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SEVENOAKS, SEAL AND IGHTHAM – 1560 TO 1650

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This paper continues the investigation of Seal, Kemsing and Ightham reported in *Archaeologia Cantiana*, cii (1993)¹ and adds information on the small market town of Sevenoaks which would have been the local focus for the three villages.

In addition to showing how the available vital statistics for Sevenoaks and the villages compare with those for other villages, the registers show the local interaction between Seal and Sevenoaks in the 1640s and the number and distribution of burials of chrisomers in Sevenoaks in the 1590s is unusual.

What also stands out is the apparent difference between Ightham and the other parishes investigated. There seem to have been many more small families just passing through Ightham than was the case in Seal and Sevenoaks. With regard to Ightham and Seal, the difference is likely to be connected with the use of land (pastoral farming in Seal, many more orchards in Ightham) and perhaps with land ownership (yeomen in Seal, county gentry in Ightham).

As in the previous paper, all dates are given in the modern form, that is, with the new year starting on 1st January.

VITAL STATISTICS

The previous paper showed baptisms, burials and marriages for Seal, Kemsing and Ightham. The records for Sevenoaks² during the same period have now been analysed and the nine-year running averages are given in Fig. 1.

The totals for each decade for Sevenoaks, Seal, Ightham and Kemsing

¹ See Bibliography.

² From the typescripts of the church registers held at CKS Maidstone, Ref. P330 1/42, 1/43, 1/44.

SEVENOAKS - 1562 to 1654

Running Average over 9 years

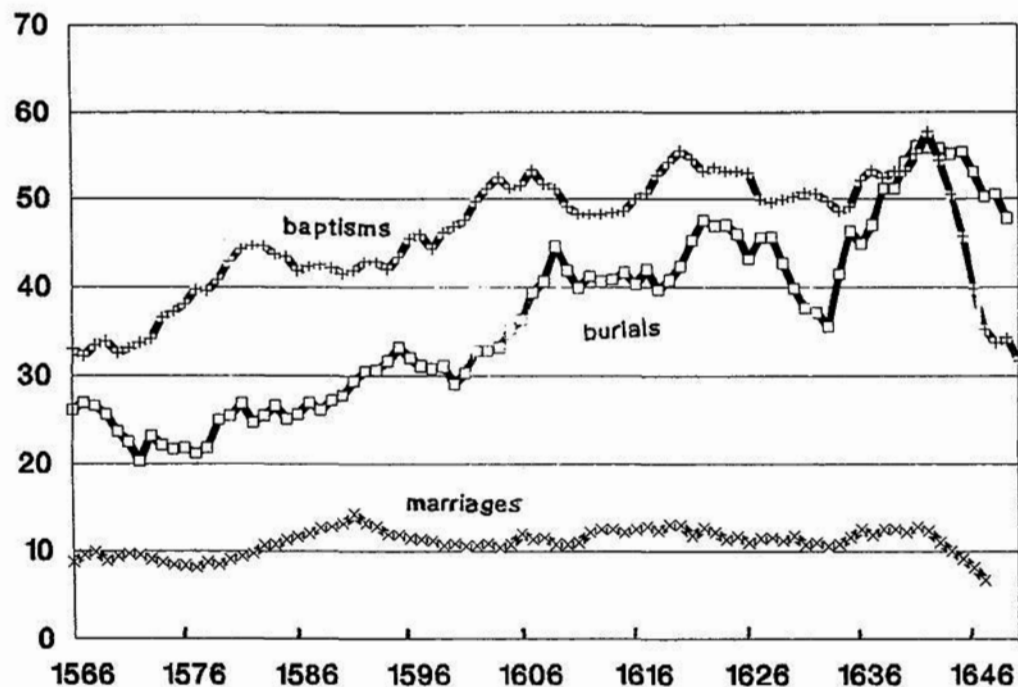


Fig. 1. Sevenoaks - 1562 to 1654; running average over nine years.

are given in Table 1. The ratio of baptisms to burials was nearly always greater for the villages than for Sevenoaks itself but, overall, it fell from just over 1.6 in the second half of the sixteenth century to about 1.3 in the seventeenth. Terling, in Essex, was a similar size to Seal with an average of 22 births per year over the period covered in Table 1 and 18 burials.³ There, whilst the ratio of baptisms to burials averaged 1.6 from 1566 to 1600 (almost identical to the Seal ratio), it fell much more in the seventeenth century, averaging 1.15 from 1600 to 1641 compared with Seal's 1.34. The population of Kemsing is very small and in the rest of this paper Kemsing has been combined, for most purposes, with Seal.

The population for Seal is as estimated in the previous paper. Those for Sevenoaks and the other two villages have been estimated in two ways, one of which takes the annual birth rate as 35 per thousand (see Appendix). The mean of the resulting figures is given in Table 1 and their spread in Fig. 2 which shows the population of Sevenoaks rising from under 1,000 in the 1560s to a peak of about 1,500 at the beginning of the seventeenth century from which it fell back to about 1,200 in the 1630s. Dr Bower⁴ estimates the population of Sevenoaks as 900–1,000 in the 1570s rising to 1,500–1,600 in the early seventeenth century.

Table 2 gives the burial rates for Seal and Sevenoaks assuming the populations are as given in Table 1. This shows both Seal and Sevenoaks with a very high burial rate in the 1560s but it may be that the surviving early records of baptisms are not complete, thus leading to an underestimation of the population in that decade. The total number of burials per year are very small for Kemsing and Ightham so that burial rates have not been calculated.

The great increase in the number of baptisms and marriages in Seal in the late 1640s was noted in the earlier paper. The Sevenoaks register shows a fall in the number of baptisms from 62 in 1646 (the early 1640s are the years with the highest number of baptisms for the total period) to 29 in 1647 and 25 in 1648 so that, in the 1642 to 1651 decade there were more burials than baptisms.

This was the period of the Civil War which could have been the basic reason for the overall fall, but there must have been some local reason why baptisms fell in Sevenoaks and rose in Seal. Comparing the Sevenoaks decrease with the rise in Seal baptisms from 11 in 1646 to 37 in 1647 and 33 in 1648 confirms the impression given by the Seal registers (where many of the fathers are noted as 'of Sevenoaks') that many of

³ Wrightson and Levine, 45.

⁴ Dr Jacqueline Bower, Kent Towns 1540–1640; Kent History Seminars 1995.

TABLE I *Vital Statistics for Seal, Sevenoaks, Ightham and Kemsing*

Decade	SEVENOAKS				SEAL				IGHTHAM				KEMSING			
	bap.	bur.	mar.	pop.	bap.	bur.	mar.	pop.	bap.	bur.	mar.	pop.	bap.	bur.	mar.	pop.
1562 to	338	264	89	999	195	131	51	432	134	76	33	328	65	36	15	159
1572 to	393	215	83	1153	200	104	59	587	159	66	20	437	45	17	11	143
1582 to	416	266	119	1276	236	136	78	733	169	91	27	495	72	31	11	188
1592 to	458	322	114	1525	161	135	55	666	151	94	23	488	41	17	3	142
1602 to	511	382	116	1441	183	131		498	136	47	22	331	46	24	8	127
1612 to	502	417	126	1473	190	138	54	534	103	55	25	273	63	35	15	149
1622 to	512	444	109	1407	214	172	52	543	116	96	37	315	41	35	15	104
1632 to 1642	424	362	110	1175	231	179	52	590	138	107	39	373	51	39	16	102
total yearly	3554	2672	866		1610	1126	401		1106	632	226		424	234	85	
average	44	33	11		20	14	6		14	8	3		5	3	1	
average pop.				1292				573				380				140

Estimated Population

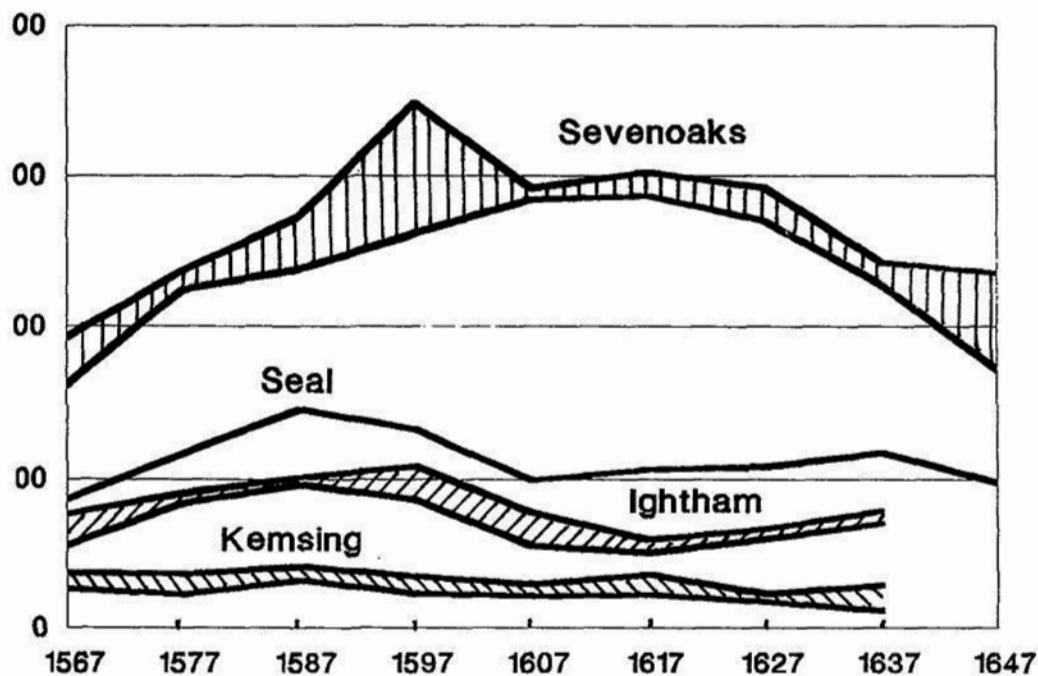


Fig. 2. Estimated population.

