# Elizabeth Denyer's paintings of William Jones' British butterflies: their discovery and significance

#### Sonja Drimmer<sup>1</sup>

and R.I. Vane-Wright<sup>2</sup>

<sup>1</sup>Columbia University, Department of Art History and Archaeology, 1190 Amsterdam Avenue, New York, NY 10027, USA.

<sup>2</sup>Life Sciences, the Natural History Museum, Cromwell Road, London SW7 5BD, UK; and Durrell Institute of Conservation and Ecology (DICE), University of Kent, Canterbury CT2 7NR, UK

## ARTICLE

Dick Vane-Wright has a special interest in previously unpublished 18th century British watercolour paintings of Lepidoptera, including the very important work of William Jones.



**Sonja Drimmer** is a Lecturer in the Department of Art History and Archaeology at Columbia University and was formerly a Research Associate at the British Library. She specializes in medieval manuscript illumination and is delighted to be making her first foray into the study of 18th century entomological paintings.



In 1824 Elizabeth Denyer (1765/6-1824) of 9 Cheyne Row, Chelsea, bequeathed two works to the British Museum – an illuminated 15<sup>th</sup>-century book of psalms, and a volume of paintings of original British Lepidoptera. She made the butterfly and moth paintings at the suggestion of William Jones of Chelsea. The discovery of the Psalter and her insect paintings in the British Library – where they have long been catalogued but never researched until now - promises new insights into William Jones and his butterfly collection, suggests а significant link between entomology and antiquarianism, and reveals Elizabeth Denyer as a pioneer conservator.

## The Denyers of Chelsea – and their connection with William Jones

The Denyers were a wealthy family of Chelsea, known for their benevolence and piety. Elizabeth - or Eliza as she called herself - was born in 1765 or 1766, the only child of Martha (ca 1731–1795) and John Denver (ca1730-1806). John Denyer's occupation remains unknown, but he was chairman of the Chelsea Armed Association (Royal Volunteers) and spent the last 20 years of his life in comfortable retirement (Faulkner, 1829; Dilke, 1888; Hastings, 1910; Godfrey, 1913). During this period he amassed a valuable collection of medieval manuscripts, incunables, sixteenth-century printed Bibles and theological treatises. It was in his capacity as a collector that John Denyer fostered contacts with a number of



Folio 60r from Denyer (1800) depicting two underwing moths, *Catocala sponsa* (Linnaeus, 1767; the Dark Crimson Underwing), and *Catocala fraxini* (Linnaeus, 1758; the Clifden Nonpareil), species that always appear to have been rare in the UK. (© The British Library Board.)



Vignette of Elizabeth Denyer's parents, included in Denyer (1800: folio 54r). To date no image of Eliza has been found – surprising insofar as she was notable enough to have a road named in her honour – Denyer Street, London SW3. Running between Mossop Street and Draycott Avenue, Denyer Street is now more notable for 'Boris Bikes' and the rather hideous Peter Jones warehouse (no relative of William) than entomologists – although the nearby "Admiral Coddington" was frequented by at least one thirsty lepidopterist well into the 1970s. (© The British Library Board.)

like-minded scholars, such as the wellknown collector and historian of typography William Herbert (Myers, 2004). Perhaps, as fellow residents and scholars of Chelsea, Denyer and Jones developed a friendship. They were certainly familiar enough that, in 1804, Jones and his wife Sarah stood as witnesses to John Denyer's will (National Archives, Public Record Office, Probates, 11/1436: Will of John Denyer).

The earliest evidence for contact between the two families appears 12 years earlier. Eliza Denyer did not merely take an interest in her father's book collection; she was also actively involved in its conservation and repaired a number of his damaged volumes, an activity for which she achieved some renown in her day. It was during one of her major conservation campaigns that Denver probably first collaborated with William Jones. In 1792, a mutilated manuscript of Psalms, originally made in London ca 1425, was brought to Denyer to repair. According to a note written by John Denyer on an added leaf in the volume (Denyer, undated):

This manuscript was presented in July 1792 by Mr Joseph Parker of

Exmouth to Miss Eliza Dennis Denyer of Chelsea (mutilated) who perfected the manuscript and illuminations with the Assistance of Mr William Jones who presented the frontispiece and several of the vignettes (fol. 2r).

