

	CONSERVATION	1
	FARMING	2
	FISHFARMING & FISHERIES	2
	MARINE	3
	POLITICS & PARLIAMENT	4
	GENERAL ENVIRONMENT	5
	ENERGY	8
	NEWS OF ORGANISATIONS	8

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CONSERVATION

DEER MANAGEMENT

A report by the Scottish Parliament's Environment, Climate Change & Land Reform Committee criticised the failure of the current system to protect important habitats [Apr 17]. It points out that in many places deer densities are too high to deliver the public interest, and that deer impacts continue to be a significant factor in preventing the restoration of native woodland.

This report and its recommendations were welcomed by Scottish Environment LINK. Duncan Orr-Ewing, of LINK's Deer Task Force, said: "We are urging full implementation of the committee's recommendations to underpin the full range of Scottish Government objectives, including meeting our 2020 biodiversity targets, native woodland expansion and protection of peatlands to mitigate climate change. We now expect Scottish Natural Heritage (SNH) to use their full range of powers to encourage sustainable deer management in line with public expectations."

Dr Maggie Keegan, of Scottish Wildlife Trust, said: "Overgrazing and trampling by deer has had a profound effect on the health and connectivity of Scotland's ecosystems, especially in the uplands."

NATIONAL NATURE RESERVES

The board of SNH has approved National Nature Reserve (NNR) status for Glencoe and Mar Lodge Estate. The reserves, both owned by the National Trust for Scotland, comprise extensive upland areas with diverse and nationally important nature. Both also have established land and visitor management and monitoring plans.

NATIONAL SCENIC AREAS

Christine Metcalfe, on behalf of Avich & Kilchrenan Community Council, has submitted a petition to the Scottish Parliament, urging the Scottish Government to review the process for designation of National Scenic Areas (NSAs) and to consider increasing the number of NSAs in Scotland to protect the natural landscape and support the tourism sector. It is becoming clear that due to pressures from various quarters, including those of the renewable energy industry, some areas deserving of the title of NSA have not yet been recognised as being in urgent need of this. One such location, for example, is Loch Awe in Argyll.

Currently, there are 40 NSAs across Scotland. In 2015, in relation to petition PE1564, the Scottish Government indicated that it had no plans to designate any further NSAs. See: www.parliament.scot/GettingInvolved/Petitions/petitionPDF/PE01655.pdf

FAVOURABLE CONDITION

The Proportion of Scotland's Protected Sites in Favourable Condition 2017 has been published by SNH. The main findings show that of the over 5,000 natural features on protected nature sites in Scotland, 80.3% are either in favourable condition, or unfavourable but recovering towards a favourable condition. This figure represents a 0.1% decrease in the proportion of natural features in favourable or recovering condition between 2016 and 2017. There has been an 8.9% increase since assessment reporting began in 2005.

There are three broad types of protected

features: earth science, which covers geological outcrops and landforms, fossil beds and caves (98% in favourable condition); species (76.1% in favourable condition) and habitats (79.3% in favourable condition). All saw a decrease in the proportion of features in favourable condition since last year (species by 0.2%; earth science and habitats 0.1%). Of the individual feature types which are monitored, some feature types showed an increase in the proportion of features in favourable condition, some remained stable, whilst others decreased. Of particular note were fish features where the proportion in favourable condition rose from 76.1% in 2015/16 to 84.8% in 2016/17.

Invasive species and over-grazing are the main challenges to improving condition from unfavourable to favourable. The proportion of assessments recording invasive species as a negative pressure has risen for the past five years to 20.5% in 2016/17. This includes both non-native and native species. The proportion of assessments recording over-grazing by wild herbivores and/or domestic stock has decreased from 18.4% in 2015/16 to 18% in 2016/17.

See: <http://bit.ly/2rzVcY0>

CAIRNGORMS INSECTS

A three-year project has been launched to save six rare insects in the Cairngorms National Park. The shining guest ant, dark bordered beauty moth, small scabious mining bee, northern silver-stiletto fly, pine hoverfly and Kentish glory moth have all been identified as needing urgent conservation action, with many of them having their last strongholds within the National Park.

Funded by the European Agricultural Fund for Rural Development, the project will survey the size and distribution of the species' populations,



FARMING

ORGANIC FARMING

The chief statistician of the Scottish Government has published figures which show that the percentage of agricultural land used for organic farming has fallen by 4% to 122,000 hectares, or 2.2% of agricultural land. This is the eighth consecutive fall in the area of organic land. The fall in area was seen in grassland & rough grazing (down 4%), and potatoes and vegetables (down 1%), with a small increase in cereals (up 1%). Pasture makes up 93% of organic land.

There was an increase in the number of organic cattle (up 16% to 29,000), but there were falls in the number of sheep (down 13% to 115,000), pigs (down 75% to 1,750), and poultry (down 8% to 241,000).

2.9% of agricultural land in the UK is organic. See: www.gov.scot/stats/bulletins/01278

GREYLAG GEESE

Increasing numbers of greylag geese are causing significant damage to grass or crops throughout Argyll and the islands. *Scottish Farming Leader* reported that greylags are now included on the general licence for July and August. An individual licence is not required to shoot resident greylag geese to prevent serious agricultural damage during those months. Where Canada geese are causing serious agricultural damage, control can be undertaken at any time.



FISHFARMING & FISHERIES

LOCH ETIVE FISHFARM

The *Herald* reported that the Scottish Environmental Protection Agency (SEPA) confirmed that there have been a number of occasions in the last three months of last year where Dawnfresh had breached its pollution licence by overuse of azamethiphos on one of its fishfarms in Loch Etive, north of Oban [Feb 15]. A SEPA spokesman said: "SEPA is in contact with Dawnfresh regarding occasions where consecutive bath treatments with azamethiphos were carried out at Etive 6, less than 24 hours after the first treatment. These treatments are not in compliance with the site's CAR licence. We will be undertaking further investigations into this matter with the company."

Dawnfresh is Scotland's largest producer of farmed trout. The insecticide is used to kill sea-lice and said to be highly toxic to birds, fish and crustaceans.

There were around 54 tonnes of fish deaths (approximately 18,000 fish) on the fishfarm over the three months, with 43 tonnes in November alone. The Friends of Loch Etive (FoLE) campaign group believe that the insecticide has been a contributory factor.

Dawnfresh admitted there was an error which led to the 'technical breaches' but denies that the spike in fish deaths was related to the insecticide, saying that there was a problem in transferring fish from a wellboat in November. A spokesman said its fish mortality rate was 'very low' and 'I would say industry leading.'

Etive 6 is classed as 'poor' in SEPA's 2016 compliance assessment.

A spokesman for FoLE said: "It isn't that long ago, when Dawnfresh first applied for this new farm, that it was insisting that the new farm would not need to treat for sea-lice at all. Now it appears, just a couple of years later, that they cannot treat for sea-lice without breaching their pollution control licences, damaging the wildlife of Loch Etive. As FoLE will continue to point out to Dawnfresh – and will pursue with the full weight of the law – Loch Etive belongs to the Etive community and not to one company seeking to expand its industrial fishfarming operations to the overall detriment of the wildlife of the loch."

Dawnfresh fishfarms are understood to be certified by the RSPCA Assured scheme, which describes itself as 'the only farm assurance scheme in the UK dedicated solely to improving farm animal welfare.'

Stewart Hawthorn, of Dawnfresh, said: "In 2016, we recorded an historically low number of sea-lice in Loch Etive thanks to taking a more proactive approach to the problem. Unfortunately, there were six instances on one of our sites where we did not meet our usual high standards in the technical implementation of a treatment. This is particularly frustrating for us because SEPA has confirmed that without these very small number of errors, the site would have been rated as 'excellent' in environmental compliance. Overall we are proud of our record of environmental compliance. Going forward into 2017 we remain committed to effectively controlling sea-lice and are already in the process of putting in place new treatment methods which will further reduce our reliance on chemicals."

WRASSE

The *Sunday Times* reported that increased demand for wild wrasse, to help control sea-lice in Scotland's aquaculture sector, has resulted

in the costs escalating from £400 *per tonne* in 2014 to £56,000 *per tonne* in 2015. The Scottish Government has pledged to double the number of fishfarms by 2030. The Angling Trust has demanded that restrictions on catch be made, together with monitoring, to ensure that wrasse don't become extinct. The Marine Conservation Society 'shares concerns.' The Scottish Salmon Producers' Organisation said that wrasse were caught sustainably and both under-and over-sized fish were returned to the sea.

