

Sedge (*Cladium mariscus*) in Cambridgeshire: Its Use and Production since the Seventeenth Century*

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AREAS of peat fen in Britain have long been recognized as productive, if difficult, terrain. They provided peat, reed, rush, osiers, sedge, fish, fowl, and rich grazing land in their undrained state, and fertile arable once drained. The Cambridgeshire Fenland is one of the largest and historically most important of these areas. General and specific works on the Fenland make frequent mention of the natural products.¹ These were so important to the local economy that their imminent loss was cited in argument against the General Draining of the Fens during the seventeenth century.² Some fen products, such as peat³ and coprolites,⁴ have received considerable attention but, in contrast, little evidence has been previously collated to clarify the part sedge production played in the agrarian economy of the Fenland. It was certainly significant; at least sixteen Fenland parishes contain areas that can be identified as former sedge fens by name, and a further five are known to have produced sedge (Fig 1). With the system of intercommoning that was

prevalent in the Fens,⁵ it is likely that most settlements had access to an area of sedge fen. Today, sedge is harvested in Cambridgeshire only from the National Trust nature reserve at Wicken Fen.

The aim of this paper is to provide a general view of sedge as a crop and a commodity in the Cambridgeshire Fens. It appears that sedge has not been widely used elsewhere in Britain, except in the Norfolk Broads where it is still harvested from a few places, again mainly nature reserves.⁶ Most of the information presented relates to the period since the General Draining, but earlier material has been cited where available.

I

At Wicken Fen, and in the Broads, 'sedge' is the saw sedge, *Cladium mariscus*. This is the definition followed by many authors,⁷ although some do not define sedge at all.⁸ Marshall, however, conjectured that the term sedge was probably used generically and covered all the species of sedge (*Carex* spp) found in the Fens as well as the 'special sedge' of Burwell Fen (*Cladium mariscus*).⁹ His argument was based on the term 'lesch', which is normally translated as 'sedge', and has affinities with the French word 'laiche'

* This study was carried out while the author held the Imperial Group Research Studentship at Wolfson College, Cambridge. I should like to thank Professor Sir James Beament for research facilities in the University of Cambridge Department of Applied Biology, Dr HJ Harvey for discussion and criticism, and Mrs G Crompton for the idea.

¹ Eg M Allbright, 'The entrepreneurs of fen draining in England under James I and Charles I: an illustration of the uses of influence', *Explor entrepreneurial Hist*, VIII, 1955, pp 50-65; H C Darby, *The Changing Fenland*, Cambridge, 1983; H Godwin, *Fenland: its ancient past and uncertain future*, Cambridge, 1978.

² J Thirsk, *English Peasant Farming*, 1957, p 30.

³ See H Godwin, *op cit*, pp 111-23; J R Ravensdale, *Liable to Floods*, Cambridge, 1974, pp 52-3.

⁴ R Grove, 'Coprolite mining in Cambridgeshire', *Ag Hist Rev*, XXIV, 1976, pp 36-43.

⁵ H C Darby, *op cit*, pp 11-13.

⁶ B Moss, 'The Norfolk Broadland: experiments in the restoration of a complex wetland', *Biol Rev*, V, 1983, p 537.

⁷ Eg H Godwin, *op cit*, p 146; H L Edlin, *British Plants and their Uses*, 1951, p 33; T M Hughes and M C Hughes, *Cambridgeshire*, Cambridge, 1909, p 75; A H Evans, *A Flora of Cambridgeshire*, 1939, p 20.

⁸ Eg M Allbright, *op cit*; J R Ravensdale, *op cit*.

⁹ W Marshall, 'On some ancient court rolls of the manor of Littleport in the Isle of Ely', *Cambs antiq Soc Comm*, IV, 1877-8, pp 106-7.

