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Miner Absenteeism and Customary
Holidays in the Great Northern Coalfield,
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Miner Absenteeism and Customary Holidays in the Great Northern Coalfield, 1775-1864¹

The decline of 'Saint Monday' occupies a prominent position in debates over the transition to a capitalist labour market.² Most scholars agree that some form of customary Monday holiday existed in the past but there is little agreement over its chronology or its effect upon labour productivity and living standards. Reid claimed that "the eradication of Saint Monday did real harm to

¹ The author is grateful for financial assistance from ESRC Research Grant 000-239-222. Dr T.W. Nutt provided invaluable assistance during the data collection and input stage of the project and Dr L.D. Schwarz offered valuable and supportive comments.

² D.A. Reid, 'The Decline of Saint Monday, 1766-1876', *Past & Present*, 71 (May, 1976); D.A. Reid, 'Weddings, Weekdays, Work and Leisure in Urban England, 1791-1911: The Decline of Saint Monday Revisited', *Past & Present*, 153 (Nov., 1996); H-J Voth, 'Time and Work in Eighteenth-Century London', *Journal of Economic History*, 58, 1 (1998); H-J. Voth, *Time and Work in England, 1750-1830* (Oxford, 2000); W. Rybczynski, 'Keeping Saint Monday' in W. Rybczynski, *Waiting for the Weekend* (New York 1991), pp. 109-131; T.S. Ashton and J. Sykes, *The Coal Industry of the Eighteenth Century* (Manchester 1929); W.H.B. Court, *The Rise of the Midland Industries, 1600-1838* (Oxford 1938), p. 206; T.C. Barker and J.R. Harris, *A Merseyside Town in the Industrial Revolution: St. Helens, 1750-1900* (Liverpool 1954), p. 287; T.S. Ashton, *An Economic History of England: The Eighteenth Century* (London 1955), p. 204-5; S. Pollard, *A History of Labour in Sheffield* (Liverpool 1959), pp. 30, 61, 211; N. Thrift, 'Owners' Time and Own Time: The Making of a Capitalist Time-Consciousness, 1300-1880', in J.A. Agnew, D.N. Livingstone and A. Rogers, *Human Geography* (1996), p. 557; E.P. Thompson, *The Making of the English Working Class* (Harmondsworth, 1963; 1980 edn.), pp. 337-338, 443-3; P. Glennie and N. Thrift, 'Reworking E.P. Thompson's "Time, Work Discipline and Industrial Capitalism"', *Time and Society*, 5 (1996), pp. 275-299; R.W. Malcolmson, *Popular Recreations in English Society, 1700-1850* (Cambridge 1973), pp. 94-5; J.S. Hodgson, 'The Movements for Shorter Hours, 1840-1875' (unpub. D.Phil. thesis, Oxford, 1940); S. Pollard, 'Factory Discipline in the Industrial Revolution', *Economic History Review*, n.s., 16, 2 (1963-4), p. 257; E.P. Thompson, 'Time, Work-Discipline and Industrial Capitalism', *Past & Present*, 38 (Dec. 1967), pp. 56-97; M.A. Bienefeld, *Working Hours in British Industry: An Economic History* (London 1972); M. Hodgson, "The Working Day and Working Week in Victorian Britain, 1840- 1900" (Univ. of London M.Phil. thesis, 1974); R. Samuel, 'The Workshop of the World: Steam Power and Hand Technology in Mid-Victorian Britain', *History Workshop*, 3 (1977), pp. 6-72; N. McKendrick, 'Josiah Wedgwood and Factory Discipline', *The Historical Journal*, 4 (1961); P. Stearns, 'Reducing Work Time', in P. Stearns, *Lives of Labour: Work in a Maturing Industrial Society* (London 1975); R. Whipp, "'A Time to Every Purpose": An Essay on Time and Work', in P. Joyce (ed.), *The Historical Meanings of Work* (Cambridge, 1987), pp. 210-236; G.S. Cross, *A Quest for Time: The Reduction of Work in Britain and France, 1840-1940* (Berkeley 1989); J. de Vries, 'The Industrial Revolution and the Industrious Revolution', *Journal of Economic History*, 54 (1994), pp. 249-270; J. de Vries, *The Industrious Revolution: Consumer Behavior and the Household Economy, 1650 to the Present* (Cambridge 2008), pp. 91-92; L. Schwarz, 'Custom, Wages and Workload in England during Industrialisation', *Past and Present*, 197 (2007), pp. 143-175. Much of the debate over work discipline has grown up around the Engelsian concept of a pre-industrial moral economy. This appears in its most pristine form in F. Engels, 'Introduction', *The Condition of the Working Class in England* (1845; 1993 edn. Ed. D. McLellan), pp. 15-17; see also S. Pollard, *The Genesis of Modern Management* (1965), pp. 160-1, for the influence of Werner Sombart's *Der Moderne Kapitalismus* (1903) and *Hoch Kapitalismus* (1929) in developing this idea; Historical interest in working time during the Industrial Revolution has also mirrored those of economists. See, for example, G.S. Becker, 'A theory of the allocation of time', *Economic Journal*, 75 (Sept. 1965).

the actual and potential quality of working-class life ... in submitting to the norms of industrial capitalism the notion of a proper balance between work and leisure was lost." According to Reid a Monday holiday was widespread until the second half of the nineteenth century from which point the custom gradually gave way to a Saturday half holiday.³ By contrast, Voth has argued that Saint Monday was not enjoyed by workers in the north of England after 1760 and elsewhere it had become unimportant by 1800.⁴ According to Voth, the disappearance of Saint Monday and the reduced importance of holy days were the two main factors responsible for the substantial increases in labour inputs per worker between 1760 and 1830.⁵ Feinstein, too, believed that a decline in customary holidays resulted in a substantial increase in working hours during the Industrial Revolution.⁶ Others have claimed that the Monday holiday was of comparatively late origin: Rybczynski suggested that the custom 'probably started at the end of the eighteenth century' and de Vries thought that it only emerged after 1780.⁷ Saint Monday has also been depicted as a 'greater recourse to binge drinking and binge leisure' following pay days, though Harrison's research on the occurrence of crowds in the period 1790-1835 led him to conclude that it 'was a fixed arrangement and not merely a by-product of weekend inebriation.'⁸

³ Reid, 'Decline of Saint Monday', p. 101; Reid, 'Weddings, Weekdays, Work'.

⁴ Voth holds that a decline in customary holidays led by 1830 to an average working day in London of 11 hours and fifteen minutes and a national average working year of 306 days. In the north of England, it is argued that workers worked 13 hours and 57 minutes each working day. Voth, Time and Work, p. 175; tab.3.30, p. 123; p. 159; tab. 3.6, p. 67; p. 88; see Schwarz's review in Albion.

⁵ Voth argued that abstention from leisure time by workers was responsible for between 50 to 70 per cent of total output increases between 1750 and 1850. Voth, Time and Work, pp. 234, 2.

⁶ C.H. Feinstein, 'Pessimism Perpetuated: Real Wages and the Standard of Living in Britain during and after the Industrial Revolution', Journal of Economic History, 58 (1998), p.649.

⁷ Rybczynski, 'Keeping Saint Monday', p. 116; de Vries, 'Industrious Revolution', p. 260. De Vries appears initially to have relied mostly upon Rybczynski for information about Saint Monday. More recently, de Vries has placed his weight behind Voth's analysis. De Vries, Industrious Revolution, pp. 91-92. Giddens, meanwhile, has argued that the practice has "hardly disappeared entirely today in any area of industry". A. Giddens, A Contemporary Critique of Historical Materialism (2nd edn; Stanford 1995), p. 137.

⁸ de Vries, 'Industrious revolution', p. 260; M. Harrison, 'Time, Work and the Occurrence of Crowds 1790-1835', Past & Present, 110 (1986), p. 140.

Such conflicting views stem chiefly from a lack of reliable evidence of historic daily work patterns. Most accounts of Saint Monday have tended to stress the experiences of semi-independent artisans who left behind few records of their working lives. Little is known about how such workers structured their daily work time and even less about their motivations in arriving at decisions about absences from the workplace: most studies of customary holidays have relied almost exclusively upon anecdotal reports. Hobsbawm observed that even in the later nineteenth century the available evidence “rarely throws much light on individual work efforts” whilst Boulton noted that it is “difficult to find accurate quantitative information as to popular attitudes to the working week in the past ... efforts to measure such change are usually frustrated by lack of hard information.”⁹ The scarcity of quantitative and longitudinal evidence of daily labour patterns led Reid to gauge Saint Monday observance against workers’ choice of marriage day. Voth’s study of time and work, meanwhile, relied almost exclusively upon accounts given in court statements about what workers were doing at times when they witnessed crimes.¹⁰ Even the most detailed of community-level studies have elicited few details about workers’ day-to-day interaction with the industrial workplace.¹¹ Nonetheless, Saint Monday observance has come to occupy an iconic position in English social history. Most scholars have regarded its persistence as symbolic of worker resistance to the drive amongst improving employers for a more regulated working week during the Industrial Revolution.

