

**Public elementary schools and food supply in war time : memorandum for teachers in rural and suburban schools / Board of Education.**

**Contributors**

Great Britain. Board of Education

**Publication/Creation**

London : [H.M.S.O.], 1916.

**Persistent URL**

<https://wellcomecollection.org/works/cd5uj9sc>

**License and attribution**

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection  
183 Euston Road  
London NW1 2BE UK  
T +44 (0)20 7611 8722  
E [library@wellcomecollection.org](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>

*(This Paper may be referred to as Circular 944.)*

BOARD OF EDUCATION.

---

PUBLIC ELEMENTARY SCHOOLS AND FOOD  
SUPPLY IN WAR TIME.

---

Memorandum for Teachers in Rural and Suburban  
Schools.

---



LONDON:  
PRINTED UNDER THE AUTHORITY OF HIS MAJESTY'S  
STATIONERY OFFICE  
By VACHER & SONS, LIMITED, WESTMINSTER HOUSE, GREAT SMITH STREET, S.W.

To be purchased, either directly or through any Bookseller, from  
WYMAN AND SONS, LIMITED, 29, BREAMS BUILDINGS, FETTER LANE, E.C.,  
and 54, ST. MARY STREET, CARDIFF; or  
H.M. STATIONERY OFFICE (SCOTTISH BRANCH),  
23, FORTH STREET, EDINBURGH; or  
E. PONSONBY, LIMITED, 116, GRAFTON STREET, DUBLIN;  
or from the Agencies in the British Colonies and Dependencies,  
the United States of America and other Foreign Countries of  
T. FISHER UNWIN, LIMITED, LONDON, W.C.

1916.

*Price One Penny.*

WELLCOME  
LIBRARY

P

9434



22502624513



# PUBLIC ELEMENTARY SCHOOLS AND FOOD SUPPLY IN WAR TIME.

## Memorandum for Teachers in Rural and Suburban Schools.

1. The Board of Education have been requested by the President of the Board of Agriculture and Fisheries to draw the attention of Local Education Authorities, School-Managers, Teachers, Parents, and others interested in the work of Elementary Schools to the need for maintaining and increasing the supply of home-grown food of all kinds. The Board are well aware how much useful work has already been done in connection with the war by the Elementary Schools and they recognise the difficulties under which many schools are being conducted owing to the absence of teachers on military service. But they feel confident that every Elementary School which is in a position to do so will be ready to assist at the present time in any work which can contribute directly or indirectly to the national welfare.

2. This Memorandum is limited to indicating briefly some of the minor industries and occupations for increasing food-supply which have been and can be taken up in connection with rural and semi-rural schools where circumstances are favourable. No attempt is made to give detailed suggestions for carrying them on. Such suggestions would have to vary widely in accordance with local conditions; and there are numerous publications—especially the leaflets issued by the Board of Agriculture and Fisheries—from which expert guidance in matters of detail can be obtained. The suggestions on Gardening and Winter Gardening issued by the Board of Education\* should also prove helpful.

### CHOICE OF WORK.

3. Of the various branches of practical work already undertaken in connection with Elementary Schools several are directly concerned with the production of food, viz.: Gardening; the keeping of poultry, pigeons, rabbits and bees, and, in a few schools, of pigs and goats; and (for girls in connection with Cookery lessons) the making of jam, the evaporating and bottling of fruits, and the drying of savoury herbs.

4. Before deciding which, if any, of these or similar occupations can be profitably undertaken in any particular school, all the circumstances of the school should be carefully considered—especially the knowledge and tastes of the teachers; the soil and situation: the possibility of acquiring land with reasonable security of tenure: the cost of carriage; the prices of manures and feeding-stuffs, and the prospects of marketing the produce to advantage. If it is proposed to keep pigs or goats, accurate information should be obtained respecting the Bye-laws which regulate the keeping of animals near houses. In all cases it will be advisable to discuss the project with the owners or occupiers of neighbouring premises.

\* These publications may be obtained from Messrs. Wyman & Sons, Ltd., Fetter Lane, London, E.C. Price 1d. each, post paid 1½d.



