North of England Institute of Mining and Mechanical Engineers Nicholas Wood Memorial Library

Mining and mineral statistics

a resource guide

Introduction

Mining and mineral statistics encompasses numerical information relating to mines - their output and the people working there – and the distribution and consumption of minerals. So statistics will cover topics such as numbers employed, occupations, wages, hours of work, strikes, accidents, death rates, royalties, output, transport, costs of production and distribution, prices, industrial and domestic consumption, exports, imports, equipment used. Figures may refer to a country, county, coalfield, particular mine, age of employees; and be over varied periods.

There may be uncertainty about accuracy and how figures are collected. Since the basis for collection may change care needs to be taken if looking at statistics over a long period.

This guide lists, with brief annotations, the major regular general statistical sources and other occasional or specialist publications. Most will deal with all types of mineral and mines and some only with coal or metals.

Guides

Burt, R & Waite, P An Introduction to the Mineral Statistics of the United Kingdom 1845-1913 *British mining (23)* 1983, 40-58.

Also available online at

http://www.nmrs.org.uk/publications/pdf/BM23/BM23-40-58-statistics.pdf

Introduction to the University of Exeter series of compilations *Mineral Statistics of the U.K.* - <u>http://projects.exeter.ac.uk/mhn/MS/intro.html</u>

Explains briefly the development of the major statistical series in the 19th Century.

Hunts Mineral Statistics 1860 includes a brief survey of the development of the mineral statistics and the general progress of the industry in the United Kingdom from 1854 to 1859.

The 1897 changes in coverage and publication are explained in the introduction to Part 1 of the Mines Inspectors report for 1897.

Books

Books relating to the economic development of the coal industry will include various statistics, perhaps with some discussion on from where they are derived and their validity.

Ashley, W.J. *Adjustment of wages:* a study in the coal and iron industries of Great Britain and America. 1903.

Has a section on sources of information and some figures for the late 19th Century.

www.mininginstitute.org.uk

Also available online: https://archive.org/details/adjustmentwages00ashlgoog

Buxton, N.K. *The economic development of the British coal industry: from Industrial Revolution to the present day.* 1979.

Flinn, M. & Stoker, D. The history of the British coal industry. Vol 2: 1700-1830: The Industrial Revolution. 1984

Mitchell, B.R. *Economic development of the British coal industry 1800-1914*. 1984 Has figures on wages, productivity, output, profits, etc together with discussion.

Rowe, J W F. *Wages in the coal industry.* 1923. A study, including historical aspects, with some figures.

Compilations - Metalliferous mines

Burt, Roger, Waite, Peter & Burnley, Ray *The Durham and Northumberland mineral statistics : metalliferous and associated minerals 1845-1913.* University of Exeter, 1983. General introduction. Mines: ownership, management (names) production by year, mineral, mine, value. Totals for Northumberland & Durham and by mine.

Burt, Roger; Atkinson, Michael; Burnley, Ray & Waite, Peter. *The Derbyshire mineral statistics: metalliferous and associated minerals* 1845-1913. University of Exeter, 1981 Similar content.

Other titles in this series are not held by NEIMME.

Gill, Mike & Burt, Roger *The mines of Yorkshire: metalliferous and associated minerals.* 2003. (British Mining (72)).

Major regular mining statistics publications – in chronological order

These are the general sources giving coverage from 1848.

1. Statistics of the produce of copper, tin, lead and silver from the mines of the United Kingdom, with the exports and imports of these metals, from 1848 to 1852 in *Records of the School of Mines and of science applied to the arts Vol 1 parts 1-4* 1853

2. Robert Hunt's *Mineral statistics* 1853-1881 [NEIMME has all]

Output, price, imports, exports, transport – railway, canal, coastwise. For coal many figures for England and Wales are by county. Includes pig iron production, with some details of blast furnaces and forges.