Jones' scholarship in languages (Bryan, 1869) appears to have come into use here, where Eliza Denyer included both Hebrew and Latin on the new frontispiece title-page for the damaged book. The precise nature of Jones' contribution to the 'vignettes' is more difficult to extrapolate from the language of the note above; he may have provided advice on more technical aspects, such as the creation of pigments and the technique of laying gold down on the page. Within the Jones archive in the Oxford University Museum of Natural History (OUMNH) is a book that he copied in entitled full. "Directions for Illuminating MS Transcribed from a MS of 1710 by Mrs Elstob". In light of other documents in the archive that

Spine of Elizabeth Denyer's *Paintings of Lepidopterous Insects*, Chelsea, 1800. London, British Library, Additional MS 6895. (© The British Library Board.)







Details from folio 51r in Denyer (1800), depicting *Aricia artaxerxes* (Fabricius, 1793) from the William Jones collection – of which they can be considered iconotypes (see text). (© The British Library Board.)

Details from folio 40r in Denyer (1800), depicting Maculinea arion (Linnaeus, 1758) from the Jones collection. (© The British Library Board.)

contain instructions for producing pigments, it seems reasonable to assume that Jones developed an interest in the medieval origins of the craft in order to improve his capacity to reproduce naturalistically faithful representations of insect specimens.

### Elizabeth Denyer's Lepidoptera paintings

The next collaboration between Jones and Denyer occurred at some period up to 1800, and is much more in line with the entomological pursuits for which Jones is known. It resulted in a paper codex of paintings by Denyer of British Lepidoptera, a book that has gone unpublished and essentially unnoticed since its bequest by Denyer to the British Museum in 1824. Thanks to the British Library, the contents of this whole work can now be viewed via the Internet (Denyer, 1800).

The volume is preceded by a title page, "Insects of the Lepidoptera Class Collected in the Environs of London Painted from Nature by Eliza Dennis Denyer M.DCCC" as well as a preliminary note that reads: "The following figures were painted from insects in the Cabinet of William Jones Esqr. of Chelsea – they were collected within a few Miles of London (except a few.) they are the whole of the Papilios as yet discovered in Great Brittain [sic]. Together with the largest of the Sphinx's with a few of the Bombyx's and Noctua's most remarkable for Size and Beauty." Following this note is a complete index of the named species depicted in the volume, expanded to a bionomic table for the butterflies only, then 46 plates of British butterflies (with a total of 181 individual images), a vignette of Eliza Denver's parents, 12 plates of British moths (25 images) and, finally, several blank but numbered pages. possibly intended for future additions.

#### Northern Brown Argus, Large Blue, Large Copper, and Scarce Copper

As the authors of this note intend to prepare a full account of the butterflies illustrated by Denyer – significantly, they purport to represent a list of all British species known to Jones by 1800 – we only draw attention here to four species of Lycaenidae that have long been of particular interest.

The Northern Brown Argus, *Aricia artaxerxes* was first named by Fabricius in 1793. The type locality was given as "Anglia", but is conventionally considered to be Arthur's Seat, the

250m peak of Holyrood Park, close to the centre of Edinburgh - at which locality the species is now extinct. The formal description refers to two illustrations of this insect in Jones' Icones (volume 5, plate 63, as now bound at OUMNH). Fabricius studied the Icones during a visit to Jones' home in Chelsea, in August 1787. Whether or not Fabricius also saw the actual specimens in Jones' collection is unknown, but it seems likely that he did. According to Lewin (1795), the original specimens were in the Jones Collection - and the Elizabeth Denver images, presumably made during or shortly before 1800, confirm this. However, a recent search of the surviving Jones Lepidoptera collection, and the British and type specimen collections all held at OUMNH, failed to reveal any Jones material of this species. Although a search should be continued (including at the Linnean Society), at this point it appears that the original material has been lost or destroyed.

Jones' original paintings must be regarded as 'iconotypes' for *Hesperia artaxerxes* Fabricius, 1793. However, if we make the reasonable assumption that Denyer's images were also made from the original type series, then they have similar heuristic value to the Jones



Detail from folio 19r in Denyer (1800), depicting *Lycaena dispar* (Haworth, 1803) from the Jones collection. At that time this species was misidentified by British lepidopterists as *Papilio hippothoe.* (© The British Library Board.)

of this nominal species is under consideration. An iconotype is not equivalent to a primary type specimen; it is merely taken to be *a pictorial representation of the type specimen* from which it was prepared (with the added complication that the artist could always have made an interpretative, composite image, based on more than one specimen). So, in this case, we now have, in effect, multiple iconotypes.