TABLE 2 *Burial Rates per Thousand*

Decade	Sevenoaks	Seal
1562 to	30	30
1572 to	19	18
1582 to	21	19
1592 to	21	20
1602 to	27	26
1612 to	28	26
1622 to	32	32
1632 to 1642	31	30
Average	26	25

these were of infants from Sevenoaks. Fig. 3 shows that, although the fall in numbers in Sevenoaks is partially compensated by the increase in Seal, the total for the two in 1650 is less than half the total for 1641.

There was also a large increase in the number of marriages recorded in Seal in 1647, 1648 and 1649. Although there was again a fall in the number recorded for Sevenoaks in the late 1640s, since they only averaged about ten a year throughout the period, many of the large number of extra people married in Seal at that time must have come from a wider area. Perhaps, at this time, the attitude and beliefs of the vicar of Seal were more in tune with local feeling than that of the vicar of Sevenoaks. Dr Nicholas Gibbon, the vicar of Sevenoaks at the beginning of the decade, was a Royalist who was deprived of his living in 1644, being replaced by Thomas Kentish, 'a preaching minister' who accepted the Directory of Worship introduced in 1646.⁵ John Baker, vicar of Seal and Kemsing in the 1640s was more fortunate, not being evicted until 1650 when he was replaced by two of 'Cromwell's parsons', one for Kemsing and one for Seal.⁶ Thus, it appears that, in the late 1640s, Seal had a vicar of the 'old persuasion' which perhaps was what many of those living in the area wanted.

⁵ David Killingray, *St. Nicholas Parish Church, Sevenoaks, Kent*, Sevenoaks, 1990, 6.

⁶ Rev. T. Shipdom Frampton; *Arch. Cant.*, xx (1893), 269.

Baptisms 1641 to 1650

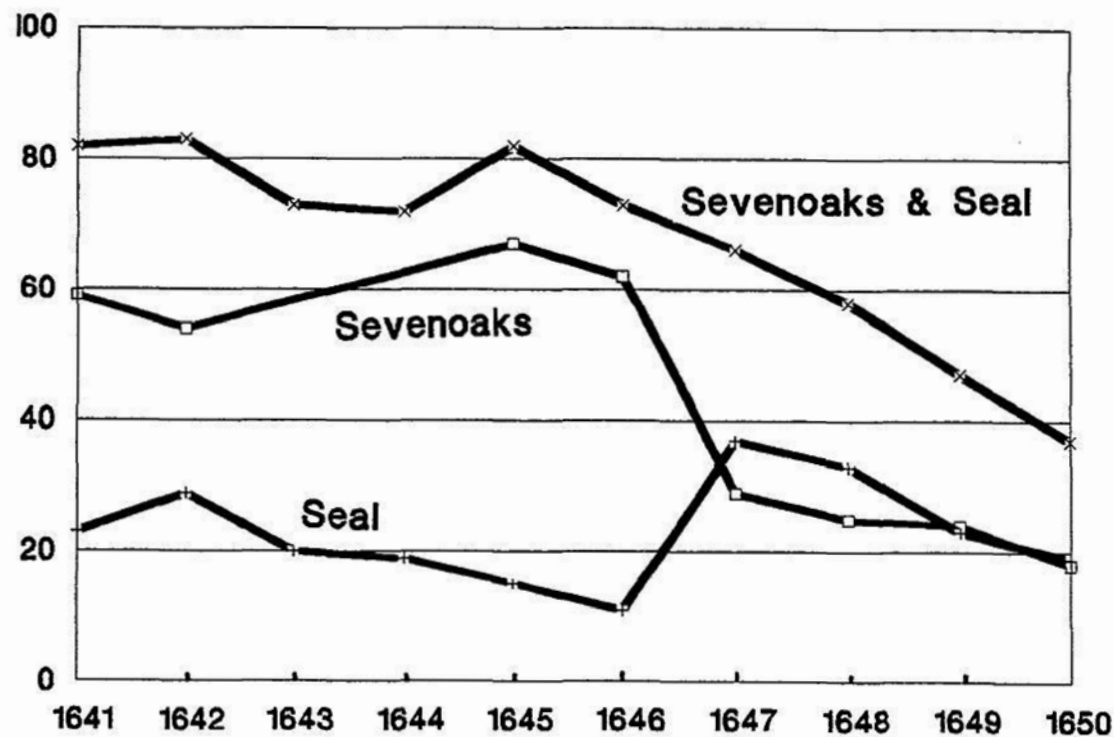


Fig. 3. Baptisms 1641 to 1650.

Seasonal Distribution of Marriages

There were three periods of the year when marriages were forbidden:

- the beginning of Advent (four Sundays before Christmas Day) to the Octave of Epiphany (14th January, eight days after Epiphany) – 45 days
- Septuagesima (the third Sunday before Lent) to the Octave of Easter (eight days after Easter Sunday) – 72 days
- Rogation Sunday (the fifth Sunday after Easter) to Trinity Sunday (the Sunday after Whit Sunday, that is the eighth after Easter) – 22 days

Emmison⁷ reports that a few ministers in Essex (including one in 1575) made a note of these in their registers and that several of them were censured for marrying couples during one or other of the periods, the only date given for an actual case being 1592.

Fig. 4, the percentage of marriages which took place during one or other of the three prohibited periods, shows that, during Elizabeth's reign, many people avoided marrying during periods banned by the church – or ministers refused to marry during those times – and this pattern continued in the villages to the end of the period studied. The drop to only 12 per cent in Sevenoaks in the 1632/41 decade looks spurious, particularly since the proportion rises again in the 1640s (not shown in Fig. 4). However, Nicholas Gibbon, vicar until 1644, may have observed the prohibition more firmly than did either his predecessor or his forced replacement, Thomas Kentish.

The distribution of the 816 Sevenoaks, Seal, Ightham and Kemsing marriages between 1561 and 1602 for which accurate dates are available and those in the three villages from 1603 to 1648 are given in Table 3 where the three periods are referred to, for brevity, as Christmas, Lent and Whit. The total number of prohibited days was 139 so that, if there had been no bias to select a particular time of the year, the percentage expected in each period would have been as given in the last column in Table 3. Although the number of marriages celebrated during the Whitsun period is only slightly less than would be expected if there had been no prohibition, those performed during Advent and the Christmas/New Year period and Lent are much fewer than would have been the case if there had been no seasonal or other bias.

Did marriage to avoid the birth of a bastard account for some marriages within the 'forbidden' periods? Of the 26 Seal and Ightham couples where the first child was baptised less than six months after the

⁷ Emmison, 158.

Marriages in Prohibited Periods

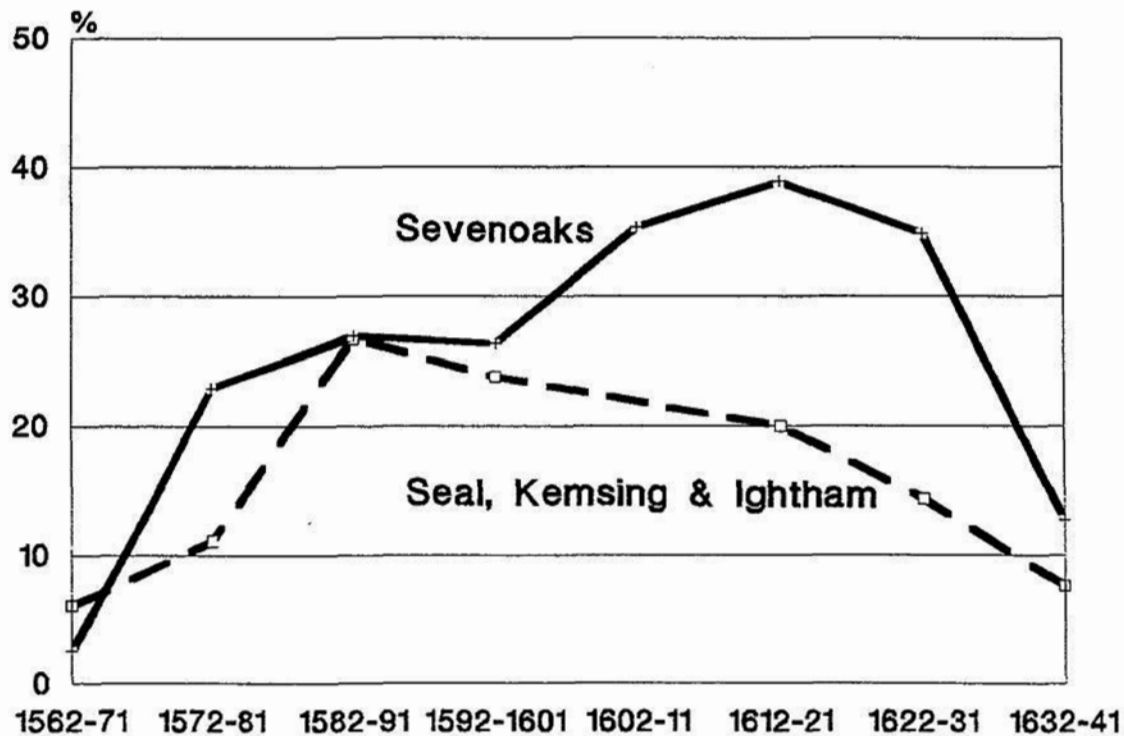


Fig. 4. Marriages in prohibited periods.

