

J. F. M. DOVASTON,
AN OVERLOOKED PIONEER OF FIELD ORNITHOLOGY

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JOHN FREEMAN MILWARD DOVASTON (1782–1854) features in the *Dictionary of National Biography* mainly on the strength of his reputation as a minor Romantic poet. It could be argued that he has a far worthier claim to inclusion for his contributions to early nineteenth-century ornithology. Like so many early workers, his importance has been overlooked due to the fact that he published no books.¹ Even the few papers of his that appeared in print were all written in a popular vein, some of them even under a pseudonym. The discovery that hidden in these are accounts, all too tantalisingly brief, of practices and experiments in ornithology that up till now have been generally assumed to be far more recent in origin underlines the importance for historians of science of not only exploring the relatively less learned early journals, but taking care to scan the frankly popular and apparently quite ephemeral matter so often contained in them.

The journal in this instance is Loudon's *Magazine of Natural History*, which began in May 1828, appearing at first bimonthly, price 3s. 6d. It was aimed originally at young people, but soon began to attract such a large following among naturalists of all ages and became so generally read that by 1835 it had turned into a medium for quite substantial scientific papers of wide general interest. In its pages in that year, for example, were published the important speculations of Edward Blyth, recently claimed as a crucial yet unacknowledged source of Darwin's main evolutionary hypotheses.² Previous to this more learned period, however, there were many contributions of a light-hearted or more or less trivial nature; and one of the more frequent suppliers of these was Dovaston, either under his own name or under an anagram of it, "Von Osdat". On the occasion of his first piece, dated May 1829, he explained that he had written it "principally to gratify the urgent entreaties of some students of nature in these parts; particularly those of my amiable friend Mr. Richard Tudor, surgeon, who, I may almost say, can neither eat, drink, nor even sleep without your Magazine".³

"In these parts" refers to the Shrewsbury district and the nearby parts of North Wales. Dovaston⁴ was the owner of a small estate, known as "The Nursery", in the village of West Felton, midway between Shrewsbury and Oswestry. The estate was the creation of his father, John Dovaston (1740–1808), an equally accomplished man of wide culture, who after becoming interested in botany on a visit to the West Indies built up his ancestral seat as a highly prosperous tree-nursery, catering for the fashion for planting then prevalent among the landed aristocracy and gentry. His son progressively improved and extended it, and though never wealthy by the standards of the time⁵ he latterly lived the amply comfortable life of a bachelor country gentleman. In his way of life, his unexpectedly radical views and his mild, if rumbustious, eccentricities he strongly recalls Charles Waterton, his Yorkshire contemporary, with whom he shared a passion for birds and a highly untypical insistence on their never being shot at or molested within the bounds of his estate.⁶ The two

appear to have exchanged letters only once or twice,⁷ however, and Dovaston was certainly no traveller: he seems indeed to have left home only very seldom and reluctantly, proclaiming as late as 1838 that he had never yet been on a railway train and had no great desire in fact to go on one.⁸ On the other hand, he was no recluse. He seems to have led an active social life, was much in demand at amateur theatricals and sat for some years on Shrewsbury Town Council. In 1814, when still only thirty-two, he was presented with the Freedom of the Borough of Oswestry—then a place of only some 3,500 souls—presumably on the strength of his personal popularity and the national reputation he had won with his first volume of poems.

Like his father he combined wide literary and musical interests with manual skill and a highly intelligent approach to natural history. He was a dilettante, certainly, but none the less one with a keenly enquiring mind. His education had included both Oswestry Grammar School and Shrewsbury School (then at a low ebb), followed by Oxford, to which he went on an exhibition—and where he acquired the nickname, on his own claim,⁹ of “Crazy Jack of Christ Church”. He then entered the Inner Temple and was called to the Bar in 1807, the same year in which he took his M.A. Finding he hated practice, however, he abandoned it not long after, having meanwhile succeeded to the family estate. Unlike that of the average country gentleman of the time, therefore, his mind was a well-trained one and, perhaps even more unusually, he did not let it rust, favouring intellectual pursuits in place of field sports. To these twin facts we owe the singular originality of his work.

By the age of forty his knowledge of birds had clearly become very considerable. About this time he had rounded off a tour of the Lake District with a special journey to Newcastle to do homage to Thomas Bewick, famous by then for his wood-cuts and his enormously popular *History of British Birds*. A friendship had at once sprung up and over the next year Dovaston sent “large heaps” of additions and corrections to the fifth edition. He also procured many orders for Bewick’s works among his friends, passed on specimens and notes to him from his naturalist neighbours and even went so far as to draft the preface for the sixth edition,¹⁰ which came out in 1826.

