CHAPTER FIVE 'CURST DUNBAR' AND DURHAM

Again I was at curst Dunbar And was a prisoner taen, And many weary night and day In prison I hae lien.

From 'The Battle of Philiphaugh', from *Minstrelsy of the Scottish Border*, a collection of Border ballads compiled by Sir Walter Scott 1802-1803

In mid-July of 1650 an English Parliamentarian army under Oliver Cromwell (Figure 5.1) crossed the border into Scotland to pre-empt a possible Scottish invasion of England. Rather than defend, the English had chosen to attack. There was much at stake. If the Scots won the inevitable war, their intention was to impose Scotland's particular form of Protestant religion on everyone in England and Wales, and to reinstate the monarchy, albeit very much under the authority of the Presbyterian Church. And yet, for the previous 12 years Covenanting Scots and Parliamentarian English had fought together as allies against Charles I, precisely over dissent, the right to freedom of religious thought, and to oppose the monarch's wishes if they were not in the interests of the people. How had allies become enemies?

The trouble was that, in England, the convulsions of the Civil Wars had made Parliament, and its army, feel that liberty to believe and worship according to one's conscience (within some defined limits) was a right they had fought for, and won. This manifested itself in numerous strands and sects of Protestantism with different ideas about the organisation of religion. The Independents, of whom Oliver Cromwell was one, did not agree with the authority of the Anglican Church.¹ Nor could they accept the Reformed Kirk of Scotland, with its extremely interventionist discipline of the Kirk Session with its elders, and 'searchers' for sin and non-compliance at parish level.² Even though they were essentially Presbyterian in belief, the Independents found this to be too much of an intrusion into the lives and consciences of individuals. The English Parliament had challenged monarchy, and won; it did not want another set of religious beliefs and practices imposed on the country against its will. Nor, having established a Commonwealth in February 1949, was it now prepared to relinquish political and economic authority to the son of the Stuart 'tyrant' they had executed for treason.

In Scotland, on the other hand, the form of the Kirk was seen as the perfected achievement of God's plan, and it was the duty of believers to bring all nations to the same communion table.³ Kirk and government were so closely entwined in Scotland that the Kirk's decisions most often became effective national law. In preparation against the expected Scottish invasion and its consequences, on 12th June 1650 the English Commonwealth Parliament appointed Thomas, Lord Fairfax⁴ and Oliver Cromwell, recently returned from his uncompromising and bloody campaign in Ireland, to lead a new field army as general and lieutenant-general respectively, and to push these troops towards the north of England.⁵ When it became clear that Parliament intended to make a pre-emptive invasion of Scotland instead, it did not sit well with Fairfax's conscience. He resigned his command, and on the 26th June Oliver Cromwell accepted the position of lord-general in his place. This was the beginning of the campaign that led to the Battle of Dunbar.

Allies: 1639 to summer 1650

Whereas the Reformation in England was long-drawn out and witnessed changes in confession until the middle-way sought by Elizabeth I, the wake of the Reformation in Scotland saw religious observance established at a state level as Calvinist Presbyterianism. The reformed Scottish liturgy focused on the reading and exposition of The Word, defined in the *Book of Common Order*, while the administration and authority of religion in Scotland was organized through the local presbytery of elders, the Kirk Session, provincial synods, and a national General Assembly of the Church of Scotland. In May 1637, when King Charles I (Figure 5.2) sought to impose *The Book of Canons* (1636) and the *Book of Common Prayer* (1637), he intended them to replace the authority of the presbyteries, sessions and General Assembly with a royally-appointed hierarchy of bishops, and the Kirk's *Book of Common Order*, respectively. Opposition was fierce, and in response the National Covenant was signed on 28th February 1638; this committed every adult male who signed it to uphold the Scottish Kirk and a new administration was formed with powers to raise an army in its name. Charles I's refusal to give way resulted in the First and Second Bishops' Wars in 1639-41 between the king and a Covenanting Army.

Neither side prevailed in the First Bishops' War, and Charles called an English Parliament in order to raise money to continue his campaign against the Scots. When Parliament refused to comply, and no funds were raised, Charles dissolved the Parliament after only three weeks, hence the name Short Parliament. With the situation unresolved, the Scots invaded northern England during the Second Bishops' War in 1640 and Royalist Durham was overrun by the Scots on their march south. 6 Antiquarian accounts of damage and iconoclasm (the destruction of religious images and monuments) inflicted by the Scottish army during this occupation have long been confused with damage caused by the Scots prisoners from the battle of Dunbar five years later (Chapter 1). However, the Scots army seems to have attacked the furnishings in the Cathedral, and 'elsewhere in the city', including the schoolmaster's house on Palace Green 'which was ruinated by the Scotts'. 7 General Alexander Leslie⁸, the Scots commander, had taken Durham Castle in 1640-1, and used it as a hospital, and possibly part of his army was billeted in the Cathedral and/or cloister. ⁹ There was extensive damage to the houses, property, crops, fodder and barns of estates throughout the northeast. 10 A cessation of conflict was eventually agreed under the terms of the Treaty of Westminster in August 1641, when Scottish Presbyterianism was acknowledged as the settled religion of Scotland and the bishops were unseated north of the Border. The Irish rebelled bringing a new destabilizing factor into the equation, and with the king and Parliament in London at loggerheads over religious freedom and the rights of the monarch, Civil War broke out in England in August 1642.

A new Solemn League and Covenant was signed in September 1643 between the leaders of the English Parliamentarians and the Covenanting Scots, who vowed to serve as allies against the king and in defence of the Kirk (Figure 5.3). A Scottish army, under General Alexander Leslie, invaded the north of England once more in support of Parliament against the king. Over the next three years, Scots and English fought side by side and officers learned to respect their allies, even if they did not always like them. Many of them had cut their military teeth previously in Europe's great Protestant war of the 17th century, the Thirty Years' War. Under this new covenant, Alexander Leslie led the Scots in harness with Parliament for throughout the campaign; David Leslie helped turn events in favour of Parliament at Marston Moor. Sir Robert Montgomerie, Sir James Lumsden, Archibald

Strachan, all officers at Dunbar, had served as allies to Cromwell's army. And this means that hundreds, perhaps thousands, of ordinary Scottish troops had been brothers in arms with English Parliamentarian soldiers too. In 1644 the Scots Covenanters, as allies of the English Parliament under Alexander Leslie, laid siege to Royalist Newcastle upon Tyne from late July to mid-October 1644 and a garrison occupied the town from then until February 1647.¹³

Some of the archaeology of this period in Newcastle may relate to men who ended up as prisoners in Durham, or at least their comrades. For example, Colonel William Stewart, a Scot originally from Galloway, was married to Lady Elizabeth Calverley, of Littleburn, County Durham, and raised a regiment of foot and troop of horse in South-West Scotland. He was the hero of Alexander Leslie's Scottish assault on Westgate in 1644, but later fought at Dunbar against Cromwell. He himself escaped from Dunbar, but some of the men from his regiment may not have been so lucky. Evidence of the siege of Newcastle has been found in at least 13 different places on the Town Wall and Castle Garth, as well as repairs and strengthening of the defences: several bastions and gun-emplacements were created, whilst the town received a ferocious pounding from artillery both in the surrounding countryside and Gateshead where evidence of artillery batteries has been found. Countless musket ball, pistol balls, and cannon balls have all been noted through the centuries.

A more human insight, and perhaps one closer to the experience of the Dunbar Scots, can be gained from deposits interpreted as watchmen's fires found north of the Close Gate, which were dated to about 1645–55. Artefacts found here could have been discarded by an English garrison, who were using premises near the Close Gate as a guard-house in 1650. Similarly, hearths from the period were found at the Town Wall at Hanover Street. These evoke men huddled round fires to keep themselves warm whilst enduring the cold and boredom of long nights in a potentially hostile environment. Scottish and French coins of the period, and numerous pieces of clay tobacco pipe were perhaps lost by the Scottish army during the siege. In a familiar complaint, the Scots were accused of burning all the timber in Berwick in 1645 and it is easy to imagine search parties on both sides scouring suitable buildings for fuel. For the Scots, woodwork redolent of idolatry, superstition and blasphemy may have burned all the brighter. None of this could have induced much sympathy for the Scots prisoners when they passed through these towns in 1650.

The events of the following years in Scotland are convoluted, but explain how Parliamentary England and Covenanter Scotland ended up fighting at Dunbar in 1650.²² Whilst the Covenanting army was in England aiding Parliament, Scottish supporters of the Crown were given the opportunity to defend their cause under James Graham, Marquis of Montrose.²³ After some success, his forces were defeated by the returning Covenanter army early in 1647. A further split and campaign arose when Scottish Royalists entered into secret negotiations with the king, the so-called 'Engagement' of the winter 1647.²⁴ In return for support from the Scots army, the king promised to aid the establishment of Presbyterianism in England. The Engagers were subsequently defeated in August 1648 and the English New Model Army invaded Scotland in order to remove any lingering Royalist support from the Scottish Parliament in Edinburgh.

With Charles I dead, Montrose made a renewed attempt at Royalist military invasion through Scotland in March-May of 1650. This failed and Montrose was executed. Charles, Prince of Wales, made the political expedient of vowing to uphold Scots Presbyterianism and the Solemn League and

Covenant in June 1650 in order to accede to the Scottish crown as Charles II and in return for the support of the Scottish Kirk, Parliament and army. Charles II took vows to observe, uphold and defend the practice and customs of the Church of Scotland in perpetuity for himself and his family. For some Scots, this second covenant was a betrayal of the aims of the 1638 National Covenant and they believed that the English had only made the pact in order to gain the support of the Scots army. The man who claimed the English throne was now, to all political intents and purposes, a Covenanter, at one with the reforming aims of the Scottish Church and people, and bound by his oath, on penalty of blasphemy, to establish Presbyterianism in England. Given Charles's character, this act of religious and political expediency must have grated (Figure 5.4). When the English Parliament realised the imminence of the threat, military preparations began.

Enemies: Cromwell's campaign in Scotland in autumn 1650

In the summer of 1650 Oliver Cromwell and the new field army crossed the border into Scotland. He led the English as far as a line of fortifications linking Edinburgh and Leith, but was forced into a series of alternating retreats and advances to the east and south of Edinburgh in respect of the Covenanting army, under the command of David Leslie (Figure 5.5), during July and August 1650, before finally falling back to Dunbar at the beginning of September. The port at Dunbar had been an important location for the defence of southern Scotland since the 7th century, and especially after the permanent loss of Berwick upon Tweed to the English in 1482. Its good harbour facilities made it a focal point for invading armies and their supply boats en route to Edinburgh. [Figure 5.6]

At the time of Cromwell's arrival, there was already a partially constructed fort on the headland at Dunbar, built in 1560 by the French,²⁸ and a massive early 16th-century blockhouse for artillery. The surviving tollbooth, built between 1593 and the early 17th century (Figure 5.7), housed the borough courts and records, the town gaol and, with the harbour, was a point for the collection of all dues and tolls. The mainstay of the local economy was herring, with regular exports of uncured fish to Newcastle, and of salted and cured fish to the Continent, especially to Poland, France and Spain, as well as inland.²⁹ Early 17th-century Edinburgh merchants had invested significant capital in a herring curing and packing factory which was still thriving in the 1640s. New and prestigious town houses were built along the High Street, and a new defensive stone wall had been erected sometime before the wars of the 1630s-40s.³⁰ For Cromwell's needs, Dunbar was crucial as a port from which he could re-supply his army by sea because the Scottish army's scorched-earth policy had made it impossible to provision his troops once he had crossed the border. Starving an army into retreat by stretching their supply lines was an acknowledged tactic of warfare.

Cromwell's troops and horses were 'provided' with accommodation in the townspeople's houses, outbuildings, fields and gardens; the troops and animals had to be fed and watered; and there was an amount of loss due to pillage and destruction of crops and livestock. Accounts drawn up afterwards in 1651 detail the many claims for compensation. Maus Ferguson asked for £31 to compensate for the loss of her twelve hens, some sheets and meal, but some claims were very considerable; Thomas Purves wanted £12,020 and the total loss to the town, including costs for removing cess, was calculated at £134,638 2s 8d. When Cromwell's troops had reached Dunbar they discovered famine in the town and Cromwell ordered 'pease and wheat to the value of £240' to be distributed. He placed his cannon inside the parish church for shelter and security and waited.

In the period leading up to the battle, print propaganda from both sides proliferated. From the Scots viewpoint, the Kirk was the 'champion of Reformed religion, defending Protestantism against the 'sectaries' and 'heretics' who had overthrown the English Church, killed the king and assailed Reformed orthodoxy'. Cromwell and the Independents, on the other hand, promoted themselves as advocates of 'religious freedom, toleration and the preservation of Protestant diversity'. Cromwell himself noted that his troops were called an 'Army of Sectaries and Blasphemers' by the Scots, the latter being an accusation of some venom in the context of the time.

The armies at Dunbar

At the beginning of 1650 the Scottish army was extremely short on numbers with 2,500 cavalry and 3,000 foot, and it was decided that a far higher levy of 19,000 should be encouraged from the nation's population.³⁵ However, 12 years of war had taken its toll on fighting-age men in Scotland. By this stage, the traditional Scottish system of call-out of all men aged between 16 and 60 was impracticable so each county sheriffdom appointed its own shire committee of war, answerable to the Committee of Estates (the government of Scotland 1640-51) to decide what proportion of manpower could feasibly be raised whilst maintaining essential farming and industry.³⁶ The religious and political character of the different regions of Scotland filtered their responses, such that traditionally Royalist Aberdeenshire and Kincardineshire were less likely to turn out for a strongly Covenanting army. As a result, the Scots infantry regiments raised in the summer of 1650 are reckoned to have been generally 'smaller, more numerous, and with more colonels commanding them than their English counterparts'.³⁷

The two principal sources for the Scots units that took part in the battle are an English intelligence survey, 38 which may have been compiled from interrogations of Scottish prisoners; and an inventory³⁹ (Figure 5.8) composed by Norroy, King of Arms at the College of Heralds, of the estates of the commanding officers of the Scottish regiments, and of the commander's colours and banners captured after the battle. 40 In addition, information can be gleaned from: Cromwell's letters, 41 an account written by a Puritan soldier Captain John Hodgson who had taken part in the battle, 42 which includes a list of Scottish prisoners, but was written 20 years after the event, notes in the early London magazine or early newspaper *Mercurius Politicus*, ⁴³ and a lithograph of the battle produced for Cromwell by a soldier of fortune, Fitz-Payne Fisher. 44 The now elderly Alexander Leslie was appointed as senior adviser to David Leslie, and held estates in densely-populated Fife. Major General Sir Robert Montgomerie, a younger son of the 6th Earl of Eglinton, was David Leslie's senior cavalry commander at Dunbar. He had been lieutenant colonel of the family's horse levied from Ayrshire, Lanarkshire and Renfrewshire in south central and western lowland Scotland. 45 Lieutenant General Sir James Lumsden of Innergellie, Leslie's senior infantry commander at Dunbar, was another veteran of military service for Sweden in the Thirty Years' War, and after the Scots siege of Newcastle upon Tyne had been made governor of that town from 1644-47. Lumsden's brigade included regiments levied from Fife. 46 Colonel Archibald Strachan, second in command of the Scottish cavalry at Dunbar, had fought with Cromwell against fellow Scots at Preston in 1648, but had distinguished himself with David Leslie in the skirmishing prior to Dunbar.⁴⁷

As the project was able to analyse the strontium and oxygen isotopes in our individuals and highlight

their possible geographical origins (Chapter 4), it is important to note that the Scottish brigades were organised largely on a geographical basis, although sometimes their nuclei were formed of older regiments raised elsewhere; and regiments were authorised to be formed out of those previously existing, or troops reassigned, as was most advantageous and practical at the time. The places in which the regiments were raised are shown in Figure 5.9. The list below is not definitive and structured following Furgol's identification of the three major units in each infantry brigade and Reid's list, but is not presented according to brigade number. The locations in brackets are not modern administrative regions, but are intended to indicate the overall geographical region of Scotland in which the regiments were raised. This makes it easier to compare with the isotope maps (Chapter 4) as well as providing a more accurate focus in the search for relevant parish and presbytery records.

