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CONSERVATION

SNH REVIEW

The Strathspey & Badenoch Herald reported that Scottish Natural Heritage (SNH) is reviewing how key protected areas for nature can better safeguard flora and fauna and halt the loss of biodiversity by the Scottish Government's target of 2020 [Oct 15]. SNH said that 'some sensitivities' have emerged in the initial reactions to the findings of the independent panel. The view of the panel was that protected areas 'are not in themselves a sufficient response to the widening and increasing pressures bearing on the natural environment and its contribution to Scotland's prosperity, health and wellbeing ... Our commitment to the best places for nature in Scotland, the sites and reserves that are already protected remains central to everything we do. What we cannot assume that it will be enough in the longer term.'

Dr Gus Jones, of the Badenoch & Strathspey Conservation Group, said: "Protected areas, that include National Parks, are set up to conserve and provide refuges for valued habitats and species. Fundamentally, the concern is that the proposed changes would undermine delivering on these primary functions. This would be against the public interest and damage Scotland's natural capital. It would leave us all the poorer and add to environmental problems facing future generations. Badenoch & Strathspey is outstandingly rich in biodiversity, with, for example, the Cairngorms National Park supporting a staggering 25% of the UK's threatened animals and plants. To secure a future for these requires more action, not less. Currently we are falling short on delivering targets to halt biodiversity loss. We need to secure ecologically coherent networks and robust and resilient ecosystems to the benefit of Scotland's people and natural capital. That is what our protected areas are for, and their wise management is key to achieving this."

The *Protected Areas for Nature* report responds to the Scottish Government's *2020 Challenge for Scotland's Biodiversity and Route Map to 2020*. See: www.snh.gov.uk/docs/A1509577.pdf

BEARDED TITS

RSPB Scotland reported that last year was a record-breaker for bearded tits on the River Tay, with numbers more than doubling at the site after work to protect and conserve the reedbeds. Populations had become increasingly fragmented and isolated because of the historic loss of their habitat.

723 bearded tits were monitored at the Tay reedbeds in 2014, representing 45% of all the bearded tits ringed in Britain last year. They are an amber list species.

The ringing work was undertaken by the Tay Ringing Group. A PhD student on the project, Iain Malzer, said: "The bearded tits on the Tay are reacting positively to RSPB Scotland's reed management and over the course of the study we've learned lots about how these birds interact with their specialist habitat. We placed radio-trackers on close to 40 bearded tits over two breeding seasons, allowing us real insight into the habitat selection of these normally elusive birds. We noticed that, while old, dry, patches of reed are critical for nesting, almost all foraging trips occurred in more open, previously managed reed

where invertebrates were easier to catch. The key looks to be in creating patches of reed at different ages, offering a variety of resources for the bearded tits to exploit. Appropriate management at this site could even help encourage these birds to spread and occupy new reedbeds."

HOUSE SPARROWS

A series of small wildflower meadows across Glasgow were sown by RSPB Scotland to provide a source of food for house sparrows, whose numbers have declined in the city by 90% since the 1970s [Mar 14]. RSPB Scotland and the University of Glasgow are monitoring sparrows in the city and investigating reasons for their sudden decline.

CORNCRAKES

The *BBC News* website reported that 1,069 male corncrakes were counted this year, compared to 1,289 in 2014 – the highest total in 45 years. 333 calling males were counted in Tiree this year. The wet and cold spring and summer weather has been blamed for the poor breeding season.

RSPB Scotland said that Islay and Iona had recorded a slight increase in corncrakes, but there were fewer in almost every other part of the Highlands & Islands.

WOODCOCK

Woodcock numbers have been decreasing across the UK in recent years. The Scottish Gamekeepers Association (SGA) has recommended that sportsmen do not indulge in any early shooting of woodcock. It is shot in season in low density in Scotland, and the Scottish population is faring better.

The Game and Wildlife Conservation Trust (GWCT) and the British Trust for Ornithology found there were 55,241 breeding males in the UK in 2013, a fall of 29% from 2003. It is thought that the there is less habitat available as conifer plantations become too mature for woodcocks to find open enough breeding areas.

Alex Hogg, of SGA, said: "GWCT has done a lot of scientific work regarding these birds and we agree with their guidance that shoots should leave it as late as possible in November before shooting woodcock. While it is legal to shoot woodcock from September 1, the majority of estates offering it don't start this early in the season. However, it is sensible to minimise the pressure on the birds as much as possible to ensure the resident breeders get the best chance for future years and we will be encouraging our members to take these steps going forward. Shooters have always been receptive to conservation guidance, as was shown with black grouse, and those we have spoken to are happy to support the later start to help the resident woodcock."

PHALAROPES

Red-necked phalaropes migrate to the Western Isles and to Orkney and Shetland during the summer. 36 breeding males were counted on RSPB Scotland's reserve in Fetlar, Shetland, equalling the highest number that has ever been recorded there. A pair also bred at the RSPB reserve at Balranald in North Uist for the first time in 31 years.

Six males were recorded in Argyll, the most southerly the birds breed in the UK. This is the best breeding year on record.

HEN HARRIERS

The Heads Up for Harriers group is asking the public to help determine where hen harriers go in winter and of the particular threats to the birds' survival in winter. Please include any details of places where birds are seen (a six-figure grid reference is best), time and date of sighting, the sex of the bird and any notes on behaviour. Contact: email: HenHarrier@snh.gov.uk; telephone 07767 671973. See: bit.ly/1Pfe4hu

- The Hen Harrier Life+ Project website reported that data received from a satellite tag suggests that Holly, a hen harrier who fledged on Ministry of Defence land in Argyll in 2015, has died. She was in the 'uplands of central Scotland.'

ORKNEY STOATS

A report, commissioned by SNH, has highlighted the impact that stoats have on the ecology of Orkney [Jun 15]. Stoats particularly impact on ground-nesting birds, the Orkney vole and its predators, hen harriers and short-eared owls. There have already been 470 sightings on the Orkney mainland and linked isles, compared to 290 in 2014. An eradication programme of the non-native species could cost £500,000 and last up to five years. External funding is being sought.

The animals began to appear in the islands about five years ago after possibly being deliberately introduced. SNH is seeking volunteers for a trapping programme.

SEABIRD BREEDING

RSPB Scotland reported a mixed success during this year's breeding season at nature reserves. RSPB Scotland had expected a cold and wet summer to badly affect the birds; while the breeding season was not as bad as feared, declines in the Northern Isles was a cause for concern

In Tiree, guillemot numbers grew from 2,068 in 2014 to 2,634 individuals this year. The number of kittiwake nests at Troup Head in Aberdeenshire increased from 395 to 414 during the same time and 460 chicks fledged. At Fidra in the Firth of Forth, there were 1,026 active puffin burrows, up from about 800 in 2009. At Marwick Head in Orkney, 570 kittiwake pairs were recorded this year – a decline of 90% since 1999 when the site used to hold 5,573 pairs. Guillemot numbers at Marwick Head also dropped from 34,679 to 8,645 over the same period. 668 puffins were observed at Sumburgh Head in Shetland, but only around a third of nests there fledged any chicks, suggesting that some 400 nests failed. Kittiwakes were scarce at North Hill in Orkney and of the 300 Arctic terns present on Mousa in Shetland only 20 pairs attempted to breed, and none managed to raise any chicks.

Phil Taylor, of RSPB Scotland, said: "Scotland has already designated more marine protected areas than any other part of the British Isles, and RSPB Scotland has worked hard to make sure these include protection for black guillemots and sandeels. But clearly, though our seabirds can cope with wet summers, they struggle without healthy seas to feed in. The Scottish Government could help solve this as they have already identified 14 potential Special Protection Areas (SPAs), which are internationally important parts of our sea, but are dragging their feet when it comes to designating them. For most of Scotland, 2015 has been a welcome reprieve from years of chronic seabird decline. However, we're not out of the woods yet. Despite this great news we've still lost two thirds of our kittiwakes, Arctic skuas and Arctic terns since 2000. The best time to take action was twenty years ago, the second best time is now."

