

Eighteenth-Century Changes in Hampshire Chalkland Farming

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THE past farming systems of light-soiled districts are often described as 'sheep-and-corn'. The term does not reveal the changes which took place at various times in the exact objects of sheep and grain production and in the relative importance of the two groups of products. This paper describes some agricultural developments in the Hampshire Chalklands, traditionally a 'sheep-and-corn' area, in order to show how greatly the emphasis on certain products changed between the early eighteenth and early nineteenth centuries. The evidence so far available permits no final conclusions on the evolution of Chalkland agriculture, but the sequence suggested here may provide a framework for more exhaustive studies, and should stress the inadequacy of 'sheep-and-corn' for describing farming systems which changed in essentials over time.

The early decades of the eighteenth century may only be taken as the base period for a discussion of the whole century if it is recognized that they themselves were times of agricultural transition. In the Hampshire Chalklands the agricultural advances of the late seventeenth and early eighteenth centuries were towards increasing the supplies of sheep feed. The greater provision of artificial fodder crops and irrigated grass for the flock made the cultivation of more and more sheep-walks possible, and this continued during the late eighteenth century under the impetus of rising prices for grain. The increase of fodder supplies, the extension of tillage, and the changes in farm production and costs which they helped to bring about are considered here.

I

The sheep flock was the pivot of Chalkland husbandry. From the later seventeenth century demand for local wool was falling, but ewe flocks remained of central importance for breeding stores and fertilizing the ploughland. The large, lanky, downland sheep were admirably suited to a routine in which daylight was spent grazing the downs and darkness folding on the arable. On the other hand they gave only a small fleece, although of good quality, and the culled ewes fattened only slowly.¹ The grassland flocks were

¹ Edward Lisle, who farmed at Crux Easton from 1693 or 1694 until 1722, did not regard Hampshire Chalkland sheep as abundant wool bearers, and contemporary farm accounts record less valuable sales of wool than of sheep on the hoof.—E. Lisle, *Observations in Husbandry*, 1757, *passim*; Farming and Domestic Account Book for Property at Compton and

limited in size by the shortage of fodder in winter and at lambing. Supplementary supplies would mean that more sheep could be stocked; these in turn would promote higher crop yields and permit the permanent cultivation of the thinner chalk soils.

These desiderata became attainable from the latter half of the seventeenth century with the spread of water meadows and 'new' crops. In 1669 John Worlidge of Petersfield recommended sowing turnips and "several new Species of Hay or Grass," and floating water meadows.¹ Thirty years later sainfoin, ryegrass, clover, and turnips had been established widely, as the work of Edward Lisle clearly reveals.² These crops alone, however, were of great but not inestimable importance, as was emphasized by Lisle's difficulties in overwintering cattle on the high downs.³ At Crux Easton even sheep pressed hard on resources of fodder. "It is a hard matter," lamented the would-be grazier, "tho' one have a good stock of that grass, to get the shepherd's leave to hayn it from the sheep for that end [to feed cattle], he stands so much in need of the hop-clover grass from the middle of March to the beginning of May."⁴ Lisle was unfortunate in that Crux Easton lies far from a river valley. In the common type of Chalkland parish abutting on to a stream forced grass from floated meadows was at this time being added to the 'new' crops, effecting an unprecedented improvement in the fodder situation.

It has been stated that "during the eighteenth century in particular, water-meadows must have been pushed to the limits of areas where it was possible to construct them."⁵ This accords with the visible remains of irrigation systems on the valley bottoms and with contemporary documents. For instance, on the Compton reaches of the Test payments for irrigation are recorded from 1714, when it was patently routine and had induced three men to specialize in the work; they charged by the acre for drowning meadows and piece rates for such tasks as "Shutting y^e hatches Down."⁶ In the Park meadows fifty-one acres were drowned regularly. These meadows were maintained partly for dairy cattle, and in accordance with local practice herds

Somborne, H[ampshire] R[ecord] O[ffice]: 2M37/148; Accounts of Mr Rumbold's executors 1707-21, HRO: 2M37/153. The sale of stores is stressed in Defoe's *Tour* of 1724, Everyman edition, p. 289.

¹ J. Worlidge, *Systema Agriculturae*, 1681 (first edn., 1669), pp. 11, 17, 46.

² Lisle, *op. cit.*, *passim*. (Contemporary farm accounts refer to Rye Grass, Sainfoin, Hop Clover, and Broad Clover.—HRO: 2M37/148, 153.)

³ *Ibid.*, pp. 229-33, 263. ⁴ *Ibid.*, p. 217.

⁵ H. P. Moon & F. H. W. Green, *Land Utilisation Survey*, Hampshire, ed. L. D. Stamp, 1940, p. 377.