Infantry

Lumsden's Brigade: the General of the Artillery's Regiment was raised from detachments of all other regiments in the army in July 1650, and quartered at Wemyss and Burntisland on the coast of Fife; Sir William Douglas of Kirkness' Regiment was raised in Fife and Kinross (eastern Central Lowlands) in July 1650; and Sir James Lumsden's Regiment which was raised in Fife in July 1650.

Sir James Campbell of Lawers' Brigade: Sir James Campbell's Regiment was raised as the Marquis of Argyll's Regiment for service in Scotland in July 1939, and was mostly raised in and around Perthshire (Central and Eastern Southern Highlands). Sir George Preston of Valleyfield's Regiment was raised in February 1649, in Perthshire). Sir John Haldane of Gleneagles's Regiment was raised in 1650, also in Perthshire). The brigade was joined by 250 recruits from Linlithgowshire (Central Lowlands) in February 1649. James Elphinstone, Lord Couper's Regiment was raised in July 1650 in Perthshire.

Major-General Pitscottie's Brigade: Major-General Colin Pittscottie's Regiment was formed in Forfarshire (north-eastern Lowlands), but Pitscottie was commissioned to raise the regiment anew in Fife and Kinross in February 1649; Sir David Home of Wedderburn's Regiment was raised anew in February 1649 in Berwickshire, Teviotdale and Selkirk (Borders, i.e. Lowlands); Colonel John Lindsay of Edzell's Regiment was raised in Angus and Dundee in July 1650; but included two small regiments, that of Sir Andrew Ker of Greenhead raised in February 1649 in Teviotdale and Selkirk (Eastern Borders, i.e. Lowlands), and that of Sir James Douglas of Mouswall raised in Dumfries (South-West Scotland, i.e. Lowlands).

Colonel Innes's Brigade: Sir John Innes' Regiment was formed around the core of the Master of Forbes's Regiment raised in Aberdeenshire and Banffshire (North-East Lowlands and Highlands), but Innes was commissioned in July 1649 to raise a regiment in Moray, Nairn and Inverness-shire (North-East Lowlands, Moray Firth, Highlands), Colonel John Forbes of Leslie's Regiment was raised in Aberdeen and Banffshire in 1650, Master of Lovat's Regiment - Sir James Fraser of Brea, Tutor of Lovat, was commissioned in July 1650 to raise a regiment in Inverness-shire (Highlands). The latter were Highlanders of Clan Fraser.

Major-General James Holbourne's / Holborn's Brigade: Sir George Buchannan's Regiment was

raised in July 1650 in Stirling, Clackmannan and Linlithgow (Central Lowlands), Major-General James Holbourne's Regiment raised in February 1648 in Stirling and Clackmannan (Central Lowlands), Colonel Alexander Stewart's [Edinburgh] Regiment was raised in Edinburgh (Central Lowlands) in 1649. Lord Balmerino's Regiment of Foot was raised in 1650 in Edinburgh (Central Lowlands) and may have fought at Dunbar. Lord Kirkcudbright's Regiment was raised in February 1649 in Galloway, Ayr and Renfrew (South-West, i.e. Lowlands, and Central Lowlands) but probably comprised very few men.

Cavalry

Earl of Leven's Regiment of Horse was raised anew in February 1649 in Haddington and Berwickshire (Central Lowlands, and Borders, i.e. south-eastern Lowlands).

Lieutenant-General David Leslie's Regiment was raised anew in February 1649 in Lanarkshire, Renfrew and Ayr (Western and Central Lowlands).

Major-General Robert Montgomerie's Regiment was raised in 1649 in Ayr and Renfrew (Western and Central Lowlands).

Major-General Sir John Browne's Regiment was re-raised in February 1649 in Perthshire (Central Highlands).

Colonel Thomas Craig of Riccarton's Regiment Craig was commissioned to be colonel of horse in Midlothian (Central Lowlands).

Sir Charles Arnott's Regiment was raised in February 1645, possibly in Inverlochy, Inverness-shire (Highland). Before the Battle of Dunbar it was expanded with recruits from Fife (Eastern Scotland, i.e. Lowlands).

Colonel Archibald Strachan's Regiment was formed in June 1650 from his troop of Colonel Gibby Carr's / Gilbert Ker(r)'s Regiment from Dumfriesshire (South-West and Borders, i.e. Lowlands). In July 1650 the Ministers of Scotland contributed to raising this regiment, hence it was known as the Ministers' Regiment.

Master of Forbes' Regiment was raised in February 1649 in Aberdeenshire and Banffshire (North-East Lowlands and Highlands, Moray Firth, and North-Central Highlands).

Colonel Walter Scott's Regiment was raised in 1649 in Roxburgh and Selkirk (Eastern Borders, i.e. Lowlands).

Sir James Hackett's / Halket's Regiment was raised in Spring 1649, in Linlithgow, Fife, Peebles and Dumbarton (Eastern Central Lowlands, Central Lowlands and Western Central Lowlands).

Lord Mauchline's Regiment was raised in 1650 in Lanarkshire (Central Lowlands to mid-Southern Lowlands).

Lord Brechin's Regiment was raised in 1649 in Stirling and Clackmannanshire (Central Lowlands). **Sir Arthur Erskine of Scotscraig's Regiment**.

Sir Robert Adair of Kinhilt's Regiment was raised in 1642 originally, in Ulster, raised anew in 1649 as as part of Colonel William Stewart's Regiment.

Colonel William Stewart's Regiment Stewart was commissioned in February 1649 to raise troop anew in Wigton and Kirkcudbrightshire (South-West, i.e. Lowlands).

Earl of Cassilis' Regiment was raised anew in 1650 in Western Scotland (the core of original regiment was Carrick and Galloway (Western Lowlands and South-West, i.e. Lowlands).

Colonel Robert Hackett's / Halket's Regiment Halket was authorised in 1650 to raise a new regiment on the basis of his troop of horse in Sir James Hackett's / Halket's Regiment raised in Spring

1649, in Linlithgow, Fife, Peebles and Dumbarton (Eastern Central Lowlands, Central Lowlands and Western Central Lowlands).

Colonel Gibby Carr's / Gilbert Ker(r)'s Regiment was raised in February 1649 in Dumfriesshire (South-West, i.e. Lowlands).

Sir John Browne of Fordell's Regiment was re-raised in February 1649 in Perthshire (Central Highlands).

Whilst the army may not have been so inexperienced as has been suggested, the cavalry regiments raised in 1649 were certainly fewer in number. Additional troops were raised and added in 1650, and with each addition must have increased the proportion of new faces and nervous untrained cavalry horses. 50 Then, in what would nowadays be called 'ideological purges', in June and early August 1650 David Leslie was deprived of his most experienced Royalist commanders and veteran soldiers (80 officers out of perhaps more than 3,000 men in total).⁵¹ In addition, many militarily experienced Covenanters simply refused to serve the king, and therefore General David Leslie: this provoked one Scottish colonel to call it an army of 'nothing but useless clerks and ministers' sons, who have never seen a sword, much the less used one'. 52 Small historical details add further weight to this damning verdict. On the 28th August 1650, Agnes Eizatt (Izatt) of Ceres, a mining parish near Markinch (Fife), cursed one of the elders (who may have been her landlord) and was made to apologise. In her defence, she cited her sorrow for her husband, an old weak man who was 'put out' by this same elder to be a soldier. 53 This implies that her husband was evicted, threatened or coerced and taken against his will. In another case, on 8th September 1650, Christian Lang appeared before the Kirk Session for breaking the Sabbath 20 days earlier: she explained that she had gone to visit her friend Margaret Mitchell, whose husband was taken to the army against her will, and Margaret was lying sick.⁵⁴ On the same day, Euphane Brown, who lived in 'the Coaltoun', appeared before the Session accused of fornication because she was pregnant, though unwed, to William Da. William had come to her house in Baldinnie Coaltoun as he was on his way to the 'coal' [mine] (which implies that he was a miner), and they were engaged to marry. He was now in the army, but had not yet returned from the defeat at Dunbar. 55 A few weeks later, on the 6th Oct 1650, Sunday Euphan(e) Brown, on being asked again if William Da had returned, said she had heard that he was taken prisoner. ⁵⁶ An entry for 4th June 1651, notes the sum of 4 shillings Scots to be sent 'to a wounded soldier that was held a prisoner'. 57 We cannot know if this was William Da, or if he ever returned to Ceres, but the Ceres Kirk Session register of baptisms does record: 'Da, Margaret, born to William Da and Euphan Brown, christened on 16 February 1651'.

By contrast, the Cromwellian army was composed of well-disciplined veterans. Five of the seven cavalry regiments had been trained by Cromwell himself at their inception, and had formed part of his New Model Army. Colonel Francis Hacker's regiment had first been raised in 1648 and his troops were probably veterans of earlier campaigns. John Lambert's cavalry regiment had been recruited early in the Civil War as part of Fairfax's Northern Association, as had the infantry regiments he took over from Colonel John Bright. Three infantry regiments were 'directly descended' from the New Model Army; another had been created for Colonel George Monck from units that could be traced to the New Model Army. Three of the other infantry regiments were raised in 1648, and although the infantry regiment originally raised to serve in Ireland was more recent, it too, most probably, contained experienced men. Many of the soldiers would have fought through major battles in the preceding campaigns of the Civil Wars; some had been deployed to quell recent riots in England.

Even so, as one published account describes, their condition was still affected by weather and disease:⁶⁰

Our bodies [were] enfeebled with fluxes, our strength wasted with watchings; want of drink, wet and cold, being our continual companions, which impaired our strength and courage and made altogether useless above 2000 men...

These 'fluxes', probably some sort of dysentery, or diarrhoeal disease, are discussed further below in the context of the Scots prisoners held in Durham Cathedral after the battle. ⁶¹ Infectious diseases were a persistent problem for troops on both sides throughout the Wars of the Three Kingdoms. ⁶²

The Battle

The battle of the 3rd September was preceded by a period of stalemate: Leslie camped on Doon Hill, to the south of Dunbar, and whilst he stayed there Cromwell could not engage (Figure 5.10). Neither could Cromwell retreat further south as Leslie had a force at Pease Bridge/Cockburnspath, barring the way to the border. When, however, Leslie gave up his strategic advantage and the Scots descended Doon Hill on 2nd September, Cromwell took his opportunity with a surprise attack at first light (Figure 5.11). The actual location of the engagement lies between the hill and the London road, on the basis of the (Fitz)Payne Fisher plan drawn up in about 1652, which is itself based on eyewitness accounts, but should be treated with some caution as a source (Figure 5.12).

The action of the battle has been extensively discussed, particularly the manner in which Cromwell engineered his victory against an overwhelming superiority of numbers (BOX 5.1).⁶⁴ The composition of the two forces was certainly critical in the outcome but other factors also played their part. Leslie's decision to give up the higher ground on Doon Hill seems, on the face of it, a puzzling tactic but it may have been in preparation for an immediate engagement or perhaps triggered by the enthusiasm of Leslie's inexperienced army. If some tactical strategy was intended then most likely it was to reinforce those guarding against Cromwell's likely path of flight south along the coast. Another factor in the final outcome was Cromwell's re-organisation of the disposition of his English infantry, cavalry and artillery once they had been able to observe Leslie's manoeuvres from the safety of Broxmouth House.⁶⁵ This had left Cromwell well prepared. In addition, rather than waiting for a Scottish engagement the following day, Cromwell had surprised Leslie by beginning his own assault at first light on the morning of the 3rd September and quickly succeeded in splitting the Scottish cavalry from their infantry and attacking the exposed flanks. Heavy cavalry ploughed into infantry and the remaining Scottish brigades could offer little in response, though Sir James Campbell of Lawers and his troops put up considerable resistance. After singing the 117 Psalm, the English forces set out in pursuit of Leslie and the other survivors. 66 A letter dictated by Cromwell to his secretary John Rushworth on the day of the battle and sent to William Lenthall, Speaker of the Parliament of England, recounts:

...So they march'd after us, with Horse, Foot and Train, within a mile of Dunbar, where both armies stood in Battalia all Night; only in the Morning, about two o'clock, we gave them a hot Alarm, and so got Wind of them; and this Morning about Twilight the General advanced with the Army, and charged them both in the Valley and on the Hill. The battle was very fierce for the Time, one part of their Battalia stood very stiffly to it, but the rest was presently routed..⁶⁷

For his part, David Leslie reported that 'by engaging with gallant and desperate men all might be lost', ⁶⁸ and so it was. The Scottish army was defeated in less than an hour, and it is generally agreed that Cromwell's troops were better trained and disciplined, and that Cromwell's tactics were far superior to those of the Scots army, even if it was not an entirely one-sided encounter ⁶⁹ (Figure 5.12). The basic statistics of the battle, as with all historic battles, are disputed. The English army, made up of 3,500 horse and 7,500 foot, ⁷⁰ was outnumbered by the Scots, made up of 6,000 horse and 16,000 foot, more realistically about 3,000-4,000 cavalry and 9,500 infantry according to modern estimates. ⁷¹ This evidence is largely gathered from Cromwell's letters and those associated with him; there is no official Scottish narrative, although vague and isolated accounts are scattered through Scottish correspondence, diaries and memoirs. ⁷²

Each side fielded infantry and cavalry, and were equipped in a similar way, if distinctive in aspects of their dress. 73 The English made an inventory of the Scots artillery pieces remaining after the battle. 74 Each infantry regiment had cannon of various sizes, mortars, and the men were armed with matchlock and flintlock muskets which used gunpowder and lead bullets, swords and pikes (wooden shafts with steel points). 75 The Scots, in particular, are known to have used the latter 6 as well as the 'small and great Leather Guns', which were light enough to be carried on a single horse. A vivid picture of the essential equipment of a Civil War musketeer is given by a collection of finds from the 17th-century bastion at the Castle at Newcastle upon Tyne: a pottery grenade, musket rest, an iron blade from some form of pole arm, lead shot – both musket balls and pistol balls, powder flasks for a musket.⁷⁷ Pottery grenades such as this example would eventually give rise to the specialised role of the grenadier, and were primarily used when storming defences, as they were much more effective in confined spaces. The musket rest was necessary given the 1.23m (4 foot) barrel and up to 7.26kg (16lb) weight of the guns (see Figure 5.3). Things like powder flasks, which were often made of perishable materials, rarely survive The Newcastle examples were of the form known as the 'Twelve Apostles', as 12 were normally carried about the upper body. They were made of wood with a leather outer covering⁷⁸ (Figure 5.13).