It was in the same letter with which he enclosed this preface that he first described what he termed his “Ornithotrophe” (an ingenious pun on “trough” and the Greek word for a trophy, meaning a conspicuous display). This was the name he had coined for a wooden trencher, “with a rim, and perforated slightly to let out the rain”, which was suspended by three harpsichord wires from an iron hook or ring designed to move along a cord stretched between two trees outside his study window. “This I trim with food, and with a wand from within, can slide it to and fro along the line. . . . I have also perches about and near it, and fasten half-picked bones and flaps of mutton to the trees.” In this way he had found a means of “alluring even the shyer birds close to my residence, particularly in the winter months”. On one snowy day, he reported, he had counted as many as twenty-three species at it.¹¹ This is the earliest-known instance of a feeding-device for wild birds. By the following December some of his neighbours were copying his example¹² and, thanks to the publicity Bewick had given it in his book, “many gentle-minded people” erected similar devices in the course of the next nine years.¹³ It is not clear whether this interest persisted. Waterton, certainly, disapproved of feeding wild birds. Bewick was different: “I have, all my life, busied myself with

feeding Birds", he told Dovaston, "but I had not (like you) the same kind of apparatus nor convenience of doing all this so well as I wished—to obtain all the information in my power, respecting Birds, in younger Days."¹² Loudon, some years later, played around with the idea desultorily¹⁴; in 1877 the Rev. F. O. Morris wrote a letter to *The Times* to try to arouse public interest; but it was not, it seems, until the long frost of the winter of 1890–91 that the practice became, for the first time, very widespread. All the leading newspapers that winter joined in advocating it, and as a measure of their success one dealer in bird-seed reported that he had never before sold so much in small quantities, which he presumed was being bought for feeding to wild species.¹⁵ Bird-tables duly became common in the 'nineties. It is not clear how far they had been in use before this—one writer in 1894 refers to having used one "for a great number of years"¹⁶—and it is clearly unsafe to assume any connection between these and Dovaston's device. Even so, the conception of enticing birds by artificial means so that they can be carefully observed for scientific purposes from close at hand (which represents one of the most fundamental steps forward taken by man in his behaviour towards wild creatures) may have passed down in a direct line from its origin at West Felton.

Closely associated with the idea of attracting birds to the house with food is the practice of encouraging them to nest round about by the provision of artificial nesting-holes and -boxes. Dovaston was also using these. "The *foraminous* birds", he wrote to Bewick in 1825,¹¹ "I accommodate with artificial building-places in the woods; and others after their kind." In a later note he makes it clear that this extended to putting up pots and boxes on walls and trees, in which birds came and nested freely.¹⁷ In this practice, however, he undoubtedly had predecessors; it is quite possible, indeed, that the idea had merely been borrowed. The method had been utilised in various parts of Europe since the late Middle Ages as a means of ensuring a more ready supply of wild birds' eggs for food.^{18,19} In the United States, rather similarly, small boxes on the tops of poles had long been erected in gardens for wrens to nest in,¹⁸ because of the large number of injurious insects they were known to destroy²⁰; and this practice seems to have extended to encouraging other kinds of birds to nest in gardens, perhaps for more purely aesthetic reasons. (Bartram, for example, had a box for martins in his garden.) Charles Waterton, there seems little doubt, was the first person to put up artificial nesting-places in Britain, at least for non-utilitarian reasons. This was in 1813, on his return from a trip to Guiana, "having suffered myself and learned mercy".²¹ He began with barn-owls and went on to extend the idea to making nesting-holes for starlings. Precisely when he moved on to boxes is not clear; but, certainly, there were numbers of these hidden in the trees on his estate in later years.²² He, too, may possibly have borrowed the idea. They were being used in Germany for scientific observation by 1836²³ and may well have been quite widespread on the Continent even before that date. Like feeding the birds, however, they did not apparently catch on, and it was not until the 'nineties, again, with the main upsurge of protectionist enthusiasm, that their value was rediscovered.²⁴ Most of the models even then were at first imported from Germany.