TABLE 3 *Marriages During Forbidden Periods*

period	Sevenoaks and villages 1561 to 1602		Seal, Ightham and Kemsing 1603 to 1648		expected if marriages had been evenly distributed %
	no.	%	no.	%	
Christmas	52	6.4	20	5.3	12.3
Lent	72	8.8	29	7.7	19.7
Whit	37	4.5	13	3.4	6.0
other	655	80.3	316	83.6	61.9
Total	816		378		

marriage,⁸ only six married during a supposedly prohibited period. Two of these six marriages took place two days and four days before Christmas Day with their infants being baptised five and fifteen weeks later. If it had been of great importance to marry outside a prohibited period, both these couples could have married before the end of November. Another couple married three days before the end of the Lent period but the baptism was over 5½ months later so that a few days' postponement would hardly have mattered. Thus, whether or not a couple married within one of the specified periods or not does not seem to have been dictated by trying to ensure that the marriage preceded the birth. Perhaps, it was not so much the church enforcing the 'closed periods' as tradition continuing to endorse them.

Since the date of marriage in Sevenoaks between 1602 and 1631 does not seem to have been dictated by religious prohibitions, the monthly distribution of these 373 marriages has been investigated and is shown in Table 4 as both actual numbers and as a monthly index with 100 representing the number expected if there had been no seasonal distribution. These show that the Lent period was still avoided with June and October (before and after the harvest period?) as the most popular months. Also included are the national monthly indexes for 1600-1649 given by Wrigley and Schofield.⁹ Comparing the two sets of indices shows that both the fall in marriages in March and the October/No-

⁸ Six months is taken here since, if the couple were to marry because it was known that the woman was pregnant, some weeks would elapse between actual conception and the date of marriage.

⁹ Wrigley and Schofield, 300.

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TABLE 4 *Seasonal Distribution of Marriages*

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sevenoaks 1602–1631												
no.	30	32	16	32	30	40	34	27	26	40	36	30
Index	95	111	51	104	95	131	107	85	85	126	118	95
National Indices 1600–1649												
Index	99	100	22	93	123	129	103	73	89	158	165	48

TABLE 5 *Age at Marriage*

Location	baptised between	number	Men mean	median	number	Women mean	median
Seal, Ightham and Kemsing	1560s to 1620s	91	26.4	25.25	102	24.6	24.3
Staplehurst	1540s to 1570s	45	26.3	26	64	23.5	23
Terling	1550 to 1624	42	25.9	25	88	24.5	23.8

vember peak were smaller in Sevenoaks than the aggregate for England as a whole.

Age at Marriage

It has been possible to calculate the age at marriage of 91 men and 102 women in Seal, Kemsing and Ightham¹⁰ in the period 1562 to 1650 and the results are given in Table 5 together with similar data for Staplehurst given by Zell and for Terling given by Wrightson and Levine.¹¹ All three locations give similar results with women tending to marry about two years younger than men.

¹⁰ Families have not been reconstituted for Sevenoaks.

¹¹ Zell, 70; Wrightson and Levine, 68.

Seasonal Distribution of Baptisms

The seasonal distribution of baptisms has been investigated for Sevenoaks between 1562 and 1599 and for Seal, Ightham and Kemsing between 1562 and 1645/1650. The results are shown in Table 6, both as monthly totals and in the form of a monthly index with 100 representing the number of baptisms which would be expected in a given month, if there had been no seasonal variation. Table 6 also includes those for 18 Kent Weald parishes calculated by Zell for the same period and national figures given by Wrigley and Schofield for 1540 to 1599.¹²

TABLE 6 *Seasonal Distribution of Baptisms*

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seal, Kemsing and Ightham, 1562-1645 (3,153 baptisms)												
no.	283	305	362	317	283	224	211	246	238	262	241	288
Sevenoaks, 1562-1599 (1572 baptisms)												
no.	153	156	163	143	121	111	114	93	123	1234	138	123
Sevenoaks, Seal, Kemsing and Ightham (4, 832 baptisms)												
no.	436	461	525	460	404	335	325	339	361	396	379	411
Index	108	114	130	114	100	83	81	84	90	98	94	102
18 Kent Weald parishes, 1560-1599 (22,178 baptisms)												
Index	107	117	123	119	98	85	77	87	94	97	96	100
National indexes, 1540-99												
Index	111	123	123	111	89	81	78	89	105	100	101	91

The broken line in Fig. 5 shows the seasonal distribution for Sevenoaks and the three villages in graphical form and the solid line the index for the Weald parishes. This shows that, at least with regard to the seasonal distribution of baptisms, Sevenoaks and its surrounding villages was indistinguishable from its Wealden neighbours. Neither Sevenoaks and the villages nor the Weald parishes differ greatly from the national seasonal distribution shown by the dotted line in Figure 5.

The peak in the early months of the year indicates a high level of

¹² Zell, 245; Wrigley and Schofield, 287.

Seasonal Distribution of Baptisms

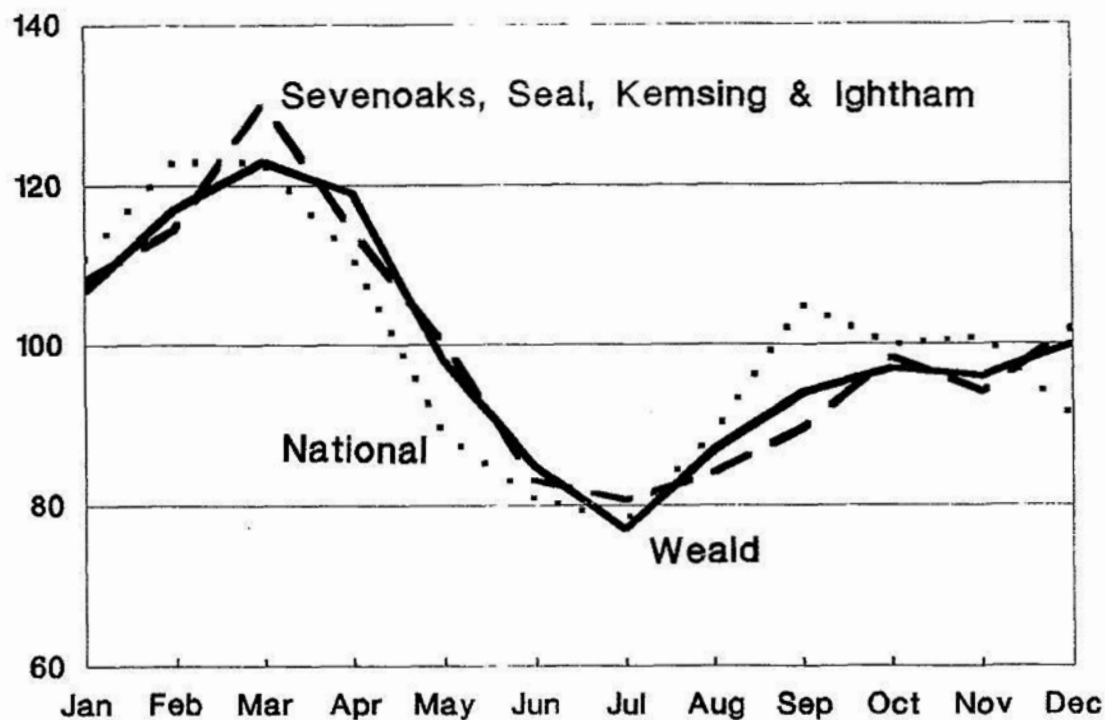


Fig. 5. Seasonal distribution of baptisms.

conceptions in the April to July period with a fall in late summer and autumn when those working on the land would be at their busiest. Since even towns like Cranbrook, with its growing cloth industry, still showed the seasonal distribution of births traditionally expected of those making their living from the land, we would expect these rhythms to be at least as pronounced in the Sevenoaks area.

Age at Baptism

Parish registers usually give only the date of baptism so that taking time of conception as nine months before baptism assumes that they occurred only a few days after birth. Chislet, near Herne Bay, has records going back to the 1540s. Not only is this rare but the baptisms recorded in 1544, 1545 and 1546 give the date of birth as well as baptism and a very large proportion of the infants were baptised on their day of birth – 13 out of 15 in 1544, 8 out of 11 in 1545 and all 16 in 1546.¹³

Berry and Schofield's¹⁴ analysis of 43 parishes in which the dates of both birth and baptism were recorded showed that the average age at baptism was only a few days about 1600 increasing to about a month by 1800.

During Elizabeth's reign it was the parents' responsibility to have their infants publicly baptised on a Sunday or holy-day and the 'clergy's duty to admonish their flocks not to defer christening longer than the first or second Sunday after birth except for just cause'.¹⁵ In 1587, John Petchie of Fryerning in Essex and his wife were reported to the Church Courts 'for keeping their child unchristened three weeks and the wife brought her child to be baptised when she came to give thanksgiving at the end of three weeks';¹⁶ the Petchies were not an isolated case of presentment to the Essex Courts for delay in having a child baptised.

In the Ightham register, the date of birth, as well as date of baptism, is recorded for twenty-five infants born between 1642 and 1650. Of these, half were baptised when between one and three weeks old with a quarter being over three weeks – see Fig. 6. Both the mean and median age of these infants was 15 days and, if this is typical for the locality and the period, it implies that about two weeks, on average, needs to be deducted from baptism date to give date of birth.

¹³ Cox, 40.

¹⁴ B.M. Berry and R.S. Schofield, 'Age at baptism in pre-industrial England', *Population Studies*, 25 (1971), 453–63, quoted by Wilson, 214.

¹⁵ Emmison, 139.

¹⁶ Essex Archidiaconal Records, quoted by Emmison, 140.