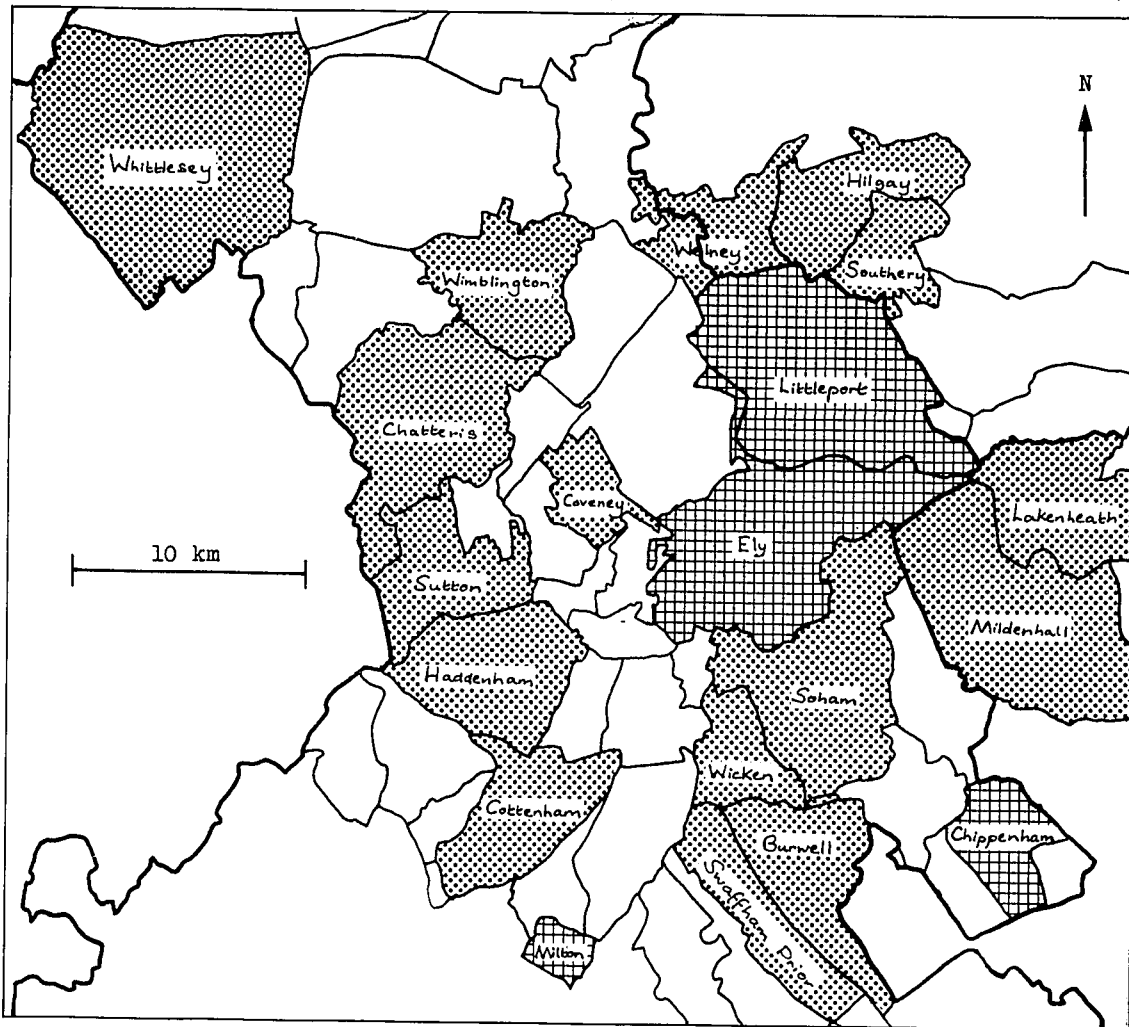


FIGURE 1

Parishes in Cambridgeshire known to have produced sedge in the past, (a) from evidence of the existence of areas known as 'Sedge Fen', 'Lesh Fen' or 'Setchel Fen' (stippled areas), or (b) from other evidence (hatched areas).

Sources: R G Baker, *Map of the County of Cambridge and the Isle of Ely*, Bluntisham, 1821; J Blaeu, 'Regiones inundatae in finibus comitatus Norfolciae, Suffolciae, Cantabrigiae, Huntingtoniae, Northamptoniae, et Lincolniae', 1648; Charity Commissioners, *31st Report*, Vol 1, 1837-38, p 326 (322); F W Maitland and W Baildon (eds), *The Court Baron*, 1891, p 129; Ordnance Survey, *Provisional Edition*, 1:25,000, Southampton, 1955, sheets TL56-57; Ordnance Survey, 1:50,000, 1st Series, Southampton, 1974, sheet 143; J R Ravensdale, *Liable to Floods*, Cambridge, 1974, p 55; P H Reaney, *The Place-names of Cambridgeshire and the Isle of Ely*, Cambridge, 1943, 137, 150, 203, 231, 261, 266; S Wells, *History of the Drainage of the Great Level of the Fens*, Vol 2, 1828, pp 141-235, 253-331; E Whetham, 'Turf digging in Swaffham Prior in the eighteenth century', *Cambs local Hist Council Bull*, XXVI, 1971, pp 8-13.

referring to the plants of the genus *Carex*. Darby¹⁰ has followed Marshall's line of reasoning, but there is little evidence to suggest that 'sedge' refers to anything other than *Cladium*.

The ecology of *Cladium mariscus* has been described in detail by Conway.¹¹ It is a

perennial and evergreen plant of shallow-water zones of lakes and ponds, and the fens that may adjoin these or develop from them. *Cladium* is not, therefore, a well distributed plant in the UK, and is most frequently found in East Anglia.¹² This corresponds well to its prehistoric distribution, although it has clearly passed through phases of

¹⁰ *Op cit*, p 24.

¹¹ V M Conway, '*Cladium mariscus* (L) R Br', *J Ecol*, XXX, 1942, pp 211-16.

¹² F H Perring and S M Walters, *Atlas of the British Flora*, 2nd edition, Wakefield, 1976, p 353.

abundance in other regions, notably the Somerset Levels.¹³ There seems to be no evidence, however, that the plant has been cropped in Somerset, at least in the recent past.¹⁴

The leaves are the economically important part of the plant. They grow out from a short stock, are 1.0–1.5 cm wide and up to 300 cm long, and are armed with sharp saw-like teeth (hence the common name). The plant spreads locally by short horizontal rhizomes and, under favourable conditions, grows in dense stands. The production of seed appears to depend on a high summer water table, and the floating seeds are spread by water. Establishment from seed is probably only successful on bare soil or open water as it is severely inhibited by the presence of a canopy of vegetation.¹⁵ *Cladium*-swamp is a well-defined phase of hydrosereal plant succession which tends to give way to either woodland or acid bog.¹⁶ Regular mowing of the sedge, however, prevents succession to woodland by curbing the establishment and growth of woody species.

