species. Zorkul Lake Reserve is the newest of Tajikistan's protected areas. It was redesignated in its current form in 2000 with the aim of protecting a representative example of the Eastern Pamir ecosystem. Prior to FFI's engagement, the reserve was highly underresourced and lacked any real on-the-ground protection. Uncontrolled poaching appeared to be a significant threat to its wildlife, along with livestock grazing, which occurred on over nearly half of the reserve, including in sensitive nesting areas. In addition, the risk of climate change at mountain reserves such as this one is significant, given the impact on cold-adapted montane species with nowhere higher to move to.

ACHIEVEMENTS IN PREVIOUS YEARS

In 2009 the first formal needs assessment was conducted for Zorkul Lake Reserve, under an initial Halcyon Land & Sea grant provided in 2008. This demonstrated that it was badly under-resourced, and highlighted the paucity of management systems and processes, including the absence of any management plan. In 2011, Halcyon Land & Sea provided a follow-up grant to the reserve, to enable full-scale support and capacity-building

efforts to be undertaken. A full biodiversity survey and mapping of the area were completed. In addition, camera trapping revealed the presence of a healthy population of snow leopards in Zorkul. The project provided fuel and maintenance for the patrol vehicles and ensured that reserve staff could access the reserve regularly, whereas in 2010 (and previously) they were unable to visit the reserve at all. The ranger station at the reserve's western entrance was renovated and refurnished, and boundary signs were erected. The presence of a functioning ranger station provides a key deterrent for potential poachers who might previously have hunted in the reserve. The survey work and resulting understanding of the reserve (previously funded by Halcyon Land & Sea) continues to be an important basis for the reserve's plans and communications with others.

PROGRESS IN 2018

The staff training and equipment provided by this project continues to be applied to the management of the reserve, which otherwise operates on the shoestring budget provided by the State. Following introductions established by FFI, the reserve authority has benefited from support from other international organisations, such as Panthera who have provided equipment and uniforms. The varied training and support provided to rangers over the course of this project helped to create wider incentives for them to better protect the biodiversity of the reserve, even with the limited funds that they receive from the government. The administration is trying to develop plans to promote small-scale ecotourism as a way of contributing to additional operating funds and ranger costs.

HABITAT



LOCATION



AREA SECURED

87,700 hectares

AREA OF CONSERVATION IMPACT

457,700 hectares



Soils For The Future, Kenya

STRATEGIC SMALL GRANT

BACKGROUND

Whilst mechanisms for REDD+ are well developed as a means to enable forest conservation projects to access carbon finance, at present there are few examples of carbon funding being used to prevent the loss of carbon from grasslands. Grasslands support very important stocks of soil carbon, which can be released through inappropriate management, such as agricultural conversion, over-grazing or soil erosion. One of the constraints to greater inclusion of grassland projects in carbon finance schemes is the lack of appropriate methodologies for assessing soil carbon that could be applied under Verified Carbon Standard assessments for carbon finance projects.

ACHIEVEMENTS IN PREVIOUS YEARS

A Strategic Small Grant from Halcyon Land & Sea in 2013 was used to complete the development of a suitable methodology for grassland carbon, and specifically to validate the methodology in relation to the Verified Carbon Standard. As a result, Soils for the Future has a developed grassland soil carbon methodology, which is available to a broad range of communities living on grasslands and savannahs. This tackles a key hurdle in accessing carbon finance for improved grassland management approaches in East Africa. The grassland methodology has been approved by the Verified Carbon Standard and is available for use by project developers, i.e. anyone interested in developing carbon projects related to fire and grazing. This opens the door for community organisations and NGOs in countries such as Kenya and Tanzania to access sustainable financing for grassland conservation through carbon finance, as previous carbon methodologies are not suitable for them. The Soils for the Future team confirmed to us that Halcyon Land & Sea finance was received at a critical time and the methodology would not have been completed without it.

PROGRESS IN 2018

Soils for the future have continued to use the methodology in a soil carbon project in northern Kenya and are aiming to complete validation for carbon credits from this project during 2019. The soil carbon methodology has also been used to start a grazing management soil carbon project in Montana, USA and in a fire management project in Mozambique. The methodology remains open access and is available <u>here</u>.

HABITAT



LOCATION



POTENTIAL AREA OF CONSERVATION IMPACT

100,000 hectares



Increasing Security For Borana Conservancy, Kenya

STRATEGIC SMALL GRANT

BACKGROUND

Borana Conservancy extends over 12,950 hectares of natural savannah at the north-eastern edge of the Laikipia Plateau on the slopes of Mount Kenya. It supports a range of savannah species such as impala, giraffe, elephant, zebra and buffalo, as well as predators such as lion and leopard. Borana Conservancy was identified as being suitable for the introduction and protection of black rhino, and Kenya Wildlife Service stated its intention to introduce a number of rhinos into Borana Conservancy in 2013, as long as effective security could be put in place. The aim was to create a much larger wildlife area by removing the fence separating the adjoining Lewa Wildlife Conservancy once the rhinos became established.

However, in order to ensure security for black rhino and other wildlife. further measures needed to be implemented to increase infrastructure and protection at Borana Conservancy before the rhino introduction could proceed.

ACHIEVEMENTS IN PREVIOUS YEARS

In 2012 Halcyon Land & Sea provided a Strategic Small Grant to help Borana Conservancy increase its security operations, to enable the conservancy

to monitor and protect the introduced black rhino against the backdrop of escalating rhino poaching across East Africa. This funding was used specifically to purchase digital radios with GPS (Global Positioning System) capability and to provide extensive training for scouts in antipoaching techniques by an external security firm. including advanced military-style techniques.

The grant from Halcyon Land & Sea enabled a dedicated and armed anti-poaching team to be created, as part of a wider rapid response team with Lewa Wildlife Conservancy. As a result of this increased security, 21 black rhino were introduced to Borana Conservancy in 2013, and active efforts continue not only to protect, but also to intensively monitor these individuals. The Borana Conservancy has told us that it considers the Halcyon Land & Sea grant to have played a timely and crucial role in allowing the rhino reintroduction to proceed.

Since the grant, Borana and Lewa have successfully removed the dividing fence, creating a 37,600-hectare rhino sanctuary with the capacity to hold 110 black rhinos, which is supported by a combined force of 99 rangers backed by armed Kenya Police Reserve officers.

HABITAT



LOCATION

POTENTIAL AREA OF CONSERVATION IMPACT

37,600 hectares

The digital radios procured through Halcyon Land & Sea funding have provided a secure security network, compatible with that used at neighbouring Lewa, which has helped improve communication and monitoring of armed teams at night, thus increasing their safety, and Borana's capacity to counter poaching threats. No rhinos have been lost to poaching since 2015, when one individual was killed.

PROGRESS IN 2018

The Borana-Lewa ecosystem is now home to 169 Eastern black rhinos – 14% of Kenya's rhino population. No poaching incidents occurred this year. Daily monitoring and surveillance of rhinos through individual identification by the rangers continued during 2018. Daily site reports are filed from the monitoring team, and are added to a shared database for the whole Borana-Lewa system. In addition, professional, well-trained and armed field-based security teams represent a

deterrent to potential poachers, whilst vigilant monitoring continues to ensure that any threats are quickly detected and responded to. The teams have back-up support from vehicles, aircrafts and tracker dogs, and several night flights have been organised to check for poachers.