A Scottish Government spokeswoman said: "In 2009, Scottish ministers classified extensions to 31 breeding colony SPAs which provide areas for essential activities such as feeding, loafing, and preening. We are presently considering the scientific cases for 14 draft SPAs. A pre-consultation phase has highlighted a number of scientific issues with the proposals, and we are working with SNH and the Joint Nature Conservation Committee to resolve these. Once resolved, Scottish ministers will determine if there should be a public consultation."

OTTER SURVEY

The *BBC News* website reported that wet summers in 2011 and 2012 hampered efforts to accurately survey for otters in Scotland. A new report for SNH details evidence of the animals at 44 Special Areas of Conservation (SACs) and assessed 34 to be in a 'favourable condition.' Since 2003-04, otters are thought to have declined slightly; the mammals had previously been rising in numbers since the mid 1980s.

TAYSIDE BEAVERS

The Herald reported that 21 beavers have been shot and killed in Tayside despite farmers and landowners being asked by the Tayside Beaver Study Group to 'tolerate' the animals until a decision is made on their reintroduction [Sep 14]. Local farmers and estate owners have long complained of the damage the beavers are causing, particularly through the construction of dams.

A licence is not needed to shoot beavers because they have no legal protection in the UK. However, possessing and moving a dead beaver is not legal without a licence.

SNH has licensed the Royal Zoological Society of Scotland (RZSS) to collect any beaver carcasses from Tayside and examine them. 23 beavers have been examined since the end of 2012; 21 were shot and two were killed on the roads. Four other carcasses could not be retrieved or were too far decayed for postmortem examination. RZSS is also contracted to advise how to manage beavers' impact in Tayside.

David Bale, of SNH, said "We don't encourage lethal control. Instead, we advocate other solutions such as protecting trees and discouraging dam building. Removing a beaver simply leaves the territory open for another beaver to move in, so shooting tends to be a short-term solution."

An NFU Scotland spokesman said that farmers fear beavers' impact on productive farmland reliant on complex drainage systems. The costs of removing dams and pipe blockages and repairing flood defences was already significant in Tayside. He said: "We have a number of members who are affected by the illegal reintroduction, with one member whose flood bank collapsed due to burrowing of beavers; and another who has had to remove 35 dams from his farm."

A Scottish Government spokeswoman said: "There is currently no legal protection for beavers in Scotland. We are aware that farmers on Tayside are experiencing issues with beavers and would encourage land managers to consult with SNH on mitigation measures."

**FARMING****BEINN EIGHE BEES**

Apis mellifera mellifera, a native subspecies of dark European honeybee, is being studied to better understand viruses transmitted by varroa destructor mites; the dark bees are varroa-free. The bees in the study are from colonies reared in a project near Beinn Eighe National Nature Reserve, Wester Ross. SmartBees, a European

initiative including scientists from the University of Aberdeen, hope that they can provide insights into the immune system of honeybees.

BUTTERFLIES

Neonicotinoids are subject to a European Union-wide ban imposed to protect bees [Aug 14]. However, research suggests they might have had a negative impact on butterflies across many parts of the UK. The study, based on data gathered by volunteers at more than 1,000 sites, associated declines in 15 of 17 butterfly species with neonicotinoid use. Most occurred in England, where crops were most likely to have been treated with the pesticides. In Scotland, where neonicotinoid use had been comparatively low, butterfly numbers were stable.

Dr Andre Gilburn, of the University of Stirling, who led the research, said that the pesticides, introduced in the 1990s, are absorbed by wild flowers growing in field margins, many of which provide a nectar source for butterflies and leafy food for their caterpillars. The study is published in the journal *PeerJ*.

- The Scottish Wildlife Trust (SWT), RSPB Scotland, Butterfly Conservation Scotland and Buglife, have called for neonicotinoids, which harm bees and wild pollinators, to be banned in Scotland permanently. They have written to the Cabinet Secretary for Rural Affairs, Food & Environment Richard Lochhead, calling on the Scottish Government to permanently ban the use of three neonicotinoids on outdoor crops.

Pollinators provide an essential ecosystem service to farmers and fruit growers worth at least £43m per year to Scotland's economy. However, a growing body of evidence shows that neonicotinoids damage bee brains, reduce bumblebee queen production, reduce wild bee density and have many other harmful effects that could result in substantial and unknown costs in the future.

Dr Maggie Keegan, of SWT, said: "These toxic chemicals not only harm bees, they also persist in the agricultural landscape and contaminate soils, potentially harming invertebrates such as earthworms. They are picked up by wildflowers, get into the watercourse and are linked to a decline in birds and butterflies in farmed systems. We now know that bumblebees can't pollinate crops effectively when exposed to these pesticides, so it makes moral, ecological and economic sense to ban them. The SWT recognises that with a permanent ban in place, farmers will need advice regarding safe alternatives. This is why we are also calling on the Scottish Government to support research that will help Scotland's farmers cut down on all pesticide use – which is ultimately the best option for Scotland's wildlife and agricultural ecosystems."

Craig MacAdam, of Buglife, said: "Buglife led a strong campaign that culminated in the EU suspension, an action we know the UK government is opposed to. It is therefore essential that Scotland takes a lead in protecting the future of our pollinators and sets an example to Westminster – these bugs are our friends and without them agriculture as we know it would end."

COMMUNITY GARDENS

The Herald reported that the Glasgow Food Charter, a coalition of public, private and voluntary sector organisations, aims to build on the success of 16 existing community gardens. It is calling for disused and derelict land to be turned into community gardens. Unlike allotments, which are individually owned, community gardens are shared plots. Glasgow has the highest density of unused and derelict land in Scotland as well as the shortest life expectancy rates in the UK. Most of the 1,300 hectares of vacant and derelict land, comprising 925 individual sites, are in the most deprived areas, and could be used to establish community gardens.

However, only two gardens on the Good Food For All map have security of ownership. There are ambiguities around leases for using the land, and a requirement from Glasgow City Properties for income from commercial rent by building on wasteland.

The Glasgow Food Charter is part of the Glasgow Food Policy Partnership, comprising Glasgow City Council, Glasgow Local Food Network, Glasgow Centre for Population Health, NHS Greater Glasgow, Soil Association Scotland, Nourish Scotland and the University of Glasgow.



WOODLAND

NATIVE SEEDS

Seeds from trees native to Scotland are to be collected and stored in the Kew Royal Botanic Gardens' Millennium Seed Bank for their long-term conservation. Target species include Scots pine, common juniper, common ash, common alder and silver birch. 15 organisations are to help in gathering healthy seeds. Funding for the collection and analysis work has been secured from the People's Postcode Lottery.

EMBO WOODS

The *Press & Journal* reported that the Embo Trust has bought 40 acres of the Fourpenny Plantation near Embo in Sutherland, under the National Forest Land Scheme. The trust plans to establish around 30 smallholdings on the site, each about a quarter of an acre, under a runrig system. The rest of the land would be transformed into a community woodland. The trust had originally hoped to purchase 400 acres of the plantation.

FORESTRY FIGURES

The *BBC News* website reported that new figures from Forestry Commission Scotland show that the forestry industry is worth almost £1 billion a year to the Scottish economy. Timber production and jobs in the sector have increased by half since the last review in 2008; new processing techniques are producing much more valuable wood products. A tree-planting boom in the 1970s and 1980s means that these trees are now reaching maturity.

25,000 people are now employed in forestry-related businesses in Scotland, including tourism and leisure. The forest management and processing sector employs more than 19,500 people an increase of 6,500 compared with the previous report in 2008.

In 2008 timber production was about 5 million tonnes each year. It is currently 7.5 million tonnes *per annum*.

