

Gender, wages and agricultural day labour in England, c.1480–1680*

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Abstract

This article presents a new dataset of wages of agricultural and unskilled workers in England between 1480 and 1680. Evidence is drawn from 14 year-long samples of wage accounts from rural gentry households in twelve different locations. Together these accounts record over 20,000 workdays paid by the day, 29.3 per cent of which were undertaken by women. The great majority of the work recorded was agricultural. Women's work was highly seasonal, concentrated in three types of tasks: weeding, haymaking, and the grain harvest. It was surprisingly common for women and men to receive the same daily wage for the same tasks and modal wages for women and men often overlapped. However, men achieved higher average (mean) wages and worked more consistently throughout the year. The gender pay gap for day wages was 38.5 per cent, lower than that suggested by existing wage series, but the gender pay gap in annual earnings was much higher. Women's participation in casual agricultural wage labour declined significantly over time.

Before 1700 agriculture was the largest sector of employment for men in England.¹ The latest estimates using evidence of work tasks suggest women provided just over a third of all agricultural labour (paid and unpaid) between 1500 and 1700.² Yet recent studies of wage labour have neglected this period, focusing instead on the aftermath of the Black Death and the eighteenth and early nineteenth centuries.³ This is unfortunate, as the sixteenth and seventeenth centuries

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¹ S. Broadberry, B. M. S. Campbell, A. Klein, M. Overton, and B. van Leeuwen, *British economic growth, 1270–1870* (2015), p. 353.

² J. Whittle, 'Putting women back into the early modern economy: Work, occupations, and economic development', *EcHR* 77 (2024), p. 1130.

³ S. A. C. Penn, 'Female wage-earners in late fourteenth-century England', *AgHR* 35 (1987), pp. 1–14;

S. Bardsley, 'Women's work reconsidered: gender and wage differentiation in late medieval England', *Past and Present* 165 (1999), pp. 3–29; J. Hatcher, 'Debate: Women's work reconsidered: gender and wage differentiation in late medieval England', *Past and Present* 173 (2001), pp. 191–8; K. Snell, *The annals of the labouring poor: Social change and agrarian England 1660–1900* (1985); N. Verdon, *Rural women workers in*

saw important transformations in agricultural wage labour. Wage series demonstrate that high real wages in the fifteenth century fell to a nadir of low wages in early seventeenth century.⁴ In the late sixteenth and early seventeenth centuries, male farmers outnumbered labourers in rural England, suggesting an agricultural economy based on smaller farms in which wage labour was supplementary. By the start of the eighteenth century, labourers outnumbered farmers, indicating the dominance of larger farms reliant on wage labour.⁵ It remains unclear how these changes effected the employment of women in agriculture. This article explores two key aspects of gendered wage employment: how women's participation in agricultural labouring was shaped and changed over time, and the gender pay gap in agricultural work.

One reason for the neglect of the early modern period in the history of English agricultural wages is lack of evidence. The detailed manorial accounts and labour law prosecutions that illuminate late medieval waged employment largely disappear after 1450. The systematic farm accounts and wage books so useful for the eighteenth and nineteenth centuries barely exist before 1700.⁶ Yet evidence is available for the sixteenth and seventeenth centuries in the form of gentry household accounts. Although household accounts do not survive in large numbers, they often record large quantities of agricultural labour in some detail. Previous studies have used this evidence in two ways: historians from James E. Thorold Rogers onwards extracted wage data from household accounts, while others such as A. Hassell Smith have undertaken detailed studies of particular estates. Nevertheless, their potential remains underexploited. This article analyses 14 full-year samples from 12 different estates, which together record more than 20,000 days of labour. The samples are spaced as evenly as possible across the period 1480–1680 and are widely distributed across English regions, as discussed in section II. This hybrid approach combines the strengths of local studies with a wider chronological and geographical overview.

The following section reviews existing research on gender and agricultural wage labour in England and the gender wage gap in early modern Europe. Section II introduces the sources and discusses the proportion of day labour undertaken by women. Across the period, women provided an average of 29.3 per cent of the days worked. However, the farms studied here suggest that the employment of female casual labourers declined significantly over time. Section III examines tasks and number of days worked per year. This shows that while women were often employed to do agricultural work, this work was concentrated in weeding, hay making, and harvest work. As a consequence, it was highly seasonal, with 72.7 per cent of days worked concentrated between June and September. In contrast, men did a wider variety of agricultural tasks and worked

Note 3 *continued*

nineteenth-century England: Gender, work and wages (2002); J. Burnette, 'The wages and employment of female day-labourers in English agriculture, 1740–1850', *EcHR* 57 (2004), pp. 664–90.

⁴ E. H. Phelps Brown and S. V. Hopkins, 'Seven centuries of the prices of consumables, compared with builders' wage-rates', *Economica* 23 (1956), p. 302; G. Clark, 'The long march of history: Farm wages, population and economic growth, England 1209–1869', *EcHR* 60 (2007), p. 109.

⁵ L. Shaw-Taylor, 'The rise of agrarian capitalism and the decline of family farming in England', *EcHR* 65 (2012), pp. 53, 58; J. Whittle, 'Land and people', in K. Wrightson (ed.), *A social history of England, 1500–1750* (2017), p. 163.

⁶ Thousands of manorial accounts survive for 1250–1450, see B. M. S. Campbell, *English seigniorial agriculture, 1250–1450* (2000); farm accounts become much more plentiful after 1700, see M. E. Turner, J. V. Beckett and B. Afton, *Farm production in England 1700–1914* (2001), ch. 2.

throughout the year, thus doing many more days' work. Section IV looks more closely at women's three main agricultural tasks and demonstrates that equal pay was not unusual for these tasks. Section V examines rural wages more generally, comparing the modal and mean daily wages paid to women and men, looking at annual earnings, and calculating the gender pay gap. This shows that while men's average (mean) wages were always higher than women's, it was not unusual for normal daily wage rates paid to women and men to overlap. The gender pay gap for day wages is shown to be smaller than has been assumed, although the gap in average annual earnings per worker from a particular employer was much larger. These findings prompt a reconsideration of women's place in the agricultural wage labour force, suggesting historians have overemphasized the impact of differences in physical strength, and overlooked the consequences for women's work of the changing place of agricultural day labour in the wider economy.

I

A string of local studies has found widely varying levels of women's involvement in agricultural day labour, leading to a lack of consensus about levels of female employment. Late fifteenth- and early sixteenth-century accounts from Essex, Cumberland, and Cheshire record high participation rates of women.⁷ In contrast, Essex accounts from 1589–90 and the 1630s show little involvement of women in the grain harvest.⁸ Analysis of Henry Best's farming book reveals that women undertook 37.8 per cent of the days worked in the grain and pea harvest on his large east Yorkshire farm in 1641.⁹ Women made up between 13 and 50 per cent of the day labouring workforce on four estates in south-west England in the later seventeenth century.¹⁰ Hassell Smith's study of Stiffkey in Norfolk remains the most thorough reconstruction of agricultural wage labour for sixteenth- and seventeenth-century England. He found that women provided at least 55 per cent of non-specialist agricultural day labour in 1593–94.¹¹ Yet the plentiful employment opportunities for women of all ages in Stiffkey in the 1590s stand in stark contrast to nearby Hunstanton in the 1610s, where very few women at all were employed in agricultural day labour.¹² By studying 14 year-long samples of accounts from 12 estates this article aims to illuminate the more general patterns behind these scattered examples.

Wage series offer an overview that rises above local variations, but obscure how wage rates differed by task and worker's ability and reveal little about the availability of employment. None offers adequate coverage of women's agricultural wages. Thorold Rogers was the

⁷ A. J. L. Winchester, 'The castle household and demesne farm at Millom in 1513–14', *Trans. Cumb. & Westm. Antiq. & Arch. Soc.* 83 (1983), pp. 91–2; L. R. Poos, *A rural society after the Black Death: Essex 1350–1525* (1991), pp. 212–19; D. Youngs, 'Servants and labourers on a late medieval demesne: The case of Newton, Cheshire, 1498–1520', *AgHR* 47 (1999), p. 157.

⁸ P. Sharpe, *Adapting to capitalism: Working women in the English economy, 1700–1850* (1996) pp. 78–80.

