Victoria County History of Cumbria Project

[Note: This is a provisional draft and should not be cited without first consulting the VCH Cumbria

project team: http://www.cumbriacountyhistory.org.uk]

Parish/township: Musgrave

Author: Haydn Charlesworth

Date of drafts: 18/10/2025, 9/11/25

ECONOMIC HISTORY

Introduction

Astride the river Eden and the Swindale beck, with soils of variable drainage and fertility, the

Musgrave townships supported mixed fields of arable, meadow and pasture. They also supplied

some freshwater fishing and valuable demesne woodlands. Pasture and commons (for grazing

cattle, sheep, horses and poultry), predominated in the narrow lands extending upwards onto the

Pennine moors and west onto Little Musgrave's lowland commons. The Musgrave's combined the

two manors and, into the 19th century, expanded and 'improved' their demesne lands. They detailed

the services collected, and leased what they could, but set limits on 'arbitrary' fines charged on

death of landlord or tenant. Textiles derived from wool, flax and hemp, stone and clay from

quarrying, and coal and lead from deposits in the Pennines provided industrial income. The railway

arrived in 1862-1952, boosting the carrier business within the parish.

Of those employed in Musgrave/Helbeck in 2011, 10 were in agriculture, 15 in education and the

same in construction. Ten were in management, 20 professionals, five admin. (or secretarial), 30

skilled trades and 15 elementary occupations. Fifteen people had no qualifications and 45 had

1

degree levels, (not necessarily skill levels). Two people were out of work, 95 economically active, 32 inactive, 29 full-time and 17 part-time employees. Twenty worked from home, 42 were self-employed and 32 worked over 49 hours a week with 20 in the public sector.¹

Farming

The Agricultural Landscape

Lynchets were visibly sculpted onto fields near Hall Garth.² A possible medieval field system was identified near Below Hill. ³ The aratral, reversed 'S' shaped fields of medieval cultivation were preserved in field boundaries at 'fore Haber' in Haber field and at Thorney field. Low field had 'rigg' shaped strips up to two thirds of a kilometre long.⁴

The common fields of Great Musgrave were named in a 17th century demesne survey as Scalde Banke (field), Thorney Bottome field, Milne hill field, Low Holme (field), Flatts (field), Lowfield, Faire field, Thorney field, Rober field and Demesne field.⁵ Medieval field boundaries might then be surmised for the period *c*. 1300-1500, with their extents approximate to those leased in 1571 at *c*. 500 a. and to a feodary of 1283, which assessed Great Musgrave at three carucates (an elastic measure of up to *c*. 540 a.).⁶ An early allotment of arable land belonging to the church may also be preserved at 'Kirklands' near Haber field.⁷

⁻

www.cumbriaaction.org.uk/resources/parish.profiles/musgravehelbeckparishprofilee04002559.pdf (accessed 13/09/25).

² HER 4120, CAS(C), CB/Hen/2/1634, 3.31.

³ HER 5632 (c. 1km NW of Great Musgrave).

TNA, IR 30/37/58 (field 292); S.R. Eyre, 'The Curving Plough-strip and its Historical Implications', Agricultural History Review, 3.2 (1955), 80-94, O. Rackham, The History of the Countryside: The classic history of Britain's landscape, flora and fauna, (London, 1995), 172, re 'giant selions' 'probably 12th or 13th century', Google earth.
 CAS(C), DMUS/5/2.

⁶ F.W. Ragge, 'The Feoffees of the Cliffords, from 1283 to 1482', CW2, 8 (1908), 271, 304; CAS(C), DMUS/2/8.

⁷ TNA, IR 30/37/58 (fields 355, 356, 364).

'Musgrave hall' encompassed two corn mills and demesne at Damgarth, riggs at Milne hill, Scalde bank and Low Holme and the Cow pasture along the Swindale. ⁸ Hayning park (130 a., *c*. 52.7 ha.) lay on a bluff with woody scarps. Imparked in 1358 the flat-topped hill provided timber from Haining wood, wood pasture for browse, enclosures of plantations, coppice woods, and arable. ⁹ Near the fields at 'broad mires' traces of a flax retting pond were found. ¹⁰ The malodorous effluent from it was drained by Punder sike into Lowgill beck and neighbouring Warcop (pre 1541). ¹¹ Ditched, partly canalised, and maintained by the tenants (on pain), the sike separated Flatt field and Fair field from Haber field. ¹²

In 1571 Great Musgrave had (upwards of) *c*. 500 a (202 ha.), of land (arable) and *c*. 200 a. (81 ha.) meadow, 500 a. pasture, 500 a. more and 60 a. (24.3 ha.) woodland, totalling 1760 a., (712 ha.) a little over half of the total modern extent of 3,190 a. (1290 ha.). ¹³ As the estimated extent of Great Musgraves common fields was *c*. 549 a., the arable being *c*.359 a. or *c*. 65%, meadow *c*.64 a. or 12%, and pasture 125 a., *c*. 23%, then the 1571 arable may have increased by *c*. 140 a. (57 ha.) 43%, meadow by *c*. 135 a. (55 ha.) *c*. 250%. ¹⁴ The last reflecting the premium value of hay against arable.

The Musgrave fields lay on soils of poor to medium fertility (often converted in the 15th century to profitable pasture). ¹⁵ Smaller fields and closes were made to divide the old fields and expand the

⁸ CAS(C), DMUS/5/2.

⁹ Cal. Charter R. V, 157.

¹⁰ HER 16880; TNA, IR29/37/58, fields 168,269, 270; CAS(C), WDMDS/PC/11/157 & 8.

¹¹ TNA, IR29/37/58, small field 207 called 'Punder Sike' beside it.

D. Winterbottom, 'Sackclothes and fustyane and such like com'odytes.' Early linen manufacture in the Manchester region', in E. Roberts (ed.) *A History of Linen in the North West*, Centre for North-West Regional Studies, 38 (Lancaster, 1998, note 9 (a practice forbidden by c.1541, [33 Hen. 8 c.17), (see Government).

¹³ CAS(C), DMUS/2/8, box 31. deed.

¹⁴ CAS(C), DMUS/5/2.

www.landis.org.uk.soilscapes Soil type 6, (Cranfield university, map viewer), A.J. Winchester, Landscape and Society in Medieval Cumbria, (Edinburgh, 1987), 52.

farmland in *c*. 14th/15th centuries, (e.g. 'Musgrave close', in Haber field, and 'Wheat close', at Lowfield and around 'Kirklands').

