

Marking the boundaries: William Jordan's 1633 pre-enclosure survey of Duffield Frith (Derbyshire)*

by Heather Falvey

Abstract

Although many forest surveys were conducted during the seventeenth century, little is known about the work of forest surveyors. Here we draw together evidence for their remuneration and working conditions. Furthermore, the records of the disputed enclosure at Duffield Frith in Derbyshire permit an examination not only of the mechanics of surveying a forest but also of subtle forms of resistance to enclosure, including the role played by women in advancing that resistance.

On 20 September 1633, Timothy Pusey and Thomas Gilbert, commissioners charged by the Duchy of Lancaster with overseeing the partition of the former royal forest of Duffield Frith, certified the Duchy court of the acreage of each division. To ensure that their report was intelligible, William Jordan, the surveyor who had worked on their behalf, provided 'plottes', or sketch maps, upon which the three distinct sub-divisions of each of the three wards were delineated in green, violet and red.¹ Jordan's maps have, regrettably, failed to survive, and thus we lack any cartographical representation of the Frith at the time of its enclosure. However, appended to the commissioners' report is a statement by John Lane, jun., one of the local men appointed to assist in laying out the divisions, which vividly describes Jordan's activities and the problems that he encountered when surveying the area.² Lane's account illuminates not only the murky circumstances in which forest surveyors carried out their work, but also the subtle strategies of resistance with which they might be confronted.

Until relatively recently, riot was virtually the only form of popular protest studied by early modern historians. This emphasis, one suspects, is due largely to the fact that such incidents are fairly easy to find in various legal archives, in particular those of central government.³ Many case studies have been published and a great deal has been learned about early modern

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¹ DL 44/1127, document 1, commission, dated 27 Mar. 1633; document 2 includes measurements of the division of Duffield Frith.

² DL 44/1127, document 4, dated 20 Sept. 1633.

³ See, for example, K. Lindley, *Fenland riots and*

the English Revolution (1982); R. B. Manning, *Village revolts: social protest and popular disturbances in England, 1590–1640* (1988); B. Sharp, *In contempt of all authority: rural artisans and riot in the west of England, 1586–1660* (1980).

riots during which enclosures in forests were destroyed or damaged.⁴ But various non-violent strategies were also open to protestors.⁵ John Walter has provided a particularly detailed discussion of resistance strategies that stopped short of riot, including grumbling, cursing, appeals, libels, complaint letters, petitions, foot-dragging and harassment.⁶ Andy Wood, noting the effectiveness of various non-violent forms of protest, has commented that there was 'a politics to semi-public verbal dissent, muffled grumbling and anonymous threat as much as there was to open protest'.⁷ The very subtlety of such protests, however, has rendered their detection, by both contemporary authorities and historians, much more problematic.

The disafforestation and subsequent enclosure of Duffield Frith was but one of the Caroline administration's numerous projects aimed at increasing revenue from the vast but mismanaged crown estates; thus events there are relatively well-documented.⁸ Evidence from Duffield confirms historians' suspicions that more subtle strategies of resistance were practised, for their perpetrators were traced and some were prosecuted. In addition, this evidence emphasizes the role played in that resistance by women, who themselves rarely appear in prosecutions of riot. It is also, moreover, highly revealing of the technical aspects of the work of forest surveyors, about which the historical record is almost invariably silent.⁹ The following discussion, based largely on the report compiled by the Duffield enclosure commissioners, not only rectifies this historiographical omission, but also emphasizes the severe challenges faced by, and the scant rewards due to, those who were responsible for surveying early modern forests.

I

In early modern England the work of surveyors created tension, not only between the owner and the tenants of the land being surveyed, but also between the tenants and the surveyor himself. The work of the estate surveyor is well known both from contemporary publications

⁴ D. G. C. Allan, 'The rising in the West, 1628–1631', *EcHR* 5 (1952–3), pp. 76–85; J. H. Bettey, 'The revolts over the enclosure of the royal forest of Gillingham', *Proc. Dorset Natural History and Archaeological Society* 97 (1975), pp. 21–4; R. W. Hoyle, 'The forest under the Dynhams', in J. Broad and R. W. Hoyle (eds), *Bernwood: the life and afterlife of a forest* (1997), pp. 35–72; D. O. Pam, *The story of Enfield Chase* (1984), pp. 63–77; Sharp, *In contempt of all authority*.

⁵ See, for example, the strategies identified in J. C. Scott, *Weapons of the weak: everyday forms of peasant resistance* (1985) and id., *Domination and the arts of resistance: hidden transcripts* (1990).

⁶ J. Walter, 'Public transcripts, popular agency and the politics of subsistence in early modern England', in M. J. Braddick and J. Walter (eds), *Negotiating power in early modern society: order, hierarchy and subordination in Britain and Ireland* (2001), pp. 123–48.

⁷ A. Wood, *Riot, rebellion and popular politics in early modern England* (2002), p. 89.

⁸ For crown projects see the various contributions in R. W. Hoyle (ed.), *The estates of the English Crown, 1558–1640* (1992). For the background to events at Duffield, as well as an account of its enclosure and the aftermath, see H. Falvey, 'Custom, resistance and politics: local experiences of improvement in early modern England' (unpublished PhD thesis, University of Warwick, 2007), chs 2 and 4.

⁹ For example, Hoyle notes that for Bernwood (Bucks.) the working papers of the commissioners are lost (Hoyle, 'The forest under the Dynhams', p. 57). Throughout this paper 'forest surveyor' denotes professional land surveyors who were employed to measure timber and land within forests and chases; it does not refer to the 'surveyor general of woods' and his underlings. For these royal officers in woods and forests, see G. Hammersley, 'The Crown woods and their exploitation in the sixteenth and seventeenth centuries', *Bull. Institute of Historical Research* 30 (1957), pp. 136–61.

such as those by Ralph Agas, John Norden, and Aaron Rathborne, and also from the work of various modern scholars of literature and history.¹⁰ Although both contemporary and modern writers have discussed in general terms the developing science of surveying and the mechanics of dividing common fields at enclosure, there is a conspicuous absence of commentary on the measurement and division of enclosures within forests.

The most immediate problem encountered when surveying a forest was that its boundaries were not necessarily delineated either by fences, hedges or ditches on the ground, or by cartographic symbols on paper or parchment.¹¹ There were very practical reasons for each omission: firstly, as hunting grounds, forests were open spaces where game roamed and browsed freely and through which hunters could chase without impediment;¹² and secondly, as crown property, forests belonged to the largest landowner in the country, who simply could not afford to survey and map all of its lands.¹³ Although a 'Great Survey' of crown lands was attempted in 1608–09, and some maps were drawn up, the project was never completed.¹⁴ Furthermore, in 1612 the Frith itself had been one of the royal forests surveyed in preparation for disafforestation but these proposals were shelved on the death of the earl of Salisbury.¹⁵

Setting out a forest enclosure differed markedly in character from estate surveying. Whereas the latter comprised measuring on the ground and delineating on parchment 'boundaries' that already (either in practice or in memory) existed, laying out an enclosure, particularly one in a

¹⁰ R. Agas, *A preparative to platting of landes and tenements for surveigh* (1596); J. Norden, *The surveyors dialogue* (London, 1607 & new editions in 1610 and 1618) and now M. Netzloff (ed.), *John Norden's The Surveyor's Dialogue (1618): A critical edition* (2010); A. Rathborne, *The surveyor in four booke*s (1616); R. Helgersen, 'The land speaks: cartography, chorography, and subversion in Renaissance England', in S. Greenblatt, *Representing the English renaissance* (1988), pp. 327–61; R. Helgersen, *Forms of nationhood: the Elizabethan writing of England* (1992), ch. 3; B. Klein, *Maps and the writing of space in early modern England and Ireland* (2001), ch. 2; A. McRae, 'To know one's own: estate surveying and the representation of the land in early modern England', *Huntington Library Q.* 56 (1993), pp. 332–57; A. McRae, *God speed the plough: the representation of agrarian England, 1500–1660* (1996), especially ch. 6, "'To know one's own': the discourse of the estate surveyor'.