3. Mining and mineral statistics of the United Kingdom of Great Britain and Ireland 1882-1887. [NEIMME has all]

(1883 is entitled Summaries of the Reports of the Inspectors of Mines and Mineral Statistics of the United Kingdom of Great Britain and Ireland, including Lists of Mines and Mineral Works for 1883)

Output, value, prices, exports, usually by county, but for some minerals by mine. Transport – railway, canal, coastwise. Lists of mines, quarries, blast furnaces, mills, forges, steel and tinplate works, lead smelters.

Has a summary of production in British colonies and possessions.

4. Mineral statistics of the United Kingdom of Great Britain and Ireland with the Isle of Man 1888-1896 [NEIMME has all]

Content is much the same as the previous series except for lack of details by mine for coal, no lists of mines and inclusion of an index by mineral, region, etc.

5, Annual general report upon the mineral industry of the United Kingdom of Great Britain and Ireland 1894-1896 [NEIMME has all]

Includes statistical tables - Accidents, death rates, employment, output by county. There is also a discussion of output, accidents, etc in foreign countries.

This report was part of the annual Mines Inspectors reports and was seen to duplicate *Mineral statistics of the United Kingdom of Great Britain and Ireland with the Isle of Man* so the two were combined in the reorganised Inspectors reports from 1897.

6. Mines Inspectors reports Parts II-IV 1897- 1919 [NEIMME has all.]

Part II Labour – employees, by age, sex; accidents, prosecutions, death rates, [May have figures on other topics, eg explosives used, coal cutters in use, number of safety lamps]

Part III Output – county summaries under the various mining Acts; Output, exports, value - by mineral and sometimes by mine.

Part IV Colonial and foreign statistics - output, value, employment, accidents – summary tables (not including value) and country by country description and statistics. Index to Parts I, II, III, IV of the report.

7. Board of Trade Mines Department *Statistical summary* [*statement*] of output and of the costs, production, proceeds and profits of the coal mining industry 1920-1946 [NEIMME has 1920, 1921-33, 1934-1939]

Quarterly - Output, costs (wages, timber, management, insurance...), employees by district. A 2 page table.

8. National Coal Board *Annual report* {vol.2 Accounts and statistics} [NEIMME has 1946-47 to 1970-71]

Extensive statistics.

9. National Coal Board *Annual report and accounts* [NEIMME has 1980-81-1985-86] Has summary statistics.

10. National Coal Board *Statistical tables for the year...* [NEIMME has 1972-73 to 1978-79]

11. Ministry of Fuel and Power *Statistical digest* [NEIMME: 1946-74, 1948-1967] Coal – production, accidents, equipment, manpower, costs, distribution. Tables cover various earlier years. (Also gas, oil.)

12. Ministry of Power *Digest of energy statistics*, [NEIMME: 1968-71] Similar content.

13. Department of Energy *Digest of United Kingdom energy statistics* [NEIMME: 1972-78, 1981-86]

Note: Coal statistics are summarised in *Colliery Year Book* from 1922-1965 (See the Yearbook section below.)

Other regular returns – accidents, strikes, unions, production, etc.

Coal Tables. Statement showing the coal production, consumption, and number of persons employed, in the principal countries of the world, in each year from ... to ..., as far as the particulars can be stated. [There are variations in the title.] Published covering various periods between 1883 and 1924. [NEIMME has 1883-1893, 1883-1894, 1883-1895, 1883-1896, 1883-1899, 1883-1901, 1883-1903, 1901-1924.]

The Mineral Industry of the British Empire and Foreign Countries: Statistical summaries (Production, Imports, and Exports) [NEIMME has volumes covering 1913-1971] Has figures for Britain. Also volumes for 1913-22 covering a particular mineral with more detail and including value, eg Coal, coke and by-products; Lead.

The Mines Inspectors reports have accident data – numbers, types, causes, death rates; employee information by age, occupation, colliery district, etc; output. For more information see the Library resource guide: *Mines Inspectors reports.*

Summaries of the statistical information contained in the reports of Her Majesty's inspectors of mines... [with variations of title]. For 1888-1896 [NEIMME has all - bound with the Inspectors reports for the year] Employees, output, fatal accidents, shift hours during accidents, death rates – mostly by districts.

