Bird Populations 9:219-220 Reprinted with permission BTO News 261:11 © British Trust for Ornithology 2005

# BARN OWLS FLOURISH AS BEE-EATERS ARE OUT-FOXED

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David Glue, BTO Research Biologist, reviews the breeding year from New Year success stories to a season cut short by midsummer heat.

EXITO PARA LAS LECHUZAS COMUNES PERO NO PARA LOS ABEJARUCOS

David Glue, investigador del BTO, hace un repaso de la temporada reproductiva, desde historias de éxito en Año Nuevo hasta el abrupto final de la temporada por el calor a mitad de verano.

Following a generally upbeat breeding season in 2004 (BTO News 255), BTO nest recorders, ringers and BTO/JNCC/RSPB Breeding Bird Survey workers sallied forth with high hopes in 2005.

# A FLYING START

Spring-like warmth in January (the mildest since 1990) and the first half of February triggered a host of early nesting attempts - now, seemingly, an annual event (*BTO News* 258).

2005 saw further range extensions: inland by Avocet, to the north and west by Cetti's Warbler and Dartford Warbler.

However, advanced nesting operations among many resident waterfowl, owls and songbirds were checked, or halted, an uncomfortable wintery spell from mid-February to mid-March.

#### REINTRODUCTIONS PROGRESSING

Reintroduction programmes proceeded apace. Sea Eagle enjoyed further successes in Scotland, despite nesting platforms being destroyed in the hurricane-force storms of January. Red Kite expanded to all points of the compass, notably from the Chiltern Hills (Oxon/Bucks) population.

Golden Eagle nested in Co Donegal, the first time in Ireland since at least 1910, though the single egg failed to hatch. It was part of a reintroduction programme, initiated in Glen Veagh National Park in 2001.

# BARN OWL AND KESTREL ENJOY RODENT FEAST

Overall, the combined legacy of another mild winter and glut of wild fruits (the highest conifer seed yields in a decade, and beech mast since 2000) had positive knock-on effects. Sustained spring warmth from 16 to 18 March, with countrywide temperatures above 20°C, stimulated concerted egg-laying among populations of Bustard, Raven, Goosander, Ring-necked Parakeet and Dipper. Fuelled by high populations of small rodents (notably Wood Mouse and Brown Rat), the BTO--led Barn Owl Monitoring Programme noted the earliest season in 20 years of recording (mean

first-egg date 5 April). As far afield as the Solway Firth and Devon, broods of 4-7 were successfully raised. Tawny Owl and Long-eared Owl likewise profited, as did Kestrel with bumper broods of 5-7 young fledging from boxes. Hopefully this may help redress recent marked declines in some areas.

Resident Crossbill and Siskin over-wintered comfortably and bred early. By mid-April, family parties of Siskin were noted at garden feeders, from Radnor to Highland, while mobile flocks of Crossbill were a feature noted by UK birders form mid-June.

# LATE SPRING FROSTS HIT TITS AND WARBLERS

A mild showery April initially helped many thrushes, Starling and corvids to raise large first broods. Waxwings lingered from Cambridge to Aberdeen, singing tantalizingly. Regular northerly winds across the UK, combined with storms and late snow over Iberia and North Africa, held hack many spring migrants (this was charted by BTO's BirdTrack - see www.bto.org/birdtrack. Many migrants from south of the Sahara arrived somewhat late, rapidly set up territory and nested.

Temperatures see-sawed sharply in a cool changeable May. Mid-month, temperatures plummeted, resulting in destructive night frosts with values slipping to -6°C in Highland and even -3°C in lowland parts from Kent to Cornwall. This scorched blossom and destroyed the aerial and soil invertebrate food supplies of many nesting songbirds and halted the recent sequence of early springs, extending back to 1988.

High nestbox occupancy rates were charted for tits, but they then struggled as defoliating caterpillars were in short supply. Blue Tit and Great Tit brood-sizes varied widely, with extremes of 1-13 and 2-12 young respectively being reported to the BTO's Nest Record Scheme. Complete brood losses were frequent, with sexton beetles kept busy. Those monitoring nestboxes complained, variously, of heavy losses to predatory mammals. Reports of chilled and moribund broods of warblers, wagtails and chats were an ongoing feature in the coldest first half to June in 10 years, with frequent grass frosts, temperatures falling to -1.6°C at Altnaharra (Sutherland) on the 6th.

# QUAIL AND GOLDFINCH PROFIT FROM MIDSUMMER HEAT

Increasingly humid sub-tropical heat from mid-June, with temperatures reaching 30°C from Brighton north to Perth on 19th, improved nesting prospects. Swifts gained from extra aerial plankton foods, many eventually rearing broods of 2-3 young. Quail sang lustily across the country, locally in good strength (e.g. in the Severn Valley), in a broad spectrum of habitats: from dune slacks and coastal headlands, to golf courses and cereal fields. As ever, cases of confirmed breeding were rare. Lucky, therefore, the kite-flyer on Dunstable Downs (Beds) who chanced across an attended brood in grasses flanking an airfield.

Seabirds, as ever, enjoyed mixed fortunes. It was encouraging, then, to see that auks, Shag and Kittiwake, at many of the beleaguered sites in the North Sea, from Orkney and Shetland to Yorkshire, experienced improved breeding success in comparison to recent seasons - a trend hopefully to be sustained by the sand-eel fishing ban imposed by the European Commission.

With high pressure anchored over the UK from 11 July, temperatures topped 32oC: parched habitats and falling water-tables posed growing problems. Studies of Nightjar, Spotted Flycatcher, Goldfinch. Greenfinch and Yellowhammer helped to confirm successful double-brooding; but, for many, nesting activity faded sharply in the dry heat. Exposed nest sites and limited food supplies compounded further the high predation rates of a range of species -Sand Martin to Hobby (Hants), Little Ringed Plover to fox (Cambs) and Willow Tit to Great Spotted Woodpecker (Nottingham). Sadly, a family of young Bee-eaters, welldeveloped at a river bank site at Hampton Bishop (Hereford), also fell to foxes. This attempt followed close on the heels of that at Bishop Middleham Quarry (Co Durham) in 2002, which was only the second successful attempt in the UK.

By August, Constant Effort Site scheme ringers were catching only modest numbers of tits, warblers and Goldcrests, suggesting a mediocre breeding season overall in 2005. However, the true story will emerge only as the BTO's nest record cards return to Thetford HQ.