Conservation news

Protecting Scotland's seas through Scottish coastal communities

Since June 2014 Fauna & Flora International (FFI), in partnership with the Community of Arran Seabed Trust (COAST), has been providing support to various communities along Scotland's coast. FFI has been working with the community on the remote Fair Isle, which lies between the Orkney Islands and Shetland, and supporting the long-established Fair Isle Marine Environment and Tourism Initiative (FIMETI). FIMETI represents the interests of the c. 60 people living on the island and has been campaigning for stricter protection of their local sea for 2 decades. Fair Isle has submitted a proposal for a Demonstration and Research marine protected area and awaits a decision from Marine Scotland, the government department responsible for the management of Scotland's seas, later this year. The proposal seeks to explore whether locally led management measures could be put in place, and aims to investigate declines in various seabird populations on Fair Isle and to determine whether seabird populations are negatively affected by the impact of human activities and/or by broader environmental fluctuations such as the effects of climate change. The proposed marine protected area would also endeavour to demonstrate the many socio-economic benefits that marine protected area designation could bring to the Fair Isle community, such as job creation, increased tourism and an enhanced knowledge of the local marine environment.

FFI has also been working with people living along the shores of Loch Sunart and the Sound of Mull. The area is part of two new, separate but overlapping marine protected areas designated for both common skate (Loch Sunart to the Sound of Jura marine protected area) and seabed life such as northern feather-stars (Loch Sunart marine protected area). Community members living here have acted on their interest in local issues to form a community group that is now in its early stages of mobilization. The group would like to see their local waters thriving within their environmental limits, and understand that local voices being inherently part of the government process is key to this. Coastal communities around Scotland can play a distinct and valuable role in the sustainable management of inshore waters. Too often this role is overlooked and marginalized from mainstream discussions between government and other leading representatives but the seas are a common, shared resource and members of the public have a rightful place within the decision-making processes connected to this resource.

One such role coastal communities can play is sharing their local knowledge of certain areas of the sea. The benefit of this kind of contribution has been shown along the north-west coast in the Wester Ross area, another region the project has been engaging with. The area has been designated as a nature conservation marine protected area for various features, including maerl, a hard slow-growing red algae, which can form beds that provide shelter for juvenile fish and other species. Maerl beds are very delicate, however, and are highly sensitive to bottom-towed fishing gear, the impacts of which the marine protected area is intended to mitigate. Local knowledge recently indicated a greater presence of maerl, and a survey using an underwater camera was carried out to locate the unmapped maerl. The search, initiated by members of the local community and supported by a partnership between FFI, Scottish Wildlife Trust and Scottish Natural Heritage was a success and new locations of maerl have now been mapped. With management of this marine protected area currently out to public consultation the data from this survey can be put forward to strengthen the case for larger areas of protection.

Through this project coastal communities have increased opportunity to share their local knowledge of certain areas of the sea and to use this to influence government processes directly. Communities are supported through the initiative to mobilize into coordinated and more strategically-thinking action groups that work alongside one another and with partners. This year will be focused initially on the current consultation on marine protected area management approaches, together with the ongoing support to Fair Isle. Later in the year we aim to organize a symposium on Scottish coastal community empowerment, which will help to maintain momentum and provide a further focus to establish a network of coastal communities around Scotland.

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Identifying and managing priority ecosystem services in Peru

Fauna & Flora International (FFI) works with a number of strategic partners in the extractive industry. These include, amongst others, Rio Tinto, Anglo American, BP, eni and Repsol. Together we are integrating ecosystem approaches into strategic management of biodiversity and ecosystem services across their operations. Repsol, an oil and gas company, and FFI are working together to identify priority ecosystem services at Repsol's Sagari Project. Priority ecosystem services are defined by Performance Standard 6 (the guidelines produced by the International Finance Corporation) as those that a project's activities are likely to affect, and could therefore have effects on local communities, and that a project directly depends on (e.g. water). Sagari is a gas pipeline project in the western Peruvian Amazon, located along the lower Urubamba River

and within the buffer zone of the Machiguenga and Ashaninka Communal reserves as well as Otishi National Park.

