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GEOGRAPHICAL DISTRIBUTION OF LARGE FIRES
DURING THE PERIOD 1966-1970

by

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FIRE RESEARCH STATION

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G. Ramachandran

SUMMARY

This note contains data on the frequency and total cost in large fires that occurred during the period 1966-1970 according to the brigades which attended these fires. These were fires which caused losses of £10,000 or more in direct damage.

KEY WORDS: Large, fire, loss, distribution, brigades

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INTRODUCTION

Since 1965 the Station has been receiving fire loss information provided by the British Insurance Association on all fires in which the loss by direct damage was estimated at £10,000 or more. Previous notes^{1,2,3} on the subject contain analyses of these fires according to hazards, sources of ignition, extent of spread etc. From 1968, statistics on large fires are also being published in United Kingdom Fire and Loss Statistics^{4,5} (Section IV).

Data on large fires for different regions of the country may be of local interest and the table given in this note shows the number of large fires and total losses in the various fire brigade areas for the period 1966-1970. (Brigade areas with average frequencies of about two or less fires per year have not been shown separately). The average loss per large fire has also been shown. The figures in the table have not been adjusted for the decreasing value of money. Brigade wise distribution of large fires that occurred in 1965 has already been published⁶.

SOME NOTES ON THE TABLE

There was a considerable geographical variation in the frequency of large fires and the total loss in these fires.

Most of the increases in the frequency of large fires over the five year period can be attributed to inflation (i.e. an increasing number of fires cause losses of £10,000 or over at current values). In Northern Ireland, there is a significant increase in frequency since 1969 due to factors other than inflation; the average loss, however, is not increasing.

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Large fires - Brigade wise distribution

| Brigades | 1966 | | 1967 | | 1968 | | 1969 | | 1970 | | For the five year period | | |
|----------------------------------|------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------------|--------------------|-----------------------------|
| | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | Loss per large fire (£'000) |
| | <u>County Brigades</u> | | | | | | | | | | | | |
| Berkshire and Reading | 5 | 502 | 3 | 107 | 11 | 723 | 6 | 161 | 7 | 149 | 32 | 1,642 | 51.3 |
| Buckinghamshire | 13 | 462 | 6 | 252 | 12 | 448 | 23 | 1,012 | 18 | 1,849 | 72 | 4,023 | 55.8 |
| Cheshire | 11 | 649 | 9 | 710 | 17 | 1,609 | 12 | 634 | 22 | 1,365 | 71 | 4,967 | 69.9 |
| Cornwall | 3 | 61 | 3 | 57 | 2 | 130 | 6 | 420 | 1 | 72 | 15 | 740 | 49.3 |
| Denbighshire and Montgomeryshire | 4 | 77 | 4 | 153 | 1 | 18 | 3 | 65 | 1 | 15 | 13 | 328 | 25.2 |
| Derbyshire | 6 | 124 | 8 | 260 | 11 | 647 | 8 | 221 | 3 | 206 | 36 | 1,458 | 40.5 |
| Devon and Torbay | 8 | 184 | 5 | 304 | 6 | 223 | 5 | 215 | 4 | 187 | 28 | 1,113 | 39.7 |
| Dorset | 3 | 73 | 4 | 224 | 3 | 148 | 2 | 117 | 3 | 83 | 15 | 645 | 43.0 |
| Durham (County) | 17 | 977 | 15 | 1,614 | 8 | 164 | 8 | 1,952 | 8 | 350 | 56 | 5,057 | 90.3 |
| Essex | 26 | 2,197 | 14 | 522 | 19 | 475 | 26 | 1,900 | 25 | 2,726 | 110 | 7,820 | 71.0 |
| Flintshire | 1 | 18 | 4 | 191 | 2 | 435 | 6 | 817 | 2 | 54 | 15 | 1,515 | 101.0 |
| Glamorgan | 7 | 463 | 8 | 557 | 16 | 982 | 11 | 325 | 11 | 1,251 | 53 | 3,578 | 67.5 |
| Gloucestershire | 7 | 289 | 3 | 36 | 9 | 634 | 6 | 1,435 | 10 | 290 | 35 | 2,684 | 76.6 |
| Hampshire | 9 | 451 | 8 | 263 | 6 | 154 | 8 | 286 | 18 | 431 | 49 | 1,585 | 32.3 |
| Hertfordshire | 16 | 614 | 16 | 998 | 13 | 342 | 16 | 948 | 11 | 594 | 72 | 3,496 | 48.5 |
| Kent (incl. Canterbury) | 14 | 800 | 24 | 1,105 | 20 | 1,176 | 24 | 1,282 | 31 | 1,588 | 113 | 5,951 | 52.6 |

