

Issues relating to a substantial increase in local population in Wool, Policy H5 and impacting Environment policy E10

Paper 1 of 2. SANG proposal

Toby Branston

Increases in housing numbers produces a corresponding increase in the local pet numbers particularly of cats who are largely free to roam and predate bird, small mammal and reptile populations but also of dogs who are general walked between 1 and 3 times per day in pleasant surroundings which are preferred by their owners. These favoured walk locations include the SSSI River Frome water meadows and local woods such as North / Coombe wood, Cole Wood and Hefthelton which also leads onto an undesignated heath containing annex 1 breeding population of nightjar, woodlark and Dartford warbler.

From the Partial Review Options Consultation Report, January 2017. Pg 74.

Element - Suitable Alternative Natural Greenspace (SANG)

Proposed requirement - provide new areas of public open space that are convenient and dog friendly providing an alternative to heathland.

The overarching aim of the provision of SANGs is to divert visitor pressure to ensure that there is no net increase in recreation pressure on internationally protected heathland.

Comment

Although using a site such as Coombe Wool nr Wool as a SANG may help to alleviate pressure on heathland it will not help biodiversity as a whole as this particular high quality wildlife site will be degraded by conversion to a convenient to access, dog friendly public space.

In Purbeck District Councils Pre-submission document, it clearly sets out the parameters by which development plans should be assessed on with regard to biodiversity. Under Local biodiversity and geodiversity, sections 96 and 97 it states that 'The Council has a specific duty set out in the Natural Environment and Rural

Communities Act 2006 to conserve biodiversity' and this includes all high value wildlife sites such as SSSI's but also LNR's and even undesignated sites such as hedgerows and semi natural deciduous woodland.

It is widely acknowledged and is indeed the root principle backing the Dorset Heaths Planning Framework under which all developments within 5km are considered that increased recreational access especially for dog walking (D. Liley H. Fernley 2012; Banks & Bryant 2007) is a known cause for bird population declines. Therefore, the above two principles add great weight that Coombe Wood should be ruled out as a venue for the proposed SANG for the Wool development to prevent deterioration of its rich bird assemblage. In a recent visit to the Wood R Palmer, Trees for Dorset and I Alexander, Natural England disturbed woodcock, a red listed now scarce breeding resident species. (pers. com.)

I myself compiled the following list of bird species which were holding territory in the wood and probably breeding on 3 visits in spring 2017 from listening and observation points along the approx. 500m long public right of way that crosses the wood;

Species	Comment
Blackbird	numerous
Blackcap	numerous
Blue Tit	present
Bullfinch	present
Carrion Crow	present
Chaffinch	numerous
Chiffchaff	numerous
Coal Tit	numerous
Cuckoo	present
Garden Warbler	present
Goldcrest	numerous
Goldfinch	numerous
Great Spotted Woodpecker	present
Great Tit	numerous
Green Woodpecker	present
Jackdaw	present
Long-tailed Tit	present
Marsh Tit	present
Nightingale	present on 1 occasion
Nuthatch	present
Pheasant	present
Robin	numerous
Siskin	present
Song Thrush	present
Tawny Owl	present
Treecreeper	present
Woodpigeon	numerous
Wren	numerous

If PDC wanted to follow the convention of trying to actually improve biodiversity why not turn another adjacent maize field into an open, well landscaped parkland with circular walks of a variety of distances that would be attractive to local dog walkers. This if well managed under nature conservation principle, ie allowing hedges to obtain their optimum size and diversity and only cut on long rotation and planting / replacing the wildflowers meadows that are vanishing from the countryside then biodiversity could actually be enhanced.

Surely PDC reputation could be made for wildlife conservation if local woodlands were actually enhanced to provide for breeding sites for turtle dove which are still known in the parish albeit from a low number of sites and also biodiverse organic farmland was maintained alongside these woods in a habitat mosaic to provide feeding habitat, how fantastic would that be!

Another fact as Coombe Wood / North Wood have been in a Woodland Grant Scheme for some years then the landowners / manager has been receiving grant aid to actually enhance this wood for wildlife (Natural England online mapping service at; <https://magic.defra.gov.uk/MagicMap.aspx>)

Ongoing enhancement to benefit our declining species could be the primary aim which can be achieved alongside more sympathetically managed farmland including organic arable and pasture and a maize field converted to a SANG rather than the degradation of a good wildlife wood by massively increase visitor pressure. Stewardship grant funding alongside sustainable woodland management should give income enough to ensure its long term survival to benefit wildlife and achieve our biodiversity targets.