Specific training and constant refreshers are of absolute importance for the success of Borana's rhino monitoring and anti-poaching programs. Training allows the men on the ground to operate with confidence, in a systematic manner, and ultimately more safely. Borana's training schedule includes tactical refreshers, medical training and dog handling. This contributes significantly to staff morale and dedication to their often-arduous work. This year, two complete tactical refresher courses were carried out for the entire security team.

Recognising the impact of rangers' welfare on their ability to effectively protect rhinos, investment was made during 2018 into upgrading staff accommodation at Borana.





Greater Niassa Reserve, Mozambique

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

BACKGROUND

The Niassa Reserve, a pristine wilderness of 4.2 million hectares (roughly the size of Denmark), is home to one of the largest miombo forest ecosystems in the world. It harbours rich and diverse wildlife, including elephants, sable antelopes, large numbers of Cape buffalo, Lichtenstein's hartebeest, eland and zebra. Niassa is also an important stronghold for Endangered African wild dogs. The 30,000 people living within the reserve are among the poorest in the country, with little access to markets or social services, and they are entirely dependent on the reserve's natural resources for their livelihoods. In 1954, the government of Mozambigue created a reserve to protect Niassa in a joint venture with a private company. Thus, the Sociedade para Gesta e Desenvolvimento da Reserva do Niassa (SGDRN) was formed. In 2002, SGDRN invited FFI to help protect Niassa, and for 10 years we assisted them in managing the reserve, with financial support from Halcyon Land & Sea.

ACHIEVEMENTS IN PREVIOUS YEARS

Biannual aerial surveys showed that over the decade of FFI support (2002-2012) populations of most wildlife species stabilised and grew. The elephant population doubled to around 20,000 individuals (over 70% of Mozambique's total elephant population). Research and monitoring confirmed the importance of the reserve to two of

Africa's most charismatic carnivores – lion and African wild dog. A radical restructuring of the reserve to a public-private model resulted in the establishment of tourism concessions, designed to contribute significant revenues towards the annual operational budget of the reserve.

The mandate of SGDRN to manage the reserve ended in September 2012. It was proposed by the government that a Mozambican Foundation be established to manage the reserve into the future, and FFI has continued to assist the government in developing a long-term management model. In the interim, the Wildlife Conservation Society has been working with the government in the comanagement of the reserve. This new management structure builds on and consolidates FFI's previous support to the reserve. However, poaching pressures have been increasing in and around the reserve, resulting in worrying declines in some key species. The significant resurgence in ivory hunting across East Africa has been felt particularly strongly within Niassa.

The fact that Niassa remains protected is an important legacy of Halcyon Land & Sea support, without which, it is likely that there would be no Niassa Reserve to protect, under any type of management, today. FFI is committed to working actively with governmental, NGO, and private sector partners to find long-term solutions to the management of Niassa.

¹⁰ Does not include area of Chuilexi Conservancy, as this is reported elsewhere.





PROGRESS IN 2018

During 2018 FFI continued to engage with the Mozambique government and with the Wildlife Conservation Society to support the establishment of an integrated management and governance structure for the reserve. Efforts are underway to improve the integration and coordination operations of the reserve, including across concessions, through standardising operations and by strengthening law enforcement, including giving specifically trained and certified scouts across the Reserve the ability to conduct searches and arrests, and carry firearms.

The appointment of a new General Director to the government body responsible for protected areas in Mozambique (Administracao Nacional de Areas de Conservacao, ANAC) created a new opportunity for Niassa Reserve, with reconsideration of the options for its long-term management. FFI built a strong relationship with the new General Director over the year, and there was subsequently a request for FFI to support capacity development for ANAC.

Early in 2018, FFI focused on raising the profile of the plight of elephants in Niassa, through a press release that received global attention across the media. On the back of this, and following conversations with different members of the Mozambique government, 60 members of the Mozambican Special Forces were deployed across Niassa to make up the shortfall in reserve-level rangers. Their presence has had a significant impact on levels of poaching across the Reserve, with a 73% reduction in poaching against the same period in 2017, according to ANAC data. ⁶⁶ The Halcyon Land & Sea grants were awarded to BLUE at a crucial time in its development, enabling BLUE to recruit staff, develop its project portfolio and its donor base... None of this [success] would have been possible without the provision of seed-funding such as that provided by Halcyon Land & Sea at a pivotal stage.

Support To Blue Marine Foundation

STRATEGIC INITIATIVE

BACKGROUND

The BLUE Marine Foundation (BLUE) was formed by the team behind the film, The End of the Line, with the aim of being a new and innovative force for marine conservation, and with an agenda to develop large-scale Marine Protected Areas (MPAs). In 2010 Halcyon Land & Sea provided a core grant to help establish the foundation and underwrote continued engagement of key staff with the foundation.

ACHIEVEMENTS IN PREVIOUS YEARS

This initial investment helped to leverage for the management of the Chagos Marine Reserve. Without this investment it would not have been possible for the government to have finalised the declaration of this 54.5 million hectare area as a no-take zone. This grant, during BLUE's initial year, also provided critical funds, vital for allowing the organisation to firmly establish itself. This grant also underpinned the operation of Fish2Fork, an innovative website that reviewed restaurants based on their approach to using sustainable seafood, in order to bring about changes regarding the fish they serve, and their sourcing and labelling policies. Fish2Fork now continues to operate effectively in partnership with the Marine Conservation Society's Good Fish Guide.

In 2011, further support was provided to help the development of BLUE and Fish2Fork, and to

develop a more diverse income base. By investing in a Development Consultant they were able to access further funding of over US \$1,049,670 at that time. Between 2013 and 2014 FFI helped to develop the technical capacity of BLUE by seconding an FFI marine expert who assisted in the strategic development of new and existing projects.

PROGRESS IN 2018

BLUE has continued to grow and mature institutionally from the initial seed funding provided by Halcyon Land & Sea, and now employs some 24 staff and consultants. It now fulfils a niche position placing a high emphasis on policy, large-scale MPAs and replicable sustainable fisheries' models. Over the last year BLUE has developed plans to roll out a model of marine protection and sustainable fishing around the UK coast and in the Mediterranean, along with oyster restoration projects. BLUE has been an active participant in campaigns, such as the call for political support for the proposed Blue Belt initiative for UK Overseas Territories, and has engaged on specific marine reserves, such as that around Ascension Island, which could become the largest no-take zone in the Atlantic, and in St Helena, where moves could have reduced the effectiveness of the reserve by allowing long-line tuna fishing. BLUE is also working in Italy to support MPA development in the Aeolian Islands, as well as exploring opportunities in Menorca and working on grouper fisheries in the Maldives.