WILD SALMON

The Atlantic Salmon Trust (AST) is launching a Suspects Framework study into the decline in numbers of wild salmon, particularly the mortality of juvenile salmon during their long migration at sea before returning to UK rivers as adults. The AST suggests that likely suspects include the impact of aquaculture through sea-lice, pollution, disease and escapees; predation; bycatch from fishing fleets; overexploitation and overfishing of the juvenile salmon's staple diet; climate change and moving sea currents.

FINFISH/SHELLFISH CONSULTATION

A Scottish Government consultation is asking for responses regarding a number of proposed changes to current permitted development rights for fish and shellfish farms. The consultation closes on 28 July; email: FishFarmReview@gov.scot; see: www.gov.scot/Publications/2017/05/8601

SHELLFISH PRODUCTION

Marine Scotland Science has published the *Scottish Shellfish Farm Production Survey 2016*. The production tonnage of mussels increased by 6% from 7,270 tonnes in 2015 to 7,732 tonnes in 2016, the highest level of mussel production ever recorded in Scotland. Pacific oyster shell production increased by 31%; additionally, 4.6 million shells were produced for on-growing in other waters. The overall estimated value of the industry was calculated to be approximately £11.7m.

See: <http://bit.ly/2sdPYys>

SHELLFISH

The Regulation of Scallop Fishing (Scotland) Order 2017 will bring new controls for the Scottish king scallop fishery into force from 1 June [Jul 15]. The changes will increase the minimum landings size of scallops from 100 mm to 105 mm which will help protect the breeding stock and is expected to lead to an increase in yield and egg production.

The new restrictions limit vessels to towing eight dredges *per side* in inshore waters. There will be no change to the current restrictions outside 12 nautical miles. Alternatively vessels can tow ten dredges *per side* in the six to 12 nautical mile zone, provided they install electronic monitoring on-board. This equipment records the location, speed and winch activity every ten seconds.

- New minimum landing sizes for lobsters are to be introduced, making the minimum landing size 90 mm for the west coast (excluding the Solway Firth) and 87 mm in the rest of Scotland. Changes are being implemented over a two year period; on the west coast there will be a 88 mm target for year one and 90 mm target for year two. The *West Highland Free Press* reported that Kate Forbes MSP has raised the disparity between the west and east coasts during questions in the Scottish Parliament. She asked Rural Economy secretary, Fergus Ewing, to meet fishermen from Skye. She said that Marine Scotland's consultation demonstrated less demand for larger-sized lobsters, and so west coast fishermen would be 'disadvantaged.'

SCALLOP DREDGING

A petition is to be sent to Holyrood to stop scallop dredging destroying Scotland's inshore sealife. It calls on the First Minister, Nicola Sturgeon, and the Scottish Government to urgently ban scallop dredging within three miles of the shore, and legislate for a 'sustainable six' where low impact fisheries are promoted and damaging fishing is phased out within six miles of the shore.

The petition said that divers have seen at first-hand the recent devastation inflicted by a single scallop dredger, legally, in Loch Carron, exposing the chronic mismanagement of Scotland's inshore fisheries [see MARINE below]. See: www.openseas.org.uk/2017/04/26/lochcarronmore; <http://bit.ly/2q1BL7c>; <http://bit.ly/2pXolp0>

INSHORE FISHERIES PILOTS

The Scottish Government is to trial a more localised approach to fisheries management, where fishing interests will be responsible for developing distinct local arrangements. A second pilot will trial the impact of separating different methods of fishing, such as creeling and trawling, in an area. These new trials build on the Scottish Government's Inshore Fisheries Strategy [Jan 15].

INSHORE FISHERIES

The inshore fisheries fleet operates out to six miles offshore, and is made up of about 1,400 vessels, 88% of which are creel and dive operators. Scallop dredging is recognised as one of the most destructive forms of fishing in Europe but is banned in only 4.4% of Scottish inshore waters, with some areas operating under seasonal restrictions [Apr 17]. Trade groups and conservationists have said that the failure of the Scottish Government to implement a clear and firm approach is leading to overfishing and the destruction of vital breeding grounds for crustaceans and other species.

The charity, Open Sea, claims that Scottish ministers are more concerned about preventing European vessels operating in white fish areas than protecting shellfish stocks inshore. Nick Underdown, of Open Sea, said: "This issue of resource mismanagement has been a longstanding problem for Scotland. Inshore fishermen think better use can be made of our inshore waters than is currently being made. It would be better in terms of contributing to more secure livelihoods, better in terms of environmental impact and the sustainability of the resources."

Alistair Sinclair, of the Scottish Creel Fishermen's Association, said: "The government does not have a clear strategy as to how it is going to look after all the organisations and businesses that work [inshore]."

A government spokesman said: "We have been working over the past year to implement the Inshore Fisheries Strategy, which includes implementing a range of crab and lobster management measures and new catch limits for unlicensed fishermen."

SEA FISHERIES STATISTICS

The *Provisional Scottish Sea Fisheries Statistics, 2016* has been published by Scotland's chief statistician and show that the quantity of fish landed by Scottish registered vessels in 2016 was 453,300 tonnes (an increase of 3% since 2015) with a value of £563m, (an increase of 29%).

There was a 41% increase in the value of pelagic landings to £226m, reflecting a 1% increase in the volume landed. There was a 26% increase in the value of shellfish landings to £169m, with the volume increasing by 10% to 63,600 tonnes. There was a 18% increase in the value of demersal landings, with a 5% increase in fish landed, to 95,400 tonnes.

Mackerel accounted for 30% of the total value of Scottish landings (£169m). The value of mackerel

increased by 29% since 2015. However the volume of mackerel landed was 188,000 tonnes, 6% lower than in 2015. Of the total volume of mackerel landed 49% was landed abroad. The average price of mackerel landed into Scotland increased 35% to £885 *per* tonne. Herring landings increased 12% to 66,000 tonnes, and the value increased by 121% to £47m. There was a 98% rise in the average price to £719 *per* tonne.

Haddock increased by 0.5% in 2016 to £38m, despite a 2% decrease in average price *per* tonne of haddock to £1,332 *per* tonne; the volume landed increased by 3% to 28,000 tonnes. The volume of cod landed in 2016 was 13% higher than in 2015 and the value increased 21% to £27m; the average price increased by 7% to £2,103 *per* tonne. The value of monkfish landings increased 32% to £35m, driven by a 16% increase to £2,743 *per* tonne. The volume of monkfish landed increased 14% to 13,000 tonnes. The value of hake landings was £18m, a 16% increase. There was a 18% increase in the volume landed to 8,000 tonnes, despite a 2% decrease in the price *per* tonne to £2,353. The value of saithe landings was £8m, a 14% increase from 2015. The volume of saithe decreased by 4% but the average price *per* tonne increased by 18%. The value of whiting landings was £8m, a 6% decrease and the volume landed decreased by 8%; however, the price *per* tonne increased by 3%. The value of plaice landings was £7m, a 65% increase due to an 31% increase in the volume landed and a 26% increase in the price *per* tonne. Both ling and megrim landings had a value of £6m, a 38% and 29% increase, respectively. There was a 23% decrease in the volume of 'other demersal' species landed but the value increased by 33% due to a 74% increase in the average price *per* tonne. The increase in the value of 'other demersal' species was mainly due to better reporting of wrasse sales, used as a cleaner fish to remove sea-lice.

Nephrops (Norway lobster/langoustine) are the most valuable shellfish stock, accounting for 47% of shellfish landings, and overall the second most valuable stock to the Scottish fleet at £79m, up 30% on 2105. The volume landed increased by 27% to 21,000 tonnes and there was a 2% increase to £3,766 *per* tonne. Scallops made up 22% of the value of shellfish landings. The volume of scallops landed in 2016 decreased by 4% to 15,000 tonnes; their value increased by 12% to £37m with a 17% increase to £2,416 *per* tonne.