⁹ M. Roberts, 'Sickles and scythes: Women's work and men's work at harvest time', *HWJ* 7 (1979), p. 23.

¹⁰ P. Sharpe, 'Time and wages of west country

workfolks in the seventeenth and eighteenth centuries', *Local Population Stud.* 55 (1995), p. 66; Imogene Dudley, 'Evidence of women's waged work from household accounts, 1644–1700: Three case-studies from Devon, Somerset and Hampshire' (unpublished PhD thesis, University of Exeter, 2019), pp. 142–51.

¹¹ A. Hassell Smith, 'Labourers in late sixteenth-century England: A case study from North Norfolk [Part 1]', *Continuity and Change* 4 (1989), p. 29.

¹² J. Whittle and E. Griffiths, *Consumption and gender in the early seventeenth-century household: The world of Alice Le Strange* (2012), pp. 221–5.

pioneer of collecting wage data, but found a mere seven examples of women's day wages for agricultural work for 1401–1582.¹³ His research underpins more recent studies such as Gregory Clark's series of male agricultural wages,¹⁴ and Humphries and Weisdorf's series of women's wages.¹⁵ Humphries and Weisdorf collected new data from wage accounts across the period 1260–1850, but the wide chronological scope of their series means this data is thinly spread. They have an average of 27 examples of day wages per decade for 1480–1580, and 48 per decade for 1580–1680.¹⁶ Importantly, Humphries and Weisdorf excluded wages earned for haymaking and the grain harvest because they were higher than other wages, yet our research shows that these were the most common tasks undertaken by women as day labourers.¹⁷ To explore the gender wage gap, Humphries and Weisdorf compare their wage series with that of Clark, showing that in the six hundred years between the thirteenth and nineteenth centuries, women's average wages in the English economy fluctuated at levels between one third and two thirds of men's wages.¹⁸

Our approach of combining a large dataset with attention to the context in which women and men were employed offers fresh insights into the causes of the gender pay gap. In her examination of the gender pay gap during the Industrial Revolution period, Joyce Burnette argued that the gender differential in day wages was market driven. Its roots lay in women's lower productivity and had two main causes: women's lesser upper-body strength in comparison to men in an era when most forms of work depended on muscle power, and the fact women typically worked slightly shorter hours.¹⁹ No evidence has been found of women working shorter hours before the 1790s. Differences in physical strength need more careful consideration. Recent research on Portugal shows that women earned two-thirds of the male wage for agricultural work between 1350 and 1900, but argues that this does not represent discrimination, because women had two-thirds of men's physical strength.²⁰ Yet, as Alexandra de Pleijt and Jan Luiten van Zanden have noted, while women's strength was on average 67 per cent that of men, gender wage ratios varied widely between European countries and over time, and were often closer to 50 per cent.²¹ Explanations resting on physical strength are also challenged by widespread evidence of equal pay for women and men in medieval English agriculture.²² Similar evidence

¹³ Seven days worked by women, not seven sets of accounts: Rogers, *History of agriculture and prices*, III, pp. 614–43.

¹⁴ Clark, 'Long march', pp. 97–135.

¹⁵ J. Humphries and J. Weisdorf, 'The wages of women in England, 1260–1850', *JEC* 75 (2015), pp. 405–47.

¹⁶ *Ibid.*, 'Wages of women', pp. 431–2.

¹⁷ *Ibid.*, pp. 408–9.

¹⁸ J. M. Bennett, *History matters: Patriarchy and the challenge of feminism* (2006), p. 103; J. Burnette, *Gender, work and wages in industrial revolution Britain* (2008), p. 73; Humphries and Weisdorf, 'Wages of women', pp. 431–2.

¹⁹ J. Burnette, 'An investigation of the female-male wage gap during the industrial revolution in Britain', *EcHR* 50 (1997), pp. 268–9, 274–7; Burnette, 'Wages', p. 675; Burnette, *Gender, work and wages*, pp. 72–135.

²⁰ N. Palma, J. Reis, and L. Rodrigues, 'Historical gender discrimination does not explain comparative western European development: Evidence from Portugal, 1300–1900', *Explorations in Econ. Hist.* 88 (2023), pp. 5–6.

²¹ A. de Pleijt and J. Luiten van Zanden, 'Two worlds of female labour: Gender wage inequality in western Europe, 1300–1800', *EcHR* 74 (2021), p. 634.

²² Rogers, *History of agriculture and prices*, IV, p. 495; Lord Beveridge, 'Westminster wages in the manorial era', *EcHR*, new series, 8 (1955), p. 34; Penn, 'Female wage-earners', p. 13; J. Whittle, 'The food economy of lords, tenants, and workers in a medieval village: Hunstanton, Norfolk, 1328–48', in M. Kowaleski, J. Langdon and P. R. Schofield (eds), *Peasants and lords in the medieval English economy: Essays in honour of Bruce M. S. Campbell* (2015), p. 45.

for early-modern England is presented in this article. Sandy Bardsley argued equal wages were only found when women were paid the same as boys or elderly men.²³ The issue of whether all the men who worked alongside women for the same pay were of inferior physical capacity is re-examined below.

A range of studies from elsewhere in Europe observe equal pay for women and men in the early modern economy. Some of these occurred in industries that were less reliant on physical strength. For instance, piece rates for spinning showed 'no significant differences in remuneration between the sexes' in the seventeenth-century Dutch Republic,²⁴ while in sixteenth-century Toledo women and men working as nurses received equal pay in certain periods.²⁵ Other forms of work had a more obvious element of physical exertion: unskilled female construction workers earned similar daily wages to men in the late sixteenth- and early seventeenth-century Sweden, and the same was true for brewers employed on sixteenth-century Swedish royal demesnes.²⁶ This suggests that differences in average physical strength between women and men are not always an adequate explanation for gender differences in daily wages. The variety of agricultural wages observed in early modern English household accounts sheds new light on this debate.

II

While accounts recording agricultural labour for the period 1450–1700 are rare in comparison to earlier and later periods, these records are often richly detailed. Unlike medieval manorial accounts they typically name workers, allowing analysis by gender and the reconstruction of individuals' work patterns. Unlike most eighteenth-century farm accounts, they frequently detail the tasks undertaken, allowing analysis of the gender pay gap by task. This study is based on some of the few detailed accounts that have survived, taking 14 full-year samples of accounts from a range of English localities and spread across the period 1482–1674, shown in Map 1 and Table 1. All recorded substantial numbers of named day labourers working in agriculture. Gentry accounts are idiosyncratic documents, kept with varying degrees of professionalism. In most cases useable records, without gaps or missing detail, only survive for one or two years: we selected the years with the most complete and detailed records for analysis, while balancing the selection by time period and location.²⁷ No more than one sample was taken from a particular place in any decade; the Willoughby family accounts for Wollaton and Middleton dominate the mid sixteenth century because these are the only detailed farm

²³ Bardsley, 'Women's work reconsidered', pp. 5, 17, 29.

²⁴ E. van Nederveen Meerkerk, 'Market wage or discrimination? The remuneration of male and female wool spinners in the seventeenth-century Dutch Republic', *EcHR* 63 (2010), pp. 174–6.

²⁵ M. Drellichman and D. González Agudo, 'The gender wage gap in early modern Toledo, 1550–1650', *JECH* 80 (2020), p. 353.

²⁶ K. E. Gary, 'Constructing equality? Women's wages for physical labor, 1550–1759', *Lund Papers in Econ. Hist.* (2017), p. 18. J. Molinder and C. Pihl, 'Women's work and wages in the sixteenth century and Sweden's position in

the 'little divergence', *EcHR* 76 (2023), p. 161.

²⁷ The Stebbing accounts survive for a single year. Those of Hunstanton, Eaton and Swarthmoor only had sufficient detail for a single year. The accounts of Althorp, Ashton and South Ormsby offer full records for 2–4 years. The full run of accounts for Smithills and Gawthorpe have been analysed in Li Jiang, 'Wage labour and living standards in early modern England: A case study of the Shuttleworth accounts, Lancashire 1582–1621' (unpublished PhD thesis, University of Exeter, 2022), and those for Payhembury by Dudley in 'Women's waged work'.