Age at Baptism

Ightham: 1642-1651

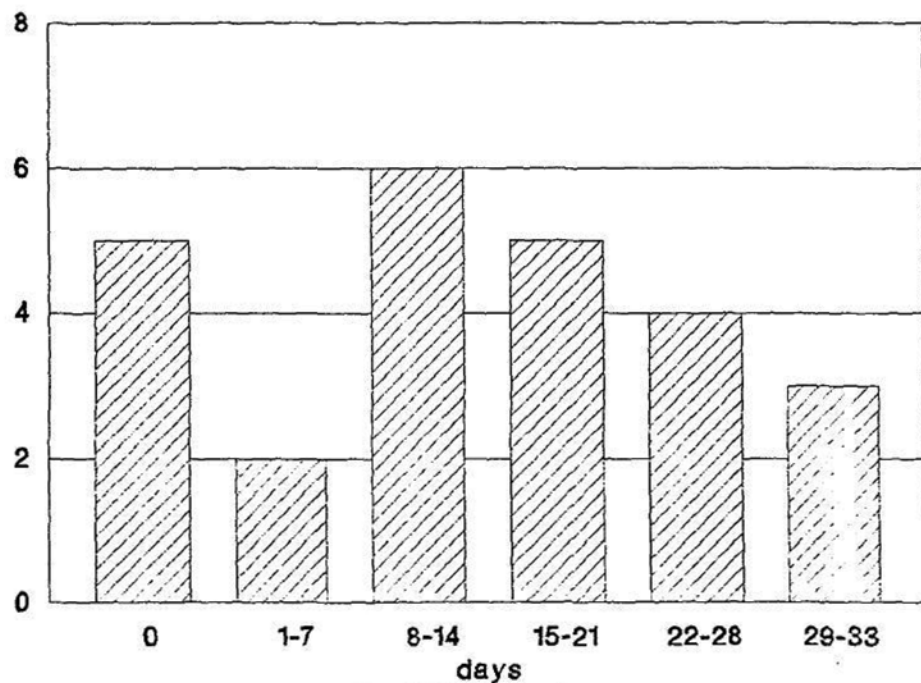


Fig. 6. Birth to baptism.

Both Seal and Ightham were large parishes where the church could be two or three miles from the baby's home. Perhaps in such cases baptism was postponed until the mother was able to travel to the church to give thanks for her delivery ('churching'). The records for the Church Courts for the Sevenoaks area have not survived, but it looks as if either church practices had changed in the intervening sixty years or Ightham, in a different diocese, did not take the church's admonishments as seriously as did the Essex villages. However, this was the time of the Civil War and it may be that this long interval between birth and baptism was due to the disruptions of the times.

Baptisms on Sundays

As noted above, baptisms were expected to be carried out on a Sunday or holy-day. For Seal, two-thirds of the 739 baptisms recorded between 1562 and 1599 were on a Sunday; although Sevenoaks has not been investigated in such detail, the same picture emerges with, very often, a number of baptisms on the same day which is often a Sunday, for example, three baptisms on 25th March, 1565, five on 1st May, 1581. For 1593, 1594 and 1595, 73 per cent of the 121 Sevenoaks baptisms were on a Sunday. Given that many of the others would have been baptised on one of the many holy-days, it appears that, as with marriages, custom went along with church edicts.

This proportion of 66 to 73 per cent for Sunday baptisms is higher than national figures for the same period¹⁷ which show about 40 per cent of baptisms on Sunday in 1550 rising to 57 per cent in 1600.

Seasonal Distribution of Burials

The seasonal distribution of burials for Sevenoaks, Seal, Kemsing and Ightham has been investigated in a similar way to baptisms – see Table 7 and Fig. 7 which include the monthly indices calculated for 14 Kent Weald parishes (14,798 burials) by Zell and national indices.¹⁸ Obviously, the pattern here is affected by factors causing high mortality rather than custom or religious practices. Although some of the burials were of infants dying soon after birth (which would account for some of the likenesses between the seasonality of burials and that of baptisms), Wrig-

¹⁷ Cambridge Group for the History of Population and Social Structure, 'Days of the week for baptisms, burials and marriages from family reconstruction', *Local Population Studies*, 51 (Autumn 1993), 15–17.

¹⁸ Zell, 247; Wrigley and Schofield, 294.

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TABLE 7 *Seasonal Distribution of Burials*

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sevenoaks, Seal, Kemsing and Ightham, 1560–1600 (4,868 burials)												
no.	419	393	479	457	467	375	369	319	403	406	379	402
Index	103	97	118	113	115	92	91	79	99	100	93	99
14 Kent Weald parishes, 1560–1600 (14,798 burials)												
Index	115	111	124	130	114	90	84	75	80	85	89	103
National sample of 404 parishes (index)												
1540–1590	107	111	121	120	99	87	81	89	92	97	97	99

ley and Schofield have shown that it was adult mortality which determined the general seasonal pattern. Sevenoaks and the three villages do not deviate so much from the national figures as do the Wealden parishes. Right at the end of the period investigated, in 1650, the parish register for Ightham gives the day of death as well as that of burial. Four were buried the day following death, one two days later and one three days later.

Chrisomers in Sevenoaks

An unusual feature occurs in the Sevenoaks register during the 1590s where the burial of a number of chrisomers is added on to the entry of a normal burial, for example 'William Wakeling and four chrisomers'. Cox in his comprehensive study of the English parish registers¹⁹ found that entries of burials of 'chrisom children' were fairly frequent throughout England during the sixteenth and seventeenth centuries but not recorded as an adjunct to the burial of an adult.

At baptism, the child was anointed with chrism (holy oil) and the chrisom, a white linen cloth, was placed on the child and worn for seven days or until the mother was churched when it was presented to the church and afterwards used by the priests for general purposes about the church. If, however, the child died before the mother's churching, the infant, shrouded in the white cloth and bound round with ornamental

¹⁹ Cox, 59–63.

Seasonal Distribution of Burials

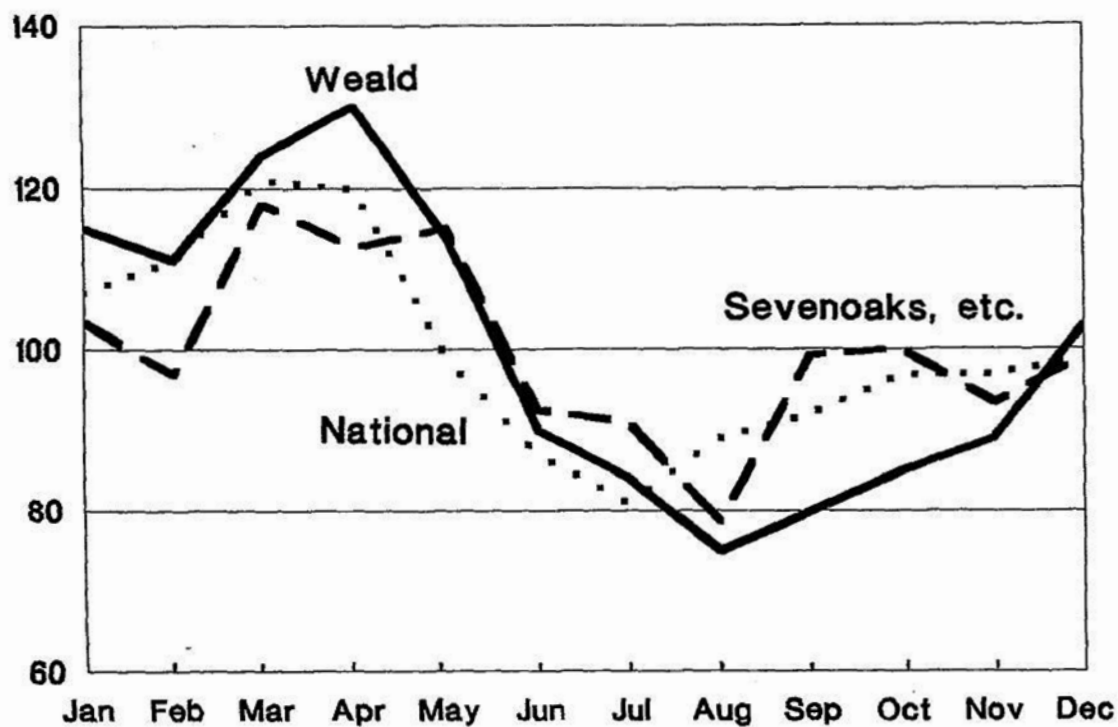


Fig. 7. Seasonal distribution of burials.

strips of linen, was termed a chrisom child or, occasionally, a chrisomer. Anointing with chrism and the use of the chrisom was retained for some time after the reformation. Although the word was no longer used in the second Prayer Book of 1552, the use of the chrism continued for many years. It was described in an undated entry in the register of Wickenby, Lincolnshire, for the early seventeenth century: 'The chrysom and a gracepeny is always to be given at ye woman's churching. The chrysom must be half a yard of fine linnen long and a full yard in width'.²⁰ The term 'chrisom child' was, however, used in some parts of the country for an infant dying without having been baptised in which case it would not have had a name.²¹

Details of the entries in the Sevenoaks register are given in Table 8, the entries noted in the typescript having been checked against the original surviving records. What is surprising is the number apparently buried on the same day and the fact that no details are given which is in contrast to the examples given by Cox. The burials of these very young infants have not been included in the yearly totals, one of the reasons for this being that it does not appear that their baptisms were recorded either.

These entries raise a number of questions. For Seal and Ightham, about 10 per cent of those baptised are known to have been buried within a year, but there is no record elsewhere in Sevenoaks or the villages studied of numbers of infants being buried at the same time. Did the burial of chrisomers generally go unrecorded but, during the 1590s, was there a more rigorous cleric in Sevenoaks who entered them in the register, a number together, the next time there was an adult burial to record instead of noting them individually on the day they occurred? Even so, this means that in 1594, for example, there were at least eight births in addition to the 44 whose baptisms were recorded and infant mortality would have been about 25 per cent. Also, with about thirty burials a year, there were no long gaps between them; there were at least nine burials between that of William Wakling in March 1594 and that of Robert Vane's wife in September.