BOG WOODLAND

The *Strathspey & Badenoch Herald* reported that the Cairngorms National Park Authority (CNPA)'s planning committee has approved RSPB Scotland's plans to install small dams in Abernethy National Nature Reserve as part of a larger mire restoration project. Water levels in artificial drains within the forest would be raised, rejuvenating habitats for species such as damselflies and helping with carbon retention and water management. Boat of Garten and Nethy Bridge Community Councils, CNPA, RSPB Scotland and Scottish Natural Heritage are working together on the project.



FISHPARTING & FISHERIES

MUSSEL HATCHERY

The Scottish Aquaculture Innovation Centre and Highlands & Islands Enterprise are to trial Scotland's first commercial mussel hatchery in Shetland. It is hoped that the £1.9m project could lead to higher productivity in the shellfish industry.

The 30-month project includes establishing a pilot-scale hatchery at the NAFC Marine Centre in Scalloway, Shetland. The first spat (baby mussels) could be produced next summer. There will also be a research and development programme to look at ways of increasing farmed mussel yields in Scotland. The project partners said production could be raised substantially if there were a reliable supply of spat for Scottish producers. Partners include the Scottish Shellfish Marketing Group, the University of the Highlands and Islands and the Scottish Government.

RIVER TWEED

A report for The River Tweed Commission (RTC), by consultants SQW, has found that the value of the River Tweed to the economy of the Borders and North Northumberland has risen to £24m a year, despite 'a couple of testing years' for anglers. The last review of the economic impact of the river was carried out in 2006.

Fishing and other activities on its waters are credited with supporting some 513 jobs. The total number of rod days let on the Tweed in 2015 was 38,210, an increase of 6.5% on 2006.

Douglas Dobie, of RTC, said that the economic benefits of the river allowed them to invest in scientific research to help manage the river. The RTC had channelled research grants totalling £1.3m into the Tweed Foundation over the past ten years. He said: "This report underlines the success and importance of managing the River Tweed on a long-term basis. Over the past decade the economic contribution of the activities on the Tweed has continued to grow, as has our scientific understanding of the whole river system. We are unique in Scotland in this regard."

SPEY CATCH

The *Strathspey & Badenoch Herald* reported that a total of 7,728 salmon and grilse were caught in 2015, 70% more than in 2014. The total number of grilse – salmon that have spent only one winter at sea, was 2,732 compared to 1,024 in 2014. 2,175 sea trout were caught during the season, compared to 2,500 last year. 94% of all salmon and grilse caught were released, an increase on the 92% returned last year.

See: www.speyfisheryboard.com

SEA TROUT

The *Herald* reported that the Atlantic Salmon Trust has called for strict catch-and-release rules to be introduced on large female sea trout, between two and six pounds in weight. 85% of eggs laid by females come from very big fish, and in 90% of cases, it is only the female who goes out to winter feeding in the ocean. Sea trout can spawn five or six times, whereas salmon usually spawn only once, and trout inhabit smaller rivers than salmon.

MACKEREL

Scotland's mackerel fishermen and processors are urging the UK government and European Commission to reduce the current access arrangements for Faroese fishermen which allows them to catch mackerel in Scottish waters.

In 2014 a quota exchange agreement and an

access arrangement were negotiated. The access part of the deal enables vessels from Faroe to catch some of their own mackerel and blue whiting quota in EU waters rather than in Faroese waters, and in return EU vessels can catch some of their quota for these species in Faroese waters.

A report on the access arrangement, published by Seafish, has found that this part of the agreement is heavily skewed in favour of the Faroese, according to the Scottish Pelagic Fishermen's Association (SPFA). The report shows that UK received no benefit as its vessels did not catch any mackerel or blue whiting in Faroese waters in 2014. Conversely, the Faroese caught 93% of their mackerel and blue whiting permitted from EU waters with an estimated catch value of £42.1m.

The deal is now up for its annual negotiation; the SPFA and Scottish Pelagic Processors Association are calling for the EC and the UK governments to adopt a strong stance to ensure a more equitable agreement is reached.

Ian Gatt, of SPFA, said: "We are not against every part of the overall agreement, especially since it enables some Scottish whitefish boats to access quota held by the Faroese. It is also desirable to work within international quota arrangements rather than have autonomous quota setting. However, the part of the agreement that is causing us huge concern is the access arrangement for mackerel. This has given Faroe the opportunity to catch over £40m worth of high quality mackerel, primarily from within Scottish waters, which is now being sold into the same markets as our own processing sector, creating marketing difficulties."

Ian McFadden, of the processors association, said that processors were now in direct competition with the Faroese sector as the mackerel caught in Scottish waters had a much higher quality.

FISH QUOTAS

Scientific advice has recommended that North Sea cod has an increase of 15% for 2016; haddock is recommended to increase by at least 30%; monkfish is advised to rise by 20%; megrim is expected to increase by 26%; Rockall haddock is advised to rise by 25% and West Coast nephrops (prawns) are recommended to rise by 15%.

North Sea prawns and whiting will be reduced by 17% and 15% respectively. To help Scottish fleets adapt to the introduction of the white fish and prawn discard ban next year, extra quota will be allocated to reflect the 'unique challenges' of the discard ban. This will mean a double boost for haddock, for example, with an additional top-up over and above the advised 30% increase, resulting in a potential bumper increase of 56%. The discard landing quota will be allocated based on recorded landings of vessels' main quota stock between 2013-15. Fish Producer Organisers will be required to submit a landing obligation management plan, which should incentivise vessels that change fishing practices. This approach to allocation and management will be reviewed during 2016.

• EU member states have amended the Cod Recovery Plan (CRP). The two main North Sea trawl gear categories, white fish and prawns, are to be merged. These gear categories control the amount of time that vessels can spend at sea and this change will make it easier for vessels to fish with larger mesh. The time at sea limits will be merged on a one to one basis, ensuring that fishermen face no reduction in overall time at sea.

The CRP sets cod quotas and time at sea for over 10m fishing vessels capable of catching cod, even if only a little. Recovery plans have been in place since 2004. The cod stock in the North Sea has increased substantially in recent years, from a low of 36,000 tonnes in 2006 to an estimated 150,000 tonnes this year, the recovery plan target.

The proposals on effort management in 2016-17 will be made to the Fisheries Management & Conservation Group. Once effort allocations have been confirmed at the December Fisheries Council the reforms will begin in January 2016. Of over 2,000 Scottish fishing vessels, nearly 400 vessels are controlled by CRP time at sea limits.



MARINE

MPAs

The *Herald* reported that the Clyde Fishermen's Association (CFA) said that the viability of fishing in the firth would be undermined by changes to regulations governing Marine Protected Areas (MPAs), leading to economic collapse in the communities dominated by fishing [Oct 15].

In the 1970s, the CFA represented more than 120 boats; there are now 67, employing around 2,040 fishermen. Herring was once the predominant catch, but vessels now trawl for more readily available prawns and scallops.

Elaine Whyte, of the CFA, said: "Fishing has contributed a huge amount to our communities over the years and now the industry is under threat of extinction due to unnecessarily ambitious proposed MPAs and a regulating order imposed by the Sustainable Inshore Fisheries Trust (SIFT). The Clyde fishery is already heavily regulated and controlled to ensure sustainable fishing and additional tiers of management will only spell the death knell of our industry. We fully support marine conservation and the principle of MPAs, but it is vital that such management measures are proportionate and enable the continuation of sustainable fishing. Over the last few years a number of different NGOs and lobbyists have been saying there is no fish left in the Clyde, which has worried the public, but this is not true. We want to let the public know the truth and what is happening with regulation."

