

Wales Ring Ouzel Survey 2006

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Introduction:

Ring Ouzels (*Turdus torquatus*) are known to have been in decline across Wales since at least the 1970s (Gibbons *et al* 1993; Tyler and Green 1994, Lovegrove *et al* 1994). A national survey in 1999 aimed to set a baseline for future monitoring of breeding ring ouzels across the UK, and a decline of 39 – 43% was recorded in tetrads known to have been occupied during the 1988-91 breeding atlas (Wotton *et al* 2002).

This 2006 survey aimed to re-survey as many as possible of the tetrads in Wales that were visited in the 1999 national survey to detect any population trends since then. A secondary aim was to record habitat features in occupied and unoccupied tetrads, and to see if there is any association between habitat and retention of ring ouzel. This paper reports on the results of the tetrad survey and the second aim will be analysed and reported elsewhere.

Methods:

The survey followed the methods of the 1999 survey as described by Wooton *et al* (1999) using a tape playback to locate territorial ouzels. Tetrads were chosen from those surveyed in 1999 to give as wide a coverage of Wales as possible with the available observers. Those not surveyed were due to lack of observers or surveys not completed due to reasons outside our control. The tetrads surveyed gave a good geographical and habitat range across Wales.

Each tetrad was visited twice, over a single day each time. The first visit was between mid-April and mid-May. The second visit was between mid-May and the end of June. Mornings were considered preferable, but it was recognised that surveys of some sites might take longer than a morning to complete, and in the 1999 survey use of the tape playback meant that surveys were found to be successful throughout the day. Wet weather and very windy conditions were avoided.

Four transects, roughly 500m apart were walked where possible through each tetrad, starting 250m in from one corner of the tetrad. Transects tried to avoid following linear features, and cut across habitat features. All areas of the tetrad were covered, even if the habitat appeared to be unsuitable, although improved pasture, dense woodland and conifer plantations were generally excluded (though forest edges were included as ouzels have bred in forestry in Wales (Tyler and Green 1994)).

The tape of ouzel call and song was played within c250m of each part of the tetrad, so first play was 250m along the first transect, then every 500m. At each point the tape was played for 20 – 30 seconds. After which, the area was observed for 5 – 10 minutes to record any ouzel activity. Any birds seen or heard were marked on a map.

On record sheets provided to each observer, the tetrad, observer name and dates of each visit were recorded along with record the number of birds seen on each visit. After the second visit the maximum number of pairs considered to be in the tetrad were recorded. Finally, a brief description of the vegetation of the tetrad (e.g. mainly heather, mainly unimproved grassland, mosaic of heather and grass, mainly forestry and so on) was included.

Results:

A total of 26 tetrads, out of the 35 in Wales covered in the 1999 survey, were re-surveyed in 2006. Total maximum numbers of ouzels within those tetrads fell from 81 to 25 breeding pairs – a 69% decline. Totals for each tetrad, along with the 1999 results for comparison, are given in Table 1.

Declines appeared to be similar across Wales. Denbigh (2 tetrads) experienced a 75% decline; Merionnydd (17 tetrads) a 69% decline; Radnor (1 tetrad) – 100% decline; Brecknock (3 tetrads) – 78% decline; Glamorgan (1 tetrad) – 100% decline. Only Monmouthshire (2 tetrads) experienced an increase from 0 to 1 pair.

County	10km square	Tetrad	1999	1999	2006	2006
			min	max	min	max
Meirionnydd	SH61	SH6812	0	0	0	1
Meirionnydd	SH62	SH6224	3	5	0	1
Meirionnydd	SH62	SH6622	5	8	0	1
Meirionnydd	SH63	SH6230	2	3	0	1
Meirionnydd	SH64	SH6644	5	7	3	3
Meirionnydd	SH71	SH7012	7	10	3	4
Meirionnydd	SH71	SH7212	8	10	0	0
Meirionnydd	SH71	SH7412	4	5	4	4
Meirionnydd	SH71	SH7414	2	3	1	1
Meirionnydd	SH72	SH7824	0	0	0	0
Meirionnydd	SH72	SH7828	2	2	0	0
Meirionnydd	SH74	SH7046	2	3	2	2
Meirionnydd	SH74	SH7242	2	3	0	0
Meirionnydd	SH74	SH7444	1	1	0	0
Meirionnydd	SH82	SH8228	0	0	0	1
Meirionnydd	SH83	SH8238	3	4	2	2
Meirionnydd	SH84	SH8240	1	1	0	0
Denbigh	SJ14	SJ1646	1	1	0	1
Denbigh	SJ24	SJ2244	3	3	0	0
Glamorgan	SN90	SN9000	1	2	0	0
Brecknock	SN92	SN9420	2	3	1	2
Brecknock	SN92	SN9620	4	6	0	0
Radnorshire	SO15	SO1856	1	1	0	0
Monmouthshire	SO21	SO2014	0	0	0	0
Monmouthshire	SO21	SO2412	0	0	1	1
Brecknock	SO22	SO2626	0	0	0	0
Totals			59	81	17	25