⁹ E.J. Hobsbawm, ‘Custom, Wages and Work-Load’, in E.J. Hobsbawm (ed.), Labouring Men (1964), p. 363; J. Boulton, ‘Economy of Time? Wedding Days and the Working Week in the Past’, Local Population Studies, 43 (Autumn 1989), p. 28; Similar arguments are used in P. Glennie and N. Thrift, Shaping the Day: New Histories of Clock Times in England (Oxford 2009), pp. 104-5.

¹⁰ Reid, ‘Weddings, Weekdays, Work’. The issue of choice of marriage day as a proxy for Saint Monday is discussed in more detail below; Voth, Time and Work; Clark and van der Werf argue that pre-industrial work routines were probably less informal than has often been reported whilst stressing the difficulty of measuring the pre-industrial working day. G. Clark and Y. van der Werf, ‘Work in Progress? The Industrious Revolution’, Journal of Economic History, 58 (1998), pp. 830-843.

¹¹ P. Hudson and S. King, ‘Two Textile Townships, c. 1660-1820: A Comparative Demographic Analysis’, Economic History Review, LIII (2000), pp. 706-711. For a discussion of the problems and possibilities of micro-history, see P. Hudson, ‘Industrialization in Britain: The Challenge of Micro-History’, Family and Community History, 2 (1999), pp. 5-16.

This article re-opens the divergent debate about the importance and longevity of Saint Monday and offers a detailed study of miners' daily work patterns during a crucial period of industrial transition. It addresses some hitherto unexplored definitional problems relating to worker absenteeism in eighteenth- and nineteenth-century Britain and contends that the observance of Saint Monday was a much more complex practice than has been described in much of the literature. It also argues against recent suggestions that Saint Monday had largely disappeared by 1800.

I

Customary Monday holidays amongst coal miners have a long anecdotal history. Stone noted a suspicious pattern of Monday absences among Elizabethan colliers whilst Hatcher's study of a late-seventeenth century Northumberland colliery showed that regularly-employed hewers at the face turned in an average of about four days per week (one-and-a-half days fewer than non-face workers).¹² Langton noted that in eighteenth-century Lancashire, 'on most of the days when absenteeism occurred the whole getting force was off together' and Ashton and Sykes concluded that "Collier Monday" [was] no innovation ... it was the custom to take half a day from work at the periodic pays.¹³ Nineteenth-century sources, moreover, abound with

¹² L. Stone, 'An Elizabethan Coalmine', Economic History Review, n.s., 3 (1950), p. 101; J. Hatcher, 'Labour, Leisure and Economic Thought before the Nineteenth Century', Past & Present, 160 (Aug. 1998), pp. 87-91; see also the commentary on the working time of a colliery waggonway wright in P.E.H. Hair (ed.), Coals on Rails, or the Reason for my Wrioting: The Autobiography of Anthony Errington from 1778 to around 1825 (Liverpool 1988), pp. 202-206; Werner Sombart noted a 'lack of eagerness for work' amongst Bavarian miners of the sixteenth century. W. Sombart, Der Bourgeois (Munich and Leipzig, 1913), transl. M. Epstein as The Quintessence of Capitalism (1915) cited in S. Moos, 'The Statistics of Absenteeism in Coal Mining', The Manchester School, 19 (1951), n. 1, p. 89. For other German examples, see J.S. Roberts, 'Drink and Industrial Work Discipline in Nineteenth-Century Germany', Journal of Social History, 15 (Autumn 1981), pp. 25-38. It was suggested that up to 75% of miners at one Spanish colliery failed to attend work on Mondays. A. Shubert, A Social History of Modern Spain (1990), p. 123.

¹³ J. Langton, Geographical change and industrial revolution: coalmining in south west Lancashire, 1590-1799 (Cambridge 1979), p. 204; Ashton and Sykes, Coal Industry of the Eighteenth Century, pp. 164-5; See also the informative tabulations in P.E.H. Hair, 'The Social History of British Coalminers, 1800-1845' (Oxford D.Phil. thesis, 1955), p. 168.

references to Saint Monday. In the early 1840s, customary holidays were said to be widespread in Scottish collieries and in South Staffordshire a Monday holiday was taken fortnightly.¹⁴ In South Durham, miners were paid fortnightly on a Friday and took the Saturday as a holiday, some of them failing to return to work the following Monday. Pitmen were said to retire to the public house on Friday, remaining there until the Monday.¹⁵ In Yorkshire, collieries were 'but thinly attended directly after pay-day.' One underground steward suggested that hewers' hours on Monday averaged only about 75 per cent of a full day's work and another suggested only 60 per cent. In the Bradford and Leeds district, the Monday was 'chiefly spent by the adults in intemperance, or in recovering from the effects of it, or sometimes in mere physical repose'¹⁶ In the Cumberland collieries, meanwhile, a Monday holiday was accompanied by another taken on alternate Thursdays which marked the beginning of a new fortnight's pay calculation. In Lancashire, it was

never expected that [the colliers] should return to their work [on Monday] ... many of them will not settle steadily to work before the middle of the week following the pay. In this manner the drawers are kept half employed for two or three days at the beginning of the reckoning ... and toward the end of it they are worked past their strength to make up the lost time.'¹⁷

In many collieries, a Monday holiday was set aside as a day for repairs and general maintenance. Monday stoppages were observed at Oldham, though they were said to be in decline in the 1840s and some owners attempted to

¹⁴ Children's Employment Commission: East of Scotland: PP 1842, XVI, CEC., pp. 436, 448, 456; West of Scotland: PP 1842, XVI, CEC., pp. 357, 360, 361, 362. South Staffordshire: PP 1842, XVI, CEC., p. 18; Some Staffordshire iron workers also observed the Monday holiday. PP 1842, XVI, CEC., p. 73; see 'Iron Masters' Quarterly Meeting', in Daily News, 17th Oct. 1853, p. 7; PP 1842, XVI, CEC., pp. 64, 87. See also Ashby-del-la-Zouch, PP 1842, XVI, CEC., p. 102.

¹⁵ Children's Employment Commission: South Durham: PP 1842, XVI, CEC., pp. 148, 149; There were widespread reports of 'Cavilling Monday' and 'gaudy days' amongst miners in Northumberland and Durham. D. Douglass, 'The Durham Pitman', in R. Samuel (ed.), Miners, Quarrymen and Saltworkers (London 1977), pp. 237-9, 252-3.

¹⁶ Children's Employment Commission: Yorkshire: PP 1842, XVI, CEC., pp. 191, 279; PP 1842, XVII, CEC., H 2.

¹⁷ Children's Employment Commission: Cumberland: PP 1842, XVI, CEC., pp. 307; Lancashire: PP 1842, XVII, CEC., p. 176 (see also pp. 159, 179, 202, 213).

ease the problem by paying half the fortnightly-paid workers on one week and the remainder a week later.¹⁸ In some districts of South Wales, workers put in only two-thirds of days in the fortnight following the monthly pay.¹⁹ Cross, in his wide-ranging study of working time, asserted that 'British miners may have seen an increase in the workday in the 1840s, but the practice of Saint Monday, summer short time work, and early quitting on Saturdays in summer remained.' Rybczynski, meanwhile, argued that 'the Monday holiday achieved what amounted to an official status. Weavers and miners ... regularly took a holiday on the Monday after payday'.²⁰ According to Humphries, miners 'would come and go as they pleased, and celebrate St. Monday at the beginning of the week, even if the remorseless pressure of the piece-rate meant working up a storm by Friday.'²¹ There is evidence that the miners' Monday holiday persisted into the twentieth century. A departmental committee of 1914-16, concerned with the effect of war enlistment upon falling coal output, observed that in the Great Northern Coalfield 'most men [are] off work on the Monday, the attendance gradually improving as the week progresses up to Saturday'. Moreover, a perceived problem of miners'

¹⁸ Children's Employment Commission: PP 1842, XVII, CEC., p. 204; PP 1842, XVII, CEC., pp. 843, 856-7; E.P. Thompson observed that the practice existed in the later-nineteenth century with pits being kept open on 'Pay Monday' only for repairs. Thompson, 'Time, Work-Discipline', n. 65, p. 74; According to Harrison, "colliers in general stopped work in Bedminster to attend a reform meeting on a Tuesday in 1831". Harrison, 'Occurrence of crowds', p. 165.