Charles Millar, of SIFT, writing to *The Herald*, said: "Far from posing a threat to the fishery, [the proposed Firth of Clyde Regulating Order submitted by SIFT] would stem its decline. The Clyde once hosted a rich mixed fishery for cod, whiting and herring. Now 99% of the value of its landings (largely prawns and scallops) are shellfish. Such over-dependence on just two stocks is bad for economic security. SIFT's proposal for zones where trawlers and dredgers cannot work will not only provide areas where stocks of finfish can build up, but will also enable shellfish numbers to grow. What we propose is 21st century fishery management that brings internationally proven techniques to the firth, creating zones where the seabed and its fish stocks can recover and devolving control to local people. It also addresses long-standing challenges like gear conflict between trawler-men and creelers.

"It is for that reason that the Scottish Creel Fishermen's Federation – which comprises some 75% of the Scottish fleet – said that the regulating order 'offers our industry a chance to thrive and grow, and to have our say in the management of the Clyde. It would significantly reduce the gear conflict that costs creelers dear, and would allow creel fishermen to operate on a level playing field.'

"As the Clyde is a public asset, it is also important that new regulation enables management for the benefit of all communities – not just for one section of the commercial fishery. Many thousands of residents in the Clyde area have already signed their support for the Revive the Clyde campaign that calls for precisely the sorts of measures that the regulating order proposes."

In response Bertie Armstrong, of the Scottish Fishermen's Federation, wrote: "Charles Millar is being somewhat disingenuous when he claims that the Scottish Creel Fishermen's Federation represents 'some 75% of the Scottish fleet' as part of his justification for SIFT imposing upon our hardworking Clyde fishermen an unproven fisheries management regime they don't want.

"According to Scottish Government statistics, creel vessels account for around 63% of the total number of vessels in the fleet, and of course, because these are typically small one-man vessels, this sector employs many times fewer people than the larger mobile sector of the fleet – including in the Firth of Clyde.

"Notwithstanding that point, and as a federation that has both mobile gear and creel vessels in its membership, we recognise the importance of having the right management measures in place to ensure our fleet thrives across a broad spectrum of fishing methods.

"Such sustainable management also needs to have the support of our fishing communities, something which is patently not the case with the SIFT proposal for a regulating order in the Clyde, which will only destroy fishing jobs. The opposition to the regulating order proposal is intense in many Clyde communities, as illustrated by the local meetings currently being hosted by the Clyde Fishermen's Association. It should also be noted that as a federation we have consistently supported Marine Protected Areas as long as they are designated on an evidential basis and managed in a well-balanced manner."

MINKE WHALES

The Hebridean Whale & Dolphin Trust (HWDT) reported that sightings of juvenile minke whales off the west coast increased in 2015 to 28 juveniles, the highest ever recorded within a survey season, indicating either a significant increase in actual numbers or an influx of minke whales from elsewhere. A steady increase in the encounter rate with minke whale juveniles since 2011 was particularly marked this year, with the highest rate of young whales recorded since the trust started boat-based surveys in 2003. The 2015 surveys documented an encounter rate of one young minke whale per 286 km – three times the average over the trust's entire dataset. 30 adult minkes were sighted.

HWDT also recorded the highest annual number of common dolphin sightings since its research expeditions began, with 723 individuals observed over 63 encounters. The common dolphin was once uncommon in the Hebrides, but the trust's encounter rate with the species has more than doubled over the past 12 years, also for reasons that remain unclear. However, warming seas and climate change, fisheries by-catch, pollution, underwater noise and habitat loss may all affect numbers.

The number of white-beaked dolphin encounters almost doubled in comparison to 2014, although many of these encounters were made during one particular day of survey around the Butt of Lewis.

HWDT's research vessel *Silurian* covered more than 4,000 nautical miles in 2015, documenting more than 1,200 encounters with cetaceans and basking sharks, and recording almost 625 hours of underwater detections of cetaceans using specialist listening equipment. Despite less than favourable weather conditions, the overall encounter rate remained steady, with eight sightings of cetaceans per 100 km recorded, compared to nine per 100 km in 2014 and five per 100 km in 2013.

See: www.hwdt.org

COMMON SEALS

The *BBC News* website reported that the population of common (harbour) seals on the east coast of Scotland and Northern Isles has declined. However, there is an east-west divide with numbers at a record high on the west coast, the population has risen by 60% or more in some parts of the west coast in the last six years. Last year, only 29 were counted in the Firth of Tay and Eden Estuary Special Area of Conservation, set up in part to protect the harbour seal, a 90% decline in 15 years. There has been a 75% decline around Orkney over the same period and numbers have also declined in the Moray Firth and Dornoch Firth. The research was carried out by the Sea Mammal Research Unit at the University of St Andrews. See: <http://bit.ly/1HTcehl>

DALGETY BAY MUSSELS

A radioactive source has been detected in mussel beds at Dalgety Bay in Fife. The Scottish Environment Protection Agency found the source during routine monitoring, and said that it would continue to monitor the area ahead of remediation work by the Ministry of Defence [Jul 14]. The mussel beds are offshore from the beach area. Food Standards Scotland said that restrictions on the removal of seafood have been in place since 2012.



POLITICS & PARLIAMENT

CROWN ESTATE

The *Herald* reported that a draft memorandum of understanding, which sets out the terms of the new relationship between the UK and Scottish Governments following devolution, gives the Ministry of Defence power to extend existing agreements with the Crown Estate and take over new parts of the land for defence purposes, even if the measures are opposed from Holyrood.

Following the Referendum, the Smith Commission recommended that management of the Crown Estate north of the border, which includes a large property portfolio, half the coastal foreshore and almost all the seabed, should be devolved. However, it also stated that an agreement should be drawn up between the administrations to ensure that transferring power was not 'detrimental to UK-wide critical national infrastructure' such as defence capabilities. The provisions in the draft memorandum have been included despite the UK Government already having powers to intervene if actions of the Scottish Government are seen as potentially harmful to defence interests.

Andy Wightman, the land reform expert, said: "This complicated approach to Crown Estate devolution is unnecessarily convoluted, the draft order is riddled with inaccuracies and errors, and the Scotland Bill still fails to devolve the revenues of the Crown Estate. A process that could have been simple and straightforward has been hijacked by the MoD and by an acquiescent Crown Estate Commission."

Crown Estate land in Scotland includes the base for the UK's entire submarine fleet, including its nuclear arsenal, and is also used for intelligence gathering and testing military hardware.

A UK government spokesman said: "The Crown Estate transfer scheme will include protections for defence, supported by a complementary memorandum of understanding between the UK and Scottish Governments. The Crown Estate in Scotland is key to delivering strategic capabilities for the defence and security of the whole of the UK. These defence capabilities need to be protected to secure future use of the Crown Estate in Scotland, given the unpredictable nature of future threats to the UK."



GENERAL ENVIRONMENT

GENERAL LICENCES

Scottish Natural Heritage (SNH) has placed licence restrictions on four properties over 'clear evidence' of wildlife crime against birds of prey. The three-year licence restrictions have been placed on Raeshaw Estate and Corshope Farm in the Borders, and parts of the Burnfoot and Wester Cringate Estates and Todhalls Farm in Stirlingshire. This is the first time that licence restrictions have been applied in Scotland.

The move follows a Police Scotland investigation into poisoning and the illegal use of traps at the properties. General licences allow land managers to carry out actions which would otherwise be illegal, and include controlling some wild birds to protect crops or livestock.

Nick Halfhide, of SNH, said: "There is clear evidence that wildlife crimes have been committed on these properties. Because of this, and the risk of more wildlife crimes taking place, we have suspended the general licences on these four properties for three years. They may though still apply for individual licences, but these will be closely monitored. This measure should help to protect wild birds in the area, while still allowing necessary land management activities to take place, albeit under tighter supervision. We consider that this is a proportionate response to protect wild birds in the area and prevent further wildlife crime."