MAP 1: Location and date of the accounts studied

TABLE 1: Agriculture activities recorded in the accounts

<i>Estate</i>	<i>Family</i>	<i>Year</i>	<i>Arable</i>	<i>Hay</i>	<i>Park & Estate</i>	<i>Kitchen Garden</i>	<i>Orchard</i>	<i>Hops</i>
Stebbing	Capell	1482	Y	–	–	–	–	–
Wollaton	Willoughby	1523/4	Y	Y	Y	–	–	–
Middleton	Willoughby	1524	(Y)	Y	Y	Y	–	–
Wollaton	Willoughby	1541	Y	Y	–	Y	–	–
Wollaton	Willoughby	1565	Y	Y	Y	–	–	–
Smithills	Shuttleworth	1583	Y	Y	Y	Y	–	–
Althorp	Spencer	1599/1600	Y	Y	Y	Y	–	Y
Gawthorpe	Shuttleworth	1605	Y	Y	Y	–	Y	–
Hunstanton	Le Strange	1613/14	–	Y	Y	–	–	–
Ashton	Smyth	1632	(Y)	Y	Y	Y	Y	–
Payhembury	Willoughby	1644/5	Y	Y	Y	–	Y	Y
South Ormsby	Massingberd	1653/4	Y	Y	–	–	–	–
Eaton	Aldrich	1665/6	Y	Y	–	–	–	–
Swarthmoor	Fell	1674	Y	Y	–	Y	–	–
Total			13	13	9	6	3	2

Notes: (Y) indicates the arable agriculture was present but very limited in extent

Sources: BL, Add. Roll 66051; UNMSC, Mi A11, Mi A15, Mi A22, Mi A48; Lancashire RO, Shuttleworth accounts, DDKS 18/1, 6-7; BL, Add. Mss 25080; Norfolk RO, LEST P6; Bristol Archives, Thomas Smyth of Ashton Court, AC/36074/72; Todd Gray (ed.), *Devon household accounts, 1627–59*, Part I (1995) pp. 113–32; Lincolnshire Archives, Sir Drayner Massingberd, 1-MM/6/1/1; A. Hickley (ed.), 'John Aldrich of Eaton farm accounts 1663–1667' in J. Wilson, P. Howard and A. Hickley (eds), *Country and city: Wymondham, Norwich and Eaton in the 16th and 17th centuries* (Norf. Record Soc., LXX, 2006), pp. 215–26; N. Penney (ed.), *The household account book of Sarah Fell of Swarthmoor Hall* (1920), pp. 53–193.

accounts identified for that period.²⁸ Nevertheless, these full-year samples allow seasonality and annual employment patterns to be analysed.

Table 1 shows the main elements of the farming economy evidenced in each account. As well as agricultural work, half the accounts described land management tasks such as hedging and ditching or lopping firewood. A little under half recorded labour in kitchen gardens, while others noted the labour expended in specialist food production in orchards and hopyards. The home farms of gentry households were not typical farms and some prioritized direct food provision and the maintenance of parkland rather than production for the market. Yet they relied on local people to provide the great majority of labour and the types of work they recorded were common across the English countryside.²⁹

²⁸ Accounts for Wollaton and Middleton survive for much of the period 1523–1606, see W. H. Stevenson, *Report on the manuscripts of Lord Middleton* (1911), pp. 351–462.

²⁹ See J. Whittle, M. Hailwood, H. Robb and T. Aucoin, *The experience of work in early modern England* (forthcoming), ch. 6.

TABLE 2: The number and gender of person-days paid

<i>Place</i>	<i>Year</i>	<i>Person-days paid</i> <i>Number</i>	<i>By women</i>	
			<i>Number</i>	<i>%</i>
Stebbing, Essex	1482	410.5	142.5	34.7
Wollaton, Notts.	1523/4	969.5	444.5	45.8
Middleton, Warks.	1524	1132.75	268.25	23.7
Wollaton, Notts.	1541	3039	1688.5	55.6
Wollaton, Notts.	1565/6	2185	754	34.5
Smithills, Lancs.	1583	463	49	10.6
Althorp, Northants.	1599/1600	4076	1465	35.9
Gawthorpe, Lancs.	1605	1669.5	387	23.2
Hunstanton, Norf.	1613/14	505.5	79.5	15.7
Ashton, Som.	1632	1650.1	367.5	22.3
Payhembury, Devon	1644/5	1459.5	183	12.5
South Ormsby, Lincs.	1653/4	1820.5	171	9.4
Eaton, Norf.	1665/6	1722.5	139.5	8.1
Swarthmoor, Lancs.	1674	687	241	35.1
		21790.35	6380.25	29.3

Notes: One calendar year was sampled from each account. Only payment by the day is included.

Sources: As Table 1.

All agricultural and unskilled labour paid by the day or task was collected for analysis, although only that paid by the day is quantified in Table 2. Skilled work undertaken by craftsmen such as smiths and carpenters, and by their servants and apprentices (all of whom were male), was excluded from the dataset. Unskilled work specified as ‘helping’ craftsmen (some of which was undertaken by women) was included. Workers paid by the week were included, but not servants employed on quarterly or annual contracts.

Accounts do not detail the exact extent of the lands being farmed and managed, but the approximate scale can be inferred from employment patterns: for instance, the Fells of Swarthmoor in Furness, Lancashire, were running a relatively small upland farm, while the Willoughbys of Wollaton in Nottinghamshire managed the labour on a set of demesne farms that stretched into a number of communities.³⁰ Similarly, the Shuttleworths at Smithills had farmland in various locations across southern Lancashire that they managed directly, although mainly relying on servant labour.³¹ The Le Stranges of Hunstanton had a large estate, but only

³⁰ The Wollaton estate extended into Lenton, Beeston, Bramcote and Arnold, see M. S. Dawson, *Plenti and grase: Food and drink in a sixteenth-century household* (2008).

³¹ The Smithills estate extended into Lostock, Tingreave and Much Hoole as well as Smithills, see Jiang, ‘Wage labour and living standards’, pp. 42–3.

managed their parkland and a few enclosed fields directly. They relied on tithes and rents paid in grain rather than engaging in arable agriculture.³²

Gentry ownership of tithes is one reason why the labour involved in arable agriculture is often under-represented in these accounts.³³ Another reason is that harvest labour was frequently subcontracted. Subcontractors were paid a lump sum for bringing in the harvest, or harvesting a particular field, obscuring workers' identities and wage payments. Unusually, at Wollaton in 1541, the subcontractors in the wheat harvest were all women. Thus, for instance, 'Elizabeth Heth and her fellows' harvested 8.25 acres, while 'Beley's wife and her fellows' harvested 9.25 acres, at a payment of 8*d.* per acre.³⁴ Female subcontractors were also found at Gawthorpe in 1602, when Richard Haworth's wife was paid 3*s.* 4*d.* 'for shearing [reaping grain] *Whippe Lene* upon her charge'.³⁵

Differences in farm size and agricultural regime are reflected in the size and gender profile of the workforce employed. The number of person-days recorded was lowest in the accounts of Stebbing (arable without hay), Smithills (little arable),³⁶ Hunstanton (hay and parkland without arable) and Swarthmoor (a small upland farm). Otherwise, each account recorded between just under 1000 and just over 4000 days' work paid by the day each year. Of all the day labour recorded, 29.3 per cent was undertaken by women. This proportion varied a great deal between the accounts. On the Wollaton estate in 1541 women undertook 55.6 per cent of the day labour while at Eaton, just outside Norwich in the 1660s, they were responsible for only 8.1 per cent. The proportion of work done by women was significantly higher in accounts from the period 1482–1600 at 39.2 per cent, than in the later accounts from 1605–74 when it was only 16.5 per cent. Keith Snell argued that women's contribution to agricultural day labour declined significantly in the eighteenth century: our data suggests this change was already under way in the seventeenth century.³⁷

III

Labourers employed by day or task in gentry households mostly did agricultural work. Men occasionally helped building workers, carted non-agricultural goods, or were sent on errands, but the great majority of their work involved agriculture or land management. Women did a range of tasks including helping with building work, textile production, cleaning, cooking, and caring for the sick, as well as agriculture. Table 3 examines the types of work undertaken by women when they were paid by the day, week, or task. The only set of accounts in which agriculture did not dominate women's work is Hunstanton, where the small number of women employed were mainly spinning and carding rather than working in agriculture. The proportion of agricultural work was also relatively low at Swarthmoor, where spinning and working peat were important. In other accounts the failure to describe all the tasks undertaken creates a

³² Whittle and Griffiths, *Consumption and gender*.

