# 2

# *The Supply of Armies and Garrisons by Sea, 1320–1360*

## Logistics and Preparations for War: An Overview of Procedures

Logistical preparation was one of the most important and complicated aspects of any campaign. Indeed, ensuring that an army would be fully supplied with foodstuffs has been described as one of the most difficult problems faced by any medieval government.[1] And once that army had made inroads and established garrisons, as the English did in Scotland, it was necessary also to make sure that those islands of occupation were fully supplied.[2] Without adequate provender the intended strategy of an invading force would collapse within weeks. Once food ran out and soldiers became hungry discipline would suffer and desertions increase. This was as obvious to a medieval commander as it is to modern strategists.[3] Therefore, royal campaigns during the Edwardian period were usually preceded by months of meticulous planning.[4] This is not to say that in every campaign during this period everything went according to plan and the army remained continually supplied with food. The 1322 and 1327 Scottish campaigns provide stark reminders that any medieval expedition, regardless of the prepara-

[1] C. S. L. Davies, 'Provision for armies, 1509–50: a study in the effectiveness of early Tudor government', *EcHR*, second series 17 (1964–65), pp. 234–48, p. 234. See also D. L. Smith, 'Muscovite logistics, 1462–1598', *The Slavonic and Eastern European Review*, 71, no. 1 (January, 1993), pp. 35–65, for an interesting discussion on Russian logistical operations that highlights the complexity of organising this dimension of an expedition.

[2] On the supply of garrisons, see D. Cornell, 'English castle garrisons in the Anglo-Scottish wars of the fourteenth century', (unpublished PhD thesis, University of Durham, 2005), pp. 60–75.

[3] See, for example, M. K. Vaughn, 'For circumstances must dictate', pp. 1–3 in which Dr Vaughn draws attention to the fact that logistics are as vital to the success of a campaign as tactics and strategy.

[4] See H. J. Hewitt, *The organization of war*, Chapter 3; M. Prestwich, *War, politics and finance*, Chapter 5 and *idem*, *Armies and warfare*, Chapter 10. These three accounts provide detailed analysis of the preparations, which went into campaigns in terms of supplying armies with victuals.

tions, could disintegrate due to lack of provender.[5] And these two campaigns were a far cry away from the comment made by the Venetian envoy in 1497 who stated that, 'I have it on the best information that when war is raging most furiously, they (the English) will seek for good eating, and all their comforts, without thinking of what harm might befall them'.[6] This chapter analyses the varying methods available to the government for supplying its forces.

During the forty years covered by this book the king had three major systems for supplying his armies: the crown could issue general purveyance orders, request that a sheriff from a particular county collect a specified amount of supplies, or involve private merchants in the operation.[7] The procedures for the collection of victuals therefore varied according to which method the crown employed, although during the Edwardian period, all three methods usually operated concurrently.[8] The most prominent of the three, especially in the campaigns before Edward III's French wars, was purveyance or the kings right to prise. This allowed the king to order anyone to sell foodstuffs and other supplies to the royal purveyors. This system was the medieval government's equivalent of a compulsory purchase order.[9] The king could appoint sergeants-at-arms, usually with royal clerks in attendance, to go into the chosen counties to collect, record and pay for the foodstuffs ordered by the crown.[10] The second method employed by the crown involved issuing an order to the sheriff of a designated county to collect a specified quantity of supplies from his bailiwick and then forward them to the collection point for trans-shipment. In 1336 Robert de Causton, sheriff of Norfolk, collected 196 quarters 6 bushels of malt and 27 bacons and sent them

5 For 1322, see *Flores*, III, p. 210; *Scalacronica*, p. 89; *Brut*, p. 225; *Anonimalle*, p. 111; *Melsa*, III, p. 345; *Bridlington*, p. 79; *Murimuth*, p. 3; *Polychronicon*, VIII, p. 317. For 1327, see Le Bel in C. J. Rogers ed. *The wars of Edward III*, pp. 4–19.

6 Quoted in A. Goodman, *The wars of the roses* (London, 1981), p. 153.

7 J. Masschaele, 'Transport costs', pp. 266–67 suggests that the sheriff was the main agent in the arena of supply. However, this comment underestimates the role of private merchants, particularly after 1336 in the supply system. Alternatively D. S. Bachrach, 'Military logistics', p. 429 argues that operating the two systems of purveyance and private supply by merchants direct to the army was not generally successful. However, these two systems worked effectively in the Scottish wars of Edward III and the merchants of King's Lynn were instrumental in the supply operations from the late 1330s. See also M. K. Vaughn, 'For circumstances must dictate', pp. 234–76 for a discussion on how supplies were collected using these methods.

8 It has been suggested before that it is difficult to study the victual operations in the medieval period. See, for example, E. Amt, 'Besieging Bedford: military logistics in 1224', *JMMH* 1 (Woodbridge, 2001), pp. 101–24, p. 101. However, the Scottish and French wars of Edward II and Edward III are well illuminated with documentary evidence, which throws light on most aspects of the supply systems employed by the crown during this period.

9 A good discussion of this procedure can be found in C. Given-Wilson, *The royal household and the king's affinity* (New Haven, 1986), pp. 41–48.

10 *Rot. Scot*, I, p. 207, and R. Partington, 'Edward III's enforcers', provide examples of the sergeant-at-arms' role in purveyance. See also R. A. Kaner, 'The management of the mobilisation of English armies', p. 215.

to Ipswich and Great Yarmouth for the supply of the northern fleet.[11] Usually, though, for the royal campaigns, the sheriffs would be ordered to gather much larger amounts of victuals for dispatch to the supply depots of Newcastle or Skinburness, if the campaign was to be in Scotland or to King's Lynn, Sandwich or Portsmouth if the destination was France.[12] The third process that the king could employ was to allocate the task of supplying armies or garrisons to merchants. For instance, William de la Pole played an important role in supplying Edward's army at the siege of Berwick in 1333.[13] But the two most significant merchants in this respect were Thomas and William Melcheburn of King's Lynn. Thomas and William were influential East Anglian merchants and almost single-handedly supplied the Scottish garrisons during the 1340s. They were throughout their careers deeply involved with first local and then national affairs, being custom collectors, royal advisors, envoys, king's bankers, sub-admirals and ship-builders.[14]

The above methods were used by the crown to supply the forces it raised. Yet, it is likely that alongside these centralised procedures for supply the magnates serving in any campaign would organise foodstuffs for themselves and their retinues. Both Andrew Harcla and Aymer de Valance sent ships to supply their retinues in the 1322 campaign; William de Bohun, earl of Northampton employed two of his ships to supply him with provender during his campaigns in Scotland in 1336, and in 1347 the earl of Lancaster was supplied by his own ship, the *Cogge Thomas of Lancaster*, during the siege of Calais.[15] Whether or not

[11] E101/20/7, mm. 1, 2.

[12] E101/17/1 provides evidence that victuals for the St. Sardos campaign were to be shipped from King's Lynn. E101/17/3 shows supplies at Portsmouth. The involvement of the sheriff within the purveyance system could lead to corruption. However, it has been pointed out that although this did occur, it was in many ways the lesser evil of the many corrupt practices performed by the sheriffs. Edward III tended to keep as tight a reign as possible over his officials and there was a marked increase in judicial reviews and oyer and terminer commissions during the period of Edward's heightened campaigning years in the 1350s. On the corruption of sheriffs in the purveyance process, see R. Gorski, *The fourteenth-century sheriff: English local administration in the late middle ages* (Woodbridge, 2003), Chapter 4, pp. 112–19.

[13] See *Cal. Inq. Misc.*, II, *1307–1349*, no. 1496, p. 365; E372/177, m. 52; E. B. Fryde, *William de la Pole*, p. 42.

[14] On the Melcheburn's roles during this period, see *CPR, 1327–30, p. 104*; *CCR, 1333–37*, p. 58; *CPR, 1340–43*, pp. 87, 146, 212; *CPR, 1345–48*, p. 248; *Foedera*, III, i, pp. 7, 24; E101/19/30; E101/19/31; M. Livingstone and M. Witzel, *The road to Crécy: the English invasion of France, 1346* (Harlow, 2005), p. 95. These sources provide details of all their activities during this period. Of course, private merchants acting on their own could supply armies but generally only when the force it was supplying was stationary such as those at Berwick in 1333 and Calais in 1347. Merchants did however help provision the 1327 Weardale army.

[15] *CPR, 1321–24*, pp. 90, 107, 204; *Rot. Scot.* I, p. 417; *CPR, 1345–48*, p. 350. One of Valence's ships was called the *Garland* and de Bohun's ships were called the *Peter* and the *Katerine* commanded by Nicholas atte Putte and Roger Broun.

magnates organised their own supplies on a regular basis is difficult to establish because evidence of them doing so would not normally find its way into the central records.

This point is of more than academic interest because it affects whether we can safely assume that the foodstuffs collected for the royal campaigns of this period were for the consumption of the royal household and the general levies, rather than the contingents brought by the magnates. Moreover, if magnates did supply themselves, and their retinues, this would also increase the length of time the collected victuals, noted below, would last. It would seem reasonable to expect the magnates to supply themselves at the beginning of the campaign because an individual lord would have access to resources from his own estates. Furthermore, since the king would also expect monetary payments from those receiving the supplies he had collected by means of purveyance a magnate could save himself large amounts of money by supplying himself, and his retinue, with foodstuffs he had sourced from his demesne lands. Finally, most magnates were accustomed to a certain lifestyle and it is unlikely that they would want to experience the privations of the ordinary soldier on campaign. Indeed, the promise of adequate supplies would be more likely to attract men to their service, which would be an important consideration for any lord who had an indenture with the crown to fulfil. Thus, during the Welsh wars of Edward I several magnates certainly took the precaution of supplying their retinues in order to guarantee that men under their command would not desert on the grounds of inadequate supplies.[16] Evidence relating to the 1327 Weardale campaign also suggests that magnates supplied themselves with victuals. The Bishop of Ely employed three ships for this purpose.[17]

These three systems of supply were of course interrelated and purveyance was crucial to all but the third method. The history of this practice has been dealt with in other works, but in general it stemmed from the ancient right of kings to take goods for their households. Purveyance was probably the issue, arising as a direct consequence of the increased militarisation under the Edwardian kings, which attracted the most complaints. Parliament after parliament aired grievances on the problems related to its use, and although the system became less demanding in the 1340s and 1350s, and its nomenclature changed, the government never really altered the essence of the system.[18]

16 D. S. Bachrach, ' Military logistics', p. 429, n. 30.

17 *CPR, 1327–30*, p. 141.

18 *Rot. Parl. IV*, pp. 340, 370: *R.P. V*, pp. 16, 17. For a detailed examination of the protests that purveyance created, see G. L. Harriss, *King, parliament and public finance in medieval England to 1369* (Oxford, 1975), Chapter 16, especially p. 376; E. B. Fryde, *Studies in medieval trade and finance* (London, 1983), p. 283; M. Prestwich, *Armies and warfare*, pp. 254–59. Of similar relevance is J. R. Maddicott, 'The English peasantry and the demands of the crown, 1294–1341', *Past and Present supplement 1975*, especially pp. 24–34. *Idem*, 'The county community and the making of public opinion in fourteenth century England', *TRHS* 28 (1978), pp. 27–43, p. 39, which details some instances of resistance to the king's collectors; W. R. Jones, 'Purveyance for

The extent of victual supply for the maintenance of mariners in royal service is difficult to establish. The main reason for this is that mariners usually served for much shorter periods than conventional contingents. For example, vessels in the fleet that transported the king to Brittany in 1342 served on average for forty-four days, and the majority (63%) of ships had completed their service by October 1342, whereas the army campaigned into early 1343.[19] Furthermore, when orders to arrest ships were issued they usually specified that the vessels should turn up well victualled and munitioned, or '*bien aparaille*'.[20] In 1346, for example, every ship in the transport fleet carried enough supplies for fifteen days.[21] Therefore, at the outset of a ship's period of service it usually carried enough victuals for the crew to sustain themselves. Alternatively, mariners could be paid their wages in foodstuffs. During the period 1337–49 Nicholas Pyk indented with 165 shipmasters to serve in various campaigns.[22] Some of the mariners in these contracts were given their wages as victuals instead of money, or in a mixture of the two.[23] Major problems could occur, however, with regard to the supply of ships over extended periods of time. For instance, the fleet that transported the earl of Northampton to Brittany in August 1342 had in fact been under arrest from June of that year.[24] Since the number of ships waiting at Portsmouth numbered 145 there must have been a constant demand for food supplies because the provender that the mariners had brought with them would have been exhausted by early July.

There are a few documents that illuminate the procedure employed by the crown for supplying fleets over long periods.[25] The most informative of these is the account of William Dunstable concerning the money and victuals for the northern fleet from October 1336 to October 1338.[26] By closely examining this document we can see that the process of arranging victuals for mariners, over a lengthy period, had two distinct phases. First, the supplies were collected and

war and the community of the realm in late medieval England', *Albion* 7 (1975), pp. 300–16; C. Allmand, *The hundred years war*, p. 98.

19 For the naval periods of service, see C. Lambert, 'An army transport fleet' p. 86; for the land-based soldiers, see A. Ayton, *Knights and warhorses*, appendix 2, pp. 258–62.

20 *Rot. Scot.* I, p. 210; E372/180, m. 44; SC1/40, nos 10–20. The burden of initial provisioning of ships usually fell on their home ports. See R. A. Kaner, 'The management of the mobilisation of English armies', p. 229.

21 D. Hughes ed. *Illustrations of Chaucer's England* (London, 1918), p. 34; *Murimuth*, p. 200.

22 E101/20/39.

23 For example, the mariners under the command of Simon Springet, master of the *Portejoye*, were paid 2 tuns of flour and 7 quarters of wheat. In other indentures the mariners are paid the second way: through a mixture of foodstuffs and money. For example, those serving on the *Cog Edward* were paid, '*et en vitailles 9li. et pro sallaires des marins. 11 li 6d*', see E101/20/39, no. 3.

24 E372/187, mm. 42, 48.

25 E101/20/1; E101/20/7; C47/2/27.

26 E101/20/7, mm. 1–6.

sent to the ports of King's Lynn, Great Yarmouth, Ipswich and Hull, usually by appointed sheriffs who had to purvey foodstuffs in their counties. In this case William Muchet, sheriff of Cambridge and Huntingdonshire, supplied King's Lynn and Yarmouth with a little under 200 quarters of provender and 65 bacons. Similarly Robert de Causton, sheriff of Norfolk, delivered 200 quarters of victuals to Great Yarmouth.[27] Local merchants also contributed supplies to the process.[28]

The second part of the process involved the preparation and distribution of the victuals to various mariners and others involved in the northern fleet. Usually some of the supplies, particularly wheat, were ground into flour at local windmills-in Boston and King's Lynn in this case- and then transported by river or cart to the granaries where it would be stored ready for distribution. Once at the port the victuals were transferred to large seagoing ships by lighters hired for the purpose. In September 1337, when the *Seinte Nicholas* and the *Petre* freighted supplies from Great Yarmouth to Sandwich, with the cost of *wyndage* amounting to 5s 2d per tun.[29]

On arrival the victuals would be distributed to the mariners, men-at-arms and archers serving in the northern fleet. For example, the master of the *Portbilling* of Great Yarmouth received 2 quarters and 6 bushels of wheat for himself and his men; and from 8 July to 4 August, Reginald Godwyn supplied eighty men-at-arms and one-hundred-and-eighteen archers with 80 quarters of wheat. In this same period Dunstable dispensed 122 quarters 6 bushels and 11 parts of wheat to mariners at Hull. Moreover, although the admiral had the powers to purvey his own victuals Dunstable also supplied him for twenty-eight days in July 1337.[30] In total the whole account shows that the men of the northern fleet, over the two year period, consumed 4,507 quarters 6 bushels of wheat, 54 tuns 6 barrels and 151 quarters of flour, all protected by 80 measures of canvas, 275 quarters 1 bushel of beans and peas, 2,578 quarters 3 bushels of malt, 329 bacons, 1,877 tuns of salt fish and middle fish and 20 tuns of wine. All this was transported to the various ports for the men of the northern fleet in five large ships, four barges and numerous small boats (*naviculus*).

An alternative method was to supply ships that were anchored in port waiting transport troops to the campaign area.[31] This process is illuminated by another

[27] *Ibid.*, m. 2.

[28] For instance, in July 1337 Reginald Godwyn provided 1 quarter of wheat for 5s, E101/20/7, m. 2. Cf J. Masschaele, 'Transport costs', p. 267.

[29] E101/20/7, m. 5.

[30] *Ibid.*, m. 2; E372/184, m. 3d.