| Brigades | 1966 | | 1967 | | 1968 | | 1969 | | 1970 | | For the five year period | | |
|----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------------|--------------------|-----------------------------|
| | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | Loss per large fire (£'000) |
| Lancashire | 47 | 3,128 | 44 | 5,520 | 55 | 3,355 | 57 | 3,836 | 64 | 5,328 | 267 | 21,167 | 79.2 |
| Leicestershire and Rutland | 5 | 156 | 7 | 239 | 9 | 722 | 6 | 273 | 6 | 330 | 33 | 1,720 | 52.1 |
| Lincolnshire (Lindsey) | 5 | 129 | 8 | 362 | - | - | 5 | 282 | 11 | 900 | 29 | 1,673 | 57.6 |
| London | 148 | 7,853 | 137 | 6,084 | 132 | 10,607 | 136 | 10,382 | 172 | 9,205 | 725 | 44,131 | 60.8 |
| Monmouthshire | 1 | 13 | 4 | 176 | 5 | 193 | 6 | 137 | 6 | 373 | 22 | 892 | 40.5 |
| Norfolk | 2 | 37 | 5 | 233 | 5 | 234 | 8 | 327 | 7 | 347 | 27 | 1,178 | 43.6 |
| Northamptonshire | 4 | 271 | 4 | 298 | 3 | 647 | 6 | 195 | 5 | 177 | 22 | 1,588 | 72.1 |
| Northumberland | 4 | 569 | - | - | 7 | 151 | 7 | 270 | 6 | 211 | 24 | 1,201 | 50.0 |
| Nottinghamshire | 10 | 155 | 12 | 1,706 | 13 | 429 | 16 | 1,337 | 14 | 882 | 65 | 4,509 | 69.3 |
| Oxfordshire | 1 | 20 | 2 | 73 | 4 | 551 | 6 | 284 | 1 | 17 | 14 | 945 | 67.5 |
| Shropshire | 10 | 749 | 4 | 76 | 6 | 154 | 6 | 611 | 4 | 356 | 30 | 1,946 | 64.8 |
| Somerset | 2 | 521 | 2 | 97 | 7 | 140 | 7 | 224 | 6 | 569 | 24 | 1,551 | 64.6 |
| Staffordshire | 11 | 780 | 15 | 817 | 10 | 533 | 16 | 802 | 11 | 1,089 | 63 | 4,021 | 63.8 |
| Suffolk & Ipswich | 7 | 505 | 10 | 391 | 11 | 230 | 7 | 299 | 8 | 268 | 43 | 1,693 | 39.3 |
| Surrey | 15 | 1,271 | 10 | 247 | 14 | 586 | 13 | 339 | 14 | 926 | 66 | 3,369 | 51.0 |
| Sussex, East | 2 | 429 | 4 | 274 | 6 | 140 | 2 | 32 | 4 | 108 | 18 | 983 | 54.6 |
| Sussex, West | 5 | 122 | 7 | 240 | 6 | 253 | 7 | 1,004 | 5 | 526 | 30 | 2,145 | 71.5 |
| Warwickshire | 1 | 17 | 8 | 961 | 5 | 254 | 6 | 120 | 13 | 413 | 33 | 1,765 | 53.4 |