There do not seem to be the number of baptisms just prior to the entries of the burials to conclude that the chrisomers' baptisms were always recorded. For the end of February and March of 1594, there were four baptisms on 10th February (one of these infants was buried ten days

²⁰ Quoted by Cox, 60.

²¹ Terrick V.H. FitzHugh, *Dictionary of Genealogy*, Revised Edition, London, 1988.

later), one on 25th February, two on 3rd March and one on the 10th March. Except for 25th February, all these days were Sundays so that it does not look as if any of the new-born had to be baptised immediately.

TABLE 8 *Chrisomers in Sevenoaks*

Year	No. of Bapt.	No. of Burials	date	CHRISOMERS details	no.
1591	40	35		none recorded	
1592	44	42		none recorded	
1593	47	30		none recorded	
1594	44	25	14 Mar 1593/4 18 Sept 1594	William Wakling and four chrisomers – wife of Robert Vane and four chrisomers	8
1595	42	38	20 Feb 1594/5 23 Mar 1595 30 Jul 1595 9 Nov 1595	Henry Huchen and two chrisomers George West and two chrisomers Elizabeth, dau. of ? of London and a chrisomer Elizabeth, widow of Robert Wery and a chrisomer	6
1596	53	36	20 May 1596 25 Dec 1596	Mary Hawes and two chrisomers a nurse child of John Cox and a chrisomer	2
1597	33	30		none recorded	
1598	40	26	18 Mar 1597/8 20 Jul 1598	Henry Paris and three chrisomers widow Pock and two chrisomers	5
1599	47	37		none recorded	

Are the records for these few years the tip of an iceberg? Cox notes the unusual frequency which occurred in Aldenham, Hertfordshire, between 1637 and 1657. Aldenham is considerably smaller than Sevenoaks but in the six years 1642 to 1647, the burials of 21 chrisom children were recorded compared with the 21 recorded in Sevenoaks between 1594 to 1598. Were similar numbers of infants being buried in other years and in other parishes without being recorded?

But why were the baptisms not recorded? If the infant was sickly, presumably it was christened by the midwife, possibly without this subsequently being entered in the parish record. Midwives, both before and after the Reformation, were enjoined to baptise an infant if there was

any risk of it dying before a priest could arrive. Although, in an emergency, anyone could baptise, midwives often obtained a licence from the bishop, having been recommended by matrons of the parish and by their minister. When becoming licensed she undertook to be 'diligent, faithful and ready to help every woman travailing of child, as well the poor as the rich and not to forsake the poor woman and leave her to go to the rich and . . . to in no way exercise any manner of witchcraft, charms, sorcery or invocation'.²² Occasionally, where baptising in an emergency during a difficult confinement, mistakes could be made about the name or even sex of the baby which was perhaps why some infants were just called 'Creature'; an example of this occurred in Ightham when 'Creature, son of Thomas Coggar, baptised and buried' was recorded.

But the chrisomers could have been baptised elsewhere. Dr Roger Schofield, Director of the Cambridge Group for the History of Population and Social Studies, suggests that the chrisomers may have been infant deaths of wet-nursed children which occurred three or four weeks after a baptism recorded elsewhere in which case 'the parishioners would not know, or would be unwilling to specify, who the parents were'.²³ In this context, the entry for 25 December, 1596, is interesting in that, on that day, both a chrisomer and a nurse child are recorded as being buried. Was there a local 'entrepreneur' organising wet-nursing in Sevenoaks in the 1590s? If so, these extra burials would not imply any extra births in Sevenoaks itself.

Another suggestion following on from deaths of nurse children is that, when a child being nursed died, a healthy baby from a poor local family was substituted for it. In this case, the wet-nurse (or person organising the wet-nursing) would not want the chrisomer's name recorded.²⁴ But this again does not account for the number apparently buried on the same day.

The term 'nurse child' occurs in the register for burials in Seal fairly often (accounting for 5.6 per cent of the burials between 1565 and 1598).²⁵ In the Sevenoaks register, however, such burials can mainly be recognised only by the use of the form 'Jane, daughter of Davy Cronke of London', the term 'nurse child', 'nursling', 'nursed at/by' occurring only seven times in total between 1560 and 1650. If we assume that all

²² Cox, 56.

²³ Private correspondence, 27 July, 1994.

²⁴ Heard on a BBC Radio 3 talk, autumn 1994, but it has not been possible to trace the speaker.

²⁵ Fox, 236.

those children 'of London', 'of Maidstone', etc., were nurse children, there were 28 up to 1602, only 2.6 per cent of all burials.

Infant Mortality

Infant mortality has been studied in detail only for Seal where it was found that, of the 1,547 baptisms recorded between 1562 and 1641, 154 of the infants were buried before their first birthday. This rate of 100 per thousand is unusually low. Zell found that the rate for Staplehurst for 1538 to 1608 was 140 per thousand and for Brenchley, for 1560 to 1600, 144 per thousand.²⁶ However, he notes that, particularly for Staplehurst, there was considerable variation between the decades and, for the period 1568 to 1608, the average proportion is only 105 per thousand. The rate also falls in Brenchley, from 158 per thousand for 1560 to 1580 to 119 for the last decade of the century. Other studies of infant mortality quoted by Zell show rates of between 127 and 149 per thousand during the latter part of the sixteenth century.

In Seal, in addition to the 154 burials which can be related to baptisms, there are 56 burials of children whose baptisms have not been found. If two-thirds of these were burials of new-born infants, the proportion dying within a year would increase to approaching 12 per cent.

There are indications that other infants died in the first year or so. For example, John Budgeon had three sons baptised 'John' in April 1641, August 1643 and October 1644. Although no burials were recorded, it is likely that, since each subsequent one was given the same name, the first two both died.

Combining the infant mortality records for Seal with those in Ightham and Kemsing where baptisms and burials can be connected, it is found that approximately 30 per cent of those dying within a year actually died within a week of baptism whilst 60 per cent did not survive for a month.

Marriage to First Birth

There is no significant difference between the three villages with regard to time from marriage to first birth with about 14 per cent of the 295 women for whom this statistic is available definitely pregnant when they married and another 4 per cent where the baptism occurred between 240 and 270 days after the wedding. The data for the other 82 per cent is shown in Fig. 8; half the births occurred less than 14 months after the wedding.

²⁶ Zell, 248.

Months' from Marriage to First Birth

Seal, Kemsing and Ightham: 1560-1650

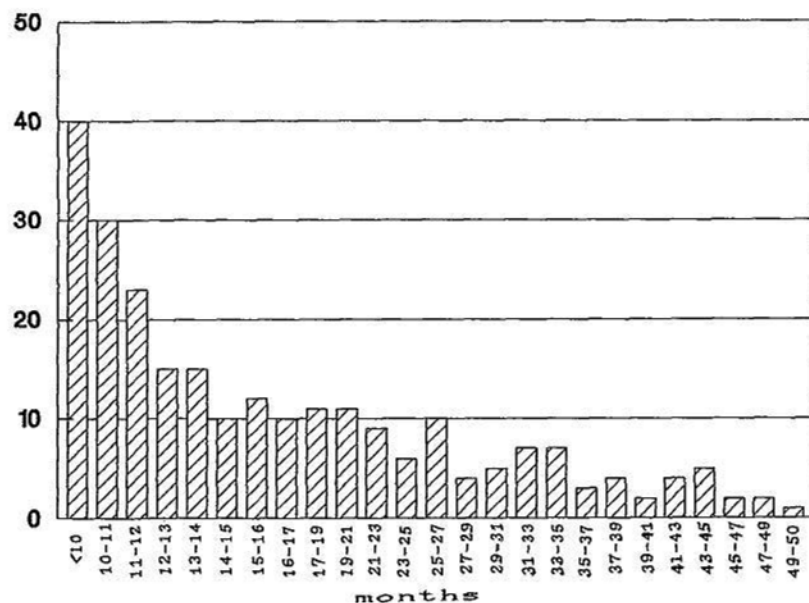


Fig. 8. Months from marriage to first birth.

The Employment of Wet-Nurses

Further study has not significantly changed the length of time between successive baptisms given in the previous paper with Ightham being similar to Seal and Kemsing and showing a similar reduction in this period when the first baby dies soon after birth. The fact that breast-feeding can delay a subsequent pregnancy has been known for a very long time but recent research shows that how effective breast-feeding is as a contraceptive depends on the total time spent suckling rather than the number of feeds.²⁷ The same mother can have one baby who is a fast feeder and another who suckles for much longer for each feed, in which case her period of infertility would be shorter for the first than the second, but with little or no supplementary feeding all normal babies in Tudor and Stuart times would have suckled for much longer, and until they were much older, than do most modern babies.

This effect is shown by the Glover family; Bartholomew Glover married Alice Parker in 1563 and they had nine children spaced over 22 years. Apparently, none of the children died as infants and the average interval between them ranges from about 30 months to 42 months with an average of 34 months. It is possible that the two intervals of 42 and 41 months indicate miscarriages but the Glovers appear to have been a very successful family with Bartholomew and Alice living all their married life in Ightham; Bartholomew died in 1600 in his sixties and Alice lived for another 23 years and must have been over eighty when she died.

In the villages studied the average time between births when the baby survived has been found to be between two and a half and three years and this agrees with other, similar, studies. Where this interval was consistently much shorter, as it was with families such as John Tebold and his wife Clemence described in the previous paper,²⁸ wet-nurses may have been employed. The obvious example in Ightham is William James, lord of the manor from 1627 to 1661, for whom the baptisms of twelve children were recorded between 1629 and 1647 with only one burial. The average interval between the baptisms of the first ten was 17.3 months, very similar to the average interval between the baptisms of the first twelve of the Tebold children born in Seal at the end of the sixteenth century.