The *Raptor Persecution Scotland* blog reported that General Licence Restriction can only be applied for crimes that have been uncovered since 1 January 2014; it cannot be applied retrospectively for offences that took place prior to this date. This means that further raptor crimes have been uncovered in the Borders case but there has not been any publicity about them. The Stirlingshire restriction order probably relates to a series of raptor persecution crimes including a poisoned red kite (July 2014), a poisoned peregrine (February 2015) and an illegally trapped red kite (May 2015) although SNH has not yet confirmed this.

However, during an interview on the BBC Radio Scotland *Out of Doors* programme, the presenter asked Robbie Kernahan, of SNH, directly about the reasons for General Licence restrictions on these four properties. Mr Kernahan said that the Stirlingshire restriction 'relates to some issues associated with poisoning birds of prey, birds of prey being found poisoned in that location, and illegal use of traps.' With regard to the Borders restrictions he said: "There are issues about the illegal placement of traps."

The General Licence Restriction orders mean that the following activities, usually permitted under General Licences 1, 2 and 3, are now not permitted in the two areas, ending 12 November 2018:

- The killing or taking of the following species:
Great black-backed gull, carrion crow, hooded crow, jackdaw, jay, rook, ruddy duck, magpie, Canada goose, collared dove, feral pigeon, wood pigeon, lesser black-back gull, and herring gull.
 - The use of the following methods to kill/take these species are not permitted:
Pricking of eggs, oiling of eggs, destruction of eggs and nests, use of Larsen trap, use of Larsen Mate trap, use of Larsen Pod trap, use of multi-catch crow cage trap, shooting with any firearm, targeted falconry, and by hand.
- However, individuals may still apply for an individual licence to permit these activities, although SNH said that if granted, these will be closely monitored.

Duncan Orr-Ewing, of RSPB Scotland, welcomed the restrictions which it said provided a 'meaningful deterrent to the serious problem of the illegal killing of birds of prey.' He said: "The use of the open general licence to control what are considered by some to be 'pest species' of bird, including crows and magpies, for conservation and other legal purposes, is a privilege and not a right."

Dr Aileen McLeod, the minister for Environment, Climate Change & Land Reform, said: "The General Licence system is a light touch form of regulation. It is clearly sensible to apply closer scrutiny to areas where there is good evidence that wildlife crime has taken place, and we believe that this will prove a useful tool in the fight against bird of prey persecution."

However, *Scottish Farmer* reported that defence agent David McKie, representing Raeshaw Estate in the Borders, said: "We are disappointed by this decision and will be vigorously challenging it."

A spokesman for Burnfoot Estate said: "We absolutely dispute the conclusions reached by SNH and consider the decision to be unfair." A spokesperson for Scottish Land & Estates said: "Our concerns about the level of evidence and robustness of process, which were raised previously along with other land management organisations, remain. We will be working with key industry stakeholders to learn more about the circumstances surrounding these new restrictions".

A spokesman for the Scottish Gamekeepers' Association (SGA) said: "It is up to the estates involved to take counsel and make a case if they feel there is insufficient evidence for the measure to proceed. When this measure was initially subject to consultation, the SGA opposed it, not in the spirit of what it was trying to do, but rather that it was simply not a good proposal."

The estates lodged legal appeals and so the General Licence restrictions ran for only six days of the three years as the General Licence restrictions were suspended in both areas until further notice.

While the appeals are underway, the estates can continue to use the General Licences.

WILDLIFE CRIME

A report, commissioned by Scottish Government to examine whether the penalties for wildlife crimes were adequate and a deterrent, has been published [Jul 13]. The Wildlife Crime Penalties Review Group was tasked to explore how wildlife crime was treated within the criminal justice system, including an examination of whether the penalties available properly reflect the seriousness of the damage caused to vulnerable wildlife and fragile habitats and ecosystems.

The independent review group made ten short- and medium-term recommendations to cut down on wildlife crime. These include raising the maximum penalty for summary convictions to at least £40,000 and 12 months imprisonment. The current maximum penalty is £5,000 and 6 months imprisonment. The group also recommends the extended use of 'forfeiture provisions', including a provision that where a firearm or shotgun is involved in the commission of a wildlife crime, the court should have the power to cancel the relevant certificate.

It also recommended the development of sentencing guidelines for wildlife crimes to enhance the consistency and transparency of sentencing. Further recommendations include systematic use of impact statements in court and consolidation of wildlife legislation.

The report concludes that penalties for wildlife crimes have fallen behind those for other types of

environmental crime and that fine levels for many of these crimes have not kept pace with inflation.

Ian Thomson, of RSPB Scotland, said: "Scotland has some of the best wildlife protection laws in Europe but, in our opinion, these need to be effectively enforced and there needs to be meaningful sentences imposed on those convicted of wrongdoing. We need to learn from the experiences in other similar countries where we are aware that sanctions available to the courts act as a real deterrent." He said that in recent years, where prosecutions had been successful, penalties imposed by the courts had been inconsistent for similar offences.

"They have also largely failed to reflect the actual or potential conservation impact of the offences, and whether the offending was carried out in the course of employment, often with the aim of financial gain. We commend the work of the review panel in producing a comprehensive report that acknowledges and reflects many of the concerns we share."

Professor Mark Poustie, of Strathclyde University, chaired the review group. See: www.gov.scot/Publications/2015/11/2196/0

RED KITE DEATH

A dead red kite was discovered by a member of the public on farmland in Glenferness, Nairn at the end of October. Test results have now confirmed the bird had ingested an illegal pesticide.

Chief Inspector Colin Gough, of Police Scotland, said: "Sadly it has been confirmed the red kite had died as a result of consuming a poisonous substance and an investigation is now taking place into the circumstances. It appears to be an isolated incident involving a single bird of prey. Police Scotland and partners are committed to tackling wildlife crime and will utilise all available resources to bring those responsible to justice. Investigations into wildlife crime can be very complex and challenging, with a major part of our enquiries involving liaising with members of the local community who may hold essential information."

Ian Thomson, of RSPB Scotland, said: "It is very disappointing to hear of yet another incident of raptor persecution in this area. It is thoroughly depressing that in 21st century Scotland, there are still those who have a Victorian attitude towards birds of prey, as well as a criminal disregard of the law. The continued targeting of our raptors is a stain on our country's reputation and has no place in modern Scotland. I urge anyone who has information about this incident to contact the police as soon as possible."

POLLUTION

The Sunday Herald reported that the Scottish Environment Protection Agency (SEPA) condemned 371 plants for leaks, spills, bad smells, permit breaches and a series of other equipment and management failures. The latest figures show that the pollution record of companies in 2014 was 2% worse than in 2013 and SEPA missed its compliance target of an overall compliance rate of 91% as a result.

The largest group of failures were 113 waste and recycling facilities, including landfill sites, metal scrapyards and waste handling stations. Other major industries classed as poor were 50 public sewage works, 42 fishfarms, nine food plants, seven whisky distilleries, six golf courses, four crematoria and four coal mines.

SEPA rated 59 sites as 'very poor' and 312 as 'poor' in the compliance assessment scores for 2014,

Mary Church, of Friends of the Earth Scotland, said: "Perhaps most galling is the long list of food firms, distilleries, breweries, fishfarms and golf

courses who all trade on Scotland's reputation for a clean environment but don't seem to mind trashing their bit of it."

Alison Johnstone MSP said: "The rise in the number of bad polluters shows how little regard some companies still have for their environmental responsibilities, and how urgently we need to implement tougher regulation. We're not talking about harmless hiccups here. Too many operators keep breaching pollution limits year after year with full knowledge of the consequences of their actions."

