

Wildlife Conservation and Sustainability Society Newsletter

February 2021 Issue

IN FOCUS: WHOOPING CRANES

Read about how conservation efforts have saved this majestic bird!

MAKING A VISUAL IMPACT!

In this issue we explore how we can use photography and social media in the fight against Climate change

Editor's Welcome



Welcome to the Wildlife Conservation and Sustainability Society's newsletter. Thank you so much for taking the time to care about our planet. We are a team of Lower Sixth students who are passionate about conserving our planet and combating the climate crisis on both an international and local level. Our generation will be key to making or breaking our planet's future, and we hope that you will join us in starting today to make a difference, however small. If we all make one small change, together we can make a global impact on our futures.

This issue will look at the importance of communication skills in conservation work, it is essential that people with these skills get involved in conservation, scientists alone cannot secure our planet's future. Increasingly social media is becoming more important, and a key medium used is photographs. Climate and wildlife photography is imperative to help explain the problems and how we can fix them and engage people in Conservation. You can also find the winners to our Christmas photo competition too!

The first way to take a step towards a positive change is to educate yourself on the issues, reading our Newsletter is the first especially important step to halting the tide of extinction sweeping across the globe. The belief that extinction is a foreign problem is a widely held belief, although untrue, the State of Nature Report in 2019, which looked at UK species proved this yet again. If you are interested in conserving UK wildlife, please see how you can do more research and take action at the end of this issue, or get in touch with your ideas by email to r.eslick@kingshighwarwick.co.uk

Keep an eye on your emails for details on our next speaker and how we are going to mark *World Wildlife Day* in March. Thanks for reading!

Rachel

Editor

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Image from [World Wildlife Day \(3 March\)](https://www.worldwildlife.org/news/detail/10-ways-to-celebrate-world-wildlife-day)

In Focus: Whooping Crane

Latin Name: Grus Americana

Wingspan: 7+ feet wide

Height: Averaging 5 feet tall

Life Expectancy (in the wild): 22-24 years

Population: 600

Conservation Status: Endangered (population increasing)

Found In: Canada during the summer, Texas



These gorgeous birds are the tallest birds in North America, standing at an impressive 4.9 feet, with a 7.5-foot wingspan. They live in family groups around marshes, shallow lakes and lagoons. They forage for food, using their bills to catch plants, shellfish, insects, fish and frogs.

A Conservation Success!

This majestic bird is a brilliant example of what conservation work can do.

In 1941 there was a small population of only 21 birds left, 15 migrating between Canada and Texas while the other 6 lived year-long in Louisiana. This small group in Louisiana died out. However, due to intense conservation efforts, the population of just 15 birds has swelled to an incredible 600.

What caused the decline?

The population's decline began with the arrival of hunting which reduced their numbers and agricultural which destroyed their breeding grounds.

How was the Crane saved from Extinction?

The birds benefitted from the Migratory Bird Breeding act of 1916, finding additional security when in 1932 and 1937, Canada's Wood Buffalo National Park and the Texas Arkansas National Wildlife Refuge were established. In 1967 the Canadian Wildlife Service and the U.S. Fish and Wildlife Service began captive breeding programs and reintroduction efforts. Since then, the population has increased, much to the relief of conservationists.

However, there are still risks to the birds' continued survival, such as power line collisions, severe weather on the Gulf Coast, contaminant spills from barges, and sometimes being shot by hunters mistaking them for Sandhill Cranes, or even intentionally by some.

To maintain these birds' habitats, we must utilise water control, restricting tree and shrub encroachment, and human disturbance and maintaining the agricultural fields as the crane's food sources.

The continued survival of this gorgeous bird relies on our continued conservation efforts.

Visit National Geographic for further information on the conservation of endangered species such as the whooping crane.

Madeleine Critchlow

Social Media & Wildlife Interaction



Emma Doyle, who works to develop sustainable tourism, spoke to us live from Australia, about her innovative study into the interaction with wildlife at various key tourist sites in the Caribbean, to help inform any changes the operators should make for the welfare of the animals, whilst also boosting tourism. This research is particularly interesting as it used social media posts to analyse visitor interaction with wildlife in MPAs (Marine Protected Areas).

Emma challenged us to think about which tourist sites we should visit on holiday and how we can use selfies & social media responsibly to promote the value of wildlife without putting it at risk.