Very few species co-exist with *Cladium* under conditions favourable for that species. Lowering of the water table, perhaps through improved drainage, reduces the vigour of *Cladium* and allows other species to become more prominent. These two types of sedge have been described respectively as 'pure sedge' and 'mixed sedge',¹⁷ botanical terms that are difficult to equate exactly with the fenmen's terminology, but may correspond roughly to 'sedge' and 'sedge-litter' (the latter being a mixture of sedge and grass). The mixed sedge harvested today at

Wicken Fen may well have been regarded as a poor quality crop in the past when pure sedge may have been more prevalent.

Adequate production of *Cladium* depends on the water table, a range between +40 cm and -15 cm in relation to the soil surface being most favourable.¹⁸ The crop is, therefore, susceptible to damage or destruction through drainage. Widespread draining of the Fenland, from the seventeenth century onwards, severely affected the status of sedge. It follows also that lowering of the soil surface through shrinkage or peat digging should favour the species. Indeed, it has been noted that land dug for peat often spontaneously produced a profitable crop of sedge soon afterwards.¹⁹ Descriptions of plant succession in abandoned turf pits suggest that this was not an immediate or even inevitable development,²⁰ depending surely on the local availability of seed or vegetative parts of *Cladium*.

II

The various published works listing the uses of British plants give thatching²¹ and kindling²² as the uses of *Cladium mariscus*. Today, the sedge harvested from Wicken Fen is exclusively a thatching material, most frequently ridging roofs that are otherwise covered with reed. As a ridging material, sedge is much more flexible than reed, and more durable. It is, however, still occasionally used to thatch a complete roof.²³

Thatching is undoubtedly a historical use of sedge, and Dimbleby²⁴ has speculated that it could have been used for this purpose in the prehistoric period. Thatching with sedge in

¹³ H Godwin, *The History of the British Flora*, Cambridge, 1975, p 392.

¹⁴ M Williams, *The Draining of the Somerset Levels*, Cambridge, 1970; B Storer, *Sedgemoor; its History and Natural History*, Newton Abbot, 1972.

¹⁵ T A Rowell, 'History and Management of Wicken Fen', unpublished PhD thesis, University of Cambridge, 1983, pp 183–97.

¹⁶ D Walker, 'Direction and rate in some British post-glacial hydroseres', D Walker and R G West (eds), *Studies in the Vegetational History of the British Isles*, Cambridge, 1970, pp 117–39.

¹⁷ H Godwin and A G Tansley, 'The Vegetation of Wicken Fen', J S Gardiner (ed), *The Natural History of Wicken Fen, Part V*, Cambridge, 1929, pp 405–7, 424–6.

¹⁸ V M Conway, *op cit*, p 212.

¹⁹ W Gooch, *A General View of the Agriculture of the County of Cambridgeshire*, 1813, p 176.

²⁰ R Parkinson, *A General View of the Agriculture of the County of Huntingdon*, 1811, p 320; L Jenyns, 'On the turf of the Cambridgeshire Fens', *Trans Sect Br Assoc*, 1845, pp 75–6.

²¹ H L Edlin, *op cit*, p 33; FN Howes, *A Dictionary of Useful and Everyday Plants and their Common Names*, Cambridge, 1974, p 233; G B Usher, *A Dictionary of Plants Used by Man*, 1974, p 157.

²² H L Edlin, *loc cit*.

²³ For an illustration of modern sedge thatch see H Godwin, *Fenland*, p 147.

²⁴ G W Dimbleby, *Plants and Archaeology*, St Albans, 1978, p 43.

East Anglia is well documented. For example, sedge was used to cover a temporary bell frame at the church of St Mary the Great in Cambridge in the early sixteenth century, and to thatch the incomplete tower of the church after the bells were re-hung in 1515.²⁵ Sedge was subsidiary to reed and gladden (reed-mace) for thatching buildings in eighteenth-century Norfolk, and was used mainly for topping hay and corn ricks.²⁶ Thatching sedge was being produced in Cambridgeshire at about the same time,²⁷ being cut expressly for this purpose at Chippenham²⁸ and, later, at Wicken.²⁹

An additional use of sedge in Cambridgeshire was as a firelighting material, or as fuel. Gooch,³⁰ when recording the uses of sedge in the nineteenth century, noted that the price of thatching sedge was approximately 17 per cent higher than that of burning sedge, though nothing is known of the differences in crop quality that this seems to imply. The use of sedge for burning dates from at least the beginning of the seventeenth century.³¹ A mid-eighteenth-century guide to the city of Cambridge listed the 'Necessaries of life' with which the town was well supplied, and included 'Sedge, with which the Bakers heat their ovens'.³² Sedge was considered to be sometimes the principal fuel used in the Cambridge colleges,³³ and examination of college accounts confirms that this was, indeed, the case. Sedge was the only fuel purchased for

the bakehouse of both St John's³⁴ and Corpus Christi³⁵ Colleges throughout the seventeenth century. In contrast, in the kitchen at St John's, sedge was subsidiary to sea-coal and charcoal.³⁶ According to Reeve, every college had a 'sedge loft', and servants wore special gloves to protect their hands from the sharp edges of the sedge.³⁷ Christ's College had a 'sedge house',³⁸ and a leather sedge glove survives in the Folk Museum at Cambridge. Sedge from Burwell Fen was 'sent by water to the upper country for the purpose of drying malt', while some of that cut at Chippenham was used for fuel.³⁹ There are numerous records of the use of sedge for firelighting in Cambridge during the nineteenth century,⁴⁰ but the practice was in decline by the 1870s⁴¹ with one observer blaming the introduction of resined firelighters.⁴²