The sympathy and approval of the children's parents should also be sought; it may sometimes be possible to obtain their active co-operation.

#### GARDENING.

5. In October 1915 there were 3,129 school gardens in England, in which 56,037 children of elementary school age were receiving instruction in practical gardening. Efforts will no doubt be made, by intensive cultivation and a well-arranged system of secondary cropping, to use every yard of land in these gardens to the best advantage throughout the year. Some general suggestions, however, may be made as to various methods of extending the use of school-gardening at the present time.

6. Wherever possible, more land should be acquired. In suburban districts the use of vacant building plots, which in many cases will not be required for building purposes during the period of the war, might often be secured at a nominal rental. Waste lands and derelict cottage gardens might be brought into cultivation. Various schools have already done good service by reclaiming rough pieces of land which the village gardeners have hitherto regarded as useless for horticultural purposes. In some cases, where the ground is heavy, farmers have been willing to plough it in the first instance.

The school garden-class might offer their assistance in the management, or even take entire charge, of some of the cottage gardens where the men are serving with the Forces or are giving up their spare time to other war work.

Any extra land is best devoted mainly to vegetables, such as potatoes, onions, carrots, turnips, parsnips and beet root, which can be easily stored for use in winter and early spring. As these crops are gathered, the ground should be planted with winter greens of all kinds.

7. If new land is to be taken, it is of course imperative that the work of trenching the ground should begin early and that advantage should be taken of fine days in winter to push forward with the necessary digging, draining and fencing.

A dressing of lime will often be necessary for new gardens. The compost heap, including such materials as road sweepings (if free from tar or petrol), trimmings and household refuse, will prove useful for enriching the ground. Night soil can be used in some gardens for crops like onions, the cabbage family and runner-beans when the supply of stable and farmyard manure is limited. The value of soap-suds as an aid to manuring in summer has still to be fully appreciated.

8. The school can sometimes be made a "centre" for simple seed-testing, for distributing plants of the varieties most suitable to the district and for the economical purchase of seeds and chemical manures. Chemical manures are often misused or used wastefully; and the school can do very useful work in helping to spread information published by the Board of Agriculture and Fisheries with regard to suitable manuring of various crops. In some districts the school can help to foster co-operation among rural workers. Some teachers have been very successful in organising the collection of eggs and poultry and the purchase for joint use by allotment holders of useful but comparatively costly implements, *e.g.*, sprayers for potatoes and fruit, as well as in forming local clubs for the insurance of pigs and cattle.



9. In the management of a school garden at the present time there is special need for rigid economy in such matters as the thin sowing of small seeds, and the utilisation of thinnings, small potatoes, the trimmings of green vegetables, &c. as food for pigs, rabbits or fowls, where these are kept at the school or by neighbouring cottagers.

#### WORK FOR COOKERY CLASSES AND OLDER GIRLS.

10. The Board have already drawn the attention of teachers of Domestic Subjects and others to the need for increased economy in the preparation of food, and have issued a pamphlet entitled "Economy in Food," setting out methods of preparing meals at a moderate price and of using vegetables as a substitute for meat.\*

Many schools are so situated that it should not be difficult to establish a much closer connection than has hitherto existed between the school garden on the one hand and the Cookery class on the other. It is not desirable that the regular courses of Cookery lessons should be seriously disturbed; but it should be possible to give increased attention to certain aspects of the subject with a view, for example, to cultivating skill in the simple cooking of vegetables. More time also might be given to those branches of domestic work which in large households come within the province of the still-room maid but which are equally within the reach of the clever cottage housewife. These would include such work as:—

- (a) Jam making from such cheap fruits as apples, rhubarb, gooseberries, damsons and vegetable marrows. In some places wild fruit, *e.g.*, blackberries, can be used. It will be necessary to watch the price of sugar carefully with this work; with juicy fruits glucose can safely be used as a substitute, and with other fruits also if care is taken to dissolve it previous to use.
- (b) Bottling fresh fruit in water. In a few cases girls might be taught how to evaporate such fruits as apples and plums.
- (c) Making pickles and chutney. Young dwarf-beans and young carrots, onions and shallots, ridge cucumbers, red cabbage, cauliflowers and damsons may be mentioned as garden produce suitable for pickling, and gooseberries, marrows, tomatoes and apples for the making of chutney.

