giving nature a home

RSPB evidence/advisory note: August hedge cutting and nesting birds

- Farmland birds need safe nesting sites and sufficient food (invertebrates and seeds) through the year to sustain their populations. A range of suitably managed habitats can provide this.
- Hedges are an important nesting habitat for many species. Any successful late nests increase the seasonal productivity of those pairs and so contribute to the recovery of that species.
- Hedge nesting passerines make multiple breeding attempts to fledge enough chicks to maintain the population.
- Many hedge-nesting birds have extended breeding seasons and have unfledged chicks in nests in August.
- In Devon, this includes linnet, yellowhammer, cirl bunting, song thrush and turtle dove (all red-listed in Birds of Conservation Concern 4).
- Research on cirl bunting and yellowhammer has shown that later nests are more productive than earlier nests so that a substantial proportion of these species' offspring are reared at this time (Evans et al 1996; Bradbury et al 2000). Furthermore, cirl bunting (and probably yellowhammer) chicks fledging from late nests are significantly more likely to survive to breed in the following year (RSPB unpublished data), making the contribution of late nests disproportionately important to population stability.
- Research on linnets has shown that, while early broods are generally more productive, they are insufficient to maintain population stability: the later broods, although fewer in number, are essential to maintain populations (Moorcroft & Wilson 2000).
- Cirl bunting, yellowhammer and linnet nests all tend to be in the outer layer (ie, that which is dense and actively growing) of hedge vegetation. This makes them very vulnerable to cutting.
- To safeguard the majority of the late nests in hedges, hedge cutting needs to be delayed until early September. RSPB also recommends delaying hedge cutting to mid September where cirl buntings nest.
- Delaying hedge cutting until the end of winter enables many species to benefit from its food (berries and nuts) and shelter. Not cutting hedges annually enables woody hedge plants to flower and fruit. A rotational approach to hedge cutting is best.
- **RSPB supports the Government's cross compliance rule preventing hedge cutting between 1 March and 31 August, and recommends Defra retains this restriction (in GAEC 7a) on August hedge cutting.**

CIRL BUNTING

- Nests in hedges and scrub on farmland.
- Red listed because of a severe long term breeding range decline in UK.
- Almost the entire UK population is still restricted to south Devon between Exeter and Plymouth. The population is recovering thanks to many farmers successfully using agri-environment schemes to manage a mix of arable, pasture and hedge/scrub in ways that benefit the birds. This includes avoiding annual hedge cutting and not cutting hedges in the breeding season.
- Cirl buntings can have four broods, nesting from April, and can have unfledged chicks in the nest into early September. Grasshoppers, an important food for cirl bunting chicks, are not available for early season broods. Research has shown that later nests are more productive than earlier nests so that a substantial proportion of their offspring are reared at this time (Evans et al 1997). Colour-ringing of cirl bunting chicks (RSPB unpublished data) shows that chicks fledged from late nests (3rd or 4th attempts from July onwards) are significantly more likely to be recruited into the breeding population. These late broods are thus disproportionately important compared to earlier ones. Consequently any estimates of the proportion of late nests destroyed by cutting in relation to earlier nests not destroyed by August cutting, will not take account of the higher value of late nests and so underestimate the damage done to breeding productivity. (This is likely to be true for yellowhammers too, but has not been quantified by research).
- Increased productivity from later broods is related to reduced corvid predation and better chick food availability in the second half of the breeding season.

YELLOWHAMMER

- On farmland, nests at base of hedges, particularly those with ditches or wide uncut margins.
- Red listed because of a severe breeding population decline over the previous 25 years and amber listed because of a long term moderate breeding population decline in the UK.
- Whilst still widespread in Devon, the Devon Bird Atlas 2007-2013 showed breeding yellowhammer distribution had contracted to 45% of tetrads from 82% of tetrads in the previous survey in 1977-85.
- Research has shown that later broods of yellowhammer are far more productive, ie, more chicks are hatched and successfully fledged, than early season ones, so that a substantial proportion of their offspring are reared at this time (Bradbury et al 2000). This is related to reduced corvid predation and better chick food availability in the second half of the breeding season.
- There is evidence that yellowhammers tend to use double hedges frequently, nesting on the laneside of these, where the two lines of hedge either side of the lane help conceal the parents' visits to the nest – thus yellowhammer nests are vulnerable to roadside hedge cutting.

LINNET

- On farmland, nests in mature hedges and gorse scrub.
- Red listed because of a severe long term breeding population decline in the UK.
- Still widespread in Devon but with a population decline that mirrors the national one. The Devon Bird Atlas 2007-2013 showed a 25% decline in the number of tetrads with evidence of breeding linnets since the previous 1977-85 survey.
- Early broods are generally more productive but are insufficient to maintain population stability: the later broods, although fewer in number, are essential to maintain populations (Moorcroft & Wilson 2000). While a lower proportion of linnet pairs have second/third broods than cirl buntings and yellowhammers, the production of linnet fledglings from those later broods in August is essential for maintaining adequate annual productivity of the species. So, while the number of nests affected by late hedge cuts may be lower, the importance of each nest in August is higher and each loss of those nests has a proportionally larger impact on annual linnet productivity – and so recruitment into the future breeding population.

TURTLE DOVE

- On farmland, nests in tall hedges.
- Red listed because of severe breeding population decline over the previous 25 years and longer term, amber listed because of moderate breeding range decline over the previous 25 years and severe breeding range decline longer term. European and global threat status is vulnerable.
- A summer visitor, turtle dove is now an extremely rare breeder in the UK, with almost all restricted to eastern England. There are estimated to be fewer than 10 pairs breeding in Devon; the Devon Bird Atlas 2007-2013 recorded probable breeding in only 15 tetrads. The number of tetrads with evidence of breeding declined to 26 from 200 in the 1997-85 survey.
- Emergency measures are being used to stop this species going extinct in the UK.

References

- Beavan, S.D & Lock, J.M. (eds) (2016) *Devon Bird Atlas 2007-2013*. Devon Birds, Cornworthy, Devon.
- Bradbury, R.B., Kyrkos, A., Morris, A.J., Clark, S.C., Perkins, A.J. & Wilson, J.D. (2000) Habitat associations and breeding success of yellowhammers on lowland farmland. *Journal of Applied Ecology*, 37, 789-805.
- Eaton M., Aebischer N., Brown A., Hearn R., Lock L., Musgrove A., Noble D., Stroud D. & Gregory R. (2015) Birds of Conservation Concern 4: the population status of birds in the UK, Channel Islands and Isle of Man. *British Birds* 108, 708-746.
- Evans, A. D., Smith, K. L., Buckingham, D. L. & Evans, J. (1997) Seasonal variation in breeding performance and nestling diet of Cirl Buntings *Emberiza cirlus* in England. *Bird Study,* 44, 66-79.
- Moorcroft, D. & Wilson, J.D. (2000) The ecology of Linnets *Carduelis cannabina* on lowland farmland. In N.J. Aebischer, A.D. Evans, P.V. Grice & J.A. Vickery (eds) *Ecology and Conservation of Lowland Farmland Birds*, pp.173-181. British Ornithologists' Union, Tring.

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