

## **Animal lovers' empathy may be hardwired in their DNA**

Scientists have uncovered a genetic difference in people who show greater compassion for animals.

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## **£1.8M funding for granite geothermal research**

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## **The BGS submits planning application for UK Geenergy Observatory in Cheshire**

The British Geological Survey (BGS) has submitted a planning application to Cheshire West and Chester Council (CWACC) to site a UK Geenergy Observatory at Ince Marshes in Cheshire.

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# Scotland urged to be prepared for festive season flooding

21 December 2018

As climate change exposes Scotland to rising sea levels and the promise of more frequent extreme weather events, the Scottish Environment Protection Agency is urging businesses and homeowners to be prepared for winter flooding over the festive season.

- Climate change accelerates flood risk from rising rivers, surface water and the sea
- How Ballater pulled together after a battering from Storm Frank
- More than 90% of Scottish adults support Floodline – but almost 70% in flood-prone areas have not considered taking preventative steps for flood control

“Being flooded can be a life-changing event, and with so many Scottish homes and businesses at risk of flooding, especially during the winter months, it’s important to have the appropriate measures in place to protect yourself and your loved ones,” explains Stewart Prodger, from SEPA’s Flooding team.

“Sixty<sup>[1]</sup> per cent of Scottish homeowners surveyed know it’s their responsibility to protect their own property, and more than half know to contact SEPA for flood warning information. If people are travelling over the festive season and leaving their home empty, it’s more important than ever to be prepared for flooding.”

As Scotland’s national authority for flood forecasting and warning, SEPA operates a 24-hour flood forecasting and warning service to inform first responders, local authorities and emergency services of emerging flood events and the potential impact on local communities and critical infrastructure.

To help everyone be aware and be prepared, SEPA’s free public flood warning service, Floodline, operates 365 days a year. Hundreds of regional Flood Alerts and local Flood Warnings get issued every year and over 27,000 customers nationwide opt to receive these directly, with many thousands more accessing them online.

When Storm Frank hit Scotland around Hogmanay in December 2015, it caused widespread flooding across Scotland. More than 100 flood warnings were issued and SEPA’s 24/7 contact centre received more than 3,300 calls. In Ballater in Aberdeenshire, more than 300 properties were affected when the River Dee burst its banks.

David Cobban and his wife Wendy run the Brakeley Gift Room, a gift shop on Bridge Street in Ballater, which bore the brunt of the flooding.

"We'd only been open for 12 weeks when the flood hit our shop, which is probably at the lowest point on Bridge Street," Mr Cobban said. "There was already about four feet of water in the shop by the time we arrived in the morning and it wiped out 100% of our stock. So we had to strip everything back to the bare stone and refurbish. Thankfully, my day job is a quantity surveyor in Aberdeen, so I managed to put back everything fairly quickly. But we were still unable to trade for about four months."

With a number of shops around the village closed, the immediate worry was whether local residents and visitors would still come to Ballater.

"Ballater has done a great job," Mr Cobban continues. "It's really been very resilient and the community has really pulled together. It's easy when you're flooded to think – that's the end of your business. But in the cold light of day, the world keeps spinning and you've got to get out and get back trading as quickly as possible. People in the village went out of their way to come to the shop and the local community was really supportive of all the businesses in Ballater. That really helped. There's a lot more liaison now between retailers and businesses in the village and I think we're probably trading better than ever."

The Cobbans signed up for free flood warnings from SEPA's Floodline in the aftermath of Storm Frank and made other winter readiness preparations including fitting flood gates to the three doorways into the shop. These have expanding seals that can be activated to stop water entering through gaps around the door. Ballater also created its own Flood Resilience Group to help alert and support local businesses and residents during times of heightened flood risk.

Stella Potter, a local resident, is a volunteer with the resilience group. Her property had 5 feet of water in the stairwell during the Storm Frank floods.

"I couldn't stay in the house because I had no electricity and no heating," Mrs Potter explained. "So I went to stay with friends who were not in the flood zone until the electricity came back on and I could get some fuel."

Mrs Potter subsequently fitted a flood door to her property and now keeps a grab bag prepared for any emergencies.

"It has my documents, a battery-operated radio, a torch and a sleeping bag," she explains. "I also keep a back-up phone charger and spare mobile phone, and a notebook with various useful numbers like insurance and policy numbers."