A summary of bird populations of Wool was produced last November by the author and directly refers to issues relating to impacts that would be caused by these housing proposals and is attached for reference. Appropriate scientific references are included.

T Branston

August 2019

Attachment;

Birds of Wool parish – a short review of the birds of important local habitats, T Branston, November 2018

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Paper 2 of 2. Water meadows

Toby Branston

The well proven argument noted in my submission 1 of 2, that increased visitor pressure leads to a corresponding decrease in biodiversity and individual species populations as applied to heaths and woodlands also applies to other open landscapes such as **water meadows**. We are lucky to have the SSSI designated river Frome and associated habitats running through the parish but this river is struggling to regain full health.

From the Partial Review Options Consultation Report, January 2017. Pg 76

Individuals commented - Water meadows need protection.

PDC responded - No development is proposed in the water meadows. Any impacts from pollution will require mitigation. Set out any mitigation requirements in any site template in the Partial Review

The above response whilst acknowledging that increased housing will produce a massive associated increase in pollution which would degrade the river and add to Poole Harbours problems of nutrient enrichments and suffocation by algal blooms as seen again this summer especially in Holes Bay it does not acknowledge that the associated increase in recreational use of the water meadows will also have a detrimental effect.

The damage done to populations of breeding waders may already be severe on the Frome water meadows and is likely to be attributed to a combination of changing agricultural practice (S. Eglinton 1990) and increased pressure from visitors, mainly dog walkers (D. Liley H. Fernley 2012). These meadows are being partially managed under an environmental stewardship scheme for it population of wintering and hopefully breeding wading birds such as redshank, lapwing and snipe. However, early cutting of rushes, as carried out in May this year and over grazing by sheep may have been enough when combined with constant dog walking throughout every day to prevent any birds from successfully breeding. Any further increase in dog walking which would obviously occur following a substantial increase in the local population if 40% more houses are built would mean the end of any chance of breeding wading birds and would start to impact the numbers of more common birds that still use the river such as sedge, reed and Cetti's warblers, reed bunting and kingfisher. The increasingly scarce otter, water vole and water shrew that all occur on the Frome would also be negatively impacted by increases in dog walking along the river.

T Branston

August 2019

Attachment;

Birds of Wool parish – a short review of the birds of important local habitats, T Branston, November 2018

Birds of Wool Parish – A short review of the birds of important local habitats

T Branston

November 2018

Good habitats for birds surround the village of Wool, many of which are nationally designated due to their importance for wildlife. Several of these habitats also have Biological Action Plans, the UK being the first country to produce a national BAP and UK BAP described the biological resources of the UK which provided detailed plans for conservation of these natural resources (JNCC, 1992). Locally we are lucky enough to have habitats such as; SSSI water meadows along the Frome (coastal and floodplain grazing marsh), Native and mixed woodlands, Farmland with hedgerows inc. arable field margins, lowland heath and ponds. In addition to these roadside conservation verges provide for rare plants plus the many gardens and paddocks providing feeding areas for birds.

A quick search on the national wildlife recording database the NBN Atlas using a search area of 2km radius of Wool village centre (an approximation of parish size but excludes the heathland) gives 22,486 wildlife records from 1986 to 2017 of which 17,075 are birds. The vast majority of these records are recorded formally in BTO surveys from breeding bird surveys but also a few wintering bird surveys primarily (WeBs) along the Frome river. Therefore, the fact that birds are choosing to breed or overwinter shows the high quality of the local habitats.

The river Frome SSSI, an important chalk river with an important population of salmon is one of only 5 streams, out of 161 classified as chalk streams by the Environment Agency to have significant populations of salmon which now has recently been discovered to be a distinct sub-species from its cousins in non-chalk rivers (C. Ikediashi et al. 2018.) This new fact raises its level of importance and reinforces that more should be done to protect and enhance its ecological condition with efforts to reduce damaging nitrogen inputs. Unfortunately, birds using the water meadows along the Frome has declined sharply in recent years to the point where practically no wader species now breed according to Wetland Breeding Birds surveys (WeBs). This has been recognised to the extent that land was looking to be purchased by Natural England with the intent to manage it specifically for breeding waders but this optimistic project is unlikely to change the state of affairs. The decline of lapwing, redshank and snipe along the river valley is sadly common now as a similar situation has occurred along other rivers in the south of England including the Piddle and the Hampshire Avon. Changes in agricultural practices such as increases in fertiliser application and in stocking densities (S. Eglington 1990) and increased recreational access especially for dog walking (D. Liley H. Fernley 2012; Banks & Bryant 2007) are known causes for these declines.