²⁷ *The Guardian*, 7 April, 1994, reporting research carried out by the Medical Council Research Council's Reproductive Biology Unit in Edinburgh.

²⁸ Zell, 248.

But was Ightham different from Seal and Kemsing?

Although, so far, the data for Ightham has been combined with that for Seal and Kemsing on the basis that there was no significant difference between Ightham and the other two, the records do give the impression that there were a number of differences between the types of family in Ightham compared with those in the other two villages:

- county gentry in Ightham, parish gentry in Seal
- in Seal and Kemsing, there were families such as the Christophers, Frenches and Fremlyns who can be traced for a number of generations and often with brothers each marrying and having children in the village; this is not the case in Ightham
- the much larger number of surnames for which only a single birth is recorded in Ightham compared with Seal and Kemsing.

These differences are described below and the conclusion reached that there was indeed a difference between Ightham and the other villages. A large part of Ightham was Chart Land, good for neither arable nor sheep so that orchards took up considerable areas of the cultivated land with demands for extra labour in the fruit-picking season which could have brought families into the parish for short periods. In addition, most of it was owned by the county gentry so that the majority of Ightham's population would have been working as farm labourers, hired for a given length of time. Thus, men of Ightham would have tended to change their place of work, often moving across parish boundaries even if they did not go very far.

Pastoral farming in Seal and Kemsing made more all-year-round demands and the land was owned by yeomen who, together with their prosperous tenant farmers, worked it mainly with help from their extended families.

Seal Gentry

In Seal, most of the wealthy families were prosperous, land-owning yeomen with extended families in the neighbourhood. Where the land was rented, the tenant farmers seemed to continue to occupy the same land for considerable periods.

Seal and Kemsing did have their gentry: Richard Tebold, a lawyer, lived in Kemsing and at Stonepits but he also had a house in Saint Bartholomew's and spent a considerable part of his time in London; Steven Tebold was also a lawyer out of the parish for long periods; John Tebold – Richard's brother and Steven's father, was of the parish gentry and his large family was described in the previous paper. Many of the other occurrences of the title 'gent.' which appear in the parish records refer to men marrying women from the village: Thomas Nevinson and

William Gosnoll who married daughters of Richard Tebold; Thomas Wale who married Richard Tebold's widow; Richard Polhil, 'a mercer of London and a gentleman of Otford', who married one of Steven Tebold's daughters; Peter Stowell, of Rochester, who married Elizabeth Porter and had four children baptised in Seal although the family continued its connections with Rochester.

Other 'gents' were mainly heads of small families or single references for which no details are known but there are two which are of interest: Thomas Gylmyn 'of Shoreham, gent.' had two nurse children buried in Seal in the 1590s. Francis Titchbourne had two children baptised in the village in September 1615 and November 1616 but when he died 'at Seal on Sunday night being 28 May 1620' he was 'buried the Tuesday next following at Edenbridge'. Since his two children were baptised only fourteen months apart, perhaps his children were wet-nursed in Seal and the family was more fortunate than the Gylmyns in that the children survived.

Ightham Parish

Ightham was a long, narrow parish stretching five miles from north to south, 'the whole area resembling roughly a hen with the neck of an ostrich' being the description given it by Edward Harrison²⁹ who surmised that, when the parish was carved out of the hundred of Wrotham, its owners claimed for it a share of the downland for grazing whilst Wrotham endeavoured to surrender the minimum amount of land possible. The long neck is part of the St. Clere estate which was part of the parish but not part of Ightham Manor – see Fig. 9. The northern part of this estate is on the chalk downs at a height of about 700 ft. above sea level but the land descends steeply from this height to under 400 ft. before rising again to Oldbury and Raspit Hill which form part of Ightham Common. South of the Common the land again falls, sometimes precipitously, to about 300 ft. at Ightham Mote. Part of the area is scored with deep ravines, one example being at Styant's Bottom.

The sandy forest and moorland to the west, known as Ightham Common, was not only not easy to cultivate but also provided poor feeding for sheep and cattle so that the common pasture land was in the more fertile area near Ivy Hatch. Ightham parish consisted of a number of more or less isolated hamlets such as Oldbury, Redwell, Bewley

²⁹ Edward Harrison, 'The Court Rolls and Other Records of the Manor of Ightham as a Contribution to Local History', *Arch. Cant.*, xlviii (1986), 171.

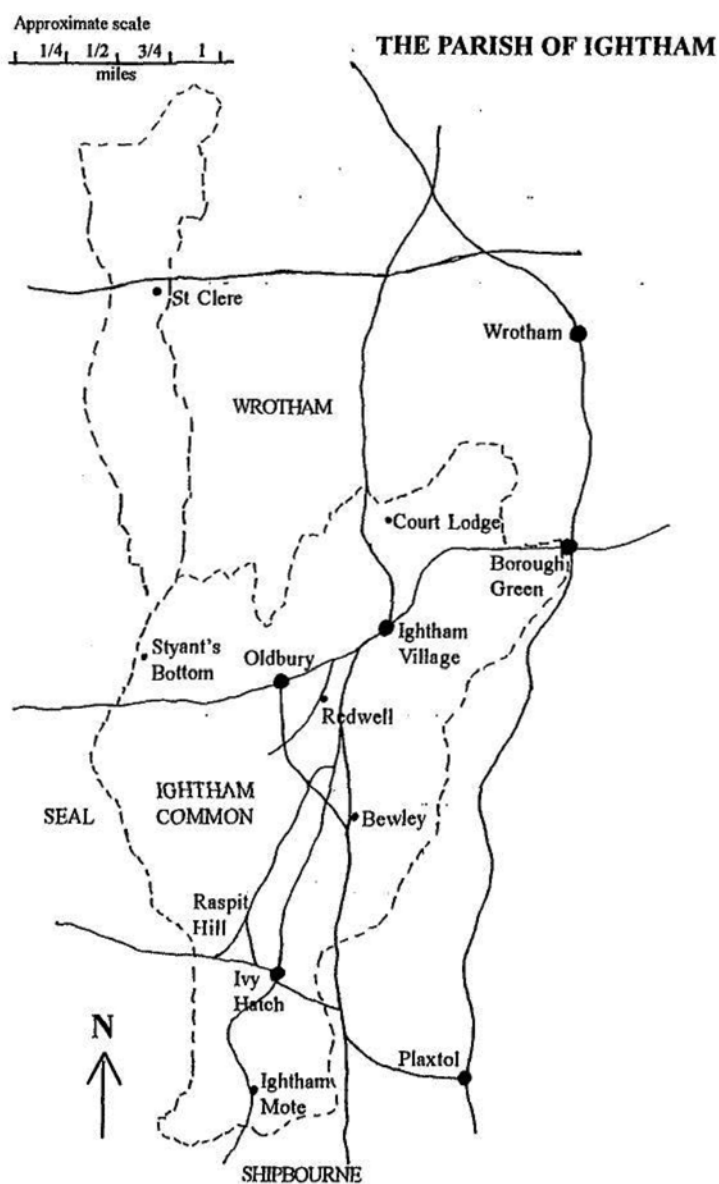


Fig. 9. The parish of Ightham.

('beau-lieu', perhaps because of its good position on the fertile, high ground to the east of the parish), Ivy Hatch and Ightham Mote.

The Great Houses of Ightham

In contrast to Seal, Ightham had three great houses – Ightham Mote, Ightham Court and St. Clere³⁰ whose owners were part of the county gentry. The parish records show that they had differing fortunes regarding their offspring – or lack of them.

Christopher Alleyn, knight, lived at Ightham Mote in the second half of the sixteenth century with six children baptised in Ightham church between 1564 and 1672 and a servant buried there in 1564. This is the only burial of a servant noted in Ightham during the period studied compared with 12 in Seal. Alleyn's heir, also called Christopher, was only sixteen when his father died and, by the end of the century, Ightham Mote was owned by the Selbys who came from the Scottish borders where they were lords of the eastern marches with Scotland. After a long military career, the first Sir William, a bachelor, retired to Ightham Mote where he died in 1611, being succeeded by his nephew, the second Sir William, who also died childless, at the age of 88, in 1641.

The manor and estate of Ightham, with the manor house called Court Lodge, was bought from Percival Willoughby of Chiddingstone in 1600 by William James, a merchant whose father had fled from the Low Countries to London where he set up in the brewing business and became a member of the Worshipful Company of Brewers. William's wife was the daughter and heiress of another wealthy merchant but William, moving to Ightham soon after his marriage, settled down as a country squire and was granted arms by James I in 1611. Of his four recorded children, only the eldest son, William, baptised in 1602, survived infancy.

William (2) succeeded his father in 1627 and took an active part with the other local gentry in the events leading up to the Commonwealth, becoming a declared Parliamentarian in the 1640s like his friend Sir John Sedley from St. Clere.³¹ William married Jane Miller, the daughter of Nicholas Miller, a neighbouring landowner from Crouch, in the late 1620s and they had twelve children as described above (p. 264).

In the aisle of Ightham church there are brasses to three generations of the Multons who owned St. Clere in the sixteenth century. William Lambarde, author of *A Perambulation of Kent*, stayed at St. Clere during

³⁰ The details of the occupants of these houses are taken from Bowra.

³¹ See Bowra, 67, for details of his activities.

his travels round the county and, in 1570, he married Jane Multon, the daughter of his host George Multon, the marriage taking place the day before her seventeenth birthday. Unfortunately, she died, childless, three years later from smallpox and Lambarde set up a marble monument to her memory in Ightham church.

The three brasses commemorate Jane's parents, her brother George who died in 1618 leaving a wife, Athelreda/Audrey who lived for another twenty years and George and Athelreda's son Robert and his wife Deborah. Deborah died in October 1619 when Robert was only twenty-five, perhaps due to complications during a first pregnancy and Robert, although he lived until 1644, does not seem to have married again. About 1630, he sold St. Clere to Sir John Sedley whose family lived there for about a hundred years, the baptisms of three children of 'Sir John Sedley, baronet' being recorded between 1627 and 1636.