³³ The Smyths of Ashton also relied on tithes for most of their grain.

³⁴ UNMSC, Middleton Collection, Mi A22. Of course, these women may have employed some male workers.

³⁵ Lancashire RO [hereafter LRO], Shuttleworth accounts, DDKS 18/5, p. 123.

³⁶ Detail about tasks was also lacking in the Shuttleworth's Smithills accounts.

³⁷ Snell, *Annals*, pp. 52–3.

TABLE 3: Percentage of work undertaken by women (paid by the day, week or task)

<i>Place</i>	<i>Year</i>	<i>Agriculture</i>	<i>Crafts and manuf.</i>	<i>Housework and care work</i>	<i>Other and unspec.</i>	<i>Total person-days</i>
Stebbing	1482	89.5	–	–	10.5	143.5
Wollaton	1523/4	95.9	0.8	1.5	1.8	480.5
Middleton	1524	56.9	–	–	43.1	268.25
Wollaton	1541	98.1	1.9	–	–	1831
Wollaton	1565/6	96.7	–	2.5	0.8	754
Smithills	1583	39.6	–	–	60.4	69.5
Althorp	1599/1600	80.4	8.0	11.0	0.6	1522
Gawthorpe	1605	100.0	–	–	–	387
Hunstanton	1613/14	10.1	89.9	–	–	79.5
Ashton	1632	91.8	–	8.2	–	376.5
Payhembury	1644/5	28.6	–	–	71.4	202.5
South Ormsby	1653/4	100.0	–	–	–	171
Eaton	1665/6	85.1	–	–	14.9	140.5
Swarthmoor	1674	43.8	39.5	0.5	16.2	425
Total days		5793.25	400	226	431.5	6850.75
Overall %		84.6	5.8	3.3	6.3	100.0

Notes: Task payments are translated into estimated days worked.

Sources: As Table 1.

problem. At Payhembury all tasks other than weeding are unspecified. At Smithills while some women were paid for weeding in the garden and winnowing, another woman was paid for seven weeks' work doing unspecified tasks in the winter of 1583/4.³⁸ Nonetheless, it is clear that agricultural work dominates the dataset for women as well as men. On average, across all 14 sets of accounts, at least 84.6 per cent of paid casual work undertaken by women was agricultural.

Table 4 shows that weeding, haymaking, and the grain harvest played a dominant role in women's casual agriculture labour, accounting for 86.2 per cent of such work. These tasks remained the core of female day labourers' contribution to agriculture into the nineteenth century.³⁹ This pattern was consistent across all 12 accounts that recorded agricultural tasks in sufficient detail: these three types of work always made up more than half of the agricultural work undertaken by women paid by day or task. Some accounts record a broader range of tasks: at Stebbing women were paid for sowing crops as well as harvesting; at Wollaton in 1541 they were employed to winnow; at Althorp women worked in the hopyard, harvested bracken, and picked and processed crab apples; at Ashton a female day labourer helped the female servants with milking; and at Swarthmoor women spread manure, harrowed, and harvested hemp and flax. Nonetheless, the overall picture was dominated by weeding, haymaking, and the grain harvest.

³⁸ LRO, Shuttleworth accounts, DDKS 18/1, p. 26.

³⁹ Verdon, *Rural women workers*, pp. 55–61.

TABLE 4: Percentage of types of agricultural work undertaken by women (paid by day, week or task)

<i>Place</i>	<i>Year</i>	<i>Weeding</i>	<i>Haymaking</i>	<i>Grain harvest</i>	<i>Other agricultural</i>	<i>Total days</i>
Stebbing	1482	0	0	50.2	49.8	128
Wollaton	1523/4	1.1	15.2	72.2	11.5	461
Middleton	1524	34.2	57.9	5.2	2.6	152.75
Wollaton	1541	11.0	61.1	23.7	4.2	1796.5
Wollaton	1565/6	0	86.6	10.6	2.9	729
Smithills	1583	94.5	0	0	5.5	27.5
Althorp	1599/1600	7.6	52.1	3.9	36.4	1227
Gawthorpe	1605	0	68.5	31.5	0	387
Ashton	1632	45.9	37.2	1.0	15.9	345.5
South Ormsby	1653/4	9.4	70.5	20.2	0	171
Eaton	1665/6	11.5	73.5	0	15.1	139.5
Swarthmoor	1674	8.1	62.6	0	29.3	186
Total days		580.25	3259	1116	795.5	5750.75
Overall %		10.1	56.7	19.4	13.9	100

Notes: Task payments are translated into estimated days worked.

Sources: As Table 1.

TABLE 5: The seasonality of women's work (paid by the day, week or task)

<i>Place</i>	<i>Year</i>	<i>Jan.–Mar.</i> %	<i>Apr.–Jun.</i> %	<i>Jul.–Sept.</i> %	<i>Oct.–Dec.</i> %	<i>Total days</i>
Wollaton	1523/4	5.6	2.9	87.3	4.2	480.5
Middleton	1524	21.0	24.4	54.6	0	268.25
Wollaton	1541	1.8	14.2	79.5	4.5	1815
Wollaton	1565/6	0	0	100.0	0	754
Smithills	1583	34.5	27.3	2.2	36.0	69.5
Althorp	1599/1600	5.6	9.8	61.2	23.4	1522
Gawthorpe	1605	0	0	100.0	0	387
Hunstanton	1613/14	0	0	51.6	48.4	79.5
Ashton	1632	6.4	23.2	60.0	10.4	376.5
Payhembury	1644/5	6.2	37.5	35.5	20.7	202.5
South Ormsby	1653/4	0	9.4	90.6	0	171
Eaton	1665/6	0	7.1	92.9	0	140.5
Swarthmoor	1674	25.2	17.4	36.7	20.7	425
Total days		367.75	768.5	4864	691	6691.25
Percentage		5.5	11.5	72.7	10.3	100.0

Notes: Task payments are translated into estimated days worked.

Sources: As Table 1.

This distribution of tasks had important implications for the seasonality of women's year-round work, as shown in Table 5. Of all the days worked by women in the 13 accounts that recorded months of the year, 72.7 per cent took place between July and September. In 4 accounts this made up 90 per cent or more of women's day and task labour. In contrast, only 5.5 per cent took place between January and March, and in 5 of the accounts no day or task labour by women took place at all in these months. Amongst the accounts that recorded winter work for women, the nature of this work was unspecified at Middleton and Smithills, while at Swarthmoor it consisted of spinning rather than agricultural work. This concentration of women's casual labour in the summer months makes it inaccurate to assume women could find waged work all year round in rural England, unless they worked as servants. The annual work pattern was very different for men: for instance, at Wollaton in 1565 men undertook 45.8 per cent of their workdays between November and April, at Ashton in 1632 the proportion was very similar at 44.9 per cent, while at South Ormsby in 1653/4 winter work made up 51.2 per cent of men's workdays.

The accounts indicate that day labouring was not a full-time occupation for either men or women in the late fifteenth and sixteenth centuries. At Stebbing in 1482 the maximum number of days worked that year was 32.5 for men and 20 for women; the average number of days worked for both men and women was 7. At Wollaton in 1541 and 1565/6 workers were employed for more days: the most heavily employed woman was Myghell's wife who did 135 days' work in 1541; and the busiest man was Robert Ward who did 148 days' work in 1565/6. In the seventeenth century we start to encounter male day labourers who worked more than 200 days a year, such as John Cockshut at Gawthorpe (278 days), John Setchfield at Ashton (225 days), and Phillip Wright at South Ormsby (261 days). However, these men were exceptional: on those estates no other men worked that number of days and the average (mean) days worked by individual men was between 23 and 51 days a year, with the median even lower at less than 20 days. The trend in days worked by women was different: full-time agricultural labouring did not develop as a career for women. No woman exceeded the number of days worked by Myghell's wife in 1541. Only three other women in all 14 sets of accounts did more than 100 days' work a year: goodwife Jones at Ashton did 107 in 1632, Susan Weeks at Payhembury did 100.5 in 1644/5, and Peggy Dodgson did 107.5 at Swarthmoor in 1674. Of the 296 individual named women recorded in all the accounts, only 15 worked 60 or more days a year and the average (mean) number of days worked was 18 days.