The importance of local woodlands for birds cannot be underestimated with many common and increasingly rare birds breeding or overwintering in the woods around the parish. Many woodland birds such as warblers and nightingales nest and forage for food at or just above ground level and are disturbed by people with dogs to the extent that they fail to breed and will abandon the site and fail to return if the pressures continue. In 2007 a study of woodland trails was undertaken by the University of New South Wales (Dr Peter Banks and Jessica Bryant), which showed that dog walking caused a 41% reduction in the numbers of individual birds detected and a 35% reduction in species richness compared with untreated controls – while disturbance from humans walking alone was typically less than half that of dogs however, still producing a significant reduction in birds. (Kate

Priestman, 2017). Solutions are suggested in this well researched article and in the most sensitive areas, the presence of dogs should be eliminated entirely, by not allowing people to bring dogs to the site with them at all. Coombe / North Wood is such a local wood with good bird numbers ie warblers (inc. blackcap, chiff chaff and garden warbler) as well as nightingales and woodcock recorded, possibly helped by its restricted public access, although it is known to be used by a small number of dog walkers and permitted horse riders. Wholesale changes to levels of human recreational activity in this wood could have very damaging consequences for its bird (and other wildlife) populations.

Yellow hammers and corn buntings breed on the edges of agricultural fields and both of these species are on the red list due to population declines. The intensification of agriculture, over management of hedgerows and increased use of pesticides have been cited as contributing factors in their decline (PF Donald 1997). Wool has managed to hold onto a small population of yellow hammer and corn bunting (now very scarce suffering a 90% decline in last 25yrs, Eaton et al. 2015) possibly owing to good hedgerow management and organic farming practices which allows insects to survive and arable plants to produce enough seed to provide for their needs. Spring planted cereal is also preferable as autumn / winter wheat does not allow space for birds like the skylark to forage and nest. Recent changes in loss of set aside and overwinter stubbles has also prevented birds finding sufficient feeding areas and reduced the numbers of birds that farmland can support. Indeed, official figures revealed by DEFRA show a 9% decline in just 5 years between 2010-15 in overall bird populations living and breeding on the UK's farmland. (Press Association Nov 2017) Damaging changes in agricultural practices can be reversed in time with benefits of wildlife, and maybe Brexit might aid this, but building houses on farmland removes this habitat forever.

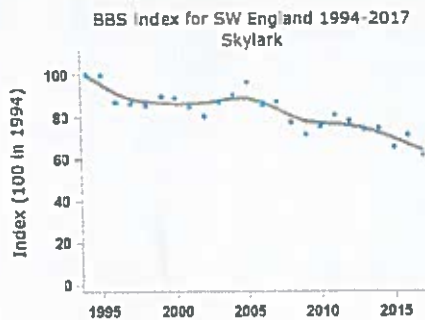
From the 2017 The state of the UK's birds published by the RSPB, BTO, WWT, DAERA, JNCC, NE and NRW it is very clear that some of our common and widespread birds are in real trouble for example it is quoted that "Farmland birds like corn buntings need help to survive alongside modern farming practices" (Hayhow et al. 2017) which confirms that we need to conserve and improve our agricultural land both to provide food for people and suitable habitat for wildlife.

Species	Long-term trend % (1970-2015)	BBS trend % (1995-2015)	BoCC4 Status
Chaffinch	21	-2	Green
Greenfinch	-46	-46	Green
Goldfinch	159	122	Green
Siskin	na	61	Green
Linnet	-55	-21	Red
Redpoll	-87	27	Red
Crossbill	na	-2	Green
Bullfinch	-39	10	Orange
Yellowhammer	-56	-16	Red
Reed bunting	-31	31	Orange
Corn bunting	-89	-34	Red

Extract from Common and widespread birds table, The state of UK's birds 2017

It is well known that a healthy population of skylark, a red listed species was lost when the recent Purbeck Gate development of 150 houses was constructed. Indeed, some of these displaced birds

(or their offspring now) may still hold on in the neighbouring organically managed fields which themselves are now part of the new proposed plan. Modernisation of farming and the direct conversion of their habitat to other uses such as housing are key contributory factors to the decline in skylark populations as recorded by the BTO breeding bird survey.



Skylarks are quite versatile birds and can utilise arable cereal or pasture grazed at appropriate stocking densities and even water meadows to breed in. All of these habitats are present in Wool and all are threatened by continual residential development.