¹¹ For a summary of the mapping of forests, see E. Baigent, 'Mapping the forests and chases of England and Wales, c.1530 to c.1670', in J. Langton and G. Jones (eds), *Forests and chases of England and Wales, c.1500–c.1850: towards a survey and analysis* (2005), pp. 21–28; for the mapping of the Duchy's forest of Needwood (Staffs.), see S. Bendall, 'Mapping the English forests: Needwood, 1598–1834', in E. Baigent and R. J. Mayhew (eds), *English geographies, 1600–1950: historical essays*

on English customs, cultures and communities in honour of Jack Langton (2009), pp. 23–38.

¹² For a general discussion of forests and forest law, see P. Large, 'From swanimote to disafforestation: Feckenham Forest in the early seventeenth century', in Hoyle (ed.), *Estates of the English Crown*, pp. 392–4. See also P. A. J. Pettit, *The royal forests of Northamptonshire: a study in their economy, 1558–1714* (Northamptonshire Record Soc., 23, 1968).

¹³ The most detailed study of crown lands in the early modern period is Hoyle (ed.), *Estates of the English Crown*. However, in some forests at least, such as at Finchampstead bailiwick in Windsor Forest, it was customary to perambulate the boundaries, without necessarily marking them out on the ground. (G. A. Kempthorne, 'An Elizabethan swanimote court roll of Finchampstead bailiwick', *Berkshire Archaeological J.* 36 (1932), p. 107.)

¹⁴ R. W. Hoyle, "'Shearing the hog": the reform of the estates, c.1598–1640', in Hoyle (ed.), *Estates of the English Crown*, pp. 204–62, especially pp. 220–27.

¹⁵ R. W. Hoyle, 'Disafforestation and drainage: the Crown as entrepreneur?', in Hoyle (ed.), *Estates of the English Crown*, pp. 368–9. The Frith was also surveyed by the Duchy several times in the sixteenth century. Those surveys have been summarized in J. C. Cox and F. Strutt, 'Duffield Forest in the sixteenth century', *Derbyshire Archaeological J.* 25 (1903), pp. 181–216.

forest, by definition, involved the marking out of new territory.¹⁶ In his discourse on surveying and woodland management published in 1612, Rock Church discussed the advantages and disadvantages of forest enclosures, though he did not describe the actual mechanics of surveying and enclosing.¹⁷ This is all the more frustrating since only three years previously Church himself had surveyed the woodlands in Duffield Frith, in preparation for timber sales there.¹⁸ The development of mathematical surveying by practitioners such as Church dramatically reduced the significance of local knowledge in the recording of boundaries. The earlier supremacy of oral tradition was swept away by the surveyor's theodolite and notebook. Memory was superseded by writing and drawing. As Bernhard Klein has noted, 'The rise of new-style surveyors is indicative of a process that removed land from its location in popular memory and upset the tradition of a limited localized setting, ... where "the day's journey and the morning's ploughing" were conventional units of measurement'.¹⁹ Contemporaries themselves were well aware of this development. John Norden observed that maps were visual tools 'which tenants mislike, not that the thing it selfe [i.e. the map] offendeth them, but that by it they are often prevented or discovered of deceitfull purposes'. The lack of proper maps, Norden claimed, had been the cause of 'infinite concealements' and 'many intrusions and incrochments' by tenants.²⁰ Such deceits notwithstanding, the leading tenants who sat on a manorial court of survey played a legitimate role in the construction of the surveyor's schedule and might manipulate the process incrementally to favour their own interests over those of their landlord. But what of legitimate contributions by tenants or commoners to the surveying of forests prior to their enclosure?

Woodmotes, or forest courts of attachment, dealt only with offences concerning vert (trees, underwood and herbage) and, according to Manwood, venison.²¹ Theoretically swanimotes were competent to consider, among many other issues, whether enclosures of moors, plains and waste were 'to the hurt of the commons'.²² It might be inferred, therefore, that a swanimote, which comprised all freeholders within the forest, could be called on to advise a surveyor in 'their' forest, but no existing study of early modern swanimotes indicates any kind of connection with forest surveys. By the sixteenth century, the swanimotes of some forests, such as Feckenham and those of Northamptonshire, had been adapted by inhabitants to regulate the increasingly

¹⁶ As noted earlier, various aspects of the work of estate surveyors are discussed in, for example, McRae, *God speed the plough*; Klein, *Maps and the writing of space*; Helgerson, *Forms of nationhood*.

¹⁷ R. C., *An olde thrift newly revived* (1612), pt 2: 'The commodities and discommodities of inclosing decayed forrests, commons and waste grounds'. Part 4 explains how to use a 'small portable instrument' for measuring the height and 'solide content' of any tree.

¹⁸ DL 1/391, answer of Robert Treswell and Thomas Jaye to the bill of William, earl of Newcastle, 25 June 1629, recalling events of 8 and 9 James. In his *An Olde Thrift Newly Revived* (p. 21), Church referred to his work as a royal surveyor: 'my late circuit Northward for survey and sale of some of his Maiesties Woods'.

¹⁹ Klein, *Maps and the writing of space*, p. 46.

²⁰ Norden, *Surveyors Dialogue* (1607 edn), p. 16, quoted in Klein, *Maps and the writing of space*, p. 57.

²¹ The most detailed recent discussion of forest courts is G. Jones, 'Swanimotes, woodmotes, and courts of "free miners"', in Langton and Jones (eds), *Forests and chases of England and Wales*, pp. 41–8. Woodmotes continued to be held at Duffield during the late sixteenth and early seventeenth centuries (*VCH Derbyshire*, I, pp. 419–20). 'Venison' initially signified all beasts of the forest but by the sixteenth century it applied exclusively to red and fallow deer. (Large, 'From swanimote to disafforestation', p. 392, n. 14).

²² Jones, 'Swanimotes, woodmotes, and courts of "free miners"', pp. 42–4, quotation from p. 42.

generous interpretation of common rights. By the seventeenth century, however, the crown itself was attempting to assert the more rigorous regulation of many of its forests.²³ Graham Jones has suggested that, in general, early modern swanimotes could be seen as ‘protecting the property of the crown and the perquisites of the forest officials’.²⁴ They were, therefore, hardly a forum wherein the interests of the commoners were likely to be favoured over those of the crown.²⁵ Thus when a forest was earmarked for enclosure, the numerous commoners, whose access to that forest was threatened with curtailment or even extinction, could make no legitimate impact on the surveyor’s work.²⁶ This might also hamper the surveyor since inevitably he would need to supplement his own measuring skills with information provided by inhabitants without whose local knowledge he could have no understanding of the forest’s boundaries. The usefulness and accuracy of such transfers of knowledge were, however, entirely dependent upon the good will and honesty of those inhabitants, which, under the circumstances, might understandably be lacking. As we shall see, memories of such boundaries might be hazy or even ‘forgotten’ intentionally.²⁷

The surveyor, whether accurately informed, or solely dependent on his own skill, had to be remunerated for his expertise. Records of the surveys of crown lands conducted in the first decade of the seventeenth century, together with those of the forests and chases reserved for the payment of army arrears in the 1650s, provide an indication of the quite substantial rates of pay that might be made to surveyors and their assistants. In the 1600s surveyors working on the crown estates were paid through the Exchequer; those employed when Robert Cecil, earl of Salisbury, was Lord Treasurer were paid a daily rate for surveying and for supervising the engrossing of surveys, out of which they were expected to pay their clerks and other expenses.²⁸ The ‘usual daily rate was 15s. whilst “in the field” surveying woods, 4s. during the period of writing up the surveys and drawing maps, and 4s. whilst “attending about the return of the commission”’.²⁹ The crown’s surveyors were usually given an advance (‘imprest’) when the survey was commissioned and the balance was paid when the survey was received and approved.³⁰ The same daily rate was being paid 50 years later to surveyors employed by

²³ See, for example, R. H. Hilton (ed.), ‘The swanimote rolls of Feckenham forest’, *Miscellany*, I (Worcestershire Hist. Soc., new ser., 1 (1960), pp. 37–40; Kempthorne, ‘An Elizabethan swanimote court roll’; Hammersley, ‘The Crown woods and their exploitation’; id., ‘The revival of forest laws under Charles I’, *History* 45 (1960), pp. 85–102; Large, ‘From swanimote to disafforestation’.