With respect to the human remains from Palace Green, the following observations might now be made from an archaeological perspective. First, it is clear that soldiers of all ages, on both sides, suffered from lack of food prior to the battle. 79 Second, no specific mention is made of women or children present as camp followers on the day of the battle or subsequently, although they were a commonplace of campaigns at this time. In a letter to the Speaker of the House of Commons on the day after the battle, Cromwell states that 'the whole baggage and train' was taken. 80 Presbyterian ministers also accompanied Leslie's troops in earlier engagements, and, notoriously, encouraged the slaughter of some 300 Irish women, and their children, after the battle of Kilsyth in Lanarkshire in August 1645.81 Finally, the injuries that might be inflicted during the Battle of Dunbar, and which might leave traces on the human skeleton include the major trauma, dismemberment and bone shattering produced by the artillery, and penetration of musket balls, loss of limbs and severe cuts caused by swords, deep wounds and slashing cuts made by pikes, and possibly knife wounds, unless protected by body armour.⁸² If treated immediately and kept clean, sword cuts tended to be less serious but shattered bones usually led to the amputation of the limb concerned, providing there were conditions under which the wounded could be treated at all. Penetration wounds, caused either by muskets or pikes, were usually the worst of injuries. Depending on the location of the

wound, the victim might suffer peritonitis, asphyxiation or drowning in his own blood. Splintered bone could cause injury both within the immediate victim, and flew like the finest shrapnel into soldiers around the target. One of the most ubiquitous problems was the introduction of foreign matter like splintered bone, scraps of cloth and field dirt, into the wound producing sepsis, and ultimately gangrene. Head wounds, unless relatively superficial, were invariably fatal. Furthermore, the matchlock muskets of the time were prone to cause injury to their own users, as well as the danger of burns wounds caused by flying sparks in the vicinity of gunpowder carried both on the soldier's person, and in quantity in the baggage train. Anecdotes abounded at the time of fatal explosions following the inadvertent lighting of tobacco pipes in the vicinity of gunpowder stores and ammunition wagons. Cavalry charges too could inflict serious injury with heavy animals moving at speed.

Aside from the personal human impacts, the military, political and religious consequences of the battle were momentous. The Scots army was effectively destroyed and, although Leslie escaped, its active leadership was taken captive: the names of the officers taken prisoner are known. Scots Cromwell was able to press his advantage, ultimately, to take Edinburgh and occupy large parts of Lowland Scotland, where he built fortresses or 'citadels' in key strategic towns, for example at Ayr, Leith, Perth, Inverlochy and Inverness; and established garrisons throughout the country, including an armed frigate on Loch Ness. In December 1655, when Scotland formed part of Cromwell's Commonwealth, the people of Dunbar petitioned Parliament for financial aid to repair their harbour, which had been damaged in a storm. The government awarded them £300 towards the cost of a new facility, thereafter called the Cromwell Harbour. The victory itself was hailed as the manifestation of Providence, justifying Cromwell, the Parliamentarian cause, and in particular, divine rejection of Presbyterianism in favour of the Independents.

After the Battle

It is said that muskets, bullets, swords, human bones, cloth could still be found near the battle site as late as the 19th century at the village of Spott. ⁸⁹ The numbers of dead vary between sources, and accurate figures will probably never be known. One of Cromwell's own messengers estimated 'near four thousand' killed, ⁹⁰ whilst the English political newspaper *Mercurius Politicus* for 12th-19th September 1650 estimated between 4,000 and 5,000 dead. ⁹¹ Cromwell only admitted to 20-30 or 30-40 English losses against 3000 Scottish; other contemporaries estimated 800-900 killed, ⁹² or no more than 300 killed ⁹³ (Figure 5.14). Similarly, Cromwell claimed that 10,000 Scots were taken prisoner, and 5,000 'sick and wounded' were released to go home, said to be 'poor wretches of them, very many of which, its probable, will die of their wounds, or be rendered unserviceable for time to come by reason thereof'; ⁹⁴ the townspeople of Dunbar were allowed to use carts to fetch back wounded from the field. Michael Morosoni, the Venetian ambassador to France, in a note to the Doge and Senate of Venice dated 12th October 1650, reported 4,000 killed, 12,000 taken prisoner and 6,000 fled. ⁹⁵

More modern estimates place the number of released sick and wounded at around 1,000⁹⁶ and the stories of individual soldiers can occasionally be picked up as they made their way home in the aftermath of battle. Referred to in the minutes of parish Kirk Session meetings as 'spoiled by the enemy' or 'lacking a leg', the returning men were given money from parish voluntary collections all

across Scotland. In Dunfermline (Fife), £68 10s (Scots) was raised on the 17th Sept 1650 to be shared amongst the poor, scholars and wounded soldiers; a contribution was to be taken the following Sunday to be used for 'hurt' [wounded] soldiers and paying surgeons. On 1st October 1650 money was paid to Andrew Anderson, surgeon, for curing wounded soldiers; £52 8s 6d, and £11 16s 6d to be distributed to the needlest of them. ⁹⁷ These are considerable sums.

The March south

The larger number of more able-bodied men captured at the battle, over 4,000 in all, now set off to march the 90-mile (145 km) route to Newcastle under the escort of four troops from a regiment led by Colonel Francis Hacker (Figure 5.15 and 1.2). ⁹⁸ The names of the Scottish officer prisoners at Dunbar were recorded on 9th September, and the list was revised the following day. ⁹⁹ We know very little, however, of the general prisoners who fought in the battle and it is unclear whether the Scottish officers were separated from their troops on or before the march. If so, this would have left the prisoners with no advocates and exacerbated the breakdown of discipline. In any case, having marched the first 28-30 miles (45-48 km) to Berwick without anything to eat at all, some of the prisoners collapsed and refused to move unless they could eat something. ¹⁰⁰ The retribution was brutal, as Haselrigge explained: ¹⁰¹ (Figure 5.16).

...I heard that the Officers who march'd with them to Berwick, were necessitated to kill about 30, fearing the loss of them all, for they fell down in great Numbers, and said they were not able to march, and they brought them far in the Night, so that Doubtless many ran away.

South from Berwick, the prisoners were given a new guard of both foot and horse, and they may have rested then at Belford, ¹⁰² while at Alnwick they were penned at the castle. ¹⁰³ The only source of detail for this overnight stop is a letter from Robert Watson, one of the Earl of Northumberland's officers based at Alnwick Castle, writing on 11th September 1650 to Hugh Potter, the Earl's Steward based at Northumberland House, London, who recounted:

As noe question but you heare of a greate defeate given the Scottes for a testimony whereof ware 6000 prisoners lodged within these walls one night betwixt the middle and upper gaite; I hope now theire is noe feare of Scottes invacion. Their souldiery hath deserted Edinbrough (the Castle excepted) and are gone to Stirlinge with a very poore strength.¹⁰⁴

The figure of 6,000 men related by Watson is perhaps an exaggerated estimate. What is more certain is that the column was then marched further south without food until the prisoners arrived at Morpeth (Figure 5.17). Here they were corralled into a walled garden where Haselrigge's letter again picks up the story:

...the Prisoners being put into a large wall'd Garden, they eat up raw Cabages, Leaves and Roots... which Cabbage... poysoned their Bodies... ¹⁰⁵

It is possible that the walled garden at Morpeth may be identified as that within the grounds of the castle and shown on a map of 1604. Morpeth Castle had been held by the Scots for Parliament in 1644 but was described as a 'ruinous hole, not tenable by nature or art', and suffered more during

the siege. ¹⁰⁷ In 1650, Haselrigge was responsible for the castle, and these two reasons may explain why the walled garden made a more secure encampment for the prisoners. ¹⁰⁸ Thereafter, the prisoners were housed for one night in St Nicholas's church in Newcastle, certainly the largest building in Newcastle at the time. In October 1650 the Newcastle Corporation paid for 'the cleaning of [St] Nicholas's Church, where the Scots prisoners was [sic] kept one whole night'; they also paid for coals and candles for the guards at the church and for two tar barrels to burn 'naughty' meat. 109 Possibly the officers were separated from their men here – Ambrose Barnes, a merchant and alderman in Newcastle, mentions 60 officers being kept at the 'marshal's house' in Newcastle. 110 This building cannot now be located but it may be that Haselrigge took over one the houses in the Castle Garth, of which there were many. There is also an account of some prisoners being kept in Trinity House, on Broad Chare, Newcastle. 111 Some of the officers were then certainly sent to Tynemouth Castle which at this time consisted of massive fortifications encompassing the entirety of a promontory projecting out into the North Sea. The complex at Tynemouth included later medieval buildings such as a large ruined 14th-century fortified gateway tower with a drawbridge 112 and the prisoners were possibly lodged in the barns or stable blocks of the old medieval priory there; in any case, the circumstances appear to have been miserable. The Kirk Session minutes for Alloa and Tullibody parish record that on 23rd March 1652 the Session received a petition from many officers taken at Dunbar and currently in prison in Tynemouth Castle. The petition begged the parishioners to collect money for the 'relief and great necessity' of the captives, and the elders of the Kirk undertook to make that collection. On 6th September 1652 a minute records that £8 4s was raised, and that it was delivered to the prisoners (Alloa Kirk Session).

Back in Newcastle, 140 men were so sick they could not be moved. William Whittaker, the gravedigger for All Saints' church (to the east of St Nicholas's), was paid 7s 8d for digging 23 graves for the Scots prisoners who had died in the town that night. The remaining 3,000 ordinary soldiers and or followers were marched to Durham on foot, to be lodged in the cathedral church. By Haselrigge's own account, about 1,000 men must have died along the way from a combination of privations, exhaustion, severe gastric problems – 'the Flux', most probably dysentery - and execution. 114

Durham Cathedral during the Commonwealth

In the 17th century Durham Cathedral church was by far the largest building in the region; contemporary gaols were very small indeed, seldom capable of holding tens of people, let alone tens of hundreds (BOX 5.2). The approximate floor space of the whole church, including the nave, transepts and choir, but not including the Galilee Chapel at the west, is in the order of 4000 square metres. As for its custodians, when the Scots had occupied the Bishopric in 1640 prebends like John Cosin were deprived of their income. Most, certainly, had to leave then, or shortly after. John Blakiston, who was later to own Durham Castle, was very active in 1642 reporting delinquent clergy to the Committee for Scandalous Ministers. Some of the clergy returned in 1642-3, only to flee again when the Scots re-occupied the city in 1644. After the abolition of the Book of Common Prayer in 1645, the very basis of the liturgy which structured the life and work of the church, most of the clergy and those employed by the Dean and Chapter departed. Their absence is indicated by the ordinance of 23rd April 1645 in which Parliament ordered three preachers be appointed to Durham Cathedral, each to be paid an annual maintenance out of the appropriated possessions of

the Dean, and Dean and Chapter of Durham. They were to reside in some of the houses of the Dean and prebends. Deans and chapters were finally dissolved in April 1649. The graveyard appears to have been leased out, and as late as 1665 and 1671 there were animals grazing in it with some years left to run of a lease. 121

The cathedral church the prisoners saw in September 1650 would have been somewhat unfamiliar to us today (Figure 5.18). For one thing, its profile against the skyline as they approached (if it were daylight) would have been different in detail, if not in the substantial shape of the building: the tall spires on the western towers had not been taken down yet; the 18th-century pinnacles on the east end, and 19th-century tracery on the central tower had not been added (Figure 1.7). The windows would still have contained the late medieval tracery to be seen in antiquarian images of the 18th century, but which was removed in the 1840s. ¹²² It is unclear how much of the cathedral's 'glorious interior woodwork' remained – the furnishings installed under Dean Hunt and John Cosin (Bishop Neile's chaplain and a cathedral prebend) – since they were reputedly already damaged and burned by the Scots armies of the 1640s. ¹²³ Either in 1640 or 1644, the Scots army may have used the Cathedral as temporary barracks whilst they overwintered, which would explain the attributions of damage to the woodwork and tombs in the Cathedral to them. ¹²⁴ If that is the case, some Dunbar prisoners may well have been in the Cathedral before as free soldiers and knew the cold stone floors that awaited them.

The prisoners in Durham Cathedral

Durham was only a small town in 1650 (Figure 5.19) and overnight its population had doubled with the arrival of the Dunbar Scots. Haselrigge claims in his letter of 31st October 1650 that he had daily supplies of bread and milk sent in from Newcastle and other surrounding towns in order to feed the prisoners in the cathedral, and that they received medical treatment. 'Twenty of the next Towns to Durham' Haselrigge states, 'continue to send daily in their Milk, which is boiled, some with Water, some with Bean Flower, the Physicians holding it exceeding good for the recovery of their health'. ¹²⁵ All this was judged to be 'an Allowance equal to what had been given to former Prisoners', but it was not enough. ¹²⁶ 'Their bodies being infected, the Flux increasing among them' and so Haselrigge ordered the sick to be removed to the former bishop's castle, where they occupied 'several Rooms'. He details the meat, vegetables and oatmeal that he ordered to be provided to prisoners in both the cathedral and the castle, with 'old Women appointed to look after them'. ¹²⁷

In part, Haselrigge blamed the deteriorating conditions on the behaviour of the prisoners themselves, describing them as 'unruly, sluttish and nasty'. He recounts murder between the captives even though they had already been stripped of any possessions. The Parliamentarian guards themselves were not beyond reproach, however. Lead, iron and anything loose attracted the light-fingered; one guard called Brewen, accused of taking and selling the lectern from the cathedral choir, was said to be 'a man of badd conscien and a Cruell fellowe to the poore prisoners. The extent to which Brewen and his like might have been responsible for what followed is uncertain but by Haselrigge's own estimation, of the 3,000 men brought from Newcastle, 1,600 were already dead and buried, and the mortality continued at a desperate rate due to illness. Haselrigge clearly believed 'the Flux' to be the principal malady, and to counter this he claimed that he supplied straw for the prisoners to sleep on. By now, however, there may have been a range of diseases caused by starvation, severely diminished strength and depleted immunity, and those caused by humans

having to live and defecate in close confinement with limited fresh water and sanitation. On 31st October Haselrigge estimated that there were 'about Five hundred sick in the Castle, and about Six hundred yet in health in the Cathedral (Figure 5.20), the most of which are probably Highlanders, they being hardier then [sic] the rest'. After a lengthy period of starvation and duress, the prisoners' metabolism may not have been able to process food and nutrients, and even this attention may have precipitated death. Haselrigge himself seemed to find the circumstances a puzzle. 'We perceive that divers that are seemingly healthy, and have not at all been sick, suddenly die; and we cannot give any Reason for it, only we apprehend they are all infected; and that the strength of some holds out till it reaches their very hearts'. 132