Women were clearly an important part of the casual workforce in agriculture, particularly in the summer harvest months. However, there were also many tasks commonly undertaken by men that women were never employed to do. These included most of the winter tasks: ploughing, threshing, hedging and ditching, and cutting wood for fuel. The year-round task of carting was always done by men. Court records provide occasional evidence of women ploughing, threshing and carting in early modern England, but this was not common, and no women were recorded in wage accounts doing these tasks.⁴⁰ In the summer, the highest paid job was mowing – that is harvesting hay or grain with a scythe. None of the accounts recorded

⁴⁰ J. Whittle and M. Hailwood, 'The gender division of labour in early modern England', *EcHR* 73 (2020), p. 16; Whittle *et al.*, *Experience of work*, ch. 3.

TABLE 6: Haymaking paid by the day: season, gender, and modal wages

<i>Place</i>	<i>Year</i>	<i>Person-days</i>	<i>Months</i>	<i>F %</i>	<i>M %</i>	<i>F pay d.</i>	<i>M pay d.</i>	<i>Paid the same?</i>
Wollaton	1523/4	59.5	Jul.–Aug.	87.4	12.6	1	1	yes
Middleton	1524	92.5	Jun.–Aug.	96.2	3.8	1	0.5	no
Wollaton	1541	1221.5	Jun.–Aug.	90.0	10.0	2.5	2.5	yes
Wollaton	1565/6	662	Jul.–Aug.	95.0	5.0	4	4	yes
Smithills	1583	69	Aug.–Oct.	0.0	100.0	–	1	–
Althorp	1600	687	Jul.–Aug.	93.0	7.0	3	4	no
Gawthorpe	1605	382	Jul.–Aug.	69.4	30.6	2	2	some
Hunstanton	1613/14	29	Jun.–Jul.	0.0	100.0	–	4	–
Ashton	1632	258	Jul.–Aug.	49.8	50.2	6	8	some
South Ormsby	1653	284	Jul.–Sept.	42.1	57.9	6	8	some
Eaton	1665	122	Jul.–Aug.	84.0	16.0	6	6	yes
Swarthmoor	1674	124.5	Jul.–Sept.	71.9	28.1	1	2	some

Notes: Mowing is excluded. At Smithills other haymakers of unknown gender were paid by task that year.

Sources: As Table 1.

women being employed to mow. These two factors: women's exclusion from mowing, and the fact that there was less work for women all year round, had a significant impact on women's potential earnings from casual agricultural labour.

IV

Since female day labourers showed high participation in weeding, haymaking, and the grain harvest, this section explores the gendering of these three types of work and their rates of pay in more detail. This shows that it was not unusual for women and men to be paid the same daily wages for undertaking the same tasks.

The hay harvest is the most richly documented of these three types of work. It consisted of two main processes: mowing and haymaking. Smith argued that haymaking was always undertaken by women, as it was on the Stiffkey estate in Norfolk in the 1590s.⁴¹ In fact, the 12 accounts that recorded haymaking paid by the day typically recorded a mixed labour force, as Table 6 shows. However, it is striking that in all the sixteenth-century accounts except Smithills women made up 87 per cent or more of haymakers. The few men who joined a mainly female workforce were sometimes paid the same as women, as at Wollaton; sometimes less, as at Middleton where the only male worker was a boy; and sometimes more, as at Althorp. In the seventeenth century, a higher proportion of male haymakers were employed, and at Hunstanton the small number of days' work were carried out exclusively by men.

⁴¹ A. Hassell Smith, 'Labourers in late sixteenth-century England: A case study from North Norfolk [Part II]', *Continuity and Change* 4 (1989), p. 377.

Employers took a range of approaches to paying for haymaking. Some farms and estates such as Wollaton and Eaton paid men and women the same. Others, such as Middleton and Althorp, paid men more than women. A third set, including Gawthorpe, Ashton, South Ormsby and Swarthmoor had some overlap in men's and women's pay.

Ashton provides an interesting example. These accounts state that men were paid 8*d.* a day and women 6*d.* a day for haymaking. This was indeed the norm on the estate. However, there were variations: one man was paid 9*d.* and some men were paid 6*d.* – the same rate as women. While most women received 6*d.*, some were paid 4*d.* It seems likely that the most able-bodied male and female workers received 8*d.* and 6*d.* respectively, while those who were less able received 6*d.* and 4*d.* The man who received 9*d.*, Robin Setchfield, seems to have made an agreement to receive that wage for all his work during the harvest period, while other men received 12*d.* for mowing and 8*d.* for other work.⁴² A similar mismatch between the stated wage policy and actual payments was found at Gawthorpe, although outside the period shown in Table 6. In 1617–20 the accounts recorded that men should be paid 3*d.* and women 2*d.* a day for making hay. However, in September 1621 women were paid more, 2.5*d.* or 3*d.* per day, for this task, while a boy was only paid 2*d.* per day.⁴³

Hunstanton employed only men to do haymaking, but paid them a woman's rate of pay, 4*d.* A wage assessment for Norfolk in 1610 set legal rates of pay for haymaking at 4*d.* for women and 6*d.* for men.⁴⁴ Those who made hay for 4*d.* included men such as Nicholas Page, a smallholder who was possibly elderly, as he died nine years later in 1622.⁴⁵ However, they also included Robert Bidden, a small farmer who died in 1630, and who was the Le Strange's most-employed labourer between 1613 and 1624. In 1613 he also mowed for 8*d.* a day and did hedging for 6*d.* This shows that the Le Stranges paid male workers according to task, rather than strength or skill, and that able-bodied men sometimes received 'women's' wages.⁴⁶

Table 7 turns to another female-dominated task, weeding. In their study of women's work in early modern Portugal, Nuno Palma and co-authors characterize weeding with mowing as a task that required considerable physical strength, thus explaining why women were paid less than men.⁴⁷ In contrast, studies of English agriculture observe weeding as low-paid work largely done by women in the eighteenth and nineteenth centuries.⁴⁸ Early modern accounts record labourers weeding field crops and kitchen gardens, most commonly in early summer. Weeding was very strongly gendered in 7 of the 10 accounts: in five 97 per cent or more of weeding was done by women; however, at Gawthorpe and Hunstanton men did all the weeding. On the 4 farms and estates where both men and women were employed, they received equal pay for this task. The pay was low, similar to the non-harvest wages paid to women for

⁴² Bristol Archives [hereafter BA], Thomas Smyth of Ashton Court, AC/36074/72.

⁴³ LRO, Shuttleworth accounts, DDKS 18/9, p. 141.

⁴⁴ J. C. Tingey, 'An assessment of wages for the county of Norfolk in 1610', *English Hist. Rev.* 12 (1898), p. 525. Women employed at Hunstanton to do other agricultural tasks during the summer of 1613 received 4*d.* per day.

⁴⁵ Other tasks done by Page in 1613 included brewing

and carting.

⁴⁶ Whittle and Griffiths, *Consumption and gender*, pp. 222–3, 231–3.

⁴⁷ Palma *et al.*, 'Historical gender discrimination', pp. 5–6.

⁴⁸ I. Pinchbeck, *Women workers and the industrial revolution, 1750–1850* (1969), p. 61; M. Overton, *Agricultural revolution in England* (1996), p. 188; Verdon, *Rural women workers*, pp. 100, 108.