A third outcome of Dovaston's wish to study birds closely without resorting to the usual device of shooting them was that he customarily made use of a field-glass. This, which he jocularly termed his "Ornithoscope", was also described to Bewick sometime in the second half of 1825. It was "a small

spy-glass, which he can instantly and silently draw out to three distinct foci. . . . By this he has acquired numerous points hitherto unknown.”²⁵ Again, however, like nest-boxes, this was not an altogether original device for bird-watching, even though Dovaston may have hit upon the idea quite independently. John Denson, who acted in effect as editor of the *Magazine of Natural History* for Loudon, revealed that he had been using one since about 1823.²⁶ A third observer, writing from Epping Forest in 1830,²⁷ “having long felt an abhorrence at taking away the life of any of the brute creation”, drew the attention of the readers of the same magazine to the value of “a good pocket telescope, magnifying about thirty times”, which he found afforded an excellent view of various shy birds. It was possibly after reading this that Waterton acquired his “excellent eight and twenty guinea telescope”, a very powerful instrument mounted on a moving table in his study, through which he watched waterfowl on his lake in 1832²⁸ and to which in later years he became “inestimably indebted, for a wholesome correction of many early conceived and erroneous impressions of the habits of various birds”.²⁹ Two years later he was carrying “a good telescope” with him while studying sea birds at Flamborough Head.²⁸ Others did likewise: Edward Blyth, for example, for scrutinising bill colour in bramblings,³⁰ and a certain J. S. Brown, apparently a friend of Denson’s, who was able to examine a crossbill very minutely because “I had my telescope with me (which, indeed, I always take out on my rambles) . . . I never carry a gun, or I could easily have obtained it.”³¹ Not everyone, it is clear, shot birds in those days—or even needed to shoot them, to establish identification—as up till now we have always been led to suppose. That field-glasses (and their concomitant, skilled field observation of the living bird) did not come into general use for so long we can blame on the sheer bloodthirstiness of Victorian ornithologists and the corrupting influence of over-vaunted field sports and of mass-produced cheap guns. Even in the “dark ages” of the middle 1850’s one or two, we find, still used them, like Robert Garner, the Staffordshire naturalist, who regularly carried “an opera or pocket-glass” for watching birds on his excursions³²; or like Thoreau in New England, who exchanged the gun for a telescope in 1854. Even so, it was not until 1880, coinciding with the first appearance of the vanguard of modern field ornithologists with their general acceptance of skilled observation as a substitute for reckless killing, that advice began to appear in books that the observer should “provide himself with a first-class telescope or field-glass, which, like his note-book, should be his inseparable companion”.³³

Dovaston’s innovations did not stop merely at gadgets. He also carried out numerous experiments on behaviour. He had tried growing mistletoe “with tolerable success” on twenty-three different sorts of trees³⁴; he enclosed a piece of grassland in order to make observations on hares³⁵; he attempted to record bird songs by musical notation—only to find the task impossible (only cuckoos and blackbirds, in his experience, sometimes emit recognisable notes).³⁴ More interestingly, he once caught a pair of swallows and their young in an anglers’ landing-net and fastened round their necks rings made of very fine cello wire. When four of them reappeared the following year, this furnished him with the proof he sought that migrants return to, and build in, the very places they have left. He then followed this up with a more sophisticated experiment: to the neck of one he added a thin piece of copper inscribed in Latin *Quo abis a Salopia?* (“Where hast thou gone to from Shropshire?”), hoping that it would be returned to him in due course. Unfortunately, it never

was; and he lost heart.^{34,36} Once more, though original, this was not the first idea along such lines. Even if the many early falconers and owners of water-fowl who marked their birds with name-plates or -bands as proof of ownership be excluded, there are other, previous instances of bird-marking in Britain, in America and on the Continent (starting with Ludolf of Sudheim, who anticipated Dovaston's basic experiment, banding swallows' legs, around the year 1350). Many other marking experiments, mainly out of scientific curiosity, took place more or less haphazardly during the rest of the century. Modern bird-ringing is regarded as having begun only in 1899 with the work of Hans Mortensen, a Danish schoolmaster, whose aluminium rings were the first to bear an adequate address for recovery as well as a serial number. Once more, however, the real point of interest is that Dovaston had conceived the idea within a wider conceptual and technical framework of remarkably modern outlook.

Dovaston's ultimate achievement was to stumble, albeit dimly, upon the phenomenon of bird territory. This seems to have occurred in the winter of 1830-31, when as a result of carefully observing the behaviour of robins at his bird-table he became "confirmed in the opinion advanced by an ingenious friend, that each bird of this species has a regular beat of his own, to which he thinks himself justly entitled, and the pugnacity which he exerts is to expel some daring intruder's raid on his own personal property"³⁷. Two years later he expanded on this:

"I am certain all birds have their particular beats, or haunts; and very rarely intrude on those of others; when the invaded never omit repelling the forcible entry, by taking the law into their own hands. Robins have their own beats, even on the different sides of a small cottage: there are four distinct pairs of robins around this house; and one is attached exclusively to my brewhouse. In the wide and wild woods, too, I am certain they keep to the same beats; as I noticed for months by the singularly loud, and unusual sort of, song in one belonging to the great cedar of Lebanon near my south entrance: and another, while I was working in a wood, lit on the handle of my spade . . . ; this I chanced to catch, and, marking him with a scissors by a black cross on his breast, I found he continually kept to the same spot."³⁶