⁶ HRO: 2M37/148, 149, 150.

and pasture rights were let annually at Pittleworth, Compton, and Brook. Sheep were also kept and other flocks agisted for the lambing season. Despite some use for dairying (later in the century possibly releasing some parish cow downs for tillage) the improvement of sheep husbandry was doubtless the main aim in watering meadows.¹

Incidental light on the extent of water meadows in the mid-Test valley is shed by the proprietors' disputes with a downstream miller. In 1713 thirty-eight acres of Pittleworth Farm were watered, while in 1743 "Mr Gatehouse waters by his carriage that has been cut time out of mind, flood mead about 35 Acres he waters by the carryer that has been cut about 30 Years, about 30 Acres he waters by Sir William's Wire [weir] about 13 Acres, & carry the Waters intirely from Mottisfont Mill."²

On the Itchen there were attempts to float common meadows, the improvement of which presumably tended to lag behind that of meadows belonging to single proprietors. In 1704 a contractor was required to water Otterbourne common meadow for the mutual benefit of the proprietors through "the greatest Increase of Grass & Hay as the sd Land is Capable of in respect of the Sd improvement by watering."³ This scheme failed, for the meadow became badly flooded from the attempted Itchen Navigation. From 1724 John White, Sir William Heathcote's agent, took an interest in the problem and by 1731 had secured the proprietors' assent to a scheme for which he had prepared estimates: "it is to be considered, that it must be first layn dry, & afterwards improved by drowning." That year a surveyor began work and thenceforth annual levies were raised to meet the cost of improvement, but the physical difficulties were not overcome. By 1740 the meadow "hath for some time Past been overflowed with Water and lain in a Ruinous Condition," and in 1746 another estimate for draining, partly by "Lowering the Carriage," was submitted. John White also suggested watering forty acres of common meadow at Compton on the Itchen in 1728. This was successful; his proposal is endorsed in another hand, "NB the pasture ground was watered, in the year 1730 & it proved beyond expectation."⁴

¹ Incidental advantages of water meadows included the control of drainage, which lessened the risk of sheep-rot, and the release of a surplus of hay for sale.—Papers relating to Pittleworth Farm, HRO: 18M54/Box G, pkts. A, C; Edwards's Collection: Farm Accounts, HRO: 2M37/148-53.

² HRO: 2M37/149. See also Papers relating to watering of meadows of Pittleworth and mill at Mottisfont, HRO: 18M54/Box G.B., 1-10, and Particulars of Pittleworth Farm, HRO: 18M54/Box G.C., 12.

³ Draft Articles of Agreement, HRO: 18M54/I pkt. 1. Subsequent schemes are detailed in the same bundle.

⁴ Documents relating to Compton Estate, HRO: 18M54/I pkt. F, No. 1.

The examples given, which might be extended, indicate the scale on which meadows were floated. The expenditure and exertion involved suggest the large return expected and further that there was no cessation of 'improving' activity during the depression of 1730-50. Floated meadows, Dr Kerridge concludes, "made possible earlier lambing and increased sheep stocking, ensured a supply of hay in drought, and by integration with the sheep-and-corn husbandry of the district, promoted increased yields of corn, especially of barley, thus constituting an improvement of the first order."¹

II

The improved fodder supplies made possible the folding and thus the cultivation of thinner soils, this being "the feature that impressed most travellers" in the Chalklands in the late seventeenth and early eighteenth centuries.² In 1724, for example, Defoe noted the recent extension of tillage by the sheep-fold system on the chalk of Hampshire, Wiltshire, and Dorset. Although he observed prodigious sheep-flocks it was already apparent that "the number of sheep fed on these downs is lessened, rather than increased, because of the many thousand acres of the carpet ground being, of late years, turned into arable land, and sowed with wheat."³ Lisle was interested in the costs of cultivating marginal soils, and recommended "gentlemen who have great downs, to plough a furrow across them in some places, that they may turn the best of such lands into arable."⁴

Incentive for the general cultivation of downland was nevertheless lacking before mid-century. Until then a farming system was evolving in which the degree of sheep-folding dictated the relatively slow rate at which fresh land could be brought and kept under the plough. With the lessening return to wool production, sheep became increasingly the tools of arable husbandry. Water meadows and 'new' crops provided the means of multiplying the tools. The inextricable bond between the folding flock and grain production was thus explained to Lisle by Mr Hawkins, "the great Hampshire farmer": "If a bane fell on sheep, corn would be dear, because there could not be a fifth part of the folding that otherwise there would be, and consequently a deficiency of the crop."⁵

The integral rôle of the sheep-fold in the production of the cash crops, wheat and barley, was accentuated during the depression of 1730-50. This

¹ E. Kerridge, 'The Sheepfold in Wiltshire and the Floating of Water-meadows', *Econ. Hist. Rev.*, Ser. 2, VI, 1954, p. 289.

² A. H. Fry, *Land Utilisation Survey*, Wiltshire, ed. L. D. Stamp, 1940, p. 236.

³ D. Defoe, *Tours*, Everyman edn., I, p. 282; see also pp. 187, 285.