Report by the Chief Labour Correspondent on the strikes and lockouts of with statistical tables. Annual for 1888-1900 [NEIMME has all] Lists of disputes, including mining. Descriptions of major ones, days lost, numbers affected.

Report on strikes and lock-outs in the United Kingdom in, and on conciliation and arbitration rules. Annual for 1901-1913. [NEIMME has for 1901-1909] Continuation of the above title with similar content.

Report by the Chief Labour Correspondent on trade unions with statistical tables 5th 1891 [as Statistical tables and report on trade unions]; 6th 1892 ; 7th 1893 ; 8th 1894 and 1895

Members, incomes, membership paid, mortality, compensation, funeral payments, etc.

Government reports – wages and hours of work

Return of rates of wages in mines and quarries in the United Kingdom 1890-1 Tracts **234** 637-756 Wages, numbers employed, by types of mine, occupation, district.

Report of the Board of Trade on the relation of wages in certain industries to the costs of production. 1891 Tracts **234** 759-954 Including coal mining.

Return showing average number of hours worked in a week's work in the chief trade centres ...in the years 1850, 1860, 1870, 1880, 1890 ...mining..... 1890. Tracts **234** 957-1030

Returns of wages published between 1830 and 1886. 1887 *Tracts* **234** 17-457 Including mining.

Return showing the average number of hours and days daily and weekly worked by men and boys from bank to bank, and otherwise, in and about mines in the United Kingdom. 1890 Tracts **213** 421-428

Royal Commissions, Select Committees

1800 *Report from the Committee appointed to consider the coal trade of this kingdom.* 23 June 1800

1800 *Report from the Select Committee appointed to enquire into the coal trade of this kingdom*, 31 December 1800 (These two in one volume printed 1829) Quantities, prices, exports, duty, transport.

1829 House of Lords *Select Committee on the coal trade*. Quantities, prices, exports, duty.

1836 *Report from the Select Committee on the state of the coal trade*, North East to London, etc. Prices, costs, ships, duties, tonnage.

1871 Report of the commissioners appointed to inquire into the several matters relating to coal in the United Kingdom.

Vol III Report Committee E: statistics of production, consumption and export of coal – lots of figures for various periods/areas/uses; export, prices.

1873 *Report from the Select Committee on the present dearness and scarcity of coal*; together with the proceedings of the committee, minutes of evidence, and appendix. Prices, exports, consumption.

1892 Answers to the schedules of questions issued by the Royal Commission of Labour. Group A: Mining, iron, engineering, hardware, shipbuilding and cognate trades. Some figures on accidents. Responses from unions, etc- wages, deductions, hours, strikes, lockouts – in different places.

1893 *Minutes of evidence taken before the Royal Commission on Labour (sitting as a whole.) Representatives of cooperative societies and of various movements and public officials.* Coop, Labour, BoT, TUC... Few mining statistics. Some comparative mortality figures.

1905 *Royal Commission on Coal Supplies*. Final report, including regional surveys + evidence, appendices.

Available resources by coalfield; exports; overseas output.

1907 Departmental committee on probable economic effect of a limit of 8 hours to the working day of coal miners. First report and Final report with minutes of evidence and appendices.

Output, prices, hours of work, wages, travelling time underground, meal times, machinery in use. Many figures for overseas as well as UK – latter sometimes by district.

1908 Cost of living of the working classes. Report of an enquiry by the Board of Trade into working class rents, housing and retail prices, together with the standard rates of wages prevailing in certain occupations in the principal industrial towns of the United Kingdom. Summary + town by town.

Occupations listed do not include mining, but the numbers in mining are given from the 1901 Census for appropriate towns. Notes on housing and rents.

1914 *Royal Commission on Metalliferous Mines and Quarries*. 1914. Minutes of evidence with index and appendices. 3 vols.

Appendices have summary statistics and other information- accidents, output, number of employees, death rates.

