

# Free flood advice workshops on offer to Yorkshire communities this Flood Action Week

Press release

The Environment Agency is offering free workshops throughout flood action week to prepare communities across Yorkshire for flooding this winter.



Flood warden in high vis jacket

Yorkshire communities at risk of flooding are being offered a series of seminars and workshops to find out how they can better prepare for the risk of flooding this season.

The Environment Agency and partners are offering a series of free online events as part of this year's Flood Action Week, running from Monday 7 November to Sunday 13 November.

The programme is designed for community groups and partner organisations with an interest in how they can prepare for, respond to and recover from flooding.

Sessions also cover community emergency resilience, climate change adaptation, natural flood management and flood volunteering.

**Carolyn Jarvis, Flood Resilience Adviser at the Environment Agency said:**

Working alongside fantastic partners, we've designed these workshops to provide free, accessible flood preparedness information. This is a great opportunity for people to become more informed and find out how they can help their local community respond to the impacts of flooding which we will all experience with more frequency.

Flooding can be devastating, and this Flood Action Week we are urging people to check their flood risk and find out the simple steps they can take to be prepared for flooding this winter.

People can view the programme of events and [sign up for the free sessions here](#).

This Flood Action Week (7 November – 13 November) the Environment Agency is urging people to take three simple steps:

Those at risk are encouraged to follow the advice to 'Prepare. Act. Survive', specifically:

- If there is an initial flood alert – prepare by packing medicines and insurance and other important documents and visit the flood warning information service.
- If there is a subsequent confirmed flood warning – act by moving family, pets and belongings to safety. Turn off gas, water and electricity.
- If there is a severe flood warning – survive immediate danger by following the advice of emergency services or calling 999 if needed

Published 7 November 2022

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## [England's treasured island seabird populations to be protected with new government funding](#)

The UK government has today announced £156,000 to protect England's much-loved island seabird populations against the threat of invasive predators.

This is one of the first instances globally of a central government providing funding to protect seabird islands against these specific threats, setting the UK as a global leader for seabird island biosecurity.

The UK's islands such as Coquet Island and the Isles of Scilly are internationally important for millions of seabirds, with Coquet Island being the only breeding place in the UK for Roseate terns which are a red listed species. However, some key breeding populations are in decline due to multiple threats including invasive mammals such as stoats and mice.

The eggs and chicks of ground-nesting seabirds including puffins, razorbills, gannets, terns and European storm-petrels are particularly vulnerable, and their populations can quickly be decimated by invasive mammals.

The funding will be delivered through the AfterLIFE plan from July 2023. It will ensure existing biosecurity measures across England's seabird islands are maintained and enhanced so we can continue to protect the recovery and secure the future of important seabirds.

It will also fund new measures including:

- The employment of a full time Biosecurity Officer
- A conservation detection dog team that will train dogs to search for and indicate the presence of brown rats
- Information campaigns targeting island visitors
- Training of volunteers to support biosecurity implementation across England's seabird island Special Protection Areas
- Frequent surveillance checks

These measures will build on the Biosecurity for LIFE project, which Defra has supported since 2018 and has implemented key biosecurity measures such as surveillance checks and volunteering programmes on seabird island Special Protected Areas.

**Minister for Biosecurity, Marine and Rural Affairs Lord Benyon said:**

"British seabirds are part of what make our coastlines so beautiful, and it's vitally important we continue to do all we can to protect each unique species and allow them to recover and thrive.

"Defra's contribution to the AfterLIFE Plan will ensure important measures continue to safeguard our treasured seabirds against invasive mammals that have the potential to obliterate entire populations."

**RSPB's Seabird Recovery Officer and Biosecurity for LIFE project executive Laura Bambini said:**

"The Biosecurity for LIFE project has worked with a diverse range of organisations, communities and individuals to set up critical biosecurity measures in place on England's internationally important seabird islands. Having worked with Defra, Natural England and key stakeholders in other UK nations to secure the maintenance of these measures in the long term, we are pleased now to see the development of national island biosecurity programmes underway across the UK. This is important for building resilience in our seabird populations which are in a precarious situation due to the pressures they face at sea."

"This announcement is significant, ahead of the UN's CBD COP in Montreal, as it sets the UK Government as leaders in island biosecurity, in one of the very few instances globally of a government using core funds to protect seabird islands from the threat of invasive non-native mammalian predators."

**RSPB's Principal Marine Policy Officer Kirsten Carter said:**

"The islands of the UK are amazing, their relative isolation has allowed seabirds and other wildlife to thrive. But these wild and sometimes rugged places are delicate, protecting them requires constant vigilance as the

precarious balance that has allowed wildlife to flourish can be easily disrupted with catastrophic consequences.”

“We have seen how even just a single inadvertently introduced predator can have a devastating effect on an island where the native species have no natural defences. This is why today’s announcement to fund the Biosecurity AfterLIFE is so important, it enables the protection of these inspiring places for future generations.”

In light of the ongoing outbreak of bird flu, conservation efforts such as AfterLIFE are vital for boosting the resilience of our vulnerable seabird populations. This work aligns with Defra’s development of an English Seabird Conservation and Recovery Plan which will assess the vulnerability of and threats to England’s seabirds and propose actions to address them, due to be published in Spring 2023.