FFI's interest in an ecosystem approach is driven by the need to expand risk management practices and corporate commitment to understand risks at earlier stages in project life-cycles, and, by changes in legislation, promote the valuation of ecosystem services (e.g. in Peru the Ley de Mecanismos de Retribución por Servicios Ecosistémicos; www.minam.gob.pe/wp-content/uploads/2014/06/ley_302105_MRSE.pdf). Repsol and other partners are being supported by FFI to achieve best practice through voluntary compliance with IPIECA guidelines (IPIECA is the global oil and gas industry association for environmental and social issues), following Performance Standard 6 and the adoption of an ecosystem approach in projects.

An ecosystem approach (as defined by the Convention on Biological Diversity) encourages project proponents to look at the underlying ecological structure and function that determine habitat types and biodiversity, and at the ecosystem services that stakeholders depend on within an area. Focusing on ecosystem services provides a way to integrate and connect related social and environmental indicators, and helps in the development of impact assessments, mitigation, and social and environmental projects. Through a high-level assessment of operational impacts and infrastructure development, FFI evaluates ecosystem services that both the company's operations and communities depend upon and may affect. The company's social and biodiversity baselines are reviewed, experiences of the social and environmental teams captured within an ecosystem services review workshop, and a joint site visit undertaken.

In the Sagari Project several unique activities undertaken within the social and environmental teams were applicable to the identification and understanding of ecosystem services within the study area (e.g. monitoring related to water quality, size of fish catches and hunting frequency) but lacked any focus on understanding ecosystem services. Recommendations for integrating the ecosystem approach at both the company and operational level were provided by FFI, including designing data collection to define the location and flow of ecosystem services and the level of dependence on ecosystem services by the project and local communities. A key strength of this project was a multidisciplinary approach that included participation of the Project Construction, Safety and Environment, and Community Relations teams. This resulted in a better understanding of ecosystem services across the project area and of the potential impacts the gas pipeline project will have on biodiversity and ecosystem services.

FFI engages with all its corporate partners to adopt and incorporate an ecosystem approach to identifying and managing impacts on biodiversity and ecosystem services. This current collaboration has demonstrated how the successful integration of an ecosystem approach can foster multi-disciplinary collaboration to promote the efficient and comprehensive identification of ecosystem services, stakeholder dependencies, potential impacts and mitigation activities.

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Release of confiscated and captive-bred parrots: is it ever acceptable?

In October 2013 111 captive Endangered red-and-blue lories *Eos histrio* were confiscated from a Filipino trader on their native island of Talaud, north of Sulawesi, Indonesia. To prevent them escaping the trader had torn out their flight-feathers, so they were transferred to recover at Tasikoki, an animal rescue centre in Sulawesi, pending their eventual release back into the wild. The Indonesian authorities emphasized the signal such a release would send to the region's trappers and traders: commerce in this species is illegal under national and international law. Thus in August 2014 55 birds (the others having died or failed to recover from their injuries) were duly liberated into forest on Talaud. Most conservation-minded onlookers would doubtless applaud this outcome, not just for the sake of the birds themselves or the species as a whole, but also for that strong conservation message. But what if this exercise sent something else back to Talaud as well?

Parrots regularly carry undetected pathogens such as herpesvirus, circovirus, polyomavirus, bornavirus and chlamydia. Even clinically healthy birds can transmit pathogens both within and between species, causing severe illness, especially in naïve (previously unexposed) populations. Moreover, some pathogens (e.g. herpesvirus) produce weak symptoms in one species but fatal ones in another. As parrots are typically sociable, disease spread can be rapid in both captivity and the wild, mostly by direct contact but even by using the same perches; in captivity airborne transmission may also occur. Detecting all potential pathogens in captive birds is expensive, time-consuming and nigh impossible, as cases can still go undetected, however comprehensive the monitoring. Unsurprisingly, therefore, many pathogens are present in many facilities worldwide. Before or even after confiscation, is it certain those lories were never housed with or near other parrots?

The experts say: 'Only in the very unusual circumstances where history of disease exposure of confiscated birds is known. . ., there is a true conservation need. . ., and there are resources for a comprehensive release programme, is it advisable to utilize confiscated birds in releases' (Snyder et al., 2000, *Parrots: Status Survey and Conservation*