#### KEEPING OF LIVE STOCK.

11. What the School can do in the way of keeping bees, poultry or other stock must depend mainly on the teacher. A teacher who has had no practical experience and must depend solely on printed books and publications for advice is very unlikely to make a success of any of these forms of work.

There are, however, a number of teachers in rural districts who have gained the necessary experience in managing live stock of their own and who with local assistance could turn their knowledge to good use in their schools.

#### POULTRY KEEPING.

12. Poultry are probably the most convenient live stock for school and cottage purposes; and perhaps the easiest and most

---

\* Obtainable from Messrs. Wyman & Sons, Ltd., Fetter Lane, London, E.C. Price 1d., post paid 1½d.



profitable branch of poultry farming is the breeding and management of a few fowls specially selected for winter laying.

It is, of course, desirable that fowls should have a free run, but they also do well in confinement if properly fed, cleaned, housed and sheltered.

There may be a few schools so situated that it would be profitable to breed and feed chickens for the table, which could be sold either direct to the consumer or to a poulterer. Both eggs and dressed poultry are likely to command good prices owing to the stoppage of the usual supplies from France and Russia. Teachers who are experienced poultry keepers may be able to find opportunities for teaching the older children how to manage an incubator and foster-mother.

13. Occasional opportunities might be found even at schools situated in the midst of a considerable population for the practice of what is sometimes known as "backyard poultry farming." It may be noted that for egg production it is not at all necessary in these cases to keep a male-bird with the hens.

In low-lying districts where water and open ground are available Indian Runner ducks may be kept in substitution for, or along with, fowls. They are good layers and find much of the food they need for themselves.

#### RABBITS.

14. In some parts of the country the larger varieties of tame rabbits are fed for table use. Where a market is at hand, they are profitable stock for the small-holder, as their food may consist very largely of kitchen scraps and the wastage of the garden, with such additional fodder as may be gathered along the sides of country lanes and hedgerows. Occasionally they are kept to crop small lawns and grass surfaces. Most country boys know a good deal about the feeding and management of rabbits as pets, and there would as a rule be no difficulty in establishing a "school rabbitry," where room can be found for their accommodation. It will probably be necessary in most villages to find a market for the rabbits in neighbouring towns, since local prejudice usually prevents the use of tame rabbits for food in places where wild rabbits are plentiful.

#### BEEES.

15. A few years ago Bee-keeping in connection with school-gardens was taken up by a large number of teachers; but the frequent losses of valuable stocks, due to "Isle of Wight" bee-disease for which no effective remedy is yet forthcoming, have tended to discourage bee-keeping all over the country. It is the opinion of experts, however, that, at least in some districts, the disease is showing signs of wearing itself out, and it may soon be possible to resume bee-keeping with good hopes of success. Bees are very profitable in districts where their food plants grow abundantly.

#### PIGS AND GOATS.

16. The keeping of these animals by school children is a much more difficult matter, and should only be attempted when circumstances are favourable.



The keeping of pigs has the advantage of providing a constant supply of manure for the garden. In most cases, however, neither pigs nor goats can be kept at school unless the local Bye-laws have been relaxed on account of the war. Further, in view of the present high price of feeding-stuffs, the school which is to make a profit must organise a systematic collection of kitchen and garden waste from the children's homes or from houses in the neighbourhood where no poultry or pigs are kept.

#### WORK DURING HOLIDAYS.

17. The need for making special arrangements in order to keep the school garden in cultivation and to have the animals properly looked after during holidays should be borne in mind. As a rule the difficulty can easily be met through the goodwill of neighbours or the interest of the children themselves.