⁴ Lisle, *op. cit.*, pp. 3-4, 266.

⁵ *Ibid.*, p. 430.

depression has been described by Dr Mingay from the rentals of the duke of Kingston.¹ An examination of the rentals for Broughton Manor, part of the only Kingston estate containing Hampshire lands, between 1722 and '39, supports the general thesis.² Arrears occurred in 1728 and in all years from 1730, by far the heaviest in those ending at Michaelmas 1735 and '37. Yet in those years there were estate outgoings which cannot be attributed entirely to the landlord's desire to prevent farms falling into hand. Forty pounds were "Allowed towards building a New Rickhouse 1738 as per Agreement on Farmer Morgans taking an advanced Rent," and elsewhere smaller sums were spent on improvements, notably in 1735 and '36 on breaking up Broughton Common Down.

During this depression there were other attempts to increase production. The floating of some water meadows has been noticed. In 1745 a Stoke Charity farmer whose affairs were in straits considered planting 500 acres of 'Cinque Foyle' and the quite exceptional area of 100 acres of hops.³ Some sheep stints (but not those of great cattle) were raised far beyond the accepted carrying capacity of the common downs. For instance, Barton Farm, Weston Patrick, carried a stint of 160 sheep on Broad Down from 1719, but a 'concealed' increase in folding was achieved by temporarily reducing the farm's acreage, between 1733 and '47, from sixty to forty-five acres.⁴ At King's Somborne the Court Baron raised the long-standing stint of forty sheep per yardland to forty-four in April and fifty-two in October 1735. This was reduced to fifty in May 1736, but the level of forty was not regained until 1741.⁵ This abrupt raising of stints acknowledged the vital influence of the flock on the harvest, perhaps of wool as well as of grain, since the prices of both were low in the 1730's. It is possible that all these examples were attempts to combat ruinously low prices by increasing production. The response of the supply curve of aggregate agricultural output to falling demand is slow even today. In the first half of the eighteenth century labour would account for the largest share of farm production costs; it would be

¹ G. E. Mingay, 'The Agricultural Depression, 1730-50', *Econ. Hist. Rev.*, Ser. 2, VIII, 1955, pp. 323-38.

² Nottingham University Archives, Manvers Collection, Rentals 4344-48; 4509-48. The bad years in the Hampshire Chalkland may be extended until at least 1747. For a large farmer at Compton 1744 was the worst year in the period 1744-60, and the Rector of Compton abated the tithes, "in consideration of y^e bad Season & cheapness of corn." See J. S. Drew, *Compton, near Winchester*, 1939, p. 120.

³ Papers relating to tenancy of Hants manor of Stoke Charity, HRO: 18M54/Box E, pkt. A.

⁴ Bolton Collection: Leases for Barton Farm, Weston Patrick, HRO: 11M49/447.

⁵ Extracts from presentments to Court Baron of King's Somborne concerning stints per yardland, 1724-50, HRO: 2M37/208; Miscellaneous Papers relating to Brook, Eldon, etc., c. 1750-1800, HRO: 2M37/127.

largely family labour, the 'opportunity costs' of which would be effectively nil in times of depression and unemployment. As purchased inputs would be few, and in any case cheaper at such times, and as fundamental shifts in demand might be masked at first by unfavourable weather, efforts to offset lower prices by actually expanding output might not have seemed irrational.¹

At the end of the eighteenth century agriculturists still claimed to be convinced of the necessity of the sheep-fold. Much of this acclaim was retrospective and was prompted by the decline in the old folding system brought about by the vast conversion of sheep-walk to tillage. This extension of cultivation was the result of private rather than parliamentary enclosure. Of the total county area only 6 per cent was affected by Acts enclosing open field and only a further 5 per cent by those concerning the 'waste'.²

The aim of those who financed parliamentary enclosure in chalk Hampshire was less the taking-in of new ploughland than the creation of compact and private holdings from common field strips. On this the Articles of Agreement for an enclosure in the Chalkland edge parish of East Dean in 1809 are especially clear. "The Parts and Pieces of Individuals in the . . . Fields lye so dispersed & intermixed with the lands of others as not only to render the same inconvenient to the sev. Prop^rs & Occupiers thōf but Detrimental to good Husbandry & in their present Situation are incapable of any Improvem^t & there are also within the s^d Parish of East Dean some old Inclosures & the dividing & lay^g the Old Inclosures near would be a considerable Advantage to all the Proprietors interested therein."³ The proprietors at another enclosure went so far as to enter into a bond for £200 to allot one of their number his new enclosure next to his existing closes.⁴

On the enlarged and private farms which parliamentary enclosure thus tended to form the trends of the market for farm products could be followed more nearly than on the jumbles of closes and open-field strips which they superseded. In the late eighteenth century this implied a shift towards grain production, as Arthur Young's 'Minutes of Inclosures' in Hampshire suggest. After the enclosure at Monk Sherborne Young noted, "Corn. Has not increased much," whereas sheep had decreased. At Up Nately corn had increased while sheep had merely "not lessened," and at Basingstoke corn had "Very greatly increased," but sheep, Young was obliged to hedge, "The

¹ Cf. J. K. Galbraith and J. D. Black, 'The Maintenance of Agricultural Production during depression: the explanations reviewed', *Journ. Polit. Econ.*, XLVI, 1938, pp. 305-22, and D. E. Hathaway, 'Agriculture in an Unstable Economy Revisited', *Journ. Farm Econ.*, XLI, 1959, pp. 487-99.