The number of active Scottish registered fishing vessels in 2016 was 2,038, an increase of 23 vessels from 2015. The shellfish sector makes up 64% of the over 10 metre fleet and the number of vessels in the sector increased by two to 365. The demersal sector makes up 33% of the over 10 metre vessel fleet.

The number of creel fishing 10 metre and under vessels increased by 17 vessels to 1,291, 88% of the 10 metre and under vessel fleet. The nephrops trawl sector remained the same since 2015.

The uptake of quota for West of Scotland mackerel was over 106%, while North Sea mackerel exceeded 99% and North Sea herring was over 103%. West of Scotland herring was 80%.

Quota uptake was 98% for the key demersal fish stocks in the North Sea, with the exception of North Sea haddock (above 59%) and North Sea plaice (above 68%). West of Scotland quota uptake for haddock (area VIb), was over 84%. Whiting, saithe and monkfish were over 97%. Uptake for haddock (areas VIa, Vb) was just over 61%. The quota uptake for North Sea nephrops was 87% and for West of Scotland nephrops it was over 82%.

See: <http://bit.ly/2qfap0M>



MARINE

LOCH CARRON EMERGENCY MPA

The Loch Carron flame shell beds have been designated as a Marine Protected Area (MPA), following a joint survey by Scottish Natural Heritage (SNH) and Marine Scotland Science (MSS) into claims that the vulnerable habitat had been damaged by scallop dredging [Apr 17]. The inquiry confirmed that damage to the flame shell beds was consistent with the impact of scallop dredging. The investigation also found there was a viable prospect of recovery because part of the bed had survived and another nearby bed had remained intact. There are hopes that the habitat will eventually recover, but this is likely to take many years.

The MPA means any proposed development or use of the sea will have to take the need for recovery into account. To manage fishing activity, an urgent Marine Conservation Order is to be put in place to prevent mobile gear fisheries, such as dredging, taking place in the area – initially for one year. The area involved covers 16 km².

Environment Secretary, Roseanna Cunningham, said: "While we recognise there are concerns around scallop dredging in coastal waters, we must balance environmental concerns with the need for legitimate and sustainable fishing. The Scottish Government will now begin work immediately to identify if there are other areas which should be protected."

Katie Gillham, of SNH, said: "The evidence collected by recreational divers, and by MSS and SNH, clearly shows the damage that was done to the flame shell bed. Alongside protecting the flame shell bed, this new MPA will help us learn more about the recovery of this Priority Marine Feature as it happens."

The field report provides an initial analysis of the survey results; see: <http://bit.ly/2rCD9Nl>

Marine biologist Sue Scott, of Lochcarron, said that protection should be extended. She said: "I'm very pleased to see that the government has brought in the protection area. It is a good start, but what we would really like to see is scallop dredging banned from inshore waters, ideally to a distance of three miles from the coast. It is a hugely destructive practice which targets an area where a host of young fish and shellfish make their homes and these nursery area have little chance to recover. Scallop dredging is just so incredibly destructive to the seabed. It is like a plough digging furrows on land ... It is an industry which is acting against itself because it destroys the very areas where the young of the species they catch thrive." [see FISHFARMING & FISHERIES above].

Nick Underdown, of Open Seas, said: "Whilst we welcome the move to protect the parts of flame shell reef that remain in Loch Carron, this is clearly too little, too late. The Scottish Government is glossing over a much broader problem of scallop dredging impact throughout our coastal waters. They haven't even taken steps to protect flame shells in other areas where they remain intact. Incredibly this includes places where they exist in the Small Isles MPA – the waters around Rum which still have no protection at all. The Scottish Government's management of our inshore waters is prehistoric, piecemeal and it's hurting our rural economy too."

Calum Duncan, of the Marine Conservation Society (MCS), said: "Whilst this loophole of inshore fisheries management led to damage, we are hopeful that there is sufficient healthy reef left to return Loch Carron to its natural state, given time."

Dr Richard Luxmoore, of the National Trust for Scotland, said: "We welcome the rapid action taken by the Scottish Government to protect the flame shell beds of Loch Carron from further destruction by scallop dredging. We now call on them to give further consideration to the benefits of stopping destructive fishing practices in all our inshore waters within three nautical miles. There is good evidence that this would deliver long term economic benefit, as well as helping our marine life to recover and thrive."

Sam Gardner, of WWF Scotland, said: "This recent incident clearly shows the importance of completing the MPA network and ensuring the jewels of Scotland's seas are there for future generations to enjoy."

The *BBC News* website reported that Bertie Armstrong, of the Scottish Fishermen's Federation (SFF), wrote to Ms Cunningham, saying that the government's emergency measures undermine confidence in marine protection. Mr Armstrong said that five similar reefs were already closed to fishing and that MPAs were designed to protect 'examples' of rare sea features, not all of them. He said that the move was a *de facto* statement of mistrust in the process of MPAs. He wrote: "You will know that this logical, sequential, evidence-based endeavour is one that we, as directly affected stakeholders, have not only participated in but directly promoted on the international stage as an exemplar for others, balancing well the relevant Scottish Government policies of healthy and productive seas. Stepping outside the process undermines confidence in a balanced government approach to MPAs."

ADDS

A study by the Scottish Association for Marine Science and the Joint Nature Conservation Committee showed that underwater acoustic deterrent devices (ADDs) caused large-scale underwater noise pollution. ADDs are deployed by more than 130 fishfarms to scare away seals, and can be heard at least 30 kilometres away.

The health of cetaceans is being put at risk by the noise pollution; marine mammals depend on sound to navigate the seas. Loud underwater noises can cause permanent hearing loss, stress and disorientation resulting in whales and dolphins beaching and dying. The number of ADDs has greatly increased in recent years as fishfarmers try to find publicly acceptable ways of prevent seals from eating their salmon.

The study concluded: "The unregulated use of the devices in Scotland could pose unintended ecological impacts to non-target species such as the harbour porpoise. Saturating the Scottish coastline with noise may pose a risk to both target and non-target species in areas where they were meant to be protected."

According to an email released under Freedom of Information law by SNH, the study found that the signal from ADDs could be detected 20 kilometres away from the fishfarms at Portree on the Isle of Skye and 30 kilometres from Lochmaddy on North Uist; it stated: "The Sound of Mull and Loch Linnhe were completely ensounded (filled with sound)."

Anti-fishfarming campaigners have filed a formal complaint to the European Commission alleging failures to protect cetaceans from 'deliberate and reckless disturbance' and they are demanding an immediate ban on the use of ADDs by fishfarms.

Don Staniford, of the Global Alliance Against Industrial Aquaculture, said: "This new scientific research blows the use of ADDs on salmon farms out of the water. Salmon farmers are clearly caught between the devil and the deep blue sea. On the one hand they can continue to shoot seals – and

lose £200m in US exports – and on the other they can continue to use ADDs. The industry must bite the bullet and immediately install anti-predator nets or move salmon farms out of the ocean.”

Sarah Dolman, of Whale & Dolphin Conservation, highlighted evidence from SNH that ADDs can be loud enough to cause hearing damage, stress and behavioural disturbance to seals and porpoises. “As protected species with important designations for their protection on the west coast this might constitute an offence. At the very least, SNH should immediately investigate and report on the extent of ADD use and implement best practice guidance, including monitoring and compliance, with a view to phasing them out in the short term, particularly in special areas of conservation.”

Dr Caroline Carter, of SNH, pointed out that detectable noise wasn't necessarily harmful. She said: “However, available evidence shows that certain types of acoustic deterrents can disturb cetaceans and therefore we are actively working on this issue. We are already in discussion with the aquaculture industry to develop smarter use of acoustic deterrents to reduce the risk of unintended impacts on cetaceans.”

Scott Landsburgh, of the Scottish Salmon Producers' Organisation, said: “As farmers, we balance the need to protect seals and cetaceans with the need to protect the welfare of the fish. We work alongside Marine Scotland and SNH to find solutions that take account of balancing one need with another. Any action we do take is always informed by science and research.”

KILLER WHALE

Lulu, a killer whale (orca), was found dead on the Isle of Tiree last year after becoming entangled in fishing lines [Jan 16]. The *BBC News* website reported that Dr Andrew Brownlow, of the Scottish Marine Animal Stranding Scheme and Scotland's Rural College, said that tests have now shown that her body contained among the highest levels of polychlorinated biphenyls (PCBs), ever recorded. PCBs were banned from the 1970s but are still in the environment.