If thatching and burning sedge represented two different qualities of the commodity, as suggested by the price differential noted by Gooch, then perhaps sedge litter represented a third and poorer one. Sedge litter was a common material in eighteenth-century Norfolk,⁴³ and in eighteenth- and nineteenth-century Cambridgeshire,⁴⁴ being used for agricultural purposes in barns and farmyards. The use of sedge as a floor covering for domestic buildings is suggested by the payment, by Christ's College, Cambridge, of 2d for 'sedge when the

²⁵ J E Foster (ed), *Churchwarden's Accounts of St Mary the Great, Cambridge from 1504 to 1635*, Cambridge, 1905, pp 25-6; W D Bushell, *The Church of St Mary the Great*, Cambridge, 1948, pp 33, 44.

²⁶ W Marshall, *The Rural Economy of Norfolk*, 1795, pp 88 ff, 319.

²⁷ W Gooch, *op cit*, pp 177-8.

²⁸ C Vancouver, *General View of the Agriculture of the County of Cambridge*, 1794, p 31.

²⁹ G T Porritt, 'A fortnight in the Fens', *Naturalist*, ns IV, 1879, p 119; J T Carrington, 'Localities for beginners. No 8 — Wicken', *Entomologist*, XLIII, 1880, p 171; W G Sheldon, 'Wicken Fen: its past, its present condition, and its future', *Entomologist*, XLIV, 1916, p 3.

³⁰ *Loc cit*.

³¹ W Camden, *Britannia*, 1610, p 491.

³² *Cambridge Depicta*, Cambridge, 1763, pp 15-16.

³³ J E T Rogers, *A History of Agriculture and Prices in England*, IV, Oxford, 1882, p 373.

³⁴ St John's College, Bakehouse Bursar's Account, 1608-1860 (BB2.1-3). I am grateful to the Masters and Scholars of all three Cambridge colleges mentioned here, St John's, Corpus Christi, and Christ's, for permitting access to their records.

³⁵ Corpus Christi College, Corpus Christi and Catherine Hall Baker's Account, 1638-85.

³⁶ St John's College, Junior Bursar's Account, 1719-95 (SB11.1).

³⁷ F A Reeve, *Cambridge*, 1976, p 73.

³⁸ Christ's College, Accounts and Bills, 1729.

³⁹ C Vancouver, *op cit*, pp 31, 36.

⁴⁰ Eg C C Babington, *Flora of Cambridgeshire*, 1860, p xix; J Venn, *Early Collegiate Days*, Cambridge, 1913, p 279; A Stewart, 'Fenland lightermen', *Fen Notes Queries*, VII, 1907-9, p 102.

⁴¹ W Marshall, 'Botanical Sketch', I: Botany of the Fenland; S H Miller and S B J Skertchley (eds), *The Fenland, Past and Present*, Wisbech, 1878, p 306.

⁴² J Venn, *loc cit*.

⁴³ W Marshall, *Norfolk*, p 319.

⁴⁴ T M Hughes and M C Hughes, *op cit*, pp 99-100; C Vancouver, *op cit*, pp 31, 36, 41, 139; S H Miller, *The Handbook to the Fenland*, 1889, p xxii.

Christenmass lordes came at Candlemas to the colledge with shewes'.⁴⁵ Sedge has also been used out of doors as a surfacing material. Soham causeway, for instance, was strewn with sedge in 1589 at a total cost of 4 shillings.⁴⁶ In 1811 Cottenham parish bought half a hundred of sedge 'for North Fen Bridge'⁴⁷ — possibly, strewing is implied here. Later, around 1900, sedge was strewn on the gallops at Newmarket during frosty weather to provide improved purchase for race-horses.⁴⁸

A number of more minor uses for sedge have been recorded. During the repair of the roof of the tower at the church of St Mary the Great, Cambridge, in 1593 sedge was bought to 'laye upon the Leads of the Church to save the Leadds when the slate of the Steple was taken downe'.⁴⁹ More sedge was purchased to cover, and presumably to protect, the new work on the tower. Sedge was used in the making of hollow drains during the early nineteenth century.⁵⁰ At Madingley and Horningsey drainage channels were filled with bushes and sedge before the topsoil was replaced. This mixture of materials replaced stone, branches, bracken, furze, twisted straw, or bean-straw which were used in other parts of the country.⁵¹ According to Sheldon,⁵² sedge from Wicken Fen has been used as forage, and its use as 'chaff for horse fodder' — presumably to bulk out feed — has also been referred to.⁵³ Stacks of 'fodder' were generally present on the Fen during the 1880s, but this material was differentiated from sedge, and may have referred to

grass.⁵⁴ The tough, saw-edge leaves of *Cladium* probably do not make it an ideal animal feed-stuff, and Conway⁵⁵ indicated that it was 'never grazed'. However, at Chippenham Fen in Cambridgeshire, Highland cattle readily eat the growing shoots, and cut sedge has been used as fodder in Sweden during periods of hay shortage.⁵⁶ In the 1870s the chief consumers of sedge appear to have been brickmakers.⁵⁷ Some of the sedge cut at Wicken was used for covering bricks while drying, but the demand for it for that purpose was declining at the beginning of the twentieth century,⁵⁸ a period which coincides with the closure of the nearest brickyard, sited on the edge of the Fen itself.⁵⁹