[31] A further method was for a sheriff or other official to transport supplies directly from England to the campaign area. This method worked particularly well when the army was stationery and was employed during siege operations. For example, in early 1347 and during the siege of Calais the sheriff of Essex sent seven ships from Colchester loaded with supplies to Edward's forces. These ships mainly freighted malt and oats, and the wages of the mariners and the costs of the supplies came to £93 6s 8d, see E101/556/37.

account. In June 1337 Robert Emeldon, clerk, was assigned to purvey victuals in Hampshire. The collected provisions were then to be distributed among the fleet of ships currently lying in Portsmouth harbour. Emeldon supplied a total of twelve vessels with wheat and wine. These twelve ships received a total of 56 quarters of wheat and 35 tuns of wine. The largest consumer was the crew of the *Cristofre*, commanded by Richard Fille, which had 10 quarters of wheat and 6 tuns of wine.[32] The admiral of the fleet could also organise the purchase and distribution of supplies alongside the other existing methods used for collecting victuals. For example, in 1336 Geoffrey de Say, admiral of the king's fleet, recorded separately by receipt the victuals he bought from several merchants. These purchases included 20 quarters of wheat, 18 beef carcases, and 56 muttons for £4 19s 4d from Ralph le Wayte.[33] Private individuals could also be allocated the task of supplying a fleet. This occurred during the preparations for the Crécy campaign when the abbot of Beaulieu sold victuals to the mariners of several king's ships. The account comes in the form of four individual receipts for wheat, beef, cider and conger eels.[34]

Clearly, the scale of operations required to supply a medieval fleet should not be underestimated as it could involve enormous amounts of foodstuffs. A crew of forty mariners carrying forty horses, for example, could consume 2.2 tonnes of supplies per day. [35] The quantities of victuals that would be consumed by seafarers are illuminated by a document that shows us exactly the food requirements of 4,050 mariners.[36] This source relates to the provisioning of the northern admiralty and takes the form of a list of counties and their projected contributions to the victual requirements of the fleet. Lincolnshire, for instance, was expected to furnish 1,000 quarters of wheat, 1,700 quarters of barley, 800 quarters of beans and peas, 4,000 bacons, 6 lasts of herrings, 20,000 stockfish and 3,000 stones of cheese.[37] In total the seventeen counties listed were to contribute 9,100 quarters of wheat, 9,350 quarters of barley, 2,200 quarters of beans and peas, 6,000

[32] E101/20/1.

[33] C47/2/27, no. 12.

[34] E101/24/12, nos, 1 and 2.

[35] R. W. Unger, 'The northern crusaders: the logistics of English and other northern crusaders', in *Logistics of warfare in the age of the crusades: proceedings of a workshop held at the centre for medieval studies, University of Sydney, 30 September to 4 October, 2002*, ed. J. H. Pryor (Aldershot, 2006), pp. 251–73, p. 262.

[36] C47/2/31. This is a difficult document and it comes in a file with nine individual membranes. Membranes 1–3 record the projected amounts of victuals that each county listed should provide, while membranes 4, 5, 7, 8, 9 lists the names of important magnates, retinue captains and the size of their projected retinues. For an enlightened discussion of the document, see M. Prestwich, 'English armies in the early stages of the hundred years war', p. 108.

[37] C47/2/31, no. 1.

quarters of oats, 12,960 bacons, 3,900 stones of cheese, 45 lasts of herrings and 32,400 stockfish, 60 tuns of ale and 100 tuns of cider.[38]

Food was not the only requirement of a medieval fleet. Many of the ships were altered to make them fit for war; and they needed stocks of weapons for defence. This materiel must be factored into the logistics of sea transport. In 1339 Thomas de Snetesham supplied the king's ship *Phillipe*, commanded by Thomas Springet, with 30 padded shirts, 21 pieces of plate armour, 30 hauberks, 38 crossbows, 40 sheaves of barbed arrows, 200 cords for the bows, 13 *balistars*, 200 quarrels and 8 banners.[39] During a ten-year period Snetesham supplied the king's ships with a total of 599 *cuirass'*, 856 bascinets, 878 unspecified pieces of armour, 2,072 sheaves of arrows, 10 pikes, 199 *blasons* (a type of incendiary device), 95 *pousell* (a type of armour), 553 *aktuns* (a type of padded shirt), 256 crossbows, 300 darts, 750 bows and 3,843 windlass ropes.[40]

So far we have analysed how armies were supplied before an expedition was launched, we now turn to an examination of the supply systems in place for more static forces such as garrisons. The supply of garrisons in Scotland was the responsibility of the keeper or receiver of victuals at Berwick or Newcastle.[41] The workload of this official increased dramatically during the large invasions of the 1330s, but when the king's attention was drawn to the continent the scope of the operation was scaled down commensurately. This did not make the keepers' task easier, for his was the sole responsibility of forwarding supplies on to the garrisons and ensuring that they did not fall through inadequate supply. In addition, he would also be expected to make good any losses of victuals if there was no satisfactory reason for this. Supply by sea brought the risks of loss or spoilage.[42] By examining the accounts of Robert Tonge, who was keeper at Berwick between 1335 and 1338, we can gain a good understanding of the system of garrison supply.[43] The accounts show that after 1337 Robert relied for his supplies on merchants appointed by the king. Goods flowing into Berwick predominantly by sea were then allocated to the garrisons of Bamburgh, Edinburgh, Stirling,

38 *Ibid.*, roll nos, 1 and 2. This enormous amount of victuals was also probably intended as food supplies for the 2,000 men-at-arms (or armed men), 4,000 archers and 4,000 spearmen also noted in the document (*ibid.*, no. 5) thus bringing the total of personnel to be fed to 14,050.

39 E101/20/9, m. 5.

40 *Ibid.*, m. 2.

41 A detailed though at times somewhat contradictory account of the role of the receiver of Berwick, and of Berwick's importance in the victualling process can be found in B. L. Atkinson, 'Berwick Upon Tweed in the wars of Edward III' (unpublished MA thesis, University of Leeds, 1959), Chapter 7. The overall importance of Berwick is analysed by C. Candy, 'The Scottish wars of Edward III', pp. 194–201.

42 For an example of this, see *CPR, 1345–48*, p. 543.

43 Tonge occupied the office of receiver at Berwick, Newcastle and Bamburgh simultaneously and he accounted separately for each post at the Exchequer. See B. L. Atkinson, 'Berwick Upon Tweed', pp. 110–11.

Roxburgh and Perth.[44] By examining Tonge's accounts we can see the importance of his work. Between 30 September 1336 and 29 September 1337, Tonge had oversight of 3,115 quarters of wheat, 226 quarters of fish, 575 salmon, 2,746 quarters of oats, 886 tuns 21 pipes of wine, 418 quarters of malt, 455 tuns 4 pipes 8 quarters of flour, over 5,000 boards de *escland*, 2,028 horse shoes, 7,400 nails and various other iron implements.[45] From Berwick, Tonge shipped these out on thirty-six ships from both local and more distant ports to the garrisons at Edinburgh, Stirling, Bamburgh and Perth. Berwick ships not surprisingly played an important part in this traffic.[46] Although it has been suggested that the role of ships in supplying Scottish garrisons was not as easy as it was to supply Welsh castles the important strongholds of Edinburgh, Stirling, Perth and Bamburgh could easily be supplied by sea.[47]

Piecing together the methods employed for supplying armies on the continent is more problematic than those used in Scotland. The latter operation has been more fully researched and is easier to understand, owing to the fact that in Scotland the English crown appointed a receiver of victuals who produced a vast amount of documentary evidence that can be used to reconstruct the northern supply operations. Nevertheless, it has usually been suggested that armies campaigning in France during this period mainly lived off the land.[48] This view is generally taken because it is argued that the quantities of provisions required by large armies, such as those of 1346 and 1359–60, could not have been transported over with the troops. Neither could the soldiers, when on active campaigns or *chevauchées*, have been burdened by slow and cumbersome

[44] For example, in March 1340 Thomas Melcheburn forwarded 1,000 quarters of wheat to Berwick at 7s 6d per quarter, and 1,000 quarters of oats at 4s. per quarter, In the following year Thomas and his brother William Melcheburn contributed a further 500 quarters of wheat, 500 quarters of malt, 10 tuns of wine, 100 quarters of salt and 7 quarters of oats. A further 200 quarters of salt and 7 quarters of beans and peas were later sent by them. All these supplies were freighted by sea. See E101/22/24; E101/23/2.

[45] E101/20/4, mm. 1–11.

[46] *Ibid*., mm. 2, 3, 7, 8, 9. In fact there are 40 ships separately listed, but the *Katerine* of Berwick, commanded by Hugh Caldecotes, made three separate voyages as did the *Holygost* of Berwick, and the *Katerine* of Berwick commanded by John Bisshop carried out two voyages. Other ships came from thirteen ports all located on the northeast and east coasts, with the largest contribution coming from the ports of the Humber estuary, which supplied five ships, followed by King's Lynn with three ships.

[47] On castle supply, see M. Prestwich, 'The victualling of castles', *Soldiers, nobles and gentlemen: essays in honour of Maurice Keen*, ed. P. Coss and C. Tyreman (Woodbridge, 2009), pp. 169–82, p. 172.

[48] M. Prestwich, *Armies and warfare*, pp. 253, 259–61; S. J. Burley, 'The victualling of Calais, 1347–65', p. 49; M. McKisack, *The fourteenth century, 1307–1399* (Oxford, 1959), p. 242; H. J. Hewitt, *The Black Prince's expedition of 1355–1357* (Yorkshire, 2004), pp. 27, 46; T. J. Runyan, 'Naval logistics in the middle ages', p. 91; C. J. Rogers, *War cruel and sharp*, p. 310.

baggage trains.[49] Yet, many of the campaigns conducted by the English in France operated in the summer months when the autumn harvest would not be ripe.[50] This last issue probably explains why, when in France, English forces usually attacked towns. It was in the towns that the invaders expected to find large stores of foodstuffs. Indeed, the newsletters from the 1342 Brittany campaign and the accounts written during and after the 1346 Crècy expedition, show the importance that English commanders placed on taking towns while on the march, even at the risk of incurring heavy casualties.[51] Even then there was no guarantee that the supplies within would be found or secured from the ravages of uncontrolled looting or burning.[52]

The view that armies relied for supplies on the lands they passed through has recently been challenged on two grounds. First, it has been suggested that the daily calorific intake of a soldier could be much less than has previously been thought. Prestwich has calculated that seventy-four men would require 93 quarters of wheat for 176 days.[53] A quarter being 384lbs, these men would consume 35,712lbs of wheat in the allotted time that would have meant that each man roughly ate 2.7lbs of bread per day, which amounts to around 5,000 calories per

[49] J. Masschaele, 'Transport costs', pp. 270, 277 has suggested that a packhorse could carry four bushels of wheat, a bushel weighing 48 lbs., and travel up to twenty-nine miles per day. Therefore, an army's progress need not be slowed down by the need for carts.

[50] This could be of great importance. In 1812 when Napoleon invaded Russia some of his forces began feeding their horses un-ripened cereal crops, which resulted in thousands of horses dying of colic, as Dumoncau, one of Napoleon's officers, noted 'if the barley is fed to them and they drink water, the barley swells up and causes violent colics, which lead to death'. See P. B. Austin, *1812, Napoleon's invasion of Russia* (London, 2000), p. 58. Thus great care for the horses' victuals, at least, was required when campaigning on foreign soil during the summer months.

[51] *Avesbury*, pp. 340–42, contains a newsletter written by the king to the council in England, which clearly shows that in 1342 the English concentrated on taking towns. Also, see *The life and campaigns of the Black Prince*, ed. R. Barber (Woodbridge, 1986), pp. 15–16, which records the letter written by Michael Northburgh detailing the early events of the Crècy campaign and which provides clear evidence that the English sacked several towns for the supplies that were stored there.

[52] See, for example, A. Ayton, P. Preston, *The battle of Crècy*, pp. 66–67, which notes the problems that could ensue if discipline in the army disintegrated when a town was taken. Note particularly the sack of Carentan in which the English attack destroyed much of the stores.

[53] M. Prestwich, 'Victualling estimates for English garrisons in Scotland during the early fourteenth century', *EHR* 82 (1967), pp. 536–43, pp. 536–37. Prestwich has recently slightly updated his figures relating to the weight of a quarter and he now suggests that a weight of 424 lbs seems more reliable. However he does still argue that the daily calorific intake would be similar regardless, see M. Prestwich, 'Victualling castles'. This would make a bushel 53lbs. D. S. Bachrach, 'Military logistics', p. 430 makes the suggestion that a quarter was 504 modern pounds. If this latter figure is indeed true then the length of time the supplies would last for as noted in this book should, perhaps be extended by anywhere up a month.

day for each man.[54] Recently it has been suggested that this high intake should be reduced to 3,250 calories per man per day.[55] In this same period a Venetian galley man would consume 4,000 calories per day, which also suggest that fighting men in the fourteenth-century would consume between 3,500 and 4,000 calories per day.[56] What also needs to be noted, especially with regard to garrison supply, is that not much is understood about the numbers of garrison troops. If the troops were of knightly stock, or from junior branches of knightly families or the gentry class, a servant was likely to have accompanied them. Therefore, the men-at-arms who appear on a garrison's muster roll would not be indicative of the actual number of men who required feeding from the food supplies. In fact the seventy-four men in Prestwich's calculations could have actually numbered over 100. Indeed, a garrison at Edinburgh in 1300 was manned by a total of 347 men of whom only 154 were fighting men, and the non-combatant staff at garrisons could number many individuals including brewers, cooks, bowyers, boys, glaziers, drapers, woodmongers, falconers, clerks, millers, washerwomen, chaplains, heralds, water carriers and bakers.[57]

It has also recently been argued that Edward III's campaigns in France did not rely on foraging for their supplies, and that the force of 1359–60, which numbered around 10,000 men, was fed for ten weeks solely from a large baggage train. It is calculated that 937 to 1,000 one-ton carts of cereals would last an army

54 This calculation is also supported by several studies of medieval households, showing that a household servant employed by a lord was usually provided with roughly the same quantity of food M. Prestwich allocates to garrison troops in the reign of Edward I: some two to three pounds of bread and a gallon of ale per day. See C. M. Woolgar, *The great household in late medieval England* (London, 1999), pp. 132–33. In addition, the bakers of the royal household were also expected to purchase a quarter of corn from which they were required to bake forty superior simnels, 140–50 salt simnels, and 260 bakers' loaves. A superior simnel would feed four men, the salt simnel would feed two and one loaf would be sufficient for one man. See C. Given-Wilson, *The royal household and the king's affinity*, p. 4. This suggests that a quarter of grain could feed up to 270 men. Indeed a bushel of wheat would normally provide thirty loaves and with nine bushels to a quarter then it can be inferred that one quarter of wheat could produce 270 loaves, see *idem*, 'Purveyance for the royal household, 1362–1413', *BIHR* 56 (1983), pp. 145–63, p. 152. Based on M. Prestwich's further calculations (*Armies and warfare*, p. 248) it is possible to suggest that 10,000 men would require roughly 5,000 quarters of cereals per week or 15,000 per month. However, it should be borne in mind that the inclusion of meat would reduce the demand for such heavy consumption of cereals. But with the inclusion of horses the weekly consumption could be further increased: it is estimated that 10,000 horses would require some 4,000 quarters per week. Furthermore, if we accept that the magnates supplied themselves, at least initially, then the duration of provender would last a month or so more.

55 Y. N. Harari, 'Strategy and supply in fourteenth century western European invasion campaigns', *JMH* 64 (April, 2000), pp. 297–333, p. 303.

56 F. C. Lane, 'Diet and wages of seamen in the early fourteenth century', in *Venice and history: the collected papers of F. C. Lane* (Balitmore, 1966), pp. 263–68.

57 See D. Cornell, 'English castle garrisons', pp. 3, 74–75, who notes that 'in reality there was a much larger supporting cast whose purpose it was to support the garrison'.

of 15,000 men fifty days.[58] These figures are entirely plausible and it is worth noting that when carts were transported by sea they were likely to have been dismantled, so as to take less space in the hold, and would have been relatively easy to re-construct at the disembarkation point. That English medieval armies did indeed bring supplies with them can also be deduced from the orders issued by Henry V in 1415 when he told the sheriff of Hampshire to proclaim that, 'every lord, knight, esquire, valet and all others going with the king', was to bring with him on the campaign enough victuals for three months.[59] And if we look further, the evidence of armies foraging for victuals in the Tudor campaigns in France has been described has 'scanty:' 'The enemy's territory never seems to have been the staple support of English armies at this period'.[60]

Second, account must be taken of the meat carcases that were undoubtedly transported with the armies. In 1294, along with grain and flour, Edward I shipped 1,537 sheep, 430 cattle, 210 bacons, 4,565 stockfish, 807 salmon, 253 conger eels, 3,774 birds and 23,700 eggs, to Gascony for his planned campaign there.[61] Such quantities of meat would ensure that the grain supplies would last longer. Moreover, bearing in mind that the fleets raised by Edward III were much larger than those of his grandfather, it would clearly have been possible for large amounts of foodstuffs to be transported to France in the 1340s and 1350s. It should also be noted that not all of Edward III's continental campaigns required large amounts of supplies to be transported with the troops. For example, in 1338–40 the first two campaigns in the Low Countries were launched from allied territory with the option of local purchase, and it is not surprising to find that Edward's stay in Flanders has been described as 'an economic bonanza for the Low Countries, not only for the many Low Countries princes, but also for the bourgeois of the towns, for the church, and even for the common labourers, peasants, and the poor.'[62] This is borne out by the fact that Edward's own household expended £2,063 3s 5d on supplies.[63] Furthermore, the 1342 Brittany expedition, much like the 1338–40 campaigns, was conducted with a relatively small number of English

[58] Y. N. Harari, 'Strategy and supply', p. 314. There are several views on what a medieval cart could carry but estimates vary between 1,000 pounds to half a ton. Wagons, it has been argued, could hold up to one ton. On carts and wagons, see A. C. Leighton, *Transport and communication in early medieval Europe, 500–1100* (New York, 1972), p. 72; M. Girault, *Attelages et charrions au moyen age* (Paris, 1992), p. 138; J. Masschaele, 'Transport costs', pp. 268–69; D. S. Bachrach, 'Military logistics', pp. 431–32.