Dr Brownlow said: “The levels of PCB contamination in Lulu were incredibly high, surprisingly so. They were 20 times higher than the safe level that we would expect for cetaceans to be able to manage. That puts her as one of the most contaminated animals on the planet in terms of PCB burden, and does raise serious questions for the long-term survivability of this group (of UK killer whales). The threshold where we think that there is some form of physiological effect caused by PCBs is around 20-40mg/kg stored within the tissues. Lulu had a level of PCBs of 957mg/kg and this has put her as one of the most contaminated individuals we have ever looked at.”

“Killer whales are incredibly intelligent, they are very nimble, socially aware animals. [Lulu] would have spent most of her probably very long life existing around the waters of the west coast. It is potentially plausible that there was some effect of the PCBs that was in some way debilitating her so she wasn't strong enough or even aware enough to deal with this entanglement (in fishing line). We very rarely see entanglement in killer whales – actually this is one of the first cases we have documented.”

Lulu was at least 20 years old, which may be one reason that the levels of PCBs were so high, because they had built up over the years. There is evidence that PCBs can impair the immune system and affect the brain. They also affect reproduction, preventing killer whales from bearing young. There was no evidence that Lulu had ever had a calf. There are eight remaining

resident killer whales in the west coast pod; no calves have been born in the past 25 years.

SEALS & SHIPPING

A University of St Andrews study reported that 11 out of 25 UK conservation areas linked with seals were at high risk of overlap with shipping and noise could affect how sea mammals such as whales, dolphins and seals find food and communicate with each other. Maps showing the levels of risk of exposure to vessel traffic for grey and harbour seals around the UK were produced.

The team investigated the underwater noise levels generated by vessels that individual animals were exposed to in the Moray Firth using predictive acoustic noise models. For 20 out of the 28 animals observed in the study, the levels of predicted noise were high enough that temporary hearing loss could occur. However, there is no evidence that seals were exposed to noise levels high enough to cause permanent hearing damage.

Dr Esther Jones said: “This is particularly pertinent to harbour seals that are declining in some regions around the UK, as half of SACs [Special Areas of Conservation] associated with them had a high risk of exposure to shipping. Exposure risk was highest within 50 km [31 miles] of the coast and any impacts will have the greatest effect on harbour seals as they generally stay close to land. Urbanisation of the marine environment is inevitably going to continue, so chronic ocean noise should be incorporated explicitly into marine spatial planning and management plans for existing marine protected areas. We now need to begin assessing any behavioural changes of seals as a result of chronic exposure to underwater noise, so that we can understand the implications of those changes on individuals and ultimately on population dynamics.”

It is now planned to tag seals with sound and movement recording devices to investigate how their behaviour is affected by noise. The research is published in the *Journal of Applied Ecology*.

OCEAN PLASTICS

Greenpeace is to sail *Beluga II* around the Scottish shoreline this summer, taking samples of microplastics, surveying remote beaches for pollution and investigating seabird nests for plastic during the hatching season.

Fidra, a charity based in East Lothian, said that beaches around the Firths of Forth and Clyde have become hotspots for ‘nurdles’ – the tiny plastic pellets used in many products.

DORNOCH FIRTH OYSTERS

The Glenmorangie distillery, near Tain in Easter Ross, is helping to restore oyster reefs to the Dornoch Firth. The firth is thought to have supported oysters for over 8,000 years until the 19th century, when they were fished to virtual extinction. The Dornoch Firth is an SAC.

The Dornoch Environmental Enhancement Project is a partnership between Glenmorangie, Heriott-Watt University and MCS. As well as reintroducing the oysters it also aims to enhance biodiversity and act in tandem with the anaerobic digestion plant to purify the distillery's by-products created through the distillation process. The plant will purify up to 95% of the waste water released into the Firth with the remaining 5% naturally cleaned by the oysters.

300 oysters from the UK's only sizeable wild oyster population in Loch Ryan in Galloway were placed on two sites in the Dornoch Firth, with the aim of building an established reef within five years. Dr Bill Sanderson, of Heriott-Watt, said: “The aim is about four hectares of oyster reef at

a density of about ten *per* square metre. To achieve that, we will have to put quite a lot of oysters in here and we have to grow them first.”

Hamish Torrie, of Glenmorangie, said: “Oysters are biofiltration geniuses. They can really clean up the water and are perfect for marine life. Basically, they will store carbon and that sort of thing so they are hugely important for the ecosystem of the sea.”

Calum Duncan, of MCS, said “Active reinstatement of living seabed habitats such as oyster reefs can play a crucial role in ocean recovery.”

TRANSOCEAN WINNER

The *BBC News* website reported that Transocean, owner of the 17,000 tonne Transocean Winner oil rig which ran aground at Dalmore, near Carloway on Lewis, has paid the Maritime & Coastguard Agency (MCA) £400,000 [Nov 16]. The payment had been requested by the MCA to help cover the costs in dealing with the incident. The whole operation to refloat the platform is thought to have cost almost £17m.

SCOTTISH BEACH AWARDS

Keep Scotland Beautiful has granted 60 beaches a Scottish Beach Award. The awards have been running for 25 years; St Andrews West Sands in Fife and Gullane Bents in East Lothian have been on the list every year. The traditional start of the Scottish bathing season is 1 June.



POLITICS & PARLIAMENT

FORESTRY & LAND MANAGEMENT

A Forestry & Land Management (Scotland) Bill has been introduced. It is the first time in its history that forestry legislation has been considered by the Scottish Parliament. The bill will deliver:

- Improved accountability, transparency and policy alignment. Forestry will be fully accountable to Scottish ministers and the Scottish Parliament
- A modernised legislative framework to develop, support and regulate the sector in Scotland
- More effective use of Scotland's publicly owned land. The National Forest Estate will be managed to deliver economic, environmental and social outcomes and the Scottish Government will be able to offer land management experience and expertise to others.

The Scottish Government will also create a new executive agency, Forestry & Land Scotland, and a dedicated forestry division within government. Existing staff will transfer to new bodies as civil servants.

Carol Evans, of the Woodland Trust Scotland, said: “Forest industries are worth £1 billion every year to Scotland, with a large part of that coming from the landscape and recreation benefits of irreplaceable ancient and native woodland. This forestry bill is an opportunity for the official definition of forestry to catch up with fifty years of improved practice on the ground. Modern forestry is no longer just about timber supply, but about sustainable forest management, biodiversity, carbon sequestration, community engagement, and tourism.”

Jonny Hughes, of the Scottish Wildlife Trust (SWT), said: “[SWT] advocated for the inclusion of a duty on Sustainable Forest Management on the face of the bill and we are pleased to see this on page one. The Sustainable Forest Management duty is also linked to a further duty on the preparation of a Forestry Strategy, which must include objectives on ‘the conservation and enhancement of the environment by means of sustainable forest management.’ These duties will provide a firm foundation for building a modern forestry sector

that delivers a much broader range of benefits to Scotland than we saw in decades past.

“Forestry policy and practice has thankfully come a long way since the outdated 1967 Forestry Act. We believe the proposals under the bill and the new organisational structures will increase the accountability of forestry in Scotland, and improve the design and management of woodlands so they provide a wide range of outcomes beyond timber. These non-market benefits include carbon storage, biodiversity, recreation and improved health and well-being.” See: www.parliament.scot/parliamentarybusiness/Bills/576.aspx

AIR POLLUTION

Anna Heslop, from Client Earth, told the Scottish Parliament’s Environment, Climate Change & Land Reform Committee (ECCLR): “Whilst the [air pollution] situation is improving, the problem is that it’s a public health emergency and the situation is not improving fast enough. My understanding is that the Cleaner Air for Scotland strategy is not currently under review. It would be very disappointing if Scotland’s ambition is not increased.”

She said that the strategy had fed into the UK government’s air quality plans published on 9 May after UK ministers decided not to appeal against the High Court’s rejection of a bid to delay them until after the election [Apr 17].