¹⁹ Pollard, 'Factory Discipline', p. 256 see also the examples referred to in R.A. Church, The History of the British Coal Industry, Vol.3, 1830-1913: Victorian Pre-Eminence (Oxford, 1986), pp. 241-3.

²⁰ Cross, Quest for Time, pp. 7-8; Rybczynski, 'Keeping Saint Monday', p. 114; see also R. K. Fleischman and R. H. Macve, 'Coals from Newcastle: an evaluation of alternative frameworks for interpreting the development of cost and management accounting in Northeast coal mining during the British Industrial Revolution', Accounting and Business Research, 32 (2002), n. 19, p. 138; In the 1960s, an aged Yorkshire miner reputedly told E.P. Thompson that in he remembered colliers tossing a coin in order to decide whether or not to go to work. Thompson, 'Time, Work-Discipline', n. 64, p. 74; D.M. MacRaild and D.E. Martin, Labour in British Society, 1830-1914 (Basingstoke 2000), pp. 8, 46, 106. By contrast, patterns of Monday absences do not appear amongst eighteenth and early-nineteenth century English agricultural labourers in an impoverished rural labour market overburdened with surplus labour.

²¹ J. Humphries, 'Protective legislation, the capitalist state and working class men: the case of the 1842 Mines Regulation Act', Feminist Review, 7 (1981), p. 23; see also J. Mark-Lawson and A. Witz, 'From "Family Labour" to "Family Wage"? The Case of Women's Labour in Nineteenth-Century Coalmining', Social History, 13, 2 (1988), p. 160.

voluntary absenteeism exercised scholars of industrial relations and labour statistics in the coal industry well into the second half of the century.²²

Such widespread reports of customary absences from work might be taken as proof of the ubiquity of Saint Monday in the mining districts. Some historians, however, have remained circumspect with regard to the available evidence of miner absenteeism. Church argued that variations in the length of the working week in mining and the extent of short-time working are virtually impossible to ascertain prior to the 1860s.²³ For the eighteenth century, virtually no evidence of daily working has survived. Langton discovered only five hewer pay-sheets for Lancashire for the period 1740-1799 while Barnsby considered the absence of evidence on the extent of Black Country miners' observance of Saint Monday to be 'quite baffling'.²⁴ Levine and Wrightson did not report high levels of Monday absenteeism amongst the Whickham pitmen of the mid-eighteenth century and Flinn's major study of British coalmining between 1700 and 1830 did not include a footnote entry for Saint Monday.²⁵ Treble's

²² PP 1914-16 [7939], Report of the Departmental Committee Appointed to Inquire into the Conditions Prevailing in the Coal Mining Industry Due to the War, p. 16; F.D.K. Liddell, 'Attendance in the Coal-Mining Industry', British Journal of Sociology, 5, 1 (Mar. 1954); Moos, 'Absenteeism in Coal Mining'; R.F. George, 'The Sources and Nature of Statistical Information in Special Fields of Statistics: Statistics Relating to the Coal Mining Industry', Journal of the Royal Statistical Society, Series A (General), 112 (1949); L.J. Handy, 'Absenteeism and Attendance in the British Coal-Mining Industry: An Examination of Post-War Trends', British Journal of Industrial Relations, 6, 1 (1968). This issue is discussed in more detail below.

²³ Church, British Coal Industry, n. 3, p. 239; Langton, Geographical change; D. Levine and K. Wrightson, The Making of an Industrial Society: Whickham, 1560-1765 (Oxford 1991), pp. 258-261. See also G.W. Daniels and T.S. Ashton, 'The Records of a Derbyshire Colliery, 1763-1779', Economic History Review, 2 (1929), pp. 124-129; O. Wood, 'A Cumberland Colliery during the Napoleonic War', Economica, n.s., 21 (1954), pp. 54-63; O. Wood, 'A Colliery Payroll in 1802', Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society, n.s., 72 (1972), pp. 303-319, for eighteenth- and early-nineteenth century survivals.

²⁴ Langton, Geographical change, p. 151; G.J. Barnsby, 'The Standard of Living in the Black Country in the Nineteenth Century: A Rejoinder', Economic History Review, 26, 3 (1973), p. 515.

²⁵ Levine and Wrightson, Making of an Industrial Society, pp. 260-1; Flinn's discussion of industrial relations in the North East fails to identify any discussion between owners and workers about Monday absences. M.W. Flinn, The History of the British Coal Industry: Vol.2, 1700-1830: The Industrial Revolution (Oxford 1984), pp. 352-58. There is some evidence of fines being imposed for absenteeism or drunkenness whilst on duty. See, for example, T. Robertson (ed.), A Pitman's Notebook: The Diary of Edward Smith, Houghton Colliery Viewer, 1749-1751 (Newcastle upon Tyne), p. 14; Children's Employment Commission, PP 1842, XVI, p. 361; A major contemporary report by J.R. Leifchild on the pits of North Durham and

detailed productivity study based on two-and-a-half years of colliery paybill evidence from the 1890s, moreover, threw little light upon the prevalence of customary holidays.²⁶ Moreover, the north-east miners' bond (a contract crucial in maintaining a regular and sufficient labour force) included no references to customary holidays, despite the strict provision that "[t]he said hewers hereby hired shall ... do and perform a full day's work on each and every working day and in default thereof ... for every such default ... [shall] ... pay the said owners ... the sum of two shillings and sixpence."²⁷

Claims by some historians about the ubiquity of Saint Monday amongst coalminers are matched by an uncertainty amongst others about the possibility of testing such propositions against any reliable series of records. The available workplace evidence is often so short-run and elliptical in coverage as to render impossible any reasoned conclusions about the spread of customary holidays in the historic labour market. To the uncertainty over quantitative evidence must be added the profound limitations of many of the anecdotal sources used by historians of Saint Monday. Many of the reports arise from employer complaints about worker absences. These may have been exaggerated by newspaper editors and government inquirers eager (as many were) to characterise miners as independent and oppositional.²⁸

Analysis of the minutes of evidence of the Children's Employment Commission of 1842 reveals that that two-thirds of witnesses who reported

Northumberland failed entirely to discuss any customary Monday holiday, though there is anecdotal evidence of its observance in most other coal districts, including South Durham and Leifchild was concerned to focus chiefly upon education, morality and accidents. Children's Employment Commission, XVI, pp. 513-562; see P. Kirby, 'The Effectiveness of Early Victorian Social Investigation and the Mines Commission of 1842', (**forthcoming**), pp. **-**.

²⁶ J.G. Treble, 'Productivity and Effort: the Labor-Supply Decisions of Late Victorian Coalminers', Journal of Economic History, 61 (2001), pp. 414-438; J.G. Treble, 'Intertemporal Substitution of Effort: Some Empirical Evidence', Economica, 70 (2003), pp. 579-595.

²⁷ H. Scott, 'The History of the Miners' Bond in Northumberland and Durham, with special reference to its influence on industrial disputes' (Manchester Univ. MA thesis, 1946), pp. 7-10; Children's Employment Commission, PP 1842, XVI, p. 537.

²⁸ Especially in periods when managers were unable to get colliers to work more hours during periods of high demand. A typical complainant from the 1870s opined, "We must see less worship of St. Monday, fewer scores at the beer-house and greater moderation in dress and expenditure." Derbyshire Times, 17th Feb. 1872. J.E. Williams, The Derbyshire Miners: A Study in Industrial and Social History (London 1962), p. 60.

instances of Saint Monday among miners were colliery managers – a group which represented only nine per cent of the total of witnesses.²⁹ Given that reports of Saint Monday emanated disproportionately from among employers representatives it would be unwise to regard them as objective evidence of the prevalence of Saint Monday (though this is precisely what many social historians have done).

II

What can micro-historical studies reveal about the incidence of customary holidays amongst coalminers? The remainder of this article focuses on the recorded daily work patterns of miners in a Tyneside colliery between 1775 and 1864 drawn from a set of uniquely-detailed pay records. The paybills of the Wylam Colliery, Northumberland, provide evidence of the work histories of individual hewers and allow a study of day-to-day work efforts and absenteeism on different days of the week.³⁰ Wylam was the most westerly of the Tyne sea-sale collieries and thus was not dissimilar to other collieries in the Great Northern coalfield. The hewers worked 76 per cent of possible days annually which was close to the average for the North East (which averaged around 80% according to an owners' account of 1830-31).³¹ Wylam hewers (in common with all hewers in the Great Northern Coalfield) were paid by the piece and worked the bord and pillar system, with each hewer working his own place at the coal face. Hewers worked as relatively isolated individuals within the pit and the piecework system seems to have developed as a form of remuneration that would ensure optimum effort in underground situations where workers could not be supervised. Jaffe argued that this led to a unique tension in north-east mining 'between a relatively advanced capitalist

²⁹ Kirby, Evidence to the Children's Employment Commission; see also Kirby, 'Early Victorian Social Investigation', [forthcoming], Fig. 2, p. **.