HABITAT



LOCATION GLOBAL



AREA OF CONSERVATION IMPACT

54,896,250 hectares¹²

¹² Not included in Halcyon Land & Sea area calculations

Iberian Lynx Programme, Southern Portugal

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

BACKGROUND

In 2002, fewer than 150 Iberian lynx were believed to survive in the wild, making it the most endangered cat species in the world. This was due mainly to the loss and fragmentation of lynx habitats. The population of lynx prey (the wild rabbit) had decreased, and lynx habitats had been destroyed by infrastructure projects in both Spain and Portugal. The animals were also killed in road accidents and illegally hunted. The lynx is associated with some of the Iberian Peninsula's most threatened habitats - cork oak forest and maquis scrubland. In 2002, Halcyon Land & Sea started the process of securing a landscape corridor with the aim of reconnecting current and former lynx habitats and safeguarding the vital habitat required for future reintroductions of this species. This project worked in parallel with other conservation efforts in Portugal and Spain. The planned corridor connected the Monchigue region of south-western Portugal, to the Spanish border.

ACHIEVEMENTS IN PREVIOUS YEARS

Working with the Liga Para a Protecção Da Natureza (LPN), a leading Portuguese conservation NGO, we successfully negotiated land management agreements for strategically positioned areas of lynx habitat, with the aim of establishing a corridor of suitable habitat for lynx linking back to their existing refuges in Spain. These lands have since been managed for the recovery of rabbit populations, given the importance of this locally declining species as prey for the lynx. In January 2010 a lynx was formally recorded in one of the target areas for our project (the Moura/Barrancos region), the first verified evidence of lynx in Portugal since 2001. LPN was invited to sit on the governmental committee overseeing implementation of the National Lynx Conservation Strategy.

In 2013, further management agreements were signed (covering an additional 775 hectares) and management interventions included promotion of rabbit populations, through fertilisation and electric fencing of rabbit pasture lands, and the construction of rabbit shelters and refuges. The lynx programme enabled LPN to access two successive grants, one of which also supported effective conservation measures for black vultures, resulting in the first chick of this species successfully fledging in Alentejo for more than 40 years. By 2015, captive-bred lynx were being released within Portugal, re-emphasising the importance of the 'lynx habitat corridor' that this project worked to create.

PROGRESS IN 2018

During 2018 LPN continued to monitor habitat, rabbit densities and artificial dens in key project areas. Some 14 management agreements are still active, and the programme retains positive and productive relationships with most of the land owners who had previous management agreements. Elsewhere, the government ledinitiative to reintroduce lynx to Portugal (in no small part stimulated by LPN's previous lobbying) continued apace. Six further lynx were released in 2018, and some 20 cubs were born in the wild. There are currently over 50 Iberian lynx now living wild in Southern Portugal, and the total population of the species has recovered to around 700, of which 600 are in the wild.

HABITAT



LOCATION



AREA SECURED

18,154 hectares

AREA OF CONSERVATION IMPACT

20,050 hectares


Using REDD to Protect Forests, Vietnam

STRATEGIC SMALL GRANT

BACKGROUND

The biodiversity of Vietnam is exceptional, and most is associated with the country's 12.9 million hectares of forests. Over half the country's forest was lost between 1943 and 1990 and, whilst plantation development means overall forest cover is beginning to increase, important natural forest sites continue to be lost. Specifically, Kon Tum Province is a globally recognised biodiversity hotspot, and is home to species such as the greyshanked douc langur, yellow-cheeked gibbon, and the endemic chestnut-eared laughing thrush. This area has seen significant forest loss since 2000 and 75% of its forests have been degraded, threatening these important watersheds and the biodiversity they support.

Linking Vietnam into the emerging opportunities around REDD (Reducing Emissions from avoided Deforestation and Degradation) finance could represent an opportunity to change the drivers of forest destruction by creating financial incentives to protect Vietnamese forests, rather than to exploit them. In 2010 the Vietnamese Government requested FFI to develop exemplar REDD projects, and asked for targeted capacity building for government staff to help them access opportunities from international government support funds.

ACHIEVEMENTS IN PREVIOUS YEARS

This project supported the national government to engage with the wider REDD agenda and provided an important example and opportunity for lesson sharing more widely in Vietnam, with significant development of understanding about REDD and its complexities within the regional authorities and technical agencies.

Specifically, we worked with the Department of Forestry to help them design a REDD+ project in the forests of Kon Tum in the Central Highlands. Following selection of pilot areas in 2012, the project conducted socio-economic studies and research in the forests and surrounding villages to better understand the drivers of forest degradation in the vicinity.

HABITAT



LOCATION



POTENTIAL AREA OF CONSERVATION IMPACT

As a result of this work, the Hieu Commune REDD+ project was established to create a direct link between healthy forests and improved well-being of ethnic minority forestedge communities. The project helped communities to secure forest rights and manage forests to create climate and biodiversity benefits, plus develop opportunities to increase the wellbeing of all community members. As well as securing land tenure for the communities, the project will ensure that community-led forest management is implemented for all villages in Hieu Commune.

In 2017 the project took a new direction, following the discovery of the world's second largest population of grey-shanked douc langurs in a nearby area. This area supports 30-50% of the global population of this endemic and Critically Endangered primate. FFI began work to establish a new protected area to protect the langurs, taking a landscape approach that links the forests of Hieu Commune (underpinned by carbon payments), and surrounding village forests (whose watershed values could release other Payments for Ecosystem Services) around a core zone that supports the langurs and other important biodiversity.

PROGRESS IN 2018

Work continued to scope out the proposed protected area to protect key populations of grey-shanked douc langurs and northern yellow-cheeked gibbons. This work included securing the necessary approvals and engaging with local communities to understand their needs and dependencies, and to ensure they have means to engage with and benefit from the project. We have stepped up our own staffing base in the area and have joined forces with a local NGO to develop capacity and increase on-the-ground support for conservation in the project area. The entire programme of work in Kon Plong, Kun Tum Province can be traced directly back to the initial support from Halcyon in 2010. This is now one of FFI Vietnam's most important and well-funded sites, in which we have the vision and finance for a landscapelevel intervention that includes, at its core, a new protected area, which will protect one of the most important and strategic forests outside of Vietnam's current protected areas network.





Tongwe Forest Protection, Tanzania

STRATEGIC SMALL GRANT

BACKGROUND

The Tongwe people reside on the eastern side of Lake Tanganyika, in an area adjoining the Mahale Mountains National Park. Their traditional lands include several areas of intact forest and miombo woodland, and these support important populations of elephant and chimpanzee (approximately 300 individuals). The Tongwe have traditionally managed their forests sustainably, but these are under increasing pressure from agricultural conversion and felling of trees for fuel and charcoal, particularly by migrants from elsewhere in the country. In addition, a series of mining exploration projects are planned in the region, including on a large strip of land running through the Tongwe tribal area.

ACHIEVEMENTS IN PREVIOUS YEARS

In 2009 Halcyon Land & Sea provided a grant to help the Tongwe Trust to establish the Ntakata Village Land Forest Reserve (under Tanzanian law), thus securing the largest and most intact forest in Tongweland. To achieve this, the project established land tenure, ownership and use rights in order to secure this area against future environmental challenges and development impacts. Participatory forest management plans were completed and by-laws for the reserve were formulated by the village councils themselves. Forest guards were trained and equipped, ranger posts established, and an airstrip was built to allow tourist access to the site.