²⁴ Jones, ‘Swanimotes, woodmotes, and courts of “free miners”’, p. 43.

²⁵ Prior to the disafforestation of Braydon Forest (Wilts.), a jury of 17 ‘good and lawful men of the county of Wilts’ was impannelled. These men did not necessarily have a direct interest in that forest. (F. H. Manley, ‘The disafforesting of Braden [sic]’, *Wiltshire Archaeological and Natural History Magazine*, 45 (1930–2), p. 556.)

²⁶ Klein, *Maps and the writing of space*, p. 57, touches

on the input of tenants in estate surveys but this study of Duffield is the first to draw attention to the subtle difference regarding enclosure surveys. In the 1650s at Enfield Chase it was ordered that the none of the jury who advised the enclosure commissioners should have a direct interest in the Chase. Pam, *Enfield Chase*, p. 70.

²⁷ See also N. Whyte, *Inhabiting the landscape: place, custom and memory, 1500–1800* (2009), especially chs 4 and 5.

²⁸ Hoyle, “Shearing the hog”, p. 220.

²⁹ H. Lawrence, ‘John Norden and his colleagues: surveyors of crown lands’, *Cartographic J.* 22 (1985), p. 55, citing E/403/2722 et seqq. If paid daily, ‘a typical rate for surveyors was 15s. when working in the field’. F. Kitchen, ‘John Norden (c.1547–1625): estate surveyor, topographer, county mapmaker and devotional writer’, *Imago Mundi* 49 (1997), p. 55.

³⁰ Hoyle, “Shearing the hog”, p. 220.

the Commonwealth. When working in Kingswood, Needwood, Sherwood, and Enfield forests and chases, the surveyors were to be paid 15s. per day. Unlike the earlier surveyors of crown lands, however, these surveyors' disbursements were to be covered by their employers. Wages for clerks, messengers, and men to carry their chains would be met by the Trustees for sale of the Forests.³¹ Between September 1656 and November 1658, when Enfield Chase was surveyed prior to enclosure, the commissioners and surveyors there were to employ a clerk at 5s. a day and a messenger at 3s., and to hire labourers to carry the chains and other instruments at no more than 1s. 6d. a day.³² In 1656 at Needwood, the inclosure[sic] commissioners, including the surveyor George Sargeant, were to employ a clerk and messenger at the same rates as at Enfield, and to hire labourers for the same purpose.³³

These rates of pay compare favourably with estimates of other wage rates in the period: agricultural labourers might earn 12d. in 1640–49, and building labourers 10–14d. in 1630–40.³⁴ The rates of 3s. and 5s. for messengers and clerks respectively were relatively generous and 15s. per day for surveyors – a sum that was apparently on offer between at least 1602 and 1656 – appears positively lucrative. Surveyors would, however, have been regularly working away from home and would need to cover the expenses of bed and board, and probably stabling, out of their fee. The rewards of surveying were not, from this perspective, particularly attractive. Indeed, a brief survey of biographies of early modern land surveyors in the *ODNB* suggests that the estates of very few were worth a great deal when they died; Norden's wealth at death, for example, was a mere £29 14s. 4d.³⁵ Only those who came from landed families, such as John Blagrave of Reading, seem to have died wealthy.³⁶

II

Early modern writers on improvement consistently emphasized the fact that the land within royal forests was not being exploited to its full potential and argued that conversion to cultivation would render it more productive and its inhabitants more industrious.³⁷ Indeed, John Norden considered forests to be 'verye nurseryes of idlenes, atheisme, beggerie [and] perfidiousnes'.³⁸

³¹ *Calendar of State Papers Domestic, 1655–6*, p. 368; *Calendar of State Papers Domestic, 1656–7*, p. 78.

³² Pam, *Enfield Chase*, p. 70.

³³ N. Tringham, 'Needwood Forest surveys of 1649–50 and attempted inclosure', *Trans. Staffordshire Archaeological and Historical Society* 44 (2010), p. 32; Bendall, 'Mapping the English forests', p. 27.

³⁴ Statistical table XV, 'Agricultural day wage rates in southern England', in J. Thirsk (ed.), *Agrarian History of England and Wales*, IV, 1500–1640 (1967), p. 864; D. Woodward, 'The determination of wage rates in the early modern north of England', *EcHR* 47 (1994), p. 30.

³⁵ *ODNB*, 'Norden, John (c.1547–1625)'. During his lifetime Norden was forever claiming poverty, possibly spuriously. The monumental *Dictionary of land surveyors and local mapmakers* does not discuss the

working conditions of these practitioners, nor does it record any probate inventory values. (*Dictionary of land surveyors and local mapmakers of Great Britain and Ireland, 1530–1850* / compiled ... by F. Steer ... [et al.]; edited by P. Eden; sec. edn edited by S. Bendall (2 vols, 1997).) The entry for William Jordan (II, p. 285) comprises only the reference for his inventory (in which he is described as 'surveior'); there are no details of any surveying commissions that he undertook.

³⁶ Blagrave's will: PROB 11/118, fo. 188. See *ODNB*, 'Blagrave, John (b. before 1560, d. 1611)'.

³⁷ For example, see the views of John Manwood and John Norden reproduced in J. St John, *Observations on the Land Revenue* (1787), App. I and II.

³⁸ John Norden, 'To the Righte Honorable the Lorde Highe Treasurer of Englande. A Proiecte towching the improving of some of his Maiesties forestes, parkes,

The financially straitened monarchs of the early seventeenth century accordingly implemented a policy of disafforestation and enclosure 'by agreement' in several royal forests.³⁹ In 1632, enclosure agreements were signed by leading tenants of the various manors in and around Duffield Frith.⁴⁰ Following enclosure each of the wards would be divided into thirds, one third to be retained by the crown and leased for cash, the other two thirds to be allocated to the legal commoners, this being the usual way for the crown to proceed with enclosure following disafforestation.⁴¹ Prior to enclosure the Frith had been used as common waste to which access was *de facto* unrestricted.⁴² Although improvement writers extolled the social and economic benefits of forest enclosure, the commission to enclose Duffield Frith failed to rehearse the usual improving rhetoric, and made no promises of the advantages that would accrue to commoners or commonwealth. It emphasized, instead, the strictly fiscal nature of this project: the Frith was to be 'inclosed and improved for our [i.e. royal] use and benefit'.⁴³ In fact, no 'benefit' ensued for, rather than generating a cash income, when the crown's thirds were leased to Edward Syddenham, esquire, the initial payment of over £2,000 was reimbursed because previously he had lent the king a similar sum.⁴⁴ Local responses to the enclosures were unfavourable, surfacing before they were even ratified, and rolling on for more than 30 years.⁴⁵ Indeed, William Jordan would probably have declined the task of surveying the Frith in 1633 had he been aware of the stonewalling in which the inhabitants of Duffield had engaged some 40 years earlier when, in 1592, the Duchy had sought information about the boundaries of the Frith. This earlier episode is worth considering briefly since it is indicative of local attitudes towards surveyors and demonstrates that local memories of those boundaries were highly selective.