| Brigades | 1966 | | 1967 | | 1968 | | 1969 | | 1970 | | For the five year period | | |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------------|--------------------|-----------------------------|
| | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | Loss per large fire (£'000) |
| Wiltshire | 5 | 873 | 6 | 165 | 2 | 25 | 3 | 38 | 4 | 170 | 20 | 1,271 | 63.5 |
| Worcester City & County | 10 | 628 | 6 | 613 | 11 | 460 | 9 | 434 | 7 | 942 | 43 | 3,077 | 71.5 |
| Yorkshire (East Riding) | 3 | 166 | 1 | 11 | 4 | 64 | 4 | 522 | 2 | 40 | 14 | 803 | 57.3 |
| Yorkshire (North Riding) | 6 | 202 | 5 | 262 | 4 | 307 | 1 | 50 | 2 | 36 | 18 | 857 | 47.6 |
| Yorkshire (West Riding) | 30 | 1,765 | 37 | 2,958 | 23 | 3,500 | 39 | 5,138 | 32 | 1,794 | 161 | 15,155 | 94.1 |
| Other County Brigades | 16 | 518 | 22 | 1,008 | 20 | 1,746 | 43 | 2,782 | 34 | 4,600 | 135 | 10,654 | 78.9 |
| Total for County Brigades | 500 | 28,818 | 494 | 30,164 | 518 | 33,589 | 586 | 41,508 | 613 | 40,817 | 2,711 | 174,896 | 64.5 |
| <u>County Borough Brigades</u> | | | | | | | | | | | | | |
| Birmingham | 19 | 1,202 | 35 | 2,316 | 32 | 1,467 | 20 | 1,258 | 33 | 1,545 | 139 | 7,788 | 56.0 |
| Blackburn | 3 | 111 | 5 | 231 | 5 | 285 | 5 | 245 | 5 | 317 | 23 | 1,189 | 51.6 |
| Blackpool | 5 | 176 | 2 | 1,816 | 2 | 24 | 7 | 226 | 2 | 131 | 18 | 2,373 | 131.8 |
| Bolton | 9 | 480 | 3 | 137 | 8 | 157 | 4 | 110 | 2 | 92 | 26 | 976 | 37.5 |
| Bradford | 11 | 716 | 6 | 174 | 12 | 817 | 20 | 2,091 | 17 | 697 | 66 | 4,495 | 68.1 |
| Bristol | 4 | 391 | 9 | 306 | 9 | 216 | 8 | 252 | 7 | 329 | 37 | 1,494 | 40.3 |
| Burnley | 4 | 321 | 3 | 51 | 3 | 1,226 | 9 | 504 | - | - | 19 | 2,102 | 110.6 |
| Bury | 6 | 247 | 6 | 170 | 3 | 230 | 1 | 50 | 5 | 134 | 21 | 831 | 39.5 |
| Cardiff | 4 | 105 | 9 | 259 | 6 | 95 | 5 | 229 | 3 | 169 | 27 | 857 | 31.7 |
| Coventry | 3 | 207 | 2 | 44 | 3 | 217 | 3 | 90 | 4 | 131 | 15 | 689 | 45.9 |

| Brigades | 1966 | | 1967 | | 1968 | | 1969 | | 1970 | | For the five year period | | |
|-----------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------------|--------------------|-----------------------------|
| | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | Loss per large fire (£'000) |
| Derby | 2 | 35 | 3 | 39 | 2 | 40 | 7 | 298 | 3 | 69 | 17 | 481 | 28.2 |
| Dewsbury | 3 | 102 | 5 | 201 | 1 | 21 | 3 | 58 | 1 | 23 | 13 | 405 | 31.1 |
| Huddersfield | 5 | 134 | 11 | 2,233 | 6 | 224 | 11 | 356 | 5 | 429 | 38 | 3,376 | 88.8 |
| Kingston upon Hull | 2 | 30 | 8 | 263 | 3 | 120 | 7 | 355 | 5 | 113 | 25 | 881 | 35.2 |
| Leeds | 18 | 1,308 | 17 | 646 | 24 | 1,237 | 21 | 756 | 28 | 1,905 | 108 | 5,852 | 54.1 |
| Leicester | 9 | 417 | 8 | 331 | 8 | 418 | 7 | 292 | 4 | 257 | 36 | 1,715 | 47.6 |
| Lincoln | 4 | 243 | - | - | 3 | 65 | 5 | 881 | 2 | 74 | 14 | 1,263 | 90.2 |
| Liverpool | 13 | 445 | 17 | 533 | 25 | 3,497 | 25 | 1,182 | 13 | 545 | 93 | 6,202 | 66.6 |
| Luton | - | - | 8 | 719 | 3 | 258 | 2 | 50 | 3 | 71 | 16 | 1,098 | 68.6 |
| Manchester | 23 | 1,683 | 23 | 877 | 21 | 756 | 34 | 1,407 | 26 | 1,251 | 127 | 5,974 | 47.0 |
| Newcastle upon Tyne and Gateshead | 11 | 232 | 13 | 377 | 5 | 270 | 13 | 1,456 | 13 | 400 | 55 | 2,735 | 49.7 |
| Newport | 6 | 158 | 1 | 15 | 4 | 626 | 4 | 201 | 3 | 51 | 18 | 1,051 | 58.3 |
| Nottingham | 14 | 443 | 7 | 564 | 11 | 440 | 12 | 631 | 3 | 498 | 47 | 2,576 | 54.8 |
| Oldham | 6 | 148 | 1 | 56 | 4 | 99 | 3 | 93 | 3 | 63 | 17 | 459 | 27.0 |
| Portsmouth | 7 | 176 | 1 | 253 | 2 | 197 | 2 | 2,128 | 3 | 80 | 15 | 2,834 | 188.9 |
| Preston | 1 | 16 | 4 | 91 | 5 | 381 | 2 | 27 | 4 | 642 | 16 | 1,157 | 72.3 |
| Rochdale | 4 | 1,455 | 7 | 474 | 5 | 298 | 5 | 244 | 1 | 23 | 22 | 2,494 | 113.3 |
| Salford | 3 | 93 | 5 | 131 | 6 | 158 | 4 | 175 | 6 | 166 | 24 | 723 | 30.1 |