Calum MacDonald, of SEPA, said that he was disappointed at the failure to meet its compliance target, but defended SEPA's overall performance. Of the 5,305 sites assessed in 2014, 73% were rated as excellent and 14% as good. He said: "Compliance is good and getting better, but we are not complacent and are taking a range of actions to improve the situation further. Non-compliance is not an option and several initiatives are currently ongoing which aim to drive up compliance across each sector where ratings have been less than satisfactory. These include revising our compliance assessment scheme so it can provide more timely information, a revised regulatory monitoring strategy which will provide additional compliance evidence, and new enforcement powers recently approved by the Scottish Parliament which include the capability to impose financial penalties."

REGULATORY EVIDENCE STRATEGY

The Herald reported that SEPA is to implement its new Regulatory Evidence Strategy over the next two years. A leaked internal email said: "It means that operators (including Scottish Water) have to monitor their own assets and report the results to us and the public. We have to set-up processes to audit them and make sure they are complying. This was a big decision for SEPA and one we have thought very carefully about over the last 18 months. We are convinced that this change will substantially increase our ability to protect and improve the environment, and target our resources to where they can make the greatest difference."

The person who leaked the memo said: "The agency is effectively abandoning its own direct sampling and analysis, for example, where a river is receiving effluent from a manufacturing plant. Instead it will rely on monitoring the operators' results, only verifying that the sampling from the river has been done properly. This implication for waste is also particularly concerning given a few operators may try to dispose of hazardous waste as normal waste, which would have huge financial benefits for them. I am also aware that Scottish Water already pays their managers bonuses partly for meeting SEPA targets, given that they are the biggest discharger in Scotland and that they also likely to carry out their own chemical analysis of the samples, can self-monitoring be right there? Look at lack of confidence angling interests have in fishfarms which already undertake self-monitoring."

Martin Marsden, of SEPA, said: "We have no intention of abandoning the monitoring of discharges. We feel strongly that operators should undertake a degree of self-monitoring to ensure that they are compliant with the requirements of their licence. We will require operators to report their monitoring information to SEPA." He said that the new strategy would apply to all those that SEPA regulated including those who are responsible for discharges to water, emissions to air and management of waste: "It is normal practice across the UK and Europe for regulators to require operators to undertake self-monitoring

and to report the results. Clearly, the regulator has to put in checks and balances. We will be ensuring that our audit and environmental monitoring allows us to independently check the performance of sites. If operators cheat they will be misleading the public, damaging their reputation, and will possibly end up in court."

SEPA confirmed that the strategy would also apply to nuclear sites, although an appropriate balance would be discussed in detail with the sector which was already involved in self-monitoring.

John Finnie MSP said: "SEPA's role is a vital one, spelt out in their name, to protect our precious environment. While every citizen and business must play their part too, I am very concerned at SEPA's plans to withdraw from monitoring discharges instead having businesses, regardless of their potential to have a negative impact on the environment, to 'monitor' themselves. I intend writing to the Cabinet Secretary about this change as I cannot imagine any meaningful risk assessment indicating these changes will enhance environmental protection or protect our vital water courses."

AIR QUALITY

Cleaner Air for Scotland – The Road to a Healthier Future has been published by the Scottish Government, a new national strategy aiming to achieve cleaner air quality for Scotland.

The first distinct air quality strategy, it sets out actions across government portfolios that will further reduce air pollution. The World Health Organisation guideline values for particulate matter will be adopted in Scottish legislation, the first country in Europe to do so.

Air quality will be linked to climate change adaptation and mitigation, transport and planning.

There are currently 32 Air Quality Management Areas in place across Scotland, the vast majority declared on the basis of transport emissions which include fine particulate matter and nitrogen oxides. See: www.gov.scot/Publications/2015/11/5671

MIDGE HATCH

The warm autumn has produced a rare third hatching of biting midges. Dr Alison Blackwell, of the University of Edinburgh, who runs the Scottish Midge Forecast, said the consequences could be more of the insects next year. Overall this year there were fewer midges than previous years because the cold and wet summer affected the two main hatches. A midge trap in Argyll had almost two million fewer insects than in 2014. At Gairloch in Wester Ross, another trap used for surveying midge numbers were found to have fallen by one and half million insects.

WILDLIFE CRIME

George Allan was fined £600 at Aberdeen Sheriff Court after a badger was caught up in a snare and electrocuted for more than 24 hours.

Mr Allan pled guilty to setting a snare and failing to inspect it within 24 hours and failing to fit the necessary identity tags, contrary to the Wildlife & Countryside Act as amended by the Wildlife and Natural Environment Act 2011. He was a full time gamekeeper employed by the Easter Skene Shooting Syndicate on land rented to them by Dunecht Estate.

The Scottish SPCA, with the assistance of the Natural History Museum in London, used forensic entomology on the fly larvae found on the dead badger to determine that the badger had remained in the snare for longer than 24 hours. This is the first time forensic entomology has been used in a Scottish SPCA investigation. The PAW Forensic Working Group provided financial assistance.

MOORLAND BIRDS

The Scottish Moorland Study Group, part of Scottish Land & Estates, studied three grouse moors – Glenogil, Invermark and Glenturret. More than 80 species of birds were recorded on the managed moors. The wildlife audits showed that birds which had suffered a serious decline across the country had 'rallied' on the moors.

In response, Patrick Stirling-Aird, of the Scottish Raptor Study Group, wrote in a letter to *The Herald*: "Unfortunately, for some species and in some places, the reality is very different. For example, a comprehensive study of peregrines in north east Scotland last year revealed the following percentage occupations of breeding territories of this species per habitat/land use categories: coast, 65%, lowland farmland, 64%, deer forest, 36% and grouse moorland, 7%."

- *The Herald* reported that cuckoos are thriving on Scottish grouse moors; an estate spokesman said that 'grouse moor management seems to suit them.' An audit of birds on the Invermark Estate in Angus (see above) recorded eight singing males this year. The bird is on the Red List of conservation concern, and a priority species in the UK Biodiversity Action Plan. The cuckoos often leave their eggs in meadow pipits' nests, common on heather moorland.

AMPHIBIANS & DRAINAGE

A conference, Amphibians & Drainage 2015, organised by Amphibian & Reptile Conservation took place in Perth.

The *BBC News* website reported that 40 Sustainable Urban Drainage (SuDS) ponds, designed to alleviate flooding and prevent pollution from reaching rivers and the sea, were found to be teeming with wildlife. Common frogs were found at 28 sites, palmate newts at 17 and common toads at ten. Great diving beetles, mayfly larvae, water boatmen, damselfly larvae, dragonfly larvae and freshwater shrimp were also recorded. Aquatic plants, including watercress and brooklime, and non-aquatic flowers such as northern marsh orchid were found.

Previous research was carried out between 2010 and 2014 and during that period only one pair of newts were recorded at one of 13 sites. The research project involves SNH and Highland Council.

BARITE MINE

The *BBC News* website reported that M-I Swaco has lodged plans with Perth & Kinross Council for a barite mine at Duntanlich, north of Aberfeldy in Perthshire [Jan 15]. The site has the only known significant economic deposits of barite in the country to mine; the deposit is estimated at 7.5 million tonnes. Barite is largely used in drilling fluids during oil and gas exploration. If the application were to be approved, it will ensure that the UK is self-sufficient in barite.

M-I Swaco wants to replace its existing mine at Foss, which has operated since 1985 but is becoming increasingly difficult to mine.

A previous application to develop a mine at Duntanlich was refused in 1996, but the developer said that it had now addressed previous concerns after three years of studies on the visual impact and potential problems for local roads. The company said that the new proposal ensured the development could not be seen from the nearby viewpoint of Queen's View and had minimal visibility from the rest of the surrounding area. The site is within the Loch Tummel National Scenic Area.

Mine traffic, which could be carrying 120,000 tonnes of material each year, will travel on a new access route from the site to the A827, avoiding towns and villages in the Tay Valley. Consultations have been held with the communities of Ballinluig, Pitlochry and Aberfeldy.