² W. E. Tate, 'Field Systems and Enclosures in Hampshire', *Papers & Proc. Hants. Field Club*, XVI, 1947, p. 263, agreeing with estimates by Prof. Gonner and Dr Slater.

³ HRO: 12M37/555.

⁴ Enclosure at Binley, St Mary Bourne, 1743, HRO: 3M54/1.

number, probably, lessened; but the produce in value being so, is questionable.”¹

The effects of parliamentary enclosure on agricultural production were therefore of a similar quality to those of the contemporaneous private enclosure of sheep-walk. It is, however, in the latter, affecting so much greater an area, that the major changes of the century must be sought. Nevertheless, the numbers of Enclosure Acts do provide a rough index to the rate of all enclosure, for some downland was included in many Acts aimed more specifically at open-field. Under the same market influences a broadly similar rate of progress must be assumed for public and private enclosure, although difficulties of administration probably retarded the former a little by comparison. The increase of enclosure is shown by the passing of nine Acts relating to parishes wholly or partly on the chalk from 1709 to 1773 inclusive, fourteen from 1774 to 1792, and twenty-five from 1793 to 1815. This acceleration is not altered by the inclusion of formal private enclosure agreements. The ultimate direction of the movement is evident in that five of the eight Acts passed in 1809–12 dealt exclusively with the ‘waste’.

The crucial importance of the large-scale cultivation of sheep-down hinged on the land-utilization balance of many Chalkland parishes and farms. Like the attenuated parishes, many farms held in severalty stretched from narrow valley to untilled hill pasture. It was “the favourite idea among the down farmers, that no farm can be advantageously disposed for the general circumstances of that country, unless it has water-meadow at one end, and maiden down at the other.”² This ideal balance was to be upset, as the profitability of grain farming grew, by the piecemeal conversion of sheep-down to tillage on individual farms. The shift is symbolized on Lord Bolton’s estates by the contrast between 1660, when permission was granted to make a rabbit warren, and some year between 1783 and 1799, when a 285-acre warren was destroyed to make an arable farm.³ Enclosure of downland for permanent arable cultivation was taking place in the late seventeenth century,⁴ more rapidly from the mid-eighteenth, and fastest during the Napoleonic wars. Enclosure for other purposes—to carve pasture from the Clay-with-Flints scrub which was nearest to true waste, to protect coppice, or to impark—was by comparison insignificant.

Compared with the evidence for parliamentary enclosure, that for the en-

¹ *Annals of Agriculture*, XLIV, 1806, pp. 427–8.

² C. Vancouver, *General View of the Agriculture of Hampshire*, 1810, p. 78.

³ Nether Wallop Estate Papers, HRO: 11M49/466; Register of Copyhold Leases, 11M49/85.

⁴ e.g. at Chilbolton and Shipton Bellinger, F. R. Goodman, *Reverend Landlords and their Tenants*, 1930, pp. 38–9.

closure and cultivation of downland is fragmentary, but its sum is impressive. The commonest clues are incidental notes that certain parcels of arable were formerly downland, for example, "2 acres of arable at Old Down,"¹ or "New Down—arable,"² or "The two(?) meadows. . . That next Stockbridge is now plowed."³ Isolated references in modern works are not infrequent, for instance to the "field, known as Breachfield, situated on a hill about a quarter of a mile north-east of the village of St Mary Bourne; the field having formed part of Eggbury down till 1772, when it was broken up."⁴ This example shows the elements of the process—the first cultivation of an elevated down in the late eighteenth century giving rise to a field-name typically associated with the ploughing of virgin land. A complete survey of literary evidence would be a considerable task, although a useful chronology of the movement might be obtained by its collection for selected groups of parishes.⁵ To demonstrate the occurrence of the process in the eighteenth century ample references are to be found in leases, farm accounts, and estate records. Leases are especially useful. They may reveal indirectly the spread of cultivation, as at Hurstbourne Tarrant, where four hundred acres of woodland and a similar acreage of furze and heath were tilled between 1778 and 1816. Alternatively, they may specify parcels of sheep-down which tenants might plough without penalty—e.g. part of Northbrook Down, Micheldever, in 1737, common down attached to Compton Farm in 1745, and forty acres of Peach Down, Kingsclere, in 1809.⁶

Actual proposals and agreements to break up downland are direct evidence. An incomplete, probably late seventeenth-century, paper endorsed "Nether Wallop—about breaking up th Downs," states that "The Tenants of Wallop would break up 50⁽¹⁷⁾ acres of the Downs & pay my Lord an acknowledgement for it, it is the Course pt of the Down lying beyond the Salisbury road other lords doe permit the same thing & have some. . ."⁷ A 1740 proposal "relating to the breaking up & inclosing part of Compton Down" concerns four hundred acres leased by various persons from the Dean and Chapter of Winchester, who asked £1 per acre to license tillage. At this

¹ Lease of lands at Broughton, 1773, HRO: 2M37/358.