³⁰ Hair discovered few surviving colliery paybills showing daily participation, though he observed that "the information on them is invaluable". Hair, 'British coalminers', p. 313; the lack of such evidence was also noted by Flinn, British Coal Industry, p. 367.

³¹ Flinn, British Coal Industry, pp. 373-4; Levine and Wrightson's study of the Whickham pits in the mid-eighteenth century showed that they were worked about 75 per cent of all possible days. Levine and Wrightson, Making of an Industrial Society, pp. 260-1.

superstructure and a form of labor organization and production more appropriate to 'manufactures' or the workshop.'³² Thus, coal hewers enjoyed a degree of freedom of control over their work time that was similar in many respects to that enjoyed by semi-independent artisans. Importantly, north-east miners were paid fortnightly and this permits a study of their habits of attendance on both 'pay Mondays' and 'non-pay-Mondays'.

In the late-eighteenth century the working fortnight at Wylam showed wide variations in physical effort from day to day. An early paybill for a fortnight during 1775 (Table 1) shows the daily productivity of 27 hewers working in a single seam. Significant short work is evident on the second Monday and Tuesday following the pay Saturday (Saturday 1). Gross output on the second Monday and Tuesday stood at 76.8 and 68.6 per cent respectively compared with the day of highest output (on the first Friday) whilst the average number of corves produced per hewer (excluding idle days and hewer-putters) on the second Monday and Tuesday was 62.1 and 68.5 per cent of the highest average (on the second Friday).

³² A.H. John, 'The Industrial Development of South Wales, 1750-1850' (Cardiff 1950), p. 80; A.T. Ponson, Traité de l'exploitation des mineurs de houille (Liège 1854), cited in Hobsbawm, 'Custom, Wages and Work-Load', p. 353; J.A. Jaffe, The Struggle for Market Power: Industrial Relations in the British Coal Industry, 1800-1840 (Cambridge 1991), p. 101.

Table 1. Production (in corves) of 27 hewers in the Wylam Moor Colliery, Delight Pit, Yard Seam (July, 1775).

	mon1	tue1	wed1	thu1	fri1	sat1	mon2	tue2	wed2	thu2	fri2	sat2
5	5	5	5	5	5	X	11	11	5	5	5	5
13	15	16	15	15	16	X	10	12	14	15	16	9
10	15	15	15	15	16	X	8	9	14	15	16	8
13	12	13	13	13	13	X	8	9	13	14	15	9
X	5	X	X	X	X	X	8	9	14	15	15	9
14	14	15	15	16	16	X	8	X	X	X	X	X
X	14	15	13	13	13	X	8	9	16	14	16	9
10	12	15	16	16	16	X	8	9	15	14	16	8
8	10	10	10	10	10	X	7	X	10	10	11	8
14	12	12	14	14	14	X	8	9	14	14	15	8
13	13	15	16	16	16	X	8	9	15	14	16	9
14	X	X	X	X	X	X	8	9	14	15	X	9
14	15	15	15	15	15	X	8	9	15	14	16	9
9	10	10	10	10	10	X	7	8	10	10	X	8
14	X	X	X	X	X	X	8	X	14	15	15	9
8	12	10	11	11	11	X	7	8	12	12	8	5
7	7	7	7	7	7	X	7	7	7	7	7	7
10	2	X	X	X	X	X	8	7	5	X	X	X
13	13	11	12	12	12	X	8	X	X	X	X	X
1	2	1	2	2	2	X	1	2	1	2	1	2
8	X	8	8	8	8	X	X	X	X	X	10	5
4*	8	8	7	7	7	X	7	7	7	7	8	8
10*	10	8	10	10	10	X	7	8	8	10	11	9
5*	5	5	5	5	5	X	3	3	3	3	3	5
5*	8	5	5	5	5	X	3	3	3	4	4	5
6*	4	4	4	4	4	X	3	2	3	3	X	X
X*	5	5	5	5	5	X	3	3	3	2	4	5
Total corves	228	228	228	234	236	0	180	162	235	234	228	168
Ave without idle shifts	9.5	9.5	9.9	10.2	10.3	-	6.9	7.4	9.8	10.2	10.9	7.3
Ave for 'full time' hewer shifts†	10.4	10.4	11.4	11.6	11.8	-	7.7	8.5	11.6	12.1	12.4	7.6

Source: ZBK. Note: X = absent. Note: * the final six entries also worked as putters. † Figure excludes idle shifts and the totals of the six hewer-putters.

From the early nineteenth century, several almost complete years of production have survived and provide much detail of miners' daily participation. Occasions upon which the entire workforce experienced a total cessation of work on a 'pay Monday' were rare (see Appendix A-D below) and these fell from 13.3 per cent of possible pay Mondays in 1802 to 10.5 per cent in 1838 and 7.7 per cent in 1847 following which 'saintly' and 'secular' Mondays enjoyed an equal share of idle days (Table 2).

Table. 2. Percentage of Mondays upon which there was a total cessation of hewing, Wylam Colliery, 1802-1854.

	'Pay Mondays'	other Mondays	number of Mondays in sample
1802	13.3	0.0	30
1838	10.5	0.0	39
1847	7.7	7.7	52
1854	7.7	7.7	52

Source: ZBK/

Note: 'Pay Monday' represents a Monday following a fortnightly pay Saturday.

Complete cessations of work on Mondays, however, were not out of line with stoppages on other days. In 1838, hewing was stopped completely on 5.3 per cent of all Mondays (10.5 per cent of all possible Saint Mondays) whilst complete stoppages on other days of the week were: Tuesdays, 7.5%; Wednesdays, 10.3%; Thursdays, 12.8%; Fridays, 15.4%; Saturdays, 25% (pay Saturday excluded). In 1847 and 1854, a complete cessation was also equally likely to occur on any day of the working fortnight. Hence, the notion that there was any regular or 'official' Saint Monday stoppages amongst the whole mining workforce is untenable (Table 3).³³

³³ Raphael Samuel noted a very similar pattern amongst Wrexham miners in the late nineteenth century amongst whom 'attendance might fluctuate ... from day to day (with 'Saint Monday' by no means always preferred to the more secular days of the week)'. R. Samuel, 'Mineral Workers', in R. Samuel (ed.), *Miners, Quarrymen and Saltworkers* (London 1977), tab. 1.6, pp. 54-5; Treble and Vicary, in a study of Durham hewers in the 1890s related erratic attendance to a lack of demand. J.G. Treble and S. Vicary, 'Equity, Efficiency and Insurance: Explaining the Structure of Miners' Wage Payments in Victorian County Durham', *The Economic Journal*, 103 (1993), p. 483.

Table 3. Cessations of production by the entire labour force, Wylam Colliery, 1802-1854

	Mon1	Tue1	Wed1	Thu1	Fri1	Sat1	Mon2	Tue2	Wed2	Thu2	Fri2	Sat2
1802	0 (15)	0 (15)	0 (15)	0 (15)	0 (15)	15 (15)	2 (15)	2 (15)	0 (15)	0 (15)	0 (15)	0 (15)
1838	0 (20)	1 (20)	4 (19)	4 (19)	4 (19)	19 (19)	2 (19)	2 (20)	0 (20)	1 (20)	2 (20)	5 (20)
1847	2 (26)	1 (26)	1 (26)	1 (26)	1 (26)	25 (26)	2 (26)	1 (26)	1 (26)	0 (26)	0 (26)	2 (26)
1854	2 (26)	0 (26)	1 (26)	0 (26)	0 (25)	23 (25)	2 (26)	1 (26)	2 (26)	0 (26)	0 (26)	0 (26)

Source: ZBK/

Notes: Number of days for which paybills exist is given in parentheses.

The major form of Monday absenteeism in the Wylam colliery was short working. Table 4 provides averages of daily tub production as a percentage of the day of highest average production (see also Appendix F). In 1802, productivity on pay Monday reached only 60 per cent of that on the highest production day. Moreover, although short working on 'pay Monday' diminished in subsequent years, it remained evident through until at least the sixth decade of the century.

Table 4. Effect of short working: gross scores of tubs per day as a percentage of fortnightly production (excluding days where there was a total cessation of hewing).