The famous Large Blue, Maculinea arion (Linnaeus, 1758; type locality probably Sweden), was first published as a member of the British butterfly fauna by Lewin (1795). However, as discovered by Perceval (1983) and recounted by Salmon (2000), Henry Seymer had described and illustrated this species many years earlier (in about 1777, according to Perceval, 1983), in his personal annotated copy of The Aurelian (Harris, 1766; plate reproduced in Salmon, 2000). Although the Denver paintings are more recent than Lewin's book, it is possible that British material of this species had come into William Jones' possession before the species came to the attention of Lewin. Vane-Wright & Hughes (2005: 41) cite a Henry Seymer diary entry dated 16th August 1776 in which he records receiving two specimens of Papilio arion from the Duchess of Portland. Both Seymer and the Duchess died in 1785, and soon after their respective collections were separately dispersed through major sales. In light of the inclusion of both the Large Copper and the Scarce Copper in the Denver paintings, it seems quite likely that the ultimate source of the Large Blues in Jones' collection would have been the Duchess of Portland's, either direct from her sale, or indirectly via the Seymer sale. Whether or not Seymer had other sources for the Large Blue is unknown, but his British Lepidoptera collection was extensive – in 1776 it contained some 696 species, significantly more than the 530 species he then counted in the collection of the Duchess (Vane-Wright & Hughes, 2005: 272).

The Large Copper, Lycaena dispar Cambridgeshire), (type locality although named by Haworth in 1803 as a new species, had been known from Britain for more than 50 years earlier, but misidentified as another species, Papilio hippothoe Linnaeus, 1761 (type locality Sweden) - and it is under this name that Denyer illustrates a female Large Copper from the Jones collection. Again, Henry Seymer is potentially involved, as he also referred to and illustrated the Large Copper, as "hippothoe", in his annotated Aurelian of ca 1777 (Perceval, 1983; Salmon, 2000). Lewin (1795) suggested that Seymer had obtained Large Coppers from Huntingdonshire and passed his material to the Duchess of Portland. However, as Perceval (1983) and Barker & Vane-Wright (2007) have shown, at least some if not all of Seymer's Large Coppers came from Cambridgeshire (now taken to be the type locality). Jones illustrated this species in his Icones, and the female is illustrated by Denyer. Her illustration is very similar to the female specimen ex Jones presented to the OUMNH by Drewitt (1929), and it is conceivable that the Jones material of this species was obtained following the Duchess of Portland and Seymer sales, and may well have originated in either case from Seymer.

The Scarce Copper is arguably the most interesting butterfly illustrated by Denyer - to which the possible but unproven provenance for Maculinea arion and Lycaena dispar of Henry Seymer discussed above is potentially relevant. Lycaena virgaureae (Linnaeus, 1758; originally described from Europe and [North] Africa) has not been found in the British Isles within living memory. Its supposed status as an extinct resident (e.g. Allan, 1956) has long been and continues to be debated (e.g. Salmon, 2000). As established by Perceval (1983, 1995), the first person to refer to this species as British was not Harris (1775), as often claimed (Harris misapplied *virgaureae* to the ubiquitous Small Copper, L. phlaeas) but Henry Seymer, ca 1777, in his personal annotated copy of Harris (1766) already noted above. Salmon (2000) reproduced the plate with Seymer's painting of the butterfly – a single male shown underside.

Although Seymer regarded L. virgaureae as rare in Britain, he stated that it was less rare than L. dispar – an observation that Perceval considered significant, insofar as it was clear that Seymer had more than one British L. dispar in his collection, and so he presumably had seen more Scarce Coppers than that. Whether or not Seymer had specimens in his own collection is unknown, but seems likely. However, as pointed out by Perceval (1995: 108), at the time of her death in 1885 the Duchess of Portland is known to have had two males and two females purported to be *L. virgaureae*. The next to refer to this species in print was again the comprehensive but ill-fated Lewin (Dunbar, 2010: 47) who illustrated it, and claimed to have experience of this species in nature himself (Lewin, 1795: 86, pl. 41, figs 1,2).