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## [UK announces major new package of climate support at COP27](#)

- PM to launch major international climate package to deliver on the UK’s Glasgow legacy at COP27
- New announcements include £65.5m for green tech innovation and significant clean energy investments with Kenya and Egypt
- UK will also launch a new Forests and Climate Leaders’ Partnership and confirm more than £150m for protecting rainforests and natural habitats, including the Congo Basin and Amazon
- Rishi Sunak will reaffirm the UK’s steadfast commitment to supporting countries on the frontline of climate change

Prime Minister Rishi Sunak will cement the UK’s COP legacy with a series of announcements on energy transition, climate financing and forest and nature preservation, as he hands over the baton to Egypt at COP27 today [Monday 7th November].

The UK continues deliver on our key funding commitments, spending £11.6 billion on international climate finance. Recognising the existential threat climate change is already posing around the world – from catastrophic floods in Pakistan to drought in Somalia – the Government will commit to triple funding for climate adaptation as part of that budget, from £500m in 2019 to £1.5bn in 2025.

The Prime Minister will also host an event later today to launch the Forests and Climate Leaders’ Partnership. The new group, initially comprising 20 countries, will meet twice yearly to track commitments on the landmark Forests and Land Use declaration at COP26, which aims to halt and reverse

forest loss by 2030.

To support the forest agenda, the UK is committing £90m today for conservation in the Congo Basin, a vital tropical rainforest which is home to some 10,000 species of tropical plants and several endangered species, including forest elephants, chimpanzees and mountain gorillas.

The PM will also confirm £65 million in funding for the Nature, People and Climate Investment Fund, which supports indigenous and local forest communities, and new financing for Treevive, which is working to conserve and restore two million hectares of tropical forest.

As we hand over the Presidency of COP, the Government is focused in particular on partnering with the private sector to facilitate green innovation and energy transition, at home and around the world. As well as helping the drive for net zero, reducing the global demand for oil and gas cuts off the funds for Russia's brutal war machine.

In support of this, the Prime Minister will announce a further £65.5 million for the Clean Energy Innovation Facility today, which provides grants to researchers and scientists in developing countries to accelerate the development of clean technology. Since the BEIS-led fund was launched in 2019 it has supported the creation of biomass-powered refrigeration in India, prototype lithium-ion batteries in Nigeria and clean hydrogen-based fuels for steel production in Morocco, among other innovations.

Prime Minister Rishi Sunak is expected to tell COP27 later today:

The world came together in Glasgow with one last chance to create a plan that would limit global temperature rises to 1.5 degrees. The question today is: can we summon the collective will to deliver on those promises?

I believe we can. By honouring the pledges we made in Glasgow, we can turn our struggle against climate change into a global mission for new jobs and clean growth.

And we can bequeath our children a greener planet and a more prosperous future. That's a legacy we could be proud of.

As well as supporting innovation, the UK is working with G7 allies to provide countries with reliable, transparent sources of sustainable infrastructure financing. Ahead of an expected meeting later today between the Prime Minister and President Ruto, the UK and Kenya have reaffirmed their commitment to the UK-Kenya Strategic Partnership and agreed to progress a number of flagship green investment projects.

The projects include new and expanded solar and geothermal power plants in Kenya backed by British International Investment, UK export financing for Nairobi's ground-breaking Railway City and a major Public-private Partnership on the \$3 billion Grand High Falls Dam hydropower project led by UK firm GBM

Engineering.

The UK will also confirm new financial support for Egypt's flagship COP27 initiative, the 'Nexus on Food, Water and Energy'. The funding will develop projects including solar parks and energy storage innovations, and is expected to mobilise billions in private sector finance.

The Prime Minister is also expected to hold a series of bilateral meetings at COP27 today, including with French President Emmanuel Macron and Italian Prime Minister Georgia Meloni.

He will also attend a roundtable discussion focused on energy transition partnerships, and will deliver a national plenary statement later in the day setting out the UK's climate commitments.

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## [PM pledges to make UK a clean energy superpower ahead of COP27](#)

- PM to travel to Egypt to galvanise action on the climate commitments made at COP26 in Glasgow
- Rishi Sunak will pledge to speed up the transition to renewables to create new high-wage jobs, protect UK energy security and deliver on net zero
- UK to chair a high-level meeting on forests and announce new support for climate-vulnerable countries

The Prime Minister will urge countries to deliver on the Glasgow Climate Pact and set out his intention to make the UK a clean energy superpower when he travels to COP27 in Egypt today [Sunday 6th November].

The UK has already cut carbon emissions faster than any other G7 country, with renewable sources like wind and solar now making up more than 40 percent of our energy supply – a four-fold increase on a decade ago.

Addressing COP27 tomorrow, Rishi Sunak will say that in light of the shock to the energy markets caused by Russia's invasion of Ukraine, the UK will work with international allies to go further and faster to transition to cheaper, cleaner and safer sources of energy. We will only be able to ensure households and businesses have reliable, affordable fuel by solving the climate crisis and ensuring renewables are at the heart of our energy security.