	1802	1838	1847	1854
Mon 1	9.3	8.9	7.5	7.7
Tue 1	10.0	9.8	8.9	9.3
Wed 1	10.1	8.5	9.6	9.5
Thu 1	9.5	9.5	9.4	9.6
Fri 1	8.5	9.0	9.2	9.2
Sat 1	-	-	-	-
Mon 2	6.1	8.8	8.1	8.7
Tue 2	8.9	9.1	9.4	9.3
Wed 2	9.2	9.0	9.8	9.5
Thu 2	9.2	9.2	9.7	9.5
Fri 2	10.0	9.3	9.5	9.7
Sat 2	9.1	8.7	8.9	8.0

Source: Wylam Colliery Paybills. NRO ZBK/

By the fifth and sixth decades of the century, there was a noticeable tendency towards short working on Mondays that did not follow a pay Saturday. This suggests the appearance of a 'recovery dip'. As Hair argued, the physical and mental strains of underground labour set limits to the miner's working week

'which practically no economic incentive could make him overstep. Thus the short week like many other abnormalities in the social behaviour of colliers was directly related to the underground environment.'³⁴ The development of more short working on 'non-pay Mondays may be explained by the substantial increases in hewer productivity that took place from the 1830s. These were brought about chiefly by technical advances in underground haulage permitting greater amounts of coal to be transported away from the coal face more quickly by haulage workers. The absence of any advances in hewing technology meant that productivity could only be increased by individual hewers producing larger amounts per shift or by the employment of more hewers.³⁵ By the mid-century, a hewer might cut between 2.5 and 4 tons of coal per day. It is therefore unsurprising that a need for physical and mental recovery would impose itself on the pattern of the working week. Rather than merely 'taking Monday off to recover from the weekend', therefore, short working by hewers on 'non-pay Mondays' by the 1840s was more likely to have arisen from fatigue.³⁶

Perhaps the least measurable aspect of miners' absenteeism was that of individual voluntary absence. It might be thought that the absence of a named hewer from a pay bill would imply simply that no work was performed. However, McCormick has noted how the calculation of miner absence rates are crucially dependent upon accurate estimates of the number of available shifts: 'if work was available for four shifts and a man worked four shifts then his absence rate was zero. But if work became available for six shifts and he worked five then his absence rate would increase to 16.7 per cent even

³⁴ Hair, 'British coalminers', pp. 156-7.

³⁵ A.J. Taylor, 'Labour Productivity and Technical Innovation in the British Coal Industry, 1850-1914', *Economic History Review*, 14 (1961), p. 57; P. Kirby, 'The Historic Viability of Child Labour and the Mines Act of 1842', in M. Lavalette, *A Thing of the Past? Child Labour in Britain in the Nineteenth and Twentieth Centuries* (Liverpool 1999), p. 103.

³⁶ Voth, 'Time and Work in Eighteenth-Century London', p. 29; Excessive consumption of alcohol was a frequent employer explanation of miners' desire for a Monday holiday. It is possible that some short working on Mondays may have resulted from the need at the start of the week for firemen and ventilation workers to rid the workings of gas accumulated over the weekend and to perform any repairs to the pit that might have been required. Such work, however, would normally have been completed prior to the start of a shift.

though his attendance rose by 25 per cent.³⁷ Estimating available shifts from historic data, therefore, presents intractable problems. A missing hewer might be working in a different seam or a different pit within a colliery for which a paybill has not survived, or he might be employed as a putter or in off-hand work elsewhere.³⁸ The effect of injury, illness or chronic infirmity upon attendance is also not known.³⁹ Men might also be recorded on paybills for long periods after they had left employment.⁴⁰ The frequency of blank entries recorded against named hewers in the Haugh Pit, Wylam is given in Table 5, together with estimates of voluntary daily absences for 1839-58 and 1925. The results suggest that voluntary absenteeism may have been higher among mid-nineteenth century coalminers compared with their early-twentieth century counterparts.

Consideration of the causes of individual voluntary absenteeism presents further problems.⁴¹ In the 1950s, Liddell observed that the likelihood of voluntary absenteeism varied greatly among coalminers. His study of a

³⁷ B.J. McCormick, Industrial Relations in the Coal Industry (1979), p. 139.

³⁸ Treble, 'Productivity and effort', p. 429; Rowe examined miners' working hours from the later 1880s to 1922 emphasising the difficulty in defining what constituted a 'shift'. J.W.F. Rowe, Wages in the Coal Industry (London 1923), pp. 110-118; McCormick, Industrial Relations, pp. 134-179. B. McCormick and J.E. Williams, 'The Miners and the Eight-Hour Day, 1863-1910', Economic History Review, 12 (1959), pp. 222-238.

³⁹ Some of these factors were discussed for the eighteenth century by Levine and Wrightson, Making of an Industrial Society, pp. 253-4, 271-2.

⁴⁰ One statistician noted as late as 1949 that it was "possible for a man to remain on the books for many months ... The number of wage earners on books is therefore not necessarily a realistic figure of those available for work.' George, 'Statistics Relating to the Coal Mining Industry', p. 332.

⁴¹ Moos wrote of the problem of definition in 1951: "It may be difficult or impossible to establish the cause of absence of a worker. Absence from work may result from a series of causes none in itself sufficient to cause absence: Undernourishment, overwork, high taxation, a football match, illness of a close relative, a quarrel with a foreman or with a fellow-worker or at home, a surplus of income, a hangover, a slight attack of rheumatism or of flu, working with a new machine or with a newcomer, any combination of factors as these might induce a miner to stay at home rather than go to work. It may be an additional mile to cycle in bad weather or against the wind which has raised the marginal disutility of work above unity. Only a scientific investigation into the background of an absentee could yield a useful classification: one would have to consider his age group, marital status, skill, general state of health, social behaviour, home conditions, working conditions, and the distance between his home and his work, etc." Moos, 'Absenteeism in coal mining', n. 1, p. 92; Church noted for the nineteenth century, 'With so much depending upon short-term considerations and upon individuals' inclinations, absenteeism is extremely difficult to measure.' Church, British Coal Industry, p. 244.

Table 5. Estimates of daily voluntary absenteeism (%), Wylam Colliery, Haugh Pit, 1839-1858 compared with 1925 estimates.

	mon1	tue1	wed1	thu1	fri1	sat1	mon2	tue2	wed2	thu2	fri2	sat2
Missing entries on paybills †	21.8	20.6	14.4	15.0	27.4	-	24.1	15.3	23.2	15.2	15.3	28.1
Estimate of voluntary absenteeism ††	7.7	7.3	5.1	5.3	9.7	-	8.5	5.4	8.2	5.4	5.4	9.9
Estimate of voluntary absenteeism (1925) †††							7.8	3.9	3.7	3.6	3.4	6.2

Source: Wylam paybills. ZBK/. November sample.

† Row 1 is the percentage of missing entries per shift among named hewers.

†† Row 2 is an estimate that deflates the gross missing shifts according to the following assumptions: a) 33% of hewers absent from a paybill on any day would be employed elsewhere in the colliery or no longer employed; b) the proportion of voluntary absences in 1839-58 was equal to the 52.8% of all absences recorded in 1946-1955. This is based on the proportions of face workers' voluntary and involuntary absences given in L.J. Handy, 'Absenteeism and Attendance in the British Coal-Mining Industry: An Examination of Post-War Trends', *British Journal of Industrial Relations*, 6, 1 (1968), tab. 1, p. 29. This may overestimate voluntary absences due to higher rates of involuntary absences due to sickness and injury amongst the nineteenth-century labour force.

††† Row 3 gives the percentage daily rates of voluntary absence calculated from 1925 absentee estimates and employ Handy's weightings for voluntary absenteeism. S. Moos, 'The Statistics of Absenteeism in Coal Mining', *The Manchester School*, 19 (1951), tab. 1, p. 95. The overall average absenteeism rate in Durham pits from 1880 to 1893 was estimated by Taylor at 8.5 per cent. A.J. Taylor, 'Labour Productivity and Technical Innovation in the British Coal Industry, 1850-1914', *Economic History Review*, 14 (1961), p. 56, App. 2, p. 70; Absenteeism in forty-five Northumberland collieries during the last six months of 1913 was reported at 10.2%. PP 1914-16 [7939], *Report of the Departmental Committee Appointed to Inquire into the Conditions Prevailing in the Coal Mining Industry Due to the War*, table, p. 36.

Durham colliery showed that thirteen per cent of the workers accounted for more than a third of all absences whilst 6 per cent of men were absent for less than two days per year. Married men with one child lost on average 1.8 weeks per year through voluntary absence whilst married men without children lost 2.1 weeks and single men 2.7 weeks.⁴² At the Wylam Colliery, similarly, householders cut an average of 10 per cent more coal per day compared with bachelors, although the shape of daily participation across the pay fortnight was similar for both groups (Table 6).⁴³

Table 6. Average daily number of tubs per hewer shift worked: householders and bachelors, Wylam Colliery 1839-1864.