Legal tenure rights are in place for two neighbouring villages, giving them legal ownership and responsibility for managing the reserve. These villages have formed a Joint Natural Resource Board, which meets quarterly to discuss issues of forest conservation and associated matters. The reserve is patrolled and monitored by nine forest guards that are recruited from the local villages and provided with appropriate equipment, skills and facilities.

PROGRESS IN 2018

The forest reserve remains secure under conservation management. Nine rangers continued to provide security patrols and monitoring on a daily basis, and also collaborated with district antipoaching officers and police. A new security outpost, with better mobile phone signal, was also established, and a further of 15km of footpaths were developed bringing the total to 35km, allowing easier patrols and tourist access.

Monitoring records have shown a significant reduction in threats, particularly snaring within the forest, with snare numbers recorded each quarter now around 5% of those in 2013. Sightings of flagship wildlife species (e.g. chimpanzees, buffalos and monkeys) have increased, and ranger-based monitoring of chimpanzee populations continued. Additional scientific studies have assessed both chimpanzee density and trends in habitat quality.

The first tourists visited the site in 2018, and additional income diversification opportunities have been identified, including honey production. However financial sustainability remains an ongoing challenge for this project.

HABITAT



LOCATION



AREA OF IMPACT 18,300 hectares

> AREA SECURED 300,000 hectares



Ishaqbini Community Conservancy, Kenya

STRATEGIC SMALL GRANT

BACKGROUND

The Ishaqbini Community Conservancy was established to protect savannah grasslands alongside the Tana River in north-eastern Kenya, and one of the most important populations of the Critically Endangered hirola antelope (the conservancy supports up to 62% of a global population estimated at 430 in 2011). This species had seen severe declines over recent decades as a result of over-hunting, disease, drought, habitat loss, and competition with livestock. The neighbouring forest reserve protects two Critically Endangered primate species - the Tana mangabey and Tana River red colobus. Ishaqbini also supports populations of African wild dog, reticulated giraffe, lesser kudu, gerenuk, lion, leopard and desert warthog. The Ishaqbini Community Conservancy was established with customary and ancestral land rights by the traditional pastoralist Somali community, however the site was threatened by local land rights disputes with incoming agriculturalist communities keen to convert land for shifting agriculture. Complex land tenure in this region undermined the ability of the community to prevent encroachment into the conservancy, undertake anti-poaching activities, and develop proposed ecotourism operations.

ACHIEVEMENTS IN PREVIOUS YEARS

Support from Halcyon Land & Sea in 2008 enabled a review of tenure rights and legal options and led to successful conflict resolution with the neighbouring agriculturist community over future conservation management. By dealing with these inter-clan conflicts, security was improved which enabled hirola anti-poaching operations to be strengthened. Scouts from the two conservancies work collaboratively, and a memorandum of understanding is in place to allow the future establishment of a joint venture tourism operation focusing on both conservancies. In 2012, a 2,300 hectare hirola sanctuary was established by the Ishagbini community and made safe from predators, and subsequently 48 hirola were translocated into the area.

PROGRESS IN 2018

An aerial survey in early 2018 concluded that there had been a 140% increase in the number of hirolas in the Ishaqbini Hirola Sanctuary since it was established in 2012. Effective management, underpinned by strong community support, has enabled the hirola population in the sanctuary to grow at an average of 15-20% per year. The recent survey concluded that the population now stands at an estimated 115 individuals (15% more than last year's figure).

HABITAT



LOCATION

AREA OF CONSERVATION IMPACT

68,174 hectares

Cristalino State Park, Brazil

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

BACKGROUND

Cristalino State Park is the most biodiverse reserve in the Brazilian Amazon and a key gateway to the southern Amazon. It has the second highest recorded diversity of bird species in the world, and is home to the Endangered white-whiskered spider monkey. Cristalino acts as a barricade between undisturbed forest in the north and intensive deforestation in the south, preventing the advance of cattle ranching, logging and soya farms into the heart of the Amazon basin. In late 2003, Halcyon Land & Sea made an emergency purchase to protect 1.600 hectares of the southern border of the Cristalino State Park in Brazil. The land was secured with a view to establishing a sustainable forest buffer zone to block the expansion of ranching, prevent natural resource conflict between ranchers and soya growers in the south and indigenous people in the north, and preserve large tracts of Amazonian wilderness. These forests would be maintained as private nature reserves.

ACHIEVEMENTS IN PREVIOUS YEARS

With the generosity of the Grass Valley Trust and Brazilian entrepreneurs, the area of land protected within the private nature reserves was increased to 6,476 hectares, and it is now managed by our local partner - the Cristalino Ecological Foundation (CEF). Subsequent site visits have confirmed the excellent status of forest and wildlife, and the reserves were judged to be well-managed and secure. The area is regularly visited by ornithologists and bird researchers, which reflects the good conservation status of this area. Relative to the status at project initiation, the threats to the Cristalino private nature reserves managed by CEF are judged to have been much reduced as a result of (i) regular patrols, (ii) the award-winning ecotourism business, which has demonstrated the economic value of the forest, (iii) environmental education work with local communities, and (iv) increased knowledge of the biodiversity value of the area through research.

PROGRESS IN 2018

During 2018 CEF continued to actively manage and protect the private reserves and to use the areas for ecotourism. No infractions of the reserves were reported. Regular ranger patrols and use of the area for ecotourism activities all year round acted as a deterrent to illegal activities, along with the presence of a permanent ranger in the northern part of the reserves. During the wild fire season (June to September), the frequency of patrols was increased to ensure a prompt response. In addition, active lobbying by CEF has resulted in a change in local regulations, allowing better control of illegal fishing activities in the Cristalino Park.

Tourism generates enough funds to underpin basic management activities, but additional funds are required for ongoing protection and monitoring. The potential to further increase tourist levies to increase income was assessed during 2018, but this approach was dismissed as it was deemed likely to deter visitors. FFI's efforts to resolve differences between the two shareholders of the company that owns the private reserves (Grass Valley Trust and the Instituto Ecológico Cristalino) continued during 2018, however the death of the key Brazilian shareholder (after a long period of illness) has further delayed efforts to formally register a final parcel of land.

HABITAT



LOCATION



AREA SECURED 6,476 hectares

AREA OF CONSERVATION IMPACT

Cardamom Mountains, Cambodia

STRATEGIC INITIATIVE

BACKGROUND

The 570,000 hectares of the Cardamom Mountains in Cambodia represent a huge, undisturbed and previously unstudied forest massif. In 2002, an emergency grant from Halcyon Land & Sea established a ranger force to protect wildlife and habitats in the wildlife sanctuaries of Phnom Aural and Phnom Samkos. Support was given to a range of enforcement agencies to counter poaching and illegal logging. This initial small grant proved successful in paving the way for a much larger 'Cardamom Mountains Wildlife Sanctuaries Project' to strengthen the management of the sanctuaries to conserve wildlife, and enable the sustainable development of local communities. A series of Community Protected Areas have been established within Phnom Samkos Wildlife Sanctuary, which are patrolled by community rangers.

