



A BIRD'S EYE OF THE STORM

The severe weather the UK endured this winter had an obvious effect on people and property, but it also had a major impact on our birds

WORDS BY CATH HARRIS

Roger Tidman (FLPA - Images of Nature)

IMAGINE YOU'RE A SWIFT. You master the skies searching the air for food, your harvest no more bountiful than at the head of a storm. There, as low pressure sets in, air is forced higher, carrying with it millions of invertebrates. You take full advantage, doing so again as the tempest moves on. Dodging its cruel impact may have taken two days and your round trip 1,200 miles, but you are sated and your young, adapted to long waits, will soon be well fed. Now imagine you're a thrush, or a chat or even a Ruby-crowned Kinglet. You lack the skill and strength to use the weather and need land to rest and feed. The winds were kind when you left on migration but conditions deteriorated as you crossed the ocean. An oil rig or fishing boat might offer respite, but the chances of finding food are

remote. And, who knows, a hungry raptor may have been caught in the turmoil and be alongside. You face a desperate choice.

Storms. They bring devastation and human tragedy but what do they do to birds? Where do birds go; can they find food? Are nesting sites still intact and what of migrants blown off course? Do they survive when the stir of birdwatchers moves on?

The St Jude's Day storm, last October, reminded us of what severe weather can do. Four people died and property and power lines were damaged as high winds swept from south-west England to East Anglia. The Great Storm of 1987, our worst for almost three centuries, stole 18 lives and caused even more damage. Six of the seven famous oaks in Sevenoaks toppled and 15 million mature trees fell elsewhere. But, for nature, the storm was "not a bad

ABOVE:
Cley was one of many Norfolk coastal sites to be hit hard by this winter's storms and tidal surges

RIGHT:
The great storm of 1987 actually created habitat for Nightjars

thing at all," says Tony Whitbread of the Sussex Wildlife Trust. "For the semi-natural woods of the south-east, it was a major boost to woodlands and their wildlife."

When a tree falls, gaps open in the canopy, allowing in extra light. Wildflowers grow in the new spaces drawing butterflies and other invertebrates. Deadwood on the ground (which holds carbon) lures Stag Beetles, woodlice and centipedes, attracting Treecreepers and Redstarts. Warblers and Nightingales find new foraging and nesting sites and fungi flourish on the extra recycling they now have to do. "Storms are an engine to woodland ecology, driving its ecological diversity," Whitbread says.

The Forestry Commission confirms Whitbread's view. The 1987 storm "engendered a keen interest in the role and importance of deadwood in



forest ecosystems,” its post-storm report concluded. FC Ecologist Jonathan Spencer added: “The combination of insects, fungi and rain produced water-filled rot holes which provided breeding places for numerous flies and beetles.” Noctule Bats had more roosting holes and birds found new sources of food in altered habitats. Uprturned roots and logs became “plucking sites” for Goshawk and other raptors. In Suffolk, Blackcap, Chiffchaff and Willow Warbler numbers increased after the 1987 storm, most significantly in the worst affected woodlands. The felling of pine trees by high winds cleared other sites, creating habitats for Nightjars and Wood Larks whose numbers there doubled in five years.

But, while storms can create habitats, can they also destroy them and the food sources within? ➡➡



Derek Middleton (FPA - Images of Nature)



S & D & K Maslowski (FLPA - Images of Nature)

Last year was a mast year – a bumper season for fruit and seed-bearing vegetation. St Jude had little impact on the bonanza, with many trees still laden after the storm – good news for Blackbirds and thrushes. The amount of fruit lasting through a winter can be invaluable for some birds, the BTO's Paul Stancliffe says. "Redwings and Fieldfares can survive in the UK by feeding on berries, but if fruit is blown to the ground it deteriorates very quickly. Birds must soon move on or perish."

Among birds intent on moving on are those on migration caught in bad weather. Only the lucky ones find land, often our east coast. The RSPB's Grahame Madge recalls a "classic fall" 11 years ago of Redstarts, thrushes and chats, thought to have been blown off course. "The bushes were dripping with them. Prevailing winds had probably changed and forced them to ground."

Similar landings of Blackbirds were seen last autumn and in November 2012, when thousands of thrushes en route from Scandinavia suddenly appeared on the east coast. Fog is thought to have been the main cause

then, claiming the lives of many other birds which fell into the sea, disorientated and exhausted. "It's fair to assume that weather conditions account for huge mortality," Madge adds. "But I don't think there is evidence that [these incidents] are a real conservation issue. Birds head for cover when they land and look for a food source. But we know little of what they do next."