1918-19 *Royal Commission on the Coal Industry* [Sankey Commission], 3 vols. Output, earnings, exports, time lost.

1925 Royal Commission on the Coal Industry. Vols 2, 2a Minutes of evidence and vol 3 Appendices. Employment, wages (by occupation; by age if under 21), production costs, output, prices.

Northumberland and Durham publications

Durham Coal Owners' Association. *County agreements and decisions regarding miners, deputies, enginemen and mechanics*. 1925 Brief note on wages. Durham Coal Owners' Association *Wages and trade customs, 1874, together with statistics and other matters relating to the Durham coal-field,* 1875. Very detailed by colliery. Also a volume for 1876.

Durham Miners' Association *Changes in wages on the Durham coal trade*, 1871-1924. 1924 Changes and reasons.

Simpson, John Bell *Capital and labour in coal mining during the past two hundred years.* 1900 Selling price of coal on the Tyne; chart of hewers wages 1700-c.1895; other wages

Steam Collieries Defence Association *Wages and trade customs, 1873, together with statistics and other matter relating to the Northumberland coal-field.* 1874. Very detailed by colliery. Also a volume for 1875 and one with both years.

Yearbooks

Colliery year book and coal trades directory. 1922-1965.

[NEIMME has 1928, 1939-64]

Statistics: resources; production; prices; costs of production and distribution, including wages; capital expenditure; exports; distribution; industrial and domestic consumption; employment; accidents, including list of disasters; disease; compensation; number of baths; machinery used; list of disputes and days lost; horses used; opencast output; international comparisons. May cover a number of years or a long period. (Not all figures are included in all years). Extracted from Mines Inspectors reports; Royal Commissions; government returns on labour, transport, prices and energy; academic papers, etc.

The North Country and Yorkshire coal annual for 1921.

coal shipments from NE ports – foreign and coastwise – latter to named ports. Output, wages, royalties for Northumberland, Durham, Yorkshire, Great Britain. Comparative figures for Northumberland, Durham, Yorkshire, UK over time; reserves; coal prices; wage agreements.

The South Wales Coal Annual for 1912 Wages over time; prices; exports from particular ports; coastwise.

Journals

Mining magazine From 1910 there are statistics of production - international and mainly metal - no coal.

Colliery guardian

Has items on coal prices, imports, exports, share prices at various periods over the years from 1861. No long term figures.

Mining journal

International coverage and includes metals extraction and production too. Covers coal prices, share prices, especially in the 19th Century from 1835. May be occasional articles too on specific regions or on accidents.

Transactions, NEIMME, Transactions, Institution of Mining Engineers

Use the subject indexes – Admin section in classified index or output, wages, etc in others. Occasional articles, but mostly discussing statistics - especially accidents – rather than presenting figures.

Durham Mining Museum website

This has some statistical material at *http://www.dmm.org.uk/stats/index.htm* "In this section we present some statistical tables showing data related to the Coal Mining Industry in the UK presenting some of the data in the statistical tables in a graphical form for easy comparison. Most of the data in these tables was extracted from editions of The *Colliery Year Book and Coal Trades Directory* and combined into the form you find available here."

Tables:

- Fatal accidents at all Mines from 1873 to 1953, distinguishing the principal causes.
- Non-Fatal accidents at all Mines from 1908 to 1945, distinguishing the principal causes
 Total number of Persons Injured, so far as reported.
- Non-Fatal accidents at all Mines from 1908 to 1945, distinguishing the principal causes Number of persons seriously injured.
- Output of Saleable Coal in the Principal Districts of Great Britain and Ireland and the Total Selling Value at Pit (1877-1956)

Graphs:

- Fatal Accidents in the UK Coal Industry 1873-1962
- Fatal Accidents in the UK Coal Industry 1873-1962, Fatalities per 1,000 persons employed
- Output of Saleable coal for County Durham 1877-1956
- Output of Saleable coal for Northumberland 1877-1946
- Output of Saleable coal UK Total 1877-1956
- Tonnage Output per man 1877-1956
- Total Selling Value at Pit 1882-1946