It is a commonly held belief that the Scots prisoners destroyed a great deal of the remaining fabric in the cathedral, particularly the Neville tombs in the south aisle, the latter as acts of Calvinist iconoclasm or anti-English sentiment due to the association with the victor against the Scots at the Battle of Neville's Cross in 1346 (Chapter 1). These claims are repeated in all the fictional accounts of the Scots imprisonment. A great deal of image-stripping took place earlier in the process of Reformation under the 16th-century puritan dean of the cathedral, and it may be doubted how much damage prisoners stripped of weaponry could actually inflict on stonework, even the softer alabaster used on the Neville tombs. 134

Another claim is that the Scots stripped out the woodwork inside the cathedral for fuel and for this there is a little more evidence. A chapter meeting of 3rd November 1660 reported that there were almost 'noe seats in the Quire'¹³⁵ while an account of repairs in 1663 describes 'the building of a new font somewhat suitable to that which the Scots destroyed'.¹³⁶ Another key element in historical fictions of the events inside the cathedral is that while the Scots may have broken up the woodwork, including the organ, they spared the clock because it has a thistle carved into its casing.¹³⁷ An edition of the *Rites* dated 1653 lays the blame at the feet of the Scots: 'but in the yeare 1649 [sic] this abbey was made a p(ri)son for the Scotts and quite defaced the Chime bells and cloke and all taken away.' The owner of this book, Ralphe Cotesworth, was almost certainly a recusant and a Royalist, and this may have coloured his reaction, nonetheless this is the earliest reference to Scottish destruction.¹³⁸

Haselrigge's letter of 31st October claims that he supplied coals to the prisoners on a daily basis, but the context implies that he was perhaps only referring to the sick in the Castle. There is at least one visible scorch mark in the south aisle of the cathedral that may have been caused by the fire of a brazier whilst the prisoners were there. A contemporary account by the Library keeper, Isaac Gilpin, suggests some manuscripts may have been burnt and there are indeed a few blackened and buckled manuscripts in the cathedral's holdings with missing leaves. One particular 14th-century manuscript, MS B.I.29, was intact in the 1630s according to the library catalogue but is now in a pretty sorry state. These manuscripts Gilpin had been at some charge of late in preserving the books and other goods, by removing them to another place for better security, the Scotch prisoners having got into the next room, and with 24 hours afterwards into the Library, and spoiled and burned whatever they found there'. 143

Sometimes the later antiquarian records make it difficult to disentangle references to damage inflicted by the Scots as an occupying force in the 1640s, and damage made by the Scots as prisoners in 1650. The Hunter manuscript of the *Rites of Durham*, dating to 1655 or 1656, does make this

distinction, with two references to destruction by prisoners in 1650, and one attributing the damage to Leslie's forces of 1640:

But in the yeare 1650: this Abbey churc[h] was made a prison for the Scotts and quite defaced w(i)thin, for ther was to the Number 4500 w(hi)ch most of them perished and dyed ther in a very short space and were thrown into holes by great numbers together in a moste Lamentable manner; But in the yeare 1655 the Clocke and Chyme was repayred againe w(hi)ch was taken downe and preserved from the s(ai)d ruyne. 144

There was another lettern of brasse belowe a very faire one w(i)th an eagle on itt w(i)th her wings spread where the Monckes did singe ther Legends att Mattins and other tymes w(hi)ch same stood theire untill the yeare 1650 when the Scotts were sent prisoners from Dunbarr feight and putt prisoners into the Church where they burned upp all the wood worke in regard rhey had noe Coales allowed them.¹⁴⁵

There was 4 paire of faire Organs belonginge to the quior for celebratinge gods service the best of them standinge over the quier doore beinge used but upon festivall daies ther was but 2 paire of such in all England att th(a)t tyme but ther was a paire att the cominge in of the Scotts 1640 farr exceeded all w(hi)ch they destroyed. 146

This is the oldest reference known to describe the way in which the prisoners were buried but it gives a somewhat biased impression of destruction and chaos inside the cathedral when in fact the Scots probably made efforts to organise themselves in the cramped conditions. Being warmest on the south side of the building huddled around their braziers, they probably used the colder end as their toilet. Oily patches on the floor of the cathedral, identified as magnesium nitrate from urine, may have seeped up from the crushed limestone on which the flagstones are laid. 147 The patches appeared only after 1967 when underfloor heating was first laid in the cathedral. The new system, which employed surface convectors connected by ducts under the floor, was in use throughout the winter of 1967 but when the heating was turned off in April 1968 for the summer a 'dark, oily substance' developed on the surface of the flagstones which dried out to leave a 'somewhat rubbery, brownish integument'. Judging by their wear pattern, the Coal Measure sandstone flagstones affected had been in place for several hundreds of years. Various explanations were suggested, including oil permeating upwards from the bedrock, slurry weathering out of the flagstones or some kind of organic mould. When each suggestion was discounted, further research showed this to be an inorganic substance probably contained in solution in the sandstone flags and identified principally as nitromagnesite. 148

While the source of the magnesium may well be the finely crushed Magnesian Limestone onto which the flagstones were originally laid, ¹⁴⁹ the nitrogenous content is harder to explain. Once washing water from the Cathedral well was excluded as a possible source and the use of incandescent gas mantles considered improbable, ¹⁵⁰ another proposal was that gunpowder might be the source. But there is no evidence for gunpowder being stored in the cathedral, nor is there much to suggest that buried human remains might be responsible; there are simply not enough of them. It is speculated, therefore, that the source might be nitrogen-rich urine from the confined Scots soldiers. Rough estimates, based on the urine secreted daily by an adult, place the volumes at between 227,305 and 1,136,523 litres, containing approximately 2000 kg to 10,000 kg of fixed nitrogen. ¹⁵¹ When this liquid

filtered down through the porous flagstones it may have reacted with the underlying Magnesian Limestone to form magnesium nitrate. ¹⁵²

If this is so then the spread of the slippery substance on the cathedral floor in 1968 might provide an unusual kind of map of the way in which the space inside the cathedral was used by the prisoners. 153 As Figure 5.20 shows, the oily surface film developed on the flagstones in the transepts, the choir aisles and the east end of the cathedral. If this was an area set aside as a toilet (presumably once the numbers decreased) then the soldiers might have congregated during the day and night at the opposite end, the west end of the nave, that being the warmest part of the cathedral, especially so in late autumn. This would also fit with the reddening scorch marks from a brazier in the south aisle and, indeed, damage to the Neville tombs, all of which would fall within the area of occupation; presumably the Galilee chapel was sealed off otherwise more damage might be expected there. It would also fit with the concerns of Gilpin, the Library keeper, that his books were under threat; the library, which was located above the slype, ¹⁵⁴ was closest to the south wall of the south transept where there is a door for a stair in the south-eastern turret which gives access to spaces above the central crossing. If the prisoners got through this door, or indeed through any of the other five ground-floor doors to staircases rising up into the towers, they could have gained access, at least temporarily, to the roof and to almost any unsecured building around the cloister yard. Finally, we know that the sickest prisoners were taken to the castle and the north or Great Door of the cathedral provides an obvious and direct line of access onto Palace Green from an area of the cathedral where the prisoners might have slept. 155 Early modern concepts of social space were very different from our own¹⁵⁶ and, although transformations of social relationships and domestic space were changing in this time, it is unlikely that there was any alternative to the sheer necessity of placing some form of roof over, and enclosing walls around, this number of men. Where else could they go?

The prisoners in the Castle

By his own account, Haselrigge moved the sick and the dying out of the Cathedral and into the Castle. The condition of the Castle buildings at this time is unclear. The Castle was said to have been in great decay when Bishop Neile (1617-27) arrived in 1617, which induced Neile to spend a considerable amount on restoration work. 157 This included work on the east end of the north range and a number of rooms at the north end of the Great Hall. The accommodation was improved sufficiently to allow Bishop Morton (1632-59) to entertain Charles I here in 1633 and 1639. The Castle may have been used later as a hospital for wounded troops in the 1640s, ¹⁵⁹ so there was some precedent to the use to which it was put after Dunbar. Following the Ordinance abolishing Bishops and appropriating their lands passed by Parliament on 9th October 1646, an order was issued on 16th November 1646 for the sale of all episcopal property. 160 The Commonwealth government needed money and the idea was that it could raise a loan from the City of London using the money gained by these sales of ecclesiastical land as security. 161 Consequently, the majority of the properties were sold to London merchants and businessmen, most of whom had no intention of occupying their new properties, but sold or leased them on. Durham Castle was sold to Thomas Andrews, Lord Mayor of London on 2nd May 1649 for £1,267; he is thought to have sold the Castle to John Blakiston MP for Newcastle, one of the foremost of the Parliamentarian party in the North-East of England and one of the fifty who signed the death-warrant of King Charles I. 163

Blakiston served on the committees dealing with the sale of bishops' land, and on another for abolishing deans and chapters and the sale of their lands. 164

The correspondence of John Cosin, when returned as the Restoration Bishop of Durham, spent £6,000 'For the rebuilding of Durham [Castle, which the Scots spyl'd and ruined with gunpowder]' (Cosin's own annotation in brackets). 165 Nevertheless, the Castle was clearly judged to be an improvement on living conditions in the Cathedral in the autumn of 1650. Five hundred men were moved in by 30th October 1650 and, having moved them, Haselrigge now provided the sick prisoners with mutton broth, boiled beef and milk. According to his own account at least, nurses were brought in and the prisoners were kept clean by 40 of the most healthy. Straw bedding was also provided, as well as coal for fires. Notwithstanding these sanitary measures, by 30th October 1650 some 1,600 had died. The *Rites of Durham* reported that 'most of them perished and dyed ther in a very short space and were thrown into holes by great Numbers together in a most Lamentable manner'. 166

Drawing together the various historical sources, something further may now be said about how the men died. Dysentery is the most likely cause of death, an inflammation of the large intestines or lower digestive tract with symptoms of intense abdominal cramps, diarrhoea, rapid weight loss, vomiting and fever during which sufferers lose fluids and salts (electrolytes - sodium, chloride, potassium and bicarbonate) that are necessary for survival. In the past, for most people, severe dehydration and fluid loss were the main causes of diarrhoea deaths. Infection is spread through contaminated food or drinking-water, particularly water contaminated with human faeces, and from person-to-person as a result of poor hygiene. It is easy to see how these 'fluxes' would spread in circumstances in which men lived and fought in close confinement, and with little or no food and clean water with which to replenish the body's salts. The real danger here is severe dehydration and electrolyte imbalances which can result in shock or coma. Outside the digestive tract, bacteria in the bloodstream or bacteremia may have fatal consequences particularly for malnourished children, and can also cause kidney failure. The bacteria are highly infectious and would have spread quickly between prisoners particularly when the men were confined inside the Cathedral and were forced to foul the flagstones but, as we have already seen, the 'flux' was already present among the ranks of both Scottish and English soldiers before the battle of Dunbar. 167 Signs of dysentery can last for five to seven days or longer but the course of the illness affects individuals differently. 168

In addition to dysentery, there is another possible cause of death which should be considered. This is so-called 're-feeding syndrome' which is defined medically as a potentially fatal shift in fluids and electrolytes which may occur in patients who are malnourished and then consume large quantities of food rapidly. During the period of starvation, which in the case of the Scottish soldiers may have been up to 12-14 days, hormonal and metabolic changes occur as the body reacts by reducing cellular activity and organ functions. When re-feeding begins, this triggers the release of insulin and affects potassium, phosphate and magnesium electrolytes, both sodium and water balances may be affected to such an extent that they experience fluid overload which can lead to cardiac failure. Anyone with little or no food intake for more than five days is at risk. ¹⁷⁰

The statistics on the dead and the speed with which the men died was astonishing to Haselrigge as well as to his superiors: on 5th August 1651, some months after the numbers of casualties had been

reduced, Parliament still insisted on an order to 'take care that such provision be made for the Scottish prisoners in Durham Castle, while there, as is fit for prisoners of war'.¹⁷¹ Although so many died in each building, we do not know where and there are no contemporary historical accounts of where the dead were buried. Archaeology remains our only source of information. The last prisoners were issued with passes to return home in July 1652, some 22 months after they first crossed the River Wear and marched through the Great Door of Durham Cathedral.¹⁷²

The response to the defeat in Scotland

For the Scots parliament and Kirk the defeat at Dunbar was a national disaster. The Commissioners of the General Assembly of the Church of Scotland ordered national fasts to demonstrate repentance 'when God's hand was so heavy on the land...'. ¹⁷³ For God's wrath to have been visited on the nation in such a calamitous fashion, their own sins must be prodigious. ¹⁷⁴ As soon as word reached the parishes in Scotland spontaneous voluntary collections of money were made for the prisoners in churches across Scotland, there followed more centrally organised national collections. ¹⁷⁵ So, for example, on 31st October 1650 a letter was received by the presbyteries of St Andrews and Cupar (Fife) from the Commissioners for the General Assembly of the church showing the sad and sorrowful condition of many of the Scots prisoners in England, reporting that about 500 were dead, and those that were still alive were 'very pinched with hunger, cold and want of comfortable supplies', desiring speedy contributions from the kirks and money to be sent to the Dean of Guild of Stirling. ¹⁷⁶ More informal individual parish collections were taken for poor soldiers travelling through the parish in 1653, and a third official collection also was made for prisoners in England in 1653. Those from 1652-3 would have been intended for prisoners not only of the Battle of Dunbar, but also of the Battle of Worcester on 3rd September 1651. Kirk Session minutes record these collections described variously for the prisoners in Berwick, Durham, Newcastle, Shields, and Tynemouth. At least one record also mentions prisoners in the Tower of London. In Kirkcaldy (Fife), on 3rd November 1650, a notice was read from the pulpit of a collection to be made for the captives in England, and eight men were named to collect the money. 177 In Burntisland (Fife), on the same day, it was stated that the prisoners and captives taken at Dunbar were held at Berwick and Newcastle, indicating the route the march was taking. This parish raised £100 Scots. ¹⁷⁸ On 17th November 1650, in Kirkcaldy, it was announced that a collection for the prisoners in Durham and Newcastle would be made next Sabbath. The minutes following (24th Nov 1650) record that £26 6s 8d (Scots) was raised for the prisoners.¹⁷⁹ On 1st December 1650, the Minster told the Kirk Session that he had delivered the 50 merks given for the relief of the captives in England, to the Dean of Guild in Stirling. 180 On 12th April 1652, parishioners in Kirkcaldy heard that a collection would be made for prisoners in England, to be collected next Sabbath and two elders would collect it at the kirk door; on the following Sunday, £17 10s was raised for them. 181