[59] J. Barker, *Agincourt: the king, the campaign, the battle* (London, 2005), p. 101; A. Curry, *Agincourt: a new history* (Stroud, 2005), p. 68.

[60] C. S. L. Davies, 'The provisions for armies', p. 236.

[61] M. K. Vaughn, '"Mount the warhorse, take your lance in your grip …": Logistical preparations for the Gascon campaign of 1294', pp. 97–111, see pp. 99–111.

[62] B. Lyon, 'The dividends from the war in the Low Countries,' *Peasants and townsmen in medieval Europe*, ed. J. M. Duvosquel and E. Theon (published on the De Re Militari website, 1995), pp. 693–705, pp. 694, 698.

[63] *Ibid*.

soldiers. In the Low Countries campaigns some 4,500 English troops fought, while in 1342 the Brittany army numbered roughly 3,800 men who operated in an area that was increasingly under English control with direct access to several towns and ports. Thus the supply demands of such campaigns were not as great as those of the expeditions of 1346 and 1359–60.[64]

Of course it could be argued that all these supplies were transported only for those campaigns in which the English expected to conduct sieges. This can be discounted for two reasons. First, it was natural that at some point during any expedition a siege of some kind would have to be conducted; that was the business of medieval warfare. Nevertheless, as the 1346 expedition showed apart from the siege of Calais, French towns were sacked with haste and no lengthy sieges were undertaken. Although Caen was attacked and captured the time this took was, by medieval standards, quick.[65] Second, it is now widely recognised by historians that Edward's campaigns in France sought the strategic outcome of a battle.[66] So in order to achieve this goal it was vital for Edward to be able to keep his army in the field long enough to force this outcome. In short English armies preferred not to remain static, a strategy that mean they had little time for foraging. This does not mean that the English were not unaware of the dangers that could surround logistical operations, and during the siege of Cambrai in 1339 Edward had witnessed how lack of adequate supplies could bring about an army's slow disintegration. Therefore, in order to keep his forces in good shape long enough to force Philip into action, Edward had to ensure that his soldiers brought enough supplies to see them through a two-month campaign. To rely on the local countryside in France to support his army was to undermine his battle-seeking strategy squandering the resources invested in preparing the campaign. Considering this it is inconceivable that Edward would not have brought sufficient provisions with him to get his through the first eight weeks of a campaign, even if this involved reduced rations. And he could also replenish his supplies through the sack of towns while on the march.

The discussion above has examined the methods available to the administrative officials of the period for collecting, storing, distributing and freighting supplies from the towns, villages and counties of England to both garrisons and armies in the field. We have also seen how these victuals were recorded and paid for, and we have scrutinised the work of the officials who were in charge of the system. The following analysis will expand on this to discover how such

64 For the size of the English contingents in the Low Countries, see A. Ayton, 'Edward III and the English aristocracy at the beginning of the hundred years war' p. 179 and p. 181 for Brittany.

65 Caen was taken in less than two days, see *Avesbury*, pp. 358–60; *Murimuth*, p. 203.

66 For example, C. J. Rogers, *War cruel and sharp*; A. Ayton and P. Preston, *The battle of Crécy*; S. Morillo, 'Battle seeking: the contexts and limits of Vegetian strategy', *JMMH* 1 (Woodbridge, 2001), ed. B.S. Bachrach, C. J. Rogers and K. DeVries, pp. 21–41. In this article Morillo weighs up the arguments for the battle seeking approach.

clerical and organisational expertise was employed to exploit the maritime resources of the kingdom in relation to the supply fleets and naval armadas that were deployed in the wars against Scotland. The discussion will be divided into three parts. The first section will concentrate on the military expeditions to Scotland in the period between 1322 and 1336. These years witnessed the most intensive campaigns conducted by the English against their northern neighbour with the added potential to compare the effectiveness of the procedures used during Edward II's last campaign in 1322 and Edward III's first expeditions. This approach will reveal the scale of each operation and the character of the deployment of English sea power against Scotland throughout this period. In the second part we will concentrate on the period between 1337 and 1359 during which there was a vast reduction in English involvement in Scotland. The third and final section will examine the logistics of the English campaigns in France, which more than took up any slack left by the scaling down of the Scottish war. Indeed, the continental expeditions placed new and ever increasing demands on the English merchant fleet. The main aim is to show by quantitative analysis the central role played by the maritime communities in transporting victuals in all of the royal campaigns. Within the context of the logistics an evaluation of the 'military naval role' of shipping in the wars of Scotland will also be assessed.

## The Supply of Armies and the Naval War in Scotland, 1322–1336

As noted above, the campaigns conducted in Scotland by the English crown between 1322 and 1336 brought a renewed period of military intensity, ending the relative lull after 1314. The role performed by the English merchant fleet was central to every expedition undertaken during this time. As such the degree to which the crown could exploit its naval resources through fleet raising mechanisms had a significant bearing on the outcomes of the campaigns. Broadly speaking, vessels operating in the Scottish wars were utilised in two ways: they were either employed as supply ships or fighting vessels. Neither of these roles should be underestimated. In 1322 no fewer than 101 ships, manned by 4,000 mariners, freighted to Newcastle and Skinburness several thousand quarters of various supplies.[67] Large though it was this contribution was dwarfed by the 183 vessels that were deployed in more offensive naval capacities. The sources show that throughout 1322 the English merchant fleet provided 284 ships, contributed by eighty ports and manned by 10,000 mariners.[68]

[67] See BL, Stowe 553, fols 76v, 77r–77v; E101/15/36, mm. 1, 2; E101/16/1; E101/16/6, mm. 1–4; E101/16/7, mm. 1–11; E101/16/8, mm. 1–3; E101/16/20; E101/16/21, mm. 1–7; *Bain*, no. 766, p. 142; *Calendar of inquisitions miscellaneous*, II, no. 1088, p. 269; *CCR, 1318–23*, pp. 591, 640–1, 660–1; *CPR, 1321–24*, pp. 14, 77, 86, 90, 107, 109–10, 114, 134, 204, 205, 207, 288; *CCR, 1318–23* pp. 463; M. Prestwich, 'Military logistics', pp. 278–88.

[68] BL, Stowe MS 553, fols 76r, 76v, 77r; E101/15/36, m. 2; E101/16/7, mm. 9, 10, 11; E101/16/8,

The first campaign of Edward III in 1327 ended in complete frustration, and ultimately failure, as far as Edward was concerned. Whether or not we accept the argument that the Weardale campaign was a planned farce, a fake show of strength, in order to come to a reasonable peace settlement with Bruce, or that it simply failed because the English had not yet developed a more mobile method of conducting a campaign, the results are the same.[69] In either case we are concerned with the preparations that were made to supply the English army and the overall maritime contribution to this process. The size of the English army on this expedition, and therefore the numbers of troops to be fed is difficult to establish.[70] Jean le Bel states that the English had 37,000 men in the field of which 7,000 were men-at-arms.[71] This seems implausible, but a reasonable estimation of the foreign contingents can be made at between 500 and 780 Hainaulters, all men-at-arms. To this should be added the contingent brought by the bishop of Ely that totalled 173 men-at-arms.[72] If we accept le Bel's estimate that the king's division, which would have included Mortimer, numbered around 600 men-at-arms we can suggest a total of around 1,500 men-at-arms.[73] Indeed, the overall force could well have been larger as the majority of the other magnates, except the earl of Oxford, were present on this campaign and performed their feudal service.[74] Considering that this was the first royal led campaign of the new reign it would be reasonable to expect that the size of the army was somewhere between those forces engaged on the 1322 and 1335 campaigns, so perhaps anywhere up to 10,000 men.

Fortunately, there are some Exchequer accounts that have direct relevance to the expedition, and by examining them we can gauge how successful the crown

mm. 2, 3; E101/16/16, m. 6; E101/16/20; E101/16/21, mm. 8–10; *CCR, 1318–23*, pp. 462, 463, 534, 540, 546, 547, 553, 559; *CPR, 1321–24*, pp. 14, 77, 86, 90, 102, 107, 109–10, 114, 134, 204, 205, 207; *Foedera*, II, i, p. 485; *Cal. Inq. Misc.*, II, *1307–1349*, no. 1088, p. 269; *Bain*, no. 766, p. 142, which provides evidence that the king had his medicine transported by sea. It is assumed that the Cinque Ports supplied the ships they were ordered to and that the twenty-two ports (*CCR, 1318–23*, p. 553) requested to contribute ships for the transportation of the Irish troops did so at the rate of one vessels per port.The number of mariners involved in the 1322 expedition is to some extent an estimation, as many of the ships in this campaign served for no pay and we are therefore not given their crew sizes. However, the vessels recorded in the Wardrobe accounts do have crew sizes attached to them so the average crew size of forty-two mariners per ship has been applied across the board.

69 I. Mortimer, *The greatest traitor: the life of Roger Mortimer, first earl of March, ruler of England, 1327–30* (London, 2003), p. 178. Mortimer suggests that Roger had planned the campaign in this way as part of some pre-arranged deal with the Scots, whom he met while he was exiled in France prior to his successful invasion in 1326.

70 The best analysis of the army can be found in N. B. Lewis, 'English Feudal Levy'.

71 Le Bel, in Rogers, p. 8.

72 R. Nicholson, *Edward III and the Scots*, p. 20; N. B. Lewis, English feudal levy', p. 238, n. 9.

73 Le Bel, in Rogers, p. 4.

74 N. B. Lewis, 'The English feudal levy', p. 247.

was at organising its supplies.[75] Utilizing these accounts, it is possible to say that a total of 4,688 quarters of wheat, 1,438 quarters of oats, 378 quarters of malt, 3,760 small salts, 728 bacons, 16 barrels of sturgeon, 4,000 horse shoes and 80,000 nails were collected.[76] These victuals were mainly gathered from the counties of Lincolnshire, Norfolk and Suffolk, but the nails and the horseshoes were sourced from Wales, and these were transported in at least six ships.[77] Moreover, orders issued before the campaign suggest the gathering of a further 500 quarters of wheat, 2,200 quarters of oats, 1,000 quarters of barley, 900 quarters of beans and peas, 100 quarters of salt, 140 bacons, 200 horse shoes and 300 nails.[78] This seems reasonable because the Exchequer evidence does not include any victuals from the counties of Derbyshire or Nottinghamshire, and these counties, based on evidence from other campaigns, would have almost certainly provided some supplies.

The above list does not include those victuals that the merchants were ordered to forward to Newcastle. Again, Exchequer evidence is lacking, so we have to rely mainly on the details contained in the calendared records. In May protections were issued to twelve merchants and their ships for the purpose of transporting supplies to Newcastle.[79] In addition, the bishop of Ely provided his retinue with foodstuffs freighted in three ships.[80] There was also more than one ship provided by Richard Gilian from the port of Ferriby, but unfortunately we are not given

75 E101/18/2; E101/18/8; E101/18/10.

76 E101/18/2, mm. 2–4; E101/18/8.

77 *Ibid*., Thomas Springet commanded one of the ships: the other five are not named. This account is badly damaged and over half the account is missing.

78 The Scottish Rolls contain two separate orders for supplies issued before the start of the expedition to the same counties. The quantities of victuals finally collected are calculated by subtracting the quantities of supplies demanded in the first order with those requested in the second set of orders. It has been presumed that the difference in the quantities demanded from the first order to the second set of orders, which were mainly reductions, had indeed been collected. In total 6,500 quarters of wheat, 4,200 quarters of oats, 1,100 quarters of beans and peas, 1,200 quarters of barley, 700 quarters of salt, 440 bacons, 6,000 horse shoes and 3,600 nails, were demanded from Lincolnshire, Yorkshire, Nottinghamshire, Derbyshire, Norfolk and Suffolk, see *Rot. Scot.* I, pp. 206–7, 215, 220, 221.

79 *CPR, 1327–30*, pp. 104, 108. Of these twelve vessels five were from Great Yarmouth (the *Blithe*, owned by Stephen de Catefeld; the *Nicholas*, owned by Thomas Sidher; the *Rose* owned by John de Fordele; the *Edmund*, owned by Robert de Drayton and a ship of Bartholomew de Thorp); the port of London provided two (the *Marie*, commanded by Andrew Rosekyn, and the *Seintemaribot*, commanded by Adam Frenche); two were contributed by the town of Heacham (a ship of Simon Lambright and a ship of Geoffrey Gruggen). This port was recorded in the accounts as Hecham. However, it is likely that this was the town of Heacham, which is just south of King's Lynn; one ship came from Nottingham (Hugh Dammeson and William Amyas supplied this ship); one was supplied by the port of King's Lynn (the *Peter*, commanded by Thomas de Melcheburn).

80 *Ibid*., p. 141. The ships were the *Torkesay*, commanded by Robert de Stayburn; the *Kele*, commanded by William le Wayte, and the *Flundres*, commanded by Robert del Bate.

precise numbers.[81] If we include the three vessels supplied by the bishop of Ely for his retinue, and the six from the Exchequer evidence, then the total number of visible ships is twenty-one, with the suggestion that the actual total could have been as high as thirty. Already there is a stark difference between this campaign and the 1322 expedition. Indeed, the evidence shows that Mortimer and his advisors produced a pitifully small number of vessels to convey the collected supplies. Even if we allow for a further twenty ships, which would have freighted the victuals from the counties in the initial orders, the total falls far short of adequate planning.

Taking all the above evidence together a theoretical assessment of the total collected supplies would be between 10,000–12,000 quarters of cereals, 900 bacons and close to 4,000 small salts, these being transported in thirty ships. If it were to be assumed that an army of 10,000 men would consume some 15,000 quarters of cereals per month, the amount of food estimated to have been collected in 1327 would have supplied an army of this size for roughly one to two months.[82] But whether the evidence entirely supports le Bel's statement that the food ran out during the second confrontation with the Scots has to be reassessed. For instance, after the campaign was concluded John de Charleton, receiver of victuals at Newcastle, sold off various foodstuffs including wine, flour, oats and salt.[83] This means there was a surplus of provender left after the expedition, which points to the fact that the main problem lay with the management of the distribution of victuals from Newcastle to the army. All of this suggests that the English had not yet come to terms with the problem of supplying highly mobile forces. Indeed, the same logistical failings that had ended Edward II's expedition in 1322 seem to have beset Edward III's campaign in 1327. In short the real problem lay within the system of distribution from the depots to the army in the field.

Was the failure in 1327 of the administration in raising an adequate supply fleet mirrored by the crown's attempts to put to sea an armada of ships capable of providing sufficient naval cover for the land army? Evidence for the naval contingent of the 1327 campaign is mainly contained in the records of the Chancery, and therefore, open to interpretation. Nevertheless, it is possible to create a picture of the potential size of the naval dimension of the expedition. General

[81] E101/18/19, m. 10, shows that two ships freighted 8.5 barrels of sturgeon and 1 pipe of wine from Newcastle to York, in early September 1328, the voyage was described as being 'on the king's business'. Whether these were some of the ships supplied previously by Richard Gilian is however doubtful, as they are recorded as coming from Roucliff and York. The ships were the *Blithe* of York, commanded by William Gregor, and a ship of John Bekeman.

[82] With the inclusion of fodder for horses the available victuals for the men would be decreased. But it is also worth bearing in mind that some magnates, such as the bishop of Ely, seem to have been supplying their own men.

[83] E101/18/10, nos, 2–19. For example he sold 40 tuns of salt to John Scot fitz Rich, Nicholas de Carhale and Robert Haliwell (no. 2); and he sold one tun of flour to Robert Acton, *ibid*., no. 7.

arrest orders for ships were issued on 6 May when nine ports were asked to contribute fourteen vessels over 60 tuns well armed and manned *dupplici eskippamento*, to be ready within a week.[84] The service expected of these vessels' crews was described as *servitium debitum*, which suggests these ships were to serve at their home ports' expense and would therefore be absent from any payroll.[85] In addition the Cinque Ports were also ordered to provide vessels.[86] If we assume therefore that the Cinque Ports did provide their full quota and the above nine ports contributed fourteen ships, then so far, the crown would have raised seventy-one vessels manned by roughly 1,500 mariners. Added to this can be the thirty ships' crews that were paid wages by Nicholas Acton and a further thirty-two vessels arrested from the ports of Devonshire.[87] If we include the victualling ships in this total we can say that a possible 154 vessels took part in this campaign, supplied by thirty-six ports with the majority of these (52.7%) situated on the east coast. The number of mariners is difficult to establish with any accuracy, but if we use the average from the Acton account then there could have been as many as 2,000–2,500.[88] The evidence seems to suggest, therefore, that Mortimer and Isabella put to sea an adequate fleet of ships to provide sufficient naval cover. However, closer inspection of the Acton account reveals that the thirty ships recorded on this document only served from 3 to 26 June. This was an incredibly short time and it would have meant that the ships completed their service before the land campaign began. Already there is a stark difference between this campaign and that of the 1322 expedition. Table 2.1 compares the numbers of ships deployed in the last Scottish expedition of Edward II with those employed in the first Scottish campaign conducted by his son.

**Table 2.1 Numbers of ships that served in Edward II's last Scottish campaign and Edward III's first Scottish expedition**

| Campaign | Ships | Mariners | Ports |
|---|---|---|---|
| 1322 | 284 | 10,000 | 80 |
| 1327 | 154 | 2,500 | 31 |

*Note*: The mariner numbers in 1322 and 1327 are estimations based on the averages we have from accounts that detail crew sizes.