Table 1: ring ouzel survey of Wales 2006. Results by tetrad.

In addition to the tetrads visited above, an area of mid – Wales was also visited. This was the area around Plynlymon on the Ceredigion / Montgomery borders. This area did not fall into the tetrads chosen for the 1999 survey, but had been the subject of a previous survey (Tyler and Green 1994) and subsequent informal visits. No ouzels were seen anywhere around Plynlimon or on the northern valley edges such as Hyddgen that used to hold pairs.

Discussion:

The rather depressing results presented here confirm a trend that has been recorded since at least the 1970's (Gibbons *et al* 1993). Whilst earlier surveys and reports (such as Tyler and Green 1994) appeared to show that declines were steeper in South Wales, this study shows that the species is declining at a similar rate across Wales (albeit with a small sample in some areas), although there are still a higher number of pairs present in North Wales, especially Meirionnydd.

A survey carried out in 1995 by CCW/Steve Parr (CCW, unpublished) overlapped on a number of tetrads. Results in 1995 were lower than in 1999, but, except in one case, higher than in 2006 (Table 2). The survey methodology only involved 2 hours per visit in each tetrad, and did not involve tape playback (though see note below) and perhaps was not rigorous enough to pick up an elusive species such as the ouzel.

Tetrad	1995	1999	2006
SH6224	3	5	1
SH6662	3	8	1
SH7012	3	10	4
SH7212	3	10	0
SH7824	1	0	0
SH7828	0	2	0
SH8240	1	1	0
SN9420	0	3	2
SN9620	4	3	0
SO0214	0	0	0
SO2412	0	1	0
SO2626	0	0	0

Table 2: Comparison of results of tetrads that were covered in the 1995 survey.

A number of reasons have been put forward for these declines including afforestation and other land use change in the uplands, acidification (Tyler and Green 1994) climate change (Beale *et al* 2006), hunting and other factors on the migration routes (Burfield and de L Brook, 2005), deforestation and habitat change on the wintering grounds (Ryall and Green 1994) and human disturbance (M Shrubbs pers. comm.).

Although earlier surveys such as Tyler and Green (1994) were carried out after a period of great habitat loss in the Welsh uplands due to afforestation and agricultural improvement, anecdotal evidence suggests that there has been little habitat change since the 1999 surveys. Indeed, in some areas agri-environment and other schemes may have improved some parts. However, the declines continue. Human disturbance has probably increased in many, but not all, upland areas and may be a factor but there is no direct evidence for this.

If climate change is the main driver of population decline, it may be expected to see a more general decline across the range. However declines in Wales, at least in the 1980's, appear to have been patchy. It is probable that a combination of factors is causing the decline and that without a more detailed knowledge of the ring ouzels' ecological requirements it will be difficult to put in place conservation measures for this species.

Note on survey methods:

Although the tape play back method has reportedly been used successfully in other surveys (Wooton *et al* 2002) none of our surveyors reported getting any obvious response to the tape. However, the rough transect approach meant that a large proportion of the tetrad was covered, and a considerable time was spent in each tetrad. For the more mountainous tetrads 'transects' were not possible but the approach of covering the whole area within 250 metres was followed as far as possible, along with the time spent listening after tape playing. Although we had no evidence that tape playing elicited response from birds, the general approach of good coverage of the tetrad combined with a 'look and listen' survey appeared to pick up more birds than the simpler walk through method used in the 1995 survey.

References:

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