Occasionally, these minutes allow us to gain a glimpse of the impact of the deaths at Dunbar on bereaved families left behind, in particular on wives deprived of their breadwinner. If any other misfortune prevented the wife herself from working she would be forced to appeal to the church: for example, Helen Smith, spouse to John Young, who was killed at Dunbar, appealed to the kirk in Culross for help for this reason and she was awarded an allocation of 12 shillings monthly. The records also give us a vivid picture of Scottish soldiers who had escaped Dunbar and were

attempting to find their way home. The minutes for Culross Abbey (Fife) Kirk Session on 12th October 1650 record that the names of soldiers hurt at Dunbar were to be brought in the next day and 'something to be given them according to their several conditions, till they mend'. As the soldiers straggled their way home, the parishes they passed through responded to their needs as best they could, and there are copious entries for sums of money being given to poor or injured soldiers. There are also a few records of the misdemeanours of soldiers from regiments that were at Dunbar (men and officers). 184

Reading history from skeletal remains

At this stage it is worth pausing to reflect on how the scientific findings discussed in Chapters 3 and 4 might relate to the specific historical contexts which had affected the earlier lives of the Dunbar men in Scotland. To do this, nine life course 'biographies' (Figures 5.21 to 5.28) have been drawn together from all the available evidence we have been able to extract from the skeletal remains through osteoarchaeological observation, biochemical and microscopic residues found in their dental calculus, and isotopic analysis. There will always be a gap between scientific observation and interpretation, but our aim here has been to give our unknown men as much of a restored voice as possible and to make sense of the interpretations we have made in both historical and human terms within a reasonable degree of confidence.¹⁸⁵

Childhood conditions

Chapter 3 provides striking confirmation for poor or restricted diet and deprivation, and or disease, in childhood, through the identification of enamel hypoplasia in the teeth of the Dunbar men (Sk 1, Sk 12, Sk 19, Sk 23, Sk 25, Sk 27a, Sk 28); the isotopes in Sk 21, Sk 23 also suggested that some suffered from dietary stress or disease during childhood. Possible evidence of rickets from childhood - due to deficiency of vitamin D - was found in six people (Sk 1, Sk 7, Sk 13, Sk 14, Sk 21, Sk 23), evidence for long-term vitamin C-deficiency was identified in three (Sk 6, Sk 12 and Sk 23) and non-specific infectious disease was observed in ten individuals (Sk 1, Sk 3, Sk 5, Sk 6, Sk 12, Sk 21, Sk 22, Sk 23, Sk 25, Sk 26/27c). Pathogens for pneumonia and bronchitis were found in the oral microbial proteins of three individuals (Sk 1, Sk 12, and Sk 25); while two people (Sk 22 and Sk 28) may have had anaemia in their childhood. Our individuals had the misfortune to be born and bred during what has been described as 'the heyday of famine and scarcity in all of Scottish history..., roughly, between the middle of the sixteenth and the middle of the seventeenth century' although there were specific periods of deprivation before and after. 186 Shortages of one foodstuff or another were legislated for many times in the 1560s-90s, with famine recorded in 1598, and indicated through poor harvests in 1621-22, and four periods of famine prices between 1620 and 1625, most severely in 1622-4. 187 Particularly high mortality associated with famine throughout Scotland was recorded in 1623. The Highlands endured difficulty in 1604, 1623 and 1650, and Northern Scotland in 1634-36. 189 It was also a period in which there were outbreaks of plague until the end of the 1640s; ¹⁹⁰ one third of the inhabitants of Brechin, where Dunbar prisoner Robert Junkins came from (Chapters 7 and 8), died in the plague of 1647/8. 191 The designation of diseases in this period was very inexact, but epidemics of consumption, leprosy, measles, scurvy, tuberculosis, typhus, and whooping cough occurred intermittently throughout the 17th century. Babies in the womb can be affected if the mother suffers from poor nutrition or disease, and this might even be carried through from poor health in grandmothers. The estimated age ranges of our individuals suggest that the 17-26 year-olds were

most likely born in the period, that is between 1624-1633; and the few individuals aged 36-46+ were most likely born in the period between 1604-1614 (Chapter 3). Most of the people represented by the skeletons at Palace Green would have been born into periods of famine and disease, or had mothers who had suffered in their younger years and experienced shortage at some point in their lives. ¹⁹² It is one thing to note historical dates of famine, another to read the effects directly on the teeth and bones of our unnamed prisoners.

In addition to these economic aspects of deprivation, we should also mention the strength of belief that the 17th-century Scottish Presbyterian Church had in fasting. 'Days of humiliation' or fasts were predetermined by the church and regulated so as to mitigate the sins of society and plead God's forgiveness. ¹⁹³ Since disease, harvest failure, plagues, threats to the security of the kingdom or the Kirk were themselves seen as manifestations of God's anger, Scottish society was called on to fast in order to demonstrate repentance, sometimes for several days. This imposed 'mortification of the flesh' must have contributed to further malnutrition and reduction of the body's ability to cope with disease. Kirk Session minutes of the period are replete with intimations of national and local fasts, including those following the national disaster of the Battle of Dunbar. ¹⁹⁴

Diet

A predominance of plant proteins of oats, with beans and brassica, was found in several people (Chapter 4) (Sk1, Sk12, Sk21, Sk22, and Sk25) and this evidence from their dental calculus is suggestive when placed in an historical context. It seems to be generally agreed that from the late 16th century through the 17th century there were significant dietary changes in Scotland. There was a distinction in diet between the Lowlands (including the North-East Lowlands) of Scotland, on the one hand, with a relatively restricted range of foods, very sparing use of beef and mutton, and a heavy reliance on oats; and the Highlands (including Perthshire, the eastern parts of Aberdeenshire, Banffshire, Moray and Inverness-shire) on the other hand, with a greater range of foods especially dairy products and fresh meat. 195 Over the 17th-18th centuries the labouring people in the Lowlands became almost dependent on oats, and Highlanders experienced a gradual change away from the consumption of animal-derived food until, they too, came to rely more on oats. 196 Oatmeal porridge (possibly first described in 1615), oatcakes and oat bread are all referred to in the early 17th century. According to one traveller in 1605, servants in the Lowlands ate mostly oatmeal, the farm hands ate bread made of peas and beans, whilst the Highlanders ate more cheese, flesh and milk. 197 In 1639 every soldier in the Scots Covenanting army was to be given 'two pound weight of aite [oat] bread in the day and twentie eight ounce of wheat bread ane pynt of aile in the day'. 198 On the assumption that these quantities were in fact for two men, each soldier having a 'follower', this provides 3,300 calories each, mostly from the oatbread. 199 Although contemporary Kirk Session minutes suggest that diet did vary according to location, social rank and wealth, this pattern seems similar for civilian and even urban institutional diets, and it has been calculated that an average adult male needed to consume about 36 ounces of oats or oatmeal to do a day's work. 200 Porridge was made with water but eaten with milk, though not in great quantities, or with butter or ale. 201

The primacy of oatmeal in the Lowlands did not, of itself, indicate a poor diet or a calorific deficit.

Oats and ale are nutritious, but the diet *is* low in vitamins and this may be borne out in those Dunbar prisoners who were vitamin C- and vitamin D-deficient.²⁰² Cereals also contain phytates which affect

calcium absorption and lack of calcium itself interferes with the production of vitamin D from sunlight, making it more likely that the person will develop rickets. If sunlight was then also reduced because of the latitude and weather conditions, and perhaps their living/ work environments then this would have increased the chances of an individual developing rickets. Meat consumption too was probably limited in the Lowlands. Although both cattle and sheep were kept on most farms, they were small and lean, and climate and pre-improved agricultural regimes left livestock vulnerable, and mortality was high when conditions were adverse. Heat was more likely to be consumed as haggis or blood pudding which contained offal, or as broth with barley and kale. The latter, in particular, would have been an important source of vitamin C²⁰⁴ and the brassica proteins detected in our individuals' calculus could well be kale or cabbage. Other greens and some roots would be grown too, including peas and beans. There are also frequent accounts of hens, eggs and sometimes duck, and freshwater fish might have been available to some.

Marine fish was obviously available around the coast, but less so further inland.²⁰⁶ None of our individuals had a significant marine fish component in the isotopes of their tooth dentine.

Mobility

Several of the people represented by the skeletons at Palace Green had lived in different locations long enough for their movements to leave traces in their bodies. The subsistence crises of the early 17th century did cause emigration, just as it checked population growth. ²⁰⁷ Due to the nature of Scottish Poor Law the care of the poor fell on individual parishes and without effective centralised control there were great differences between places in the nature and extent of relief and charity offered.²⁰⁸ Kirk Session minutes are replete with concerns and payments, many obviously to vagrants, but the extent of vagrancy among the able-bodied but unemployed poor is unknown. ²⁰⁹ As elsewhere in 17th-century western Europe, rural-urban migration was certainly a factor in population mobility and young men from rural locations often sought employment and apprenticeships in towns.²¹⁰ Following the 1644-5 epidemics, apprenticeship migration to Edinburgh rose threefold. 211 It should also be noted, however, that farm servants also moved about in search of work and there were large seasonal hiring fairs. ²¹² In eastern Lowland Scotland in the 17th century, farm-labourers were expected to bring 'a wife or other female whose labour would be called upon on a casual, usually seasonal basis'. ²¹³ And where there were men and women, married or not, there would be children. Finally, tradesmen, many of whom may have been cottars, formed another migratory group in the countryside and between country and town, whilst tenants tended to have less freedom to move.²¹⁴ As a result, life course migration, and subsistence migration to escape shortage and famine, might explain the evidence for movement which has been suggested for some of our individuals. Migration for marriage tended to form a more localised pattern, ordinary people seldom marrying too far from home, and again the age range most affected would be adolescents and young adults. ²¹⁵ In the Highlands, the clan system made fermtouns and working communities more focused on kin ties, and assumptions about favour towards kinsmen were so strong that Highlanders had almost a customary right to the hereditary possession of their holding. Even here, however, rentals indicate a regular turnover of occupancy. 216 A different type of tenure prevailed in the northern isles, where holdings were successively divided between co-heirs. This tended to create communities of close kinship within concentrated areas.²¹⁷ The implication is that here, at least, most people did not tend to move far from their place of birth in the normal course of events.

If the diet in the Highlands was understood to be appreciably better than in the Lowlands by ordinary people, then we might envisage that this would also lead to movement of population, though recorded evidence for this is sparse and it is uncertain how migrants could be accommodated within Highland social structure. Certainly, our evidence seems to imply movement for longer and more permanent periods than might be explained by seasonal short-range transhumance of sheep flocks, and sheiling occupation in the uplands. ²¹⁸ The dietary evidence from the dental calculus, combined with the strontium and oxygen isotopic analyses suggests men with a Lowland diet, hailing from isotope regions which are also consistent with the Central Lowlands, and several Dunbar regiments were raised in these parts (see Figure 5.9). By contrast, individual Sk 6 ate a consistent mix of plant and animal proteins, perhaps indicative of a more Highland diet. He enjoyed a relatively stress-free childhood, and the isotopic results imply that he came from areas covering the western Central Lowlands (which could feasibly include the culturally 'Highland', Gaelic-speaking areas around Loch Lomond and the Trossachs), Caithness or Orkney, and moved little in his life. Individual Sk 22 spent his earliest childhood possibly in the Highlands, including Aberdeenshire, or in south-west Scotland, but moved to the western half of Scotland in middle childhood and had a mixed plant and meat protein diet. ²¹⁹ We therefore have possible Highlanders amongst our individuals and Haselrigge and others did assign the term 'Highlander' to many of the soldiers in the Cathedral, clearly stating that they were, on the whole, healthier than the majority of their comrades in arms. ²²⁰ It should be remembered that the Master of Lovat's Regiment of Foot were Covenanting Highlanders who fought at Dunbar, and that many inhabitants of Perthshire and the North-Eastern Highlands would speak Gaelic. Many of the individuals found in Durham had evidence suggesting some, or considerable, movement during childhood, suggesting families on the move rather than adolescent/young adult migration for apprenticeship or marriage. As we have seen, farm labourers hired on an annual basis were expected to bring a wife or other woman to supplement their labour, and this probably meant children travelling with them. In the context of the times, families migrated to find labour, or to avoid famine, food shortage or disease. We cannot go so far as to suggest which regiments our soldiers or followers might have joined, but it is certainly interesting to compare the areas suggested for their origins with the map of recruitment.

Finally, there were many Scottish fighting soldiers involved in the various conflicts of northern Europe in the early 17th century; by one estimation some 50,000 Scots between 1618 and 1640. 221 Veterans of earlier conflicts²²² stayed on to serve in Dutch, French, and Swedish armies in the Thirty Years' War (1618-48), and chose to remain.²²³ There were Scots communities in Bergen in Norway, the Dutch Republic, Gothenburg in Sweden, Hamburg in Germany, Lithuania and Poland. 224 General Alexander and General David Leslie, Major General Sir Robert Montgomerie and Lieutenant General Sir James Lumsden all served under the Swedish king and when Alexander Leslie returned to Scotland to raise a Covenanting army to fight Charles I he actively sought ought Scottish veterans with fighting experience. ²²⁵ The isotope signatures of three individuals (Sk 5, Sk 24, and Sk 27a) suggested that they were born in northern or eastern Europe, including the Bohemian massif, Poland, Sweden or Norway. Sk 5 was a young adult when he died and it is possible that he and Sk24 were the sons of Scots émigrés.²²⁶ Sk 27a, who was somewhat older at 36-45 years old, is perhaps more likely have been a foreign mercenary, and he would probably have been a Protestant given the purges of the Scottish army. 227 A few weeks after the Battle of Dunbar, 'Dutchmen' and High Germans were both recorded in the Scots army but it is not clear if they were actually present at the battle itself. ²²⁸ 'Dutchmen' in 17th century parlance could have come from modern Flanders, the Netherlands or the north-west

coast of Germany. One 'High German, named Augustin and probably from the southern half of Germany is described as 'a stout and resolute man, and lover of the Scots Nation....'. He was purged out of the army before Dunbar and sailed to Norway.²²⁹