Emma's team evaluated the impact on iguanas, turtles, nurse sharks and swimming pigs, using a set of codes for best and poor practices based on criteria like proximity of animals and humans, different types of physical contact with animals and feeding the animals. (see table)

The study identified geographic areas where wildlife tourism occurs, and identified relevant hashtags and social media accounts for the operators. They then reviewed about 1000 posts of the species of interest and assigned codes.

The study found that charismatic and iconic species such as turtles showed only 16% of photos with best practices, with many tour operators posting photos of poor practice such as feeding or touching the turtles, which encourages visitors to continue with these practices, despite their negative effects.



Swimming Pigs were treated similarly to turtles, with only 16% of posts showing best practice, which becomes more concerning when poor practices with pigs are also used in interactions with native species, increasing the negative impact of these practices.

With iguanas, 45% of visitor posts show best practice, and only 33% of tour operator posts.

This is encouraging, and suggests that tour operators do not need to offer experiences such as feeding for tourists to enjoy seeing iguanas.



Nurse sharks were treated either well or very poorly with 47% of posts showing best practice, although 19% of posts showed touching, the highest of any species, suggesting that educational action with both tourists and tour operators would be beneficial.

This study was fed back to operators to encourage them to adopt better practices. We too can make sure we are not contributing to poor practices on our own holidays.

What can you do?

If you want to contribute to sustainable wildlife tourism, then before you select a place to visit and an operator to do a tour with, you could review the images promoted by that operator and check what other visitors post, then apply a similar approach to Emma's study.

How many images show best practices?

How many show poor practices?

Should we support them or find another operator that we are more comfortable with?

Then select an operator who seems to be the most responsible. Then make sure that you do the right thing and treat the animals and environment with respect, and lead by example and post responsible images.

Emma reminded us the world of Conservation needs not only scientists but also great communicators, and social media is an immensely powerful communication tool for Conservation messages.

Rachel Eslick

Wildlife Tourism Coding System

Best practice (No 1) to worst practice (No 16)

1. Image of animal(s) with no people posing in same image
2. People/person inside boat/wharf with animals outside and no feeding or touching
3. People/person with animal at distance more than one metre
4. People/person with animal less than one metre (arm's length)
5. Children at distance less than one metre from animals
6. Touching any part of animal
7. Chasing animal
8. Restraining, holding, lifting, riding animal
9. Animal out of its natural setting (on boat, wharf)
10. People in a group surrounding animal
11. Active feeding of animals
12. Food for animals visible in image
13. Feeding alcohol to animal
14. Aggression displayed by animal
15. Human injury attributed to animal
16. Sick or injured animal

You can follow Emma on Instagram
[@MPAConnect Caribbean](https://www.instagram.com/MPAConnect_Caribbean)

Visualising Climate Change



'Climate visuals' are the imagery used to convey the extent of Climate Change, studying the impacts and causes. I am studying these for my EPQ and wanted to share with you 4 core elements I have discovered to consider when taking climate photography:

1. Be honest and connect with real people rather than a staged photograph

Authentic photos are seen to have a greater impact on an individual than staged photographs perceived as "gimmicky" and a false representation. Truthful and raw photographs without physical or digital manipulation allows the viewer to develop a personal connection to the everyday scenes shown. The media is a fundamental part to visualise the effects of Climate Change – "they have a pivotal role in building public engagement, both now, and in the future." It is crucial to rely on realistic Climate visuals to have a widespread revolution.

2. Engage with the audience to show a new story

Classic photographs of Climate Change including polar bears, pollution and the Amazon rainforest are shown to have poor engagement with the audience, even prompting "cynicism and fatigue". People become numb to these photographs. It "acts as a close down" to Climate visuals however encouraging the individual to understand a new story from less familiar photographs provokes thought. Dynamic and even novelty photographs help engagement.

3. Display Climate Change causes on a large scale

Presenting the physical extent of Climate Change impacts helps viewers to understand how people's daily habits can become such a problem. For example, meat-eating may not be recognisable as a cause of Climate Change and can aggravate defensive reactions. One survey concluded that "many participants were confused by the meat-eating image and asked what it had to do with climate change".

Communicating the issue arising from individual's behaviour on a large scale can be more effective at promoting change. This can be showing 100 livestock fields rather than one cow.