CHECKBAR RECYCLING

The *Press & Journal* reported that EIS Waste Services has received planning approval to extend a waste and recycling centre at Checkbar near Nigg in Aberdeenshire. The plans, for greenbelt land, had received objections from local residents and Portlethen Community Council. Aggregate from demolition sites will be transformed into construction material to be sold on.

DUNG BEETLES

The *BBC News* website reported that the Dung Beetle UK Mapping Project (DUMP) in the early stage of its research, has already noted an alarming trend of decline of some species. Reasons for the decline in some beetle species include coming into contact with anthelmintics, (a drug given to livestock to control intestinal worms), soil disturbance and the disappearance of livestock from historic pastures due to a change in farming practices.

Dung beetles encourage the growth of healthy grass through their burrowing in soil, which aerates it and allows rainwater and nutrients into the ground. They also eat animal droppings harbouring parasites harmful to livestock.

The Cairngorms and the Western Isles are among the best recorded areas for the creatures, but large parts of the rest of Scotland remain unrecorded. DUMP is unfunded.

NATURAL CAPITAL

Speaking at the World Forum on Natural Capital in Edinburgh, the First Minister, Nicola Sturgeon, said that Scotland is continuing to lead the way in protecting and enhancing our natural capital. Natural capital refers to the world's stocks of natural assets, including soil, air and water – all things that make human life possible. She said: "In Scotland we are determined to play a leading role in developing the thinking about the concept of natural capital and its application.

"We recognise that Scotland's rich and diverse natural environment is a national asset which contributes hugely to our economy and to our wider sense of wellbeing. In 2011 we became the first country in the world to establish a natural capital asset index. It demonstrates the extent to which Scotland's natural capital declined between 1950 and 2000 – although it also provides evidence that it has stabilised since then. That's partly as a result of cleaner rivers and lochs, and cleaner coastlines. Now obviously, not all benefits of natural capital can be quantified. You can't place a value on the feeling of wellbeing you get from a beautiful landscape.

"But it's important for us to recognise that damaging our environment has a cost. We're more likely to abuse nature, if we think it is free; and to treat it with care, if we appreciate its value.

"We have recognised that natural capital has a role to play in our policy-making. When we published our revised economic strategy in March, it stated explicitly that 'protecting and enhancing our stock of natural capital ... is fundamental to a healthy and resilient economy.' The Scottish Government is determined, first and foremost, to lead by example – by measuring and enhancing our own natural capital. We know that by doing so, we will benefit the ecosystems and people of our own country; and we'll also do our bit to help the environment and wellbeing of the wider world."

Environmental & Resource Economics Project Report for SEPA in 2009, concluded that economic value of ecosystem services can be estimated at between £21.5 and £23 billion per year to Scotland.

- The peatland soils of Scotland are estimated to store ten times more carbon than in all of the

UK's trees (*sic*, see below)

- Lochs in Scotland store almost 35 billion cubic metres of water, and Scottish soils up to 42 billion cubic metres of water
- The value of insect pollination services in Scotland is estimated at £43 million per year
- The value of coastal wetlands in Scotland has been estimated at £49-76 million per year
- Visits to the outdoors made by people living in Scotland generated around £2.3 billion in expenditure in 2010
- In 2004, the value of marine biodiversity-related industries in Scotland was estimated to be over £1.2 billion.

See: <http://bit.ly/1QG2EXq>

PEATLAND CODE

The Peatland Code, launched at the World Forum for Natural Capital, targets the restoration of one million hectares of UK peatlands over the next five years. Those restored sites alone could save 220 million tonnes of CO₂ by 2050. Over 80% of UK peatlands have been damaged, but currently lock away more than three billion tonnes of carbon, are the habitat of rare wildlife and act as a natural filter to drinking water.

The Code is based on research by academics at Birmingham City University and the University of Leeds. The code claims that sustainable business investment could reverse the degradation of peatlands, many of which are found in Scotland. Peatlands cover around 10% of the UK and store more than 20 times the amount of carbon as all the country's forests (*sic*; see above).

LAND USE STRATEGY

A consultation has been launched on the draft *Land Use Strategy 2016-2021*.

The strategy sets out a range of policies and proposals including management of natural resources, including continued use of an ecosystems approach to land use decisions; developing and implementing activities to promote climate friendly farming and crofting; an exploration of the relationship between ownership, use and management of land including consideration of the potential advantages of a single policy statement about land; encouragement of regional land use partnerships to bring a range of interests together to consider land use at a local level.

Scotland's first Land Use Strategy was published in 2011. Since then, the significant commitments in the strategy have been completed and two successful land use pilot projects in Aberdeenshire and the Scottish Borders completed.

Scotland's Land Use Strategy is a key commitment of the Climate Change (Scotland) Act. The Act requires that the strategy be reviewed every five years or less. The consultation runs until 29 January 2016.

See: <https://consult.scotland.gov.uk/land-use-and-biodiversity/land-use-strategy-for-scotland/>; www.gov.scot/Topics/Environment/Countryside/Landusestrategy/lusreview

CULLODEN BATTLEFIELD

The conservation zone around Culloden Battlefield is set to be expanded to give the historic site greater protection from development. The battlefield is in the care of the National Trust for Scotland; the conservation zone would be six times the current size. A housing project, 400m from the existing boundary, has planning permission but nothing has yet been built on the farmland site at Viewhill [May 14].

SNOW PATCHES

The *BBC News* website reported that 73 patches of snow have survived on Scotland's hills from

last winter – the most since 1994. Iain Cameron's records are published by the Royal Meteorological Society. Mr Cameron said that snow had survived in areas where the phenomenon was unusual. He said: "This includes, also for the first time since 1994, mountains in the north west Highlands, where 12 patches survived. The reason so many patches survived is undoubtedly to do with the very cool spring, which saw frequent and heavy snow showers right through May and even into June. In fact, there are good grounds to believe that the maximum depth of snow recorded in the gullies of Ben Nevis was achieved in early June. Also because of the cool and overcast summer months. For example, the summit of Aonach Mor, 4,000 feet, recorded only four days where the temperature exceeded 10°C. July and August were also cool, and taken together this meant that melting rates were diminished."

Mr Cameron also recorded details of a summer avalanche that occurred on Sgurr na Lapaich in the North West Highlands. Avalanche debris had survived because of a protective jacket of thick mud.

MURDER ACRE RESERVE

The Scottish Wildlife Trust is using part of its Flying Flock on the Murder Acre reserve near Arthur's Seat. As part of Plantlife's Save Our Magnificent Meadows, funded by Heritage Lottery Fund, conservation grazing by a herd of Shetland cattle will help to restore the former meadow and increase the site's biodiversity.

 **ENERGY**

TURBINE ANIMATION

The John Muir Trust and the University of Leeds Wild Land Research Institute have produced an animation showing the change in Scotland's landscape over the past 20 years as a result of the proliferation of wind turbines. The animation is based on a series of maps, based on Scottish Natural Heritage (SNH) data, that illustrate the extent of Scotland's land area from which wind turbines are visible, including both built and consented wind turbines above 20 metres tall.

The percentage of Scotland's landscape visually affected by wind turbines has risen from just 1% in 1995, to 16% in 2005 and 48% in 2015. Within Wild Land Areas, the figures have risen over the past decade from zero to 17%.

See: www.youtube.com/watch?v=se_zts1Rgbs

WINDFARM UPDATES

Inverness-shire: Druim Ba Sustainable Energy has submitted revised plans for a ten turbine windfarm at Blairmore Farm, Kiltarlity. Previous plans were rejected by the Scottish Government on the grounds that the turbines would have a significant impact on the landscape [Jul 13]. The company has reduced the number of turbines, and also reduced their height.

Easter Ross: Following a public inquiry, the Reporter appointed by Scottish Ministers has dismissed the appeal brought by PI Renewables Ltd, which was seeking to overturn the refusal of planning permission by Highland Council for the 14 turbine Carn Gorm windfarm, near Ben Wyvis.