From 2009 Halcyon Land & Sea has provided additional funding to develop sustainable finance strategies for the area.

ACHIEVEMENTS IN PREVIOUS YEARS

The project provided practical support to over 30 Community Protected Areas within the forests, including mapping of community lands, establishing land title, resolving land conflicts, developing community land-use plans and Community Protected Area management plans, and building capacity of community-based organisations. The project also provided support for horticulture, sustainable forest product use and livelihood development. As a result, approximately 441,000 hectares of land within the Cardamoms has been brought under sustainable management and protection through Community Protected Areas. The project also conducted research to demonstrate the relative economic benefits of forest protection in relation to proposed hydropower schemes.

PROGRESS IN 2018

During 2018, work has continued with communities within the Cardamom Mountains on varied initiatives to link endangered species and forest protection to livelihood development opportunities, with support from the UK's Darwin Initiative and the Fondation de Bienfaisance du Grupe Pictet. Forest wardens actively protect culturally important Endangered species, such as Asian elephants and Siamese crocodiles, and as a result there are clear indications of reduced threats to these species, for example a 66% reduction in the use of fishing nets in crocodile sanctuaries since 2015, and no crocodile poaching incidents recorded over the last three years. Parallel work to increase local community food security and access to clean water has also helped to reduce some of the key drivers of forest destruction.

HABITAT



LOCATION



AREA SECURED 441,000 hectares

AREA OF CONSERVATION IMPACT



Flower Valley, South Africa

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

BACKGROUND

The Cape Floristic region is one of the world's six botanical kingdoms and is the most botanically rich habitat on Earth. Nearly 70% of its 8,600 plant species are endemic. In 1999, FFI was approached to help secure Flower Valley's 550 hectares of near-pristine fynbos flower meadows on the Agulhas Plain of the Cape Floristic region in South Africa. This site was otherwise threatened with conversion into a vineyard.

ACHIEVEMENTS IN PREVIOUS YEARS

FFI and its local partner, the Flower Valley Conservation Trust (FVCT), created a project linking biodiversity conservation with community development. For the first time, wild fynbos flowers could be harvested sustainably under a new code of practice that ensured effective habitat regeneration. Sales of fynbos products to local and international supermarket outlets proved successful, and these previously provided an important contribution to the operations of FVCT. The first fynbos field guide was published by FVCT in 2016, which describes 41 fynbos species harvested on the Agulhas Plain, the threats facing fynbos, and the importance of harvesting flowers responsibly.

Local people now have year-round employment under ethical conditions, and this success has made this project a model for other farms in theCape Floristic region. Additionally, the Flower Valley Early Learning Centre has provided education for 800 children and training for teachers, as well as support and mentorship to the wider community.

Between 2000 and 2002, Halcyon Land & Sea also helped to purchase Witkrans and Witvoetskloof (two areas of lowland fynbos neighbouring Flower Valley), saving them from agricultural conversion. These lands were used to test new South African legislation enabling conservation easements, where a legal deed on the property restricts its future use, so it can only be used for conservation in perpetuity. This was the first ever transaction in the country to use a conservation easement as part of a property sale. The Witvoetskloof property has now been incorporated into the neighbouring Grootbos Nature Reserve under a deed ensuring conservation use and is being used as a joint tourism venture between FVCT and Grootbos.

A 'Fynbos Trail' was established in 2012 as a three-day walking experience through Witvoetskloof, Grootbos, and the Flower Valley farm, providing overnight stops at each site. The proceeds are shared between the organisations and this revenue now creates a small but regular income stream for FVCT.

HABITAT



LOCATION

AREA SECURED

3,607 hectares

AREA OF CONSERVATION IMPACT

In parallel to the work at Flower Valley, FFI worked directly with South African National Parks (SANParks) to implement a conservation management system for the Agulhas Plain, and to secure a series of additional sites of high biodiversity under the auspices of the Agulhas National Park between 2003 and 2008. SANParks used the support of Halcyon Land & Sea to leverage the conservation of sites such as Hangnes, Ratel River North, and the Nuwejaars wetlands.

FVCT continues to act as the coordinator and secretariat for the ongoing Agulhas Biodiversity Initiative (ABI, phase II), which maintains the conservation partnerships between landholders and agencies across the Overberg landscape. The initiative focuses on integrated land-use planning (including controlling invasive alien plants); viable, nature-based, responsible tourism; environmental education and environmental awareness programmes; and transitioning to a green economy. FVCT coordinates the ABI Alien Clearing Programme with funds from South Africa's Department of Environmental Affairs.

Properties purchased or leveraged with funds from Halcyon Land & Sea (Flower Valley, Witvoetskloof, Witkrans, Ratel Rivier, etc.) remain under long-term conservation management and/or easements, and are managed by local agencies (FVCT, Grootbos, SANParks). All properties are subject to the ongoing invasive alien plant clearing programmes, managed and coordinated by FVCT under ABI phase II.

During 2017, FFI supported the initial development of a "fynbos corridor" between the Agulhas National Park and the Walker Bay Conservation Area, in order to link and consolidate the areas purchased with Halcyon Land & Sea funding over the past 15 years.

PROGRESS IN 2018

Work continued into 2018 to stabilise the financial management of FVCT following a cash-flow crisis it encountered in 2017; to diversify sources of sustainable finance; and to reduce reliance on donor funding. Recommendations produced during a full review of the Trust's financial base were implemented during 2018, and the financial situation remained stable this year. Due to some uncertainty over its long-term sustainability, greater attention has been given to how the Trust can use its existing assets to generate revenue. FFI have provided ongoing technical support and advice to FVCT during this period of instability, primarily through Board membership.





Pablo Moreir



Montado Do Areeiro, Madeira

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

BACKGROUND

Madeira's Montado do Areeiro is the only known breeding site of Zino's petrel, Europe's rarest seabird. The birds were threatened by livestock overgrazing, uncontrolled tourism, rats and feral cats. In 2004, only approximately 30 breeding pairs were known to survive.

ACHIEVEMENTS IN PREVIOUS YEARS

In 2004, Halcyon Land & Sea secured 310 hectares of land, which was incorporated into the neighbouring Parque Natural da Madeira. The park raised significant co-finance from the EU to support the purchase and to implement activities such as removal of livestock, rehabilitation of habitats, and control of tourism to protect Zino's petrel.

The land is now irrevocably the property of the Parque Natural da Madeira, which has been managing the area successfully for some time. The initial effect of the removal of livestock and reduction in rabbit numbers was dramatic on both endemic flora and on the birds. Close monitoring of the breeding colony showed that numbers of Zino's petrel were steadily increasing up to the summer of 2010. However, in August 2010 the site was badly affected by widespread fires on the island. Four adults and 38 juveniles were lost during this fire and efforts afterwards concentrated on protecting the remaining fledglings, repairing damaged burrows, preventing erosion, promoting habitat recovery and preventing rat invasions. Regeneration of the flora and fauna has been a slow and painful process. In 2011, the petrels returned and the number of calls heard suggested there was no significant reduction in the adult population as a result of the fire, despite the loss of many of that year's fledglings.