III

Sedge was measured and sold by the 'hundred', a unit that consisted of 120 bunches.⁶⁰ Today, commonly used units are the score (ie 20 bunches) and, beyond that, 600 bunches which are sometimes referred to as a 'load'.⁶¹ The size of the bunch in the past remains unknown, but the modern 'standard bunch' measures 71 cm in circumference at the band (which will normally be at least 30 cm from the butt) when the sedge is first cut; the measurement decreases as the material dries so, when sold, the bunch may measure less than this. Modern thatchers prefer to use partially green sedge of about 105 cm in length;⁶² well-grown material can be much longer than this. Sedge land

⁴⁵ J Peile, *Christ's College*, 1900, pp 54–5; I am grateful to Dr D E Coombe for bringing this reference, and the newly discovered series of porters' bills at Christ's (Note 33), to my attention.

⁴⁶ University Library, Cambridge, EDC 3/1/1 (April, 1589); I am grateful to Mrs D M Owen for bringing this reference to my attention.

⁴⁷ *Westrope's Year Book*, Cottenham, 1912, p 13.

⁴⁸ H Godwin, *Fenland*, p 148.

⁴⁹ J E Foster, *op cit*, pp 246, 252, 261.

⁵⁰ W Gooch, *op cit*, p 242.

⁵¹ W Gooch, *loc cit*; G E Mingay, *The Agricultural Revolution: changes in agriculture, 1650–1880*, 1977, p 48.

⁵² *Loc cit*.

⁵³ A H Evans, *loc cit*.

⁵⁴ W Farren, 'Memories of Wicken'; J S Gardiner (ed), *The Natural History of Wicken Fen*, Cambridge, 1926, p 181.

⁵⁵ *Op cit*, pp 213–14.

⁵⁶ C Tyler, 'Calcareous fens in South Sweden. Previous use, effects of management and management recommendations', *Biol Conserv*, XXX, 1984, p 78.

⁵⁷ W Marshall, 'Botanical sketch', *loc cit*.

⁵⁸ R Ransom, 'Wicken Fen (a journey to)', *Cambs Graphic*, 12.v.1900, pp 4–5.

⁵⁹ T A Rowell, 'The origins of the Wicken Fen brickpits', *Nature Cambs*, XXV, 1982, pp 21–2.

⁶⁰ St John's College, Junior Bursar's Account, 1719–95 (SB11.1), entry for 1735.

⁶¹ Norfolk Reed Growers' Association, 'Standards and specifications for reed and sedge', *The Reed*, Norwich, 1972, p 68.

⁶² F W Cooper, 'The thatcher and the thatched roof', *The Reed* (Norfolk Reed Growers' Association), Norwich, 1972, p 64.

generally produced something between 5 and 15 hundred sedge (600–1800 bunches) per acre.⁶³ Production at Whittlesey Mere, before draining, was around 1000 bunches per acre.⁶⁴

In the nineteenth century, sedge was cut at Wicken in the early morning; as with hay, dew on the vegetation aided the scythe.⁶⁵ The sedge-cutters had to protect themselves against the viciously sharp edges of the sedge, so they bound their hands and arms with pieces of stocking.⁶⁶ The bindings can be seen clearly in R W Macbeth's painting (dated 1878) of the Wicken sedge harvest. There can be little doubt that his fascinating illustration is reasonably accurate; Macbeth was regarded at the time as painting 'the picturesque, but sad and unhealthy, life of rural England, with something apparently of a philanthropic intention',⁶⁷ and a separate study of a sedge-cutter is 'in fact exactly as he is to be seen at his work'.⁶⁸ Once cut, the sedge was tied into bunches or sheaves,⁶⁹ stacked, and removed from the site. Macbeth's painting shows wheelbarrows being used, of the type that were also used to transport peat. Bunches were also carried away on two poles between two men,⁷⁰ a method that was still being used at Wicken in the 1930s.⁷¹ It was thought noteworthy that no horses were used on the Fen in the 1880s,⁷² but a pony and sledge were used to remove sedge during the 1920s and 30s.⁷³