Perceval (1995) goes on from Lewin to list several more notable authors and collectors who claimed to have seen or collected this species in England. However, he also notes that, following the pronouncements of Westwood (in Humphreys & Westwood, 1841), the claim that this was an indigenous species came under increasing doubt. With apparent puzzlement, Perceval (1995: 109) states that "The possibility of extinction did not seem to occur to them". What Perceval may not have been aware of is that before the end of the 18<sup>th</sup> century the idea of extinction was almost undreamt of, as the works



Male and female Large Coppers (*Lycaena dispar*) from the William Jones collection now preserved in the Oxford University Museum of Natural History. The female (right) is plausibly the specimen used by Elizabeth Denyer (1800) to make her image of "*Papilio hippothoe*". (© OUMNH.)

of God were perfect and could not be lost in such a way (Brooke, 1991). It was only with the emergence of ideas of evolution from about 1800 onwards, not firmly established until the publications of Darwin and Wallace some 60 years later, that the idea of extinction became commonplace. So the doubts expressed by Westwood in the 1840s are perfectly understandable – but they have probably coloured the debate ever since, right down to the present.

So the significance of the Denyer illustrations of L. virgaureae from the British collection of William Jones is twofold. First, they add Jones to the list of senior figures in British lepidopterology who, at the end of the 18th century, seemed to have no doubt that the Scarce Copper was a native British species. However, his lack of data (see next section) on the habits and ecology of this butterfly clearly indicate that he had no personal knowledge of *virgaureae* in life. Perhaps had mislabelled continental he material? - but, as Perceval (1995: 108) cogently pointed out, travelling to and collecting butterflies in nearby mainland Europe at the end of the 18<sup>th</sup> century was not likely to be good for your health!

The second point is that this finding also strengthens the possibility that the collections of the Duchess of Portland and/or Henry Seymer, both dispersed in 1786, were the source of Maculinea arion, Lycaena dispar and L. virgaureae in the Jones collection. The female L. *dispar* illustrated by Denver is a good match for the ex Jones female in Oxford, and a fair match for the female illustrated by Seymer. Jones' own figure of *L. dispar* in his *Icones*, which work has the notional date of 1783-1785 (but see discussion in Vane-Wright, 2010), was evidently made from Drury's collection, suggestive that Jones acquired the material used by

Denyer in the period 1786-1800, consistent with a 'Portland'/Seymer origin. Although Drury's collection was not finally dispersed until after his death in 1804, as a dealer as well as a collector, Drury has to be another possible source of one or more of these rarities. And it must also be admitted that the Denyer image of the underside of male virgaureae and the Seymer image of the same do not match well enough consider to them representations of the same specimen but, as noted above, the Duchess supposedly had at least two males, and Seymer likely had one or more also.

#### William Jones' Bionomic Tables

Among the William Jones manuscripts in the OUMNH are some early bionomic tables, succinctly presenting basic known facts about the habits and ecology of the British species of butterflies, including flight season, general habitat, and larval hostplant. Such an approach seems to have been novel at the time, reminiscent of Jones' pioneering character matrix in his only published paper, on the classification of world butterflies (Jones, 1794). This tabular approach, whether taken from Jones or merely 'reinvented', has a long history in British lepidopterology, starting in print with Haworth (1802). However, what is striking here is the range of ecological data tabulated in the Denyer (1800) volume, suggestive but almost 200 years in advance of the work of Fritz Bink (e.g. 1992) on life history strategies in butterflies, an approach based on Southwood's (1977) idea of an "ecological periodic table" (Bink & Siepel, 1986). Denver's table, which we presume must have been laid out according to Jones' precise instructions, has eight columns: page [where the species appears in the volume]; species epithet ["Latin

names"]; common name ["English names"]; hostplant ["caterpillars food"]; voltinism ["how often breed"]; overwintering stage ["how pass the winter"]; flight period ["when appears the fly"]; and general habitat ["haunts in the winged state"].

We intend to make a thorough analysis of this table in a future work, and so it is premature to say much here. But one immediate insight it does give concerns those species for which Jones either had first-hand knowledge, or good data were already available, in contrast to those for which little was known other than, say, flight period and general habitat, or those for which almost nothing was known by Jones – this last group giving an idea of those species he had acquired from old sources or from others.