TABLE 7: Weeding paid by the day: season, gender, and modal wages

<i>Place</i>	<i>Year</i>	<i>Person-days</i>	<i>Months</i>	<i>F %</i>	<i>M %</i>	<i>F pay d.</i>	<i>M pay d.</i>	<i>Paid the same?</i>
Wollaton	1541	172.5	May–Jun.	97.1	2.9	2	2	yes
Smithills	1583	12	Oct.	58.3	41.7	1.4	1.4	yes
Althorp	1600	93	May–Oct.	100.0	0.0	3	–	–
Gawthorpe	1605	12	Jun.	0.0	100.0	–	2	–
Hunstanton	1613/14	27.5	Jun.	0.0	100.0	–	4	–
Ashton	1632	158.5	Mar.–Nov.	100.0	0.0	4	–	–
Payhembury	1644/5	81.5	May & Aug.	55.8	44.2	6	4 or 6	yes
South Ormsby	1653/4	16	May	100.0	0.0	4	–	–
Eaton	1665	32.5	Jun.–Jul.	49.2	50.8	6	6	yes
Swarthmoor	1674	10	Jun.–Oct.	100.0	0.0	1	–	–

Sources: As Table 1.

other tasks. However, Payhembury in 1644/5 was an exception. On this Devon farm weeding was highly paid at 6*d.* per day; other agricultural tasks, including men's normal week-work in agriculture, received 4*d.* The reasons for this remain opaque: it was during the Civil War and in a part of south-west England where women found plentiful employment in dairying and lacemaking.⁴⁹ It is possible that high wages were required to persuade them to work. Another possibility is that the wages for weeding did not include food and drink, while those for normal week-work did. A legal wage assessment from Devon in 1654 ordered that female haymakers should receive 2*d.* per day 'with meat and drink', but 6*d.* without.⁵⁰

Table 8 shows wages paid for harvesting grain. As already mentioned, the number of worker-days expended in the grain harvest was under-recorded in these wage accounts. Occasionally, however, as at Stebbing, Wollaton in 1523/4 and 1541, and at Gawthorpe, detailed accounts appear to record the great majority of the workforce. The grain harvest involved various tasks. Barley and oats were typically mown with a scythe like hay. As with hay, this was done by men only and was rewarded with high wages – normally the highest agricultural wage found in the accounts. Wheat and rye were reaped or sheared with a sickle. Workers then raked and bound the cut crops, before standing the sheaves in stooks. Reaping, raking and binding were done by women or men, typically for one rate of pay.⁵¹ The two rates of pay for men in Table 8 show the difference between the higher wages for mowing and the lower wages for other tasks. Equal pay for women and men carrying out tasks other than mowing was widespread, although not universal.

There were wide variations in the gender balance of the harvest workforce. At Wollaton and Althorp harvest work was dominated by women. Elsewhere men dominated, sometimes to the

⁴⁹ Dudley, 'Evidence of women's waged work', pp. 161–3; P. Sharpe, *Population and society in an east Devon parish: Reproducing Colyton 1540–1840* (2002), pp. 120–59.

⁵⁰ A. H. A. Hamilton, *Quarter sessions from Queen Elizabeth to Queen Anne* (1878), p. 163.

⁵¹ Children and less-able adults might be paid less.

TABLE 8: Work in the grain harvest paid by the day: season, gender, and modal wages

Place	Year	Person-days	Months	F %	M %	F pay d.	M pay d.		Paid the same?
						(a)	(a)	(b)	
Stebbing	1482	228.5	unclear	28.2	71.8	3	4	–	no
Wollaton	1523/4	437.5	Aug.–Sept.	75.7	24.3	2	2	4	yes
Wollaton	1541	297.5	Aug.–Sept.	67.4	32.6	3	3	6	yes
Wollaton	1565/6	92	Aug.	83.7	16.3	4	4	10	yes
Althorp	1600	69	Aug.–Sept.	69.6	30.4	3	6	–	no
Gawthorpe	1605	312	Jul.–Sept.	38.9	61.1	3	3	6	yes
Hunstanton	1613/14	22	Aug.–Sept.	36.4	63.6	4	4	8	yes
Ashton	1632	45.5	Aug.–Sept.	7.7	92.3	6	8	12	no
Payhembury	1644/5	16	Aug.	37.5	62.5	4	4	6	yes
South Ormsby	1653/4	77.5	Aug.–Sept.	44.5	55.5	6	8	13	no
Eaton	1665	30	Aug.	0.0	100.0	–	10	20	–

Notes: Female and male harvest work (a) consisted of shearing or reaping, raking, binding, stacking corn, and unspecified harvest work. Male harvest work (b) consisted of mowing corn.

Sources: As Table 1.

complete exclusion of women, as at Eaton in Norfolk in 1665. The proportion of women in the harvest workforce declined noticeably after 1600. This was not due to the increasing use of the scythe, as argued by Snell for the eighteenth century.⁵² The gendered use of technology remained the same: barley and oats mown with the scythe by men, wheat and rye reaped or sheared with the sickle by women or men.⁵³ Women still made a significant proportion of the harvest workforce after 1600 on estates such as Gawthorpe and South Ormsby at 39–45 per cent, but they were no longer numerically dominant, as they had been at Wollaton and Althorp in the sixteenth century.

Across the 11 estates shown in Table 8, 55 per cent of harvest labour was provided by women. The high proportion of women and prevalence of equal pay for tasks other than mowing suggest a shortage of male labour for this labour-intensive and time-sensitive task. It is possible that this shortage became less acute over time, as landlessness increased and more male labour became available, thus reducing the proportion of women employed and the incidence of equal pay. The pattern of a high proportion of women employed and equal wages to men during harvest time is nonetheless surprising, given that the period 1560 to 1640 is identified as one of low real wages in agriculture, near-famine conditions in northern England, and a high gender wage gap.⁵⁴

The comparison of wage rates for women and men employed by the day in three types of agricultural task, haymaking, weeding, and harvesting grain, shows that during the sixteenth and seventeenth centuries it was not unusual for women and men to receive the same pay for

⁵² Snell, *Annals*, p. 50.

⁵³ Roberts, 'Sickles and scythes'.

⁵⁴ Clark, 'Long march', p. 109; A. Appleby, *Famine*

in Tudor and Stuart England (1978); Humphries and Weisdorf, 'Wages of women', pp. 418, 428.

TABLE 9: Modal day wages in the accounts

(a) Paid to women

<i>Account</i>		<i>Most common F wage</i>			<i>2nd most common F wage</i>		
<i>Place</i>	<i>Year</i>	<i>Wage d.</i>	<i>Days paid</i>	<i>Female days %</i>	<i>Wage d.</i>	<i>Days paid</i>	<i>Female days %</i>
Stebbing	1482	3	64.5	42.3	1	52	36.5
Wollaton	1523/4	2	335.5	75.5	1	109	24.5
Middleton	1524	0.73	123.75	46.1	1	100.5	37.5
Wollaton	1541	2.5	957	56.6	2	253.5	15.0
Wollaton	1565/6	4	733	97.2	3	21	2.8
Smithills	1583	0.5	42	85.7	1.4	7	14.3
Althorp	1599/1600	3	1298	88.6	2	167	11.4
Gawthorpe	1605	2	265	68.5	3	122	31.5
Hunstanton	1613/14	1.8	40	50.3	1.6	27	34.0
Ashton	1632	4	173.5	47.5	6	117	32.0
Payhembury	1644/5	1.3	90	49.1	6	6	34.1
South Ormsby	1653/4	6	155	90.6	4	16	9.4
Eaton	1665/6	6	114	81.7	5	12	8.6
Swarthmoor	1674	1	64	25.6	0.87	39	16.2

(a) Paid to men

<i>Account</i>		<i>Most common M wage</i>			<i>2nd most common M wage</i>		
<i>Place</i>	<i>Year</i>	<i>Wage d.</i>	<i>Days paid</i>	<i>Male days %</i>	<i>Wage d.</i>	<i>Days paid</i>	<i>Male days %</i>
Stebbing	1482	4	150.5	56.4	1.5	39	14.6
Wollaton	1523/4	4	92.5	37.4	2	66	14.8
Middleton	1524	2	347.5	40.2	3	182	21.1
Wollaton	1541	6	358.5	26.5	4	354	26.2
Wollaton	1565/6	6	608.5	43.0	10	264	18.6
Smithills	1583	1.5	92	22.2	2	36	8.7
Althorp	1599/1600	6	1217.5	47.5	5	819.5	31.9
Gawthorpe	1605	3	656	51.4	2	289	22.6
Hunstanton	1613/14	4	216	50.7	8	94	22.1
Ashton	1632	8	876	68.5	12	158.6	12.4
Payhembury	1644/5	4	960.5	76.0	2	165.5	13.1
South Ormsby	1653/4	6	774.5	47.0	5	394.5	23.9
Eaton	1665/6	12	602	38.6	10	498	31.9
Swarthmoor	1674	3	87	22.1	1.5	63	16.0

Notes: Shading indicates food and drink was provided for workers. No shading indicates diet was not provided, or accounts provided no information. Fractional payments were a consequence of weekly pay rates being divided by 5.5 to calculate the daily rate. 'Fe/male days %' shows the percentage workdays by women or men that were paid at that rate. Wages for women at Hunstanton were for spinning; women's agricultural work there received 4d. per day. *Sources:* As Table 1.