Riggs of arable lay on more fertile soils at Broomrigg and Broomrigg end, Longfield and Turks head field (c. 23 & 21 a./ 17.8 ha.). ¹⁶ There were square arable closes at High Burtergill (Brackenbar end and Scaw closes), (*c*.46 a./ 18.6 ha.), of the 14th century or earlier. ¹⁷ Fields of arable at Bale Hill were extended from *c*. 28 a. to cover 96 a. (38.9 ha.) by 1843, with *c*. 100 acres of enclosed pasture. By 1842 total arable was accounted at *c*.569 a. (230 ha., 14%), meadow *c*.614 a. (248 ha., 15%), pasture *c*.400 a. (162 ha. 10%), woodland *c*.96 a. (39 ha., 2.4%), common *c*.2400 a. (972 ha., 59%), from the parish total of 4080 a. (1652 ha.). ¹⁸

Little Musgrave

No common fields were named in Little Musgrave but the lord had meadow in New Ings, arable in Sweete lands and Blands underfoot. ¹⁹ The 130 a. pasture at Blandsbirks (also demesne) had customary tenants to the west, south of Little Musgrave where 'field' names occur with Smithfield marking a boundary of early fields. ²⁰ To the northwest, ploughlands lane led to Ploughlands farm where the demesne had shares in the 'Ings'. In 1283 Little Musgrave was taxed for one carucate: 'ploughland', (c. 60-180 a.). Probable medieval ridge and furrow was identified nearby. ²¹

Extensive pasture lay at Blind beck, Little Musgrave Mask (common and intake), Intake hill and Tewfitt Hill. In 1803 an agreement between tenants and owners was made to enclose 97 a. of the

¹⁶ Soil type 18.

¹⁷ A.H. Smith, *The Place Names of Westmorland*, EPNS, XLIII, 2, (Cambridge, 1967), 82; *Cal. Pat.*, Edward III, 1, (Cambridge, 1893), 583. ('William son of Adam de Buretrigill', 1334).

¹⁸ TNA; IR 29/37/58.

¹⁹ CAS(C), DMUS/5/2.

²⁰ Rackham, *History of the Countryside*, 173, though not itself indicative of 'open fields' 'Its connexion with arable land is medieval'.

²¹ HER 6516.

commons and waste inside a ring fence with Intack and Mask stinted as one pasture for winter cattle gates closed to cattle and sheep between 13 April and 26 May. 22 In 1847 Little Musgrave had c. 1,198 a. land with c. 300 a. arable, c.441 a meadow or pasture, c. 97 a stinted pasture and c.360 a commons, waste and highways. 23 In 1852/3 Little Musgrave Intake Inclosure was permitted creating c. 267 a. of allotments. 24

Medieval farming: Estate management

Prior (*ante*) to 1194, pasturage disputes over wastes and commons adjoining Byland Abbey's monks at Bleatarn grange, concluded with a grant of 82 acres to Great Musgrave and an outgate for their cattle. ²⁵ The lords took shares in each common field showing their early planning (*c*. 11th/ 12th century?), and possibly incorporating the retting sike. ²⁶ The common arable and meadow fields were sited between natural boundaries, access lanes, tracks and engineered water courses with pasture along the field edges. ²⁷

The Pennine part of Musgrave parish lay within the purlieus of Stainmore forest (see Government). These summer pastures were governed by 'levancy and couchancy', which set stocking rates (for cattle, sheep and horses), by limited winter pasturage in the lowlands. 28 Land shortages led to disputes with the Clifford's at Leazehead pasture from c. 1337 (Leaze: common land rights to

_

²² CAS(C), DMUS/1/9/5/1.

²³ TNA; IR 29/37/59.

²⁴ TNA, MAF 1/626, (1851), MAF 1/627, (1852).

²⁵ J. Burton, 'Charters of Byland Abbey relating to the Grange of Bleatarn, Westmorland', CW2, 79, 46-7, (no. 43)

²⁶ D. M. Stenton, *English Society in the Early Middle Ages*, The Pelican History of England (3), (Harmondsworth, 1976), 124-5.

M.C. Higham, 'The organisation and production of textiles in north-west England in the medieval period, including woollen processing, but with particular reference to linen,' in E. Roberts (ed.) *History of Linen,* 13..(identified -'with small pond, tenter banks and a retting pool system, all complete with canalised streams, was identified.')

²⁸ R. Muir, Landscape Encyclopaedia, A Reference guide to the Historic Landscape, (Oxford, 2012), 144.

tenants pastures). 29 Also to conflict and depasturing across the watershed against Mickleton in Yorkshire (see Government). 30.

In 1358 Thomas de Musgrave was granted free warren in Musgrave and the king's gift to impark 'le Hevenyng' with rights to waterfowl and falconry..³¹ In 1291/2 Little Musgrave paid 11s cornage. 32 In *c*.1354/5 it was 11s 4d. 33 Cornage for 1389/90 was 11s 2d for Little Musgrave, 4s 2d for Great Musgrave and remained the same in 1422 and 1424. 34 Then (1424), Great Musgrave was extended at 53s. 4d. yearly, and Little Musgrave, at 40s yearly for which a further 12d was paid for licence to fix the post (sluice?) of his mill at Musgrave (see below) .35 A retrospective valuation in *c*. 1491/2 for *c*.1477/8 gave the value of Great Musgrave as 20 marks (cornage 4s 2d), Little Musgrave as £20 (cornage 11s 2d). 36

Stock management was developed in the 15th century, and flax production in the fields organised for the close (companion) planting of oats and flax (see below). 37 The need to increase church income was a spur to clerical interventions, (see Religious history). A church deed in 1482 described the beating (beetling or battling) 'tanta vim' (?) of crops on ricks (flax) for textile production. ³⁸ The field name 'Unfangle' nearby, suggested the untangling of textile fibres (flax and hemp). ³⁹

²⁹ J. Richardson, *The Local Historian's Encyclopedia*, (New Barnet, 1985), 22.

³⁰ TNA, SC8/12/583-SC8/166/8262, etc; J.L. Malay, Anne Clifford's Great Books of Record, (Manchester, 2015), 929.

³¹ Cal. Charter R., V, 157.

³² Cal. Inq. p. m., 3, no. 21.

³³ Cal. Ing. p. m., 10, no. 162 (Great Musgrave was compounded).