Later still, he was pronouncing quite confidently that a bird "will never leave his beat. . . . Of this I have made repeated trials. I keep suspended trenchers on which I feed birds; and sometimes I mark them; and have even noticed that birds visiting that at the east window of my book-room will not visit that by the south window of my dining-room, nor the contrary."³⁴ These birds were caught for marking at the trenchers in a special trap cage. The feeding-device thus served a doubly useful scientific purpose.

Unknown to him, several earlier writers, beginning with the Italian G. P. Olinia in 1622, had already noted that robins have special territories from which rivals are excluded.³⁸ Dovaston, however, it will be noticed, went further than this: he did some preliminary mapping of territories and secured proof by means of marking experiments. Probably no one before him, either, had established quite how sharply the boundaries of such territories can be demarcated. His remarks, nevertheless, fell on deaf ears and it was not till the elaborate marking experiments of J. P. Burkitt in the early 1920's that the study of territory in robins was carried any further forward.

Had there been more people like Dovaston, and had there only existed some central organising person or body to seize on what was important and ensure for it the necessary currency, field ornithology in Britain might have achieved its technical "take-off" some sixty years earlier than it did. In many ways at that period the thinking was already astonishingly modern. In 1834, for example, one writer even went so far as to propose the noting of passage movements of sea-birds "by the cooperative Agency of Naturalists residing near Headlands on the Coasts"³⁹—in other words, what today we know as "network research", the central achievement of modern field natural history. The picture we are left with, after reading the words of these progressives, is a very different one from the traditional picture, with its canvas entirely populated with gunmen. It must heighten interest, too, in the sixth edition of Bewick to know that so much of the additional information it enshrines was obtained by methods that were so remarkably advanced for their time. Most of all, it calls in question at least one authoritative view, that "the value of the *History of British Birds* rests on its wood-cuts alone".⁴⁰

¹ His main scientific publication was a list of local birds in W. A. Leighton's *Guide to Shrewsbury* (Shrewsbury, 1850).

² Loren C. Eiseley, "Charles Darwin and Edward Blyth", *Proc. Amer. Phil. Soc.*, Vol. 103 (1959), pp. 94–158.

³ *Mag. Nat. Hist.*, Vol. 1 (1829), p. 219.

⁴ Apart from his published writings and the brief account in the *Dictionary of National Biography*, there are various allusions to him scattered through local books, magazines and newspapers. In addition there are two valuable collections of letters: twenty-six written to him by Thomas Bewick in 1824–28, now in the British Museum (Egerton MSS. 3147), and some twenty-seven written by him to the Rev. Thomas Archer, a friend from Oxford days, between 1805 and 1844, now in Shropshire Record Office (MS. 1422). The latter, hitherto unknown, make excellent reading. They are written in a somewhat florid style, with much gusto and humour, and are often highly self-revealing. He is also known to have kept a journal of copious notes (*cf. Mag. Nat. Hist.*, Vol. 5 (1832), p. 425) and with his friend J. E. Bowman wrote a journal of their tour in Scotland in 1825, intended to be kept as a family heirloom (Bowman to Dovaston [among Bewick letters], 18 Jan. 1827; Bewick to Dovaston, 2 July 1827). The latter of these is now among the Bowman family papers in the possession of Sir John Bowman, of Newbury (K. B. Thomas, *Medical Hist.*, Vol. 10 (1966), p. 245). His library of 3,250 volumes was sold by auction at Shrewsbury in February, 1910.

⁵ Ten years before his death he described his income as rather more than £1000 per annum (Dovaston to Maria Archer, Mar. 1844).

⁶ Bewick to Dovaston, 15 Aug. 1827.

⁷ *Cf. Mag. Nat. Hist.*, Vol. 6 (1833), p. 6.

⁸ Dovaston to Archer, June 1838.

⁹ Dovaston to Archer, July 1830.

¹⁰ Bewick to Dovaston, 26 Nov. 1825: "My friends must admire and approve of "the preface" which we all ardently wish to see in print." Dovaston had a far readier pen and doubtless volunteered this task in order to speed up work on the new edition.

¹¹ Quoted by Bewick, *A History of British Birds*, Ed. 6 (Newcastle & London, 1826), Vol. 1, pp. iv–v footnote.

¹² Bewick to Dovaston, 21 Dec. 1826.