	Mon1	Tue1	Wed1	Thu1	Fri1	Sat1	Mon2	Tue2	Wed2	Thu2	Fri2	Sat2
Householders	10.9	11.9	12.0	12.0	11.0	-	12.0	12.0	12.0	12.0	11.9	11.0
Bachelors	9.9	11.1	11.3	11.4	11.1	-	10.2	11.0	10.0	11.2	10.3	10.1

Source: Wylam paybills.

Note: November sample. Excludes idle days from calculation.

III

The obvious limitations imposed by literary and anecdotal sources in explaining Monday absenteeism prompted Reid to study the frequency of marriages in registers drawn from Birmingham, Blackburn, Bristol and Manchester. He argued that “the incidence of Monday weddings was a reflection of a general preference for taking Monday as a day of leisure and festivity ... patterns of periodicity in wedding dates might be seen as proxy-data for consideration of wider questions of social and economic custom and

⁴² Those who had developed habits of voluntary absence carried on their practices from one year to the next. Liddell, ‘Attendance in Coal-Mining’, pp. 85, 83-4, table, p. 83.

⁴³ A miner from Weardale told the 1842 Commission: “chaps before they marry are more apt to keep holiday. A man with a wife and two or three bairns to keep cannot drink much.” *Children’s Employment Commission*, PP 1842, XVI, CEC., p. 159; One major difference between the two groups at Wylam was that daily ‘target setting’ appeared to be much more evident amongst householders.

discipline.”⁴⁴ Reid relied upon “the assumption that weekday weddings involved time away from work” and his findings largely supported his earlier finding that Saint Monday had declined from the middle of the nineteenth century.⁴⁵ These findings have never been tested against workplace evidence, though if the choice of marriage day is accepted as a proxy for St Monday observance, it must follow that the incidence of Monday marriage was greater when Monday was a holiday and lower when Monday was an ordinary working day. It is possible to test this proposition using the Wylam data.

The incidence of miners’ Monday marriages fell from about a quarter in the 1840s to 13.3 per cent in the 1850s with a marginal increase to 15.4 per cent in the 1860s (Table 7).⁴⁶ These changes in Monday marriages appear broadly similar to the wider decline observed by Reid for Blackburn (1841: 34%; 1851: 24%; 1861: 14%) and Manchester (1841: 27%; 1851: 24%; 1861: 21%).

Table 7. Miners’ Marriages: Ovingham Parish, 1840-1869.

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
1840-49	26.7	4.4	0.0	2.2	2.2	53.3	11.1
1850-59	13.3	4.3	0.0	2.2	4.4	55.6	20.0
1860-69	15.4	3.8	1.9	1.9	0.0	57.7	19.2

Source: Ovingham Marriage Register, NRO, EP102/14.

⁴⁴ Reid, ‘Weddings, Weekdays, Work’, pp. 143, 162. Schofield had previously investigated people’s days of preference for important celebrations such as baptisms and marriages but had not extended that study to any inferences about Saint Monday. R. Schofield, “‘Monday’s Child is Fair of Face’: Favoured Days for Baptism, Marriage and Burial in Pre-Industrial England’, *Continuity and Change*, 20 (2005), pp. 93-109; Gillis points out that some Welsh miners chose the monthly pay day to marry. J.R. Gillis, *For Better, For Worse: British Marriages, 1600 to the Present* (Oxford 1985), p. 150.

⁴⁵ Reid, ‘Weddings, Weekdays, Work’, p. 141.

⁴⁶ Between 1838 and 1864, 38 per cent of grooms in the parish of Ovingham (of which Wylam was a township) stated that they were occupied in coal and the majority of the grooms were residents of Wylam village.

Despite the fall in the popularity of Monday as a day for marriage, however, there was no corresponding fall in the frequency of days on which there was a complete cessation of hewing on a Monday (Table 8).⁴⁷ The aggregate evidence suggests no connection between the availability of idle Mondays and the rate of Monday marriages.

Table 8. Mondays (%) upon which there was a total cessation of hewing: Wylam Colliery, 1802-1864.

Year	%	Mondays in sample
1802	6.7	30
1838	7.9	39
1847	7.7	52
1854	7.7	52
1838-64†	8.7	46

Source: NRO ZBK/

Notes: † November sample.

It is possible to further test the accuracy of choice of marriage day as a proxy for Saint Monday by comparing evidence of hewers' work records with evidence of their marriages in the Ovingham register. Of the 117 hewer marriages in the register between 1839 and 1861, twenty-five can be linked to grooms for whom a work record has survived for the fortnight in which they married.⁴⁸ Although small in number, this sample probably represents the largest number of direct linkages between evidence of days worked and preferred day of marriage from English sources.

Of the ten hewer grooms who married on a Monday, four chose a Monday following a pay Saturday where there was a complete cessation of hewing. Of the six who did not marry on a pay Monday, three turned in a full day of coal production on their wedding days (two completing a full working week thereafter and one taking off the following day) whilst the other three took off a

⁴⁷ Though compare with Table * for cessations on Saint Monday and non-Saint Mondays.

⁴⁸ Four were celebrated on Sunday, ten on Monday, one on Tuesday and ten on Saturday.

full day to marry on days when the pit was in full production.⁴⁹ Of the Sunday marriages, half of the grooms took the following Monday off work but in no case did a Saint Monday immediately follow a Sunday marriage. Of the ten Saturday marriages, only four were followed by a Saint Monday (thus a majority of hewer marriages did not occur on a pay Saturday). The single Tuesday marriage was celebrated in a pay fortnight during which there were two Mondays upon which the whole labour force was off. The couple chose to marry on neither of these holidays. The groom put in half-a-day's production on his wedding day and worked at full production for the rest of the week.

Given the rarity of a full cessation of work in Wylam Colliery, the 40 per cent of Monday marriages occurring on such days might indicate a preference for marriage on Saint Monday. However, the picture is far from clear since a majority of hewer marriages did not take place on a Saint Monday. The more numerous aggregate evidence suggests that the decline in the popularity of Monday as a choice of marriage day was not matched by a fall in the proportion of days when a complete stoppage occurred (which remained stable and low at between 6.7% and 8.7% of available Mondays between 1802 and 1864). In addition, there was no increase in marriages on other days of the week where there was a total cessation of work.⁵⁰ The fact that 60 per cent of hewers' Monday marriages occurred on days when most of their comrades were at work challenges stereotypical views of the bucolic and well-attended collier wedding described in accounts such as Edward Chicken's The Collier's Wedding.⁵¹ Moreover, given the unpredictability of days upon which pits might be idle (see, for example, the erratic distribution of such days in 1838, in Appendix B), the ability to plan important events to fit in

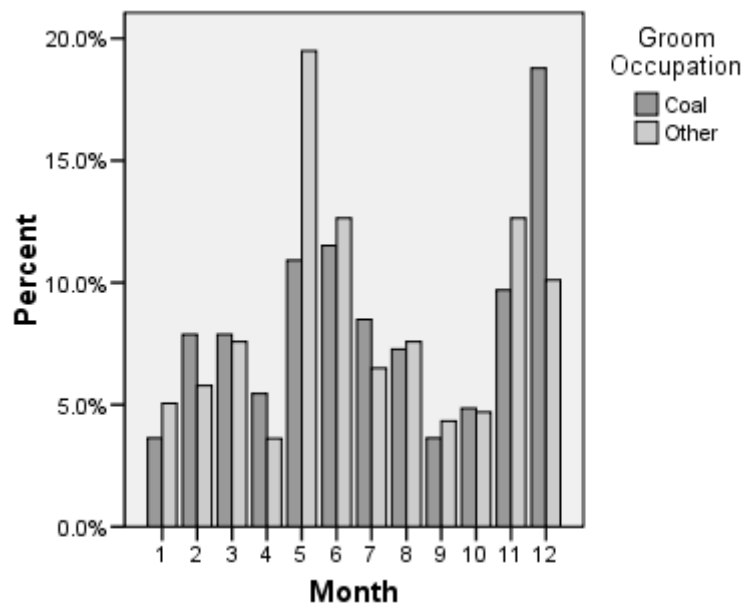
⁴⁹ The Church stipulated that marriages should take place between eight a.m. and noon. Schofield, 'Monday's child', pp. 106-7.

