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Environment Endangered species

## Starving guillemots push rival chicks off cliffs

Ian Sample, science correspondent  
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Article history



Guillemots normally guard lone chicks if the parents are both foraging. Photograph: Murdo Macleod

Guillemots have begun killing their neighbours' chicks by death and pushing them off cliff edges in a desperate race to collapse fish stocks in the North Sea.

The sudden rise of infanticide in a colony in the Firth of Forth is an unprecedented breakdown in the social behaviour of the birds, experts say. It is a "catastrophe" that could eventually see the birds die out.

Guillemots are among the toughest of Britain's native birds. They are able to form vast huddles to protect themselves from predators. Guillemots guard their eggs and chicks. Mating pairs rear only one chick while the other parent takes turns to mind the young while the other parent forages.

Biologists at the Centre for Ecology and Hydrology, near Exeter, have been monitoring a colony of 20,000 guillemots on the Isle of May since 1983 and have recorded a long-term decline in the weight and the number of chicks they raise each year. In 2005, the number of chicks had become so scarce that both parents were forced to leave their chicks to fend for themselves at the same time, leaving their chicks to fend for themselves.

Before 2005, chicks left alone were often looked after by their parents returned, but video footage taken last year by Kate Ashbrook, of Leeds University, showed lone chicks were being attacked and even pushed off the cliff edge on to the sea.

"When the chicks are unattended, they wander off to find food from a neighbour, and that's when they end up being attacked," she said.

It is extremely rare for guillemots to leave a chick unattended. Ashbrook said 60% of those in the Isle of May colony were unattended last year. Of 99 chicks born between late May and early August, almost 70% of them in direct attacks by neighbours.

Tim Birkhead, of Sheffield University, who has studied guillemots for over 30 years, said: "It is one of the most extraordinary things I have ever heard about and it really flags up that something monumental is happening out at sea."

He added: "All one can do is watch in despair as this catastrophe unfolds."

BBC NEWS

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## Seabird chicks 'killed off'

Food shortages have forced Scotland's seabirds to attack and kill chicks from neighbouring nests, experts have found.

Leeds University researchers said young guillemots on the Isle of May colony, in the Firth of Forth, had been pecked to death or thrown off cliff edges.

The study revealed that adult guillemots were having to spend so much time foraging that parents were leaving chicks unattended.

In the past attacks on chicks were extremely rare, said the researchers.

In July, the RSPB warned that the poor breeding was giving cause for "serious concern".

It said guillemot eggs had been left abandoned and birds spent more time at sea in a search for food.

However, the latest study suggested that the parents when chicks are successfully hatched.

Adult guillemots were having to leave their chicks unattended, putting them at risk from exposure to the elements.

But many more died because of attacks from birds raising their own chicks on neighbouring nest sites, according to the study.

The scientists said the birds were stressed, hungry and determined to stop other chicks from receiving food.

The findings have been published online in the journal *Biological Letters*.

The experts said it indicated that social harmony in long-established colonies, could break down if conditions are for example if the prospect of starvation looms.

Kate Ashbrook, author of the study, said: "The attacks usually involved more than one adult as chicks from neighbouring nests were attacked."

"More than two thirds of all documented chick deaths were caused by attacks from neighbouring nests."

"Yet this particular colony has been monitored for over 25 years and in that time chick attacks have been very rare."

### 'Hungry neighbour'

Guillemots rear only one chick during the breeding season from April to July.

Because the young birds are vulnerable to attacks, parents rarely leave them unattended and take turns to guard them.

However, a decline in prey in recent years has led to parents being forced to search for food at the same time.

The researchers witnessed almost half of all chick deaths during the day.

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HOME > EARTH

## Infanticide rife in guillemot colony

By Louise Gray, Environment Correspondent

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Where am I? > Home > News > Science

From The Times  
September 17, 2008

## When food is short, guillemots attack next door



The guillemots breed on cliff ledges

Mark Henderson, Science Editor

RECOMMEND?

The common guillemot is among Britain's most loved seabirds, crowding into densely packed cliff-top colonies that seem to be models of social cooperation.

But these breeding grounds, in which thousands of pairs gather to mate, have been revealed as an unlikely example of "nature red in tooth and claw", after research showed that they are rife with infanticide.

Scientists studying a colony of about 20,000 guillemot pairs on the Isle of May in the mouth of the Firth of Forth have found that when food is scarce the seabirds frequently attack and kill the chicks of other pairs when they are left unattended.

Though the birds do not eat the fledglings that they peck to death, it is thought that this violence is a result of increased competition for limited resources.

"The attacks were brutal and usually involved more than one adult as chicks fled from the initial attacking neighbour," said Kate Ashbrook, of the University of Leeds, who led the study.

The Isle of May is a small, rocky outcrop about 1.2 miles (2km) long and 440 yards wide. The nature reserve is home to thousands of seabirds, including razorbills, black-legged kittiwakes, European shags, Atlantic puffins, herring gulls and lesser black-backed gulls, as well as common guillemots.

The guillemots breed on cliff ledges, where they pack so closely together that adults are often touching one another. They lay a single egg that hatches directly on to the bare rock.

In normal breeding seasons, which run from April to July, one member of each pair forages for food while the other stays with the chick for warmth and protection from predatory gulls. While aggression between adults is common, it is rare for adults to attack chicks – at least, that is, when one parent is present.

When food is short, however, both parents often leave to fish for sand-eels at the same time. When this happens – as in last year's breeding season studied by Ms Ashbrook – the result is carnage.

Search for food

Guillemot is increasingly attacking and killing chicks from neighbouring nests due to food shortages, researchers say.

Guillemot survival in site 'empty'

Such attacks with chicks being pecked to death or thrown off cliff edges, researchers at the University of Leeds said.

Over 60 per cent of chicks died and 69 per cent of deaths were due to attacks on chicks.

Journal *Biology Letters*, suggest that the attacks were a relatively new phenomenon in the Firth of Forth, Scotland.

More than one adult as chicks from neighbouring nests were attacked, which have decline in some areas.

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- EARTH
- ENVIRONMENT
- GENETICS
- LIVING
- MEDICINE
- PHYSICS
- POLITICS
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# Size doesn't always matter

Working with PhD student Kate Ashbrook we developed a story which secured multiple national newspaper, TV and radio station hits, proving that it's not just the big projects that grab the media's attention. We briefed and supported Kate – who had no prior experience of dealing with the media – to handle the huge influx of interview requests like a pro, including a live interview on the BBC's 6 o'clock news bulletin.