² Noted on a parcel of 165 acres, surrounded by downland, on a map of allotments to heiresses of Roake Manor, Broughton, in the possession of Rev. R. E. Langdon.

³ Note of letting a down, 1755, HRO: 2M37/150.

⁴ K. E. Innes, *Hampshire Pilgrimages*, 1948, p. 42.

⁵ Downland in the Hampshire Chalkland is at present being plotted from early nineteenth-century maps by Mr M. C. Naish at University College, London.

⁶ HRO: 2M37/Hurstbourne Tarrant, 28, 62; 2M37/53; 2M37/93; Southampton University Library, Abstracts of Torr & Co. leases.

⁷ Nether Wallop Estate Papers, HRO: 11M49/466.

price the Compton tenants were licensed in 1741, when they also agreed to enclose the common fields, "to burn, bake, plough, and convert to tillage 21 acres of downland." The new fields were called 'Bakelands'.¹

A detailed scheme for cultivating sheep-downs on Chalton Manor was advanced in 1756.² The duke of Beaufort's tenants at Blendworth petitioned for further licence to plough Blendworth Down, on which they claimed "an immemorial customary Stinted Right of Common of Sheep," for 742 animals on 304 acres. Permission was requested to cultivate 209 acres; the remaining 95 acres were hangers, the steepest slopes, which the margin of cultivation had not reached, and were deliberately excepted. Agreement was forthcoming. Of the tenants on the manor, those at Catherington and Blendworth who had "lately" received licence to break up common downs were to be indulged in a forty-two-year repetition. Tenants at Clanville and Chalton were to be granted similar rights if they desired them—at Clanville for 400 acres and at Chalton, "such a Quantity as they shall judge convenient and beneficial to be broke up." This points to the final approval of permanent cultivation after a trial period, and shows the tenantry unanimously willing to sacrifice grazing rights to the plough in a year when wheat prices were rising steeply.

The inducement to sow wheat on maiden downland was considerable, despite the high initial cost of paring and burning the sward. No reliable yield figures are available, but crops were certainly far above the average on the chalk hills at first, although dropping subsequently. All the signs point to an expansion of the arable acreage in this way as the eighteenth century advanced. It is not suggested that this took the form of a smooth upward curve, but much detailed evidence is required before short-term variations in the rate of progress are distinguished.

¹ HRO: 18M54/F.1 and Box H, pkt. F, No. 15. See also J. S. Drew, *Compton, near Winchester*, 1939, p. 119.

² HRO: Chalton Manor Estate, Box 2/3, 4, 5. Dr Joan Thirsk informs me that she has found instances elsewhere of the temporary cultivation of common pastureland by agreement between manorial lords and their tenants. Dr Thirsk refers particularly to an agreement in the 1670's between the lord of the manor of Penkridge, Staffs., and his tenants for the tenants to plough a part of the common for five years and then allow it to revert (Staffs. Record Office, D260, 8, 1), and quotes R. Lowe, *General View, Notts.*, 1794, p. 9: "it has been besides an immemorial custom for the inhabitants of townships to take up breaks, or temporary enclosures of . . . perhaps from 40 to 250 acres, and keep them in tillage for 5-6 years." Cf. also H. P. R. Finberg, *Tavistock Abbey*, 1951, pp. 32-5, 105. The Hampshire agreements, Dr Thirsk suggests, may refer to the continuation of this practice into permanent cultivation. The introduction of turnips, clover, and other green crops made permanent cultivation of the poorer downland possible. See J. Worlidge's letter of 1682 in J. Houghton, *Husbandry and Trade Improv'd*, 1728 edn., IV, pp. 141-4.