¹³ *Mag. Nat. Hist.*, Vol. 6 (1833), p. 3. There is a remarkable parallel to this in the almost contemporaneous discovery by entomologists of the value of strong-smelling sugar as a means of attracting hitherto scarcely-seen types of moths. In 1832 the Doubleday brothers caught no fewer than sixty-nine species in this way. The fashion was slow to catch on, but eventually caused a revolution in collecting. At least one early user saw the possibilities of the method as a means of studying the duration of various species and the varying ratios between the sexes, but entomologists of that period were not as enlightened as ornithologists and this scientific avenue seems to have been left by them unexplored. For a full account

see D. E. Allen, "The origin of sugaring", *Entomologist's Record*, Vol. 77 (1965), pp. 117-121.

¹⁴ See, for example, a letter of his to Waterton in 1839 reproduced in the latter's *Essays on Natural History*, Second Series (London, 1844), p. 11.

¹⁵ *Nature Notes*, Vol. 2 (1891), p. 33.

¹⁶ G. T. Rope, *Nature Notes*, Vol. 5 (1894), p. 4.

¹⁷ *Mag. Nat. Hist.*, Vol. 5 (1832), p. 502.

¹⁸ J. Rennie, *The Architecture of Birds*, Ed. 2 (London, 1844), p. 339 *et seq.*

¹⁹ B. Campbell, "Nestbox", in *A New Dictionary of Birds*, ed. Sir A. Landsborough Thomson (London, 1964), p. 526.

²⁰ Anon., *Time's Telescope*, Vol. 2 (1815), p. 143.

²¹ *Mag. Nat. Hist.*, Vol. 5 (1832), pp. 9-15.

²² R. Hobson, *Charles Waterton: His Home, Habits, and Handiwork*, Ed. 2 (London, 1867), p. 33.

²³ Cf. *Mag. Nat. Hist.*, N.S., Vol. 2 (1838), pp. 399-406.

²⁴ *Nature Notes*, Vol. 8 (1897), p. 77; J. R. B. Masefield, *Wild Bird Protection and Nesting Boxes* (Leeds, 1897).

²⁵ Bewick, *op. cit.*, p. iv footnote.

²⁶ *Mag. Nat. Hist.*, Vol. 4 (1831), pp. 450, 464.

²⁷ A.B., "A new mode of examining birds, etc.", *Mag. Nat. Hist.*, Vol. 4 (1831), p. 145.

The initials may well have been those of the Rev. Andrew Bloxam, later to become a well-known botanist, whose father several times visited Dovaston about this time (*cf.* Dovaston to Archer, Jan. 1831 and May 1832).

²⁸ *Mag. Nat. Hist.*, Vol. 8 (1835), pp. 162-165, 166-169, 361-364.

²⁹ Hobson, *op. cit.*, p. 312.

³⁰ *Mag. Nat. Hist.*, N.S., Vol. 1 (1837), p. 132.

³¹ *Ibid.*, Vol. 9 (1836), p. 202.

³² [R. Garner], *Holiday Excursions of a Naturalist* (London, 1867), pp. 95, 124.

³³ C. Dixon, *Rural Bird Life* (London, 1880), p. 354.

³⁴ Dovaston, *Three Popular Lectures; One on Natural History, and Two on National Melody* (Shrewsbury, 1839), pp. 5-29. These lectures were delivered three times in all in the winter of 1837-38, one audience being Shropshire & North Wales Natural History & Antiquarian Society, founded in 1835.

³⁵ H. E. Forrest, "Two old Shropshire naturalists", *Trans. Caradoc & Severn Valley Field Club* for 1910, Vol. 5 (1911), pp. 125-135. I have not been able to locate the source of Forrest's statement.

³⁶ Dovaston, "Chit-chat. No. II", *Mag. Nat. Hist.*, Vol. 6 (1833), pp. 1-11.

³⁷ 'Von Osdat' [Dovaston], "The Robin", *ibid.*, Vol. 4 (1831), pp. 410-412.

³⁸ Details of the various precursors of H. Eliot Howard, the true founder of territory theory, are given in D. Lack's *The Life of the Robin*, Ed. 4 (London, 1965). Dr Lack has confirmed (*in litt.*, June 1966) that Dovaston's work has till now remained quite unknown to him.

³⁹ J. D. Salmon, *Mag. Nat. Hist.*, Vol. 7 (1834), p. 573.

⁴⁰ W. H. Mullens, "Some early British ornithologists and their works. VIII. Thomas Bewick (1753-1828) and George Montagu (1751-1815)", *British Birds*, Vol. 2 (1909) pp. 351-361.