The Reporter found that the development would have had significant visual impacts on the Ben Wyvis massif and in particular from An Cabar, part of the most popular route up Ben Wyvis itself. He also found that the development would have a number of significant individual effects and contribute to cumulative impacts on Wild Land Area 29.

Sutherland: Muirhall Energy, proposing the Caplich windfarm, has submitted an addendum to its environmental statement, allowing a further opportunity to comment [Feb 15]. The 20 turbine windfarm would be sited approximately 5 km from Oykel Bridge. The developer admits that it would result in significant visual impact for viewpoints within 15 km, particularly those on Ben More Assynt, Stac Pollaidh and Suilven. The John Muir Trust opposes the development because of the impact it would have on wild land. The developer previously acknowledged that the Caplich windfarm would reduce the wild land characteristics in the immediate surroundings of the site, but has claimed that this would not have a significant effect on the wild land characteristics of the Reay-Cassley Wild Land Area 34 as a whole.

• Scottish ministers have refused consent for both the 22 turbine Sallachy and 23 turbine Glencassley windfarm [Nov 14]. The government said that the projects would have had an unacceptable impact on wild land and scenic landscape. The proposed developments were also in Wild Land Area 34 (see above) and the Sallachy proposal would have had an unacceptable impact on the Assynt - Coigach National Scenic Area.

OFFSHORE WIND

Beatrice Offshore Windfarm Ltd has been granted detailed Planning Permission by The Moray Council to develop the onshore transmission works associated with connecting the offshore wind farm to the electricity network [Feb 15]. The works will comprise approximately 20 km of underground cable from a landfall point to the west of Portgordon and a new substation at Blackhillock near Keith. Construction of the onshore transmission works is expected to commence in 2016, subject to a positive final investment decision early next year.

FLOATING WINDFARM

The Scottish Government has consented Statoil's floating offshore Hywind windfarm to be installed off Peterhead, Aberdeenshire. A pilot scheme of five turbines has been licenced, which will be attached to the seabed by a three-point mooring spread and anchoring system. The turbines will transport electricity via an export cable from the windfarm to the shore just over 25 km away with a generating capacity of 135 GWh *per year*. Construction is planned to start early next year with final commissioning in 2017.

Currently offshore wind turbines are rigidly attached to the seabed which makes them difficult and expensive to install in deep water.

The Carbon Trust believes that floating wind concepts have the potential to reduce generating costs to below £100/MWh in commercial deployments, with the leading concepts such as Hywind producing even lower costs of £85-£95/MWh.

SOLWAY TIDAL POWER

The *BBC News* website reported that North West Energy Squared is planning a multi-million pound tidal energy project in the Solway Firth, which could produce 12 million MWh of electricity *per annum*. The proposal would also see a road run across a tidal gateway connecting Dumfries & Galloway with Workington.

Other tidal gateways are proposed for five other estuaries in the north west of England. The developer estimates that work could start on construction on the Solway in 2022.

Turbines harnessing the power of the tide would be built into a crossing from Workington to a location south of Kirkcudbright.

The Inner Solway is a Site of Special Scientific Interest, Special Area of Conservation, a Ramsar site and Special Protection Area covering both the Scottish and English sides of the Firth. It supports the sixth largest number of wildfowl and waders in the UK, with species of international and national importance, as well as supporting the largest area of saltmarsh in Scotland and a number of nationally and internationally rare/scarce plant species.

OPENCAST COAL

A report by the Scottish Coal Task Force recommends changes, including additional oversight by Scottish Government, new monitoring fees and standardised approaches to legal agreements to make sure restoration funding is secure [Sep 15]. The report also notes the need to apply lessons to other sectors, to ensure similar risks are avoided in industries like landfill or energy developments.

Limited funds have now been recovered from bonds but it is still unclear how most restoration will be funded, including at sites within protected areas for wildlife. A £200m shortfall for restoration was estimated in 2013.

The Task Force report acknowledges that, while there could be further coal extraction in Scotland even in a declining coal-energy sector, it is uncertain whether coal prices will recover to make sites viable.

RSPB Scotland has raised concerns that the industry is proposing new tax breaks to help maintain extraction and fund restoration, highlighting risks of encouraging more extraction at sensitive sites where the industry has historically failed to meet its liabilities. It said that, instead, government intervention should come in the form of targeted funding at sites where restoration is most needed

The UK energy secretary announced a commitment to phase out coal power stations by 2025, given the massive carbon emissions caused by burning coal.

SOLAR FARM

The Lightsource SPV60 Ltd 42 MW solar farm has been approved for a 88 hectare site at Montreathmont Moor, east of Forfar. The site, a former WW2 listening station, is bounded on all sides by Montreathmont Forest and so there would be limited visual impact.

CARBON CAPTURE

In a stock exchange announcement, the UK government said: "Following the Chancellor's Autumn Statement, HM Government confirms that the £1bn ring-fenced capital budget for the Carbon Capture and Storage (CCS) Competition is no longer available. This decision means that the CCS Competition cannot proceed on its current basis. We will engage closely with the bidders on the implications of this decision for them."

First Minister, Nicola Sturgeon, called on the UK government to reverse its decision. Peterhead power station was one of two bidders in the competition [Jun 15]. Shell and SSE planned to capture up to 15 million tonnes of carbon dioxide emissions at Peterhead and store them offshore deep under the North Sea. The bid was due to be in by the end of this year.



TOURISM & RECREATION

OLD MAN OF STORR

Improved visitor facilities are being planned for the Old Man of Storr on Skye. Staffin Community

Trust (SCT) estimated that more than 100,000 people have visited the site so far this year. The trust said that The Storr was 'a vital entry point and economic driver' for Staffin.

SCT has held talks with Highland Council, which owns 202 acres (82 hectares) of land at The Storr, about creating a visitor centre with toilets, a refreshment kiosk and an off-road car park.

Linkages to other important sites throughout the community are proposed, such as Lealt Gorge, The Kilt Rock and the Quiraing.

Highland Council has allocated £530,000 towards improvements to woodland at The Storr, and for visitor management improvements.

GLOBAL GEOPARKS

UNESCO has announced the creation of UNESCO Global Geoparks. Previously operating with the informal support of UNESCO, the status of Global Geoparks will now be formally recognised under the new programme. The UK has seven UNESCO Global Geoparks, areas of outstanding geological interest which use their unique geology to drive community development. These include Geopark Shetland and the North West Highlands.

The UK government, through the UK Permanent Delegation to UNESCO, UK National Commission for UNESCO and the UK Global Geoparks Forum in partnership with other member states, helped to lead the process for Global Geoparks to become a formal UNESCO designation.

The UK's Global Geoparks generated an estimated £8.7m from April 2014 to March 2015 through their involvement with the Global Geoparks Network. Being able to leverage the UNESCO brand and its global network is expected to enhance this sum, according to a study undertaken by the UK National Commission for UNESCO.



NEWS OF ORGANISATIONS

LINK

Scottish Environment LINK, the umbrella body for 35 Scottish conservation organisations, has appointed journalist Joyce McMillan as president, following on from former Scottish environment minister, Ross Finnie.

LOCHRANZA CENTRE

Lochranza Centre Community Interest Company has taken over Lochranza Field Centre on the Isle of Arran from the PGL organisation. The centre provides residential field study courses.

REWILDING BRITAIN

Rewilding Britain has appointed Dr David Balharry as director for Scotland. See: www.rewildingbritain.org.uk

HELP PLEASE!

A *SCENES* subscriber is undertaking research into the Scottish Conservation Society which was in existence in 1975; its west of Scotland secretary was Peter Dickson. Can anyone help? Please contact *SCENES* in the first instance.

A HAPPY NEW YEAR to all *SCENES* subscribers – and a very special thank you to every 'newshound' who sends in press cuttings, each and every month!