84 *Rot. Scot*, I, pp. 209–10; *CPR, 1327–30*, pp. 104, 108.

85 *Rot. Scot*, I, p. 210. In addition, more orders were issued on 7 May for forty ships of 60 tuns or over to be requisitioned from the Thames to Great Yarmouth.

86 *Foedera*, II, ii, p. 703; *Rot. Scot*. I, p. 212.

87 E101/18/3. The ships recorded by Acton served from 3 to 26 June and were manned by 1,067 mariners. E101/17/35 lists the ships from Devonshire.

88 This number of mariners is calculated from the crew sizes of 93 ships. In addition, because the Cinque Ports' full quota is a known entity an additional 1,197 was added to the totals gained from the 93 ships.

What the above discussion shows is that although the majority of the English nobility participated in Edward III's first campaign the maritime resources that Mortimer and Isabella concentrated against Scotland were not of the same magnitude as the 1322 expedition. Yet in many ways 1327 could be considered an anomaly because of the political situation and it was to be a further six years before Edward, now free from his mother's control, would intervene directly in Scottish affairs when he fought the Scots at Halidon Hill. Did this campaign mark a new chapter in the way Edward projected his maritime resources, and his logistical organisation, against the Scots? Unfortunately, the 1333 expedition is also lacking in extant payroll material. Nevertheless, there are a few surviving sources that relate to the supply of victuals and illuminate some of the types and quantities of foodstuffs amassed for the campaign.[89]

Orders were first issued on 20 March 1333 for the collection and transportation of victuals from seventeen counties.[90] This was followed on 9 April with a more substantial request for foodstuffs from fifteen counties, the port of Great Yarmouth and Ireland.[91] In June, when the siege was in full flow, six of these counties were still being asked for supplies. These latter demands were for the same amounts of provender as the previous orders, which suggests that collection had been slow. In total, 13,100 quarters 3 bushels of wheat, 15,660 quarters 50 bushels of oats, 5,500 quarters of beans and peas, 1,600 bacons, 1,200 quarters of salt, 200 tuns of cider and 30 lasts of herrings were requested. Furthermore, the merchant Manentius Francis was requested to purvey 22,100 quarters of oats and 15,600 quarters of wheat, 4,000 quarters of beans and peas and 2,000 bacons.[92] Whether the amount of victuals that Manentius was to collect was supposed to include those that the previous orders had demanded is not clear, but on balance it is likely that these were separate orders. In addition to the supply requests, orders for the arrest of sufficient numbers of ships were issued at the same time and protections for mariners were enrolled.[93]

The above orders give the impression that this campaign was to be of the same magnitude as Edward II's last Scottish expedition. Indeed, Gilbert de Halghton, receiver of victuals at Newcastle, records a total of 3,341 quarters 4 bushels of wheat, 2,221 quarters 6 bushels of oats, 365 quarters 9 bushels of beans and peas,

89 It is not the purpose of this survey to analyse in detail the events of the siege and the battle of Halidon Hill. The best and most detailed accounts of the campaign can be found in the following works: R. Nicholson, *Edward III and the Scots*, Chapter 9; J. Sumption, *Trial by Battle*, Chapter 5; C. J. Rogers, *War cruel and sharp*, Chapter 4; B. Webster, 'Scotland without a king, 1329–1341', *Medieval Scotland: crown, lordship and community*, ed. A. Grant and K. J. Stringer (Edinburgh, 1998), pp. 223–36; M. Strickland and R. Hardy, *The great warbow: from Hastings to the Mary Rose* (Stroud, 2005), pp. 186–89; C. Candy, 'The Scottish wars of Edward III', Chapter 4.

90 *Foedera*, II, ii, p. 855.

91 *Rot. Scot.* I, pp. 227–30.

92 *CPR, 1330–40*, p. 409.

93 *Rot. Scot.* I, p. 226; *CPR, 1330–34*, p. 410.

163 tuns of flour, 48 tuns of wine, 2,715 horse shoes and 25,200 nails, which were supplied by nine counties and Manentius Francis.[94] In addition, William de la Pole supplied English forces with £244 worth of supplies and 60 casks of flour, and his brother, Richard, forwarded 477 tuns of wine, with a further 7 tuns 14 parts and 1 pipe of wine being supplied by other merchants.[95] Moreover, Robert de Wolsthorp and John de Melton contributed £340 12s 6d worth of provender from Lancashire and Gloucestershire.[96] Allowing for the same price paid per quarter of wheat by Manentius Francis (5s 5d), the £584 12s 6d worth of supplies could have amounted to a further 2,000–2,500 quarters of wheat.[97] Thus, the total amount of wheat collected and transported north for the siege was probably between 5,300 and 5,500 quarters, with the quantity of flour reaching 163 tuns and 60 casks. But it is also worth noting that the Scots, on this occasion, did not carry out a scorched earth policy. In fact English troops were able to sack the market at Haddington and take away large quantities of foodstuffs.[98]

The role that ships played in the transport of these victuals was central to the success of the siege. However, the evidence relating to the maritime logistical operation is uneven in quality. For example, in some cases, the numbers, and names, of the ships are not recorded with accuracy and only a payment for the costs of freightage has been entered on an account.[99] This being said the evidence does show that in 1333 Edward III understood the value of naval power and accordingly he raised a fleet that rivalled his father's in 1322. Indeed, including the supply ships Edward put to sea an armada numbering 228 vessels of which 138 were solely used for prosecuting the naval blockade of Berwick.[100] Given that

94 E101/18/31, mm. 1–5.

95 BL, Add MS 35181, fols 3v, 10v.

96 E372/177, mm. 52, 52d; *Cal. Inq. Misc.*, II, p. 365, no. 1496. This probably includes the £44 3s 1d recorded in BL, Add MS 35181, fol. 3v.

97 E101/18/28, m. 1, lists the prices paid by Manentius Francis. The expenses of £13 16s he incurred while collecting these victuals is recorded on E101/18/29. On the first of his accounts (E101/18/28) he records the collection of 1,502 quarters of wheat, 1,022 quarters of oats and 406 quarters of beans and peas, which are probably the supplies recorded by Gilbert de Halghton in E101/18/31, m. 1, and which were freighted in eight ships by Manentius to Newcastle. The difference between the amount of beans and peas (41 quarters and 9 bushels) in the two accounts probably reflects the damage caused to some of the victuals while being transported by sea, therefore, Halghton only received 356 quarters and 9 bushels out of 465 quarters. The difficulty of reconciling these accounts was also noted by R. Nicholson, *Edward III and the Scots*, p. 114, n. 6.

98 *Melsa*, II, p. 368.

99 J. Masschaele, 'Transport costs', pp. 267–8 also notes the problems of accurately assessing the amounts of victuals procured when the surviving Exchequer accounts only contain lump sum amounts as opposed to those particulars containing itemised expenses.

100 E101/18/28; E101/18/31; E101/18/36; E372/180, m. 47; *CCR, 1330–34*, p. 410; *CCR, 1333–37*, p. 22, 25, 99; *Rot. Scot.* I, pp. 225, 226, 232, 233, 234, 248–49, provide details of the ships arrested for service in 1333. In total the orders issued in early 1333 to the sixty-three ports and the Cinque Ports called for the requisitioning of 141 ships. Considering that most ports were

such a large mobilisation of England's maritime resources was directly employed against Berwick, it would have been almost impossible for Scottish forces to break the siege. As long as Edward kept his army well supplied the landward approach would have been cut-off from any substantial relief force, and with over 200 ships at sea Edward also made sure that no assistance could come from the seaward side. Table 2.2 and Table 2.3 make comparisons between Edward II's last Scottish venture and his sons first two expeditions north of the border.

**Table 2.2 Comparisons between the total numbers of ships serving in 1322, 1327 and 1333**

| Campaign | Ships | Mariners | Southern fleet | Northern fleet |
|---|---|---|---|---|
| 1322 | 284 | 10,000 | 131 | 153 |
| 1327 | 154 | 2,500 | 74 | 80 |
| 1333 | 228 | 5,000 | 137 | 91 |

**Table 2.3 Comparisons of victuals collected between the Scottish campaign of Edward II in 1322 with those of Edward III in 1327 and 1333**

| Year | Cereals | Flour | Salt | Fish | Meat | Wine |
|---|---|---|---|---|---|---|
| 1322 | 16,407 | 1,007 | – | 1,800 | 532 | 1,745 |
| 1327 | 11,104 | – | 3,760 | 16 | 868 | – |
| 1333 | 7,886 | 223 | – | – | – | 532 |

*Note*: The cereals are in quarters; of the flour 160 is in tuns, while the rest was measured in casks. The wine is measured in tuns. The section headed cereals includes wheat, oats, barley and what are named as mixed cereals in the sources. The meat includes beef, bacon and muttons. Although the wine is in tuns a further 47 pipes 1 barrel from the 1322 expedition should be added. The salt is described as small salt in the sources and the fish includes herrings and 16 barrels of sturgeon.

*

asked only to supply small numbers of ships it has been taken that these ports did contribute the numbers of vessels they were requested to. In addition it is also worth bearing in mind that the total amount paid in wages to soldiers and sailors during this campaign came to the large sum of £5,629, which suggests that a sizeable naval force was raised, see A. E. Prince, 'Army and navy', in *The English government at work, 1327–1366*, ed. J. Willard and W. A. Morris (Cambridge, Mass., 1940), p. 350. Finally, it is also known that on 26 June the English fleet also participated in the siege by assaulting the seaward side of Berwick, which suggests that a large English fleet was operating in local waters, see *Melsa*, II, p. 368; *Bridlington*, pp. 111–12. Indeed, by early June Edward III had already issued £6,000 for men, supplies, ships and siege engines, which shows that both the naval and land-based operations were on a large scale, see A. G. Beam, 'The political ambitions and influences of the Balliol dynasty, c. 1210–1364' (unpublished PhD thesis, Stirling 2006), p. 332.

By 1333, therefore, the above tables reveal that Edward III began to exploit his maritime resources on similar scale to that of his father. However, what Table 2.3 highlights is that the collection of supplies was more or less of the same magnitude throughout all three Scottish expeditions.[101] The main point, therefore, brought out by the tables is the extent to which both kings were able to exploit the merchant marine. In the case of Edward III his first expedition in 1327 failed to raise significant numbers of vessels. Nevertheless, by 1333 when he had taken full control of the government Edward III was raising fleets on a scale similar to his father in 1322. Did this trend continue between 1334 and 1336 over the next three military incursions into Scotland by Edward III?

Unfortunately for Edward the success of the 1333 expedition could not be exploited the following year, and his winter campaign of 1334–35 was one of complete frustration. The expedition was originally planned for early October but did not get underway until over a month later. Owing to recruitment problems, Edward's forces were small compared to the numbers of men that he had had under him at the siege of Berwick and the battle of Halidon Hill. During this time Edward became increasingly angry and frustrated over this lack of commitment to his call to arms. Even the extra bonus of allowing each man, who appeared at the muster, the right to keep all the goods he could plunder did not help to raise sufficient numbers of troops. All told, Edward's army probably numbered 4,000 men, but desertion was endemic and the county levies had fallen far short of their expected contributions.[102]

The failure to raise a sufficient number of men is mirrored by the size of the supply fleet that Edward's officials managed to put to sea during this campaign. We occasionally catch a glimpse of a ship involved in the supply operation, such as the *Katerine* of King's Lynn, commanded by Richard Blackeneye, which carried 180 quarters of wheat in the dying moments of the campaign in February 1335,[103] and we also know that some vessels were sent direct to Henry Beaumont at Dundarg.[104] But no concrete numbers of vessels involved in the supply operation can be gleaned from the available sources.

The naval dimension of the campaign is more fully evidenced through an examination of the Wardrobe accounts that record the payments made to the ships' crews who served between November 1334 and February 1335. These records show that wages were paid to the crews of nine ships manned by 372 mariners, including the masters and constables. Apart from two vessels that were

[101] Although the amount of victuals collected for the siege of Berwick in 1333 does not compare favourably to the quantities that were amassed for the 1322 expedition, it should be borne in mind that at its greatest extent the force of 1333 probably numbered 10,000 men. As such the supplies collected in 1333 were proportionally of the same magnitude as those gathered for the 20,000 men in 1322.

[102] R. Nicholson, *Edward III and the Scots*, p. 181.

[103] E101/19/2, m. 4.

[104] C. Candy, 'The Scottish wars of Edward III', p. 92.

owned by the king these ships were contributed by ports that were all located on the east coast of England.[105] If we include the ten ships requisitioned on 1 February by James Kingston and John Crabbe, in addition to six more vessels arrested from the southwest ports, it would seem that the maritime contingent numbered twenty-five individual ships.[106] This would have been a great disappointment to Edward because during the expedition he had ordered his clerks to search sixty-nine ports.[107] But this is not surprising because, as already noted, the winter weather was extremely harsh and it would have been difficult for many ships from the south-western ports to negotiate the passage in time.[108] In fact, we must suspect that the orders for ships issued in December and January were actually for the intended blockade of Scotland during the spring and summer of 1335: that is, that the orders issued in the dying days of the Roxburgh campaign were in fact meant for the expedition that was to be launched in the summer of 1335.

Although 1334 was a recruitment failure it can in many ways be seen as an anomalous winter campaign. This is shown by the fact that in the following year Edward III mustered the largest invasion force he ever entered Scotland with. By the start of the expedition Edward had raised between 13,000 and 13,500 soldiers.[109] The importance of the forthcoming invasion is also shown by the preparations to collect sufficient victuals. For example, the first orders were issued on 31 March to sixteen counties to collect foodstuffs at specified prices, and demands for supplies were continually issued through the months of April to July.[110] Indeed, the orders for foodstuffs continued even when the army had been

[105] BL, Cotton MS, Nero C.VIII, fol. 264r.

[106] E372/180, mm. 43, 44; *Rot. Scot.* I, pp. 317, 320–21.

[107] Apart from eight ships, two of which were the king's, the ports situated on the east coast provided all the vessels that served in this campaign.

[108] *Bridlington*, p. 120 provides a vivid description of the appalling weather during the campaign.

[109] R. Nicholson, *Edward III and the Scots*, p. 200. Nicholson points out that although 15,000 men probably served during the campaign this was not all at the same time, so he estimates that the optimum strength of the army was somewhere between 13,000–13,500 men.

[110] The following references provide details of the orders that were issued to collect victuals: the prices were 5s for a quarter of wheat, 3s for a quarter of beans and peas and 2s per quarter of oats. *Rot. Scot*. I, pp. 333–35, 337, 344, 369, 370; R. Nicholson, *Edward III and the Scots*, p. 205. The Exchequer evidence relating to the supplies can be found in: E101/18/35, pp. 2–16, 2d-16d ; E101/19/2, mm. 1–4; E101/19/3, mm. 1–8; E101/19/6; E101/19/9; E101/19/25; *CPR, 1334–38*, p. 98. Some of these victuals could have been used for the Roxburgh campaign because E101/19/3 runs from 29 September 1334 to 29 September 1335. However, it is probable that most of the supplies on this account were collected during and after the 1334–5 winter campaign, with the majority of the victuals being consumed in the summer of 1335. What adds weight to this interpretation is that in 1334 the king complained that his forces were short of victuals. In fact, it was probably the weather that prevented victuals reaching the king in 1334–5.

in the field for some time. During August the counties of Lincolnshire, Norfolk, Suffolk, Nottinghamshire, Surrey, Sussex, Essex, Dorset, Somerset, Cornwall, Devon, Gloucestershire, and Hampshire, were requested to find supplies and ship them to Berwick and Perth.[111] In addition, the sheriff of Lincoln was to provide a further 40 tuns of salt and 300 quarters of oats and forward them to Berwick.[112]

The thoroughness with which Edward gathered supplies echoed enthusiasm when it came to requisitioning ships to serve in both a supply and naval role. Orders were first issued for vessels to be arrested on 16 May 1335, when Edmund de Grimsby was told to requisition ships in the port of Bristol.[113] On 20 May similar writs were sent to John de Percebrigg, in which he was ordered to gather ships from the Cinque Ports, Sussex and London.[114] By 6 June two ships of Liverpool were already at sea searching for a French vessel carrying arms and supplies to Dumbarton castle.[115] The search for shipping was increased and throughout June and July ships were ordered to be requisitioned from Newcastle, Hartlepool, Hull, Yorkshire, Lincolnshire, Norfolk, Suffolk, Essex, Hampshire, Dorset, Devon, Cornwall, Somerset and the Cinque Ports.[116]

If we evaluate the evidence from the Exchequer and Chancery sources we can see that, with the supply ships included, the crown successfully raised 189 ships for this campaign, with the ports from the south and west supplying nearly two thirds (61%) of all the ships.[117] There could have been as many as 6,000 mariners manning these vessels, which cost the crown approximately £2,500.[118] This raises new questions about the mobilisation of men for the campaign of 1335, for if we were to combine the mariners with the land-based troops, then it would seem that Edward's administration managed to recruit, and put into action, roughly 20,000 men for this campaign. Moreover, a general grasp of maritime strategy was also in evidence throughout the expedition and this was actively pursued. For example, for three months the castle of Dumbarton, which was the hub of Scottish resistance, was under constant blockade by English ships.[119]

[111] *Rot. Scot.* I, p. 370.

[112] *Ibid.*, p. 369.

[113] *CCR, 1333–37*, p. 397.

[114] *Ibid.*

[115] *Ibid.*, p. 414.

[116] *Rot. Scot.* I, pp. 351, 354, 355, 356, 357, 359, 362, 363, 365, 369, 371, 374, 379.