Thus all traits are filled in for the familiar Brimstone (Gonepteryx *rhamni*), but for the "white admirable" (Limenitis camilla) the hostplant (honeysuckle) was apparently unknown to Jones. In contrast, for "hippothoe" (Lycaena dispar) there are no trait entries at all - and not even a common name. In slight contrast, virgaureae has one trait entry (a univoltine species) and a common name - the "Large Copper" [sic!]. This rather confirms the view, expressed by Seymer and considered relevant by Perceval, that at that time *virgaureae* was more familiar to British entomologists than *dispar*. For Maculinea arion, on the other hand, something is filled in for every trait except "caterpillars food" - hardly surprising for this particular species! And there are no entries at all for a species listed only as "paniscus". This refers to Caterocephalus palaemon (Pallas, 1771), the Chequered Skipper, first discovered in Britain by Charles Abbot in Bedfordshire on 8th May 1798. Abbot wrote about his discovery



A fine photograph of the Scarce Copper, *Lycaena virgaureae*, photographed in Lithuania in June 2006. Images of this species in Denyer (1800), made from a specimen or specimens in the William Jones collection said to have come from Great Britain, add weight to the claim that this was formerly a resident British butterfly. If so, it appears to have become extinct in the UK during or by the end of the 19th century. Photographer: Algirdas. (© Wikimedia Commons.)



Details from folio 50r in Denyer (1800), depicting *Lycaena virgaureae* (Linnaeus, 1758) from the Jones collection. Curiously, Denyer misspelled *virgaureae* as 'Virgamiae'. (© The British Library Board.)

in a letter to the Linnean Society on 12<sup>th</sup> August 1798, and again on 1<sup>st</sup> November 1798. This butterfly was first published as British by Donovan (1799: 7, pl. 254), as *Papilio paniscus* Fabricius, 1775 (a synonym of *palaemon*), but without a common name (Collier & Emmet, 1989: 53; Salmon, 2000). This neat correspondence incidentally helps to confirm the correct date for Denyer's work as 1800.

#### Entomologists, Antiquarians and Denyer's Pioneering Conservation

The two recently rediscovered volumes addressed in this paper evince a

common ground in the early history of entomology and medieval manuscripts study, disciplines that would appear to have little affiliation with one another. Yet important figures in both fields cultivated a scholarly interest in the two as mutually beneficial pursuits. Henry Noel Humphreys (1807-1879), for example, was the author of texts on British Lepidoptera as well as one of the most significant early manuals on the technique and history of medieval manuscript illumination (Humphreys, 1849; Backhouse, 1968; Hindman et al., 2001). In his introduction to this manual, Humphreys listed the qualities that any good illuminator should possess, which included knowledge of both botany and "[e]ntomology, too,

with its train of glittering flies, and painted caterpillars; those gorgeous worms, that in the tropics shine like creeping jewels, must have formed one of his pursuits" (Humphreys, 1849: 63).

Similarly, John Obadiah Westwood (1805-1893), the first Hope Professor, was both a scholar in manuscript illumination and penned one of the first maior studies on medieval palaeography (Hindman et al., 2001). John Harris (1767-1832), the son of Moses Harris (1730-1788), likewise was an amateur entomologist and a dedicated student of medieval manuscripts: both he and his son of the same name worked as facsimilists and produced illuminated versions of medieval statutes and the Magna Carta (Gaines, 1969-70; Weimerskirch, 1993; Freeman, 2004).

Many others followed these dual pursuits, although the brief roll call above is significant for the importance to both disciplines of the figures it names. The question that arises from this phenomenon is whether it emerged purely from polymathy or coincidence. Or, does the convergence of interests in entomology and medieval manuscripts study have something more important to say about the early history of the two fields?