Living conditions, occupation and lifestyle

In the early to mid-17th century, there were significant differences in living conditions across Scotland depending on place (urban or rural, north or south), wealth, rank, occupation, and in terms of servitude. Given that those incarcerated in Durham were not ranking officers, and taking into account the skeletal evidence for their upbringing, it is unlikely that any of our individuals came from high status families. One clue to their backgrounds, however, might lie in the evidence they present for the inhalation of micro-charcoal and soot (Sk 1, Sk 21, Sk 22, Sk 23, Sk 25), and sinusitis (Sk 1, Sk 12, Sk 21, Sk 27a, Sk 28). These conditions could have been brought on by habitual pipe smoking of tobacco, or from sooty, smoky environments, or both. The pipe stem facets or grooves in the teeth form because the pipe is clenched rigidly between the teeth for lengthy periods without moving it, something which implies their employment in tasks which involved the active use of both hands for long periods of time. Agricultural workers and craftsmen all fit this profile, likewise soldiers or followers on the march. There appears to have been no gender, class or even much in the way of age divisions as to who used tobacco; and both Covenanting and Cromwellian armies smoked extensively. 230 There were perceived health benefits of tobacco too. One late 16th-century physician in Aberdeen argued that tobacco cleared the voice, sight, ears and nasal passages, and sweetened the breath; even James VI and I, who abhorred the habit, admitted the medicinal benefits of tobacco.²³¹ It is possible that our soldiers smoked more the more they had to endure. Once in captivity, it is doubtful that our prisoners had any further access to tobacco, but we cannot tell. The smoky and sooty atmospheres suggested by the conditions observed on eight individuals (Sk 1, Sk 12, Sk 21, Sk 22, Sk 23, Sk 25, Sk 27a, and Sk 28) might have been caused by domestic fires or industrial processes; although how much soot and smoke was inhaled from contemporary muskets and cannon in the course of a campaign, and whether this exposure could have produced these results is unclear. Most Scots in the 17th century still lived and worked on large estates in 'fermtouns' or farming townships, sharing out agricultural tasks and resources. 232 Both a social and a physical concept, fermtoun size, location and context varied across the country; while in parts of the Highlands some fermtouns were rural and small with large spaces between them, others, such as those on the Fife coastal estates or the Borders were larger and more densely distributed. These were physically close interdependent communities, probably with several generations living together. Our prisoners are most likely to have been under-tenants and involved with physical work from a young age. 233 They would have lived in 'long houses', sometimes called 'byre houses', which were constructed of wood and turf and usually had two or three rooms, in one of which a cow (or cattle) was sheltered. 234 At Spittal of Glenshee, in Highland Perthshire, the houses were built of turf-covered stone, and some were quite large, the smallest measuring c.6m in length and at least 3m wide. 235 It seems likely that these would have had internal fires, seldom chimneys, and poor ventilation. House elsewhere in Scotland were built with wooden cruck frames and these were possibly more widespread and longer-lived than existing state of research suggests. Other variations in timber and turf construction are also known, including the so-called 'creel houses', which had wickerwork walls. These may have been better ventilated but almost nothing survives today above ground of the houses of the rural poor, and there has been relatively little archaeological study of rural settlement in the Lowlands.²³⁶

There are descriptions of rubble stonework cots, covered in turves, in East Lothian²³⁷ and it is clear that materials varied regionally, so that broom, heather, straw, turves or reeds might all have used for roofing.²³⁸ In stark contrast to the experiences of the Dunbar survivors in New England discussed in Chapter 7, the use of timber was tightly controlled.²³⁹

In Scottish towns, fishing ports and burghs, on the other hand, stone building was widespread. Some considerable 17th-century stone merchant houses survive in Edinburgh, Elgin, Aberdeen, the East Neuk of Fife (towns near estates held by Leslie and many other officers), and elsewhere;²⁴⁰ and this was a period that saw plenty of new building, particularly of civic, charitable and educational institutions; Dunbar's 17th-century tollbooth is one example (Figure 5.7). Colonel Alexander Stewart's small regiment was raised in an Edinburgh which was densely built up with extremely tall houses and narrow vennels or wynds between (Figures 5.29 and 5.30). Access to all levels was from a common stair but rank was marked out in the different storeys. Merchant booths and storage usually occupied street level; residents of the greatest wealth or rank lived on the first floor *piano nobile*; and status then decreased as the storeys rose, with the families of the poor living in multiply subdivided garrets at the top.²⁴¹ Lack of internal sanitary arrangements meant that most human waste was thrown out of upper storey windows into the streets and wynds below, a habit for which the city was notorious.²⁴² Living in the capital did not equate to either a better diet or a more healthy environment for the majority of inhabitants.

The areas on either side of the Firth of Forth, and eastern East Lothian, developed substantial coal mining and salt production in the early 17th century. Most of the estates on the Forth side of Fife from which soldiers were recruited owned coal mines and or salt pan: at Culross (Fife) there were more than 40 saltpans in the early 17th century (BOX 6.1 has further details). Fuelled by coal, salt panning produced excessive quantities of smoke so that the workers would have been subject to almost continual smoke inhalation, presumably combined with salt dust. The fact that Durham Dunbar prisoners were selected to work at the salt pans at South Shields is a further clue that there were Scottish saltpan workers in the ranks of the Scottish army. There was also coal mining at Culross; many of the officers held contiguous estates in Fife where most owned mines. Since the miners were 'thirled' or tied by law to the mines it seems probable that the landowner could have released or compelled them to serve in the army (BOX 7.2). William Da, who was a miner at Balginnie coaltoun (Fife), was thought to have been taken prisoner.²⁴³ The air down the mines, where the miners served long days,²⁴⁴ was filled with coal dust. It was dangerous too and physically hard so that injury to the body must have been a habitual occupational hazard. Coal miners each had to provide a 'carrier' or bearer, someone to haul the coals in baskets on their backs to the surface. These were usually members of the miner's family, his wife, daughters or younger sons; elder sons, some of whom might be among the Palace Green skeletons, would hew the coals with their fathers; but younger sons were often sent into the more confined spaces of the mine to work the coal that adults could not reach esily. As with the salt pan workers, the decision to send some Dunbar prisoners to work in coal mines in the North-East of England might imply that men who already had the necessary skills were selected (Chapter 6).

Finally, there is the evidence of grooves worn into the teeth of some individuals (Sk 1, Sk 6, Sk 12, and most markedly on Sk 25 and Sk 28) that suggests that they were using their teeth, habitually, as a 'third hand' to hold something in their mouths, or else were drawing some sort of thread through the

teeth (BOX 4.1). We cannot tell if this was thread, sinew, some sort of twine, or strip of leather. This opens up the possibility that the men were involved with repairing fishing nets, or sewing, tailoring, stitching shoes, or making laces to hold clothes together, and many other occupations or actions might be implicated. Given that so many regiments were raised from fishing communities on the Firths of Forth, Tay, and Moray, as well as the coast of Aberdeenshire, Ayrshire and the south-west of Scotland, net repair or even line-fishing is possible. Most fishermen were crofters and part-time farmers as well, so making twine for binding crop or hay stooks, for the hundreds of tasks for which it would be useful, is also likely.²⁴⁵ The basics of hand-loom weaving could be learned 'within a few weeks' and was usually carried out by young men.²⁴⁶ More specialist weaving is discussed below (Chapter 6). Whatever the overall composition of the Scots army that took to the field at Dunbar on 3rd September 1650, the majority of the prisoners excavated in Durham do seem to have been untested as soldiers, perhaps lads recruited fresh from the fields, called out from coal mines and salt pans, workshops and weaving sheds, towns, farms, crofts, cots and fishing villages.

On reflection, the age and sex composition of the Palace Green men in no way contradicts what might be expected of a small sample of the Scots army at Dunbar, and while evidence for inflammation and infections was frequent there was little to indicate trauma injuries. Knowing that Cromwell filtered out the badly wounded before the march south makes perfect sense of this observation, which initially puzzled the project team. Likewise the lack of evidence for ante-mortem and peri-mortem injuries is explained by the manner of their death from disease rather than life-threatening wounds sustained either in battle or subsequently. Dysentery or diarrhoeal diseases are likely to have been the cause of death for many. Finally, the location of the burials in the grounds of the Durham Castle is consistent with Haselrigge's account that he moved the sick to the castle, where presumably many of them died. It is important to remember that the men and boys represented by the skeletons found at Palace Green were amongst the healthiest prisoners or they would never have been selected for the march south from Dunbar in the first place. These men had the physical and mental resilience to get as far as Durham; scientific analysis cannot reveal character but, perhaps with a little imagination, we can infer this from our prisoners' remains.

¹ Reese 2006, 7.

² Langley 2016a has a detailed explanation of the workings of the Kirk at its various disciplinary and administrative levels.

³ There were, of course, subtle differences in opinion between members: for these nuances, see Langley 2016a, xvi-xix.

⁴ Parliamentarian veteran of battles at Selby, Marston Moor, Naseby, Langport and the siege of Oxford (Gentles 2004).

⁵ Reid 2012, 149.

⁶ Fordyce 1857, 1, 30, 201.

⁷ Green 2016, 65.

⁸ An experienced army officer and senior military advisor who had served in Sweden during the Thirty Years' War, becoming a field marshal, the highest ranking officer in the Swedish army four years after the death of its commander, King Gustavus Adolphus (Reece 2006, 44).

⁹ Green 2016, 59-60. During the Wars of the Three Kingdoms and Cromwell's campaign in Scotland cathedrals and churches were often used as temporary barracks and ordnance stores (Spraggon 2003,199) and Langley (2016b). See Box 5.2.

¹⁰ Both now and when the Scots returned in 1644. This can be gleaned from complaints to the Parliamentary Committees for Compounding the estates of Royalists in County Durham and Northumberland Welford 1905.

¹¹ Reece 2006, 45.

¹² There is a wealth of literature on the Civil Wars, and the territory is so well-covered that it need not be repeated here. With respect to the Scottish perspective see especially Reid 2012 and Reece 2006.

¹³ Terry 1899a and 1899b; Howell 1967.

¹⁴ Welford 1905, 346.

¹⁵ See Graves and Heslop 2013, 236-42 for an overview; Terry 1899a, b and c for a detailed description of the preparations for the siege, the siege itself and its aftermath; and Howell 1967 for the religious, political and economic context. A first-hand account is given by the 17th-century merchant Ambrose Barnes whose idiosyncratic and amusing memoirs were published by the Surtees Society (Longstaffe 1867). These included damage from massive explosions. An actual mine was discovered between the Sallyport and Sandgate during the construction of City Road (Terry 1899c, 216 n. 188).

¹⁶ Nolan 2008, 119.

¹⁷ Graves and Heslop 2013, 264.

¹⁸ Nolan et al 1989, 40.

¹⁹ Nolan et al 1989, 32-50.

²⁰ Nolan and Vaughan 2007, 161; Brickstock, 2008, 227. Evidence for individual equipment of a 17th-century musketeer was also found at the Civil War bastion at the Castle (Goodhand 1983, 202)

²¹ Welford 1905, 302; see below for further discussion of who destroyed what and when. See Green 2016 for the contrasting views on the nature of liturgical furnishings between the Arminian party who favoured beauty and ritual, and Puritan views; and Miller 2011 on Scottish Calvinist views.

²² Makey 1979; Royle 2004; Reese 2006, 1-25.

²³ Royalist army officer and self-defined hero of battles in 1644-45 before his losses at Philliphaugh in 1645 and Carbisdale in 1650 and his execution in the same year (Reese 2006, 16) (Reid 2004, 9).

²⁴ Royle 2004, 412-26.

²⁵ Royle 2004, 553.

²⁶ Reid 2004; Reid 2012, 159-76; Emery 2008. Miller (2007, 21 REF MISSING IN BIBLIO) says that the Cromwellian troops moving north desecrated St Helen's church, Auldcambus, East Lothian, as they are thought to have been stationed there. Cromwell did use parish churches, like that at Dunbar, for storing armaments and probably billeting troops because the churches were easily commandeered and offered the largest roofed structures. Elsewhere, as at Norwich, Lincoln and Canterbury Cathedrals, amongst others, Cromwell's troops did, indeed, inflict iconoclastic damage. For Cromwell and iconoclasm, see Aston (1988, 62–95), Cooper (2001), and Spraggon (2003). For the difficulties in distinguishing periods of iconoclasm, see Graves (2008).

²⁷ Dunbar's medieval status is indicated by the harbour at Belhaven between the 12th and 16th centuries, its castle, its parish church (the first to be granted collegiate status in Scotland), one, possibly two friaries, and a Maison Dieu or hospital, with most of the high medieval occupation in what is now the south-west of the modern town (Dennison et al. 2006, 11-24, 68).

²⁸ Perry 2000, 96; Dennison et al. 2006.

²⁹ This included the red herring of popular speech - a cured and dried herring of reddish appearance (Dennison et al. 2006, 32-34).

³⁰ A remnant of which may survive in Bamburgh Close.

³¹ Individual accounts from NRS, B18/39/4 and B18/39/1 Miscellaneous Financial Records; Cromwellian Losses, 1651, cited in Dennison et al. 2006, 38.

³² Abbott and Crane 1988, 2, 305.

³³ Spurlock 2007, 13.

³⁴ Abbott and Crane 1988, 2, 286). To give this some context and force, for the Presbyterian church and Protestants more widely at the time 'blasphemy' could be defined as the sin of apostasy, and was consequently regarded as far more serious than many other sins, including sexual misdemeanours (Miller 2011, 243). This goes a long way to explain the strength of this particular accusation; and perhaps the relatively lax attitude to sexual delinquency both in 17th-century Scotland and later in New England (Chapters 7 and 8).

³⁵ Reese 2006, 38. Reese's chapter on the Scottish Army and its Commanders is the main source used here.

³⁶ An Act for putting the kingdom in a posture of defence was passed on 3rd July 1650 Records of the Parliament of Scotland to 1707 (RPS), 2007-2017 University of St Andrews, A1650/5/116 [http://www.rps.ac.uk/search.php?action=fetch_jump&filename=charlesii_trans&jump=charlesii_mA1650_5_116_d4_ms&type=trans&fragment=tA1650_5_116_d7_trans, accessed 3 September 2017], and to the Report from the conference for the security of the kingdom concerning the raising of the troops, A1659/5/117 [http://www.rps.ac.uk/search.php?action=fetch_jump&filename=charlesii_trans&jump=charlesii_mA1650_5_116_d4_ms&type=trans&fragment=tA1650_5_117_d7_trans, accessed 3rd September 2017]. I am sincerely grateful to Laurie Pettitt for alerting me to the Act, and to the Report that followed limiting the initial over optimistic numbers sought.

³⁷ Reese 2006, 38.

³⁸ BM Harleian 6844 fol.123.

³⁹ BM Harleian 1460.

⁴⁰ Reese 2006, 39-40. Cromwell relates that he was presented with the banners in a letter in a letter of 4th September 1650 to Speaker of the House of Commons Lenthall: 'I have already brought in to me near Two-hundred colours, which I herewith send you' (Abbott and Crane 1988, 2, 234). The banners were placed in Westminster Hall, London, where they hung with the colours taken at Preston taken in 1648. The standard work on the Covenanting armies in general is Furgol (1990). Reese (2006) and Reid (2004) are dedicated to the Battle of Dunbar, though all these sources differ on some details, especially when estimating numbers of men raised to serve in the army.

⁴¹ Abbott and Crane 1988.

⁴³ This was as a magazine that was published weekly from June 1650 until the Restoration of Charles II to the thrones of England and Wales in May 1660. It was edited by Marchamount Nedham and its political allegiance was with the Commonwealth, and as a consequence was awarded on news publication of from 1655 until 1659.

⁴² Scott 1806.

⁴⁴ Reece 2006, x-xi, who believes the map to show inaccurate dispositions of the armies.

⁴⁵ Reece 2006, 47.

⁴⁶ Reece 2006, 48-9; Reid 2004.

⁴⁷ Reece 2006, 49.

⁴⁸ The nature of the sources do not allow that. The reader should consult Furgol (1990, Appendix D), Reece (2006) and Reid (2004) but will find differences between them.