Most weather comes from the west, so European migrants will be blown eastwards and will still be over land. Those same winds, however, propel North American migrants away from their continent. A Ruby-crowned Kinglet, larger but closely resembling our Goldcrest, was among the transatlantic rarities here last autumn. "It's the waifs and strays that point to how much displacement there has been," Madge says.

Stray seabirds are occasionally seen in the UK,

A Ruby-crowned Kinglet was blown across the Atlantic from the USA in autumn 2013

Strong winds can blow fruit from trees – which would be bad news for Blackbirds

too. "They really struggle to find food in choppy seas and often end up here exhausted, or washed up on the coast," says the RSPB's Richard Jones. Auks, shearwaters and Gannets are among birds recently stranded in bad weather. "We do see 'seabird wrecks', when large numbers die because they can't find food in strong winds. This happens most years to varying degrees."

A Little Auk was among casualties reported in 1995 after being found dead in a swimming pool at RSPB headquarters in Sandy. "To have got that far inland is very unusual and unless they find a reservoir with plenty of fish they will really struggle," Jones adds. "Many feed on Sandeels at sea and might eat eels or other freshwater fish instead."

But the problem will be recognising what is food and getting access to it in a different habitat."

Whether stranded seabirds find their way back is largely unknown, but researcher Bryan Watts of the College of William & Mary in Virginia, US, says birds in general have "tremendous situational awareness". ➔

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Wildlife GMBH (Alamy)



After tracking migrating Whimbrels through Hurricane Irene in 2011 he told the *New York Times* that birds “have an amazing ability to compensate for being pushed off track”. A separate US study followed migrating Gannets in 2012, to help assess where offshore windfarms might do least damage. The Gannets’ arrival along the New Jersey coast coincided with that of Hurricane Sandy. One bird promptly completed a U-turn, sheltering and feeding along the continental shelf until the storm had passed. “Migration is finding some way to deal with a changing regime of temperature and food availability,” Gary Langham of the National Audubon Society told the newspaper. In other words, birds just try to adapt.

Habitats cannot adapt so readily and those near coasts can be vulnerable.

St Jude was relatively gentle with RSPB Minsmere in Suffolk, but the double storm surge last December was not. Storm surges – when walls of water are forced ashore – occur when northerly winds coincide with high tide.

Minsmere’s Ian Barthorpe says tidal surges are “one of the biggest

threats to freshwater habitats.”

Bitterns, Marsh Harriers, Otters and Water Voles are among the species using the reserve’s freshwater reedbeds. These areas recover from small breaches, but over time they will lose their value as they become more saline. The Environment Agency will maintain a wall protecting reedbeds and a scrape until compensatory reedbeds are created elsewhere.

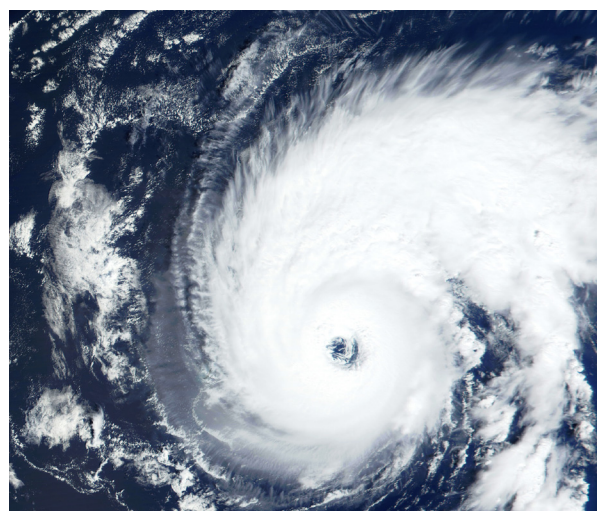
Wetland birds caught in storms over Minsmere head out to sea or

sit on the scrape, while smaller birds, such as Bearded Tits, shelter in reedbeds. Raptors don’t have that option but also prefer assistance when they take to the wing, Madge says. “They like to migrate early when there’s still sufficient warmth to create thermals.”

Madge recalls a trip to Malta when bad weather kept most birds of prey out of sight. “On the last day conditions improved and it was as if someone had opened a curtain. Honey Buzzards, kites and harriers were all piling through.”

Other large migrants react similarly to poor conditions – about 2,000 Bewick’s Swans were waylaid in the Netherlands by St Jude, the

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ABOVE:
Studies have
shown
Hudsonian
Whimbrels are
able to readjust
after being
blown off course
by hurricanes

WWT reported.

Weather-induced delays such as these are short-term. Longer-term, storms enable the Swift to feast and bring benefits that woodland managers would struggle to replicate. At a Hampshire woodland, author Richard Mabey said the Great Storm had sent seedlings “shooting up clean through the wreckage. It was not tidy or ‘well managed’ but it was triumphantly alive.” [EW](#)



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