Emilia Hanna, of Friends of the Earth Scotland, said: “Progress has been quite slow through Cleaner Air for Scotland. Another weakness again is that it doesn’t quantify what the impact of the 83 policy measures that it proposes to introduce would be, so there’s no way of knowing: does this add up to delivery of the legal limits by 2020?”

Professor Tom Rye, of Napier University, said that the strategy was ‘very weak’ on tackling transport pollution particularly in relation to HGVs and trunk roads. Vincent McNally, of Glasgow City Council, said that while air quality ‘is presenting a very real risk to public health,’ Glasgow was ‘the cleanest it has been since the industrial revolution’ with more than 97% of the city meeting all air quality targets.

RUABHA REIDH ACCESS

Gairloch Area Development Ltd has used right-to-buy legislation and submitted a bid for parts of the Ruabha Reidh lighthouse site in Wester Ross. The community group aims to guarantee access to the lighthouse keeper’s accommodation and associated parking land in perpetuity. Public access to the lighthouse buildings has been disputed since the current owners declared that the road from Melvaig, three miles away, was private and erected gates and signs. Access to the headland, a popular walk, has been limited to paying guests [Mar 17].

GAME BIRD SHOOTING

The ECCLR committee continued to consider the Scottish Raptor Study Group’s petition calling for the introduction of state-regulated licensing for game bird hunting [Apr 17].

The committee agreed to keep the petition open and wrote to the Environment Cabinet Secretary to recommend that the Scottish Government further explores, with stakeholders, the implementation of a licensing regime, particularly with reference to driven grouse shooting. The issues to consider will not be restricted to the illegal killing of raptors, but will also include other issues such mountain hare slaughter, the environmental impact of muirburn practices and the use of high dosage medicated grit.

The Scottish Raptor Study Group (SRSG), SWT and RSPB Scotland want to see a regulatory system introduced that helps tackle wildlife crime

while delivering a range of public benefits, and would like to see the shooting industry play a full role in this approach.

Logan Steele, of SRSG and lead petitioner, said: “A government-sponsored inquiry, into how a licensing regime might work, presents an opportunity to work in partnership with forward-looking representatives from the shooting industry, and other stakeholders, towards creating a sustainable upland environment where our birds of prey can thrive alongside legitimate shoot management.”

Stuart Housden, of RSPB Scotland, said: “There has been an increasing recognition that self-regulation by a significant part of the gamebird shooting industry has failed, and that new regulatory measures are required to ensure that our uplands are managed in line with the public interest. We consider that a bespoke licensing arrangement, including sanctions for removal of a licence where there is clear evidence that wildlife crimes are occurring, would provide a meaningful deterrent to illegal behaviour, as well as protecting the interests of those sporting managers who already operate to legal and sustainable standards. We commend those that do, and ask that this must now be the norm.

“We invite progressive elements of the gamebird shooting industry to fully endorse and play a full part in this approach, to help heal the unnecessary divisions between conservation and gamebird shooting, and to recognise the many opportunities that sustainable management of our uplands will bring for wildlife, important landscapes and rural employment.”

VIDEO EVIDENCE

The ECCLR committee has written to the Crown Office to ask for clarity around the admissibility of evidence of wildlife crime, with specific regard to the use of video and CCTV evidence in raptor persecution cases. It asks which pieces of legislation and case law cover the admissibility of evidence; how the Crown Office and Procurator Fiscal Service use this to interpret the admissibility of evidence; whether there is guidance issued and/or applied to the analysis of the admissibility of evidence and how that guidance is currently publicised to stakeholders and interested parties. The letter also asks for a rationale behind the recent decisions concerning video evidence [see GENERAL ENVIRONMENT below].

Convenor Graeme Day said: “These days, there’s clearly an argument for the use of video, CCTV, or even social media to be considered when a crime against any animal is alleged to have been committed.”



GENERAL ENVIRONMENT

GOLDEN EAGLE DEATHS

SNH Commissioned Report 982: Analyses of the Fates of Satellite Tracked Golden Eagles in Scotland studied the movements of 131 young golden eagles over a 12 year period, and found that 41 had disappeared in suspicious circumstances. Clusters of disappearances arose in six areas associated with grouse moor management; these are northern Monadhliaths; Angus Glens; East Grampians including Ladder Hills; and Glaick Forest/Glen Tilt, with broader clusters identified in the Upper Tay/Forth and South Loch Ness.

The report found that there was no link between fitting satellite tags and the disappearance of the birds of prey and ruled out any connection with the position of wind turbines.

The Environment Secretary, Roseanna

Cunningham commissioned the SNH report [Mar 17]. An independently-led expert group is now to look at the environmental impact of grouse moor management practices such as muirburn, the use of medicated grit and mountain hare culls, and to recommend options for regulation including licensing and other measures which could be put in place without new primary legislation [see POLITICS above]. It will immediately review all available legal measures which could be used to target geographical areas of concern; increase resources for the detection and investigation of wildlife crime and work with Police Scotland to pilot the use of special constables in the Cairngorms National Park. The group will examine how best to protect the valuable role of gamekeepers in rural Scotland. Research into the costs and benefits of large shooting estates to Scotland’s economy and biodiversity will also be commissioned.

The Scottish Government ruled out giving the Scottish SPCA more investigative powers, in light of legal advice [Jan 15].

Ms Cunningham said: “There is every reason to believe that similar levels of persecution affect untagged golden eagles, as well as those we are able to track via satellite tags ... This report identifies specific problem areas which will allow Police Scotland to adopt a targeted approach and I would also encourage members of the public to report any suspicious activity to the police.”

Ian Thomson, of RSPB Scotland, said: “The irrefutable evidence in this report, demonstrating the scale of systematic, organised criminality, is shocking and yet it is likely that none of this would have come to light had these birds not been fitted with satellite tags. When you add to this the disappearances of satellite-tagged white tailed eagles, red kites, goshawks, peregrines and hen harriers, not included this review, and consider that satellite-tagged birds form a very small proportion of the populations of these species, the overall numbers of eagles and other protected raptors that are actually being killed must be staggering. It completely bankrupts the myth that raptor persecution has been in steady decline for the last 20 years, which is something that is regularly said by the land management sector.”

Susan Davies, of the Scottish Wildlife Trust, said: “The report leaves little doubt that human interference is stopping golden eagles from expanding into their full natural range. It is also highly likely that illegal persecution is causing the disappearance of golden eagles around some grouse moors in the Highlands.”

A Scottish Gamekeepers Association (SGA) spokesman said: “Problems clearly still exist in some hotspot areas and, in our view, this can only be tackled by all partners having access to the same telemetry data in order to arrive at shared and targeted solutions. If this had been happening over the past decade, there is a high likelihood these problems could have been tackled satisfactorily before now. The SGA does not believe the report adequately tackles the threat windfarms pose to raptor species.”

Golden eagles were the focus of the Scottish Natural Heritage (SNH) report as the authors, Dr Phil Whitfield and Dr Alan Fielding, concluded that the same volume of data was not available on other species to produce meaningful analysis. See: <http://bit.ly/2sdPYys>

WILDLIFE CRIME

The Herald reported that RSPB Scotland has called for an urgent meeting with the Crown Office & Procurator Fiscal Service (COPFS) after charges against a gamekeeper, accused of killing a bird of prey, were dropped [Apr 17]. A camera, monitoring the active nest of a breeding pair on the Cabrach, Moray recorded evidence which suggested that a

hen harrier had been illegally killed. The Crown Office said that the video evidence would not be admissible in court. RSPB Scotland has now released the video footage.

An RSPB Scotland press statement said: "The case has been subject to a prolonged police investigation and nine separate court hearings, at a considerable cost to the public purse. Only now has the COPFS abandoned the prosecution just a few weeks prior to the scheduled trial. The evidence was obtained as a result of RSPB Scotland staff monitoring the active nest of a breeding pair of hen harriers which contained four eggs. A camera was deployed in a moorland area away from human habitation to film the nest to record the outcome of the nesting attempt – a routine part of RSPB Scotland's work to observe the success of breeding attempts for this protected and threatened species. Over the next three weeks, the footage recorded at the nest showed normal breeding behaviour.