⁵⁰ Voth voiced a similar concerns about Reid's inferences pointing out that the identification of a large increase in Thursday weddings in Blackburn from 1851 was not related to a rising preference among workers for midweek absences (though how this was proven in the case of Blackburn is not explained). Voth, Time and Work, p. 15; Reid, 'Weddings, Weekdays, Work', fig. 5, p. 51.

⁵¹ R. Colls, The Collier's Rant: Song and Culture in the Industrial Village (1977), pp. 58-61, 64; see also the account of another well-attended miner's wedding in Ashton and Sykes, Coal Industry of the Eighteenth Century, n.3, pp. 167-8.

with the working week would almost certainly have been dogged with great uncertainty. Banns would normally need to be called in the three weeks preceding a marriage and it is doubtful if sufficient notice of shut-down days would have been available to intending brides and grooms.⁵² In any case, it is likely that both workers and employers regarded infrequent and important occasions such as marriages as a legitimate cause for a day's absence from work.⁵³ Further from this, miners' choice of marriage day seems equally likely to have been related to the availability of wages. Annual production rates and the seasonality of weddings provides some evidence as to how hewers may have chosen their marriage days. Figure 1 shows months of marriage preference among miners compared with non-mining grooms in Ovingham Parish.

Figure 1. Month of Marriage: Ovingham Parish, 1837-1864



Source: Ovingham Marriage Register, NRO, EP102/14.

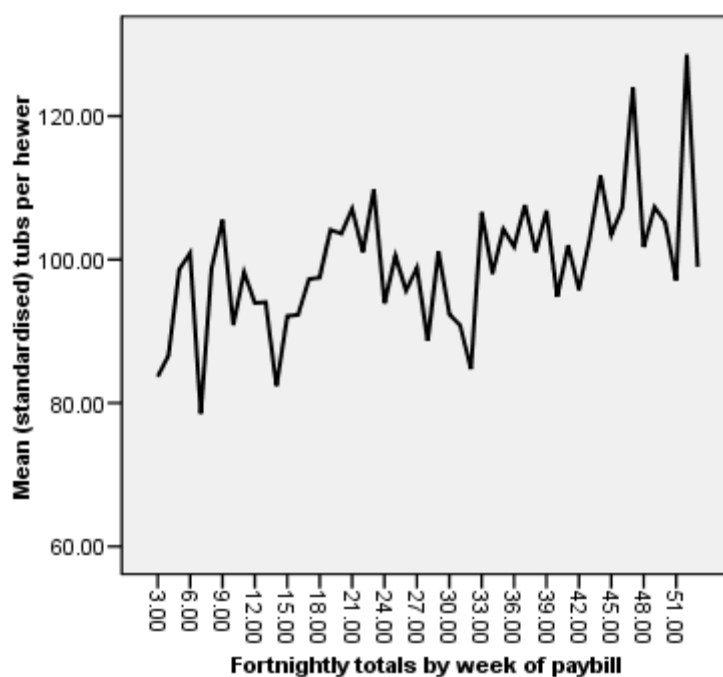
Note: includes 444 marriages.

⁵² Schofield, 'Monday's child', p. 102.

⁵³ Harrison found that only about 30% of crowd formations in Bristol between 1790 and 1835 occurred during working time but 71% of workday crowds occurred amongst those attending funerals. Harrison, 'Occurrence of Crowds', p. 163, tab.4, p. 164; Strange points out that "The compromise between attending a funeral and losing earnings demonstrates that whilst financial considerations were important, they did not override the desire to pay one's respects to the dead." J-M. Strange, *Death, Grief and Poverty in Britain, 1870-1914* (Cambridge 2005), p. 122; Reid showed, however, that funerals were not positively correlated with Mondays. Reid, 'Weddings, Weekdays, Work', figs. 2-3, pp. 48-49.

Hewers exhibited a marked increase in marriages towards the high-earning December period. This is broadly in line with Kussmaul's findings for the Northumberland mining parish of Earsdon, whose seasonality of marriage had become 'industrial' by 1800.⁵⁴ In Wylam, winter demand for coal increased during the final quarter of the year and hewer production (and thereby earnings) would rise by some 30 per cent.⁵⁵ In January, by contrast, production was lower and the incidence of marriage was also amongst the lowest during this period.

Fig *. Mean fortnightly production per hewer, per pay, 1802-1861



Source: Wylam paybills.

Note: fortnightly averages per hewer recorded for the week in which the fortnightly paybill was completed.

⁵⁴ A. Kussmaul, *A General View of the Rural Economy of England, 1538-1840* (Cambridge 1990), fig. 2.4, p. 27, p. 126 (though mining and non-mining marriages were not disaggregated in Kussmaul's study, hence the effect of mining upon the seasonality of marriage would have been understated); see also the discussion in E.A. Wrigley and R.S. Schofield, *The Population of England, 1541-1871* (Cambridge 1981), pp. 298-305.

⁵⁵ A similar pattern of winter demand existed in other coalfields. For example, see Lancashire figures in Langton, *Geographical change*, fig.50, p. 208.

The correlation between work intensity (and, thereby, piecework earnings) and the incidence of marriage suggests that the availability of earnings rather than the occurrence of customary holidays was the more important factor in determining choice of marriage day. This supports the findings of Southall and Gilbert, who studied the effect of medium-term economic distress on the incidence of marriage and discovered a very close relationship between high rates of relief and depressed marriage rates: a relationship that was strongest in industrial areas.⁵⁶

IV

The problems confronting an understanding of Saint Monday in the past are definitional, evidential and interdisciplinary. As a History Workshop editorial observed in 1977: "Work is a prime example of an area of enquiry which has suffered neglect because it sprawls so awkwardly across academic demarcations, while coinciding with none of them."⁵⁷ The evidence presented here shows, firstly, that a complete Monday cessation of work in coalmining was rare in any period between the 1770s and the 1860s. A preference for Mondays following a pay Saturday was evident up to the 1830s but thereafter idle days were as likely to occur on any day of the working fortnight. Secondly, short working on Mondays following a pay Saturday was ubiquitous throughout the period, though this had declined somewhat by the 1840s. Short working on non-pay Mondays, meanwhile, actually increased from around the 1830s and this probably corresponded with contemporary increases in work demands upon hewers.⁵⁸ Thirdly, individual voluntary

⁵⁶ The relationship was strongest in industrial areas. H. Southall, 'The Timing of Marriage in [Mid-Nineteenth] Century Industrial Communities', Local Population Studies, 47 (Autumn 1991), pp. 77-80; H. Southall and D. Gilbert, 'A Good Time to Wed?: Marriage and Economic Distress in England and Wales, 1839-1914', Economic History Review, XLIX, 1 (1996), pp. 35-57.

⁵⁷ Anonymous editorial, 'British economic history and the question of work', History Workshop, 3 (1977), pp. 1-2.

⁵⁸ Voth claims an astonishingly high mean work rate of 12.5 hour per day over 306 days per worker per year in 1830. However, no discussion of the effects of worker fatigue is offered and the discussion of nutrition seems constructed to demonstrate merely that nutritional requirements were met. Voth, Time and Work; Schwarz doubted the existence of such very long working hours. L. Schwarz, [Untitled Review] Albion, 34 (Winter 2002), pp. 665-8; As

absenteeism is virtually impossible to measure with any accuracy because of the profound difficulty in estimating accurately the number of miners available for work in historic sources.⁵⁹ The estimates offered above suggest that voluntary absences were high amongst nineteenth-century miners compared with their twentieth-century counterparts. However, understanding the causes of individual voluntary absences is problematical since they arise from innumerable decision-making processes on the part of individual miners.⁶⁰

Most crucially, the question of how long Saint Monday survived in the coal districts depends upon varying definitions of what constituted a working day. Total cessations of work (even on a Saint Monday) were never a major feature of miners' working lives and it might, therefore, be argued that Saint Monday was never important. However, apart from strike periods, the shutting down of a pit was almost exclusively a decision for managers and owners and most likely resulted in the main from technical difficulties or fluctuations in short-term demand rather than as a result of the desires of miners.⁶¹ By contrast, short working and individual voluntary absenteeism on Mondays

Adam Smith argued, '[e]xcessive application during the four days of the week is frequently the real cause of idleness of the other three, so much and so loudly complained of. Great labour, either of mind or body, continued for several days together is, in most men, naturally followed by a great desire of relaxation'. A. Smith, *Wealth of Nations*, Book 1 (1776; London 1852 edn.), p. 34.

⁵⁹ Though there was a clear age-specific difference between married householders and unmarried hewers, the former cutting around 10 per cent more coal than bachelors on any single day. The study of work time, holidays and the labour-market more generally, elicits very little quantitative information about women, children or adolescent workers. Voth's study of working time, for example, does not afford children an index entry. Voth, *Time and Work*.