Figure source; <https://www.bto.org/volunteer-surveys/bbs/latest-results/trend-graphs#skylark>

Disturbance of lowland heathland birds by humans and dogs is now widely researched and accepted as a major cause for wildlife decline (Liley et al. 2006) and is legislated for in terms of a developer's levy for residential developments within 5km of designated heaths to provide for mitigation projects in attempts to reduce these effects. Nightjars, being ground nesting are particularly vulnerable to disturbance (Langston et al. 2005) and even direct predation of eggs or chicks by dogs (Nol and Brooks, 1982; Pienkowski, 1984). Nightjars nest within the parish (as well as Dartford warblers and woodlark, the other 2 major heathland birds of conservation concern) on the heaths of the Bovington training areas which, although heavily used by the army are protected from public access and are therefore extremely good for wildlife. The DWT heaths of Winfrith and Tadnoll area plus Coombe Heath and Higher Hyde Heath are all just outside the Wool parish boundary but within the 5km known disturbance distance (Liley et al. 2006) and therefore the ground nesting bird species nightjar and woodlark and even Dartford warblers, which nest in heather or gorse clumps would be adversely affected by dramatic increases in Wool's residential population caused by any new large scale housing development.

Barry Sheppard is a local bird ringer and a BTO qualified trainer who records birds in his and his partner Wendy Riddle's garden at 'Solitaire' in Frome Avenue, BH20 6ER / SY8365 8675 which directly backs onto one of the fields identified in the planning proposals. Barry has conducted Garden Birdwatch weekly surveys to BTO set protocol for the last 11 years recording 62 species including 15 red listed species and 12 amber listed ones. A highlight of this past summers records were the pleasing number of bullfinches including family groups with newly fledged young seen on numerous occasions. A summary table of Barry's record are shown below and arranged to indicate the species importance for nature conservation according to the list of Birds of Conservation Concern as denoted by a large group of conservation organisations including; RSPB, BTO, Game & Wildlife Conservancy, Natural England, Natural Resources Wales, Scottish Natural Heritage, NIEA, WWT and JNCC and set out in the BoCC publications by Eaton MA, et al. 2015.

Common but particularly charismatic species such as house sparrow and starling breed within the village and still appear abundant as shown by their regular appearance in these records but

surprisingly to some are red listed species due to long term population declines of 66% and 83% respectively over the past 25 years.

Species	Number of weeks observed	Reporting Rate	Species	Number of weeks observed	Reporting Rate
	(of 560 weeks submitted)			(of 560 weeks submitted)	
BoCC Red listed Species			BoCC Amber Listed Species		
Starling	419	0.75	Dunnock	537	0.96
House Sparrow	403	0.72	Reed Bunting	358	0.64
Song Thrush	175	0.31	Bullfinch	212	0.38
Herring Gull	36	0.06	House Martin	57	0.1
Fieldfare	7	0.01	Black-headed Gull	39	0.07
Redwing	5	0.009	Swift *	23	0.04
Firecrest	5	0.009	Kestrel	8	0.01
Grey Wagtail	4	0.007	Willow Warbler	5	0.009
Linnet	3	0.005	Stock Dove	2	0.004
Lesser Redpoll	2	0.004	Kingfisher	1	0.002
Mistle Thrush	1	0.002	Lesser Black-backed Gull	1	0.002
Lesser Redpoll	1	0.002	Snipe	1	0.002
Hawfinch	1	0.002			
Marsh Tit	1	0.002			

Swift* - overflying records only but breed locally in East Burton Road.

Garden records at 'Solitaire', Frome Avenue, Wool.

Highlighted BoCC green status species (these are of 'least' but not no concern) include greenfinch which Barry has found a marked resurgence in the past year or 2 since their decline due to Trichomonosis which badly affected the population. Other regularly recorded species include; goldfinch, long-tailed tit, coal tit, chiff chaff and blackcap plus great spotted woodpecker and sparrowhawk.

Regular bird ringing sessions at Solitaire catch a sample of the visiting birds which enables a close look at individual birds to assess health, age and allows a small numbered ring to be attached to a leg. This ring bears a unique number which is registered with the BTO so that if this bird is recaptured elsewhere then this gives some insight into its movements. Despite the advent of improved tracking technology ringing still gives by far the highest volume of bird movement data and is still widely practiced. Some recovery highlights from birds ringed at Solitaire are listed below;

- Goldfinch: Birds ringed at Frome Avenue have been 'recovered' in Pembrokeshire and Co Cork.
- Siskins have been 'recovered' in N Wales, East and West of Loch Ness, and one reached NE Finland where she was breeding (evidenced by brood patch).
- Reed bunting: Birds ringed here have been 'recovered' both upstream and downstream along the Frome meadows.

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