So marked a shift in the balance of land utilization had serious repercussions throughout the farm economy. The especial fears of contemporaries were that successive grain crops would exhaust the poorer soils and that the shrinkage of downland would mean fewer sheep to be folded on a growing arable acreage. The former apprehension proved in the event unjustified, but the literature to which it gave rise indicates the new emphasis on grain production. This swing to arable farming may be related reasonably to the late eighteenth-century rise in the price for wheat, since wheat was usually the first and often the subsequent crop on freshly broken land. Provident farmers followed with barley, oats, and two seasons' ryegrass before reverting to wheat, but opportunists sowed as many 'white straw' crops as the land would bear. Particularly during the Napoleonic wars, wheat prices were sufficiently high to induce the most cautious to crop hard and to encourage the profiteering, the reckless, or those whose tenancies were running out to take all from the land. This was reflected in the contemporary concern, although there is no evidence of widespread or persisting soil-exhaustion. Temporary local conditions made the threat seem real, and even Young, who approved the cultivation of downland, was angered by fields reduced to "a wretched state," where, tempted by "a great sudden fertility" to be "bad farmers for present profit," some "bad managers have, on first breaking up the down, taken more than three crops, sowing as long as the land would yield."¹

As grain prices soared, so observers became more disquieted. An estate agent noted of New Down Farm at Stratton in 1799, "the tenant is too much disposed to sow the land in a greater proportion than it ought to be; it would pay her better if less of the Down land were in tillage and more of the poorest parts of the farm either in sainfoin or laid down with artificial grasses. Some limit to the cropping upon this estate in general, as well as here, would be highly proper and useful."² Another agent, valuing Gerrard's Farm, Nether Wallop, in 1803, claimed that it had been "like most others in that country... rather improperly treated by the practice of burning the Land, and sowing too many Crops in succession." He considered much of the farm's down too shallow to sustain burning and cropping, which was "only a present advantage, with certain ruin in future."³ By 1810 Charles Vancouver, the Board of Agriculture surveyor, was outspokenly criticizing the "madness, extravagance, and folly" of all who broke up downland.⁴

¹ See *Annals of Agriculture*, xxxiii, 1795, and 'postscript' to A. & W. Driver, *General View of the Agriculture of Hampshire*, 1794.

² A. B. Milner, *History of Micheldever*, 1924, p. 245.

³ Valuations, HRO: 33M57/154 and 156/6, 8.

⁴ Vancouver, *op. cit.*, pp. 55, 58, 78, 80.

Nevertheless, the more extensive system of grain-growing spread. It was made possible by the use of various rotations akin to the Norfolk four-course and by resting the land with sainfoin and clover leys. Buildings for threshing and manure storing were erected at the down ends of the elongated farms, thus saving journeys from the main farmstead by labourers and by the flock, which could be concentrated to fold the better 'home' arable.¹ Ultimately, the success of the general cultivation of the downs was sealed by establishing on them entirely new farms, named Down or Warren or New Barn. The physical enclosure of the downs, albeit in huge fields, by quickset hawthorn hedges and beech shelter-belts marks this agricultural expansion as a most significant stage in the development of the Chalkland landscape.

III

The other fear provoked by the extension of tillage—a decreased number of folding sheep—was better founded. Awareness of the trend was shown in a query circulated in 1785 by the Odiham Agricultural Society, asking anxiously or hopefully, "How far can a Tillage System by means of artificial Grasses and Roots be made to support a Flock without natural Pastures or Sheep-Walk?"² Another sign of the growing need for an alternative to natural pasture may be seen in the 'boom' in water-meadow construction between 1780 and 1830.³ It might be expected that turnips and ley grasses would have offset the shrinkage of downland, but in practice they did not completely compensate. Sheep had been fattened on turnips for the London market well before the improvement in the Southdown and other mutton breeds, but the old breeds were nevertheless primarily grassland animals. The numerical drop in these sheep has been overlooked, partly because the total in the county was always impressive (for the Southdown spread during the horned breed's swiftest decline), and partly because Hampshire sheep fairs remained in the forefront, although largely as entrepôts for western-bred lambs bound for fattening pastures in the home counties. Yet in 1794 a decline of one-third in the county's sheep population was estimated and was attributed to the enclosure and ploughing of sheep-walks.⁴ At this date

¹ See e.g. Milner, *op. cit.*, pp. 241–5.

² *An Account of the Odiham Society for the Encouragement of Agriculture and Industry*, n.d. [1785], p. 49. Simultaneously the Society offered premiums for enclosure, the largest being for the enclosure of 'waste'.

³ Mr P. G. H. Hopkins, personal communication. It is unsafe, however, to advance as further evidence of concern lease clauses demanding prohibitive rents for pasture converted to tillage. These were the accepted means of maintaining the pasture-arable ratio, and were particularly important in this district, where good pasture was ever scarce.

⁴ A. & W. Driver, *op. cit.*, p. 22.