SEPA has been working with the Scottish Government, local authorities and other partners to help assess and manage the impact of flooding through the National Flood Risk Assessment (NFRA).

First published in December 2011, the NFRA has provided Scotland with the knowledge and tools to assess the causes and consequences of river, coastal and surface water flooding, taking into account the effects of climate

change. It considers the potential impact of flooding on human health, economic activity, the environment and cultural heritage and is based on the most up to date data available.

The latest assessment estimates there are around 284,000 homes, businesses and services across Scotland at risk of flooding from rivers, surface water and the sea. With advances in technology allowing flood risk data to be gathered in more detail, this figure is more than twice as many as the 108,000 homes, businesses and services identified to be at risk in the 2011 NFRA and 2015 Flood Risk Management Strategies [\[2\]](#).

This is due to major advances in our understanding and science, not because the physical risk has changed. New tools and technology have allowed scientists to more accurately assess flood risk with increased granularity. For example, the latest figures take into account more than just a building's address to gauge its risk factor.

The latest NFRA takes into account large complex sites like universities which, while only having one address, will have multiple buildings or small workshops. In the previous NFRA, this would have been counted as just one property.

Hazard maps have also been updated, with input from local communities, to identify new potentially vulnerable areas.

Climate change will increase the numbers at risk by an additional 110,000 properties by 2080. This equates to 1 in 8 homes and 1 in 5 business and services, up from the 1 in 11 homes and 1 in 7 business and services currently at risk of flooding in Scotland from rivers, surface water and the sea.

"This is our best understanding yet of flood risk in Scotland, with a wider and more detailed national picture than ever before," explains Steve McFarland, in SEPA's Flood Risk Planning and Policy team. "Scientific knowledge and understanding of flood risk is constantly evolving. Better data and access to improved mapping and modelling has advanced our understanding of the location of properties at risk. This means SEPA and its partners are better able to reduce the risk to people, properties, businesses, communities, infrastructure and the environment from the potential impact of future increased flooding."

In a YouGov [\[3\]](#) survey conducted on behalf of SEPA, 91% of Scottish adults feel that Floodline is an important service for flood-prone communities. More than half (53%) of Scottish adults are concerned about more frequent and severe flooding impacting Scotland, rising to 58% amongst those aged 55 and over. But almost 70% (69%) of Scottish adults living in a flood-prone area have not considered putting flood control measures in place over the festive season, such as sandbags, flood gates for properties or installing air brick covers.

"Homeowners, businesses and communities need to recognise their risk, get prepared and take action to help reduce the impact that flooding on their

life," SEPA's Stewart Prodger concludes.

Here are five simple things that you can do in advance in case flooding is forecast:

- Be aware: sign up to get SEPA's free Floodline messages direct to your phone for your home and travel areas. Register online at <https://floodline.sepa.org.uk/floodupdates/> or call 0345 988 1188;
- Be prepared: if your home or business is in a flood risk area, make sure you have left it as well flood protected as possible, and if you're away, make sure a neighbour, or a friend or family member, who lives nearby, can easily contact and help you. For a list of flood risk warning areas, visit [floodline.sepa.org.uk/floodupdates/quickdialcodes/](https://floodline.sepa.org.uk/floodupdates/quickdialcodes/);
- Be active: maintain your property by doing simple things like keeping gutters and drains clear of blockages like leaves;
- Be covered: make sure your domestic or business insurance covers flooding;
- Be ready: prepare an [emergency flood kit](#) either to take away with you on holiday or in case you need to leave your home.

The Scottish Government is committed to working to reduce flood risk across Scotland and is investing £420 million over the next ten years to protect homes in many of Scotland's most flood-prone areas.

SEPA currently provides a flood warning service to almost 300 communities across Scotland and this September launched 19 new coastal flood warning areas covering Orkney and Scotland's North East Coast between Aberdeenshire and Montrose in Angus.

## **ENDS**

[\[1\]](#) Source: SEPA ScotPulse survey, December 2017

[\[2\]](#) The 2015 Flood Risk Management Strategies cover Scotland's 14 local plan districts and were prepared in response to the first National Flood Risk Assessment in 2011.

[\[3\]](#) All figures, unless otherwise stated, are from YouGov Plc. Total sample size was 1019 Scottish adults. Fieldwork was undertaken between 13th – 17th December 2018. The survey was carried out online. The figures have been weighted and are representative of all GB adults (aged 18+)