A far more extensive study is required to answer this question, but one particular phenomenon suggests that the study would yield enlightening results. When medieval manuscript illumination first began to attract the attention of antiquaries in the late eighteenth century, their approach to the subject was one that will be familiar to entomologists: pioneer antiquaries referred to the paintings they encountered in manuscripts as 'specimens' (Hindman et al., 2001), which they would often cut out from their original medieval manuscript pages, rearrange into categories and mount into albums in their own private collections (Munby, 1972; Beckwith, 1987; de Hamel, 1996; Wieck, 1996). It was this very behaviour that resulted in the 'mutilated' manuscripts that Eliza Denyer restored. Rosemary Sweet (2004: 285) has pointed out that, in its early days, "an active commitment to the preservation, let alone restoration, of monuments or antiquities was by no means axiomatic to the profession of antiquarianism".

Eliza Denyer was an extremely early practitioner of conservation and

restoration, endeavours which only became popular several decades into the nineteenth century. At this stage we can only speculate as to the origins of her ideas on the matter, but perhaps her associations with Jones nurtured her intuition that culture, like nature, requires pastoral care to prevent its loss.

#### What next?

We intend to make a complete analysis of all species illustrated by Denyer and the data attached, to extract any new knowledge pertinent to understanding the state of British lepidopterology at the turn of the 18th century. The manuscript also raises some 'motivational' questions, such as why did Jones get Denyer to make these paintings? Is there any link or parallel between Jones' tutelage of Eliza Denyer and his apparently similar relationship with Ann Latham, daughter of the celebrated ornithologist John Latham (Jackson et al., 3013)? And did Jones' familiarity with medieval manuscripts have any bearing on his entomological studies or ideas? This may help to make better sense of some of the items included in the Drewitt archive of Jones manuscripts held at Oxford (Smith, 1983).

#### Acknowledgements

The authors would like to thank Darren Mann and James Hogan for their enthusiastic help with access to the OUMNH insect collections and Jones archives, and to Jovita Callueng, Kathleen Doyle and Sarah Biggs at the British Library. John Tennent very kindly read the penultimate version of the manuscript at short notice.

#### References

Allan, P.B.M. (1956) The Middle Copper. Entomologist's Record and Journal of Variation 68: 68-73.

Backhouse, J. (1968) Pioneers of modern calligraphy and illumination. The British Museum Quarterly 33(1): 71-79.

Barker, A. & Vane-Wright, R.I. (2007) Did Henry Seymer obtain Lycaena dispar (Lepidoptera: Lycaenidae) from Hampshire? Entomologist's Gazette 58: 119–125.

- Beckwith, A.H.R.H. (1987). Victorian Bibliomania: The Illuminated Book in Nineteenth-Century Britain. Museum of Art, Rhode Island School of Design. Providence, RI.
- Bink, F.A. (1992) Ecologische Atlas van de Dagvlinders van Noordwest-Europa. Schuyt & Co., Haarlem.
- Bink, F.A. & Siepel, H. (1986) Life history tactics and strategies in butterflies. *Proceedings of the 3<sup>rd</sup> European Congress of Entomology*, Amsterdam, 24–29 August 1986: 409–412. Nederlandse Entomologische Vereniging, Amsterdam.

Brooke, J.H. (1991) Science and Religion: Some Historical Perspectives. Cambridge University Press, Cambridge, UK.

Bryan, G. (1869) Chelsea in the Olden and Present Times. George Bryan, Chelsea, London.

Collier, R.V. & Emmet, A.M. (1989) Carterocephalus palaemon (Pallas). In Emmet, A.M. & Heath, J. (eds), The Moths and Butterflies of Great Britain and Ireland Volume 7, Part 1. Harley Books, Colchester, UK, pp. 51–53.

Denyer, E.D. (undated) British Library, Add. MS. 6894.

Denyer, E.D. (1800) Insects of the Lepidoptera Class Collected in the Environs of London Painted from Nature. British Library, Add. MS. 6895. This work can be viewed in its entirety by putting "Add MS 6895" into the manuscripts search bar at: http://www.bl.uk/manuscripts/

Dilke, C.W. (1888) Chelsea: A lecture delivered in the Town Hall, Chelsea on Wednesday, January 11th, 1888. West Middlesex Advertiser, Chelsea, London.

Donovan, E. (1799) Natural History of British Insects, Volume 8. E. Donovan, and F. & C. Rivington, London.

Dunbar, D. (2010) British Butterflies. A History in Books. The British Library, London.

Drewitt, [D.] (1929) [Part of exhibition note entitled "An early figure of Chrysophanus dispar, Haw."] Proceedings of the Entomological Society of London 4:99.