By the late sixteenth century Duffield Frith was divided into three wards – Duffield (or Chevin), Belper and Hulland – which together covered about 5000 acres in 1633.⁴⁶ 'Woodgrounds' (wooded areas) within the wards not only supplied the crown with timber and wood, its main source of income from the Frith, but also provided commoners, both *de jure* and *de facto*, with particularly sheltered and lush areas for animal grazing. The extent of the woodgrounds was not recorded; consequently the absence of fences on the ground, and lines on paper, allowed inhabitants considerable latitude to exploit these spaces. In 1592 the Duchy's attempt to delineate these boundaries met with stubborn resistance from local manorial jurors, who comprised a court of survey, claiming disingenuously that the woodgrounds could not be measured because some areas did not actually contain any

Note 38 *continued*

chaces wastes &c', undated but before 24 May 1612 (Cecil Papers, Hatfield House, Herts., 132, no. 145; microfilm at British Library). This paper is similar to the project that Norden sent to Sir Julius Caesar at about the same time, cited in the previous note.

³⁹ Crown policy in this regard is discussed in detail in Hoyle, 'Disafforestation and drainage'.

⁴⁰ DL 44/1117, includes the final, signed agreements for all three wards.

⁴¹ Hoyle, 'Disafforestation and drainage', pp. 369–70.

⁴² Falvey, 'Custom, politics and resistance', pp. 87–89.

⁴³ DL 44/1117, document 1.

⁴⁴ DL 12/31/86, 31 Aug. 1634.

⁴⁵ Falvey, 'Custom, resistance and politics', ch. 4.

⁴⁶ The measurement is in DL 44/1127, document 2. The medieval Frith had included a fourth ward, Colebrook ward, nearly all of which lay in Wirksworth parish. During the reign of Henry VIII it was granted to the Lowe family; thereafter it was a separate entity. (VCH *Derbyshire*, I, p. 418.) For a detailed study of the medieval Frith, see M. Wiltshire, S. Woore, B. Crisp and B. Rich, *Duffield Frith: history and evolution of the landscape of a medieval Derbyshire forest* (2005).

wood.⁴⁷ Even if the extent of the woodgrounds were simply marked out rather than fenced in, or entrenched, the commoners' virtually unlimited usage would inevitably be circumscribed. Foreseeing this, the jury failed to co-operate with the Duchy's officers on three separate occasions. As long as the boundaries remained unmarked except in living memory, they were moveable. Indeed, locals could conveniently forget them, since, as Fentress and Whickham have observed, memory 'is not a passive receptacle, but instead a process of active restructuring, in which elements may be retained, reordered, or suppressed'.⁴⁸ This wilful failure to define the boundaries of the woodgrounds was one of several occasions when the commoners of Duffield indicated their preference to retain customs of the forest in their memories rather than to delineate them, either in writing or in markers on the ground, since the fluidity of their customs would be prescribed forever by such inscription.⁴⁹

Nevertheless, at enclosure, by definition, boundaries within the Frith needed to be fixed and marked. The task began in March 1633, when, having procured agreements from the leading commoners in each ward, the Duchy set about identifying the areas to be enclosed and issued a commission to mark out the boundaries of the thirds.⁵⁰ Assisted by 'one or more skilfull and experte surveyors or admeasurers of landes', the commissioners were to 'sett out and devide by meetes, stakes and boundes' each ward into three parts as equal as possible with regard to 'value quantitie, quallitie and goodnes of soyle'. The surveyor was to mark out clearly the boundaries of the divisions, along which hedges, fences, mounds or ditches would subsequently be set or dug to fix them permanently. Such an apparently simple task, however, was fraught with difficulties for the Duchy's officers and agents. Indeed, it is clear that from the very start the Duchy anticipated that there would be problems: the enclosure commissioners had been instructed to report anyone who was caught 'fillinge upp of holes, removinge of stakes, stones or other markes wich have been digged upp, sett or placed by the Surveyor' to mark the divisions. Perhaps the Duchy had encountered this form of pre-emptive resistance elsewhere: the explicit instructions certainly suggest painful past experience. No other references to resistance of this kind have been found, either in primary sources or in published studies; nonetheless, the Duchy's commission suggests very strongly that it had been encountered in other forest enclosures. The nightmare recurred at Duffield.

In September 1633 the Duffield commissioners reported that they had met several times in the Frith with William Jordan, whom they had appointed as 'a surveyer and a measurer of ground'.⁵¹ During these meetings the new divisions within the wards had been agreed upon and Jordan, with 'the consent of many of the best sorte of the commoners', had physically set them out. Although the commoners who participated in this process were not identified in the

⁴⁷ DL 44/484. The commission is dated 14 June 1592. The names are given of the 23 men who comprised the 'Jury of her maiesties copyholders and freholders of the saide mannour of Duffield'.

⁴⁸ J. Fentress and C. Wickham, *Social memory* (1992), p. 40.

⁴⁹ See H. Falvey, 'The articulation, transmission and preservation of custom in the forest community of Duffield (Derbyshire)', in R. W. Hoyle (ed), *Custom,*

improvement and the landscape in early modern Britain (2011), pp. 65–100.

⁵⁰ DL 44/1127, document 1. The commissioners appointed were nearly all the same as those named in the original enclosure commission of 1632 (DL 44/1117), but on this occasion only two local men, Timothy Pusey and Thomas Gilbert, actually implemented the commission.

⁵¹ DL 44/1127, document 2.

report, they were almost certainly among those who had signed the enclosure agreements.⁵² These *ad hoc* meetings, it seems, occurred instead of any kind of formal court of survey. Despite encountering various set backs, to be discussed below, Jordan completed the work of surveying all 5000 acres of the Frith in under six months. The detailed records of his survey indicate that although he recruited local men as assistants, Jordan was the only trained surveyor employed at Duffield.⁵³ The commissioners noted that he had 'sett out and devided every of the said several warde, into three partes' and had transferred the measurements thus obtained onto 'plottes' that he had drawn of the Frith.⁵⁴ Just as Jordan used red, green and violet to delineate the different thirds in each ward, so when Braydon was disafforested and enclosed, specific areas were delineated in green, red, blue and brown on the 'Plott' returned by the commissioners there.⁵⁵ At Enfield Chase, the boundaries of the new allotments were drawn on a map and subsequently marked on the ground, but it is unclear what form this marking took.⁵⁶ Under normal circumstances, a surveyor would simply make holes in the ground to show where the fences, hedges, mounds or ditches marking the enclosure should subsequently be placed. Initially Jordan had proceeded in exactly this way, with the assistance of the father and son both named John Lane but, on riding through the wards, the commissioners found that this work had been sabotaged.⁵⁷ The commissioners were therefore obliged to instruct Jordan to 'sett stakes or stones ... where he had made holes' because 'troublesome people' had 'filled [them] upp' with earth.⁵⁸

In much the most comprehensive study of the mechanics of early modern enclosure, Nicholas Blomley has suggested that there is 'little evidence that protestors targeted either surveyors or maps', although he does concede that 'the defensive tone of the surveyor's manuals' suggests they were unlikely to be welcomed by the rural poor.⁵⁹ Specific instances of harassment are now in fact coming to light as more detailed work on individual forest enclosures is published.

⁵² The names of those who signed the original enclosure agreements are recorded in DL 44/1117, documents 4–8; documents 4, 6 and 8 are the signed agreements for the three wards; documents 5 and 7 are rough drafts of the agreements for Belper and Chevin wards. The rough draft for Hulland ward has not survived; only six men signed the final agreement for that ward, including two county magnates, John Curzon and John Gell.