4. Show local images that are emotionally powerful

Images of polar bears and rainforests create a sense of psychological and geographical distance therefore it can be hard for individuals to establish emotional connection and on a personal level. Photographs that convey a sense of responsibility can be effective at receiving people's attention but could also be overwhelming. Local images help the viewer realise the climate crisis is all around us; it is caused by and effects our day-to-day life.

Laura Wiley

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Photographers making an impact



Jim Reed is an award-winning photographer and filmmaker who focuses on extreme weather.

In his collection of photographs, he focuses on taking insightful photographs where the reader needs to consider and think about them deeply. To some people they may not always be obvious that they relate to climate change.

Threat to Water Supply



Impact of international travel



He began documenting climate change and its impacts on the US in 1991 and in 2020 he marked the 29th consecutive year of photographing tornadoes, blizzards, floods, drought, and hurricanes. Jim's work has been published in 'National Geographic', 'The New York Times', 'The Guardian' and many more.

Climate Change affecting travel

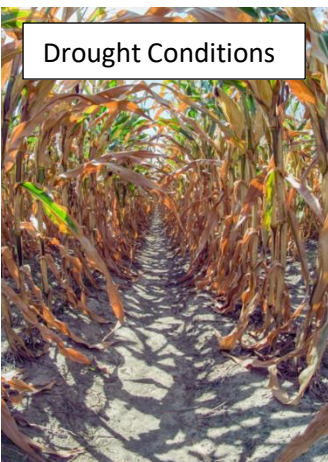


Severe Weather



He was brought up in Illinois and has a BFA in creative arts from the University of Southern California in Los Angeles. At the age of 16 he first started documenting severe weather, and used to focus more on writing rather than photography but still remains a documentarian and *"believes his journalistic insight contributes to his photographic projects"*.

Drought Conditions



American 'Photo' magazine said,

"Jim Reed is clearly more than a great storm chaser who risks his life to create iconic images of extreme weather. He is a heartfelt environmentalist whose real mission is to encourage us all to adapt a more healthful and prudent lifestyle in dealing with this era of increasing weather challenges".

Impact on Agriculture



Toby Smith is a photographer who examines our world and works on projects related to landscape, environment, industry and science.

Throughout his work, Toby looks at traditional photography and video techniques that are tailored to the specific objective, story and audience. “He moves between large format photography for exhibition and print, full production video for broadcast and also Ultra HD Time Lapse or animation for web and new-media usage.”

He is currently covering every mile of the controversial HS2 London to Birmingham track, which passes close to Leamington Spa, looking at the effects of this new High-Speed Railway on habitats, people and places. There have been large areas of destruction in the English countryside, meaning that the environmental impacts of HS2 are substantial. Smith’s photographs of every mile look at where the track is going and how this is going to affect the area. He is approaching it from a neutral position and considers both sides of the argument and attempt to balance the expenditure and demolition of habitat and buildings with the positive economic and infrastructural benefits offered and contribute the public debate on HS2.

<https://www.tobysmith.com/project/high-speed-2-overview/>



Power Stations in the UK – ‘Light after dark’

This photograph was in Didcot, where the carbon emissions are seen being released during the night, contributing to the devastating impacts of the climate crisis. There is dramatic contrast between the crops (in the dark) that surround the power station and the light/ visual pollution of the cooling towers.

Madagascar – Illegal Sapphire Mining

Toby travelled to Madagascar to explore the illegal deforestation of the North-East, extracting Rosewood and Ebony to sell. He investigates the illegal timber trade that is hidden within the ship containers.

The mountains in the background of this photo introduces depth, and makes the viewer focus on the middle ground – the ship containers. The boy standing on the containers reminds us of the realities of this industry and the huge consequences that come from illegal logging and activity in the forests.

<https://www.tobysmith.com/project/madagascar-bois-de-rose/>



‘New Energy Pioneers’ - China

This photograph is part of the project based in China, looking at ‘new energy pioneers’ and their use of wind farms. The huge wind propeller shown across the landscape is dramatic and contrasts with the bare, snowy land that you can see behind it. It gives scale on how overwhelmingly large the wind farms are but gives us hope for the new energy schemes to steer us off fossil fuels.