"However, the film revealed that on 10 June 2013, the female hen harrier was flushed from the nest, and immediately afterwards two gun shots were heard. The bird was apparently hit as a shower of feathers can be seen. A few seconds later, a man, carrying a shotgun entered the picture and moved in the direction of where the hen harrier had flown. He then returned into the picture holding the carcass of the dead hen harrier, and was seen to pick up a number of feathers that had been dislodged from the bird. On reviewing the footage, RSPB Scotland Investigations staff immediately reported the incident to Police Scotland, as it believed the footage showed clear evidence of a wildlife crime having been committed. This case was then reported for trial by the Crown Office following the identification by the police of a suspect."

Duncan Orr-Ewing, of RSPB Scotland, said: "Whilst we know that hen harriers are often illegally targeted by gamekeepers seeking to protect red grouse stocks, such crimes usually take place in remote areas, and it is therefore very difficult to obtain evidence to bring the perpetrators to justice. This incident would never have been uncovered had the nest not been monitored by our camera.

"RSPB video evidence has been used in the successful prosecution of previous wildlife crime cases in Scotland, including two very similar incidents of hen harrier persecution, and more recently our film footage assisted in the conviction of an Aberdeenshire gamekeeper for a number of raptor persecution offences. Digital imagery has also been used to assist successful prosecutions on a number of occasions in England. We are appalled and extremely frustrated that the court has not been given the opportunity to give a judgement based on this clear footage, and we are perplexed by the inconsistency in approach to these cases that seems to be taken by the Crown Office. We have written to the Lord Advocate and will be seeking urgent meetings with the Crown Office to consider the implications."

A COPFS spokesman said: "Crown Counsel considered the inevitable conclusion was that RSPB investigators entered the land in question and embarked upon evidence-gathering for the purpose of prosecution. The Crown has consistently made it clear that strict legal tests must be met before evidence which has been obtained irregularly, such as the evidence in this case, is admissible. Counsel concluded that the evidence would not be admissible in court. In light of that conclusion, it was entirely appropriate that proceedings were brought to an end."

Ian Thomson, of RSPB Scotland, said: "We do not agree with the opinion from the Crown Office that we were attempting to gather evidence for a

prosecution. We installed a camera to monitor a protected breeding bird's nest site, core business for a conservation organisation. We did not share the information about the nest site with anyone, as would be the case with any rare and vulnerable breeding bird species.

"The fact that an individual came and allegedly shot the female harrier, and that this was captured on film, was an incidental consequence of the camera's deployment, in the same way that it could easily have captured footage of the nest being naturally predated or failing due to bad weather. It is very disappointing that the opportunity for the court to consider the issue of the admissibility or otherwise of this evidence, as has happened in previous cases, has been removed."

• The *BBC News* website reported that RSPB Scotland had released video footage, which was due to be used in trial, purporting to show a pole trap being laid out by a gamekeeper on Brewlands Estate, Angus. The decision to drop proceedings was made by COPFS [Apr 17].

Ian Thomson said: "What has happened over the last few weeks has undermined our confidence significantly in that we've had two cases discontinued with absolutely no explanation. It removes any opportunity for either ourselves or the police or anyone else who is engaged in tackling the scourge of raptor persecution to learn anything at all ... There have only ever been two convictions of individuals in Scotland for shooting hen harriers. Both of those individuals were captured on video, one shooting a bird and one attempting to shoot a bird. There's the answer."

RSPB Scotland believes that prosecutors should have allowed the courts to decide whether the footage was admissible rather than pulling out of the prosecution. Without the use of such pictures, they believe the chances of a conviction are low and that the birds become more vulnerable to persecution.

Tim Bonner, of the Countryside Alliance, said: "We are very clear that controversy and inconsistency over the admissibility of video evidence gathered by organisations like the RSPB is largely their own responsibility, and could have been resolved years ago had non-statutory bodies which take on an investigative role properly addressed their activity.

"There are a number of conservation and animal rights organisations which have created investigative functions which rely heavily on covert surveillance. The RSPB and the League Against Cruel Sports (LACS) are two obvious examples and they share intelligence and working practices ... They operate without any regulation or oversight, whereas covert surveillance carried out by statutory bodies like the police and security services is strictly controlled ... RSPB and LACS, however, carry out covert surveillance on the basis of their own agenda with the absolute expectation that the police and the courts will accept video evidence gathered for the purpose of prosecution even when they have acted unlawfully, for instance by trespassing, whilst gathering it ... Given that the police are absolutely aware that these organisations carry out such operations it is surely obvious that NGOs should seek authorisations for legitimate surveillance operations to remove any question about admissibility. Such covert surveillance operations are not based on intelligence that could justify breaching people's right to privacy, they are simply shopping expeditions launched against people the NGOs do not like in the vague hope of recording a random offence of any kind."

• The Crown Office has decided not to begin proceedings on a case involving three allegedly poisoned buzzards on Edradynate Estate near

Aberfeldy in Perthshire. This is the fourth case of alleged raptor persecution to be dropped in the last month. Ian Thomson, of RSPB Scotland, said: "We are exceedingly frustrated and disappointed that again a case is not going to be tested in court. This latest decision adds to our serious and growing concern that the justice system is failing Scotland's birds of prey and strongly suggests that these laws are becoming impossible to enforce."

PAWS

The *Sunday Herald* reported that the SGA has decided to stop attending meetings of the Partnership for Action Against Wildlife Crime in Scotland (PAWS). The SGA said that it would not attend until methods of partnership working have been reviewed. Relations between the SGA and RSPB Scotland on PAWS have become increasingly strained in recent months. An SGA spokesman said: "If the trust element is lacking, it makes it hard to sit around the table in a constructive way so hopefully these matters can be resolved." He stressed that SGA had not left PAWS, and would continue to work with the government and the police.

RSPB Scotland said that it had tried for years to work collaboratively with SGA to prevent crimes against raptors. Ian Thomson said: "Regrettably, their approach has repeatedly been to deny that these crimes are taking place, despite overwhelming evidence to the contrary. The SGA should consider very carefully what message their withdrawal sends out to the Scottish public about their real commitment to working with partners to stamp out the wildlife crime."

David Johnstone, of Scottish Land & Estates, highlighted criticisms of RSPB Scotland's 'unilateral covert surveillance' and the strict penalties that already exist for wildlife crime. He said: "These should be complemented by increased preventative measures, education and training. Preventative measures adopted widely by estates – such as stricter employment contracts and training regimes – have had a significant impact on the reduction of wildlife crime."

HEN HARRIER SHOT

The *Carlisle Gazette* reported that Police Scotland had received information that a man had shot and killed a female hen harrier, in the afternoon, on a grouse moor owned by the Leadhills (Hopetoun) Estate close to the B7040 Elvanfoot to Leadhills road in South Lanarkshire. A police spokesman said: "A number of witnesses have come forward, and a significant enquiry is underway. I also ask that anyone who has CCTV in the area review their cameras. Wanton killing of wildlife in these circumstances is unacceptable."

Ian Thomson, of RSPB Scotland, said: "The recent decision by the Crown Office to discontinue a court case where there was clear video evidence of the alleged shooting of another hen harrier, has clearly sent out a message to those that wish to kill our protected birds of prey, that they can continue to do so with impunity, knowing that even if their alleged crimes are caught on film, they are unlikely to be called to account. We need this last matter to be addressed by the public authorities as a matter of urgency."

• Raptor Persecution UK wrote to the Cabinet Secretary, Roseanna Cunningham: "[The] news that an armed, masked man was seen, in broad daylight, blatantly shooting and killing a hen harrier on a grouse moor near Leadhills, is the final straw. Leadhills is the perfect microcosm of what is a country-wide problem. This latest incident is just one of at least 48 reported crimes in this area alone since 2003, and only two of those crimes resulted in a conviction; the vast majority did not even reach the prosecution stage. What we are witnessing is a theatre of the absurd.

RAESHAW ESTATE LICENCE

SNH has revoked an individual licence to control wild birds at Raeshaw Estates, near Heriot in the Scottish Borders, as a result of on-going concerns about wildlife crime. SNH imposed a general licence restriction in 2015 on the basis of 'clear evidence' provided by Police Scotland that wildlife crimes had been committed on the estate. The estate challenged the restriction through a judicial review, but the restriction was upheld [Mar 17].