[117] The evidence for the ships is gained from: E101/19/10; E101/19/11; E101/19/12; E101/19/14, mm. 2–7d; E101/19/15, m. 2; E101/19/16, mm. 3–4; E101/19/22, mm. 1–3, 6d; E372/179, m. 43; E372/180, mm. 44, 50; BL Cotton MS, Nero C.VIII, fols 264r–265v; *CCR, 1333–37*, pp. 397, 414, 431; *Rot. Scot.* I, pp. 351, 354, 355, 356, 357, 359, 362, 363, 365, 369, 371, 374, 379.

[118] This is an estimate because the victual ships are not given crew numbers, and pay details are rarely recorded.

[119] E372/180, m. 50. The ship involved was the *Trinite* of Southampton, commanded by Adam Brian. The vessel was crewed by 1 constable, and 48 mariners at a cost of £33 16s. Brian's

The following campaign of 1336 was never going to be of the same magnitude as the previous expedition and in many ways this invasion marked the end of sustained campaigning by Edward north of the border (thereafter Edward occasionally intervened in Scotland, for example, in 1337, 1341 and 1356). This latter change in strategy is evidenced by the fact that at this stage of the northern war, apart from his Lochindorb *chevauchée*, Edward started to place control of the war under high-ranking nobles such as Henry of Grosmont. By 1336 the essentials of the supply lines were already continually functioning. As such, requests to William Melcheburn for foodstuffs had been issued as early as 13 February 1336, when he was asked to supply Berwick with 1,000 quarters of wheat and 1,000 quarters of oats.[120] In the same month the castle of Cupar was to receive 10 tuns of flour, 10 tuns of wine and 10 cauldrons of sea coal, with the added proviso that all the wheat was to be ground into flour before transportation.[121] After this order no more demands for provender were issued until 12 July, the day Edward set out on his *chevauchée*, and this request was for only 40 tuns of wine, 60 quarters of oats, 24 bacons, and 2,000 horseshoes to be brought from Bristol in two ships.[122] In fact, between 11 May 1336 and 6 April 1337, Richard de Tibay, custodian of victuals at Carlisle, only had charge of 119 quarters 6 bushels of wheat, 7 tuns of flour and 119 tuns of wine. The above evidence relating to the 1336 expedition shows, therefore, that the demands for victuals were not of the same magnitude as those issued for previous campaigns. But this does not mean that Edward ignored his own supply needs in 1336. On 17 July the receiver at Newcastle forwarded 300 quarters of peas to Aberdeen, in an obviously prearranged plan with the king to meet his forces in the vicinity of the town during his *chevauchée*.[123]

From this time forward the general trend was that the organisation, collection and distribution of supplies were now mainly placed in the hands of several merchants. Most prominent among them were Thomas and William Melcheburn of King's Lynn. Between July and August 1336 they collected and shipped to Berwick 2,978 quarters of wheat at 7s per quarter, 3,090 quarters of oats at 4s a quarter, 1,000 quarters of mixed cereals, 278 quarters of beans, 384 tuns of flour

more detailed particulars are recorded on E101/19/30; he began his service on 1 September and arrived back at Bristol on 26 November.

120 *Rot. Scot.* I, p. 409.

121 *Ibid.*

122 *Ibid.*, p. 436.

123 E101/19/16, m. 4. Edward actually arrived in the Aberdeen area around 21 July, so this ship if it was sent on 17 July could well have met the king on the coast. Peas would have been used for pottage and would not have required the same amount of preparation for cooking that flour or wheat would. For the dates of the campaign, see C. J. Rogers, *The wars of Edward III*, pp. 48–50 especially p. 49.

and 384 quarters of malt.[124] By examining the surviving Exchequer accounts relating to the collection and shipment of supplies we can arrive at a good estimate as to the numbers of ships involved in the 1336 campaign. For instance, the Melcheburn's procured the services of thirteen ships, all from ports situated on the east coast, seven of which came from King's Lynn. In addition, the receiver at Newcastle utilised the services of six vessels while another nine were employed elsewhere in the supply operations. In all thirty identifiable ships were employed in a supply role for this campaign.[125]

The naval contingent was also much reduced in 1336, but again by analysing the available sources we can gain a better understanding of just how much Edward had begun to tire of his Scottish project. Orders were first issued for the arrest of ships on 8 February 1336 when James Kingston was to requisition vessels over forty tuns, all fully manned, victualled and armed, from Faversham to the north.[126] On 20 February further demands for the collection of ships were sent to William Weredale and Ambrose de Newburgh, who were to visit ports north of the Thames, and Ralph Willingham who was to search the ports south of the Thames.[127] Furthermore, by 3 May William de Emeldon was requisitioning vessels in the ports of Newcastle, Hartlepool and Berwick.[128] In the previous month of March a series of requests for ships had been sent directly to individuals such as Stephen de Padiham of Winchelsea, who was expected to contribute his ships, the *Cog Thomas* and *Cog Andreu*, for military service by Easter, and during April four barges were ordered to patrol the sea around Dumbarton castle.[129] An order, issued on 28 June, demanded that the ships of North Wales were to put to sea under the supervision of the earl of Arundel.[130] In the months of August and September requests for more ships were constantly issued and on 18 August the ships of Ireland were told to go against the Scots, while six days later all available vessels in Cornwall were to be put to sea. At the same time Roger Conduit, mayor of London, was to contribute three further

[124] E101/19/30; E101/19/32. In total Thomas and William used thirteen ships to transport these supplies. For example, Thomas freighted 180 quarters of wheat and 237 quarters of the oats the *Godyer* of King's Lynn, commanded by Walter Brekeheved.

[125] King's Lynn contributed the majority of ships with their compliment of eight vessels. The *Mariote* from the Isle of Wight was also involved in the supply operation when during November it transported victuals to Scotland, in addition to the *Rose* of King's Lynn, commanded by John Brancaster, which in April freighted stockfish to the forces of Scotland. Two further ships from Bristol and two vessels from Ireland were also involved, see *CPR, 1334–38*, pp. 247, 333; *Rot. Scot.* I, pp. 436, 437. The evidence for the supplies is recorded in: E101/19/30; E101/19/32; E101/19/33; E101/19/34; E101/20/2; E101/20/4; E101/20/7, m. 1.

[126] *CCR, 1333–37*, p. 544.

[127] *Rot. Scot.* I, p. 403.

[128] *CCR, 1333–37*, p. 573.

[129] *Rot. Scot.* I, p. 414, 417, 651.

[130] *CCR, 1333–37*, p. 593; *Rot. Scot.* I, p. 435.

ships fully manned, armed and supplied.[131] By 6 October a large flotilla of ships was ordered to be at Portsmouth and be ready to sail. No doubt this demand was issued because of the large French fleet at anchor in the ports of Normandy.[132]

How many ships did these orders actually produce? The Wardrobe book of Richard Ferriby records the wages paid to the crews of twenty-one individual ships.[133] Fourteen of these served throughout June, July and August, but three of them had been in active service from March.[134] The service which these ships were to undertake was described as an 'expedition of war' and all were to sail to Perth.[135] The king's vessels, the *Rodecog,* commanded by Hugh Reppes, and the *Seinte John,* also commanded by Reppes, had been in service from May.[136] In addition, Thomas Roscelyn employed eight vessels to transport himself and the garrison force under his command from King's Lynn to Dunnotar.[137] The total number of mariners recorded through the Exchequer as receiving wages was 355, although only seven ships are actually provided with full crew compliments.[138] The evidence therefore seems to show that the naval contingent in 1336 was not

131 *Ibid*., pp. 442, 446, 447. These three ships probably relate to the £86 10s given by London to provide ships for the king, see *Calendar of letter books of the city of London, letter book f*, p. 5.

132 *Rot. Scot.* I, pp. 467–68. In total sixty-three ports received orders to contribute ships, of which twenty-nine were situated north of the Thames and thirty-four south and west of the Thames.

133 BL, Cotton MS, Nero C.VIII, fols 265v, 266r, 266v. Four ships are not accorded any masters or crew but were sent by Robert Tonge with 42 men-at-arms and 99 archers: the *Holygost* of Berwick; the *Flemyngt*; the *Mayln* of Grimsby and the *Cristiane* of Blackeneye. No doubt the ship the *Holygost* was the same vessel that was recorded on Tonge's victual account of 1336–37 (E101/20/4, m. 8) and commanded by John Hardarrage.

134 John Houlot, master of the *Ceale* of Hull; William Broun, master of the *Leonard* of Hull; Thomas Nesbit, master of the *Nicholas* of Hartlepool. Hugh Reppes, master of the king's ship the *Rodecog* had served from May, although Reppes had been on almost continual service throughout 1334–36.

135 Ten ports, with eight of these located north of the Thames, and two south and west of the Thames, supplied these vessels. The largest contributor was the port of Hull, which provided five (23.8%) vessels to the fleet, followed by Grimsby and Newcastle, which each supplied two (9.5%) ships.

136 The *Rodecog* had a crew of 1 constable and 38 mariners and Reppes served as its master until 31 October 1335 and then from 1 November 1335 for a further 120 days, before he changed to the *St John,* see BL, Cotton MS, Nero C.VIII, fols 264r, 265v.

137 C. Candy, 'The Scottish wars of Edward III', p. 255.

138 BL, Cotton MS, Nero C.VIII, fol. 266r. There is also a much more detailed and larger payroll of the ships that served in the western fleet, as recorded by John de Watenhul (E101/19/38, mm. 1–12) on behalf of Bartholomew Burghersh. This account runs from 3 October 1336 to 10 November 1337. However, all the ships in this account served only in 1337 and were no doubt involved in guarding the coast from the French fleet at anchor in Normandy and also in the preparations for the king's intended passage to Flanders in that year. However, the largest single ship was the *Wehalchbot*, commanded by Adam Cogger, which was manned by 120 mariners and 1 constable and served from 24 August to 10 November and cost the crown £126 8s.

as large as it had been over the previous campaigns; indeed it probably numbered some thirty-eight ships. This was due in large part to Edward's continental troubles, but by then he must also have begun to realise that Edward Balliol was incapable of pushing home the advantage that the victories of Dupplin Moor and Halidon Hill had provided him with. Consequently, as direct royal intervention on a grand scale drifted away from the Scottish theatre of operations so too did the resources of England. The following table clearly highlights the peaks and troughs of English logistical operations in the Scottish expeditions by showing the numbers of ships that sailed in each campaign.

**Table 2.4 Numbers of ships involved in all the Scottish campaigns between 1322 and 1336**

| Campaign | Ships | Mariners | Southern fleet | Northern fleet |
|---|---|---|---|---|
| 1322 | 284 | 10,000 | 131 | 153 |
| 1327 | 154 | 2,500 | 74 | 80 |
| 1333 | 228 | 5,000 | 137 | 91 |
| 1334 | 25 | 372 | 8 | 17 |
| 1335 | 189 | 6,000 | 118 | 71 |
| 1336 | 73 | 335 | 25 | 48 |

## Maritime Logistics and the Naval War in Scotland, 1337–1360

The last section has analysed the evidence relating to the supply of victuals by sea and the naval service of ships during a series of royal led campaigns. We now turn to the issue of maritime supply and the naval war during the years when direct royal intervention was lacking (except in 1341 and 1356 for short periods), and when the direction of the war in Scotland passed to the king's lieutenants. These commanders indented with the king to serve with a retinue alongside other forces provided by the crown in Scotland, or on the marches. Initially in 1336 Henry of Grosmont, earl of Derby had undertaken this duty before Thomas Beauchamp, earl of Warwick, took over in 1337. But even these high-ranking nobles were gradually drawn to the more prestigious campaigns in France, and from 1338–60 Scotland was usually left to the care of Henry Percy, Thomas Lucy and Edward Balliol.[139]

An examination of the *Rotuli Scotiae* throughout the period 1337–60 reveals a dramatic decline in orders for the large quantities of supplies that were required for the expeditions between 1333 and 1335. True, the campaigns in 1337 and 1338 were accompanied by demands for large amounts of victuals, but generally, after

[139] For a lucid discussion of the arrangements made with Grosmont and Warwick, see N. B. Lewis, 'The recruitment and organisation of a contract army, May to November 1337', *BIHR* 37 (1964), pp. 1–19.

1338, the orders issued from the Chancery were concerned with the supply of garrisons. This is evidenced by that fact that in 1337 the only significant order that was issued was for Hull to fit out thirty ships capable of carrying victuals to the army under the command of the earl of Warwick.[140] In the following year, however, there was a sizeable military operation outside Dunbar castle and although this siege ended in failure detailed arrangements were made for the supply of the English army, both in terms of foodstuffs and military equipment.[141] For example, a siege engine was transported to Dunbar on 10 December 1337 in the *Coggeship* of Southampton and this vessel was employed to freight a new engine to replace the one previously sent on board the *Katerine* of Middleburgh, which had been lost at sea.[142]

But after the eventful year of 1338 the victual arrangements for Scotland begin to fall into a distinct pattern. Apart from an initial demand in 1339 for 2,100 quarters of wheat, 600 quarters of oats and 250 stockfish, the main focus of that year was the ongoing operation to keep the existing English garrisons well supplied.[143] In particular, the English forces at Perth dominate these orders. In early 1339 requests for wine to be sent to Perth were issued to the receiver at Berwick; and on 9 March merchants were encouraged to forward supplies there by sea, while during April, York and Hull were told to freight 500 quarters of wheat, 300 quarters flour, 380 quarters of barley and 540 quarters of peas to the garrison. Robert Tonge, the receiver of victuals at Berwick, usually managed the supply operation and most of the vessels that were employed in a logistical role were recorded through his accounts. For example, in 1337 Robert employed the services of thirty-six ships to freight victuals from Berwick to the outlying English garrisons. Of these, seventeen were dispatched to Edinburgh, ten to Perth and two to Bamburgh castle.[144] On 19 February 1337 Tonge also employed one small boat to conduct foot soldiers from Berwick to Perth.[145] But the numbers of ships involved in the transportation of victuals from 1337 to 1360 was not of the same magnitude as the earlier campaigns. Using the available evidence it is possible to suggest that sixty-two individual ships took part in the supply operations during

[140] *Rot. Scot.* I, p. 494.

[141] For the details of this army, see A. Ayton, *Knights and warhorses*, p. 172. But also, see J. Sumption, *Trial by battle*, pp. 236–37 and C. J. Rogers, *War cruel and sharp*, pp. 151–52. Both these accounts provide details of the actual events at the siege. For the victual arrangements in 1337 and 1338, see E101/20/4; E101/20/32; E101/21/2; E101/21/24, nos, 6, 7, 8–18, 20, 21, 26–53, 55–58, 67–73.

[142] *CPR, 1334–38*, p. 559. Sixty mariners manned this vessel. However, the king still issued a payment of £50 to the owner for compensation, see *CCR, 1341–43*, p. 186.

[143] *Rot. Scot.* I, pp. 558–89. The orders after 1338 were usually for small amounts of supplies to be sent to the outlying English garrisons such as Edinburgh and Roxburgh, and for small quantities to be sent to Berwick, see *Rot. Scot.* I, pp. 581–83, 586, 589, 619, 639, 700, 715.

[144] E101/20/4, mm. 7–9.

[145] *Ibid.*, m. 10.

these years, and that apart from one ship from London and one from Bristol, ports located on the eastern coast of England contributed all of these vessels.[146]

The naval role of ships during this period was also much reduced, when compared with the numbers of vessels that had been put into operation during the previous years. This partly reflected Edward's change of strategic focus. This was especially the case after the French had diverted their Mediterranean 'crusade' fleet to the Norman ports. This French armada posed a direct threat to English shipping and the southern ports of Edward's realm. However, Scotland was not completely neglected and using all the available sources it is possible to say that a total of thirty-two ships operated in a military role during the northern campaigns in the years from 1337 to 1360.[147] The numbers of mariners that served on these vessels is difficult to establish and although some of the ships are provided with crew numbers these are quite high, presumably because these vessels operated in a naval capacity.[148] But if we use the average of thirty mariners per ship then a rough estimate of the number of serving seamen would be in the region of 1,300 to 1,500.[149]

Taking all this evidence together it is possible to say that in the period 1337–60 ninety-four confirmed ships took part in supply and naval operations relating to Scotland. Table 2.5 and Table 2.6 record the quantities of supplies collected for each expedition and the numbers of ships involved in all the Scottish campaigns. The evidence contained in these two tables clearly show the periods of the greatest military intensity as compared to the times when the logistical effort began to decline. However, it would be a mistake to assume that the naval war in the north after 1336 was totally neglected and the English crown, at times, would ensure that there was a proactive naval presence. For example, from 8 June to 15 August 1338 the ship *Gracedieu* of King's Lynn, a large vessel manned fifty mariners with forty men-at-arms and forty archers on board, was at sea pursuing Scottish pirates and other Scottish ships.[150]

[146] E101/20/4, mm. 7–9; *Rot. Scot.* I, p. 530; *CCR, 1337–39*, pp. 27, 199, 216, 229; *CCR, 1341–43*, pp. 186, 205; *CCR, 1343–46*, p. 407; *CPR, 1345–48*, p. 152; *CPR, 1348–50*, p. 452; *CPR, 1358–61*, p. 27.