Toby has a Masters in Contemporary Photography from London College of Communication in 2008. He spent time in the British Army Infantry and worked in Africa for 2 years, focusing on his degree in Environmental Science. Now, he is an Associate Scholar of the University of Cambridge Conservation Research Institute and works with the Cambridge Conservation Initiative and the Department of Geography.

Currently, he has work exhibited internationally and for editorial clients including National Geographic, The Sunday Times Magazine, TIME, Guardian. He is also working on long term projects – “a study of hydroelectricity and landscape in Scotland, renewable energy technology across China and India and illegal logging and mining in Madagascar.”

Laura Wiley

Wildlife Monitoring



It is now more important than ever to monitor the health of nature, we cannot act to prevent species decline without the knowledge of population numbers. Constant monitoring of populations and species' ranges allows action to be taken to halt damage to the natural world, the health of the UK's nature is outlined every three years in the State of Nature Report. The most recent report in 2019 highlighted key issues to be tackled.

The 2019 State of Nature report paints a bleak picture for UK wildlife, with 15% of species threatened with extinction, and 133/8431 assessed species already extinct. Since 1970 41% of species' populations have decreased, and 27% of species' ranges have shrunk. This is not to say that no good has come in recent years, since 1970 26% of populations have increased and 21% of species' ranges have expanded. Without the constant monitoring of populations and locations, there would be no such data available, and conservation efforts would be blinded, successes unknown.

Climate change has itself been a major contributor to the changing ecosystems, directly causing a 48% moth decline and 60% aphid increase. It has also indirectly caused a huge decrease of 70% in kittiwake populations as their key food source, sand eels, has been adversely affected by the changing nature of our oceans. Migratory birds such as swallows are arriving two weeks earlier than during the 1960s, and many bird species are breeding and laying earlier. Not all of the effects of climate change are inherently negative, although human impact on climate change, speeding any natural changes that may occur, does not give nature enough time to keep up and adapt in time.

Human impacts themselves have a huge direct impact of our wildlife every day. 72% of UK land is used for agriculture, leaving only 13% of land taken up by woodlands, and of this only 40% is sustainably managed, leaving wildlife at great risk should any changes have adverse effects, with little scope for numbers to recover without human intervention. Between 2006 and 2018 1600 miles of road was built, further fragmenting precious habitat, and reducing our wildlife's ability to recover from any decrease in population.

The lack of sustainable practices within the use of nature threatens the very existence of these industries. Only 50% of UK fisheries are managed sustainably, and 57% of UK seafloor habitats have been disturbed by bottom contact fishing 2010-2015. This threatens to reduce fish populations, reducing catches and jobs in the fishing industry as well as the availability of fish in shops. 18% of UK fish stocks' status is unknown, due to the lack of monitoring, leading to blindness about whether action is required urgently.

However, support for conservation efforts is on the rise, with time donated by volunteers up 46% since 2000, this time is valued at £20.5 million each year, such support is invaluable to local conservation efforts. Individuals are starting to form the backbone of wildlife monitoring with 18,700 involved in structured monitoring schemes focussed on bats, birds, butterflies and plants alone. 70,000 volunteers regularly submit records to National Recording Schemes or to Local Environmental Records Centres.

What can you do to help?

Everyone can contribute to this, January's Big Garden Birdwatch was just one of the many opportunities to provide vital data to conservation groups. Year-round there are many ways to get involved, including using apps such as Mammal Mapper.

This app is vital to monitoring of UK mammals, as many are very poorly monitored, and absences are not able to be noticed. So, download it from <https://www.mammal.org.uk/volunteering/mammal-mapper/> Each time you go on a walk, or a drive, and you see a mammal, make a report on the app, and help with efforts to identify mammals under threat.

This is just one of the many ways to get involved with safeguarding the future of our Wildlife, and we urge you to do what you can to protect nature's future.

Rachel Eslick



NEW Mammal Mapper

Surveying the UK's mammal populations



TAKE ACTION!



What can you do as individuals to help combat this climate crisis currently facing our planet?