During a recent compliance check, SNH found multiple instances of breaches of conditions of an individual licence that had been granted to cover essential management activities on the estate. These breaches may also constitute offences under the Wildlife & Countryside Act, so SNH has reported the details to Police Scotland.

Ian Thomson, of RSPB Scotland, said: "Unfortunately, this comes as no surprise at all in relation to this particular estate. These latest multiple breaches found by SNH on the Raeshaw Estate can be added to a long list of confirmed poisoning, shooting and illegal trapping cases in this area dating back over more than a decade. The fact that there is an ongoing criminal investigation here, despite the sanctions previously imposed by SNH, echoes a pattern of repeat offending that occurs in a significant number of areas of Scotland where intensive grouse moor management is the main land use. While we welcome SNH's revocation of the individual licenses issued to this estate's employees, it is clear that current legislation and the available penalties are no deterrent to the continued criminal targeting of protected wildlife. The time has come for a robust regulatory regime, including the licensing of gamebird shoots, where wildlife crimes with a proven link to estate management could lead to a loss of shooting rights."

A spokesperson for Raeshaw Estates said that it rejected any allegation of being engaged in wildlife crime. He said: "There is no suggestion by anyone of any protected bird found being dead, injured or trapped. We believe the issue here primarily surrounds the alleged incorrect siting of legitimate traps to catch crows. The estate staff believe they have been acting in full compliance with the provisions of the licence."

WILDCAT HAVEN

Andy Wightman MSP launched a crowdfunding appeal to raise an initial sum of £10,000 to help support his fight against a defamation case being brought against him by Wildcat Haven Enterprises CIC. It is with regard to two blog posts, written in September 2015 and February 2016. Andy Wightman is a writer and researcher best known for his work on land ownership in Scotland.

The case is now underway in the Court of Session. Over £30,000 has now been raised, and a new target of £50,000 set. The pursuer, Wildcat Haven, is also seeking £750,000 in damages and if successful, would render Mr Wightman bankrupt which would result in him being ineligible to continue to serve as an MSP.

Mr Wightman's legal team pointed out that the persuer appeared to have assets of less than £5k, so the presiding judge Lord Uist agreed that a £50k 'security bond' had to be lodged by his pursuer for the case to proceed. See: www.crowdfunder.co.uk/awdefamation

SPIDERS

The Wildlife Information Centre, working with the British Arachnological Society, has launched the Scottish Spider Search. Records of four species in particular are sought – the four-spotted orbweb, daddy long-legs, zebra and nurseryweb.

ORANGE-TIP BUTTERFLY

In the past 20 years, the number of orange-tip butterflies has declined in England and Wales, but the number and distribution north of the border have increased. It is thought that the orange-tip could now be present across almost all of Scotland, from the Borders to Orkney. Butterfly Conservation (BC) Scotland is asking for reports of sightings to help uncover the reasons for its expansion. The survey is part of the Urban Butterfly Project, a three-year initiative funded by the Heritage Lottery Fund and SNH. See: www.butterfly-conservation.org/scottishorangetip

TREE MIGRANTS

A record breaking 2,270 black-tailed godwits arrived on the Isle of Tiree during April, the highest number thought to have ever been counted in Scotland at one time.

These large wading birds often stop off in the Hebrides in April and May to refuel during their long migration to Iceland, where they breed. Tiree typically only sees a few hundred godwits; the previous record was 1,320 birds in 2013. At least 20 were spotted with rings, revealing that they had spent the winter in a range of diverse sites including France, Portugal, Spain and England.

GREEN BELTS

The Association of the Protection of Rural Scotland (APRS) is to launch a new nationwide campaign to protect Scotland's green belts from development. There are 11 green belts in Scotland, covering over 200,000 hectares – Aberdeen, Ayr & Prestwick, Clackmannanshire, Dunfermline, Edinburgh, Falkirk & Grangemouth, Greater Glasgow, Helensburgh, Perth, St Andrews and Stirling.

APRS points out that over 1,600 hectares of green belt has been lost around Edinburgh since it was first designated in 1949. There are plans for 9,000 houses on five sites near Perth, 7,500 houses at two sites on the outskirts of Edinburgh and major developments near St Andrews and Stirling. John Mayhew, of APRS, said: "We recognise the pressure to build more housing, but previously-developed brownfield sites should be developed first. Development sites in green belts should only be allocated as a last resort through the local council's planning process, so that only the least valuable areas are lost."

• Homes for Scotland, the trade association for house builders, said that Scotland's population is rising and the number of households around Scotland's four main cities is projected to rise up to 24% over the next 25 years. There are also 150,000 households on waiting lists for places to live. The number of new homes being built in Scotland is now 40% less than it was before the recession. Half of new homes built in 2014-15 were on brownfield sites, and 199 hectares of previously used land were brought back into residential use in 2016. However, there are limits to how many brownfield sites can be used, as some are contaminated or have difficult ground conditions. It said that green belts are not necessarily of great landscape or environmental value.

WILDFIRES

Wildfires have occurred during the month during a period of dry, windy, warm weather. The Scottish Fire & Rescue Service tackled a major hillside blaze between Lochinver and the mountain Sulven. There was a blaze at Craigower Hill, near Pitlochry, and wildfires in Glen Etive, Lochaber and Lubcroch near Oykel in Sutherland. A large area of grassland burnt at Harburn, near West Calder and in the Ochil hills, near Stirling. A large woodland blaze also occurred at Craigie Woods near North Kessock on the Black Isle.

A gorse fire was tackled by the fire service near Kingsknowes Roundabout on the A7, Scottish Borders.

A wildfire next to the railway line at Glenfinnan in the Highlands disrupted train services between Glasgow and Mallaig. The fire affected an area of about 50 acres. A moorland and grassland fire near Essich, south west of Inverness was bought under control.

MAMMAL ATLAS

The Mammal Atlas of North-East Scotland and the Cairngorms has been launched. This fully-illustrated atlas maps 43 mammals found in the north east, using 77,592 records from 1,472 observers from all over the area and beyond. It has been compiled by North East Scotland Biological Records Centre and is supported by SNH, Aberdeenshire Council, Forestry Commission Scotland, Cairngorms National Park Authority and the Scottish Ornithologists Club.

TICKS & CONSERVATION

Research led by the University of Glasgow, with the James Hutton Institute and SNH, has examined how conservation management could affect tick populations and the transmission of the *Borrelia* bacteria that can cause lyme disease. Woodland regeneration, biodiversity policies which increase the amount of forest border and urban greening can lead to an increasing number of ticks. If deer populations are managed alongside expansion, this can reduce tick populations. The study has been published by the Royal Society.

FAIRY POOLS MAST

The Herald reported that EE has submitted a planning application to Highland Council for a 49 foot mobile phone mast in the car park of the Fairy Pools, near Glenbrittle on the Isle of Skye. The application includes the mast, two antennas, two transmission dishes, a satellite dish and two equipment cabinets.

EE's application stated that there is a specific requirement to site it in that location to provide coverage for the emergency services and 4G coverage for the surrounding area. The design statement said that the mast will be screened by surrounding woodland and views of the tower will be limited to the antennas. It said: "The ground-based equipment has been coloured green and the telegraph pole is brown, aiding in assimilating into the surrounding landscape."

However, locals have said that car parking, already in short supply at the pools, should be a priority and a mobile phone mast would take up space in the car park as well as ruin the view of the pools and surrounding glen. It could cost £500,000 to enlarge the 30 vehicle car park to 100 spaces, plus toilets.

LONGANNET ASH

Until it closed in March 2016, ash from Longannet power station was mixed with cooling water and disposed of in a series of lagoons at Valleyfield on the coast of the Firth of Forth. However the lagoons dried out in April and May, when there was less than 10% of average rainfall; dust was blown over Valleyfield, Culross, Newmills and Torryburn. NHS Fife advised residents to try and avoid breathing in the dust.

The Scottish Environment Protection Agency (SEPA) has served Scottish Power with two legal enforcement notices for the suppression of ash and dust from the Valleyfield Ash Lagoons, near Longannet Power Station.