³⁴ Cal. Inq. p. m., 16, no. 836, Cal. Inq. p. m. 21, no. 958, Cal. Inq. p. m., 22, no 306.

³⁵ Cal. Inq. p. m., 22, no. 306. (n.b. access to the mill post may have been through Brough parish?)

³⁶ Cal. Inq. p. m., 1, no. 693.

³⁷ CAS(C), DMH/10/3/1/8/18 (lines 66-75); https://exhibition.psu/s/flax/page/history-of-flax (viewed 18/4/2025) 'Flax could be grown on a section of land with oats, as the two are often harvested at the same time.',

³⁸ CAS(C), DMH/10/3/1/8/18 (line 75); 'pummeling with hammers ..', *The CIHS Newsletter, April 2011;* W. Rollinson, *The Cumbrian Dictionary of Dialect, Tradition and Folklore,* (Otley, 1997), 8.

³⁹ TNA, IR.29/37/58, fields 40, 45, 47; A. Warrack, *Chambers's Scots Dialect Dictionary: comprising the words in use from the latter part of the seventeenth century to the present day.* (London/Edinburgh, 1930), 'Unfankle' 641.

The tenants services owed to the lord, included ploughing (in 'white land time'), harrowing, mowing, carrying and shearing. 40 'Catch's' (of horses) implied the lord's herd (partly pastured at

Heanings; 'horse close'). Other dues were for geese and rent hens. In c. 1497/8 an indenture

between Edward Musgrave and Thomas Blenkinsop agreed arbitration for meering and dividing the

pasturage between Musgrave fell and Helbeckfell.⁴¹

Medieval Farming: Tenant farming

The tenants held by Custom of Tenant Right not needing the lord's approval.⁴² In 1344/5 several holders of land together had gifted Henenyngs to Thomas Musgrave and his heirs 'to hold the

Parke, & to inclose it' (nb. prior to the Kings grant).⁴³

In c. 1382/3 William Bakhous granted to Richard Talbotts (both of Burgh) half an acre and one rood

on Thorn-how '..in the fields of Musgrave'. 44 A lease to farm for 12 years was made c. 1489/90 of

a farmhold 'in Great Musgrave' for 7s p.a.. ⁴⁵ By infeofment in c. 1497/8 Robert Bate of Great

Musgrave granted his wife a tenement in Musgrave for life, thereafter to go to her rightful heirs. 46

When family inheritance failed, the lords' family might be gifted, as in c.1519/20 when Johanna

Hex(en)thwayt widow gave all her tenement in Musgrave to Edward Musgrave knt. ⁴⁷

In 1379 a 'Ricardo Horseman' was named. 48

Farming post 1550: Estate management

⁴⁰ CAS(C), CBME/1/9/1.

7

⁴¹ CAS(C), DMUS/2/8 – no. 22.

⁴² CAS(C), CBME/1/9/1.

⁴³ CAS(C), DMUS/2/8 – no. 10.

⁴⁴ CAS(C), DMUS/2/8 – no. 17. (Thorn-how appears in other deeds at this series)

⁴⁵ CAS(C), DMUS/2/8 - no. 32.

⁴⁶ CAS(C), DMUS/2/8 – no. 29.

⁴⁷ CAS(C), DMUS/2/8 – no. 25.

⁴⁸ TNA, E179/195/17.

Musgrave declared its right to charge an arbitrary fine, but only charged double the customary rent.⁴⁹ The demesne continued to expand with the grant of Blands underfoot to Christopher Musgrave in *c*. 1578/9.⁵⁰ The old manor house at Hall Crofts was replaced in *c*. 1670's by Hallgarth where four tenements had been bought by Sir Christopher's father.⁵¹ In *c*.1668 John Wilkinson a forester was living there.⁵²

Thanet and Musgrave's dispute over Leazehead resolved with Musgraves loss of the pasture rights for sheep and cattle to 300 a of furze and heath and 200 a of 'more' land and turbary in 1706-10 (see Landownership).⁵³ The Musgraves' steward Dobson had Brough beck (in Great Musgrave) straightened to improve field drainage in 1765 (using 'pond sludge' as a fertiliser).⁵⁴ A limekiln was built at Flascoe common to provide quicklime for the fields (and for building) from limestone quarried from outcropping limestone nearby (Musgrave scar).₅₅

For over 20 years Heaning was mostly pastured with sheep, black cattle and horses, producing lambs, calves, foals, and wool. Also 'Heaning Leases' (c.8a.) was ploughed and sown with oats (or other grain) for several years together. The accounts for Heaning in c. 1717 show £24/17/6 for 99½ stone of wool. The 'looker' William Steadman for half years wage was paid £1/10/- and the B(ailiff) 10/- for Little Musgrave. William Bousefield was paid £5/9/9d disbursement for Hall Garth farm and a salary of £2 in 1722. For 27 catches (of horses) and 'dressing the Heaning meadows' (marling?) 4/-. Heanings agistments pastured 17 horses, staggs and foals, between 28 April to July

_

⁴⁹ C.M.L. Bouch & G.P. Jones, *A short economic and social history of the Lake Counties 1500-1830*, (Manchester, 1961), 333.

⁵⁰ CAS(C), DMUS/2/8, no. 39 (original not found).

⁵¹ ed. Jane Platt, *Thomas Machell's Collections Towards a History and Topography of Westmorland* (CWAAS Record series 2025) 177, f. 809-810 (https://ebooks.cumbriapast.com/cbbc9b7d75.html).

⁵² CAS(C), John Wilkinson, PROB/1668/WX143.

⁵³ CAS(C), Dlons/L12/3/2/11, J.L. Malay, The Clifford Books of Record, (Manchester, 2015), 929.

⁵⁴ D. Johnson, *An Improving Prospect?: A History of Agricultural Change in Cumbria*, (Stroud, 2016), 157. (Swindale beck or Lowgill beck?).