As a natural crop, sedge traditionally receives no management other than harvesting by cutting though, today, some control may be exercised over the water table. Being

an evergreen plant, a utilizable crop of sedge can be taken at any time of the year,⁷⁴ if ground conditions allow. Aspects of cutting, such as timing and frequency, are known to have significant effects on the vigour and abundance of other species of plants, and there is considerable evidence that this also applies to *Cladium*. At Wicken Sedge Fen, during the 1920s, sedge was cut during the winter months between April and October, on a four-year cycle.⁷⁵ This was believed to be a traditional practice, although it is difficult to understand why as the adjacent Poores' Fen had been cut by the villagers within very recent memory, and was governed by rules restricting harvesting to the third Monday in July.⁷⁶ Interpretation of internal evidence in late nineteenth-century descriptions of the Sedge Fen strongly suggests that the sedge harvest occurred, in part at least, during the period May–August.⁷⁷ During the 1650s and 60s, April sittings of the manor court instructed that commoners should have cleared their parts in the Sedge Fen by Midsummer Day, laying out of the Fen being ordered for 24 April in 1658.⁷⁸ Cutting was similarly controlled on freehold land; both landlord and tenant of one area of Wicken Sedge Fen were constrained by agreement to cut only between March and August.⁷⁹ Elsewhere in the Fenland, and at an earlier time, similar restrictions applied to the timing of sedge harvesting. At Littleport in the early fourteenth century, it was an offence to not have completed the sedge harvest by Midsummer, but some classes may have been restricted to cutting after that date.⁸⁰ In the same period, sedge was protected from harvesting during the winter period, from Michaelmas to Hock Day, at both Little-

⁶³ W Gooch, *op cit*, p 177.

⁶⁴ W Wells, 'The drainage of Whittlesea Mere', *J Royal agric Soc*, XXXI, 1860, pp 149.

⁶⁵ Anon, 'In the Fens', *Engl Illustr Mag*, II, 1883, p 72; C Lucas, *Fensmen's World*, 1930, p 52.

⁶⁶ Anon, *loc cit*.

⁶⁷ Anon, 'The Royal Academy', *Mag Art*, 1878, pp 105–6.

⁶⁸ Anon, 'In the Fens', pp 72, 75.

⁶⁹ C C Babington, *loc cit*; S H Miller, *loc cit*; W Farren, *loc cit*; W Wells, *loc cit*.

⁷⁰ S H Miller, *loc cit*.

⁷¹ J Wentworth-Day, *A History of the Fens*, Wakefield, 1973, pp 48–9.

⁷² S H Miller, *loc cit*.

⁷³ D G Reid, 'Wicken Fen: notes and memories', *Camb public Libr Rec Booklist*, III, 1931, p 94.

⁷⁴ D S A McDougall, 'Marsh management for reed and sedge production', *The Reed* (Norfolk Reed Growers' Association), Norwich, 1972, p 54.

⁷⁵ H Godwin and A G Tansley, *op cit*, p 442.

⁷⁶ T A Rowell, 'Wicken Poores' Fen; origins and land use history', *Camb local Hist Comm Bull*, XXXVII, 1982, pp 7–10.

⁷⁷ T A Rowell, 'History and Management', pp 102–24.

⁷⁸ University Library, Cambridge, Doc 3974.

⁷⁹ Cambs CRO, 101/T/919.

⁸⁰ F W Maitland and W P Baildon (eds), *The Court Baron*, 1891, p 129.

port⁸¹ and nearby Downham.⁸² Neilson, in her survey of *Customary Rents*, considered that sedge was cut at some time during the summer or early autumn,⁸³ though we are given no clue as to where this information originates.

While presentments for transgressing the sedge by-laws indicate that some sedge was probably cut at all times of the year, the by-laws themselves appear to confirm a well-established system of management involving cutting in spring and early summer. This timing fits well into a calendar of fen harvests, with reed cut between 1 December and mid-March⁸⁴ and fodder cut after Midsummer's Day.⁸⁵ Furthermore, observation and biological information suggest that cutting sedge late in the season, or during the winter, would risk waterlogging, frost damage, and consequent death of shoots.⁸⁶ Whatever the actual reasons for restricting the period of the sedge harvest, it appears that the 'tradition' of winter cutting at Wicken has no clear historical precedent, apparently being linked to changes in demand for the crop, and to a change in the basic land-use of the site from sedge production to wildlife conservation at the end of the nineteenth century. The view that sedge cutting was normally a summer activity, at least in recent times, is supported by information from Norfolk.⁸⁷

Restrictions on the season for sedge harvesting may explain, in part at least, discernable fluctuations in the price of sedge at Cambridge (Table 1). Sedge was generally more expensive in the first and second quarters of the agricultural year, from October to March. There is occasional evidence that prices may have begun to decline as early as March in some years.

Sedge appears to have been cheapest during the season of harvest, and more expensive during the winter, possibly due to scarcity. However, seasonal demand for fuel, and problems of transportation and storage may also be implicated. Occasional justifications for the purchase of high-priced sedge have been noted in Cambridge account books, indicating that it had been bought 'out of season [*tempus intempestivum*]', or was 'winter sedge'.⁸⁸

At Wicken Sedge Fen, sedge has been cut on a cycle of three to five years since at least the late eighteenth century.⁸⁹ Experimental cutting has indicated that cutting sedge more frequently than one year in four can reduce yield, and allow greater admixture with other species so that, eventually, purple moor grass (*Molinia caerulea*) becomes dominant.⁹⁰ The localized nature of the experiment means, however, that generalizations cannot be drawn from the results. The frequency of cutting to which the sedge succumbs, and the speed of its decline, will be related to the vigour of the plant, and seems to depend largely on the water table. Similarly, dominance by *Molinia* is not an inevitable consequence of the demise of sedge, and Darby's extrapolation of the Wicken experiment to Fenland vegetation in general⁹¹ cannot be justified.