Young, who thought Hampshire better sheep country than Norfolk or Suffolk, claimed the county was understocked. In 1798 Marshall said, "the long-established breed of Wiltshire and Hampshire are routed, in every quarter; and may soon be extinct."¹ As late as 1810 the ubiquitous rotations involving turnips and green crops, the recently introduced swedes, and the "still partial" introduction of Southdowns had not compensated for "the great deficiency of sheep stock" arising from "the improvident destruction of the former sheep-walks."²

Although extensions of grain production characterize the Napoleonic war period, there was some redress in a similar expansion of store and mutton production. Growing demand for mutton prompted Hampshire farmers to adopt the Southdown sheep in the 1790's. A flock was purchased in 1792 by W. P. Powlett of King's Somborne, a member of the Board of Agriculture, on Young's recommendation. By 1795 both men were convinced that the experiment had demonstrated the breed's superiority, and Young was able to support this conclusion—which he had embraced in advance—by calculating that at best horned sheep gave only the profit of the fold. Southdowns, he admitted, were dear to buy, but three, he claimed, could be run for two of the old breed. Vancouver observed the ratio as five to four.³

Early mentions of Southdowns in Hampshire come from the south-eastern parishes flanking the South Down Hills—from Soberton in 1799, from Hambledon and Buriton in 1801.⁴ In the former year, with the main spread beginning, Thomas Edwards of Hunton bought two Southdown rams and two hundred ewes locally and one ram from nearby Longparish. Edwards was soon buying Southdown rams in south-east Hampshire and Sussex and selling them in his native north-western corner of Hampshire.⁵ In 1801 Thomas Terry, squire of Dummer, bought 300 Southdown ewes at Lewes, with "more than a proportionate number of rams" to cross with his Hampshire ewes.⁶ Terry and his son faced ridicule at local markets, but within seven years opinion completely changed in their favour. By 1815 the Southdown, or its cross on the Hampshire ewe from which the Hampshire Down derives, was the dominant Chalkland strain.

The spread of swedes followed that of Southdowns. At Buriton in 1801, "Swedish turnips have been introduced and highly approved of."⁷ They

¹ W. Marshall, *The Rural Economy of the Southern Counties*, 1798, II, p. 347.

² Vancouver, *op. cit.*, pp. 365-74.

³ Vancouver, *op. cit.*, p. 374.

⁴ *Hampshire Repository*, I, p. 76; II, p. 197.

⁵ Thomas Edwards's Account Book, 1790-1805, HRO: 2M37/340.

⁶ A. M. W. Stirling (ed.), *The Diaries of Dummer*, 1934, p. 133.

⁷ *Hampshire Repository*, II, p. 212.

were introduced at Dummer in 1802 and at Hunton in 1803.¹ There was a causal connection between the two innovations. Southdowns were admirably suitable for a period of contracting grassland since they were folded and fattened on arable crops. Their successful overwintering thus demanded a fodder crop which would bridge the 'hungry gap' between the last turnips, which kept badly during frost, and the first bite of watered grass. Swedes filled this gap, since they kept better than turnips and could be reserved until these had been fed off. It may be suggested that the nation-wide spread of swedes, which has been described as only occurring in the first decade of the nineteenth century although their properties had been known for years,² was much influenced by the wide substitution of arable for grass sheep.

The grass flocks of the horned breed had been suited above all else for the fold. The lambs were forced for sale at Weyhill Fair at Michaelmas, but otherwise mutton and wool production left ample room for improvement. Southdowns, by contrast, were fatter, producing more lambs, better carcasses, and more, shorter-stapled, wool. Their disadvantages arose from the higher costs of managing and feeding arable sheep, especially the great expense of growing roots. Shepherding costs rose, since fewer sheep could be tended when permanently folded than when loose on the downs. Shepherds commanded wages higher by half than labourers, with still higher rates at lambing. The capital cost of a Southdown flock was high, and altogether sheep became an expensive item in farm budgets. Probably only the example of the large class of squires and wealthy tenants, the overall profitability of wartime farming, and the growing demand for mutton made feasible so quick and complete an introduction of Southdowns. The cost of their maintenance was to become a matter of moment after 1815.³

IV

Another change in the cost structure of Chalkland farming during the Napoleonic wars was due to difficulties of labour supply. Wages were raised early, as provision prices mounted and the lot of the private soldier, which it was thought advisable to equal, improved.⁴ Attitudes towards labour were noticeably less benevolent after the failure of the Peace of Amiens, when

¹ Stirling, *op. cit.*, and HRO: 2M37/340. Thomas Edwards's accounts suggest growing pressure on his fodder supplies as he increased his sheep stock in the first years of the nineteenth century. He began to pay other farmers to winter some stock, bought the feed of Hunton Down, and in 1805 that of 6½ acres of turnips, and began to purchase rape and swede seed.

² N. Harvey, 'The Coming of the Swede to Great Britain', *Agric. Hist.*, xxiii, 1949, pp. 287-8.

³ For the main features of the system centred on arable sheep see the description of the similar Norfolk four-course in H. G. Sanders, *Rotations*, M.A.F.F. Bulletin 85, 1954, pp. 7-9.

⁴ Enquiry into the General State of the Poor, 1795, *Hampshire Repository*, 1, 1799, p. 19.

military requirements and war-work at high piece rates (notably in Portsmouth dockyard) depleted the agricultural labour force and left the remainder discontented.¹ Between 1801 and 1811 the proportion of Hampshire's population engaged in farming fell, precisely when efforts to expand production might have absorbed an increase. The total population of the 148 Chalkland parishes increased by only 2,740 (compared to 8,724 between 1811 and 1821) and the population in 49 parishes actually decreased.² The farm labourer's weekly wage rose by three or four shillings. With the expensive parochial administration and the current provision prices the £50,000 which the Chalklands population of nearly 60,000 spent on poor relief in 1809 may have gone to support only the transient, the unemployable, and those who were jobless in winter.