⁵⁵ SMR 15843 (OS. 377660/516280).

for £8/13/2d and winterage for nine horses and mares for £5/2/- between michaelmas and lady day. 56

The lord was responsible for finding wood for house repairs, particularly for 'ridstowers', 'waids' and 'spelks'. ⁵⁷ (Costs of victuals and fodder were also the lords). Up to November 1758 Sir Philip Musgrave received 1023 bushells of burnt lime for the dunghill with 257 for the Heaning (building), and in 1760, 12 bushells for the Heaning Fauld. ⁵⁸ There were further deliveries to the Musgrave demesne farmers of 282 bushells to Hallgarth, 203 to Blandses, and 180 to Spencer's tenement. ⁵⁹ On 6 March 1766 a 'Mr Goldie' advised applying to the Westmorland acre '70 double cartloads of Marle' to lighten land and 'fallowed ... before Marling as mixes best w(i)th ye Mould - & [then] sow wheat' for very good crops, 'then Oats for 2^d Crop & 3rd year Barley', also that marling improved grass ground. ⁶⁰

Musgrave also collected recipes in the Gentleman's magazine for protecting young plantations. ⁶¹ Crops grown at Hallgarth and Heaning between 1835 and 1857 showed fallow followed by wheat or barley, wheat or barley by hay, hay by oats or fallow, oats by fallow, potatoes or turnips, turnip by barley or wheat with some clover and 'seed' croppage added. 62 Sir George Musgrave had 22 cattlegates in Little Musgrave intack for Blands estate and Spencer's tenement and 15 in Flaska pasture for Hallgarth. ⁶³

⁵⁶ DHUD/8/34, depositions 1759.

⁵⁷ W. Rollinson, *The Cumbrian Dictioary of Dialect, Tradition and Folklore,* (Otley, 1997), 152, 'spelk' rod used to fasten down thatch, or for a swill basket, 135, 'ridstake' post to tether cows., 183, 'weyt' wooden hoop dished in sheepskin for winnowing.

⁵⁸ CAS(C), DMUS/5/4/53, 186, 187.

⁵⁹ CAS(C), DMUS/5/4/53, 186.

⁶⁰ CAS(C), DMUS/5/4/53, 235.

⁶¹ CAS(C), DMUS/5/4/53, 312.

⁶² CAS(C), DMUS/5/2, box 67.

⁶³ CAS(C), DMUS/5/2, box 67.

By 1846 the demesne holdings in Great Musgrave were c.350a 3r 7p.(142ha), Little Musgrave c.253a 3r 15p (103ha) a total of c.604a. 2 r 22 p (244ha), an increase of about 176 a (71ha) or 41% from c.1630. ⁶⁴ In April 1899 Hallgarth's allotment of c.349a. (141.4 ha.) sheep pasture and well stocked grouse moor-land was sold for £1250. 65 Mrs Breaks leased more on Musgrave Fell for 10 years from 1904. ⁶⁶ In c.1910 the sporting rights at Brigg Briggs was valued at £2,160. ⁶⁷

Tenant farming post 1550

George Carleton in 1576 named his oxen (for ploughing) as 'Jewell' and 'Dickie' his 'plough gere yoke & teame' valued at 'xij^s (12/-). 68 Some had more, John Breaks in 1581 had three yokes with three teames. 69 Richard Rudd had four teames but also a horse teame in 1585.⁷⁰ In 1583 William Smith had 'smythie geare xl^s 'for iron and steel tool making'.⁷¹ John Breaks' inventory itemised 'lynne stead & stead haver - xxij^s viij^d (22/8d), which suggests oats (haver) grown with flax and stored together in stacks: 'stead-heaf'(s).⁷² In 1583 'x threave' (1 threave = 24 sheaves) 'of line & three threve of hemp' were worth 'iiij^s iij^d (4/3d).⁷³ Edward Walker in 1578 had lyne & hemp about the house and gifted 'lynynge shorts & shertes' etc. & 'blowe & whyhte coytes'.⁷⁴ Textile farming and processing were labour intensive but Richard Rudd left 27 yards of 'harden cloth' (coarse hemp or flax) in 1585.⁷⁵ The manor courts tried to constrain 'bye-fires' so Thomas Rudd was fined 3/4d.

⁶⁴ TNA, IR 29/37/58; IR 29/37/59.

⁶⁵ TNA, IR 58/1979/ (1218).

⁶⁶ TNA, IR 58/1979/ (1238).

⁶⁷ TNA, IR 58/1979/ (1194).

⁶⁸ CAS(C), George Carlton, PROB/1576/WINVX41.

⁶⁹ CAS(C), John Breaks, PROB/1581/INVX14.

⁷⁰ CAS(C), Richard Rudd, PROB/1585/WINVX181.

⁷¹ CAS(C), William Smith, PRO 56B/1583/WINVX142.

Warrack, *Chambers's*, 566, - sheafs at the bottom of a stack. Oats were intercropped with flax to combat flax flea beetle and as a nurse crop to control weeds.

⁷³ Warrack, *Chambers's*, 609; CAS(C), William Smith, 1583.

⁷⁴ CAS(C), E. Walker, PROB/1578/WINVX355.

⁷⁵ CAS(C), Richard Rudd, PROB/1585/WINVX181.

in 1654, (to prevent labour influxes becoming resident).⁷⁶ In 1588 William Wanton gave the right and title to Tarne close to Christopher Quarton and 'paid xlij' for the making of the close wall'. ⁷⁷ In 1614 Thomas Chapelhow bequeathed his 'farmehold and tenantright' in Little Musgrave to his daughter. Values of their crops growing in May were a half acre of wheat (13/4d), four acres oats (£4), 3 acres big (£3), half acre pease (6/4d), a parcel of rye (6/-) and six 'Rowmes' (Rowens? : second growth of grass?) in Intacke (12/-). Valued at 50/-, was the grass growing in the Chapel myre, newe Inge and hills.⁷⁸

The tenants had the liberty to go into the Heaning at any time between 1 February and 21 March (1656) to pull up seven ashes by the roots every year to plant in their own ground. ⁷⁹ In 1590/1 tenants were to free their land for pasturing between [blank] and mid April for stinted tethered pasture (at 6d per default) but also to maintain their hedges to woods (1/- pain 1654) and onto the common (6/8d pain 1706). The overnight tethering of beasts or horses in the common fields was forbidden (on pain of 6/8d). ⁸⁰

Scarce resources fostered encroachments. Thus in 1655 John Snowdon was fined 1/- for ploughing out a boundary rain (balk) in Lowfield, and in 1612 Thomas Hutchenson was presented for taking half a rood from the lords waste without licence. For encroachment on the commons in 1719 Thomas Askell was fined 6/-. In 1709 Richard Steadman was in court for building his dwelling and garden in the lord's waste, but failure to build a dwelling on an estate was also finable (1711,

⁷⁶ CAS(C), DMUS/1/13/1/1, 87. Byfires included 'keeping an inmate'; see 'byhearths', E. Garnett & S. Rose et al. *VCH Westmd.*, 1 (London, 2025), 59.