⁴⁹ Furgol 1990, Appendix D taken from BM Harl. 6844, fo.123; Reece 2006; Reid 2004 and the British Civil Wars, Commonwealth and Protectorate 1638-1660 Project (BCW Project) Regimental WIKI site [http://wiki.bcw-project.org/covenanter/start, accessed 30 August 2017], which readers may find useful (and is based on Furgol 1990). Note that the spelling of some names varied in different documents in the 17th century, hence variations in the modern literature.

⁵⁰ Reid 2004, 34, 37.

⁵¹ Dow 1979, 8; Gardiner 1988, 274 REF MISSING; Reese 2006, 39. The precedent was set by The Act of Classes of 1649, passed by the Scottish Committee of Estates, to exclude 'malignants', Engagers, enemies of the Covenant, and other people deemed to be immoral from holding either public office or commissions in the army (Manganiello 2004, 5, 167).

⁵² Manganiello 2004. 167.

⁵³ Ceres Church records.

⁵⁴ Ceres Church records.

⁵⁵ Ceres Church records. Da may be Day, or Deas or Dias, which are all local names.

⁵⁶ Ceres Church records.

⁵⁷ Ceres Church records.

⁵⁸ Reese 2006, 26.

⁵⁹ Reese 2006, 26.

⁶⁰ Firth 1900, 25.

⁶¹ Skeletons from All Saints' Church, Fishergate, York, which are thought to represent a Civil War population, bore little evidence of healed trauma or violent battle wounds, and are thought more likely to have been casualties of infectious disease in the wake of the siege of York from April to July 1644 (McIntyre and Bruce 2010, 36- 37.

⁶² In December 1651 an 'infectious disease' was reported among the prisoners from Worcester being kept in Bristol, for example (CSPDom 2nd December 1651). They were to be removed 'to places where there will be least danger of infection, and you must pay 4d. a day each for their subsistence to privates, and 5s. a week to officers. These prisoners were to have been carried to plantations...'.

⁶³ Firth 1900; Reese 2006, 121-2; Reid 2004. During the 20th century, the site of the battle was bisected by the A1 road upgrade and has been partially quarried away (Banks and Pollard 2011, 129, 135).

⁶⁴ Reid 2004, 2012, 159-76; Reese 2006.

⁶⁵ Major John Lambert, at 31 years of age, is credited with the winning tactics and it was he who headed the English attack (Farr 2004).

⁶⁶ Of all the protagonists in this story, Leslie lived the longest. He was defeated by Cromwell a second time at Worcester exactly a year after Dunbar, captured and sent to the Tower of London. But just as Haselrigge entered the Tower (where he died in 1661), Leslie was released in 1660 and he only died in 1682. Newark Castle on the coast of Fife was his seat and many of the remains to be seen there today were constructed under his ownership. There has been some small-scale excavation and geophysical survey at Newark in recent years, which has recovered material from Leslie's time.

⁶⁷ Abbott and Crane 1988, 2, 232.

⁶⁸ David Leslie's words on Dunbar prior to the battle (Burnet 1838, 36).

⁶⁹ Firth 1900, 47; Reid 2004, 2012, 170-73; Reese 2006.

⁷⁰ Abbott and Crane 1937-47, 2, 305-15; Reid 2012, 161.

⁷¹ Reid 2012, 160-61.

⁷² Banks 1927: Firth 1900, 52.

⁷³ Reese 2006, 40-42; Reid 2004.

⁷⁴ Reese 2006, 41.

⁷⁵ Foard and Partida 2005; Reid 2004.

⁷⁶ Reese 2006, 40.

⁷⁷ Goodhand 1983, 202.

⁷⁸ Goodhand 1983, 202.

⁷⁹ Reid 2012, 159-65; Carlton 1992, 30, 160, 162-63, 311.

⁸⁰ Abbot and Crane 1937-47, X, XX I don't have this version it was Carlyle 214

⁸¹ Reese 2006, 43.

⁸² Carlton 1992, 98-102; Bull 2008. Examples of contemporary weapons and projectiles are on display at Tynemouth Castle and Durham Castle, including helmets, breastplates, and backplates. They are considered typical of an ordinary trooper's armour issued to Cromwell's New Model Army. Each plate has a dent made to prove that the plate was up to standard, caused by a leaden ball fired from a pistol from a given distance, charged with a given amount of powder; there are also leather saddles and cavalry pistol holders dating from between 1638 and 1680. None of these are directly connected with the Battle of Dunbar or the troops connected with the march and captivity of our prisoners (Twemlow 1958).

⁸³ Reese 2006, 139-40.

⁸⁴ This detail on wounds and injuries is largely taken from Carlton 1992, 222-5.

⁸⁵ BM Harleian 1460: Reese 2006, 125-9.

⁸⁶ Spurlock 2007, xv. As examples, Ayr citadel is the best preserved with some surviving walls and bastions, and the shape is clearly fossilised in later housing development (Canmore ID 41776 [http://canmore.org.uk/site/51917, accessed 28 August 2017]. Archaeological excavation and trial-trenching in Perth has located parts of the revetment walls, defensive ditches and associated deposits (Canmore ID 28385 [http://canmore.org.uk/site/28385, accessed 28 August 2017]. The citadel at Inverlochy lies almost completely beneath, or rebuilt as parts of, the Fort William of 1690-8 and better known in connection with the aftermath of Jacobite rebellion of 1745 (Canmore ID 23715 [http://canmore.org.uk/site/23715, accessed 28 August 2017].

⁸⁷ Dennison et al. 2006, 38-9.

⁸⁸ Worden 1985, 69; Royle 2004, 585-603; Spurlock 2007.

⁸⁹ Miller 1859, 140

⁹⁰ Carte 1739, vol.1, 383 NOT IN BIBLIO.

⁹¹ Reese 2006, 101.

⁹² Balfour 1824, cited in Reid 2012, 175.

⁹³ Walker 1705 cited in Reid 2012, 175.

⁹⁴ Letter from Haselrigge 5th September 1650 (Abbott and Crane 1988, 2, 331). Elsewhere, Cromwell speaks of 'wounded old men and boys' (Miller, various dates 1830, 1844, 1859, 140). After Worcester the English were said to treat the Scots well because they had themselves lost so little blood and perhaps that was a factor here too; no soldiers were put to death (Clarendon 1731, vi, 410).

⁹⁵ CSPVen XXVIII, 157, no.428.

⁹⁶ Reid 2012, 175.

⁹⁷ Dunfermline Abbey Church.

⁹⁸ Hacker was one of the regicides and charged with the custody of Charles I during his trial. Haselrigge was a good friend of his. Hacker was hanged in 1660 (Coward 2004).

⁹⁹ A list of 275 officer prisoners was printed on 9th September 1650 and updated the next day to 192 (Scott 1806, 280-286, 306-311) when 27 were added, 83 removed, presumably because they had escaped, been released or perished (Emery 2008).

¹⁰⁰ The march to Berwick included a night march. Haselrigge indicated that many escaped on this leg of the march through southern Scotland, but he does not tell us how many (PH 1763, 19, 417-21).

¹⁰¹ Sir Arthur Haselrigge Oct 31st 1650 to the Council of State for Irish and Scottish affairs at Whitehall (PH 1763, 19, 418).

 $^{^{102}}$ Perhaps in a walled garden there (John Maldon (pers. comm.). We are extremely grateful to John for sharing his enthusiasm and ideas concerning the march with the team.

¹⁰³ Robert Watson was possibly the Bailiff of Alnwick, maybe also the Constable or Grieve of the Castle.

¹⁰⁴ Watson's letters are held in the archive at Alnwick Castle in Northumberland as Sy: Q.II.153. They also feature in the Northumberland County History Vol II, under the section of Embleton Parish (p131ff). We are extremely grateful to Christopher Hunwick, Archivist for the Northumberland Estates, for his rapid and thorough replies to our queries.

¹⁰⁵ PH 1763, 19, 418.

¹⁰⁶ This suggestion was made by Richard Annis. The map is Haiwarde, Guliemus, 1604, Description of the Towne and Castell of Morpitte, Northumberland Record Office ref NRO ZAN/M16/B6.

¹⁰⁷ Ryder 1992, 63.

¹⁰⁸ An alternative may be that the area enclosed by the castle curtain wall was used as a garden: parts of the Castle Garth in Newcastle upon Tyne were given over to garden plots according to the Parliamentary Survey of 1649 (Nolan 1990, 87).

¹⁰⁹ According to the contemporary memoirs of Ambrose Barnes (Longstaffe 1867, 354). In 1650, 'naughty' meat meant that the meat was of such poor quality, or was so old, that it had spoiled and might cause ill health or harm if eaten. Another meaning, and here probably from the same cause, was that the smell of it was disagreeable, or 'high'.

¹¹⁰ Longstaffe 1867, 355. Haselrigge had obviously appointed marshals at each functioning castle as he writes about appointing the marshal at Durham Castle to see that his recommendations for the prisoners regarding food and care be carried out (PH 1763, 19, 419). There is nothing described as the 'marshal's house' in Nolan's comprehensive 1990 study of the castle after 1600.

¹¹¹ Brand 1789, volume 2, 480 note o. Brand saw the historic archives in Trinity House which recorded this. Trinity House was the administrative centre for the guild that controlled traffic on the Tyne since the middle ages, and as it comprised numerous buildings and a medieval warehouse called the Rigging Loft, it made convenient accommodation.

A plan of Tynemouth made in the reign of Elizabeth I indicates one enormous and one smaller medieval priory barn in the grounds, several ranges of stable blocks, the constable's lodging (the fortified tower gateway) with drawbridge, and a ward house, in addition to the partially ruined priory church, part of which then served as the parish church for the adjoining town (Hodgson 1822, plate facing 216). In 1648 the Commons ordered the enormous sum of £5000 to be raised to repair the towers of both Tynemouth and Newcastle castles (Adamson 1892). No significant quantity of post-medieval has been excavated at Tynemouth.

¹¹³ Longstaffe 1867, 355.

¹¹⁴ The number entering the Cathedral is disputed as is the number who set off on the march. Haselrigge's lieutenant-colonel and major counted no more than 3000. Emery (2008, 3) calculates the number who either escaped or died en-route to be in the range of 277-727 prisoners but adds 'with so many uncertainties, it is difficult to be sure whether even these estimates are in any way reliable'.

 $^{^{115}}$ We are grateful to Peter Brown for this calculation.

¹¹⁶ Though they might be presented to positions in other parts of the country or live off the income of any other prebends they also might hold elsewhere (Green 2016, 54).

¹¹⁷ Howell 1964, 217.

¹¹⁸ Some, like John Cosin, went into exile overseas. The fate of some of the clergy is given in Lehmberg 1996, 54.

¹¹⁹ In other words, the Deanery and the present canons' houses surrounding College Green (Firth and Rait 1911, 669-671). The king continued to present men to the deanery until 1646, but there is no evidence that the two appointed after 1645 were installed or secured the possession respectively (Horn et al. 2004, 77-81).

¹²⁰ Firth and Rait 1911, 81-104.

¹²¹ Ornsby 1872, 120, 137, 290.

¹²² Roberts 2003, page Figure x.

¹²³ For a detailed account of the furnishings and John Cosin's life see Green 2016; and see Chapter 1.

¹²⁴ Green 2016, 59 n.2.

¹²⁵ Sir Arthur Haselrigge letter Oct 31 1650 to the Council of State for Irish and Scottish affairs at Whitehall (PH 1763, 19, 419.

PH 1763, 19, 417-21. John Hall, the mayor of Durham and a vintner supplied the food.

¹²⁷ Sir Arthur Haselrigge letter Oct 31 1650 to the Council of State for Irish and Scottish affairs at Whitehall (PH 1763, 19, 419)

¹²⁸ PH 1763, 19, 4xx.

¹²⁹ The eagle was listed as waiting valuation in November 1651 so Breen cannot have got far with it (Committee at Durham; Welford 1905, 62; Emery 2008).

¹³⁰ DCL Hunter 45 f.91r. We are extremely grateful to Margaret Harvey and Lynda Rollason for kindly locating the earliest known references to the Scots prisoners in the different editions of the *Rites* and allowing us to cite their work (Harvey and Rollason forthcoming; Fowler 1903, 14).

- ¹³² Sir Arthur Haselrigge Oct 31 1650 to the Council of State for Irish and Scottish Affairs at Whitehall) PH 1763, 19, 4).
- ¹³³ For example, Clarke 1970, 166-171.
- ¹³⁴ One of these is heavily scored with graffiti including one dated '1647'.
- ¹³⁵ Pocock et al 2014, 56 NOT IN BIBLIO.
- 136 Greenwell 1913, 83 NOT IN BIBLIO.
- ¹³⁷ Fowler 1903, 39-40; Holson 1922, 108.
- Ushaw College, MS XVIII D.2.29. *The Rites of Durham* describes the cathedral church and monastic buildings at Durham, supposedly as they were before the priory was dissolved under Henry VIII, together with descriptions of some liturgical practices, images, furnishings, and religious customs. It also notes some historic events . *The Rites* were probably compiled by the antiquarian scholar William Claxton in the 1590s (Green 2016, 48), but there are a number of different annotated manuscripts and editions now held in many locations. It seems probable, from current research undertaken by Margaret Harvey and Lynda Rollason that these texts circulated amongst a number of recusant Catholics or people sympathetic to Catholicism, and had been compiled and annotated by different authors with these sympathies in mind. For a discussion of how the *Rites* have tended to be viewed, see Green (2016, 48).
- ¹³⁹ PH 1763, 19, 419.
- ¹⁴⁰ Norman Emery, pers comm.; others can be found in the nave, choir aisles and transepts. None can be dated, let alone to such a level of accuracy that would help distinguish between episodes in 1640, 1644 and 1650.
- ¹⁴¹ The volume highlighted by Pearson 2008 is numbered MS B.I.29, a single bound manuscript comprising two parts, both of the 13-14th century. Richard Gameson notes 'fire and liquid damage to folios 1-63 with significant loss of text on many leaves, most extensive at the start; some soot and liquid staining to the edges of most other leaves'. We are most grateful to Richard for this information. Durham, as Pearson (2008) notes, is fortunate in that its cathedral library was not dispersed like that of Exeter or Winchester and it was included by Cromwell in the grant of property to his college, a university for the north after Oxford and Cambridge, which he established briefly in the Cathedral precincts in 1657 but which ceased to exist at the Restoration.

¹³¹ Hodgson 1806, 344-46; Reese 2006, 104.

¹⁴² Pearson 2008.

¹⁴³ Isaac Gilpin, Library keeper, 1651; Welford 1905, 62-3; Pearson 2008. The latter calculates that about 70 books were lost between 1640 and the Restoration.

¹⁴⁴ DCL Hunter 45 [f. 56r]; Harvey and Rollason forthcoming.

¹⁴⁵ DCL Hunter 45 [f. 91r]; Harvey and Rollason forthcoming.

¹⁴⁶ DCL Hunter 45 [f. 92v]; Harvey and Rollason forthcoming.

¹⁴⁷ Whitworth and George 1970. A fuller description of the tests employed on the oil can be found in this article.