There are already around 430,000 jobs in low carbon businesses and their supply chains across the country, supported by £30 billion in government support for the Green Industrial Revolution in the last 18 months. The transition to renewables will create more high wage, high skill jobs across

the UK in the industries of the future.

As the UK hands over the presidency to Egypt, Rishi Sunak will urge leaders gathering in Sharm el-Sheikh not to backslide on the promise of COP26, where countries came together to sign the landmark Glasgow Climate Pact.

The Prime Minister will hold meetings with fellow world leaders to discuss new partnerships on energy security, green technology and environmental protection, and is expected to announce further funding for conservation in threatened tropical rainforests and support for countries on the frontline of climate change.

Prime Minister Rishi Sunak said:

When the world came together in Glasgow last year, nations agreed an historic roadmap for preventing catastrophic global warming. As I travel to COP27 in Egypt today, it is more important than ever that we deliver on those pledges.

Fighting climate change is not just a moral good – is it fundamental to our future prosperity and security. Russia's invasion of Ukraine and contemptible manipulation of energy prices has only reinforced the importance of ending our dependence on fossil fuels.

We need to move further and faster to transition to renewable energy, and I will ensure the UK is at the forefront of this global movement as a clean energy superpower.

The Prime Minister is expected to chair a meeting of world leaders on forests and nature, to drive progress on the landmark pledge signed by more than 100 countries last November to halt and reverse deforestation and damaging land use by 2030.

He will also attend a roundtable on energy transition partnerships, which are utilising public and private sector funds to support low and middle-income countries like South Africa to move away from fossil fuels and grow their green economies.

UK COP President Alok Sharma is in Sharm el-Sheikh today for handover ceremony to Egypt, ahead of two weeks of intensive climate negotiations. Foreign Secretary James Cleverly will also travel to COP27 with the Prime Minister, and other ministers are expected to attend throughout the summit.

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# Gaia

Launched in 2013, Gaia's mission is to create the most accurate 3D map of the Universe to date.

Gaia orbits the Sun, at a distance of 1.5 million km beyond Earth's orbit, offering a clear view of the cosmos beyond.

You can see an [animation of how Gaia works from ESA](#).

[The third full dataset from Gaia was released in June 2022](#).

## **How does Gaia 'see' the Universe?**

Gaia has two optical telescopes that work with three science instruments, it repeatedly scans the sky to precisely determine the location of stars and their velocity.

During its five-year mission, the spacecraft spins once every six hours, sweeping the two telescopes across the entire celestial sphere. As the detectors repeatedly measure the position of each celestial object, they will detect any changes in the object's motion through space.

## **UK leading the way on Gaia's images**

The UK has major roles in the Gaia mission, both in building the spacecraft and delivering the science. UK industry won some 80 million euros of industrial contracts to build Gaia.

UK activities now centre around the data processing for the Gaia mission. These commitments are primarily in three areas: the photometric reductions, calibrating observed fluxes in broad band and low-dispersion spectra, where the developments are primarily carried out in Cambridge, and the implementation is in Cambridge; the pre-processing of the image data, where the development is done in Edinburgh and Leicester and the implementation at DPCB (Barcelona) and the processing of the data from the Radial Velocity Spectrometer, for which software developments and validation is done at Mullard Space Science Laboratory of University College London (MSSL), and implementation is at CNES (Toulouse).

Gaia will provide a huge census of the stars and the [Cambridge Gaia Data Processing Centre](#) will be the front line in processing Gaia's images, which will play an important role in the discovery of many thousands of transient stars and supernovae: these will be made immediately available to schools and the public for their participation in the research.

UK participation in the mission is funded by the UK Space Agency and scientists and engineers from around the UK have played key roles in the design and build of Gaia.

The UK Science and Technology Facilities Council (STFC) funded the early

development of the project, including the set-up of the data applications centre. STFC's current support involves the UK exploitation of the scientific data to be yielded from the mission.

## Timeline

- Launch date: 19 December 2013
- Data Release Milestone 1: 14 September 2016
- Data Release Milestone 2: 25 April 2018
- Data Release Milestone 3: Due in two stages [early partial release on 3 December 2020](#), final full release June 2022
- Data Release Milestone 4: Expected after 2025
- Data Release Milestone 5: Final data release provisionally planned for 2030

## What have we learnt?

Gaia sent back its first test images in 2014 and sent back pictures showing a dense cluster of stars in the Large Magellanic Cloud, a satellite galaxy of our Milky Way. [Read more here.](#)

The first data release was in September 2016 and the second in 2018 led to a revolution in how we understand the Milky Way. [Read more here.](#)

[Watch a visual representation of the comparison of images from the two data releases, 1 and 2.](#)

[And recently the second release data has helped scientists understand the Milky Way's warp and how it is caused.](#)

Early data release 3 (EDR3) will be a new public release of Gaia data, the first part of its third release, based on the 34 months of mission data. It will cover [astrometric data \(positions, proper motions, parallaxes\) and photometric data \(magnitudes, colours\) for around 1.8 billion stars.](#)

## Additional Info