⁷⁷ CAS(C), William Wanton, PROB/1588/WINVX303.

⁷⁸ CAS(C), Thomas Chapelhow, PROB/1614/WINVX38.

⁷⁹ CAS(C), CBME/1/9/1.

⁸⁰ CAS(C), DMUS/1/13/1/1, 89-90.

⁸¹ CAS(C), DMUS/1/13/1/1, 87; J Wright (ed.) The English Dialect Dictionary: being the complete vocabulary of all dialect words still in use, or known to have been in use during the last two hundred years, (Oxford, 1961), 5, 60, 'Rean': a balk especially boundary in a field.

Thomas Gate, 3/4), as was letting it fall down (1704, Thomas Nicholson, 3/4). ⁸² Bye laws tended to restrict the economy, though fines declined in favour of permissions to rent. (see Government). A bye-law (c. Elizabeth) forbade any 'rate' (retting) of hemp or line in the river between Swindale foot and the church (on pain of 3/4d). ⁸³

In c. 1599/1600 there were c. 13 cottagers (and families) providing labour, and nine prosperous tenants, a coterie selected in c. 1656 'to bring one' (mill) 'stone to the north Milne.' ⁸⁴ The coterie paid multure on the 13th dish whereas the other tenants paid on the 24th or 30th dish. For 'mealle' or 'hard corne' all paid on the 30th. The tenants had agreed shares with the lords for mill repairs and scouring the dam. ⁸⁵

Many tenants in Burtergill, Flitholme, Brownrigg and Langrigg had cattlegates in Flascoe stinted pasture. ⁸⁶ George Petty a fellmonger (*fell*: an animal's hide or skin, *OED*) was recorded in 1739. ⁸⁷ In 1803 the tenants and owners of Little Musgrave agreed to enclose their commons and waste ground as stinted pasture charged for the ring fence needed. The tenants agreed to give 'Sheetfoot' to add to 'Mask' and 'Intack' to provide pasture for winter Cattle gates and 'Frithman gates' (meaning lost), for cattle and sheep, but its 56½ cattlegates (34½ for tenants) were stinted from 13 April to 26 May. ⁸⁸ Another 40 cattlegates (25 for tenants) lay in Flaska pasture for Great Musgrave. ⁸⁹ Great Musgrave had 10 yeomen and nine other farmers, and Little Musgrave four yeomen and seven others in 1829. ⁹⁰ Thomas Taylor (c.1823-1881) farmer of Hallgarth, developed a new cattle

⁸² CAS(C), DMUS/1/13/1/1, 88.

⁸³ CAS(C), DMUS/1/13/1/1, 89.

⁸⁴ CAS(K), WDX/88/M2; CAS(C), CBME/1/9/1.

⁸⁵ CAS(C), CBME/1/9/1.

⁸⁶ CAS(C), DBS/4/106/13/5/5 (Court book 1816-40).

⁸⁷ CAS(C), CBME 2A(B)/4/1, C. Coredon, A. Williams, *A Dictionary of Medieval Terms & Phrases*, (Cambridge, 2021), 121, Fell-monger; Pelletarius, 214: skinner, (Coriarius; leather worker, currier).

⁸⁸ CAS(C), DMUS/1/9/5/1.

⁸⁹ CAS(C), DMUS/5/2.

⁹⁰ Parson & White, *Dir. C. & W.* (Leeds, 1829), 540, 559-60.

breed which he named the 'Musgrave shorthorn', good for both meat and dairy and easy for calving. ⁹¹ In 1887 Richard Park's farm stock included 40 shorthorn cattle, 60 sheep, a Samuelson mowing machine, a winnowing machine, two single iron ploughs, a stitching plough, two pairs of seed harrows, a stitch harrow, chain and drag harrows. ⁹²

In 1831 there were 28 agricultural labourers in Great Musgrave, nine agricultural occupiers first class and 11 second class. ⁹³ In 1841 there were 18 farmers, 12 yeomen, a female and five male agricultural labourers. There were 19 male and two female farmers, two yeomen, a shepherd, 22 ag. labs and an apprentice saddler in 1851. In 1861 25 farmers, a farmer/bailfiff and five yeomen were listed and eight ploughmen, a shepherd and a cow boy. In 1871 26 farmers were listed, 27 in 1881 with one female. From 1871-1901 there were 27 farmers, two ploughmen and a shepherd in 1891, a herdsman and cattle dealer. In 1911 there were 28 farmers, 13 farm workers, four labourers and six dairy workers. There were 29 farmers in 1910, 25 in 1914 (nine in Little Musgrave) and 25 also in 1939.⁹⁴

In 1870 the arable crops were oats, 254a. (103 ha 45.8%) wheat, 40a. (16.2 ha. 7.2%), barley 79a. (32 ha. 14.2%), potatoes 22a. (8.9 ha. 3.9%), and turnip and swede 160a. (64.8 ha. 28.8%). 95 Oats grown were 250a in 1900, 356a in 1918 and 132a in 1933. 96 Wheat declined to 6a in 1952, whereas barley rebounded from 6a in 1933 to c. 83a (33.6 ha.) in 1973. 97 Potatoes declined to a single acre in 1973, turnip and swede to c. 40a. (16.2 ha.). 98 Rape was occasionally grown, and mangolds from

⁹¹ Bulmer, Dir. Westmd, (Preston, 1905-6), 227, www.Ancestry.com (accessed 19/9/2025).

⁹² Penrith Observer, 1 March, 1887, p. 8.

⁹³ CAS(K), WPR 14/7/6/1.

⁹⁴ Kelly, Dir. C. & W. 1910, 114, Kelly, Dir. C. & W. 1914, 114, Census returns 1841-1911, 1939 Register.

⁹⁵ TNA, MAF 68/264.

⁹⁶ TNA, MAF 68/1860, MAF 68/2886, MAF 68/3696.

⁹⁷ TNA, MAF 68/3696.

⁹⁸ TNA, MAF 68/5318.