The site is subject to ongoing management as part of the Parque Natural da Madeira. Wardens regularly collect data on Zino's petrel during the breeding season, rats and cats continue to be managed through the use of targeted poison and traps, and the area remains clear of livestock. The spread of invasive plants (such as broom) after the fire initially hampered the spread of native flora, but endemics are increasingly returning.

HABITAT



LOCATION



AREA SECURED

310 hectares

AREA OF CONSERVATION IMPACT

310 hectares

PROGRESS IN 2018

The Instituto das Florestas e Conservação da Natureza (who manage the park) conduct weekly checks of traps to control invasive rats and cats13 at the site, and work to manage the endemic flora. In parallel, the Freira Conservation Project conduct night-time surveys of the birds, recording call frequency and capture in hand nets to assess the presence of previously ringed individuals. This work continues to be led by veteran conservationist Frank Zino (for whom the species is named). Frank visited Montado do Areeiro 18 times during the current breeding season, and in his mid-70s, continues to abseil off these treacherous cliffs. Despite poor weather conditions that hampered data collection, inspections indicated that all the nests in the area appeared to be occupied in 2018.

Eighty breeding pairs were recorded in 2018 (compared to 30 in 2004) and at least 23 juveniles fledged from the two principal breeding areas. Prior to our intervention, fledging rates were substantially reduced due to predation. At present, however, the colony appears stable and seems likely to make a slow but sure recovery.

Additional data on the species' movements were collected this year by attaching GPS loggers to seven birds. This was carried out in collaboration with a research group in Lisbon, after revision of their original research plans to reduce potential impacts to the species. This will add to the growing ecological information base for this species, including biometric data and 30 years of capture/recapture data. In addition, further DNA studies are planned, including potential assessments of diet based on faecal samples recovered from nest sites.

An educational program in the schools in Madeira now features the *Freira* (Zino's petrel) as a highlight.

¹³ In line with the law in Madeira, feral cats considered a threat to Zino's petrel populations are humanely euthanised by a qualified vet.

Nkuringo, Bwindi Impenetrable National Park, Uganda

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

BACKGROUND

Bwindi Impenetrable National Park in Uganda is home to the Critically Endangered mountain gorilla. In 2003, Halcyon Land & Sea helped to buy a 12-kilometre long and 350-metre wide strip of land along the boundary of the park to create a more effective buffer zone and reduce humanwildlife conflict.

ACHIEVEMENTS IN PREVIOUS YEARS

Following community agreement, over 230 landowners were individually paid for parcels of land. A 200-metre strip (240 hectares) of the land purchased, just next to the park boundary, was added to the park. The remainder (180 hectares) is managed as a buffer zone, and is held by the Nkuringo Community Conservation Development Foundation. This organisation is run jointly by the local community and the Uganda Wildlife Authority, and develops community enterprises and tourism around the habituated Nkuringo group of mountain gorillas.

Work with communities has enabled gorilla-friendly livelihood options to be developed, such as growing fodder for cattle to reduce the extent of grazing lands required, and using various techniques to prevent crop-raiding by gorillas and other wildlife.





An eco-lodge has been built, which is owned by the local community and operated by a private company, and this has priority access for those with gorilla permits for the area, which are necessary for tourists to go gorilla tracking. The eco-lodge employs a number of local people, uses local produce, and the profits from this venture are accrued directly by the local community. Uses of funds from the lodge have included provision of scholarships for local Batwa children, supply of livestock to local families, building of teacher accommodation and paying for the education of nurses, thus benefiting the community as a whole.

In 2015 a year-long intensive assessment of human-wildlife conflict interventions in the buffer zone was completed and the buffer zone management plan was finally endorsed, which is now being implemented. Plans are also underway to expand tea growing as a new livelihood activity for local communities in the buffer zone.

As a result of the purchase of the buffer zone and benefits provided to local communities through gorilla tourism and a number of other livelihood activities, attitudes towards gorillas have improved significantly and human-gorilla conflict has been significantly reduced. Both the persecution of gorillas and loss of livelihoods through crop-raiding are no longer significant issues. The establishment of the Nkuringo buffer zone is being looked at as a model for similar initiatives throughout the mountain gorilla range.

PROGRESS IN 2018

The International Gorilla Conservation Programme (of which FFI is a core and founder member) continues to operate across Bwindi Impenetrable Forest, including at the project site, which remains under conservation management. During 2018, support from the Swedish government enabled the Nkuringo Community Conservation Development Foundation, along with other local community groups in the area, to undertake a strategic review and improve their focus and internal governance going forwards.

In parallel, rangers are being trained to collect data using SMART software, to help improve the effectiveness of patrols across the national park.

Additionally, a new census of the mountain gorilla population in the Bwindi Impenetrable forest was initiated, using information from on the ground surveys (covering some 330 km², with over 9,900 gorilla observations) and gorilla faecal samples (of which 833 have been collected to date). Final results from this census are expected in 2019, and will update the most recent population estimate from the park, which was400 individuals recorded in 2011. A revised estimate for the global population of mountain gorillas in 2018 indicated that there are now over 1,000 individuals, and the IUCN Red List has now downgraded their threat status from 'Critically Endangered' to 'Endangered'.

HABITAT



LOCATION



AREA SECURED

420 hectares

AREA OF CONSERVATION IMPACT

620 hectares

Historical Projects

Historical projects are those that are effectively closed, and no further FFI involvement or ongoing legacy reporting is envisaged.

Protecting The 'Google Forest' of Mount Mabu, Mozambique

STRATEGIC SMALL GRANT

The forests of Mount Mabu in northern Mozambique were only recently discovered in 2005 as a result of their identification on Google Earth. Since then this site has been recognised as an important biodiversity hotspot. This area contains the most extensive continuous mid-altitude wet forest in southern Africa (approximately 7,900 hectares), supporting a number of newly described and endemic species (including several new reptile and butterfly species) and a wide range of bird species.

The forests of Mount Mabu are increasingly under threat from commercial logging. Previously, poor infrastructure prevented the incursion of logging vehicles into these forests, but bridge repairs and accessibility to the coast has contributed to the extensive growth of logging in this region. The forest has also been affected by traditional slashand-burn agriculture, hunting, and the influx of workers to a neighbouring tea estate.

This project worked to establish a community protected area for Mount Mabu, with legally recognised status, drawing on new conservation legislation in Mozambique, which for the first time recognised Community Conservation Areas as Protected Areas. FFI worked with two local NGOs to engage the local community in developing and promoting the sustainable use of natural resources, linked to the provision of opportunities for socio-economic development. The project achieved the development and legal registration of four Community-Based Organisations, training and capacity building of community members, registration of Mount Mabu as a globally recognised Important Bird Area, development of the preliminary management plan for Mount Mabu, and initial development of an Environmental and Social Impact Assessment of the proposed Community Conservation Area.

However, in 2016 the relationship with the local project partner ran into difficulties and FFI took the difficult decision to withdraw from this project. We understand that this local partner plans to continue the project, with Mount Mabu registered as a Community Conservation Area.