Once sedge was allotted in the common fen at Wicken, it had to be cleared or risk presentment.⁹² Similarly, at Downham, it was an offence to leave the sedge unbound on the fen after cutting.⁹³ Either leaving the sedge uncut or lying on the Fen would have ecological consequences that could reduce the value of the crop. The former would allow, in many instances, the establishment of shrub species which would reduce yield and hamper harvesting, and the latter would

⁸¹ *Ibid.*, p 142.

⁸² M C Coleman, *Downham-in-the-Isle*, Woodbridge, 1984, p 21.

⁸³ N Neilson, 'Customary rents', *Oxford Studies in Social and Legal History*, Vol II, Pt 4 (ed P Vinogradoff), Oxford, 1910, p 57.

⁸⁴ L M Warren, 'The drainage of the Fens and its effect upon the parishes of the South Division of the Bedford Level, 1600-1850', unpublished MA thesis, University of London, 1927, p 34.

⁸⁵ M C Coleman, *op cit.*, p 34.

⁸⁶ T A Rowell, 'History and Management', pp 117-20.

⁸⁷ B Moss, *loc cit.*

⁸⁸ J E T Rogers, *History of Agriculture and Prices in England*, Vol 11, Oxford, 1887, pp 360-75.

⁸⁹ *Ibid.*, pp 122-4.

⁹⁰ H Godwin, 'Studies in the ecology of Wicken fen. IV. Crop-taking experiments', *J Ecol.* XXIX, 1941, pp 83-106.

⁹¹ H C Darby, *op cit.*, p 24.

⁹² University Library, Cambridge, Doc 3974.

⁹³ M C Coleman, *op cit.*, p 21.

TABLE I
Quarterly variation in the price of sedge (shillings per hundred) at Cambridge

Quarter		1594	1605	1606	1607	1611	1614	1621	1628	1629	%
Oct-Dec	Max	9.5	—	5.0	9.0	8.0	8.0	6.7	5.0	8.0	104
	Min	8.5	—	4.0	5.0	5.0	5.0	5.0	5.0	8.0	
Jan-Mar	Max	9.0	6.7	8.5	11.0 (Jan)	7.0	10.0	12.0	6.7	9.0	118
	Min	7.0	4.0	6.7	4.0 (Mar)	5.0	5.0	5.0	5.9	9.0	
Apr-Jun	Max	6.1	4.0	6.4	—	5.0	5.0	5.0	6.0	5.5	89
	Min	5.0	4.0	5.0	—	5.0	5.0	5.0	5.0	5.5	
Jul-Sep	Max	5.0	4.5	5.0	5.0	5.0	5.0	5.0	7.5	—	88
	Min	5.0	4.0	5.0	4.0	5.0	5.0	5.0	5.7	—	

Ranges have been calculated from published quantities and prices [J E T Rogers, *A History of Agriculture and Prices in England*, Vol VI, Oxford, 1887, pp 360–75]. The final column indicates the mean quarterly price as a percentage of the mean annual price.

be likely to reduce the extent or density of the future crop.

The cutting of sedge was often one of the works that peasants were obliged to carry out for their lord.⁹⁴ These works were, on occasion, commuted for cash payments recorded as *seggesilver*. In common with many other natural fen products, sedge was tithe-free in both Whittlesey⁹⁵ and Wicken.⁹⁶

IV

Once cut and bundled, any sedge not intended for local use was transported from the Fenland villages to Ely,⁹⁷ Cambridge,⁹⁸ and neighbouring villages⁹⁹ by barge. A toll of 1d per hundred of sedge was collected on the River Cam between 1702 and 1850.¹⁰⁰

The centre for the Cambridge sedge trade was probably the Quay opposite Magdalene College.¹⁰¹ Close by, at the end of Thompsons Lane were the Sedge Yard and Sedge Hall.¹⁰² It was probably at the Quay that local and University entomologists searched the sedge boats for unusual fenland beetles. Charles Babington, later Professor of Botany, took several specimens in this way in Cambridge in 1831.¹⁰³ In earlier times, sedge was stacked in the streets of Cambridge where, in 1410, the 'seggerekes' were recorded as causing a nuisance.¹⁰⁴

Of the men who cut, transported, or sold sedge, little is known. Trade directories, available for Cambridgeshire from the late eighteenth century onwards, do not list any dealers in sedge until 1864.¹⁰⁵ In that year, Robert Aspland of Wicken began to

⁹⁴ H C Darby, *loc cit*.

⁹⁵ Anon, 'Curious customs in collecting tithes in the Fens', *Fenland Notes*, 1, 1889–91, pp 57–9.

⁹⁶ PRO, IR18/13665.

⁹⁷ M Fisher, 'Captures near Ely, Cambs', *Entomologist*, 1, 1842, pp 412–13.

⁹⁸ J Venn, *loc cit*; W Farren, *op cit*, p 179.

⁹⁹ C C Babington, *loc cit*.

¹⁰⁰ G J Greenhough, 'The present use of the River Cam in relation to its historical perspective', unpublished MLitt thesis, University of Cambridge, 1980, p 78.