In response to a request from the *Sunday Herald*, SEPA released a detailed scientific report on monitoring of the Valleyfield lagoons, which disclosed that traces of eight potentially hazardous

pollutants from burning coal were detected in lagoon water in 2016. These include arsenic and toxic metals. A few samples of cadmium were in excess of agreed environmental trigger levels. In most cases, concentrations of other pollutants were said to be low. Scottish Power's monitoring data is provided for assessment of leachate impact on groundwater and surface water and it shows that the environmental standards set out within the site's permit have been met.

GRANGEMOUTH POLLUTION

The *Sunday Herald* reported that environmental performance at Ineos' refinery at Grangemouth has been rated as 'poor' by SEPA in 2016. Nine incidents caused pollution during the year. The plant was also assessed as poor in 2015.

Terry A'Hearn, of SEPA, said: "As a result of tighter controls applied by SEPA and investment by Ineos there have been significant reductions in overall emissions of sulphur dioxide which is reflected in the improvement in air quality in Grangemouth in recent years."

The refinery is only one of several plants operated by Ineos at Grangemouth, and the company argued it was bias to only focus on its poor rating. David East, of Ineos, said: "Ineos would like to point out that SEPA has rated the Grangemouth site, Scotland's largest industrial site, as being excellent or good in four out of five of its compliance assessment scheme reports in 2016."

LOW EMISSION ZONE

The *BBC News* website reported that both Edinburgh and Glasgow are to bid to have Scotland's first Low Emission Zone to tackle air pollution [Jan 17]. The Scottish Government has said that it will fund one pilot by 2018.

A City of Edinburgh Council spokeswoman said: "We are committed to addressing air pollution as a priority through a range of integrated projects, including reducing congestion and investment in improved public transport, cycling infrastructure and active travel, in addition to exploring the potential for a low emission zone. We now intend to write to the Scottish government expressing our interest in establishing the country's first low emission zone, as part of our work with the Scottish Government, Transport Scotland, Health Boards and SEPA to assist with the development of the Scottish National Low Emission Framework."

RIVER CLYDE

SEPA has reported that the River Clyde is in significantly better health than expected. River quality has improved from 'bad' to 'moderate' in 2015 with some stretches of river now at 'excellent.' The quality of water discharged from wastewater treatment works has improved and overflows from sewers have been limited. 100 km of waterways have been opened up with salmon reintroduced in higher parts of the river and there is less pollution from agricultural sources. The Scottish Government's Water Environment Fund has helped restore natural habitats by removing fish barriers and concrete channels to allow fish to reach the upper reaches of the Clyde catchment.

CONONISH GOLD

The *Oban Times* reported that Scotgold Resources Ltd submitted a pre-application to Loch Lomond & the Trossachs National Park Authority to scope for a proposed underground gold mine, 3 km from Tyndrum [Dec 16]. Ore, stockpiled since the 1980s, has been processed and will be exhausted by the end of the year. The company hopes to extract 560,000 tonnes of ore from an underground vein, starting in April 2018.



ENERGY

OFFSHORE WIND

The *BBC News* website reported that Lord Carloway, Scotland's most senior judge, ruled that Lord Stewart was wrong to allow a legal challenge which stopped the development of four offshore windfarms in the Firth of Forth and Firth of Tay [Jul 16]. Scottish ministers had approved the Inch Cape, Neart na Gaoithe and Seagreen Alpha and Bravo projects in 2014. RSPB Scotland took the matter to the Inner House of the Court of Session in Edinburgh because it thought the Scottish Government had acted unlawfully, putting seabirds at risk. Lord Stewart said he agreed with RSPB Scotland's arguments and ruled that Scottish ministers had breached legal requirements to give proper consideration to the areas being important for wildlife. Lord Stewart also found the government failed to properly consult interested parties over the environmental impact and that ministers had acted unlawfully by taking into account unconsulted information while they made their decisions. Scottish ministers appealed this decision.

The Lord President, Lord Carloway, has now found that the Scottish Government acted properly and had given proper consideration to the areas being a home for rare wildlife. He ruled that his colleague had interpreted the law incorrectly and that the process of informing the public about the environmental impact had been fully complied with.

He said: "Despite paying lip service to the correct legal test for judicial review, the Lord Ordinary has strayed well beyond the limits of testing the legality of the process and has turned himself into the decision maker following what appears to have been treated as an appeal against the respondent's decision on the facts. He has acted, almost, as if he were the reporter at such an inquiry, as a finder of fact on matters of scientific fact and methodology which whatever the judge's own particular skills may be, are not within the proper province of a court of review. For this reason alone, his decision on this ground cannot be sustained."

Stuart Housden, of RSPB Scotland, said: "Whilst we fully support deployment of renewable energy, this must not be at any cost. Combined, these four huge projects threaten to kill thousands of Scotland's internationally-protected seabirds every year, including thousands of puffins, gannets and kittiwakes. These could be amongst the most deadly windfarms for birds anywhere in the world. It was with great reluctance and as a last resort, but in these circumstances, it was clear that RSPB Scotland had to make a stand. While we are deeply disappointed with [the] decision, given the huge threat to Scotland's wildlife from these projects, we do not regret our actions so far. We will now need to take some time to consider this judgment in detail and consider its wider implications before commenting further."

A spokesman for Red Rock Power, which is developing the Inch Cape windfarm, said it would continue to work collaboratively with RSPB Scotland and other project stakeholders to minimise environmental impacts.

Energy minister, Paul Wheelhouse, said: "Clearly, protecting Scotland's marine environment is of paramount importance and at the heart of the Scottish Government's approach to offshore renewable energy applications, and we are keen to work constructively with both the RSPB and renewable energy developers to ensure the sector has a bright future in Scotland."

BEATRICE OILFIELD

Repsol Sinopec Resources UK plans to fully decommission the Beatrice oil field in the Moray Firth. An environmental impact assessment scoping report has been produced. Production at the field ceased in 2015. Five platform complexes, two demonstrator wind turbines, and cables will be removed between 2024 and 2027. 43 wells in the field are to be plugged and abandoned.

NORTH SEA OIL

Repsol said that the first oil had been achieved at the Shaw field, part of the Montrose Area Redevelopment (MAR), about 200 km east of Aberdeen. MAR could extend the life of a number of fields in the area to beyond 2030. Existing Montrose infrastructure has been expanded and upgraded, and three new fields developed – Godwin, Cayley and Shaw. MAR is aimed to unlock 100 million barrels of additional reserves.

- A report by RPS energy consultancy said that 523 million barrels of oil could be recovered from Hurricane Energy's Lancaster field, off Shetland [Apr 17]. A 2013 report estimated a figure of 200 million; the revised amount takes into account the results of the latest three wells on Lancaster. The first oil is targeted for 2019. Cenkos Securities reckon that Hurricane's Shetland acreage may contain more than 1.4 billion barrels of oil.

- The *BBC News* website reported that the first oil has been produced from BP's redeveloped Schiehallion field; the field, 110 miles west of Shetland, has been shut down for refurbishment since 2013. The Quad 204 redevelopment project could extend the life of the Schiehallion and neighbouring Loyal fields, first developed in the 1990s, to at least 2035. BP said that 450 million barrels of oil could be produced.

FRACKING

Scottish Environment LINK's Unconventional Fossil Fuel Subgroup called on the Scottish Government to prohibit fracking, and unconventional oil and gas extraction. Responding to the government's Talking Fracking consultation, the group said that for a hydrocarbon-rich country to open up a new source of fossil fuels, while it remains committed to continued exploitation of North Sea oil and gas reserves, would be irresponsible.



NEWS OF ORGANISATIONS

JMT

The John Muir Trust (JMT) has agreed to pay Scottish & Southern Energy (SSE) £50,000 in final settlement for court costs for the Stronelaig windfarm case [Apr 17]. JMT said that the 66 turbine windfarm would destroy a huge area of wild land, and won a judicial review against the Scottish Government; appeal judges decided that the case should be recalled.

Helen McDade, of JMT, said: "This case has highlighted in planning and legal circles the urgent need for planning reform."

SSE had originally sought costs of £350,000 and will donate the money received to the South Loch Ness Trail project.

RSPB SCOTLAND

Anne McCall has become director of RSPB Scotland, succeeding Stuart Housden.

SNH

Dr Mike Cantlay has been appointed as the chair of the Scottish Natural Heritage (SNH) board.

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