Potential area of conservation impact: 7,900 hectares

Halcyon Land & Sea Learning Grant

STRATEGIC SMALL GRANT

Under the 2013-2017 Arcadia grant agreement we proposed to ring-fence one Strategic Small Grant per year, which could be applied to build capacity of either partners or our own staff, in line with the aims of the fund. Specific criteria ensure effective application of this strategic funding, enabling the best match with, and benefit for, Halcyon Land & Sea.

In 2013, an award was made towards the costs of developing a legal skills base within our team. One

of the technical specialists within our REDD+ team was given the opportunity to complete legal training, partly supported by a Halcyon Learning Grant. Having this legal expertise in-house would have enabled FFI to be in a much stronger position with regard to framing our legal engagement on both REDD+ forest protection initiatives and land purchase. Unfortunately, the recipient of these skills subsequently left FFI. The learning grant facility has since been discontinued. Developing A New Approach To Conserving Rangelands, Australia

STRATEGIC SMALL GRANT

Over the last 200 years, Australia has suffered the largest documented decline in biodiversity of any continent. Rangelands support a significant number of Australia's threatened plant, animal and ecological communities, including a range of iconic Australian marsupials such as wallabies, marsupial moles and dunnarts. However, rangeland biodiversity is threatened by unsustainable agricultural practices, over-grazing, inappropriate fire regimes, invasive weeds, alien mammals and, increasingly, extreme climatic conditions. It is estimated that between 30-55% of rangelands are in some way degraded.

This project linked the rehabilitation of degraded Australian rangelands to the generation of carbon credits to deliver tradable domestic offsets, while ensuring benefits for habitats, local communities and farmers. Payments would be associated with activities to restore and improve management of land, and thus enhance biodiversity and carbon values. This would be achieved through reducing grazing pressure from both domestic stock and feral grazers such as goats, camels and rabbits; improved fire management; and removal of alien species, particularly non-native predators. The project developed Australia's first rangeland carbon sequestration methodology, which was submitted for approval under the government's Carbon Farming Initiative and subsequently field tested at a 500,000 hectare site in Central Australia. A series of 10 sites, covering more than seven million hectares, were identified where rangeland management could be implemented under this model. This could be applicable to some 40% of Australia's mainland.

In 2013, the government of Australia changed its position on carbon pricing and taxation, and in 2014 it repealed the Carbon Tax, making the future for all projects based on the generation of carbon credits very uncertain. However, the draft methodology remains and can be built upon, when and if government policy changes again. In addition, a private sector agricultural land management tool has been based on some elements of the rangeland methodology developed under this project. This can be used to assess the resilience of agricultural systems based on current management practices and future climate scenarios.

Potential area of conservation impact: 7,244,634 hectares

Yasquel Cloud Forest, Ecuador

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

Yasquel is an area of 4,000 hectares of Andean cloud forest and páramo (a highly biodiverse type of high-altitude heathland) located in the Andes of Ecuador on the slopes of the Pichinchectares volcano. In 2009, Yasquel was offered for sale and was at risk of being converted into pasture land for cattle ranching. Given the importance of the site for conservation, Halcyon Land & Sea committed a grant to purchase the site.



At the beginning of 2011, after almost two years of negotiations, the vendors suddenly withdrew the property from sale. This was apparently due to disputes within the family selling the property regarding the use and division of income from the sale. In addition, the family was not willing to meet certain conditions of sale identified by FFI as being necessary to reduce our future liability (such as proper clarification of boundaries and historical issues over squatters and evictions).



Potential area of conservation impact: 4,000 hectares

Valuing the Ustyurt Steppe, Uzbekistan

STRATEGIC SMALL GRANT

The Ustyurt Plateau is a vast arid steppe that supports a wide array of plants and animals, with around 900 species recorded. Despite its size, the Ustyurt Plateau is facing a range of threats including direct grassland destruction for cultivation; overgrazing; aridification, resulting from the diversion of water supplies; and poorly planned mining and oil developments. However, these fertile grasslands could represent an important store of natural carbon, and one that could potentially be linked to new non-forest carbon markets.

A Strategic Small Grant was used to investigate the carbon storage potential of this and other grassland habitats, and considered the potential for, and hurdles to, developing such sites for carbon finance. The project included assessments of how carbon is stored in grasslands, how this carbon store is affected by different threats to grasslands, and the potential role of carbon finance in achieving grassland conservation.



A parallel study focusing on the potential role of carbon finance in the parts of the Ustyurt Plateau located within Kazakhstan (9,565,400 hectares) indicated that the Kazakh area of the Plateau could store some 392.5 million tonnes of carbon. Although a number of significant hurdles exist to developing carbon finance projects in countries with poor enforcement regimes, this study has contributed important intelligence to the debate about long-term financing of steppe protection on the Ustyurt Plateau.



Kwakuchinja, Tanzania

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

The 2,500 hectare Kwakuchinja corridor in northern Tanzania links Tarangire National Park and Manyara Ranch. This represents a critical lifeline for migrating wildlife in the region and maintains connectivity over a wider landscape of some 15,800 hectares. Of the nine wildlife routes historically emanating from Tarangire, four have already been blocked by villages and farms. Radio tracking showed that elephant, wildebeest, hartebeest, oryx and zebra still travelled along the Kwakuchinja corridor across this landscape.

The project assessed wildlife movement, land tenure, location of settlements and undertook community engagement and development of sustainable livelihood activities within the area of the proposed corridor. The area was mapped by

Potential area of conservation impact: 15,800 hectares

satellite imagery and an aerial survey, and this was used to determine the proposed extent of the corridor. However, following elections in 2011, a new local council decided to overturn all previous agreements concerning the wildlife corridor and the project came to a halt. In 2012, a new corridor was proposed between Manyara Ranch and Tarangire National Park, to the north-east of the original corridor, passing through rehabilitated agricultural land. The village council of the main village in the area subsequently took forward the corridor idea to the local district council on their own initiative, without further NGO support. This indicates that the project left a key legacy in terms of mobilising the community to take this initiative forward, even after the conclusion of support.





Sankuru Reserve, Democratic Republic Of Congo



STRATEGIC INITIATIVE

The forests of the Congo basin are an important stronghold for a range of threatened species, such as forest elephant; okapi; and numerous primates, including the Endangered bonobo. FFI has worked with the Democratic Republic of Congo's (DRC) Protected Areas Authority, Institut Congolais pour la Conservation de la Nature (ICCN), for many years. As a result of this partnership we were asked to help develop the management structures and local institutional arrangements for newly established protected areas in the Congo basin, in partnership with local communities. In 2008, a grant from Halcyon Land & Sea was used to develop the institutional base, access the information, and leverage the funds to help bring about on-the-ground conservation for a newly established nature reserve at Sankuru.

In 2009, the government decided to de-gazette the reserve. We moved our efforts to engage with the managers of the more biodiverse neighbouring forests (the Tshuapa, Lomami, and Lualaba), but no formal partnership for this area was forthcoming. FFI also worked centrally within DRC, in collaboration with both ICCN and the Ministry of the Environment, to support the country's Reduced Emissions from avoided Deforestation and Degradation (REDD+) processes. This was in order to support the government in developing links between internal forest protection and international carbon markets.