Faulkener, T. (1829) An Historical and Topographical Description of Chelsea (2nd Edn). London.

Freeman, J.I. (2004) Harris, John (1791–1873). Oxford Dictionary of National Biography. Oxford University Press, online edn, May 2006 [http://www.oxforddnb.com/view/article/37514, accessed 20 July 2012]

Gaines, B. (1969–70) A forgotten artist: John Harris and the Rylands copy of Caxton's edition of Malory. Bulletin of the John Rylands University Library 52(1): 115–128, 1 pl.

Godfrey, W.H. (1913) Survey of London. Volume 4: Chelsea, Part II. London County Council, London.

de Hamel, C. (1996) Cutting up Manuscripts for Pleasure and Profit. 1995 Sol. M. Malkin Lecture. Rare Book School, Charlottesville, Virginia.

Harris, M. (1766) The Aurelian or Natural History of English Insects, namely Moths and Butterflies. London. Harris, M. (1775) The English Lepidoptera: or, the Aurelian's Pocket Companion. London.

Harns, M. (1775) The English Lephaopiera. of, the Autenant S Pocket Companion. London.

Hastings, I. (1910) War Medals and Decorations Issued to the British Military and Naval Forces and Allies 1588 to 1910. London, p. 310.

Haworth, A.H. (1802) Prodromus Lepidopterorum Britannicorum. Hurst, London.

Hindman, S., Camille M., Rowe, N., & Watson, R. (2001) Manuscript Illumination in the Modern Age: Recovery and Reconstruction. Block Museum of Art, Evanston, Illinois.

Humphreys, H.N. (1849) The Art of Illumination and Missal Painting: A Guide to Modern Illuminators. Bohn, London.

Humphreys, H.N. & Westwood, J.O. (1841) British Butterflies and their Transformations. William Smith, London.

Jackson, C.E., Datta, A. & Vane-Wright, R.I. (in press, 2013) Dr John Latham, F.L.S., and his daughter Ann. The Linnean.

Jones, W. (1794) A new arrangement of Papilios, in a letter to the President. Transactions of the Linnean Society of London 2: 63-69, 1 pl.

Lewin, W. (1795) The Papilios of Great Britain [first published in the same year as the first and only volume of The Insects of Great Britain]. J. Johnson, London.

Munby, A.N.L. (1972) Connoisseurs and Medieval Miniatures 1750-1850. Clarendon Press, Oxford.

Myers, R. (2004) Herbert, William (1718–1795). Oxford Dictionary of National Biography, Oxford University Press, Oxford; online edn, Jan 2008 [http://www.oxforddnb.com/view/article/13062, accessed 20 July 2012]

Perceval, M.J. (1983) The Lepidoptera of Henry Seymer (1767–1785). Entomologist's Gazette 34: 215–227.

Perceval. M.J. (1995) Our lost coppers (Lepidoptera: Lycaenidae). Entomologist's Gazette 46: 105-118.

Salmon, M.A. (2000) The Aurelian Legacy. British butterflies and their collectors (with additional material by P. Marren & B. Harley). Harley Books, Colchester, UK.

Smith, A.Z. (1986) A History of the Hope Entomological Collections in the University Museum Oxford with Lists of Archives and Collections. Oxford. Oxford University Press.

Southwood, T.R.E. (1977) Habitat, the templet for ecological strategies? Journal of Animal Ecology 46(2): 337–365.

Sweet, R. (2004) Antiquaries: the Discovery of the Past in Eighteenth-Century Britain. Hambledon, London.

Vane-Wright, R.I. (2010) William Jones of Chelsea (1745–1818), and the need for a digital, online 'Icones'. Antenna 34(1): 16–21.

Vane-Wright, R.I. & Hughes, H.W.D. (2005) The Seymer Legacy. Henry Seymer and Henry Seymer Inr of Dorset, and their Entomological Paintings, with a Catalogue of Butterflies and Plants (1755–1783). Forrest Text, Tresaith, Ceredigion, Wales.

Weimerskirch, P. J. (1993) John Harris, sr., 1767–1832: a memoir by his son. Book Collector 42(2): 245–252.

Wieck, R.S. (1996) Folia Fugitiva: The pursuit of the illuminated manuscript leaf. The Journal of the Walters Art Gallery 54: 233–254.