Length of Time in the Village

In Seal, there were a number of families like the Christophers, described in the previous paper, which can be traced from generation to generation throughout most, if not all, the period under investigation. The Frenches, excluding children born to French daughters, account for over 7 per cent of the total number of baptisms recorded in Seal between 1562 and 1655. Similarly, in Kemsing, there were the Fremlyns (accounting for 9 per cent of the recorded baptisms), Chownings and Kips, having children born in the middle of the sixteenth century, grandchildren at the end of the century and great-grandchildren in the seventeenth. But in Ightham it is unusual to be able to assemble families of two generations.

The Ightham Stretfields can be reconstituted to show three generations but Thomas, who was churchwarden in 1608, does not appear to have had any siblings, at least in Ightham, and only one of his sons married and had children in the village. The Hodsoles are another 'three generation family' with Thomas, gent., and his wife Dorothy, who died in their fifties within two months of each other in 1631, having eight children of which William (the fifth child and fourth son) appears to have been his heir. There were also the Hadlows but, of the 46 baptisms (4 per cent of all recorded Ightham baptisms), many of them cannot be fitted together as 'families'.

In contrast, in addition to the baptisms of single children, there are records such as those for the Busbys with John Busby marrying Anne Shawe in 1586 and their burials in 1617 and 1616, respectively, but no children of the union were baptised in Ightham.

This difference between the villages is shown in Fig. 10 where the solid line represents the length of time Seal and Kemsing families were present in their respective villages with the dotted line for Ightham. This

Length of Time Families Present

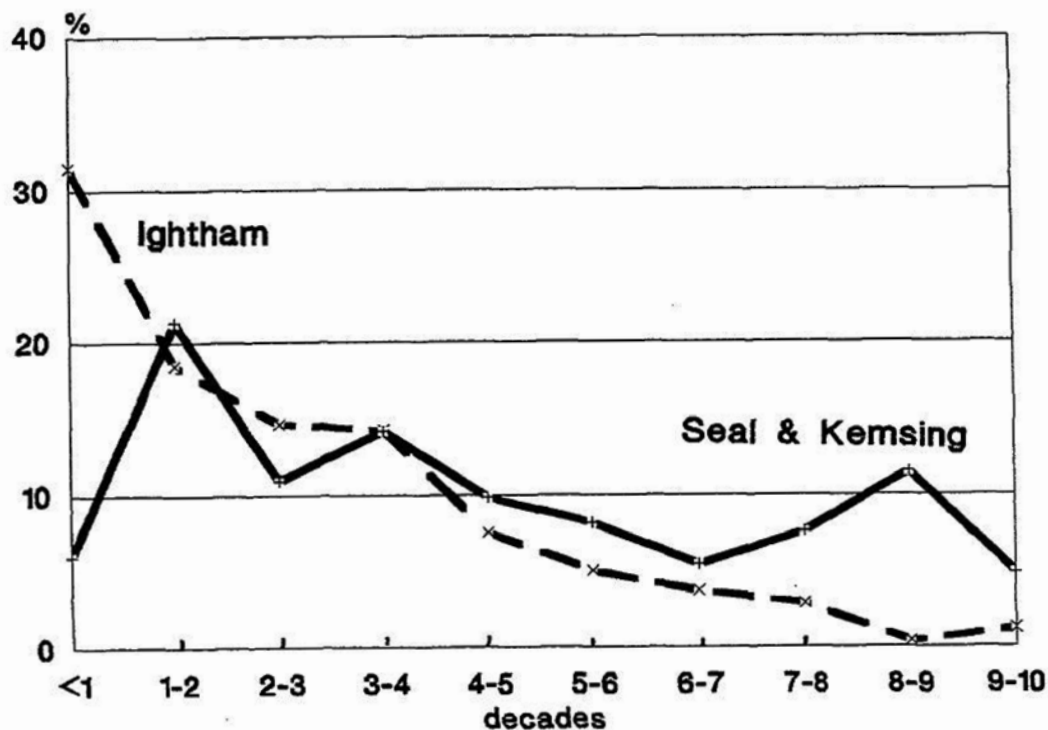


Fig. 10. Length of time families present.

shows the large number of Ightham families whose presence is known for ten years or less and the large number present for 80 and 90 years in Seal and Kemsing.

Single Occurrence of a Surname

In Ightham the proportion of surnames for which only a single baptism was recorded is much higher than in Seal and Kemsing. From 1562 to 1602, 9.5 per cent of the 613 Ightham baptisms were the only event recorded for that surname compared with only 4.2 per cent of the 1,015 baptisms in Seal and Kemsing in the same period. This difference would be expected to occur by chance less than once in a thousand times³² and seems to imply that there was a definite difference between Ightham and the other villages. With no other record of a particular name, the most likely alternatives are that either the family stayed in the village for only a short time or the record is of the baptism of a first-born child with the mother coming back to her 'home' village for the birth. In such cases where the marriage took place in the village, the surname would not have been categorised as 'only one baptism recorded' but there are a few which can be identified as 'baptisms of first children'. For example, Thomas, son of Thomas and Maria Carpenter baptised 12 July, 1649, was the eldest son of Thomas and Mary Carpenter who lived in Kemsing and William, son of Richard Thomas, gent., baptised 7 May, 1570, was the eldest son of Richard Thomas of Seal.

Population Movement

Zell illustrates the fluidity of the Wealden population by noting the names of fathers of children baptised in a given parish and comparing the numbers of 'reproducing surnames' in ten-year periods. His assumption is that, if new surnames appear in later decades, new families are arriving in the parish and the figures for Staplehurst³³ are reproduced in Table 9 together with those for Sevenoaks, Seal and Kemsing and Ightham. The population of Staplehurst was more or less constant for the whole period implying that, as new families arrived in the parish, existing ones were either leaving or dying out. In Sevenoaks and the villages the population was growing during the second half of the sixteenth century so that more new families entered the parish than old ones disappeared.

³² See Appendix for details of the significance test.

³³ Zell, 255.

TABLE 9 *Reproducing Surnames*

1562-71 1572-81 1582-91 1592-1601							
SEVENOAKS							
a. no. of names	142	158	171	182			
b. new names		81	68	65			
c. b as % of a		51	40	36			
SEAL and KEMSING							
a. no. of names	85	102	109	81			
b. new names		54	46	24			
c. b as % of a		53	42	30			
IGHTHAM							
a. no. of names	61	68	80	86			
b. new names		41	50	39			
c. b as % of a		60	63	45			
SEVENOAKS, SEAL, IGHthem & KEMSING							
a. no. of names	254	281	304	298			
b. new names		126	119	100			
c. b as % of a		45	39	34			
STAPLEHURST M. Zell	1538-48	1548-58	1558-68	1568-78	1578-88	1588-98	1598-1608
a. no. of names	121	119	127	107	112	118	127
b. new names	54	67	44	31	41	52	
c. b as % of a		45	53	41	28	35	41

Combining the results for Sevenoaks and the three villages shows a reduction in the proportion of new names in each decade showing that a considerable amount of movement was between the villages and Sevenoaks.

That a large number of young, unmarried people left the village in which they were born is implied by the number of children for whom nothing is known but their baptism, but Table 9 shows that in the Sevenoaks area studied, as in Staplehurst, married men with families were also fairly mobile. There seems to be slightly more change in Seal, Kemsing and Sevenoaks than in Staplehurst but, in Ightham, many more new names appeared than would be expected, if the population had changed at the same rate as in the other parishes; the proportion of men staying in Ightham only a short while was much higher than elsewhere.

Another measure which Zell uses to indicate family mobility is the number of children of one father baptised in the parish. His figures for

SEVENOAKS, SEAL AND IGHTHAM – 1560 TO 1650

TABLE 10 *Number of Children Baptised of the Same Father*

no. of children	Seal & Kemsing no. %	Ightham no. %	Staplehurst no. %	Brenchley no. %
1	261 36	200 43	153 35	106 29
2	114 16	105 22	86 20	53 14
3	108 14	45 10	55 13	47 13
4	74 10	32 7	28 6 10	38
5	65 9	26 6 10	45 10	35
6+	113 15	59 13	69 16	87 24
Total	735	467	436	366

Staplehurst and Brenchley are given in Table 10 together with those for Seal and Kemsing and Ightham;³⁴ as for the two Wealden villages, in some cases the children were of more than one wife. In order to avoid the inclusion of the younger children of families started just before recording began, apparent one or two children families up to the mid-1560s have been excluded unless the parents' marriage was recorded. Some of the Seal fathers are sons of an established family, having one or two children baptised in the village and then, since nothing more is recorded for them, either dying young, not remarrying after the death of their wife or moving on to somewhere else. These figures are shown in graphical form in Fig. 11.

As noted by Zell, Brenchley was more stable than Staplehurst which was very similar to Seal but with Ightham, in agreement with other measurements, showing a higher degree of mobility.

Family Reconstitution across Parish Boundaries

Some families for whom some 'events' were recorded in one parish and others in another have already been mentioned. By looking at three

³⁴ Zell, 255; the records for Sevenoaks have not been analysed in sufficient detail to give this detail.

