SPECIES FOCUS

Starling murmuration. **Photo:** Edward Delaney

Sociable Starlings

Olivia Crowe uncovers some of the facts about Starlings in Ireland and overseas

"Late one afternoon in October I hear them for the first time: loud-voiced palavering, whistles, murmurs, quarrels, bickering and warbling, croaking and chatter in the high plane trees of the street."

This description, from *The Starlings* by Jesper Svenbro, paints an apt picture that many can relate to. Starlings are highly gregarious, occurring in a variety of habitats where they feed on insects, grubs and plant matter.

They are perhaps best known for their incessant chattering, usually perched on a roof or TV aerial with wings flicking intermittently and raised throat hackles...this charismatic bird has woken up many on a summer's morning.

The Starling is more than just an urban bird – it is traditionally a farmland bird, common in open country and widespread in almost all habitats, inland and coastal. Starlings were recorded in almost all 10-km squares in Ireland during the last breeding and wintering atlas surveys – few birds are that ubiquitous.

Starlings are not often portrayed in an attractive light: short, stocky and dark with light speckles, they look like chocolate that's been left out for a few days. Their winter plumage is black with pale tips to the feathers, giving them a spotted appearance. But they are vastly improved by the spring: by then, the pale tips to their feathers have been abraded, leaving blackish feathers with a strong iridescent green and purple sheen. It seems they've moulted and have fresh plumage, but in fact they haven't – not yet. Globally, Starlings are widespread throughout the northern hemisphere, found throughout Europe, North Africa, India and as far east as northwest China. Interestingly, the species is absent from most of Iberia and the Mediterranean where it is replaced by its close relative, the Spotless Starling.

The Starling has become well established wherever it was introduced, and its distribution now spans most of North America, Australia, New Zealand and South Africa. Shakespeare bears the brunt of the blame for the North American introduction – back in the late 1800s the American Acclimatisation Society proposed the introduction of all species mentioned in Shakespeare's scripts, and some hundred or so birds were introduced; by the mid-1950s their range extended from coast to coast. Starlings were introduced to Australia and New Zealand around the same time, in the hope that they might destroy insect pests.

Conservation

The Starling's Latin name, *Sturnis vulgaris*, may imply vulgar; but *vulgaris* actually stems from the word *vulgus*, meaning "the multitude" or "the masses." Indeed Starlings are highly gregarious and they occur throughout Ireland; we have estimated that somewhere in the region of three million occur here – that's our eighth-most abundant breeding passerine. Interestingly, the recently published *Bird Atlas 2007-2011* illustrated that densities here in Ireland are higher than in Britain (see map).

Bird Atlas 2007-2011 also illustrated a striking

pattern of change in relative abundance when compared with the last atlas, 20 years previously. It showed that, on balance, numbers have increased throughout Ireland, in contrast to a decline throughout Britain, especially southern Britain.

Contrary to these apparently favourable patterns for Ireland, our Starling numbers have been on the downturn more recently. Our **Countryside Bird Survey**, which has been monitoring the status of common and widespread breeding birds since 1990, has shown a shallow, yet significant, decline in numbers,







Starling breeding abundance change 1988-91 to 2008-11. Note how Starling has increased in Ireland but declined in Britain. **Source:** *Bird Atlas 2007-11,* courtesy of BTO.

which are falling by around 1% per year. Indeed, this chattering trickster is declining throughout western Europe, with a fall of 58% between 1980 and 2012. The reasons are not clear.

Henning Heldbjerg, head of Science and Monitoring at Dansk Ornitologisk Forening (BirdLife Denmark), is about to embark on research to answer that question. "We see a huge decline all over western Europe but an increase in eastern Europe, and why is it so? I believe it is related to changes in pasture land and the number of grazing cattle," she said.

Despite the fact that their numbers are in decline, our **Winter Garden Bird Survey** has demonstrated the increasing importance of our gardens – there has been a steady increase in the proportion of Irish gardens supporting Starlings, from around 71% of gardens in 1994/95 to 82% last winter.

BirdWatch Ireland's Oran O'Sullivan, who reports on the survey annually (see also page 21), said Starlings consistently ranked in the top 20 most widespread birds in Ireland and ranked 13th in the survey last winter:

"On top of that, the overall numbers in Irish gardens have also increased, from an average of three per garden to five, over the same period. But numbers vary quite a lot from year to year. For example, the average peaked at almost eight birds per garden during the cold winter of 2010/11, reflecting their need for supplementary food supplies," he said.

Chattering tomfoolery

Starlings are highly vocal and have long been known for their ability as mimics. They have been kept as pets since the time of the ancient Romans, often for their extraordinary singing capabilities, and there was a claim that Starlings had been taught to speak Latin and Greek and could verse entire sentences. Shakespeare noted the mimicking ability of Starlings while writing *Henry IV* – "Nay, I'll have a Starling, shall be taught to speak nothing but Mortimer." Even Mozart purchased a singing Starling in 1784. A note published in 1952 reported a Starling that sounded so like a telephone ringing that the author's wife kept running indoors to pick up the receiver.

Nowadays, it is not uncommon to hear a Starling, perched on a TV aerial, make the following sounds – an owl hooting, a Buzzard's mewing, Lapwing and chicken calls, sounds of cat, goat or frog, even human whistling. Their song gets more complex with age, with the basic sounds often interspersed with a diversity of other learned calls and sounds.

Amazing murmurations

In autumn and winter each year the numbers are significantly amplified by migrants from the continent, arriving in October and November – we have no idea how many. This is the period when Starlings best earn their collective term – a *murmuration* – when they gather at their nighttime roosts. Numbers at some sites reach tens of thousands, possibly hundreds of thousands (in England, roosts of up to five million birds are known). This has been perceived as problematic, with damage to trees and accumulations of droppings. One headline reported: "The murmurations of thousands of Starlings are a wonder – unless you live under their flight path"!

A famous incident occurred on August 12th, 1949, when listeners to the BBC nine o'clock news were surprised not to hear the chimes of Big Ben. Starlings roosting on the minute hand had caused the clock to run four minutes slow.

The aerial manoeuvres that Starlings perform prior to alighting on their roosts each evening are amongst the most exciting spectacles in ornithology. There are several theories behind these murmurations. Starlings are vulnerable to attack by aerial predators such as Peregrine Falcons, so by packing together in a swirling flock they confuse the predator, preventing it from plucking an individual from the flock.

Another theory is that the birds gather together to keep warm. This has been proven for other species – the Emperor Penguin is the best known example. But perhaps murmurations simply form to advertise their roost as a great spot to settle in for the night.

The nature of a murmuration is even more complex. Research has shown that each bird reacts to the bird nearest to it, and the movement of one affects its seven closest neighbours, with each of those affecting their closest seven neighbours, and so on. This is how the flock looks like a twisting, morphing cloud with some parts moving in one direction and other parts in another. Apparently seven is one of those numbers that works in nature! There are plenty of murmurations available to view on the internet, e.g.:

www.youtube.com/watch?v=iRNqhi2ka9k.



Change in Starling numbers in gardens in winter between 1994/95 and 2013/14. Note the peak in 2010/11, which coincided with one of the coldest winters in recent times. **Source:** Garden Bird Survey