1870 and 1904, mixed corn reaching over 58a. (23.5 ha.) in 1952, and orchards of 1.75a. in 1895 were half an acre in 1960.⁹⁹

Temporary grass for mowing (fodder) increased from 119a. (48.1 ha.) in 1870 to 266a. (107.6 ha.) in 1960 as that for grazing declined from 571a. (231 ha.) in 1895 to 157a. (63.5 ha.) in 1960. Permanent grass for mowing was 505a. (204 ha.) in 1870, and still 488a in 1960, whereas grazing declined from 1611a (652 ha.) in 1870 to 923a (373.5 ha.) in 1960. Rough grazing increased from 982 to 1000a (404.7 ha.) from 1895 to 1933 declining then to 583a. (236 ha.) in 1960.

There were 55 horses employed in agriculture in 1870 then 63 in 1917 and 51 in 1933. Horse totals had been 76 in 1870, 138 in 1895, 120 in 1917, 21 in 1952 and none by 1960. 101 Cows and heifers producing milk were 246 in 1870, then 198 in 1904, 1917 and 1933. In 1952 there were 283 which rose to 372 by 1960. Total cattle rose from 665 in 1870 to 1,548 in 1973. Sheep totalled 2,176 in 1870, reaching 2,899 in 1917 and 3,704 in 1973, when one farm specialised in livestock sheep rearing and fattening and two in mixed cattle and sheep livestock. There were also 11 specialist dairy farms and four classed as mainly dairy. Of 4,007 poultry (fowl, ducks, geese and turkeys) recorded in 1933, 3,632 were fowl (chicken, guinea fowl, partridge and pheasant) and 233 ducks. By 1952 the poultry total was 1,617, 1,505 in 1960 and 183 in 1973. Pigs totalled 56 in 1870 and 168 in 1952 but just one in 1960 and 12 in 1973.

There were 31 farm holdings in 1895 of which 24 were rented, six owned, one both; a total of 2,275 a. (921 ha.) rented and 315.5 a.(127.7 ha) owned. ¹⁰² Of 31 holdings in 1904 three were under 5a., nine between five and 50a., 18 between 50 and 300a. and one over 300a.. Of 28 farms over 20 acres

⁹⁹ TNA, MAF 68/1575, MAF 68/4403, MAF 68/2088.

¹⁰⁰ TNA, MAF 68/4699.

¹⁰¹ TNA, MAF 68/2829.

¹⁰² TNA, MAF 68/1575.

surveyed in *c*. 1910, *c*. 12 were copyhold, seven customary, three customary freehold and six freehold. Of the freehold three were lords' demesne lands (four, including a land estate, Nettle pot), and one of church glebe. Of 70 significant landed premisses 22 were copyhold, 12 customary and 11 freehold, and of houses 19 copyhold, six customary, three customary freehold and 13 freehold. ¹⁰³ In 1917 of 36 holdings seven had under five acres (two owned), 21 from five to 50a. (12 owned), seven between 50-300a. (three owned), and one over 300a.. ¹⁰⁴ Of 31 holdings in 1933 four were of under five acres, one between five and 20a, seven of 20-50a., 13 of 50-100a., three 100-150a, two 150-300a and one over 300a. ¹⁰⁵ By 1960 there were just 23 holdings, two under five acres, one between 20-30a., one 30-50a. 11 of 50-100a. and three between 150-299a. There were two parttime farmers. Some tenanted holdings gained. ¹⁰⁶ The Alderson's 60a in 1851 was 124a in 1871, Brigg Briggs (Hilltop) was 45a in 1851 and 70a in 1881, and Plowlands' 113a in 1851 was 285a (or 158a – some land Warcop) by 1881. ¹⁰⁷ In *c*. 1910 at Flitholme (Warcop house) had a threshing machine and liquid manure tank. ¹⁰⁸ During the second world war 22 farms in Great and Little Musgrave from 1940-1 were directed to plough up a total of *c*. 310 a. mostly for oats and *c*. 7 a. turnip and swede. ¹⁰⁹

In 1933 there were 35 agricultural workers, 30 regulars (6 female) and five casual (two female). ¹¹⁰ In 1952 there were 31, with 24 regulars (four female), seven casuals (1 female). The total was 33 in 1960, with 24 regulars (two female), and nine casuals (two female). In 1973 only the combined total of 40 farmers and workers was recorded.

¹⁰³ TNA, IR 58/1979.

¹⁰⁴ TNA, MAF 68/2829.

¹⁰⁵ TNA, MAF 68/3696.

¹⁰⁶ TNA, MAF 68/4699.

¹⁰⁷ Census returns 1851, 1871, 1881.

¹⁰⁸ TNA, IR 58/1979 (1209).

¹⁰⁹ TNA, IR 32/200/16.

¹¹⁰ TNA, MAF 68/3696.

Fishing and Forestry

Fishing in the 'Waer' (weir) was a prohibited pastime. 111 In 1634 three persons were fined 3s 4d each for doing so. 112 About 1620-30 an Osprey was (shot) 'of[f] the Quire of Great Musgrave' (for the fishing).113 When a tank of Grayling fry was tipped into the river Eden in 1880 from Musgraves churchyard wall it became one of Europe's best Grayling rivers. It is now a site of special scientific interest (SSSI) and a special area of conservation (SAC) for 'sea, river and brook lampreys, crayfish, atlantic salmon' and bullheads. Salmon were spawning upriver to Kirkby Stephen from November to January. 114 William Nelson noted how Grayling fed in shoals near outflows, their fishing being best between Musgrave and Ormside. 115

Musgrave was identified as a locale for forest administration (St Theobald being patron saint of charcoal burners). (see Religious history). In 1358 Thomas de Musgrave received the king's gift to impark 200 acres of wood called *le Hevenyng*, with capacity to coppice and charcoal burning, for smelting and blacksmithing. ¹¹⁶ Oak trees could only be cut on Heaning park for repairs to Hartley castle buildings, ash and birch only if 'springing' with new growth and only for Heaning or Hallgarth or for tenants plowboot in Musgrave or Hartley. ¹¹⁷ In 1719 'the partners' paid £469/8/6d for Heaning wood, and Thomas Waller was paid £2/14/- for 'casting' (cutting and laying), hedging and setting 127 roods of quicksetts (thorns) there. ¹¹⁸

A.H. Smith (ed), English Place-Name elements, Part II (JAFN-YTRI), E.P.N.S. Vol. Xxvi, (Cambridge, 1956), 237 (waer, OE, 'a weir')

¹¹² CAS(C), DMUS/1/13/1/1, 92.

¹¹³ J. Platt, *Thomas Machell*, 613, f.579.

¹¹⁴ www.achurchnearyou.com/church/12217 (viewed 25/5/23).