TABLE 10: Average (mean) wages and the gender pay gap in the accounts (*d.* per day)

<i>Place</i>	<i>Year</i>	<i>Number of person-days</i>	<i>Average female wage</i>	<i>Average male wage</i>	<i>Ratio F:M</i>	<i>Gender pay gap %</i>
Stebbing	1482	410.5	1.8	2.9	1:1.6	37.9
Wollaton	1523/4	969.5	1.8	2.7	1:1.5	33.3
Middleton	1524	1132.75	0.8	2.1	1:2.6	61.9
Wollaton	1541	3039	2.5	3.5	1:1.4	28.6
Wollaton	1565/6	2185	4.0	6.3	1:1.6	36.5
Smithhills	1583	463	0.6	1.5	1:2.5	60.0
Althorp	1599/1600	4076	2.9	5.4	1:1.9	46.3
Gawthorpe	1605	1669.5	2.3	2.6	1:1.1	11.5
Hunstanton	1613/14	505.5	1.8	5.3	1:2.9	66.0
Ashton	1632	1650.1	4.1	8.3	1:2.0	50.6
Payhembury	1644/5	1459.5	3.4	3.8	1:1.1	10.5
South Ormsby	1653/4	1820.5	5.8	6.4	1:1.1	9.4
Eaton	1665/6	1722.5	5.8	10.5	1:1.8	44.8
Swarthmoor	1674	687	1.7	2.9	1:1.7	41.4

Notes: The gender pay gap is calculated by subtracting women's average pay from men's average pay, dividing that number by men's average pay, and multiplying the result by 100. Smaller percentages are more equal.

Sources: As Table 1.

the same work. For these tasks, many employers do not seem to have considered men worthy of higher wages, suggesting there were no significant differences in male and female productivity, and thus neither different levels of physical strength nor different lengths of the working day were significant factors. It is also true, however, that men were paid more for the physically strenuous task of mowing, and this remained an exclusively male task.

V

Although women and men were sometimes paid the same daily wages for the same task, this did not lead to equal earnings. This section examines modal and mean rates of pay, and compares gender pay gaps in day wages and in annual earnings from particular employers.

Tables 9(a) and 9(b) show the two most common rates of daily pay for women and men, and Table 10 compares gendered average (mean) wages. Taken together, these measures reveal some of the complexity of wage rates. For instance, the most common (modal) wage paid to women at both Stebbing in 1482 and Althorp in 1599/1600 was *3d.*, but at Stebbing 42.3 per cent of women's workdays were paid at this rate, compared to 88.6 per cent at Althorp. The second most common wage rate for women was *1d.* at Stebbing compared to *2d.* at Althorp. Thus, although the most common wage rates were the same, the average female wage at Stebbing was *1.8d.*, considerably lower than that at Althorp, where it was *2.9d.* In five of the 14 sets of accounts studied, the two most common day wage rates paid to women and men overlapped. However, mean wages demonstrate that men were always paid more per day than women on average.

The size of gender pay gaps in daily wages varied a great deal. At Gawthorpe, Payhembury, and South Ormsby the male and female averages were very close, with a gender pay gap of less than 12 per cent.⁵⁵ Elsewhere, such as Middleton, Smithills, and Hunstanton, men were on average paid more than twice the amount received by women, leading to gender pay gaps of 60 per cent or more. It is notable that these latter three estates also offered relatively little agricultural work to women.

Trends over time in the gender pay gap were muted, apart from the 1640–1660 period. The pay gap increased slightly after 1560: from 1480 to 1560 it averaged 40.4 per cent, while during the period of low real wages from 1560 to 1640 it averaged 45.2 per cent. During the Civil War and Commonwealth period (1640–1660) the pay gap was particularly small at 10.0 per cent, but it returned to pre-1640 levels afterwards (43.1 per cent). Across the whole period the pay gap averaged 38.5 per cent.⁵⁶ These pay gaps are smaller than those implied by Humphries and Weisdorf's evidence of women's wages when compared with Clark's male agricultural wages, which average 50 per cent for the period 1480–1680.⁵⁷

Comparison shows that most of the average female wages presented in this article were higher than those in the Humphries and Weisdorf series,⁵⁸ while most of the average male wages were lower than those in the Clark series.⁵⁹ These consistent differences are a consequence of how the wage series were constructed. Humphries and Weisdorf excluded harvest wages so as not to inflate women's wages. If we exclude hay and grain harvest work from our data the average female day wage was 3.5*d.*, exactly the same as that observed by Humphries and Weisdorf for the same period. Yet non-harvest work accounted for only 34.9 per cent of the days worked by women in our dataset. The average wage including harvest work, which was 4.1*d.* for the whole period, is more representative of what women could earn when they worked for agricultural wages.

Clark makes multiple corrections to his raw wage rates for men, which represent 'the average payment in a given season of a given year and place for a particular type of work' and the piece rates paid to threshers. His higher wage rates seem to result from using modal wages and inflating the whole series by 4.9 per cent to include the value of beer.⁶⁰ Thus, taken together, the female day wages of Humphries and Weisdorf and male agricultural wages of Clark overstate the gender pay gap in early modern rural England in comparison to our approach.

Wage series typically calculate annual earnings by multiplying the daily wage by the estimated number of days worked per year: Humphries and Weisdorf suggest 260 days.⁶¹ Yet comparison with accounts indicates that this grossly overestimates what female agricultural labourers earned annually. None of the women observed in the accounts worked for wages

⁵⁵ This is less than the UK's 2021 gender pay gap for hourly pay: 15.4 per cent. O.N.S., *Gender pay gap in the UK:2021* (accessed 5/1/22).

⁵⁶ Average pay gap calculated by weighting each set of wage accounts equally (i.e. an average of the 14 pay gaps shown in Table 10).

⁵⁷ Calculated from Humphries and Weisdorf, 'Wages of women', pp. 431–2.

⁵⁸ 9 out of 13 were higher.

⁵⁹ 9 out of 13 were lower.

⁶⁰ Clark, 'Long march', pp. 101–2. For criticisms of Clark's methodology see J. Hatcher, 'Seven centuries of unreal wages', in J. Hatcher and J. Z. Stephenson (eds), *Seven centuries of unreal wages: The unreliable data, sources and methods that have been used for measuring standards of living in the past* (2018), pp. 37–41.

⁶¹ Humphries and Weisdorf, 'Wages of women', p. 412.

TABLE 11: Gender differences in yearly days worked and earnings on selected estates

		<i>Stebbing</i> 1482		<i>Wollaton</i> 1565		<i>Gawthorpe</i> 1605		<i>Ashton</i> 1632		<i>South Ormsby</i> 1653/4	
<i>Gender</i>		F	M	F	M	F	M	F	M	F	M
<i>Number of named workers</i>		21	37	45	55	33	56	9	40	20	33
<i>Yearly days worked</i>	<i>Max.</i>	20	32.5	36.5	147.75	30	278	107	225.35	24.5	261
	<i>Mean</i>	6.8	7.2	16.8	27.9	11.7	22.8	34.0	37.8	8.5	50.7
	<i>Median</i>	4	4	15	14	12	8.5	22.5	9.32	6.75	19.5
<i>Yearly earnings (d.)</i>	<i>Max.</i>	40	73	143	868	73	454.5	406	1764.3	147	1681
	<i>Mean</i>	12.2	21.3	66.6	174.5	27.2	58.1	138.9	311.9	47.8	324.0
	<i>Median</i>	9	16	60	100	25	24	81	66	40.5	154
<i>Total days by named workers</i>		142.5	268	754	1534	387	1275.5	373.5	1510.8	161	1673.65

Notes: Stebbing accounts did not record the month of work. Only named workers are included and task work has been converted into an estimated number of days, thus totals differ from Table 2.