⁵³ A record in the Duchy court later stated that 'his Maiestie hath paid for the surveye of the said wards threescore pounds to other Surveyours' but there is no other record of these surveyors, or of what they had done. (DL5/32, fo. 229v.) It is Jordan's measurements and plots that were used. Perhaps these payments were made to the commissioners, or even to Jordan's assistants and workmen.

⁵⁴ DL 44/1127, document 2; this gives Jordan's detailed measurements and describes his 'plottes'. It is clear from the commissioners' report that the purpose of the plots was to record and clarify the positions of the new boundaries. These plots were drawn up and submitted as a record for the Duchy.

⁵⁵ Manley, 'The disafforesting of Braden', pp. 565–67; the map is reproduced, with the coloured boundaries, between pp. 564 and 565.

⁵⁶ Pam, *Enfield Chase*, p. 73. Pam implies that the boundaries were drawn on the map prior to them being marked on the ground.

⁵⁷ TNA, DL 44/1127, document 2.

⁵⁸ Exactly when these activities had occurred is not recorded, but John Lane indicated that it was not until 18 Sept. that workmen were employed in Hulland ward to set stakes as markers in place of the hole. He also implied that similar resistance had occurred in the other two wards, but gave no details. DL 44/1127, document 4.

⁵⁹ N. Blomley, 'Making private property: enclosure, common right and the work of hedges', *Rural Hist.* 18 (2007), pp. 1–21. The only evidence that Blomley cites is the harassment of 'a surveyor in Derbyshire'; actually this was William Jordan. (Blomley acknowledges Steve Hindle as his source for the Derbyshire surveyor; his source was my thesis.)

In May 1657 at Needwood, for example, the surveyor George Sargeant and his colleagues, asked for the assistance of 'a doozen or fourteene Horses' (i.e. mounted soldiers), without the protection of whom they could not carry out their survey.⁶⁰ Sargeant complained that 'without a partie of horse quartering neere us, we are neither able to secure the forest from continuall depredacions, nor our selves at least from interruption threatened by them'.⁶¹ The opposition at Needwood appears to have been manifested both as damage to the timber and physical intimidation of the surveyors. At Duffield, as well as reporting the 'great wast and spoyle' made of the woods by inhabitants, the commissioners also reported the more subtle technique of in-filling the holes which marked the new boundaries.⁶²

In Needwood, when allotments were made to individual commoners, the freeholders of Barton ward, perhaps surprisingly, asked Sargeant to set out their allotments for them.⁶³ Sargeant asked them to provide their own stakes, personalized with branded marks, and made each man responsible for accompanying the surveyor and noting where his stakes were to be driven.⁶⁴ This personal involvement in the process of marking the boundaries was intended to ensure co-operation between the tenants and the surveyor: those who failed to accompany Sargeant 'would find their stakes driven into the least attractive spots furthest from home'.⁶⁵ At Duffield, although William Jordan had met with leading tenants to discuss the location of the divisions within the wards, neither the main body of tenants nor the poor commoners who took piecemeal advantage of the benefits of the Frith had been consulted about the new boundaries. Resistance to the enclosure of the wards of Duffield Frith accordingly targeted the physical restrictions that would inhibit customary local access in the future. Whether a more broadly based consultation would have led to a more general acceptance of the enclosure is matter of conjecture, since even then an apparently consensual enclosure by agreement might subsequently unravel.⁶⁶

The additional work of re-digging and staking the boundary holes required more time, more labour and more expense. On 18 September, Jordan employed Francis Johnston and William Underwood to fell trees, make stakes and drive them into the holes in Hulland ward, and left his employees the Lanes to oversee the workmen.⁶⁷ Later that morning, Richard Taylor, one of the Duffield commoners asked the workmen to stop setting the stakes in the holes, but they ignored the request. He later returned, accompanied by William and Thomas Webster who were armed with bills and a pitchfork. Taylor once more demanded that the workmen desist

⁶⁰ SP 18/155 no. 18, letter from the commissioners of survey, dated 9 May 1657. See Bendall, 'Mapping the English forests', p. 27; Tringham, 'Needwood Forest', p. 32; J. Thirsk, 'Horn and thorn in Staffordshire: the economy of a pastoral county', *North Staffordshire J. of Field Studies*, 9 (1969), pp. 4–5.

⁶¹ SP 18/155/18.

⁶² DL 44/1127, documents 2 and 3.

⁶³ No allotments for individual Duffield commoners were even planned, let alone made.

⁶⁴ Bendall, 'Mapping the English forests', p. 28, referring to BL, Ms Stowe 880, fo. 104.

⁶⁵ *Ibid.*, p. 28.

⁶⁶ See, for example, M. Beresford, 'The decree rolls of Chancery as a source for economic history, 1547–c.1700', *EcHR* 32 (1979), pp. 1–10; H. Falvey, 'Crown policy and local economic context in the Berkhamsted common enclosure dispute, 1618–42', *Rural Hist.*, 12 (2001), pp. 123–58; S. Hindle, 'Persuasion and protest in the Caddington Common enclosure dispute, 1635–39', *Past and Present* 158 (1998), pp. 37–78; S. Hipkin, "'Sitting on his penny rent": conflict and right of common in Faversham Blean, 1595–1610', *Rural Hist.* 11 (2000), pp. 1–35.

⁶⁷ The following account is taken from DL 44/1127, document 4.

and all three allegedly threatened them with ‘very ille wordes and threates callinge them sorie beggarlie fellowes’, thus criticizing them for accepting wages for work detrimental to their own community. Lane sen. intervened, asking that the workmen be allowed to continue. The three troublemakers left, seemingly persuaded.

Later that day, as both Lanes were supervising further work on the boundaries, four women appeared, and not only threatened and reviled the labourers, but also removed the ‘meare stones’ and flung down the stakes. The women were later identified as Ellen and Grace Webster and Alice Taylor, the wives of the three earlier protestors, and Joan Osbeston, wife of Robert.⁶⁸ Although no men acted with them, Thomas Webster was apparently ‘standing afar of reedy to asist them’. It is worth clarifying exactly what was happening here. These women were not the original ‘troublesome people’ who had disrupted Jordan’s preliminary work. They were not simply filling in holes but were actively removing stones and stakes that had been set up following the commissioners’ subsequent advice to their surveyor. Their actions were evidently part of an on-going process of pre-emptive resistance that was offered long before the physical boundaries of the enclosure were actually erected and was intended to obscure the very outline of those boundaries.⁶⁹

That afternoon a further confrontation occurred between John Lane jun. and Richard and Alice Taylor, and their son, Edward. Before leaving for Belper to inform Jordan of the morning’s events, Lane and one of the workmen began resetting some of the stakes that had been thrown down by the women. Seeing the Taylors arrive, Lane mounted his horse and met them on the highway. Husband and wife, armed with a bill and stones respectively, struck him and swore at him. Lane rode on and left the scene, Richard Taylor making as if to throw his bill at the horse and swearing that he would kill Lane. Taylor then turned on the workman, threatening to strike him and slandering both workmen as ‘theeves’. Taylor, his wife and the other three women spent most of the following day, 19 September, in Hulland Ward, watching the workmen making stakes. Alice Taylor verbally abused them and their wives but no physical assaults occurred that day on either the men or their work.