¹⁴⁸ Or magnesium nitrate hexahydrate. The sandstone flagstones are themselves poor in magnesium and contain no nitrogenous material.

¹⁴⁹ This outcrops locally at Coxhoe and elsewhere in County Durham.

¹⁵⁰ Magnesium nitrate was employed for this purpose.

¹⁵¹ Figures given in the original as between 50,000 and 250,000 UK gallons, containing approximately 2 to 10 UK tons of fixed nitrogen (or as between 60,048 and 30,0238 US gallons of urine, containing approximately 2 to 11 US tons of fixed nitrogen) (Whitworth and George 1970). However, given that many of the men were suffering from 'the flux', i.e. some sort of diarrhoeal disease, they may have urinated more than an adult daily secretion, or, if acutely dehydrated, far less.

¹⁵² The kind of bacterial process suggested is for urea, a principle constituent of urine and high in nitrogen, to be converted into nitrogen peroxide.

¹⁵³ If the occupying Scots Army of the 1640s used the Cathedral as a billet it is more likely that they would have organised urination in the monastic latrines on the west side of the monastic dorter (sleeping quarter) or used the monastic garth inside the cloister, or the cemeteries to north and south-east of the church. If a lot of urination took place inside the church then the patterns might not be so useful.

¹⁵⁴ Later the registry on the 1727 plan of the cathedral.

¹⁵⁵ Emery (2008, 4) questions whether 3000 prisoners could have been accommodated in the available space. His suggestion is that other, unrecorded areas around the cloister were also used.

¹⁵⁶ Leech 2014; Johnson 1993, 1996, and 2010.

¹⁵⁷ Brickstock 2007, 41.

¹⁵⁸ Brickstock 2007, 41.

¹⁵⁹ Green 2016, 58-9.

¹⁶⁰ Surtees 1816-40 vol 1, ciii, NOT IN BIBLIO.

¹⁶¹ Kirby 1971, xi.

¹⁶² And ten pence; Kirby 1971, 176). Andrews, probably never even saw the Castle but may have had some of the roofs stripped of lead (Howell 1964, 228).

¹⁶³ Howell (1964, 226) casts doubt as to whether he purchased the Castle, but Haselrigge's letter of 31st October 1650 states that the Castle belongs to Mistress Blakiston, John's widow, in connection with the Castle (PH 1763, 19, 419). Sarah Blakiston received considerable sums of money from the Parliamentarian sequestrations of Royalist estates in Northumberland, specifically the rents from lands formerly held by the Earl of Newcastle and Sir William Widdrington (Kirby 1971, 80-81, 379).

¹⁶⁴ Howell 1964, 59.

¹⁶⁵ Ornsby 1869-72, vol 2, 93-4 letter 37.

¹⁶⁶ Fowler 1903, 39-40.

¹⁶⁷ Indeed, dysentery or diarrhoeal disease has been a regular visitor to troops through the ages, especially in the First World War when soldiers drank water contaminated with human faeces. It has been described as 'more fatal to armies than powder and shot' (Osler 1892, 130). The ratio of deaths from dysentery to battle wounds was eight to one in the Napoleonic Wars (1803-15) and three to one in the Crimean War (1853-1856). 21,000 people are estimated to have died from dysentery during the American Civil War (1861-65). In the 17th century treatment consisted of bleeding, emetics and purging (using rhubarb usually) but the true answer was better hygiene (Cook 1999 – NOT IN THE BIBLIO; THERE IS A COOK 2002 CALLED 'INFLUENCE OF DIARRHOEAL DISEASE' WHICH IS ALSO CITED BELOW). Even today the death rate for dysentery sufferers can be as high as 15%).

^{168 (}The World Health Organisation distinguishes between *dysentery* – a diarrhoeal episode in which the loose or watery stools contain visible red blood (most often caused by *Shigella* species (bacillary dysentery) or *Entamoeba histolytica* (amoebic dysentery) (http://www.who.int/topics/dysentery/en/ visited 24th August 2017); and *diarrhoeal diseases* - diarrhoea usually being 'a symptom of an infection in the intestinal tract, which can be caused by a variety of bacterial, viral and parasitic organisms'. Diarrhoea is defined as 'the passage of three or more loose or liquid stools per day (or more frequent passage than is normal for the

individual)' (http://www.who.int/mediacentre/factsheets/fs330/en/ visited 24th August 2017). In the 17th century the temperatures of the seasons were thought to determine the timing and type of flux (Heyden 1653, 172-3; cited in Boyd Haycock 2002, 19); outbreaks during the summer were blamed on contaminated food, those in the winter on the wet and cold (Cook 2001, 95).

¹⁶⁹ Mehanna et al. 2008.

¹⁷⁰ These complications were first observed during the Second World War. To ensure adequate protection, medical advice today recommends a nutritional assessment before re-feeding begins and that re-feeding is initiated slowly at no more than 50% of energy requirements. We are grateful to Laurie Pettitt for making this suggestion.

¹⁷¹ CSPDom 5th August 1651.

¹⁷² CSPDom 1st July 1652.

¹⁷³ Culross Kirk Session, 10 Nov 1650.

¹⁷⁴ The Church of Scotland was run by a hierarchy of 'courts', or committees, ranked in ascending authority. At parish level was the Kirk Session, comprised of the minister and elders, the minutes of whose meetings are used here. Local parishes were grouped into presbyteries, described as 'corporate episcopacy'. Next in authority was the Provincial Synod, a regional committee representing the presbyteries. The supreme court and top tier was the General Assembly which met annually, under the chairmanship of the moderator, a minister elected each year. This information was supplied by Morag Cross; see also Langley 2016a. The speed, efficiency of the Scottish church administration at this point is worth noting, and the generosity of response from ordinary people gives us a real glimpse of the pain inflicted on individuals and the nation.

¹⁷⁵ 1650, and March 1652. Langley 2016a covers the period, with references to money raised by parishioners for the prisoners in Durham, Newcastle and Tynemouth.

¹⁷⁶ Kinloch 1837, 58 NOT IN THE BIBLIO.

¹⁷⁷ Kirkcaldy Kirk Session, 205. We are enormously grateful to Morag Cross for this and the following references from the unpublished original handwritten Kirk Session minutes kept in the National Records of Scotland. Langley (2016a) is an extremely valuable published resource and has information relating to the collections made for prisoners held in Durham, Newcastle and Tynemouth. See also Langley (2016b) for context. The project has only looked at records for parishes in Fife and the Lothians, on the whole, as we know that men were recruited from these regions.

¹⁷⁸ Burntisland Kirk Session, 396.

¹⁷⁹ Kirkcaldy Kirk Session, 2.

¹⁸⁰ Kirkcaldy Kirk Session, 207. At this time the king, the Commissioners of the General Assembly and the Committee of Estates (effectively representing the parliament of Scotland during the disruption) were in Stirling, since General David Leslie had fallen back here. Hence why it was appropriate for the Dean of the Guild Court of Stirling (essentially the head of local government in the town) to co-ordinate the collections from the various parishes and administer the funds).

¹⁸¹ Kirkcaldy Kirk Session, 11.

¹⁸² Culross Kirk Session, 25 or 27 November 1651 [f78v]). Helen's marriage is not in the Old Parish Registers, nor are any births of children to the couple; this may just be an accident of survival of records.

¹⁸³ Culross Kirk Session, 12 Oct 1650, f58r). The word 'condition' is ambiguous here, in the 17th century this could mean either the nature and extent of their injuries, or their respective stations in life and whether they are foot soldiers, or officers. The former abbey church had been adapted for Presbyterian parish worship.

¹⁸⁴ Since so many parishes were now under occupation of Cromwell's troops, minutes relating to local women fornicating with English soldiers are numerous.

¹⁸⁵ The team is well aware that osteoarchaeologists and social and economic historians may disagree with some of our interpretations, especially with regard to our lifecourse 'biographies', but we do acknowledge the

limitations of the evidence and the tentative, hypothetical nature of the suggestions. We would not seek to give these the status of absolute fact.

- ¹⁸⁶ Gibson and Smout 2005, 73; Foyster and Whatley 2011, 10-11.
- ¹⁸⁷ Symonds 2011, 87; Gibson and Smout 2005, 63; Mitchison 2002, 291-3.
- ¹⁸⁸ Smout 1977, 22; in Whyte's opinion, despite the attention that the crop failures of the 'ill years' of the late 1690s have attracted, 1623 may have been 'the most severe peak in the death rate' during the 17th century (Whyte 1979, 11).
- ¹⁸⁹ Whyte 1979, 11; Foyster and Whatley 2011, 11.
- ¹⁹⁰ Symonds 2011, 97; Whyte 1979, 8.
- ¹⁹¹ Dingwall 2011, 112. Brechin suffered particularly badly in the 1640s and 1650s. Not only plague, Montrose was visited upon them, the latter sacked the town in 1644 and burned down about 60 houses, implying that they were built largely of timber and thatch (Gourlay and Turner 1977, 4).
- ¹⁹² Whyte 1979, 11.
- ¹⁹³ Miller 2011, 242. The communion service itself was preceded by a fast.
- ¹⁹⁴ Minutes of the Presbytery of St Andrews, October 1650.
- ¹⁹⁵ For Gibson and Smout (2005, 65-66) the importance of oatmeal in the Lowlands from the early seventeenth century onwards is 'unquestioned'. See also Whyte (1979, 62).
- ¹⁹⁶ Foyster and Whatley 2011b, 9-10; Nenadic 2011, 138-9; Whatley 2011, 288.
- ¹⁹⁷ Although this might be slightly overstated, there were variations within regions and the general pattern is thought to hold good (Gibson and Smout 2005, 65-67).
- ¹⁹⁸ Paul 1896, vol 26, 55,
- ¹⁹⁹ This calculation is made by Gibson and Smout (2005, 67).
- ²⁰⁰ Nenadic 2011; Foyster and Whatley 2011b, 10; Gibson and Smout 2005, 70.
- ²⁰¹ Ale and beer were drunk far more than milk. Bere, a four-rowed barley, was grown in all but the most marginal areas and was used as a 'drink crop', but could also be ground into meal; whereas two-row barley may have been grown only in the most fertile regions (Gibson and Smout 2005, 62, 66).
- ²⁰² Nenadic 2011, 139 for vitamin deficiency.
- ²⁰³ Whyte 1979, 79-80.
- ²⁰⁴ In Fife, an area from which many men were recruited, 'kaill' was a dialect word for broth (Gibson and Smout 2005, 69).
- ²⁰⁵ Particularly along the coastal fringes of south-west Scotland, the Ayrshire coast up to the mouth of the River Clyde, Berwickshire and parts of East Lothian including around Dunbar and inland across the Merse of the Borders (Roxburghshire); both sides of the Firth of Forth, across the Central Lowlands, Fife, parts of lowland Perthshire, the Firth of Tay, the coastal plains of Angus, the Mearns, Aberdeenshire, and the coastal littoral of the Moray Firth to the Dornoch Firth, and beyond (Whyte 1979, 63-5, 66 Figure 6).
- ²⁰⁶ A 'herring road' led south-west from Dunbar over the Lammermuir Hills into the Tweed valley (Gibson and Smout 2005, 71).
- ²⁰⁷ Whyte 2005, 41.
- ²⁰⁸ Symonds 2011, 97-8.
- ²⁰⁹ Whyte 2005, 42.
- ²¹⁰ Young women too, to work as household servants (Whatley 2011, 276).

²¹¹ Whyte 2005, 43.

²¹² Whyte 1997, 49.

²¹³ Whatley 2011, 282.

²¹⁴ Whyte 1997, 49.

²¹⁵ Whyte 2011, 46. Higher status people contracting marriage alliances might have a far greater geographical range.

²¹⁶ Dodgshon 2011, 33, 181.

²¹⁷ Dodgshon 2011, 33.

²¹⁸ Sheilings are huts in upland pasture. There were, however, also longer-range stock movements, such as that from the Laich of Moray into the northern Cairngorm glens (ScARF 2012a, 48; for the archaeological imprint of transhumance, regional and changing patterns see ScARF 2012b, 92-93.

²¹⁹ Did he move to the Western Highlands?

²²⁰ Exactly what Highlander meant in this context is far from clear. If they spoke Gaelic, the distinction might have been obvious, but many old Scots dialects and accents would have been almost incomprehensible to the English.

²²¹ Frost 2001, 191.

²²² For example, in Bohemia and Denmark-Norway.

²²³ See various papers in Murdoch 2001 NOT IN BIBLOI.

²²⁴ See, for example, Catterall 2002; Grosjean and Murdoch 2005; Steuart et al 2009.

²²⁵ Reece 2006, 44.

²²⁶ The return of émigré Scots and their offspring during the Glorious Revolution of 1689 is described by Grosjean and Murdoch (2005a; 2005b).

²²⁷ Whatley 2011, 276.

²²⁸ Furgol 1990, 316, 329, 331, 342.

²²⁹ Carlyle 1846, 109-110.

²³⁰ There is plentiful evidence of discarded and broken clay tobacco pipe evidence from sites associated with both armies (Carlton 1992, 223; Nolan *et al* 1993, 123; Bown and Nolan 1990, 111-14. A Parliamentary Ordinance of March 1644 gave privileged customs status to tobacco from the English colonies over those of foreign powers (Firth and Rait 1911, 394-395).

²³¹ Foyster 2011, 224. See Davey 2000, for the large number of contemporary clay pipes excavated in Dunbar. Most of these were produced in Scotland, especially Edinburgh, but Dutch imports were also present.

²³² Dodgshon 2011, 27; Whyte 2011, 28 NOT IN THE BIBLIO and see the useful diagram Figure 1.1 on page 29 which is the basis of Figure 5.x).

²³³ Dodgshon 2011; Whyte 1979; papers in Houston and Whyte 2005; Foyster and Whatley 2011b, 9). The Cromwellian occupation of Scotland in the 1650s may have provided an impetus towards commercialisation by creating a new market for cattle and the need for cash.

²³⁴ Howard 1995, 97; not to be confused with the blackhouses of later date. See ScARF (2012a, 30; 2012b, 92) for critical reviews of the archaeology of this period.

²³⁵ Howard 1995, 97.

²³⁶ Howard 1995, 97: ScARF 2012a, 30.

²³⁷ Howard 1995, 97.

²³⁸ McKean 2011, 55.

²³⁹ Dodgshon 2011, 41.

 $^{^{240}}$ Howard 1995. See the Scottish Burgh Surveys of individual towns for details of what is known for each in the mid 17^{th} century, and for surviving buildings of the period.

²⁴¹ McKean 2011, 54.

²⁴² McKean 2011, 62.

²⁴³ Ceres Church Records.

²⁴⁴ Miners in Fife were required by law to work six days a week, from 5.00am or 6.00am (4.00am in some places), and finishing at either 6.00pm or 8.00pm (Whatley 2011, 287, 290). Miners and their bearers also worked on the land for parts of the year, for example sowing and harvest (Foyster and Whatley 2011b, 3).

²⁴⁵ Whatley 2011, 281.

²⁴⁶ Foyster and Whatley 2011b, 12.