Sources: As Table 1.

more than 135 days a year for a particular employer and most worked less than 60. The maximum annual wage earned by women in the 14 sets of accounts was £1 13s. 10d. earned by goodwife Jones at Ashton in 1632. Of the other women who worked for more than 100 days, only Myghell's wife at Wollaton earned more than £1 (£1 8s. 11d.).

Actual days worked and annual earnings for women and men were reconstructed for five accounts spread across the period with particularly good records, as shown in Table 11. This shows that men who worked over 200 days a year such as John Setchfield at Ashton and Phillip Wright at South Ormsby, made a reasonable living earning just over £7 a year.⁶² However, most men did not work this number of days, and average earnings were correspondingly lower: for instance, £1–£2 at Ashton and South Ormsby, and less than £1 at Wollaton in 1565/6 and Gawthorpe. Yet men's average annual earnings were always higher than women's earnings. South Ormsby is an extreme case: there the gender pay gap in day wages was small at 9.4 per cent, but women earned an average of 48d. annually compared to men's 324d., a gender pay gap of 85.2 per cent in annual earnings. At Wollaton in 1565 the gender pay gap in annual earnings was 61.8 per cent compared to 36.5 per cent in day wages, at Gawthorpe 53.2 per cent compared to 11.5 per cent. However at Ashton, where male average annual earnings were low due to the number of men who worked only a few days a year, the gender pay gaps in day wages and annual earnings were similar at 50.6 per cent and 55.5 per cent respectively.

Equal pay for women and men undertaking certain tasks led to overlapping modal day wages for men and women on five of the estates analysed. However, men's average (mean) day

⁶² John Cockshut at Gawthorpe in Lancashire also worked over 200 days in 1605 but earned only £1 16s. 7d. due to the low wages in that region.

wages were always higher than women's even on estates where some equal pay existed, because men undertook more highly paid tasks, particularly mowing. Comparisons with existing wage series show that the methodologies used affect the gender pay gap in daily wages observed. However, the gender pay gap for daily wages is not the whole story. The lack of year-round casual labour available for women had a significant impact on women's annual earnings, and while the number of days worked by men increased over time, increasing their annual earnings, the quantity of casual agricultural labour undertaken by women declined, leading to extreme gender pay gaps in annual earnings on estates such as South Ormsby in 1653/4.

VI

This article has analysed 14 year-long samples of rural wage accounts dating from the 1480s to 1670s to explore the gendered nature of agricultural day labour. The findings have implications for two important issues: the nature and causes of the gender pay gap for women's day labour in agriculture and changes over time in women's employment.

Women and men working together in tasks such as weeding, haymaking, and reaping corn often (but not always) received equal wages. While on some estates such as Ashton, the most able women received the same wage as less able men, as argued by Bardsley,⁶³ elsewhere such as Wollaton and Gawthorpe, the majority of men and women received the same wage for the same task. At Hunstanton able-bodied men sometimes received the same wages as women when they undertook tasks such as haymaking and weeding and at other times earned more by mowing. Nonetheless, on every estate men's average (mean) daily pay was higher than women's average daily wage. This was because men more often received higher rates of pay than women, and the best paid task, mowing, was only undertaken by men. This finding accords with studies of early modern pay in other economic sectors, where equal pay existed alongside better-paid tasks undertaken exclusively by men.⁶⁴

Daily wages are only one dimension of earnings. It is annual earnings that hold greater significance for standards of living. Rather than estimating annual earnings by multiplying daily wages, we observed actual working patterns in the accounts. This shows that women's work was highly seasonal, with 72.7 per cent of days worked in July to September and only 5.5 per cent in January to March. Men's work was much less seasonal. This is reflected in the number of days worked per year. Men worked more days per year on average and this difference became more marked over time. By the seventeenth century a few men worked as full-time labourers for particular employers, being paid for over 200 days a year. Women did not do so, very rarely working more than 100 days. Most agricultural day labourers worked many fewer days for wages than this.

Of course, labourers could have worked for more than one employer. However, the seasonality of women's work makes this unlikely for many female workers. If a woman was employed at peak times on one estate, she would have been very unlikely to find paid work on another farm or estate at other times, because all the estates followed the same pattern of

⁶³ Bardsley, 'Women's work reconsidered', pp. 5, 17, 29.

⁶⁴ For example, see Van Nederveen Meerkerk, 'Market wage or discrimination?', p. 180; Gary, 'Constructing equality?', p. 18.

seasonal employment. Women certainly found other activities to generate income: for instance, working on their family farms, spinning, and engaging in commerce.⁶⁵ But they did not find year-round employment as agricultural labourers.

These findings are reflected in the gender pay gap. The gender pay gap in daily wages found in the wage accounts studied was 38.5 per cent, well below the 50 per cent pay gap for the same period implied by the comparison between the wage series compiled by Humphries and Weisdorf for women and Clark for male agricultural labourers, and below the 54.5–56.6 per cent observed by Burnette for agricultural labourers in 1740–1850.⁶⁶ However, the gender pay gap for actual annual earnings was higher, ranging between 53.2 and 85.2 per cent on selected estates between 1482 and 1654.

Burnette argued the gender pay gap in agricultural work was due to women working shorter hours and women's lesser physical strength.⁶⁷ Equal daily pay for particular tasks suggests different working hours for women and men was not a standard practice in early modern England. Mowing, the highest paid activity, and also the most strenuous, was reserved to men, but the gendering of other tasks was less clearcut. The incidence of equal pay indicates that for many common tasks differences in strength were not a factor. Studies of the modern gender pay gap find that occupational segregation and women's higher participation in part-time work are important factors leading to lower hourly pay. A significant proportion of the pay gap in these studies remains 'unexplained', however, possibly caused by discrimination against women.⁶⁸ This article's analysis of equal and unequal pay in early modern England suggests that parallel factors were present before industrialization. The gender division of labour in agricultural tasks (occupational segregation) excluded women from tasks rewarded with higher daily pay and from the majority of work carried out in the winter, consigning them to lower average pay and part-time paid work. Yet the equal pay recorded in many wage accounts reminds us that for employers seeking to engage workers to carry out time-sensitive tasks, particularly during the harvest season, female workers were just as valuable as men for most types of work.

The analysis also indicates significant changes in the gender of the agricultural day labour force over time. In the accounts studied between 1482 and 1600 women undertook 39.2 per cent of workdays recorded, while in those from 1605 to 1674 they did only 16.5 per cent. Burnette's findings show that this proportion declined further to 13.9 per cent by 1740–1850.⁶⁹ The significant decline in women's involvement between the sixteenth and seventeenth centuries correlates with the emergence of agricultural day labour as a full-time occupation for men. While men worked more in agriculture, women did less of this type of work. This trend was just as important to women's earning potential as gendered wage rates. As increased landlessness made the rural population more dependent on wages, women's opportunities for agricultural work declined.

⁶⁵ Whittle *et al.*, *Experience of work*, ch. 2.

⁶⁶ Burnette, 'Female day-labourers', p. 674. She provides separate figures for winter, summer and harvest work. The wage gaps were 56.6%, 54.5% and 55.6% respectively.

⁶⁷ Burnette, 'An investigation', pp. 268–9, 274–7.

⁶⁸ S. Connolly and M. Gregory, 'Women and work

since 1970', in N. Crafts, I. Gazeley and A. Newell (eds), *Work and pay in twentieth century Britain* (2007), p. 166; S. Harkness, 'The gender earnings gap: Evidence from the UK', *Fiscal Stud.* 17 (1996), pp. 26–35; Office for National Statistics, 'Understanding the gender pay gap in the UK: 2018', section 6, fig. 13.

⁶⁹ Burnette, 'Female day-labourers', p. 678.