The incidents recounted by Lane in his report, dated 20 September, so outraged Duchy officials that, just over two months later, on 28 and 29 November, Richard Taylor and William and Thomas Webster appeared at Westminster to answer for their actions.⁷⁰ All three men, it transpired, were legal commoners in the Frith: details of their landholding were noted on the commissioners’ report. Richard Taylor was a copyholder, whose land was worth £20–30 per annum; William Webster was a freeholder, with land worth £30–40 per annum; Thomas Webster had recently acquired copyhold land in Hulland and was reeve and headborough (constable) there.⁷¹ This evidence throws valuable light on the debate over the social status of those who opposed forest enclosures. In his wide-ranging study of enclosure riots in the West Country forests, Buchanan Sharp concluded that most of the rioters were ‘marginally poor and landless, including artisans’ and that, contrary to earlier findings, there was no

⁶⁸ Grace Webster was the wife of Thomas; Robert Osbeston was a tailor.

⁶⁹ The implications arising from fact that women were removing the markers will be discussed below.

⁷⁰ DL 4/85/64, ‘Taylor *et al* examined upon a contempt in Duffield Frith’, Nov. 1633.

⁷¹ DL 44/1127, document 4.

mass participation by yeomen and husbandmen urged on by gentry.⁷² These particular conclusions, however, have since been challenged and later work on specific enclosure riots in various landscapes has shown that the social status of participants might vary widely.⁷³ That the miscreants in Hulland ward were local landholders and included a local officer should, therefore, come as little surprise.

From the interrogatories that were subsequently administered to the three men, it is clear that the authorities construed the harassment of the surveyor, his assistants and workmen by definition as direct opposition to the king since ‘the said worke and service [were] for his Maiestye’.⁷⁴ Rather than being thereby cowed into submission, however, the Duffield commoners’ wily and evasive responses demonstrate that they had been soundly advised. Discrepancies between the two narratives reveal that the Duffield men understood precisely how prosecution for riot might be evaded: indeed, it is clear that they had also received advice on orchestrating the earlier protests. The tone of the men’s depositions emphasizes their refusal to be overawed by Duchy officials, and their determination to repulse this attack on their perceived rights. Set alongside John Lane’s account, their answers offer a competing narrative of the events in Hulland ward.⁷⁵

In his deposition, Richard Taylor disingenuously claimed that all of the incidents had occurred because Jordan had set out unequal ‘thirds’ in Hulland ward. Taylor believed that the ward contained 1200 acres and that 400 acres should therefore have been set out for the king, whereas Jordan had told him that he had laid out 490 acres for the king.⁷⁶ He and the other commoners had accordingly requested a meeting with the commissioners to discuss this discrepancy. This was why, together with four other men, he had asked the Lanes and the workmen to stop marking the boundaries until the misunderstanding had been resolved. Jordan had indeed made unequal divisions but he was actually following the instructions in the enclosure agreement that the wards should be divided into three equal parts ‘respect being had both of the quantity and quallity of the soyle thereof’.⁷⁷ Knowing that the land within the wards varied in quality, the commoners, in their negotiations prior to signing the enclosure agreements, had stipulated that rather than exact thirds, differences in soil quality should be reflected in the proportions of the division: the ‘thirds’ that Jordan laid out in Hulland ward accordingly measured 490, 525 and 604 acres.⁷⁸ Jordan had not therefore defrauded the commoners by laying out unequal areas. The Duchy itself, by contrast, had deceived them.

⁷² Sharp, *In contempt of all authority*, p. 127. Sharp was questioning the findings of Allan and Kerridge. (Allan, ‘The rising in the West, 1628–31’; E. Kerridge, ‘The revolts in Wiltshire against Charles I’, *Wiltshire Natural History and Archaeological Magazine*, 57 (1958), pp. 64–75.)

⁷³ For a refutation of Sharp’s work, see, for example, D. Underdown, *Revel, riot and rebellion: popular politics and culture in England 1603–1660* (1985), p. 109. For detailed local studies of enclosure riots, see, for example, Falvey, ‘Crown policy and local economic context’; Hindle, ‘Persuasion and protest’; Hipkin, ‘“Sitting on his penny rent”’; B. McDonagh, ‘Subverting

the ground: private property and public protest in the sixteenth-century Yorkshire Wolds’, *AgHR* 57 (2009), pp. 191–206.

⁷⁴ DL 4/85/64, interrogatory 8.

⁷⁵ DL 44/1127, document 4; DL 4/85/64. For the concept of competing narratives, see D. Cressy, *Travesties and transgressions in Tudor and Stuart England* (2000), p. 281.

⁷⁶ It is not clear from whence Taylor obtained his figures. Jordan’s measurements for Hulland ward are noted below.

⁷⁷ DL 44/1117, documents 4, 6 and 8.

⁷⁸ DL 44/1127, document 2.

The enclosure agreements had stated that the measured thirds would be allocated by casting lots; the enclosure commission, however, stated that choice of the thirds for the king would be made exclusively by the Duchy.⁷⁹ Jordan may even have been instructed to select and mark out the ground for the king during the course of his survey. That the king had been allocated the smallest 'third' was an allocation of some significance, because the divisions took account of the quality of the soil, so it follows that the smallest 'third' in each ward would contain the best quality land. The commoners were well aware of this implication.⁸⁰ Taylor further defended his actions by claiming that since none of the workmen had been willing or able to produce evidence of their authority to set the stakes, he had equivalent authority to remove them.⁸¹ With a final flourish, he claimed that neither he nor any of his associates had either abused or threatened those working on the boundary markers but conceded only that four or five women had pulled up the stakes. He named four of them but denied that he, or anyone else, had procured or encouraged their actions.

William Webster's testimony confirmed that of Taylor.⁸² Regarding the women, he professed ignorance of either their actions or their words. On meeting them he had asked his own wife to 'goe back with him' but she answered only 'that shee would presentlie followe him'. He denied any knowledge of where the women were going or 'to what purpose', again isolating the women's actions. Thomas Webster claimed that the men's approach to John Lane had been 'in a neighbourlie and freindlie manner'.⁸³ He too admitted meeting the named women but he was ignorant not only of their actions and words but also of their presence in the ward till he met them 'by chaunce'. He emphasized that they were acting independently of their menfolk; he had not encouraged them either then or earlier to remove the stakes or fill up the holes. Clearly Duffield's inhabitants knew that there was a blind spot in the law regarding the actions of women. Indeed, their actions throughout the whole affair exemplify the popular legalism current in early modern England: a growing participation in, and knowledge of, the law at all levels of society and in all areas of the country, however remote.⁸⁴

⁷⁹ DL 44/1117, documents 4–7; DL 44/1127, document 1. Kerridge has argued that the casting of lots for enclosed portions of land was normal practice. E. Kerridge, *Agrarian problems in the sixteenth century and after* (1969), p. 106.

⁸⁰ DL 1/370, answer of Robert Mellor *et al.* to the information presented by the Attorney General by the relation of Edward Syddenham esquire, 26 May 1642.

⁸¹ DL 4/85/64, examination of Richard Taylor, 29 Nov. 1633.

⁸² DL 4/85/64, examination of William Webster, 29 Nov. 1633.

⁸³ DL 4/85/64, examination of Thomas Webster, 29 Nov. 1633. For neighbourliness, see K. Wrightson, 'The

'decline of neighbourliness' revisited', in N. Jones and D. Woolf (eds), *Local identities in late medieval and early modern England* (2007), pp. 19–49.

⁸⁴ See, for example, C. W. Brooks, *Pettyfoggers and vipers of the Commonwealth: the 'lower branch' of the legal profession in early modern England* (1986); id., *Law, politics and society in early modern England* (2008); S. Hindle, *The state and social change in early modern England, c.1550–1640* (2000), pp. 87–93; J. A. Sharpe, 'The people and the law', in B. Reay (ed.), *Popular culture in seventeenth-century England* (1985), pp. 244–70; Wood, *Riot, rebellion and popular politics*; id., *The politics of social conflict: the Peak Country, 1520–1770* (1999).