[147] E101/20/28; E101/20/34; E101/22/24; E101/22/36; *Rot. Scot.* I, pp. 483, 485, 521; *CCR, 1337–39*, pp. 194, 197, 251; *Foedera*, II, ii, p. 1082; *CPR, 1343–45*, p. 555; *CCR, 1346–49*, pp. 132–33. Eighteen (56.2%) of these vessels came from ports located on the east coast, four (12.5%) were ships taken as prizes of war and re-used by the English, one was foreign, one was contributed by Southampton and eight (25%) are not specifically linked to any port of origin.

[148] The *Gracedieu* of King's Lynn, for example, had fifty mariners on board, see E101/20/28. Crew sizes are discussed in more detail in Chapter 4.

[149] On crew sizes, see below pp. 265–73.

[150] The ship was commanded by Thomas Robyn, see E101/20/28, mm. 1–2.

**Table 2.5 Quantities of victuals collected for use in each expedition, 1322–1360**

| Year | Cereals (qtr) | Flour (tuns) | Salt (qtr) | Fish (tuns) | Meat (carcases) | Wine (tuns) |
|---|---|---|---|---|---|---|
| 1322 | 16,407 | – | – | 1,800 | 532 | 1,745 |
| 1327 | 11,104 | – | 3,760 | 16 | 868 | – |
| 1333 | 7,886 | 223 | – | – | – | 532 |
| 1334 | 5,199 | 72 | – | – | – | 75 |
| 1335 | 13,370 | 652 | 427 | 10,995 | – | 273 |
| 1336 | 7,320 | 169 | 137 | – | – | 196 |
| 1337–60 | 26,479 | 595 | 273 | – | – | 923 |

**Table 2.6 Numbers of ships involved in individual operations throughout the Scottish campaigns, 1322–1360**

| Campaign | Ships | Mariners | Southern Fleet | Northern Fleet |
|---|---|---|---|---|
| 1322 | 284 | 10,000 | 131 | 153 |
| 1327 | 154 | 2,500 | 74 | 80 |
| 1333 | 228 | 5,000 | 137 | 91 |
| 1334 | 25 | 372 | 8 | 17 |
| 1335 | 189 | 6,000 | 118 | 71 |
| 1336 | 73 | 335 | 25 | 48 |
| 1337–60 | 96 | 3,000 | 8 | 88 |

*Note:* This table does not include all the ships that operated in the Scottish wars. It only contains those that can be placed within specific expeditions. See Table 2.7 for the total numbers of vessels engaged in the campaigns in Scotland

The evidence tabulated above shows quite clearly that the invasions of 1333 and 1335 were the apogee of Edward III's expeditions to Scotland.[151] The evidence relating to 1334 and 1336, for example, shows that although the quantities of the collected supplies were not much reduced from the years when the most intensive military actions took place, the size of the maritime dimension of the campaigns was markedly reduced.[152] In fact the general trend is that from the expedition of 1322, when 284 ships participated in Edward II's invasion of Scotland, with further peaks in 1333 and 1335, we eventually see evidence of a decline in the deployment of English sea power against Scotland. Indeed, from 1337 only ninety-six ships served over a twenty-year period, and these were mainly drawn from the ports that were located closest to the main supply depot of

[151] The Roxburgh campaign although sandwiched between the two large expeditions of 1333 and 1335 should be seen as an anomaly owing to the fact that this was a winter campaign conducted away from the coast in a particularly harsh winter with small numbers of land-based troops.

[152] That the victuals collected for 1334 and 1336 would be reduced should not be a surprise considering the relative size of the armies of those years when compared to 1322 and 1335.

Berwick. Finally, the analysis shows that after 1338 the English government rarely committed itself to a major logistical effort north of the border. This is shown by the fact that the victuals that were collected in 1337 and 1338 amounted to forty-six percent of all the supplies that were sent to Scotland in the period 1337 to 1360.

From the above analysis six main points are brought out. First, when we take into account the relative size of the 1322 army, as compared with the forces recruited by Edward III, Table 2.5 reveals that by 1335 Edward III was exploiting the kingdom's agricultural resources on a scale above that of his father. Moreover, because the armies Edward III deployed were smaller but of a higher quality than his father's, the former did not require as many supply ships. Second, demands on the English merchant fleet was not reduced and, if anything, actually increased during the period 1337–60, as Edward III needed substantial armadas to transport his armies to the continent. For instance, if we take 1338 as an example we can immediately see the increased scale of Edward III's maritime operations. In that year eight ships operated in Scottish waters as supply, transport or fighting vessels, while Edward raised an armada of 403 ships in order to transport his army to Flanders.[153] Third, the numbers of English ships deployed against Scotland goes some way to address the argument that the Scots usually held the advantage in the maritime war during the period under consideration, and that Edward III failed, or was not willing, to commit all his power to the wars in Scotland.[154] Although the latter point may well be valid for the period after 1336, the overwhelming numerical superiority in ships employed by Edward II and Edward III surely favoured the Plantagenets rather than the Bruces in the naval war. It is true that the Scots preyed on English ships, but these were scattered examples of piracy against small numbers of supply vessels or trading ships making their way up the east coast. It must also be borne in mind that the English attacked Scottish shipping, in addition to devastating their port communities such as the burning of Aberdeen in 1336.[155]

Fourth, the point recently made by historians that Edward III deployed no major fleet with the aim of forcing a battle in Scotland, and as a corollary did not understand the importance of naval warfare, is not supported by an examination of the sources.[156] The siege of Berwick in 1333 and the great offensive of 1335 saw

[153] For the Scottish ships, see *CPR, 1338–40*, p. 227; E101/20/34, m. 2; E101/20/39, no. 42. For the Flanders fleet, see below Chapter 3.

[154] C. Brown, *The second Scottish wars of independence, 1332–1363* (Stroud, 2002) pp. 48, 70. Brown states that the Scots usually had the advantage in naval affairs.

[155] For example, *CCR, 1337–39*, p. 172, which states 'order to deliver to William de Goseford, a ship called *La Cogg* of Flanders, which he took, and on which the bishop of Glasgow and other of the king's enemies were, certain being killed, as the king has given William that ship'. This was a great coup for Edward to catch such a prominent member of the Scottish nobility and shows that the English were also engaged in an aggressive maritime war.

[156] C. Brown, *The second Scottish war of independence*, p. 48 makes this point.

large numbers of English vessels being deployed with the primary purpose of destroying any Scottish ships they confronted, while also burning several Scottish harbours in order to prevent retaliation by the Bruce party.[157] Moreover, in 1333 a large English fleet was effectively deployed as part of the siege of Berwick, which did result in a battle. In fact the evidence seems to suggest that in most Scottish expeditions the English crown did the best it could, considering the relative poverty of maritime communication systems and technology, in trying to disrupt the Scottish resistance effort by attempting to intercept vessels that were sent to Scotland by her main allies. For example, in June 1335 two ships were sent on active service with orders to attack any ships bound for western Scotland.[158] In all the evidence points to the fact that in the period when the English king's attention was focused on Scotland the English crown would actively pursue both a naval war and, on the whole, a successful maritime logistical support operation, showing that the king and his advisors had a firm grasp for the need of a large naval dimension to any expedition north of the border.

Fifth, more recently it has also been suggested that the fleet south of the Thames was mainly deployed as a protection against possible French raids.[159] Although this was probably the case in some circumstances, it is unlikely to have been true during the periods of the major expeditions of 1333 and 1335. In fact by confining a large section of his maritime resources to the English Channel during his Scottish expeditions Edward III would in effect be diluting his naval strength at the point where it was (perhaps) most needed. That the French did send ships to aid Scotland in the wars is not doubted, but they did so only in small numbers and not until after 1336, when the breakdown of diplomatic relations between France and England and the redeployment of Philip VI's Mediterranean fleet to northern France posed a direct threat to Edward. It was this latter move in 1336 that provided the main impetus for change in the orientation of English sea power.

Finally, the analysis of the supply operations also allows some conclusions to be drawn. By comparing the amounts of victuals that were ordered during the preparations for a campaign with the quantities that were actually collected it can be seen that, on average, only fifty percent was usually successfully gathered. For example, in 1322 Edward II requested that a total amount of 34,300 quarters of wheat, oats, barley and beans and peas were to be collected. Yet the sources show that his officers managed to gather only 16,407 quarters of these supplies. Edward III's administrative officials fared no better and in 1334 and 1335 the crown ordered that 39,000 quarters of various crops be collected, but the clerks in charge of this operation only managed to gather 18,569 quarters. Yet, 1336 was a success with 7,320 quarters of various cereals being collected when only 5,300

[157] For a powerful rejection of the argument that Edward III was not a capable naval strategist, see G. R. Cushway, 'The lord of the sea', pp. 272–97.

[158] The ships were from Dartmouth and Liverpool, see *CCR, 1333–37*, p. 414; E101/15/9.

[159] C. Candy, 'The Scottish wars of Edward III', p. 245.

quarters had been ordered. The evidence also points to the fact that gradually after 1336, and certainly by 1338, the system was left entirely to private merchants, with no direct intervention from the government except in times when the king, or his friends, was personally involved in an expedition. In the period 1338–60 some 26,479 quarters of various supplies were collected when only 14,990 quarters had been ordered from the royal administration. Clearly the new victual operation involving private merchants was working quite successfully without government intervention. Indeed, one suspects that the enormous quantities of supplies that were ordered at the outset of a campaign was done so because the crown only expected to collect fifty percent of what was requested. Thus, in reality Edward II would never have hoped to actually collect 34,300 quarters in 1322 but in asking for this amount he probably expected his officials to at least gather 15,000 quarters. In all, the victual operation in Scotland during the period covered by this study should be viewed as a success. Even after direct government intervention ceased the whole system seems to have run relatively well in the hands of the receiver of victuals and the King's Lynn merchants.

In conclusion the above analysis shows that English kings had a firm grasp of maritime strategy. They employed ships to blockade important points of resistance, such as at the siege of Berwick in 1333 and at Dumbarton castle in 1334–35; they raised huge fleets to freight arms and supplies directly to the theatres of operations, and they deployed small flotillas of ships in a more aggressive role such as the burning of Scottish ports. That the English government's aim in this maritime war was not always achieved owes more to the nature of communicational difficulties and the enormous and complicated bureaucratic process required to get an armada to sea in sometimes un-seasonable conditions. In general the level of the maritime involvement in the Scottish wars between 1322 and 1360 should be viewed as a success. That Berwick would have been retaken in 1333 without naval support is questionable, and without a considerable maritime element all the invasions of these years would have been impossible. The following two tables highlight the whole logistical operation in the Scottish wars by showing the overall numbers of ships that were deployed and the total quantities of foodstuffs that were freighted.

**Table 2.7 Total numbers of ships serving in the Scottish wars, 1322–60**

| | |
|---|---|
| Number of ships | 1,141 |
| Number of ports | 98 |
| Ships from south of Thames | 513 (from 54 ports) |
| Ships from north of Thames | 628 (from 44 ports) |
| Mariners | 30,000 |

*Sources*: *Cal. Inq. Misc.*, II, 1307–1349, nos 683, 689, 1088, 1496, pp. 170–72, 269, 365; BL, Stowe MS 553, fols 76r–77v; BL, Add MS 35181, fols 3v, 10v; BL, Cotton MS, Nero C.VIII, fols 264r–266v; *Bain*, no. 766, p. 142; Calendar of letter books of the city of London, letter book f, p. 5; *CCR, 1318–23*, pp. 462, 463, 534, 540, 547, 553, 559, 591, 660–61; *CCR, 1333–37*, pp. 22, 25, 99, 194, 197,

251, 573, 651; *CCR, 1337–39*, pp. 27, 46, 199, 209, 216, 251 *CPR, 1321–24*, pp. 14, 77, 86, 90, 102, 107, 109–10, 114, 134, 204, 205, 207; *CPR, 1327–30*, pp. 104, 108, 141; *CPR, 1330–34*, p. 410; *CPR, 1334–38*, pp. 98, 247, 337; *CPR, 1343–45*, p. 555; *CCR, 1346–49*, pp. 132–33; *Foedera*, II, i, p. 485; *Foedera*, II, ii, pp. 703, 1082; E101/15/36; E101/16/1; E101/16/7; E101/16/8; E101/16/20; E101/16/21; E101/17/24; E101/17/35; E101/18/2; E101/18/3; E101/18/8; E101/18/10; E101/18/19; E101/18/28; E101/18/31; E101/18/32; E101/18/33, nos 14, 7–10; E101/18/34; E101/18/35; E101/18/36; E101/19/1; E101/19/2; E101/19/3; E101/19/6; E101/19/9; E101/19/10; E101/19/11; E101/19/12; E101/19/14; E101/19/15; E101/19/16; E101/19/25; E101/19/30; E101/19/32; E101/19/33; E101/19/34; E101/19/38; E101/20/2; E101/20/4; E101/20/7; E101/20/10; E101/20/13; E101/20/28; E101/20/32; E101/20/34; E101/21/2; E101/21/23; E101/21/24; E101/22/3; E101/22/24; E101/22/36; E101/23/2; E101/23/9; E101/23/15; E101/23/34; E101/23/26; E372/177, mm. 52, 52d; E372/179, m. 36, 41; E372/180, mm. 43, 44, 47; E372/184, m. 3d; *Rot. Scot.* I, pp. 206–07, 209–12, 215, 220–21; 225, 226, 232, 233, 234, 248–49, 286, 291, 294–97, 305, 309, 311–12, 320–21, 324–25, 414, 417, 435–37, 442, 446, 447, 467–68, 483, 485, 521–23, 530, 533–34, 558–60, 562, 564, 568, 569, 570, 576–77; R. Nicholson, *Edward III and the Scots*, pp. 121, 181; C. Candy, 'The Scottish wars of Edward III', p. 255.

**Table 2.8 Total quantities of victuals shipped to Scotland, 1322–1360**

| Types of victuals | Quantities |
|---|---|
| Wheat (qtr) | 40,190 |
| Oats(qtr) | 27,459 |
| Beans and peas (qtr) | 8,144 |
| Malt (qtr) | 3,463 |
| Various cereals (qtr) | 8,509 |
| Flour (tuns) | 1,711 |
| Meat (carcases) | 1,400 |
| Fish (tuns) | 12,811 |
| Wine and cider (tuns) | 3,744 |
| Salt (qtr) | 4,597 |

## The Supply of English Armies in France, 1324–1349

In the opening section of this chapter it was noted that the prevailing idea on how English armies supplied themselves, when campaigning on the continent, was that they usually relied on the local countryside, or the sack of a town, to keep themselves fed while on the march. But it was also recognised that recently this view has begun to be eroded as a better understanding emerges of the scale and scope of the organisational abilities of the Edwardian kings.[160] The following section will use four case studies relating to the campaigns conducted in Gascony (1324–49) and the Low Countries (1338–40), in order to show that, in most cases, the forces serving abroad under Edward II and Edward III transported large quantities of foodstuffs over with them, to such an extent, that living off

[160] The excellent study by R. A. Kaner, 'The management and mobilisation of English armies', Chapter 9, concludes with a positive assessment of the government's abilities to organise complex logistical operations and achieve a high measure of success.

the land became simply a means of replenishing what supplies they had already brought over with them.

The St Sardos expedition of 1324 is one of the best-documented campaigns of the period. Although the evidence relating to the issue of victual shipments do not rival the pay details of the army and navy, they nevertheless, allow a good assessment of the quantities of supplies that were transported to Gascony with the army. The collection of foodstuffs for this campaign began in March 1324 and during this month Robert de Nottingham acquired supplies from the counties of Lincolnshire and Nottinghamshire.[161] Later in the year a further 1,470 quarters of wheat, 239 quarters of beans and peas, 21 quarters of oats, 88 beef carcases, 131 bacons and 104 tuns of flour were shipped to Bordeaux in twenty-six ships. In addition to these victuals each ship also carried seven tuns of water for the requirements of the horses it transported.[162] All of these vessels, except the *Blithe* from King's Lynn, commanded by Richard Erinyte, were from ports south and west of the Thames. A further 1,050 quarters of wheat, 630 quarters of beans, 216 quarters of oats, 7 bacons and 27 quarters of flour was transported in October 1324.[163] The final fleet to leave England and travel to Gascony in the spring of 1325 also carried with it a further 375 tuns of flour, 585 quarters 1 pipe of flour, 40 quarters of wheat and 20 quarters 3 bushels of beans and peas.[164] As well as the collection of foodstuffs the gathering of various types of arms was also underway and during the same period a total of 5,657 nails, 3,000 boards, 136 springalds with 8,170 quarrels and 329 extra cords, 100 large spikes, 250 middle spikes were freighted to the duchy in twelve ships contributed by ports situated on the east coast.[165] Added to these supplies can be other materials of war that were freighted in twenty-six ships from the southern admiralty in the summer of 1325, which amounted to enough wood for 20 bridges, 122 cords, 1,215 nails, 32 racks for horse fodder, 731 boards, 197 nets, and 182 *canenasta*.[166] Taken together a total of 2,560 quarters 5 bushels of wheat, 889 quarters 3 bushels of beans and peas, 237 quarters of oats, 479 tuns 612 quarters of flour, 88 beef carcases and

[161] E101/16/36. He claimed £18 4s for his expenses.

[162] E101/16/35, mm. 1–2, 1d, 2d. A tun was 954 litres or 252 gallons as laid down by a statute of 1423. See G. Hutchinson, *Medieval ships and shipping*, p. 90 and B. Lavery, *Ship: 5,000 years of maritime adventure* (London, 2004), p. 44. It estimated that a horse would require 15 gallons a day depending on the temperature, see D. L. Smith, 'Muscovite logistics', p. 45.