Estancia La Querencia, Patagonia

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

Estancia La Querencia is a vast and remarkably intact example of dry grassland in Patagonia, and the area is a vital nesting habitat of the Endangered Andean condor. In 2001, Halcyon Land & Sea investment facilitated a collaboration between FFI, the landowner and three other NGO partners (Earthvoice, ProNatura USA, and the Wildlife Land Trust), to develop plans for establishing a 'Condor Conservancy' to conserve the exceptional biodiversity and ecosystems of La Querencia.

Working with these partners and the landowners, FFI helped to establish a foundation to protect the

biodiversity of Estancia la Querencia for the long term. The board of this foundation developed a plan to promote wildlife, habitats and ecotourism in the area; focusing on the protection of condors, austral rails and many other typical steppe species. In 2004-5, FFI supported the Board to realise this plan, by leading the development of a management plan for the Estancia, combining wildlife conservation, habitat management and exploration of ecotourism potential at the site. FFI's work also contributed to the site being listed as an Important Bird Area. The land remains secured under management for the foreseeable future.



Area of conservation impact: 85,000 hectares

Lekurruki Wildlife Conservancy, Kenya

MAIN GRANT (LAND ACQUISITION AND/OR MANAGEMENT)

Lekurruki constitutes a critical dispersal area and migration corridor for wildlife across the wider Laikipia landscape, including for elephant, Grevy's zebra and African wild dog. This corridor provides safe passage between Samburu, Buffalo Springs and Shaba National Reserves. It is essential for maintaining the ecological integrity and long-term conservation of species in the wider ecosystem. Within the Lekurruki Conservancy, land was previously held by 26 private landowners, and parcels were likely to be sold and/or developed for agricultural purposes.

The northern block of the conservancy, incorporating 12 private titles, was purchased and secured for conservation. This land is now fully under the management of Lekurruki Conservation Trust, which is fully equipped and staffed to provide anti-poaching coverage and security for the area. Lekurruki subsequently expanded to cover a neighbouring ranch and forest. The Lekurruki Conservation Trust supports the local community, promoting improved grazing and rangeland management; conflict resolution and security; improved water supplies; support to schools and student bursaries; and healthcare. A local tourist lodge has been developed (Lekurrukiowned, but under third-party management), which is providing increasing revenue streams to support conservancy operations and community development under a 20-year agreement.

Lekurruki remains under effective conservation management, under the umbrella of the Northern Rangelands Trust. Regular monitoring by conservancy scouts has indicated that wildlife populations are stable and/or increasing, although occasional incidences of elephant poaching have been reported.

Area secured: 1,584 hectares

Area of conservation impact: 11,950 hectares

Burnett Mary Region, Australia

STRATEGIC SMALL GRANT

The Burnett Mary region covers approximately 5.6 million hectares of land; around four million hectares of coastal zone habitats; supports over half of Queensland's native mammals and almost 80% of its native birds; and just under half of the state's native reptiles, frogs and vascular plants. The area was being cleared at around 8,000 hectares per year, resulting in fragmentation and loss of remnant habitats. It was also threatened by alien species, fires and increased salinity.

Halcyon Land & Sea funding supported the successful nomination of the Great Sandy Biosphere (1.24 million hectares) as a UNESCO Man and Biosphere Reserve, which was formally approved in 2009. FFI continued to support the operations of the Burnett Mary Regional Group (BMRG), an organisation tasked by the Queensland government with promoting effective environmental stewardship across the region.

As a result of the partnership with FFI, BMRG increased community engagement in the Sandy Links Biosphere and has worked to develop an appropriate governance structure through dialogue with local councils and other critical stakeholders. As a result of direct FFI support, BMRG developed a more diversified income base, including an innovative environmental brokering company. In addition, the partnership supported work on the cultural heritage of Fraser Island, and active protection of Critically Endangered lowland rainforests within the Great Sandy Key Biosphere Reserve.



Cape Private Nature Reserves, South Africa



STRATEGIC SMALL GRANT

In 2006, a grant from Halcyon Land & Sea was used to study the feasibility of establishing a revolving fund for acquisition and conservation of private land in South Africa. This was to serve as the basis for exploring further options for the strategic development of private nature reserves in South Africa. The resultant report outlined options for securing land under sustainable land management and for establishing a permanent covenant ensuring conservation use. Once secure, these conservation lands could again be sold, thus returning proceeds to the fund. The report has been widely circulated with conservation partners in the Western and Eastern Cape.

Opportunities to promote conservation restrictions and easements to secure key areas are currently being applied through the Renosterveld project (see above).

Conservation Incentives, South Africa

STRATEGIC SMALL GRANT

In 2006, a grant from Halcyon Land & Sea was Prior to this project, the tax laws in South Africa encouraged the destruction of nature and led to the loss of priority fynbos land. FFI supported a legal team to review laws influencing land use. As a result, legislation was changed, and landowners now have greater incentives to retain land under wild fynbos, rather than ploughing it for viniculture, wheat production or other purposes.



Philippines Biodiversity Conservation Programme

STRATEGIC SMALL GRANT

The Philippines has more Endangered and Critically Endangered endemic species than anywhere else in the world, and the fragments of natural forest that support these unique species are under imminent threat. In 2003, Halcyon Land & Sea helped create a plan to conserve some of these key areas. It proposed developing the institutional capacity of local NGOs to prepare, finance, implement and sustain their long-term conservation programmes.



In Summary

Halcyon Land & Sea 2013-2018

Over the last five years (covering the Arcadia grant AE > Continued to engage with, and track progress of, 3290 2013-2018) Halcyon Land & Sea has:

- Provided support to 25 projects, including twelve new > projects;
- > Initiated four new large-scale projects for the protection of landscapes that support globally important biodiversity and are important in maintaining the ecological viability of larger ecosystems (in Romania and Mozambique);
- Supported nine new Strategic Small Grants, across six countries;
- > Provided funds for ongoing support to 11 projects which had received Halcyon Land & Sea funding in previous years; FFI also provided ongoing support and mentoring to nine more projects using other sources of funding;
- Provided direct support to a total of 30 sites and 25 in-country partners;

eight other partners which no longer require direct support;

Continued to improve monitoring, impact assessment, and reporting processes;

> Developed nine internal case studies, of which three have been produced as learning documents for open access dissemination through our website.

In addition, over this period we have seen the scope of the fund continue to grow - the area of conservation impact of Halcyon Land & Sea has increased from 46.5 million hectares at the end of 2012 to 60.5 million hectares in 2017.





CONCLUSION

The substantial and continued support provided by Arcadia since 1998 toward FFI's Halcyon Land & Sea fund has underpinned all of the significant achievements that the fund has made to date, as detailed in this report, and explored in more detail in the recent review commissioned by Arcadia. We are tremendously grateful to the Donor Board and Advisors of Arcadia for this opportunity to carry out long-term conservation. Thank you. If you have any questions or would like more information, please contact:

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