III

It is now a historiographical orthodoxy that women were active participants in popular protest and a great deal is known about both their likely motives and the reactions of the authorities.⁸⁵ Women's involvement in anti-enclosure protest was entirely logical since 'the pasturing of animals such as cattle and sheep was the province of women in the rural sector', and pasturing was directly threatened by many enclosures.⁸⁶ It is known, for example, that women were involved in enclosure rioting at Berkhamsted (Herts.), in 1620, because a warrant was issued for five women, 'taken in a late greate ryott in cutting downe certaine pales in that parke', to be taken into custody.⁸⁷ Neither their names nor their punishments (if any) found their way into the archive of prosecution. By contrast, in April 1638 at Caddington on the Hertfordshire/Bedfordshire border, Elizabeth Birchmore and Alice Gazeley, together with their husbands and another man, were committed to the Fleet for destroying enclosure fences.⁸⁸ On many occasions female participation was encouraged by the 'ambiguous position of women in the eyes of the law and the magistrate'.⁸⁹ On several occasions some men apparently tried to appropriate women's supposed invisibility before the law by wearing women's clothing when participating in enclosure riots. In Braydon Forest in 1631, for example, three of the leaders of the riots there wore female apparel. From a distance, such a disguise might fool those attempting to quell the unrest and so avert, or at least postpone, the perpetrators' arrest.⁹⁰

In some respects the pre-emptive strikes in Hulland ward were similar to enclosure protests that occurred in 1604 at Shepshed (Leics.), where female protestors apparently acted on their own initiative. Martyn Bennett has noted that there more than half of the principal activists were women, only some of whom were married to men involved in the disturbances. 'Both the men and the women acted in single-sex teams in a systematic manner. There is no suggestion that the women were working at the behest of the men involved, they seem to have organized themselves and to have provided their own impetus'.⁹¹ In the accusations that he levelled

⁸⁵ See, for example, R. A. Houlbrooke, 'Women's social life and common action in England from the fifteenth century to the eve of the Civil War', *Continuity and Change* 1 (1986), pp. 171–89; J. Walter, 'Grain riots and popular attitudes to the law: Maldon and the crisis of 1629', originally published in J. Brewer and J. Styles (eds), *An ungovernable people: the English and their law in the seventeenth and eighteenth centuries* (1980), pp. 47–84, and now repr. in J. Walter, *Crowds and popular politics in early modern England* (2006), pp. 27–66.

⁸⁶ M. Bennett, "'And these without number": riot and rough grazing; Shepshed, Leicestershire, 1604' (unpublished paper), p. 8. The account is based on the documents that comprise TNA, STAC 8/219/23. I am very grateful to Dr Bennett for resurrecting this paper for me. John Walter makes a similar case for women's involvement in grain riots (Walter, 'Grain riots', p. 40).

⁸⁷ PC 2/30, p. 550. The riots at Berkhamsted are

discussed in Falvey, 'Crown policy and local economic context'.

⁸⁸ Hindle, 'Persuasion and protest', p. 57. Indeed the two women, with many others, had re-entered the newly-made enclosures in between their first protest and committal to the Fleet.

⁸⁹ B. Capp, 'Separate domains? Women and authority in early modern England', in P. Griffiths, A. Fox and S. Hindle (eds), *The experience of authority in early modern England* (1996), pp. 117–145, p. 121.

⁹⁰ Sharp, *In contempt of all authority*, p. 105. Christina Langert has discussed at length the concept of cross-dressing during enclosure rioting, although nowhere does she suggest that it might have been done to avoid capture or prosecution. C. B. Langert, 'Hedgerows and petticoats: sartorial subversion and anti-enclosure protest in seventeenth-century England', *Early Theatre*, 12 (2009), pp. 119–35.

⁹¹ Bennett, "'And these without number'", p. 8.

against the female offenders, the landowner at Shepshed, Roger Manners, earl of Rutland, treated them as both *femmes covert* (married women) and as disorderly persons. On the one hand he claimed that they were acting on their husbands' instructions; on the other hand he suggested that they had gone beyond the bounds 'fitting their sex'.⁹²

Although events at Shepshed and Duffield emphasize the autonomous involvement of women in enclosure protest, the nature of the prosecution differs. At Shepshed the landowner presented a complaint in Star Chamber accusing the perpetrators of rioting. Interrogatories were subsequently administered to, and answered by, many local people, both men and women.⁹³ At Duffield, the Duchy court examined only men; the women identified by John Lane were never questioned. The men asserted that Alice Taylor and her associates had been acting entirely on their own initiative, without any prompting from them.⁹⁴ The truth of these claims, however, is difficult to gauge. On the one hand, the women themselves may well have chosen to act as they did; on the other, considering the weight of the law that would bear down on the men if they admitted instigating the destruction, it is logical that they would have blamed the women.

The strategies employed by the Duffield men in their depositions demonstrate an awareness of the limitations of the law. At no point did they explicitly voice opposition to the enclosures *per se*, but merely stated that they were unhappy with the amount of land allotted for the various enclosures. Unsurprisingly, they were keen to deny any heated verbal exchanges with, let alone any physical violence against, the crown's agents and their workmen. Rather than deny that any illegal acts had taken place, however, they denied the involvement of any legally responsible persons. They were almost certainly testing the water to see how far the crown was prepared to pursue the matter. Their strategy seems to have been vindicated, since the crown fought shy of investigating to the bitter end. Despite John Lane's identification of the women who had been removing the surveyor's markers, and despite the deponents' admissions that four or five women had indeed done so, the Duchy court failed to pursue them. Indeed, the final outcome of suit against the husbands of three of them is unknown.⁹⁵

The campaign to remove the stones and posts marking out the thirds in Hulland ward could not succeed indefinitely, not least since their boundaries were now recorded on Jordan's 'plottes'. Nevertheless, the erection of the fences – a generic term which might encompass mounds, ditches, hedges, pales or walls, as well as actual fences – encountered continued resistance which dragged on until 1637.⁹⁶ In 1642 and 1643 rioters destroyed the enclosures and, despite the thirds coming into the hands of new lessees in 1651, the commoners had access to the whole of the Frith until the early 1660s, when the thirds were re-enclosed by subsequent lessees.⁹⁷ Although both legal and physical challenges were mounted, these enclosures became permanent; nevertheless inhabitants retained access to over 3300 acres in the Frith. Indeed, in 1742, Exchequer deponents stated that the remainder of each ward was still 'uninclosed and

⁹² Ibid., p. 5.

⁹³ On many occasions the people of Shepshed acted in pairs and so, technically, could not be accused of riot.

⁹⁴ DL 4/85/64.

⁹⁵ A search of the Duchy's order book covering

1631–34 (DL5/31) has proved fruitless; perhaps the suit was dropped.

⁹⁶ DL 5/32, fos 133r, 215r, 329r.