⁶⁰ As late as 1968, Handy noted 'the impossibility of being able to make a controlled experiment in an industry as diverse as coal-mining. At best, one could deal only with a very limited number of pits, and even if conclusions about coal-miners' absenteeism could be deduced on this basis one would still need to conduct parallel studies in different parts of the country and in varying conditions before its results could be confirmed as statistically sound.' Handy, 'Absenteeism and Attendance in British Coal-Mining', p. 28. An National Coal Board statistician concluded (somewhat vaguely) in 1954: "A possible explanation is that there are different traditions and emotions affecting men in different places." Liddell, 'Attendance in Coal-Mining', p. 86.

⁶¹ The constantly changing underground working environment almost certainly rendered regular customary cessations impractical. As Treble points out, "[d]emand-driven adjustments to labor input were usually achieved by closing down the pit for a day or two." Treble, 'Productivity and effort', p. 429; Flinn, *British Coal Industry*, pp. 373, 173-4. The 1847 and 1854 output figures also show absences with a duration of several days at the end of July followed by a further day of short production, possibly indicating the emergence of an annual summer holiday.

were the two main 'worker-defined' aspects of workplace absence and these remained common even in the twentieth century. A major problem with Voth's thesis was the failure to offer such distinctions – even though Saint Monday and its decline formed the major justification for his thesis. The omission casts serious doubt upon the generalisation that Saint Monday held no importance in the north of England after 1760. Moreover, Voth's evidence for the north of England was derived almost entirely from the Northern Assize depositions drawn from Northumberland, Durham, Westmorland, Cumberland, Derbyshire and the three ridings of Yorkshire.⁶² Coal miners formed a substantial part of the working population in these counties: in Northumberland, for example, it has been estimated that coalminers accounted for 14.2 per cent of occupied males in 1813-20.⁶³

The workplace evidence presented here of widespread and regular short working on Mondays in northern coal districts would seem to sustain the view that Saint Monday survived well into the later nineteenth century. That labour inputs increased can not be disputed (this is in line with previous scholarship on the importance of labour to industrialisation ⁶⁴). However, it is likely that increases in worker outputs in the period 1760-1850 resulted in the main from increasing productivity in the workplace rather than from a decline in the observance of customary holidays.

⁶² Voth, Time and Work, p. 37. A further problem is that workers may have testified that they were 'at work' at a particular time of day but such evidence is of little value in gauging levels of output on particular days. Voth's sole workplace evidence was drawn from a group of canal maintenance workers during a single year (1801), a highly unrepresentative occupation group which provided an average daily sample of 16 workers. Voth, Time and Work, pp. 154-59.

⁶³ P. Kitson, 'The Male Occupational Structure of Northumberland, 1762-1871: A Preliminary Report' (unpublished paper, Cambridge Group for the History of Population and Social Structure (n.d.), tab. 1, p. 6. I am grateful to Dr Kitson for permission to cite from his unpublished article. Earlier market integration amongst the highly-capitalised collieries of the North East together with changing terms of employment meant that seasonal demand effects were reduced. By contrast, customary absenteeism and short working was almost certainly greater amongst the technologically-backward coal districts where by-employment, short working, seasonal shutdowns and wide fluctuations in local demand were firmly established aspects of miners' expectations. This was pointed out by Ashton and Sykes, Coal Industry of the Eighteenth Century, p. 169; Miners in the Forest of Dean, for example, would leave pits at times of falling Summer demand to seek work on neighbouring farms. C. Fisher, Custom, Work and Market Capitalism: the Forest of Dean colliers, 1788-1888 (London 1981), p. 71.

⁶⁴ In particular, the arguments offered in 1977 by Samuel in 'Workshop of the World'.

Appendix A. Total cessations of production, Wylam Colliery, Peggy and Malley Pit (Yard Seam), 1802.

Pay number	mon1	tue1	wed1	thu1	fri1	Sat1	Mon2	tue2	wed2	thu2	fri2	sat2
1	-	-	-	-	-	-	-	-	-	-	-	-
2						X						
3						X	X					
4						X						
5						X						
6						X						
7	-	-	-	-	-	-	-	-	-	-	-	-
8						X		X				
9						X						
10						X						
11						X						
12	-	-	-	-	-	-	-	-	-	-	-	-
13						X						
14	-	-	-	-	-	-	-	-	-	-	-	-
15						X	X	X				
16	-	-	-	-	-	-	-	-	-	-	-	-
17						X						
18	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-
20						X						
21	-	-	-	-	-	-	-	-	-	-	-	-
22						X						
23						X						
24	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-

Source: ZBK/. Note. 'X' denotes a complete cessation of production.

Appendix B. Total cessations of production, Wylam Colliery, Haugh Pit (Horsley Wood Seam), 1838.

Pay fortnight	mon1	tue1	wed1	thu1	fri1	sat1	mon2	tue2	wed2	thu2	fri2	sat2
1							-	X				
2						X					X	
3						X						
4			-	-	-	-	-	-	-	-	-	-
5	-	-		X	X	X					X	X
6				X	X	X						X
7			X			X						X
8			X			X						X
9			X	X		X						
10						X						
11						X						
12					X	X				X		
13					X	X						X
14						X	X					
15				X		X						
16		X				X						
17			X			X	X	X				
18						X						
19						X						
20						X						
21			-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-
24						X						
25			-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-

Source: ZBK/. Note. 'X' denotes a complete cessation of production. Mon2 of Pay number 1 was 1st Jan 1838.

Appendix C. Total cessations of production, Wylam Colliery, Haugh Pit (Yard and Five Quarter seams), 1847.

Pay number	mon1	Tue1	wed1	thu1	fri1	Sat1	mon2	tue2	wed2	thu2	fri2	sat2
1						X	X					
2						X						
3	X	X	X			X						
4						X						
5						X						
6						X						
7					X	X						
8						X						
9						X						
10						X						
11						X						
12						X						
13						X						
14						X						
15						X	X	X	X			
16						X						
17						X						X
18						X						
19						X						
20	X					X						
21						X						
22						X						
23						X						
24				X								
25						X						
26						X						X

Source: ZBK/. Note. 'X' denotes a complete cessation of production.

Appendix D. Total cessations of production, Wylam Colliery, Haugh Pit (Yard and Horsley Wood seams), 1854.

Pay number	mon1	tue1	wed1	thu1	fri1	sat1	mon2	tue2	wed2	thu2	fri2	sat2
1	-	-	-	-	-		X					
2												
3						X						
4						X						
5						X						
6						X						
7	X					X						
8						X						
9						X			X			
10						X						
11						X						
12						X						
13						X						
14						X						
15						X						
16							X	X	X			
17												
18						X						
19						X						
20						X						
21						X						
22						X						
23						X						
24						X						
25			X			X						
26						X						
27	X				-	-	-	-	-	-	-	-

Source: ZBK/ Note. 'X' denotes a complete cessation of production. Mon 2 of pay number 1 was 2nd Jan. Paybill 27 commenced Mon 1st Jan 1855.

Appendix E. Hewer production (grouped as % of tubs* per day) Wylam Colliery, Haugh Pit (all recorded seams) 1839-1858. Excludes absences.

		mon1	tue1	wed1	thu1	fri1	sat1	mon2	tue2	wed2	thu2	fri2	sat2
Tubs													
1839-1848	5<	7.1	3.2	3.6	3.8	8.7	-	7.9	5.0	3.4	4.3	3.9	3.5
	5-10	37.8	25.5	29.5	23.4	25.9	-	32.9	21.8	25.5	22.4	26.5	27.4
	11-15	46.7	60.6	55.8	59.4	55.1	-	50.9	60.3	57.1	58.6	56.6	56.0
	15>	8.3	10.7	11.1	13.4	10.3	-	8.4	13.0	14.1	14.6	13.1	13.1
1849-1858	5<	9.1	4.5	5.5	6.8	6.1	-	6.2	5.8	4.0	7.6	6.6	17.7
	5-10	30.8	27.5	25.6	21.2	31.0	-	27.3	26.8	29.3	23.2	24.0	32.0
	11-15	51.4	57.2	54.3	57.9	49.6	-	51.0	54.8	53.7	56.4	55.6	37.8
	15>	8.7	10.7	14.6	14.0	13.3	-	15.5	12.7	13.1	12.8	13.8	12.4

Source: November sample. ZBK/.

Note: * Tubs standardised RE. 1843-4. Sample of 17 fortnightly November paybills (bills for 1841, 1842 and 1856 do not survive or are damaged and are not included in the sample). Allows for the shift in 1843-4 from a 16 peck corf to a 20 peck tub.