Hands were at a premium for harvest, and from 1802 Thomas Edwards of Hunton was glad to engage soldiers to help reap his wheat.³ As Southey explained, "the country is mostly down, recently enclosed, and of wonderfully thin population in comparison of the culture. Indeed harvest here depends upon a temporary emigration of the western clothiers."⁴ Another farmer, James Edwards of Horsebridge, was troubled by the restlessness and unreliability of labour; he began to board out his men, acting on a clear intention of avoiding the direct impact of rising provision costs.⁵ The increasing cost of labour, as much as the growing profitability of grain production, must have induced the investment in threshing machines, which by 1808 had "been erected of late years, and at a very heavy expense, in many parts of this county."⁶ Thereafter labour for threshing by flail, the main winter occupation, became increasingly redundant.

V

Hampshire Chalkland farming evinced many signs of a boom between 1793 and 1815. Farmers needed little urging to expand their businesses and may have borrowed heavily on the expectation of continuing high prices for farm products.⁷ The Hampshire Agricultural Society grew from the annual

¹ Vancouver, *op. cit.*, pp. 374-88.

² See Abstracts of Censuses and Returns, 1801 and 1811; and Table of Population, 1801-1901, in *V.C.H. Hampshire*, v, pp. 435-50.

³ Account Book, 1790-1805, HRO: 2M37/340.

⁴ R. Southey, *Letters from England*, ed. Jack Simmons, 1951, p. 42.

⁵ Farm Account Books, HRO: 2M37/341 (1800-5) and /342 (1805-9).

⁶ Vancouver, *op. cit.*, p. 106. This was written in 1807-8. Cf. W. H. Chaloner, 'The Agricultural Activities of John Wilkinson, Ironmaster', *Agric. Hist. Rev.*, v, p. 51.

⁷ A tenant of Sir Henry Tichborne borrowed £2,000 from him and another tenant £2,573 on stock at entry to an additional farm.—General Account of the Hampshire Estates, 1795-1817, HRO: 37M48/10. Thomas Edwards borrowed a total of £700 between April 1799 and July

wool exhibition at Magdalen Fair, Winchester, and local societies multiplied. The true boom was probably short-lived, as costs soared and the burden of taxation became weightier. There was no rebuilding to match those which locally characterize the mid-eighteenth and mid-nineteenth century agricultural expansions. Real profits were doubtless smaller than wheat prices, farm turnovers, or the alleged appearance of a claret-drinking, fox-hunting tenantry might suggest.

Yet, although insubstantial, the boom carried to a hasty conclusion the gradual developments of a half century. The plough made immense inroads into the downland and grassland flocks dwindled. Sheep began to contribute more than the benefit of the fold and store animals—more mutton, wool, and store lambs. A labour-saving machine of general application was introduced. Last, but not necessarily least, a new acceptance of progressive change and rising living standards was born in the farming community. The superstructure of Chalkland agriculture came by 1815 to rest on sky-high prices for wheat and mutton. This transition and increase in scale had been bought only at high and sometimes continuing cost. The shifts in the relationships between farm enterprises were fraught with significance for the coming depression.

In contrast to 1715, the accent in 1815 was on the greater sale of sheep products and a more extensive grain production. Changes in techniques and costs had been wrought and could not be easily reversed. Thus, although 'sheep-and-corn' certainly applies to Chalkland farming at both dates, it neglects the essential economic and technical distinctions between them.¹ Similarly, its use to describe farming on the 'good sands' of Norfolk, the 'Ryelands' of Herefordshire, and the chalk of the southern counties, fails to draw the necessary distinctions between dissimilar systems.² It may be urged that the acceptance of popular descriptions of farming systems should be replaced by scrutiny of their economic features in each locality and at every period. From this an appropriate terminology for the phases of change should emerge.

1800, probably for land purchases at Broughton.—Account Book of Thos. Edwards's expenses, 1789–1800, HRO: 2M37/339.

¹ On the contrasting structures of Chalkland farming (in Wiltshire) in recent periods of prosperity and depression, see A. H. Maunder, 'A Study of Farming Change', *The Farm Economist*, VII, August 1953.

² Cf. A. Simpson, 'The East Anglian Foldcourse: Some Queries', *Agric. Hist. Rev.*, VI, 1958, p. 88. A cursory examination of evidence for Berkshire, Wiltshire, and Dorset—where the store sheep production also pivoted on Weyhill Fair—suggests that the Hampshire changes were, with local variations, typical of the whole Wessex Chalkland. Cf. G. Slater, *The English Peasantry and the Enclosure of Common Fields*, 1907, pp. 234–5.