⁹⁷ For the riots in the 1640s, see Falvey, 'Custom, resistance and politics', pp. 199–210; for the leasing of the Frith in the 1650s and 1660s, see *ibid.*, pp. 240–51.

depastured by great flocks of Sheep and cattle by those having right of common' and that cottagers had been permitted to make encroachments.⁹⁸

IV

Having finished measuring and mapping the divisions, William Jordan's work at Duffield was complete. His story does not, however, end there because remuneration for that work was not immediately forthcoming. From the Duchy's records, it appears that Jordan was to have been paid not by the Duchy itself but proportionately by the crown's lessee, Edward Syddenham, and by the commoners, the former paying one third of the cost and the latter two thirds (although the commoners initially claimed that the whole sum should be paid by Syddenham).⁹⁹ In February 1636, nearly three years after he had first visited the Frith, Jordan commenced a suit in the Duchy court against Syddenham and the commoners, pursuing them for the non-payment of the significant sum of £45 for his efforts and costs in measuring, 'plotting' and setting out the Frith.¹⁰⁰ The claims and counter-claims regarding the fees that were made in the Duchy court are tortuous, to say the least.¹⁰¹

It was conventional for surveyors to provide their own measuring instruments, while their employers provided the necessary materials such as parchment, oils, ink and colours.¹⁰² Syddenham and the commoners would therefore have been expected to pay Jordan both for his time and his materials. As we have already seen, whereas in the 1600s crown surveyors were expected to pay their clerks and other expenses, in the 1650s disbursements by the surveyors in Needwood and the other forests were met by the Trustees for sale of the Forests. In the absence of any detailed record of Jordan's expenses, we do not know if, like earlier surveyors, he was responsible for the costs of recruiting labour at Duffield. Whether he was only claiming his own fees, at 15s. per day, or he was claiming additionally for labourers and messengers when applicable, it is not hard to see how he might have racked up an account of £45 during his employment in the Frith, which probably lasted nearly six months.¹⁰³ Orders made by the Duchy court relating to the on-going saga of Jordan's claim can be traced through the court's order and decree books until June 1637, by which time Syddenham had paid at least £12 but the commoners had paid nothing.¹⁰⁴ The matter reappears in the court records in 1640, but by this time the complainant was Jordan's widow, Mary.¹⁰⁵ Far from being sympathetic towards her, the commoners refused to pay her any of the monies that the court had ruled were due to her late husband. Arguing over a technicality, the three Duffield men who were summoned

⁹⁸ E 134/18Ge02/Mich1, depositions of Peter Alsop of Chevin ward; John Holbrook of Hulland ward; Laurence Peach of Hulland ward.

⁹⁹ See, for example, DL5/32, fo. 310r.

¹⁰⁰ DL5/32, fo. 160v. The actual sum owed is given in DL5/32, fo. 229r.

¹⁰¹ DL5/32, fos 160v, 212r, 229r, 310r, 327v, 336v.

¹⁰² P. Eden, 'Three Elizabethan estate surveyors: Peter Kempe, Thomas Clerke and Thomas Langdon', in S. Tyacke (ed.), *English map-making 1500-1650* (1983), pp. 73-4; S. Tyacke, 'Introduction', in Tyacke (ed.),

English map-making, p. 15. When working for the Duchy of Cornwall, Norden was allowed £1 6s. per day for expenses with an additional allowance for the tools of his trade. Kitchen, 'John Norden', p. 56.

¹⁰³ The commissioners' report does not say for how long Jordan was working in the Frith, but given its size, and the fact that he was the only surveyor, it is likely that he commenced almost immediately. (DL 44/1127, documents 1 and 2.)

¹⁰⁴ DL5/32, fos. 212r, 229r, 310r, 327v, 336v.

¹⁰⁵ DL5/33, fos. 431v, 445r, 448v.

to appear claimed that the court had never served them with any order concerning *Mistress Jordan*.¹⁰⁶ Indeed, rather than her action against them for contempt succeeding, she was ordered to pay costs of 20s. to one of them and the other two were discharged.

That Mary Jordan had tried to recoup the unpaid fees is unsurprising since the £30 still due from the commoners was a not inconsiderable sum. Furthermore, her husband's probate inventory indicates either that he was not a wealthy man, or (more likely) that he had died whilst away from home.¹⁰⁷ Out of the total inventory value of £4 10s. 8d., his purse, girdle and apparel were valued together at £3 6s. 8d. The items that were worth the remaining £1 4s. were described as 'the tooles of surveying and all other implementes belonging to his science with some certaine bookes'. The lack of a detailed description of these 'toolles of surveying' and books is disappointing, but Jordan would doubtless have owned some instruments similar to those that Rathborne described in *The Surveyor*: 'the Theodelite, the Playne table, and Circumferentor, ... an absolute Instrument, which I call the Peractor, together with ... the Decimal Chayne, used only by my selfe'.¹⁰⁸ The paucity of his inventory suggests that Jordan had died whilst on a surveying commission, and, because he had died intestate, it was necessary to value what items he had with him at his death. Although in theory probate inventories valued all of the moveable goods and chattels of the deceased, in practice it is clear that many inventories were only partial records of the deceased's belongings.¹⁰⁹ As a married man, it is hardly likely that Jordan would have owned no household goods at all. Furthermore, had she been on hand when the inventory was made, his widow Mary would surely have insisted that the outstanding debt of £30 from the Duffield commoners was recorded – if only as 'desperate'.

To be sure, this account of the events in Hulland ward in 1633 casts new light not only on subtle expressions of opposition that might be employed against enclosure but also on the role played in that opposition by women. Its main contribution, however, arguably concerns the work of the forest surveyor. The tribulations of William Jordan in the 1630s, and also of the surveyors in Needwood in the 1650s, were probably not uncommon and suggest that work such as theirs was an entirely thankless task. Indeed the vilification of these new professionals is scarcely surprising. In the late sixteenth and early seventeenth centuries the economic pressures of inflation and of a rising population was forcing widespread change in the agrarian economy. As a result of the quest by landowners to increase production and therefore profit, more and more land was being brought into cultivation. Unable to comprehend the actual

¹⁰⁶ DL5/33, fo. 448v, 1 Dec. 1640.

¹⁰⁷ Nottinghamshire Archives, PRSW 65/27a, inventory of William Jordan of Southwell, dated 23 Apr. 1638.

¹⁰⁸ Rathborne, *The Surveyor*, p. 121, introduction to 'the third Booke', 'The exact operation of instrumental dimensions by divers meanes'. Rathborne's book includes illustrations. For other illustrations of various surveyors' instruments see, for example, J. A. Bennett and O. Brown, *The Compleat Surveyor*, published to accompany a special exhibition at the Whipple Museum of the History of Science (1982); J. A. Bennett, *The*

divided circle: a history of instruments for astronomy, navigation and surveying (1987).

¹⁰⁹ This point about truncated inventories is not mentioned specifically, but for discussions of the shortcomings of inventories in general see M. Spufford, 'The limitations of the probate inventory', in J. A. Chartres and D. Hey (eds), *English rural society, 1500–1800* (1990), pp. 140–74; L. Orlin, 'Fictions of the early modern English probate inventory', in H. S. Turner (ed.), *The culture of capital: property, cities and knowledge in early modern England* (2002), pp. 51–83. Thanks to Ken Sneath for discussing this problem with me.

causes of the consequent upheavals, inhabitants lashed out at those men whom they saw in their neighbourhood bringing about those upheavals. McRae's analysis of the evolution of the meanings of improvement and of property during the period emphasizes the ambiguous role of the estate surveyor in these processes: an agent of change, one might say, in retrospect, of progress, who was reviled by those who paid the price of that progress.¹¹⁰ But whereas the estate surveyor defined existing albeit previously fluid boundaries, at enclosure forest surveyors marked boundaries where none had ever existed before. These men encountered obstruction or even physical abuse from those inhabitants whose traditional livelihood was threatened with extinction by enclosure. Like the land surveyors in Ireland, forest surveyors perforce needed to be 'men of activitie, that could leap hedge and ditch, and could alsoe ruffle with the severall rude persons in the country, from whome they might expect to be often crossed and opposed'.¹¹¹

¹¹⁰ McRae, 'To know one's own'; id., *God speed the plough*.

¹¹¹ T. A. Larcom (ed.), *The history of the Survey of Ireland, commonly called the Down Survey, by Doctor*

William Petty, A.D. 1655-6 (1851), pp. xiv-xvi, cited in Bendall (ed.), *Dictionary of land surveyors*, I, p. 34. To 'ruffle' = contend, struggle (OED).