W. Nelson, Fishing in Eden, a record of fifty years with rod and line in the valleys of the Eden and Eamont: To which are added som practical notes on flies and tackle, (London, 1922, reprint Forgotten books, 2012), 128-130.

¹¹⁶ Cal. Charter R., V, 157.

¹¹⁷ CAS(C), DMUS/10/3, box 126, Inspeximus & draft will of 1680.

¹¹⁸ CAS(C), DMUS/5/4/3.

In 1843 Sir George Musgrave had plantations of 3a-0-20p (1.3 ha.) at Low Planting (no.80) and 3a-2r (1.4 ha.) at High Planting (no.104, Heaning). Other small ones were 37p (0.1 ha.) near Langrigg (158) and 3r 23p (0.35 ha.) near Turks Head (no.180). ¹¹⁹ In 1910 Ploughlands had a plantation of 2a-2-11 (1 ha.) with Scots pine and Larch, for sport and shelter. North of the A66 woodland expanded from the 1930's, replacing arable near Bale hill and extending towards Woodend beck *c*.33 a.(*c*.13.35 ha.). Mixed woodland was planted east of Brough hill and at Brackenber hill c.9a.(*c*.36 ha.), the old common near Lowgill cottage made a conifer plantation *c*.7½a.(*c*. 3 ha.). A small wood *c*.2a (*c*.0.8 ha), was also created on rough grassland at Loy's hill (Little Musgrave). 120

Industry

Mills

The lords' mill at Great Musgrave lay near Hallgarth, surface evidence suggesting a leat there. ¹²¹ The 'mill site' upriver on the Swindale probably the sluice entry to the leat. ¹²² The name 'Matil[da] Milner' may reference an early mill pre 1379 and the '12d paid for licence to fix (the post) of his mill at Musgrave' in 1424 suggests the sluice into the leat was on Clifford lands upstream on Swindale beck. ¹²³ The two mills housed 'under a single roof' in *c*.1630 were a corn and a smelt mill, (in 1674 with a kiln), located at Hallgrath. ¹²⁴

Crafts

In 1583 William Smith of Musgrave left to his son his 'smythie geare, and my house'. ¹²⁵ Weaver's such as Thomas Outhwaite and Joseph Caile, and Edward Hewetson apoth(ecary) were recorded in

¹¹⁹ TNA, IR 30/37/05.

Land utilisation survey, 1931-3; O.S. OL19, 1:25,000 © 2008; O.S. 25", pub.1898, Westmorland XVI.I (10, 11,14), XXIII.I.

¹²¹ SMR 15791 (OS. 377510/513430).

¹²² SMR 15763.

¹²³ TNA, E 179/195/17, Cal. Inq. p. m., 22, no. 306.

¹²⁴ CAS(C), DMUS/5/2, DMUS/10/3, box 126, Inspeximus 6 Nov. 1690, re Sir Philip Musgraves will 1674 etc., J. Platt, *Thomas Machell*, 177, f. 143

¹²⁵ CAS(C), William Smith PROB/1583/WINVX 142.

1774, and Joseph Rain carrier, buried in 1775. ¹²⁶ In 1588 Leonard Burrell had the stone hammer and squares of a stone mason and more masons appeared in 1871. ¹²⁷ Thomas Machell reported quarries of limestone and 'Pitts of rud near Tuet Hill' (Tewfill/Tewfit, Little Musgrave), mostly red clay (also blue and white). ¹²⁸ In 1939 a limestone and a road stone quarry worker were recorded. ¹²⁹ There was a limestone quarry in Little Musgrave at Tewfill hill. ¹³⁰ A blacksmith was recorded in 1842, 1851-1881, (farrier), 1891-1911, 1934 and 1938, a 'cow doctor' in 1910. ¹³¹

Mining & Quarrying

The lord (or his officers) in 1656 were to 'pay for boone coals at the pit', and provide a dinner (or 2d). ¹³² In 1779 James Simpson miner, took lease of Musgrave common lead workings for a year with a seven years extension from 1780 (up to 21 years), and prospecting rights for a further 1000 x 300 yards. He paid a seventh of the lead to Sir Philip, and 5/- per fother for use of Hartley smelt mill. Permission was given for sheds, engines, pits shafts, drifts, water gates (for hushing?), watercourses and (for) conveying water 'and *stithe* forth and out' (use of rope station for hauling and lifting?). ¹³³ Key Scar Lead mine was near Helbeck wall end. ¹³⁴ A lead miner (and farmer) was resident in 1871. ¹³⁵ In 1771 John Birkbeck took a 12 year lease of Musgrave colliery for £5 p.a. but he delivered up in November 1777. John Snaith leased it in 1790 under a nine year lease for a rent of £1/1/- p.a.. ¹³⁶ Some 'old coal pits' were mapped on Musgrave fell in 1828. ¹³⁷

¹²⁶ CAS(K), WPR 14/1/2.

¹²⁷ CAS(C), Leonard Burrell, PROB/1588/WINVX75., Census returns 1871.

¹²⁸ J. Platt, *Thomas Machell*, 612, f. 578.

¹²⁹ 1939 Register.

¹³⁰ O.S. 6", sheet XXII, survey 1858-9, published 1863; OS grid ref. 3719 5127.

¹³¹ Kendal Mercury, 21 May 1842, p. 2, Kelly, Dir. Westmd., 1910, 1934, 1938; Census returns 1851-1911.

¹³² CAS(C), CBME/1/9/1, Jury's verdict 1656.

Warrack, Chambers Scots, 572. (re stithe/stith): 'used of a rope', 'place, station'.

¹³⁴ SMR 1585.

¹³⁵ Census returns 1871.

¹³⁶ CAS(K), WDX/88/2/1-3.

¹³⁷ Carlisle Library, (Jackson collection), *Hodgsons map of Westmorland*, (Lancaster, 1828).

Services

Retail

Some retail appears from the post office 1901-1934, and shopkeepers 1910 and 1914, shoemakers in 1829 and 1841, dressmakers in 1851-91, greengrocers in 1841-91, a produce merchant and a petrol retail dealer in 1939.¹³⁸

In 1828 Lowgill gate west of the Turks head lay on the Great North road (A66). A turnpike tollgate on the Brough to Eamont bridge turnpike road of 1753, two occupied by a Tollgate keeper up to 1861/71 made redundant by 1888. In 1939 it had become known as the 'Gan House garage' occupied by Joseph Bowen.