[163] E101/17/4, mm. 1, 2, 2d.

[164] E101/16/40.

[165] E101/16/34, nos 1–17.

[166] The term *canenasta* is intriguing because this could be a form of early cannon or some form of gunpowder weapon. If this is the case then it is one of the earliest forms of this type of weapon. See R. D., Smith, 'Artillery and the hundred years war', in *Arms, armies and fortifications in the hundred years war*, ed. A. Curry and M. Hughes (Woodbridge, 1999), pp. 151–61, p. 151, which notes that the earliest reference to such weapons in Europe dates to 1326. Alternatively the term could be derived from the Latin word, *cannesta*, which is an ornamental head covering, and as such these could have been some form of protective headwear.

138 bacons were freighted to the duchy with the army in 1324–25. Even if we allow for the wastage of 1,000 quarters of the wheat there would still have been enough to keep 2,000 men supplied for close to two months.[167] The evidence relating to the precautions taken for the feeding of horses in this expedition is also important and in addition to soldiers it must also be assumed that some of the supplies collected were for their consumption. In fact horses could be large consumers of fodder with each one requiring some 24–32 pounds of feed a day.[168] Thus when discussing the quantities of victuals collected it should not be automatically assumed that these were solely for human consumption.

Similar precautions were taken when supplying armies going to Gascony in the 1330s and 40s. For example, before John de Norwich served in the duchy in 1337 he ensured he had enough supplies for himself and his retinue. As such, Stephen le Blount collected 1,415 quarters of wheat, 2,034 quarters of flour, 21 quarters 6 bushels of malt, 695 quarters of oats, 785 quarters of beans and peas, 28 beef carcases, 319 bacons, 589 muttons, 6,520 fish and 80 conger eels.[169] In the following year Norwich was sent a further 1,955 quarters of wheat, bought from 246 people at a cost of £400 13s 10d.[170] This large amount of foodstuffs was surely meant not only for Norwich's small retinue but also for the Gascons who served under him as Edward III's representative in the duchy.[171]

During the Gascon campaigns of 1345–49, initially led by Henry of Grosmont, the supply of the English forces in the duchy was a well-planned operation. At the outset of the expedition in 1345 Grosmont transported to the duchy 264 boards, 1,280 large beams, enough to construct 50 bridges, 20 springalds with 146 cords and 104 quarrels, 2,737 sheaves of arrows for bows, 1,000 caltrops, 1,000 *sanalshapps* and 45 *carbons*.[172] In November of the following year 800 quarters of wheat and an un-quantified cargo of fish, along with other supplies, were taken to

[167] There is evidence from a letter written by Ralph Basset, John Wisham and Adam Lymbergh to Edward II that some of the victuals sent to the duchy arrived rotten and this resulted in civil unrest, however, this letter was written in early May 1325 so it must relate to the victuals sent for the forces already in the duchy, because the earl of Surrey did not set sail form England until 22 May 1325. See P. Chaplais, *The war of Saint-Sardos* (London, 1954), pp. 221–22.

[168] D. L. Smith, 'Muscovite logistics', p. 44. This weight would consist of half grain and half fodder.

[169] E101/20/30.

[170] E101/21/3.

[171] Norwich's force is known from enrolled protections (C81/17/50, m. 33) and from an Exchequer account (E101/166/11, m. 19). Using these it is difficult to get an accurate picture of the total size of his retinue, however, an estimate as to its size can be gleaned from the £1818 13s owed to him by the Exchequer (*CCR, 1337–39*, p. 323; *CCR, 1339–41*, pp. 40, 321), by spending 65s a day on wages his force was likely to have consisted of 30 men-at-arms and 100 mounted archers.

[172] E101/24/6.

Bordeaux in five ships.[173] In 1347, between May and June, a further 9,050 quarters of wheat, 200 quarters of rye and 400 quarters of beans and peas were freighted to the duchy in twenty-three ships, which except for eight, were all supplied by ports located on the east coast.[174] At the end of July, and throughout August and September, a further nine vessels from Hull and Newcastle transported 1,053 quarters of wheat.[175] And in the summer of 1348 an additional 149 quarters of wheat, 40 quarters of oats and 50 quarters of beans and peas were shipped to Bordeaux.[176] All the foodstuffs sent to Gascony in 1347 went at the request of Grosmont who was by that time participating in the siege of Calais. This was because Henry had left his most trusted retinue leader, Sir Thomas Cok, in charge of the Anglo-Gascon forces and he obviously felt obliged to make sure that Cok and his allies were supplied with provender from England.[177] Finally, the fact that in both 1324 and 1345 wood to construct bridges was transported also provides evidence of good planning. Aquitaine, and indeed much of France, was criss-crossed by large rivers. Grosmont was well prepared for river crossings, as his transportation of enough wood for 50 bridges highlights.

The king's campaigns in the Low Countries during 1338–40 were also well supplied with foodstuffs from England. Initially Edward had expected to cross over to Flanders in 1337 but this had been delayed. However, this cancellation did not stop the work of the purveyors and, as one chronicler noted, Edward's officers were extremely diligent in their business for this expedition.[178] For example, Reginald de Donington, clerk, searched the county of Lincolnshire and the area around Lindsey for foodstuffs. He traversed through 537 towns, manors, vills and abbeys and in total he collected £809 12s 8d worth of victuals.[179] By expending such a large amount of money Donington would have been able to purchase roughly 5,000 quarters of wheat.[180] Nevertheless, it was in the following

[173] *CPR, 1345–48*, pp. 198, 204, 206, 215. One ship came from Winchelsea, one from London, and the other three were all foreign vessels from Spain.

[174] *Ibid*., pp. 218–20.

[175] E101/25/20, nos 10–15.

[176] *Ibid*., nos, 5–9.

[177] Thomas Cok was retained as seneschal of Aquitaine from 1346 to 1349, see K. Fowler, *The king's lieutenant*, p. 301. However, Grosmont was back in Gascony at the end of 1349 and stayed in the duchy until 1351, so Grosmont could have used some of these supplies during his 1349 campaigns, see C. J. Rogers, *War cruel and sharp*, pp. 287, 294. Supplies could also be collected in Gascony through a system of corn rents on this, see E. C. Lodge, 'The constables of Bordeaux in the reign of Edward III', *EHR* 50 (1935), pp. 225–41, p. 226.

[178] *Knighton*, p. 7.

[179] E101/20/11, mm. 1–6.

[180] E101/21/40. This is based on the £32 6s 1d paid for 265 quarters 6 bushels of wheat by William Wallingford in 1339. Although it must be noted that the prices that were paid for wheat in the Scottish campaigns usually amounted to between 5s and 7s per quarter. Therefore, this amount of money could have bought only 3,200–3,500 quarters of wheat. Although during years when demand was heavy for wheat the price per quarter could increase dramatically.

two years that most of the activity for the collection of supplies occurred. From March to August 1338, William Dunstable, collected 347 quarters of wheat, 430 quarters of oats, 41 quarters of beans and peas, 9 quarters of malt, 92 quarters of salt, 110 muttons, 111 bacons, 1,287 horse shoes and 1,760 nails from the counties of Lincolnshire, Nottinghamshire, Derbyshire, Cambridgeshire, Huntingdonshire, Essex and Hertfordshire. All these victuals were taken to the ports of Great Yarmouth, Ipswich and King's Lynn to be transported to Flanders.[181] In a second, but related account dated to the same period, Dunstable visited the same counties as above but this time he also gathered supplies from York, Bedfordshire, Buckinghamshire, Norfolk and Suffolk. He managed to collect a further 578 quarters of wheat, 138 beef carcases, 716 muttons, 204 bacons, 137 quarters of salt, 457 quarters of barley, 907 horse shoes, 7,900 nails for those shoes, and 80 *canenas* as well as large numbers of springalds, quarrels and caltrops. He distributed these victuals to various people, including Walter de Mauny, Bartholomew Burghershh and the mariners who were stationed throughout the ports of Great Yarmouth, Sandwich and Orwell.[182] Even before the fleet sailed for Flanders more victuals were still being added to the stores already collected and days before the armada sailed a further 72 quarters 5 bushels of beans and peas was collected for the king's army.[183] It was also the case that during Edward's stay on the continent through 1339, and on his return to the Low Countries in 1340, supplies were regularly collected for his men and shipped to the Low Countries. Table 2.9 shows the quantities of victuals collected and freighted to the continent for use by English armies in the period 1324 to 1346.

**Table 2.9 Quantities of Victuals Freighted to the Continent by Campaign, 1324–1349**

| Campaign | Wheat (qtr) | Oats (qtr) | Beans/Peas (qtr) | Malt (qtr) | Barley (qtr) | Flour (tuns) | Meat (carcases) |
|---|---|---|---|---|---|---|---|
| St Sardos | 2,560 | 237 | 889 | – | – | 479 | – |
| Gascony (1337–49) | 12,318 | 695 | 1,185 | 419 | – | 2,034 | 936 |
| Low Countries | 8,335 | 1,989 | 1,225 | 1,131 | 457 | – | 2,612 |
| Brittany | 5,336 | 1,000 | 1,125 | 1,000 | 1,500 | – | 1,416 |
| Crécy | 8,027 | 3,085 | – | – | – | 824 | 2,670 |

*Note*: It must be noted that in addition to the above supplies there were a further 26, 620 tuns of fish (20,000 of which was freighted in 1346), 3,172 tuns of wine and cider and 1,097 tuns of salt that were transported to various expeditions. For the sources, see E101/16/35, E101/16/36; E101/16/40; E101/17/4; E101/20/11; E101/20/30; E101/21/1; E101/21/3; E101/21/4; E101/21/5; E101/21/40; E101/23/11; E101/23/19; E101/23/20; E101/23/4; E101/24/6; E101/25/8; E101/25/11; E101/25/14; E101/25/16, nos, 1–8; E101/25/20, nos, 5–15; E101/568/9; C76/22, m. 1; *CCR, 1343–46*, p. 309;

[181] E101/21/1.
[182] E101/21/4.
[183] E101/21/5.

*CPR, 1345–48*, pp. 198, 204, 206, 215, 218–20. What are recorded in the table are only quarters there was also an enormous amounts of supplies collected in bushels and parts that have not been included. The victuals for Gascony were collected for only two expeditions: that of John Norwich in 1337 and Henry of Grosmont in 1345–49, although Grosmont was only there from 1345–47.

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Table 2.9 reveals that English armies campaigning on the continent brought enough supplies with them so that living off the land became a secondary consideration. Indeed, the overwhelming Exchequer evidence for this is corroborated by a newsletter sent from Edward's camp during the 1339 Low Countries expedition in which the English king states:

> quel jour nous avoions noz allies devaunt nous, qe nous monstrerent qe iours vitailles estoient pres des penduz et qe le yver estoit durement aproschaunt, qils ne poient demurrer, einz y covendroit retrere sou le marche a retcurnes, quant lor vitailles estoient pres despenduz, quant ior vitailles fusrent despenduz. Verraiment ils feusrent le plus briefment vitallez par cause qils entenderont qe nostre dit cosin nous eust done hastive bataille.[184]

In short Edward is suggesting in this letter that he had enough food to offer his allies substantial quantities as long as they stayed and participated in the operation. The English administration had taken the sometimes harsh lessons they had learnt in the Scottish campaigns of the 1320s and 1330s and applied these directly to their continental expeditions. In fact the English army at this stage, in terms of preparation and organisation, was streets ahead of its continental counterparts. This is not to say that all went well in these campaigns and some chronicles record Edward's frustration, particularly with the council in England, at their lacklustre performance in forwarding him supplies.[185] But this was probably more to do with the flow of money than the collection of foodstuffs, and although one chronicler notes that towards the end of the 1339 campaign Edward's forces became short of supplies, such a problem does not seem to have affected the following campaign of 1340. [186] In all, we may conclude that Edward's campaigns in the Low Countries, from 1338–40, were so well provisioned with foodstuffs that living off the land was relegated to a secondary role. What this evidence suggests is that Edward was not willing to take the risk of campaigning in France, with the aim of seeking a decisive battle, without sufficient supplies to keep his army in the field long enough to achieve his strategic aims.

184 *Avesbury*, p. 305 but also, see *Knighton*, p. 19.

185 *Murimuth*, p. 90.

186 *Scalacronica*, p. 129; *French chronicle of London*, ed. G. J. Augier, Camden series 28 (1844), p. 79. The difficulties of a siege and the amount of material it took to successfully bring one to conclusion are discussed in detail by E. Amt, 'Besieging Bedford', pp. 105–19. It is important to remember that both 1339 and 1340 involved protracted sieges at Cambrai and Tournai, so the lack of victuals towards the end of 1339 does not reflect the fact that Edward had not prepared for sieges.

In the two previous sections of this chapter I have aimed to show that Edward II and Edward III's campaigns both in Scotland and France were well provided with foodstuffs from the outset. There were systems of supply already in place from the reign of Edward I, but under his son and grandson slight alterations were made to the administration of these systems, before Edward III increasingly began to place most of the Scottish supply system under private control from the late 1330s.[187] The gradual shift in the 1330s towards merchants handling the responsibility of supplying the King's forces in Scotland pre-empts the move by parliament in 1340 when the king, under pressure from the estates, enrolled a statute concerning the supply of the military which essentially laid down that from now 'military purveyance should henceforth be entrusted to merchants possessing no special commissions or warrants so that the people or any among them shall not be forced to sell anything against their desire or will'.[188] Of course, the king still used purveyance throughout the French wars but he now called the purveyors 'buyers'. The increasing tendency to allocate victual supply to merchants partly explains the lack of available evidence on purveyance during the campaigns conducted in 1350s. It is worthy of note that the expeditions from 1357 until 1371 were financed without parliamentary subsidies. As such the way supplies were purchased from 1357 to 1371 may create the impression that there was a lack of adequate planning, when it is more likely that the absence of source material owes more to the methods used rather than insufficient care in gathering supplies.

Having said this the quantities freighted during the Scottish wars were enormous, and although the armies of the period still suffered in certain campaigns this was a fault with the distribution of the supplies once stockpiled at Newcastle, Berwick or Skinburness, rather than a failure in their collection. Likewise, the continental campaigns of both Edward II and Edward III were sufficiently supplied with victuals from England. In all of the continental campaigns analysed in this book the quantities of provender transported over to the continent, with the army, were enough to sustain English forces in the field for an average of one to two months; a time span that most medieval expeditions were expected to be prosecuted over. The above findings should come as no surprise because these expeditions took several months to plan and cost enormous amounts of money. Indeed, for an army to be able to maintain itself in the field for one month usually took six months of preparation. It is doubtful that Edward would have

[187] See J. Sumption, *Divided houses*, pp. 62–63. It seems reasonable to assume, however, that throughout the 1350s, because of political considerations, the crown favoured privatised supply, which in turn gives the impression that far less effort was made by the king in securing supplies for his armies (we should also consider that Edward set some of the costs of the war in this period against the huge ransoms that were forthcoming from the battle of Poitiers). This method of supply had the advantage of reducing friction between the king and his subjects, while at the same time maintaining popular support for the war.

[188] W. R. Jones, 'Purveyance for war', p. 314.

thrown away all this meticulous planning and finance on the gamble that his forces could live off the land in enemy territory.[189] Moreover, the findings made here become more poignant when it is remembered that it is now accepted that Edward's ultimate aim was to force a hesitant Philip VI into battle, which could only be fulfilled if the English king could keep his army on enemy soil long enough for honour to dictate that the French must attack. This strategy in turn relies on how much provender the army freighted over with it. These foodstuffs were almost certainly taken with the forces on the large transport fleets and unloaded at the port of disembarkation. Indeed, the majority of the ships in these fleets were merchantmen and the crews of these vessels would have found this process routine. In fact it is likely that northern ships could unload of cargo at the quay side or beached on shore. In the latter case vessels would usually have lifting gear fixed to the mast and spars, or a second ship could be anchored alongside the beached craft, while other vessels were close by through means of a secure mooring post. Finally most northern ships had flat bottoms so they could be beached, unloaded and refloated at high tide.[190]

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Foodstuffs were not the only requirement for armies and the fleets raised for transportation purposes during this period also freighted horses to the continent. Although this was perhaps the most complex component of logistical operations, unfortunately we know little about how it was achieved. We do know, for example, that ships were altered to make them suitable for horse transportation, but exactly what this entailed is difficult to suggest. Generally, however, it involved creating holes in the hulls of ships to which gangplanks would be placed from the quay, or the beach front, so that horses could be loaded into the waiting ships.[191] But how the hurdles (clays or *claias* as they appear in the accounts) were employed in order to corral the horses while they were freighted on board the vessels remains conjectural.[192] We can look at evidence from a later period in relation to how horses were freighted in the northern seas and draw out some possibilities. For example, in 1760 2,400 horses were transported to the conti-

189 See, S. Herberstein, *Notes on Russia* (London, 1951), p. 99 for a detailed description of how troops serving in the early 1500s could survive on limited rations. It is surprising how little victuals soldiers could consume, when on active field campaigns, and still remain physically active. Such evidence suggest that although sedentary garrison troops may have consumed a large quantity of supplies such luxuries were not afforded to those serving on continental expeditions and the supplies collected by the English were indeed enough to sustain them for the majority of the campaign.

190 See L. R. Martin, 'Horse and cargo handling on medieval Mediterranean ships', *The international journal of nautical archaeology* (2002), 31, no. 2, pp. 237–47.