- 1) Download 'mammal mapper' and help monitor wildlife
- 2) Talk to your parents about where to visit on holiday and find responsible wildlife experiences
- 3) Think about how you can communicate the impact of 'Climate change' through photographs or social media and start to raise awareness and enter a competition (see below)
- 4) Sign up and come to our next talk or get involved in World Wildlife Day (keep an eye on your emails!)
- 5) Make or buy a reusable mask instead of using a disposable one
- 6) Listen to or watch a conservation programme and follow their suggestions
 - Wildlife Podcasts – find lots of ideas here: bit.ly/wildlifepodcasts
 - David Attenborough: Perfect Planet (BBC)
 - Wild Amazon (All 4)
 - Penguins: Meet the Family – Liz Bonnin explores all species of penguins! (BBC)
 - [Climate Change Talks in 2021 by the Science Museum](#)
- 7) Do an online Conservation course – National Geographic have a set of free courses you can [sign up to now!](#)
- 8) Join a local wildlife group
- 9) Find out more and improve your knowledge by reading new reports:
 - [State of Nature - 2019 Report by RSPB](#)
 - [Biodiversity 2020: A Strategy for England's Wildlife and Ecosystems](#)



Upcoming Events & Information

World Wildlife Day – 3rd March 2021 – more info to follow!



New Speaker - We will be hosting a new speaker after Easter, when we will hopefully all be back in school – keep an eye on your emails for more details!

Competition Time! Why not enter a photography or art competition?

- Online Photo Competition with 'Photocrowd' – Check them out for on-going competitions, next one is on 'Nature' and closes on 21st March 2021 <https://www.photocrowd.com/photo-competitions>
- Youth Landscape Photographer of the year – win £1,000 – deadline 14th April 2021 <https://www.lpoty.co.uk/competition/youth>
- Are you a painter? Find out more about this Fish Art competition – closing date 31/3/21 <https://www.wildlifeforever.org/home/state-fish-art>

Competition Winners

We had some amazing entries to our competition to take a wildlife or natural world photograph over the Christmas holidays. Thank you to everyone who entered. We are thrilled to now announce the winners!

Natural World Winners

For the natural world competition, we have chosen Rosamund Heath with her fabulous macro image of a frosted nettle as the winner and Gabrielle Shearer with her striking photo of a lone tree at sunset as the runner up.



Rosamund Heath



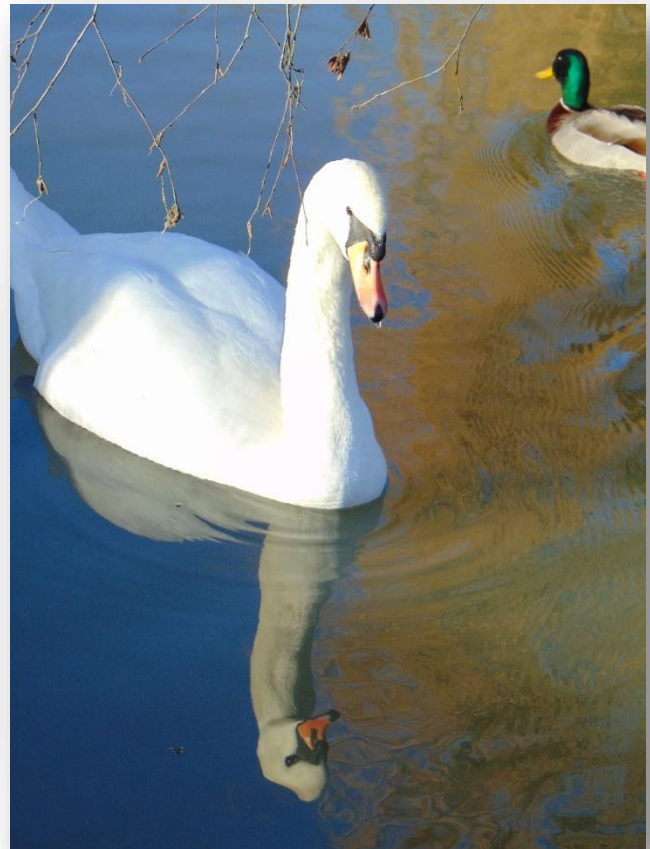
Gabrielle Shearer

Wildlife Competition

For the wildlife competition, we have chosen Rosetta McFall and her beautiful photo of a swan with its mirror image on a lake as the winner, and Ms Mills' image of a goldeneye duck as the runner up.



Ms Mills



Rosetta McFall

Do keep taking photographs of nature and wildlife! Or why not take a photo to represent Climate Change as explored in this issue? Or enter a competition. We would love to see them and will try and feature some of them in future issues.