Musgrave railway station opened in 1863 (closing in 1952). 143 The station master, porter and railway plate layers noted 1871-1921, and 1939. 144 Services ceased in 1962, the line to Appleby retained for stone quarry traffic. After 1976 only six miles between Appleby and Flitholme remained, used by the British army to Warcop training area, before redundancy in 1989. 145

Transport Services

There were two Inns in 1829, 'New Inn, Streethouse' (Robert Dent), and Pack Horse (Dinah Railton). 146 George Ion, Innkeeper of Great Musgrave was made bankrupt in March 1831. 147 The

¹³⁸ Parson & White, *Dir. C. & W.*, p. 540, Kelly's, *Dir. C & W*, 1910, p. 114, 1921/1925, p. 107, 1929, p. 104, Census returns 1841-91, 1939 register.

¹³⁹ Hodgson's map of Westmorland, 1829.

¹⁴⁰ Brough and Eamont Bridge Turnpike Trust 1753 (26 Geo.2.c.67).

Local Government Act, 1888, which transferred maintenance responsibility to county councils. , Census returns 1861-71.

¹⁴² 1939 Register.

¹⁴³ Bulmer, *Dir. Westmd.*, (Preston, 1885), 240.

¹⁴⁴ Census returns 1871-1921, 1939 Register.

¹⁴⁵ https://wikipedia.org/wiki/Eden Valley Railway (heritage railway) (accessed 15 October 2025)

¹⁴⁶ Parson & White, *Dir. C. & W.*, (1829), 559.

¹⁴⁷ Reading Mercury, 14 March, 1831, p.2.; London Gazette, 8 March.

'Turks Head' had been an Inn (possibly 'Streethouse'), and in 1840 was venue for meetings to determine the parish boundaries. ¹⁴⁸ It appeared on the 1841 census when two other publicans (one female) had separate premises. ¹⁴⁹ The New Inn was let in 1864 with the adjoining blacksmiths shop and cottage (within 100 yards of the station). ¹⁵⁰ In c. 1910 the New Inn (leased yearly from Whitsun 1908), had a trade value of 72 gallons of spirits @ x 2/6d (£9), 24 barrels @ x 8/- (£9/12/-, and 144 doz. bottled @ x 4d (£2/8/-), total £21 + £21, rent £42, less insurance and levy, £4 = £38. ¹⁵¹

Visitor economy

The heather grouse moorland above Little Turplacks, and Musgrave fell above Great Turplacks to Hanging Seal in Musgrave was part of the Helbeck estate of 4,500a owned by Ben Blackett-Ord. 152 The visitor economy was represented by self catering caravans at Grassgill (park extension c. 10/2007, approved. 070667), cottages at Little Musgrave, lets at Low Ploughlands (conversions approved 2014; 13/0873), and a hotel at Flitholme. There was also a wedding venue, a medal mounting enterprise, and at Flitholme an agricultural services business (contractors depot, machinery storage and change of use approved c. 11/2019). 153

As yet BT only offers copper broadband to the area (October 2025). ¹⁵⁴ The B4RN (Broadband for the Rural North Ltd) provides a community led service at Musgrave. ¹⁵⁵

⁻

¹⁴⁸ TNA, IR 18/10847.

¹⁴⁹ Census returns 1841.

¹⁵⁰ Penrith Observer, 5 April, 1864, p. 7.

¹⁵¹ TNA, IR 58/1979, (1188).

https://whoownsengland.org/2018/08/12/revealed-the-aristocrats-and-city-bankers-who-own-englands-grouse-moors/ (accessed 27/9/2025).

Google maps (accessed 24.9.2025),

https://my.southlakeland.gov.uk/mysouthlakeland.aspx?SouthLakes/MyMapsSouthLakes&x=348968&y=489433&2=150000&Layers=allPlanning&tab=2">https://my.southlakeland.gov.uk/mysouthlakeland.aspx?SouthLakes/MyMapsSouthLakes&x=348968&y=489433&2=150000&Layers=allPlanning&tab=2">https://my.southlakeland.gov.uk/mysouthlakeland.aspx?SouthLakes/MyMapsSouthLakes&x=348968&y=489433&2=150000&Layers=allPlanning&tab=2">https://my.southlakeland.gov.uk/mysouthlakeland.aspx?SouthLakes/MyMapsSouthLakes&x=348968&y=489433&2=150000&Layers=allPlanning&tab=2">https://my.southlakeland.gov.uk/mysouthlakeland.aspx?SouthLakes/MyMapsSouthLakes&x=348968&y=489433&2=150000&Layers=allPlanning&tab=2">https://my.southlakeland.gov.uk/mysouthlakeland.aspx?Southlakes/MyMapsSouthlakes&x=348968&y=489433&2=150000&Layers=allPlanning&tab=2">https://my.southlakeland.aspx?Southlakes&x=348968&y=489433&2=150000&Layers=allPlanning&tab=2">https://my.southlakeland.aspx?Southlakes&x=348968&y=489433&2=150000&Layers=allPlanning&tab=2">https://my.southlakes&x=348968&y=489433&2=150000&Layers=allPlanning&tab=2">https://my.southlakes&x=348968&y=489433&2=150000&Layers=allPlanning&tab=2">https://my.southlakes&x=348968&y=489433&2=150000&Layers=allPlanning&tab=2">https://my.southlakes&x=348968&y=489433&2=150000&Layers=allPlanning&tab=2">https://my.southlakes&x=348968&y=489433&2=150000&Layers=allPlanning&tab=2">https://my.southlakes&x=348968&y=489433&2=150000&Layers=allPlanning&tab=2">https://my.southlakes&x=348968&y=489433&2=150000&Layers=allPlanning&tab=2">https://my.southlakes&x=348968&y=489433&2=150000&Layers=allPlanning&tab=2">https://my.southlakes&x=348968&y=489433&2=150000&Layers=allPlanning&tab=2">https://my.southlakes&x=348968&y=489433&2=150000&Layers=allPlanning&tab=2">https://my.southlakes&x=348968&y=489433&2=1500000&Layers=allPlanning&tab=2">https://my.southlakes&x=348968&y=489433&2=1500000&

www.openreach.com/fibre-broadband/where-when-building-ultrafast-full-fibre-broadband (accessed 14/10/2025)

https://en.wikipedia.org/wiki/Broadband for the Rural North (reference retrieved 2023), (accessed 14/10/2025)