191 See, for example, H. J. Hewitt, *The organisation of war*, pp. 85–87.

192 *Ibid*. See also, T. J. Runyan, 'Naval logistics', p. 90 and *idem*, 'The cog as a warship', *Cogs, caravels and galleons: the sailing ship 1000–1650*, ed. R. Gardiner and R. W. Unger (London, 1994), pp. 47–58, p. 56.

nent by building stalls and providing pails, pumps, grain measures, dung rakes, slings and shipping halters.[193] It is likely that similar arrangements were made in the medieval period. Indeed, in 1324 the horses that were transported to Gascony were equipped with 32 racks for their fodder and 7 tuns of water.[194] It is likely therefore that along with the horses other related necessities were also freighted.

Nevertheless, perhaps the best evidence we have that illuminates the techniques that were employed by mariners when it came to loading horses onto and off ships is provided by the many chronicle sources relating to the crusades and the iconographic evidence, particularly from the Mediterranean.[195] For example, as early as the eighth and ninth centuries Venetian and Byzantine documents record that doors inserted in the hull at water level permitted horses to be loaded and unloaded from ships.[196] Later chroniclers such a Villehardouin and Joinville also record instances of doors being inserted into the hulls of ships for this purpose.[197] It was still possible, however, to freight horses in oared craft and as with evidence recorded in the Bayeux Tapestry horses would be loaded by means of a ramp from the gunwales to the beach.[198]

What we do know for certain from the available source material is that the procurement of hurdles and gangways was itself a large and complex logistical operation. These pieces of equipment were ordered in the thousands and transported to the port of embarkation, usually by the sheriffs of specified counties. One particular account compiled in 1359 by Roger de Louthe, sheriff of Essex, during the preparations for the Reims campaign, exemplifies the whole logistical operation of preparing ships for horse transportation.[199] In total he purchased 982 hurdles at 6s each from the hundreds of Dauseye, Thurstaple, Chelmsford and Tendring. Following this he transported the hurdles in carts to Maldon and Harwich. After the hurdles reached these two ports they were transferred from land to ten waiting ships (five at each port), before these vessels freighted the hurdles from Harwich and Maldon to the port of Sandwich. We are even told how many hurdles he shipped from each port. So, for example, the vessels at Harwich transported 500 while the ships at Maldon freighted 482. What Louthe's account also illuminates is just how substantial the hurdles may have been. For example, in one case it required sixteen carts, each pulled by four horses, in order to transport 100 hurdles to Maldon. Another example, relating to the Brittany expedition of 1342–43, also highlights the large numbers

193 D. Syrett. *Shipping and military power*, pp. 19–20.

194 E101/16/34; E101/16/35.

195 L. R. Martin, 'Horse and cargo handling', pp. 237–47.

196 *Ibid.*, p. 240–41.

197 *Joinville and Villeharoudin: chronicles of the Crusades*, trans., M. R. B. Shaw (Penguin, 1963), p. 196. Joinville says the door was located on the port side of the ship.

198 L. R. Martin, 'Horse and cargo handling', pp. 240–41. This practice was also well known to the Byzantines who often transported horses in galleys.

199 E101/557/10, mm. 1–2.

of hurdles, gangplanks and bridges that were required to get the horses first aboard the ships and then to France. The sheriff of Essex and Hertfordshire was ordered to collect 1,000 hurdles, twenty-four bridges (*pontes*), 2,000 boards and 200 empty barrels for the shipment of horses to the duchy.[200] While in 1356 the sheriff of Hampshire was told to make ready 1,000 hurdles and six bridges and the marshal of the household was told to ready 800 hurdles and three bridges for the transportation of horseflesh to Brittany.[201]

In addition to how horses were actually shipped to the theatres of operations the question of how many horses were freighted in the transport fleets is also of paramount importance. Throughout this book the transportation of horseflesh will be mentioned and estimates will be put forward as to the number of horses that were freighted to the continent for use in campaigns. Some of these estimates may be viewed as generous so what now follows is a detailed discussion on the problems relating to the numbers of horses that required transportation. The first point to be noted is that by using the available Exchequer evidence we know that large numbers of horses could be transported by sea. Evidence from two Exchequer accounts highlights the possible carrying capabilities of ships of the period. One document concerns the transport of horses from Sandwich to Calais in 1356, while the other details the shipment of the earl of Cambridge's and the earl of March's horses to Brittany in 1375.[202] The first source lists twenty-three ships, which transported a total of 644 horses. The smallest number freighted by a single vessel was eighteen and the largest was forty. In the 1375 account eleven ships are recorded as transporting a total of 562 horses. The smallest number of horses that were transported in this flotilla by any one ship was thirty-two, while the largest number was seventy-two. Such evidence reinforces the idea that English ships were capable of carrying large numbers of men and horses to the continent. In fact sources relating to crusader armies from the previous century show that this was the case, and these forces regularly freighted horseflesh on vessels that were capable of holding between sixty and 100 horses each.[203]

Further evidence can be found in documents relating to the 1325 St Sardos expedition. These show that the ships that transported the earl of Surrey to Gascony seem to have been allocated two separate roles. One section of the fleet, some sixteen ships (10% of the flotilla), was specifically utilised for the shipment

[200] E101/556/25, mm. 1–3.

[201] E101/561/18, mm. 1, 2.

[202] E101/695/20; E101/34/6.

[203] J. H. Pryor, 'Transportation of horses by sea during the era of the crusades: eighth century to 1285, part 2: 1228–1285', *MM* 68 (1982), pp. 103–21, pp. 103–9. Even though Pryor's study concentrates on the shipping technology of the Italian city sates, the Exchequer evidence from England undeniably shows that English vessels were capable of freighting similar numbers of horses.

of horseflesh.[204] If we suggest, therefore, that this figure can be extrapolated to other transport fleets we can estimate how many vessels out of the armadas were used for the sole purpose of horse transportation. For example, out of the 747 ships that formed the Crécy fleet of 1346 some 100 vessels would have been utilised solely for the freighting of horseflesh. Indeed, owing to the fact that the 1346 army consisted of some, 2,500–3,000 men-at-arms and the same number of mounted archers, it is not unlikely that at least 200 of the vessels in this fleet were given over to the minimum number of 6,000 horses that would have required transportation.[205] If we take the two examples from above and suggest that, on average, English ships could carry up to fifty horses each this would mean that the 200 vessels given over to horse transportation in 1346 would have been capable of freighting between 10,000 and 11,000 horses. Of course we do not know the size of the ships involved in the 1346 fleet but these numbers of horses do seem plausible. Indeed if we take the average of fifty horses per ship as reliable we could also suggest that the sixteen vessels in the 1325 fleet that were given over specifically for the transportation of horseflesh would have carried nearly 1,000 horses to Bordeaux.[206]

Even if we consider the above points it may still appear that the numbers of horses that required transportation in the period 1320–1360, as suggested in this book, could be an overestimation. But it is worth noting that the fleets of 1338, 1342, 1346 and 1359 all numbered over 400 ships and, with the exception of the 1346 army, the numbers of men that required transportation did not warrant armadas of this magnitude. The fact that transport fleets were so large suggests that it was the necessity of freighting large numbers of horses over with the forces that increased the numbers of vessels being employed. Consider, for example, the king's 1342 army that consisted of 3,800 men. This force was transported on 487 vessels, which equates to only eight men per ship. Without the need to freight a large number of horses the king could have transported an army of this size in fewer than 200 ships, saving valuable time and money. The fact that over twice this number of vessels was eventually employed probably reflects the (at least) 4,000 horses that were transported along with the army.[207]

[204] E101/17/3.

[205] Allowing for a minimum of one horse each the smallest number of horses that were transported in 1346 would have been some 5,000–6,000. The 8,000 foot soldiers that served would not require much room aboard ship. On the army numbers, see A. Ayton and P. Preston, *The battle of Crécy*, pp. 168, 171, 174, 181–89.

[206] This is, perhaps, a low end estimate. It should be remembered that the 1324 army consisted of 679 mounted troops and for this force 706 horses were valued before the steward of the household (see below, pp. 150–51). If we consider that the 1325 army numbered 1,700 mounted soldiers we can see immediately that at least 1,000 horses must have been transported. As such the mean estimate of fifty horses per ship seems reliable.

[207] This is why those fleets sailing to Gascony were smaller than the armadas that sailed to northern France. Horses could be purchased at leisure in Bordeaux and as such the Gascon

Indeed, if ten percent of this fleet was fitted out for horse transportation then some 50–60 ships would have been used for this purpose. At an average of fifty horses per ship these would have freighted some 2,500 to 3,000 horses.

One further point needs to be made. If we drastically reduce the number of horses that were transported we also have to reconsider the strategy that was adopted by English armies operating on the continent. If we were to say, for example, that each man-at-arms brought only one horse it is unlikely that he would remain a mounted soldier for the duration of the campaign. That his horse would be able to be kept in the field for over a month after a sea crossing, un-stabled and ridden everyday over sometimes rough terrain, including fording rivers, is doubtful.[208] Such treatment would surely lead to a high attrition rate amongst the horses, and in order to counterbalance the potential losses a man-at-arms was likely to bring with him at least two, if not more, mounts. If we argue that large numbers of horses were not freighted in the transport fleets we must, therefore, view any English invading force as a developing organism with at least four stages of evolution throughout the course of a campaign. This last point can be illustrated by using a theoretical invading army consisting of 500 men-at-arms and 500 mounted archers with each man bringing one horse. The first stage of the force's evolution would be at the port of embarkation in England. Here it is a fully mounted army capable of rapid movement in the field. The second stage would occur at the point of disembarkation in France when perhaps a small percentage of the horses had become unfit for use because of the sea crossing. At this point the army is no longer fully mounted, and a small proportion of the force cannot, therefore, be deployed in a *chevauchée* action. The third stage would develop throughout the expedition when after two to three weeks in the field a quarter, if not more, of the horses would be suffering from life on campaign. As such an even larger section of the army ceases to be mounted. The final evolutionarily stage would be after the official hostilities had ceased and the force arrived at the port of embarkation ready to take ship back to England, with undoubtedly a large section of the army now on foot. The force that eventually arrived back in England would, therefore, bear little resemblance to the one that had originally

fleets generally carried fewer horses. Whereas in 1342 Edward had no choice but to freight all the horseflesh he needed with him to Brest. Comparing the 1355 transport fleet of the Black Prince with the 1342 transport armada of the king further reinforces this last point. The 1355 force probably numbered some 2,800 men that were freighted in 187 ships. Yet, the force of 1342 was 3,800 strong and was transported in 487 vessels. Immediately we can see that 300 extra ships were used in the king's Brittany expedition of 1342 to transport 1,000 more men. The extra ships were raised to freight the much larger numbers of horses that were undoubtedly shipped to Brest in 1342.

[208] In 1908 the British Army Veterinary Department stated 'that while fit an animal can endure hardship and exertion without injury, once a troop horse is sick, injured or exhausted it is only an encumbrance to a fighting unit and has to be left behind, his place being filled by a fresh animal'. Furthermore, horses that were tired or winded could require up to five months before they were fully recovered, see D. L. Smith, 'Muscovite logistics', p. 45.

sailed. It is possible that troops used the horses of comrades who had fallen in battle but whose mounts survived. Although this certainly would have occurred the numbers of men dying, compared with the horse remaining alive, would be relatively few. In the battles conducted in this period English armies usually suffered only small numbers of casualties. At Crécy, for example, the English lost some 300 knights, suggesting that perhaps 600 horses were available to share out amongst the remaining army.[209] Of course, relatives of these dead soldiers may still request that the crown paid them the *restauro equorum* that would be outstanding, creating some documentary complexities. Nevertheless, consideration of this point must be noted. This brings us to a stark assumption. If we were to say that, on the whole, most men-at-arms and mounted archers only brought one horse each on campaign we should perhaps alter our view of English field strategy and tactics. What we should be considering instead of a rapidly moving mounted army is a force that, over the course of an expedition, slowly develops into a large central core of foot soldiers (many of whom may have been mounted at the outset of the campaign) from which small divisions of mounted troops are sent to raid the surrounding area and cause panic in enemy territory, much like the sparks that fly from the main flame of a struck match.

Of course the English could replace their horses during the expedition but this prospect was entirely dependent on the theatre of operations. Those armies operating in the Low Countries and Gascony would have had this luxury, but those forces such as those of 1342 and 1346 would not. Neither would the prospect of replenishing horseflesh through raiding the enemies' territory have been attractive. Once a force had landed most 'moveable' goods would be placed in a safe location by the people of the surrounding countryside. It is also worth noting that the majority of the armies after 1340 that were of any size were transported to northern France with the aim of operating deep into enemy territory, where such on the march re-stocking would have been difficult. Furthermore, Calais is unlikely to have had bloodstocks that contained thousands of horses, owing to the logistics of feeding, coupled with the fact that, for the most part, the town was under siege from outlying French garrisons, making overland shipment of horses from the Low Countries difficult.

Considering these latter points it is surely the case that English armies operating in France consisted of large mounted forces capable of rapid field movements throughout the majority of the campaigns they launched. There are three major factors that point to such a conclusion. First, the pay for men-at-arms was conditional on them appearing at the muster with sufficient mounts. For example, in the 1338–39 expedition men-at-arms who appeared at the muster with fewer than three horses (*'quia qui non habuit nisi duos equos'*) were only given half pay.[210] Further in 1340 the crown was willing to allow a banneret to transport five

[209] A. Ayton and P. Preston, *The battle of Crécy*, p. 151.

[210] See, A. Ayton, *Knights and warhorses*, pp. 100–02 for a detailed analysis of the numbers of horses that each man was expected to bring to the muster. That men-at-arms brought two

horses, a knight four and esquires three to Flanders.[211] This does not meant that all the horses brought by the men-at-arms were high quality warhorses and it is likely that only one mount out of the three would be categorised as such. Nevertheless, the evidence suggests that even when armies were campaigning in areas where they could purchase horses, such as the Low Countries, soldiers were still expected to bring at least three mounts with them.[212] Second, as already noted, the actual size of the transport fleets that sailed from 1338 to 1359 point to large numbers of horses being freighted to campaigns in France. Third, the evidence from campaign newsletters shows that English armies, such as that of 1342, were capable of quick sorties directly into enemy territory, which argues for a large section of each army being mounted. Indeed it is this last point that the success of the early expeditions rested on.[213] Consequently one is drawn to the fact that, in the end, the intended destination of the expedition dictated how many horses, and therefore how many ships, the king required. The men-at-arms that served in the expeditions of 1338–40, 1342, 1346, 1355 and 1359 are likely to have brought at least three horses along with them.

It could be argued that the ships given over to horse transportation made more than one crossing during the process of disembarkation. The dates of service accorded to the vessels serving in the fleets during this period certainly support such an interpretation. This would not, however, reduce the numbers of horse brought on campaign because as we have seen a man-at-arms was required to bring a minimum number of horses in order to receive his pay. In addition, it is unlikely that an army disembarking in enemy territory would wish to wait on the beaches they had just landed on, as this was the time when an invading force was most vulnerable to attack. As such the horses transported with the armies of 1342 and 1346 were likely to have been brought along with the troops. It is possible that in the Low Countries expeditions and the campaign of 1359 horses were transported in several crossings, as the English had access to friendly ports in these expeditions. Nevertheless, as noted the size of the transport fleets

to three horses with them seems to have been standard practice in other parts of Europe, see D. L. Smith, 'Muscovite logistics', pp. 38–39.

211 See A. Ayton, *Knights warhorses*, p. 58. Another example is the 1370 campaign conducted by Robert Knolles. Knolles force consisted of 2,000 men-at-arms and 2,000 mounted archers. However, this force freighted 8,464 horses over with it. Suggesting that each man-at-arms brought more than two horses. See, A. Ayton, 'Arms, armour and horses', *Medieval warfare*, ed. M. Keen (Oxford, 1999), pp. 186–208, pp. 197–98 draws attention to the Knolles example. That such numbers of horses were brought on campaign should not be doubted. In 1415 an earl was allowed to bring with him twenty-four horses on expeditions abroad. See J. Barker, *Agincourt*, p. 118.

212 In 1345, for example, James Audely's force was allowed to transport its horse to Bordeaux, see A. Ayton, *Knights and warhorses*, p. 58.

213 See, for example, *Avesbury*, pp. 340–44; *Knighton*, pp. 39–47; *Murimuth*, pp. 116–20. These accounts provide evidence of the rapid movements that English armies were capable of making.

argues against this interpretation. Indeed, the main advantage of using a ferry fleet system is that smaller flotillas can be raised, which in turn saves valuable time. That fleets of over 400 ships were raised in 1338, 1342 and 1346 suggests that all the horses were transported along with the soldiers. Only during the siege of Calais in 1347 and the Reims transport fleet of 1359 is it possible that horses were transported by the same ships in several crossings.[214]

It is also important to bear in mind that horses were not just required for military actions but were also employed as beasts of burden. As such we must make allowance for the large numbers of horses that would have been required to haul the large baggage trains that accompanied English armies. During this period the principle seems to have been that one horse would be required to haul one quarter of grain.[215] If we remember that the amount of victuals transported over with the army in the Low Countries campaigns amounted to roughly 4,000 quarters of grain, including various quantities of meat, and we suggest that it would take four horses to pull one cart loaded with four quarters of wheat, then it would have required some 1,000 horses for the baggage train. In short the numbers of horses that were transported to France as suggested by this book should not be viewed as excessive.

[214] On the Reims campaign, see below pp. 143–46, 198–205.

[215] J. Masschaele, 'Transport costs', p. 269.