| Brigades | 1966 | | 1967 | | 1968 | | 1969 | | 1970 | | For the five year period | | |
|-------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------------|--------------------|-----------------------------|
| | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | No. of large fires | Total loss (£'000) | Loss per large fire (£'000) |
| South Eastern | 16 | 350 | 10 | 702 | 21 | 1,293 | 14 | 459 | 11 | 282 | 72 | 3,086 | 42.8 |
| Fife | 4 | 92 | 4 | 68 | 5 | 200 | 5 | 221 | 5 | 164 | 23 | 745 | 32.3 |
| Perth and Kinross | 3 | 59 | 4 | 101 | 2 | 89 | 4 | 121 | 3 | 197 | 16 | 567 | 35.4 |
| Angus | 9 | 549 | 8 | 259 | 12 | 441 | 14 | 477 | 10 | 382 | 53 | 2,108 | 39.7 |
| North Eastern | 3 | 271 | 13 | 310 | 12 | 225 | 8 | 777 | 7 | 211 | 43 | 1,794 | 41.7 |
| Northern | 1 | 89 | 3 | 56 | 3 | 43 | 3 | 121 | 5 | 81 | 15 | 390 | 26.0 |
| Total Scottish Brigades | 85 | 3,536 | 110 | 5,821 | 141 | 7,871 | 134 | 7,070 | 109 | 6,270 | 579 | 30,568 | 57.2 |
| <u>Northern Ireland</u> | | | | | | | | | | | | | |
| North | 4 | 581 | 4 | 333 | 2 | 75 | 3 | 140 | 10 | 294 | 23 | 1,423 | 61.8 |
| South | 4 | 104 | 5 | 97 | 2 | 42 | 4 | 247 | 9 | 159 | 24 | 649 | 27.0 |
| West | 3 | 81 | 2 | 166 | 3 | 43 | 4 | 164 | 15 | 507 | 27 | 961 | 35.5 |
| Belfast | 9 | 658 | 14 | 1,251 | 6 | 677 | 22 | 1,166 | 24 | 1,248 | 75 | 5,000 | 66.6 |
| Total Northern Ireland | 20 | 1,424 | 25 | 1,847 | 13 | 837 | 33 | 1,717 | 58 | 2,208 | 149 | 8,033 | 53.9 |
| Unknown | 2 | 20 | 2 | 27 | - | - | 3 | 108 | 5 | 202 | 12 | 357 | 29.7 |
| Total (United Kingdom) | 890 | 48,370 | 928 | 55,708 | 1,005 | 61,564 | 1,118 | 78,212 | 1,115 | 69,944 | 5,056 | 313,798 | 62.0 |

