

Wildlife at Huntsmans Quarry, Naunton – report on ongoing basic survey

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Summary

The initial survey, focussing mainly on birds and plants, showed that Naunton Quarry supports a wide range of wildlife within a diverse group of habitats. Surveys by others of amphibians, reptiles, bats and other groups reinforced this conclusion

In the autumn of 2008 a meeting was held at the quarry – at which the importance of the quarry for wildlife was underlined and ways of best maintaining the richness and diversity of wildlife within the framework of a working quarry were discussed.

We agreed that in 2009 I would focus my surveys on arable wildflowers and their distribution across the sites already surveyed. In order to do this I identified key areas where it would be important to leave some arable strips unsprayed for the trial period. In the event, the strips were located in the least preferred parts of the sites and the surveys found far less species than had been previously identified. This underlines the importance of locating arable conservation strips in the most ideal areas.

I made two long visits – with my wife Pamela, who is also a general field naturalist – so that we could cover the sites more thoroughly.

Some additional species were found and observations made about the more important farmland bird species.

After completing the surveys we spent considerable time in rewriting spreadsheets for species for the four sites – using Excel. A paper copy of the sheets, together with this report and a marked-up map showing proposals for winter 2009/spring 2010 have been sent to David Glenn. Electronic versions of the report and sheets have also been sent.

Background

This **working quarry** comprises a number of linked areas including the current quarry workings, the materials sorting and processing area, land which has been worked out and restored, land under restoration, former quarried areas being reworked, and land waiting to be quarried.

The surveyor is a general field naturalist with experience of land management and has worked for many years in farming and wildlife as an independent advisor.

Huntsmans Quarries Ltd has a policy of aiming for best environmental practice during quarrying operations and then in restoring the land. **The aim of the survey** is to assess the existing and potential value for wildlife of the site. The results will influence the restoration of the land and its future management when it is returned to agriculture

The presence of two nationally important protected species – **Great-crested Newt and Perfoliate Pennycress** was already known to Huntsmans and relevant experts have been invited to look after their specific conservation. Therefore, this survey does not focus on these two species.

This ongoing survey covers only four areas within the quarry complex.

Report on the Sites

The Restoration area above the quarry

I had originally requested that we use the strip of land where the new pipeline crossed the site for the trial area as this is where I had found so many of the more unusual plants. As a compromise I agreed to the trial area being at the eastern end of the field. This proved to be unsuccessful. I had not previously surveyed that end and this year – presumably after cultivation but not planting – it was dominated by Coltsfoot, grasses and thistles with almost no species of interest. The species list was relatively insignificant compared to the pipeline area.

I believe that the better flora is found out in the field or in from the lower headland. See marked-up map for preferred option (Plot C).

The Thorns area comprises a large area of **rough grassland**, an **arable area**, an **area of current quarry workings** and some small **pools** where the **Great-crested Newt** is found. **Perfoliate Pennycress** is found on a bank in the rough grassland area.

I noted that the new Pennycress mounds are being rapidly vegetated and may need topping (or spraying) and scarifying to encourage the plant.

The strip left unsprayed in the ‘new field’ area was in the wrong place – in the northern headland – whereas the extremely rare Field Gromwell was found some 15-20 metres in.. The excavated material beside the new drainage ditch was not species-rich – although it looked spectacular as the dominant flowering plant was Field Poppy. Alongside the track we found Long-headed Poppy where the sprays had not reached.

I believe that the better flora may be found alongside or in from the track (Plot B) and in from the NW boundary fence of the new field area (Plot A)

The area near the Silt Lagoons and Pools can be described as ‘colonising grassland’, with areas of bare ground, grassland and some invading scrub. Aside from **Perfoliate Pennycress** the area has been found to contain two other important species - *Fumaria vaillantii* (**Few-flowered Fumitory**), and *Clinopodium acinos* (**Basil Thyme**), both arable species – the latter on the UK BAP list.

The site is also developing an interesting grassland flora with many limestone species. Three species of orchid were again found. The wide range of species appears to be attracting a variety of butterflies.

The previous management of topping the southern half of the grassland area was very successful in controlling invading scrub and encouraging a wide range of flowering plants. It is suggested that the area where the silt pipes cross should now have much of its scrub removed but I understand that the pipes prevent the work being done by tractor. Perhaps it is a project that could be tackled using voluntary labour from the open prison – using brush cutters, raking up and dumping piles in the edge of the wood (cover for snakes and amphibians). Consideration should be given to poisoning the stumps of the scrub as soon as it is cut to prevent re-growth (see map).

The colony of Basil Thyme (which is thought to be the largest in the area and possibly nationally) did not look so spectacular this year but that may be a purely cyclical thing.

The Reservoir Area includes a pool, restored grassland and arable land

I did not visit this site in 2009 as I had been told that no arable trial area had been created. However, from what I already knew of the site I have marked Plot D on the map as the most suitable arable trial area.

The diversity of plant life at Naunton Quarry

The existence of a number of rare and important plant species at the quarry has been reported previously. However, the very large number of other species present underlines the diversity found there. The Thorns is a large site and has been widely surveyed – producing 147 species to date. Even the Restoration Area above the Quarry, of which only a small part has been surveyed, produced 82 species. 100 species have been found at The Reservoir and 87 near the Silt Lagoons.

Sand Martins

I understand that the birds arrived this year but did not stay. I looked only briefly at the site but it appeared to me that some slippage had occurred, providing a sloping face that predators could climb and it may be that the birds were deterred by this – although I could not be sure. I hope that Huntsmans will be able to trial my suggestion of using their concrete blocks – say 2-3 courses high to provide a permanent vertical face – over which a sand pile can be built, compacted and cut back. The top surface could be covered by mesh to prevent burrowing by predators and other mammals. This practical trial could be monitored and costed so that if successful, it could become a demonstration project.

Additional notes

While this year's survey focussed on arable wildflowers, nevertheless I remain aware of other factors that may influence future conservation schemes – and in particular the HLS. In that regard, there is a project called (I believe) 'The North Cotswold Farmland Birds Project', which seeks to support applications from land-users willing to provide habitat for up to six 'Target Species'. Four of the species occur at Naunton Quarry – Tree Sparrow, Corn Bunting, Lapwing and Grey Partridge all have been recorded by me as probably or definitely breeding. Turtle Dove and Yellow Wagtail, the other target species have not been recorded in the four areas surveyed but could occur now or in the future as there is suitable feeding and nesting habitat. As I understand it, if habitat management for these species was included in an application it would be strongly supported by the local advisors for the project.