¹⁰¹ Illustrations showing the location of the site can be found in R Farren, *The Granta and the Cam, from Byron's Pool to Ely*, Cambridge, 1880, Plate 18; Cambridgeshire Collection (Cambridge Public Library), B.Qua.J73 885, B.Qua.K10 5362.

¹⁰² *Camb Chron J*, 31.vii.1818, p 3; T Baker, *History of the College of St John the Evangelist*, Cambridge, 1869, p 1086.

¹⁰³ Zoology Museum, Cambridge, Catalogue of Insects presented by C C Babington, 1876.

¹⁰⁴ C H Cooper, *Annals of Cambridge*, Vol I, Cambridge, 1842, p 152.

¹⁰⁵ *Post Office Directory*, 1864.

advertise his services as a sedge merchant, and continued to do so until 1916.¹⁰⁶ He owned more than 48 acres of Wicken Sedge Fen at one time or another, but sold most of his holdings to the National Trust in that year.¹⁰⁷ Aspland may have employed the two 'sedge labourers' who appear in the Wicken censuses of both 1871 and 1881. Only one other sedge merchant has appeared in the Cambridgeshire directories; Robert Casburn of Burwell had an entry in 1879.¹⁰⁸ He was a dealer in all fen merchandise, sedge, turf, litter and reed,¹⁰⁹ and also had an interest in the Sedge Fen at Wicken, owning 42 acres from 1843 until 1878.¹¹⁰

As the growth of sedge is dependent on a suitable water table, production must have been severely curtailed by the General Draining of the Cambridgeshire Fenland in the mid-seventeenth century. It has been suggested that sedge prices rose dramatically at Cambridge following the Draining, and that purchases then ceased.¹¹¹ Examination of College account books¹¹² indicates that neither of these suggestions holds true. Sedge continued to be purchased into the eighteenth century, and the failure of drainage works appears to have caused a spreading of sedge throughout the Fens.¹¹³ By the early nineteenth century, however, improved drainage appeared to be having an effect on the availability and value of sedge, which was compounded by a rise in the cost of straw.¹¹⁴ The successful drainage of large, sedge-producing areas around Whittlesey Mere and in Burwell Fen during the first half of the nineteenth century must have reduced

the supply severely. Furthermore, sedge may have been suffering competition in its role as tinder, from resined firelighters¹¹⁵ and from newspaper.¹¹⁶ Whereas whole gangs of barges had formerly delivered sedge to Cambridge, by 1860 only single boats were occasionally observed.¹¹⁷ Wicken Sedge Fen was then the major local source of the commodity, hence the interest of the sedge merchants Aspland and Casburn in the site.

The local industry in sedge, reed and litter was 'still going strong' between 1856 and 1875,¹¹⁸ but a declining demand for sedge was beginning to affect Wicken in the 1870s¹¹⁹ and 80s.¹²⁰ Even local demand, in the brick industry and for thatching, declined. In 1879, 'Nearly the whole of Wicken — houses, stables, sheds and outhouses of all descriptions' — was thatched with sedge¹²¹ but, by 1916, even this use was rapidly disappearing, the 'picturesque old houses of the district being rapidly done away with in favour of brick and slate houses of a particularly hideous design'.¹²²

The decline continued until, in 1932, sedge from Wicken Fen could no longer be sold for thatching at all.¹²³ Some cutting was maintained for nature conservation purposes and, eventually, the market revived. Much of the good sedge was lost, however, and continued to be lost, either because of bush invasion, a lowered water table, or inappropriate management. Today, a relatively small area of the old Wicken Sedge Fen is regularly cut for its traditional crop.

¹⁰⁶ Kelly's Directory, 1916.

¹⁰⁷ National Trust Archive, London, conveyances of R Aspland to the Trust, dated 8.v.1916 (3), 29.v.1916, 31.v.1916. I am grateful to the National Trust for access to these documents.

¹⁰⁸ Post Office Directory, 1879.

¹⁰⁹ C Lucas, *op cit*, p 126.

¹¹⁰ Cambs CRO, 101/T/981, 101/T/990.

¹¹¹ J E T Rogers, *A History of Agriculture and Prices in England*, Vol I, Oxford, 1887, p 392.

¹¹² St John's College, Junior Bursar's Account 1719-95 (SB11.1), Bakehouse Bursar's Account 1663-1735 (BB2.2).

¹¹³ A Young, 'New information on paring and burning', *Ann Agric*, XLIII, 1805, pp 148-9, 544.

¹¹⁴ Gooch, *op cit*, p 178.

¹¹⁵ J Venn, *loc cit*.

¹¹⁶ H Godwin, *op cit*, p 148.

¹¹⁷ C C Babington, *loc cit*.

¹¹⁸ C Lucas, *op cit*, p 21.

¹¹⁹ A H Evans, 'Wicken and Burwell Fens fifty years ago and now', *The Natural History of Wicken Fen* (ed J S Gardiner), Cambridge, 1925, p 90.

¹²⁰ W Farren, *op cit*, p 179.

¹²¹ G T Porrit, *loc cit*.

¹²² W G Sheldon, *loc cit*.

¹²³ J S Gardiner, 'Preface', *The Natural History of Wicken Fen*, p iv.