Number of Children per Father

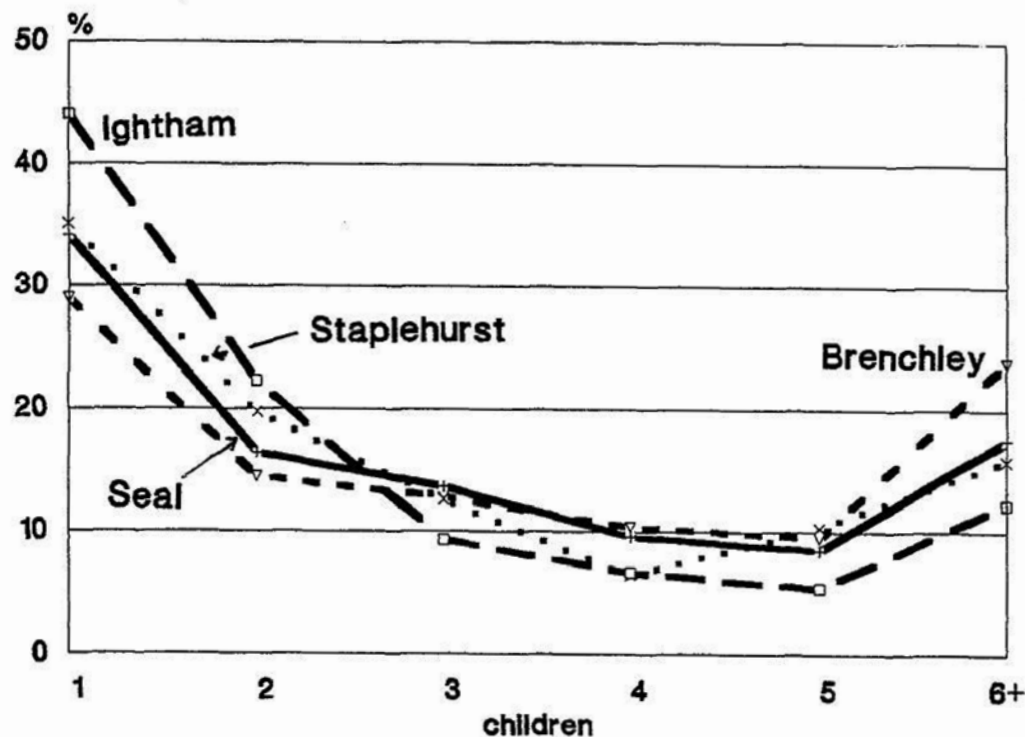


Fig. 11. Number of children per father.

adjacent parishes, it has been possible to identify families that moved across parish boundaries and if Sevenoaks and other places in the locality were examined in as much detail as Seal, Kemsing and Ightham, extensions to others would no doubt be found. Here just a few examples are given.

Women going back to the parish from which they came for the birth of their first child would not be identified, if one parish was investigated in isolation. For example, the burial of Walter Swan's daughter was recorded, in Seal, on 17 March, 1562, with two other children being baptised later. The Ightham records show that Walter Swan married Alice Denman in Ightham in 1560 and Margaret was baptised there in January 1562.

Thomas Hodsoll, the first of the three Hodsoll generations in Ightham during the period studied, had a second son Steven who married in 1638 when he was twenty-seven in Seal where he settled and had four children baptised there, two of whom died soon after birth. He was buried in Seal in 1652.

William Petley had nine children baptised in Ightham between 1580 and 1593 and John Petley, gent., had nine baptised between 1626 and 1641. None of William's sons baptised in Ightham are called John and, in any case, looking just at the Ightham records, the time interval is rather long for him to have been a son and not long enough for him to have been a grandson. Further investigation shows that William moved to Sevenoaks between 1593 and 1596 and there three more children were baptised, the youngest one being John, baptised in 1599. This John was very likely the John Petley having children from 1626 onwards; he would have been 27 when the eldest son, Thomas, was baptised.

Two generations of the Petleys can thus be assembled and these are shown in Table 11. With six out of 21 children dying under a year, the figure of only 10 per cent given above for infant mortality appears suspect. However, these are the only six burials recorded for children amongst the 54 baptisms of children whose surname began with 'P'.

Nicholas Hooper

Nicholas Hooper's history (assuming all the references are to the same man which seems likely) shows not only the way families moved from parish to parish but also how professional men travelled over a large area in the course of their business. From the investigation of Seal, Nicholas is known as the scriptor of at least four wills,³⁵ the first in 1574 and the

³⁵ Jean Fox, 'Wills in Seal', *North-West Kent Family History*, vol. 6, 10 July, 1994, 331; current investigation is showing that he wrote many other wills in, at least, Tonbridge and Kemsing as well as Seal.

TABLE 11 *The Petley Family*

William Petley:				
	baptised	buried	age at burial	
in Ightham:				
Elizabeth	8 May 1580	12 May 1580	<1 week	
Lambard	15 May 1581	21 May 1581	1 week	
George	22 Sep 1583			
William	13 Dec 1584	10 Mar 1585	3 months	
William	6 Mar 1586	17 May 1586	2 months	
Mable	11 Jun 1587	1 Sep 1587	2½ months	
Agnes	3 Nov 1588			
Matthew	9 Feb 1591			
Winifred	1 Jul 1593			
in Sevenoaks:				
Elizabeth	10 Aug 1595			
William	19 Sep 1596			
John	10 Jun 1599			
John Petley:				
	baptised	buried	age at burial	
in Ightham:				
Thomas	3 Oct 1626	9 Apr 1627	6 months	
George	23 Jun 1629			
John	9 Dec 1630			
Elizabeth	28 Feb 1632			
Jane	22 Dec 1633			
William	24 Mar 1635			
Ralph	2 May 1637			
Bennett	28 Feb 1639			
Frances	24 Mar 1641			

last in 1610. No Nicholas Hooper is recorded as attending Oxford or Cambridge in the latter half of the sixteenth century but, although such a qualification may not have been necessary for a scribe, he may have attended one of the Inns of Court.

John Hooper was parson of Ightham in the 1560s and 1570s and Nicholas Hooper, possibly a younger brother of John, married Katherine Page there on 3 October, 1575. There are no other Pages in Ightham so perhaps Katherine came from Shipbourne where they had four children in 1576, 1578, 1582 and 1585, the third a son called Robert. The next reference found to Nicholas is the baptism of two more children in Tonbridge in 1588 and 1595. Thus, it seems that Nicholas first carried out the duty of scribe in Seal before his marriage, but continued to be called upon by some of the Seal parishioners throughout his career, visiting them from Shipbourne and Tonbridge. The journey, given a good

horse, is not particularly long, but it does involve the climb up the steep, clay escarpment between Underriver and Seal. The three wills of 1576, 1598 and 1610 were written on the 15th May, 30th September and 7th April, respectively, times of the year when the roads should not have been too bad. When Nicholas wrote William Denman's will in 1598 he was accompanied by Robert Hooper who also witnessed the will; this could have been his son who would then have been 16. It would be interesting if more could be discovered about Nicholas, perhaps by finding wills he wrote in other parishes.

The population of parishes in the Kent Weald – especially those in the cloth-making region – was found by Zell³⁶ to be continually changing and he pointed out that it is crucial to include migration in population studies of Kent, if any overall conclusions are to be reached. This investigation of Sevenoaks, Seal, Kemsing and Ightham concludes that the population of Seal, Kemsing and Sevenoaks changed in a similar way to the villages in the Weald, but that the population of Ightham changed even more rapidly. By searching for particular names in other parishes in the locality, it has been possible to build up a more complete picture of some of the Ightham families. This emphasises Zell's recommendation; where local migration was of the magnitude found in this part of Kent, if complete families are to be reconstituted, it is necessary to look at the records for a number of parishes.

APPENDIX

Calculation of Populations

The average population of Sevenoaks has been calculated on the basis that the birth rate was 35 per thousand persons³⁷ and also on the assumption that the baptism and burial rate was the same, in each decade, as it was in Seal. The calculations are shown in Table 12.

The populations of Kemsing and Ightham have been calculated using the same method as for Sevenoaks since, as they are much smaller than Seal, family reconstitution as carried out for Seal is considered too unreliable. Assuming a birth rate of 35 per thousand for Seal, the population for the 1560s would have been about 550, over 25 per cent more than the figure obtained using the method described in the earlier paper; both methods give a similar average for the whole period.

³⁶ See Bibliography.

³⁷ This is the method used by Zell, 234.

TABLE 12 *Calculating the Population of Sevenoaks*

	SEAL ¹			SEVENOAKS		SEV/SEAL ratios			SEVENOAKS population ^{2,3}	
	bapt.	bur.	pop.	bapt.	bur.	bapt.	bur.	aver.		
1562 to	195	131	432	338	264	1.73	2.02	1.87	810	966
1572 to	200	104	587	393	215	1.97	2.07	2.02	1183	1123
1582 to	236	136	733	416	266	1.76	1.96	1.86	1363	1189
1592 to	161	135	666	458	322	2.84	2.39	2.61	1742	1309
1602 to	183	131	498	511	382	2.79	2.92	2.85	1421	1460
1612 to	190	138	534	502	417	2.64	3.02	2.83	1512	1434
1622 to	214	172	543	512	444	2.39	2.58	2.49	1350	1463
1632 to	231	179	590	424	362	1.84	2.02	1.93	1138	1211
1642										
total	1610	1126		3554	2672					
aver./yr	20	14	573	44	33				1315	1269

Notes:

1. Population of Seal as calculated, Seal 1993
2. Population of Sevenoaks estimated by multiplying that of Seal by average of ratios for baptisms and burials
3. Calculated on basis of birth rate equal to 35 per thousand

Single Baptisms

A 'single' baptism in this context is where the only recorded event for a particular surname is one baptism. Using a χ -squared test to compare the number in Ightham with the number in Seal and Kemsing combined, for 1562 to 1602, gives a value for χ -squared of 16.9 which implies that this difference would be expected to occur by chance in less than one case in a thousand.

TABLE 13 *Single Surnames in Seal and Ightham*

	Ightham	Seal and Kemsing
Total no. of baptisms	613	1015
'single' baptisms	58	43
expected if single were same proportion of total in all villages	38	63
χ -squared test:		6.35
χ -squared	10.53	
no. of degree of freedom	16.88	
significance level	1	
	<0.1%	

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