#### HANDICRAFT.

18. In many districts the work of the school in increasing food supply can be helped by the Manual Instruction Centres and Classes. Many necessary appliances for the garden and live-stock, *e.g.*, garden-frames, hand-lights, hand-barrows, weeding-trays, potato-boxes, fencing, &c. for the garden; and coops, nesting-boxes, feeding troughs, bee-hives, &c. for the live-stock, can easily be made at the Centres. In some schools tool-sheds, work-shops, poultry houses, rabbit hutches and other comparatively large wooden structures have been erected cheaply and expeditiously by the boys themselves.

#### THE COLLECTION OF WILD FRUITS, &c.

19. Country school-children have always found employment in their spare time during the summer and autumn months in the gathering of mushrooms, whortle-berries ("wimberries" or "bilberries" in various counties), blackberries, &c. for sale and for home use, and in many districts the summer holidays are so arranged as to coincide with the gathering seasons. In the present emergency, however, there is equal need for the collection of acorns, horse-chestnuts and beech-mast as food for stock, as well as for the cutting and drying of bracken and of clean roadside grasses for litter.

Children should be reminded that the harvesting of these wild products of field and hedgerow is important work; it can be shared by all except the very youngest children in country schools.

If acorns and horse-chestnuts are gathered for pigs or cattle (not dairy cows) kept at school or at home, they should only be given to stock sparingly and with great discretion, after consulting someone of experience or the Board of Agriculture's Leaflet on the subject.

With the marked rise in the price of drugs the cultivation of useful herbs and the gathering on a large scale of others which grow wild are being revived. The flowers of camomile, the petals of the poppy and the flowering tops of yarrow, the leaves of the foxglove and the roots of monkshood and valerian, for example, are quite easy to collect in many districts.

#### FINANCIAL AND GENERAL.

20. Teachers will naturally ask when all this practical work is to be done, and how the necessary capital is to be found. The following suggestions may be found useful:—



- (a) The work will be done, as a rule, partly during school hours and partly in the children's spare time. In suitable schools the time devoted in school hours to such subjects as Gardening may properly be increased; if the work is carefully organised and allocated to the children according to a pre-arranged "rota," there should be no need for any child to spend a disproportionate amount of his school-time at work of the kind described in this Memorandum.
- (b) The capital for starting such work as is discussed in this Memorandum is sometimes provided by the Local Education Authority; in other cases it is advanced by Managers, Teachers or others interested in the school, and its repayment (with interest thereon) by instalments is made a first charge on the income.

In some schools the children have formed Societies on co-operative profit-sharing lines, the children and teachers being the only shareholders. It is not necessary that all the children who take part in the work should take up shares; some may be employed by the Society, and when the dividend is declared a small sum is voted to them in return for their work.

Even if the children cannot be organised as a Society they may properly be entrusted under the teacher's supervision with the care of the accounts. Without attempting the formal study of book-keeping a simple set of accounts can be kept, orders for goods can be written and stock-taking carried out at intervals.

#### TWO WARNINGS.

21. (a) Teachers will need to impress strongly on the children the importance of getting through the outdoor work of the school in reasonable time. If children are allowed to loiter and "make a job last out" in order to escape indoor lessons, they will quickly acquire bad habits of indolence and more harm than good will result.

(b) All the practical work should be marked by scrupulous order, neatness and cleanliness. Tools and utensils of all kinds should be carefully cleaned every time they are used before putting them away in their proper places.

22. The following leaflets of the Board of Agriculture and Fisheries are recommended by them as especially useful for reading and reference in schools\* :—

#### 1. THE VEGETABLE GARDEN.

- |          |   |
|----------|---|
| No. 296. | Potato Growing in Allotments and Small Gardens. |
| „ 23.    | Potato Disease.                                 |
| „ 105.   | Wart Disease (Black Scab) of Potatoes.          |
| „ 193.   | Winter-Rot of Potatoes.                         |
| „ 264.   | The Cultivation of Onions.                      |
| „ 3.     | Flea Beetles.                                   |
| „ 10.    | Wire Worms.                                     |
| „ 11.    | Daddy Long-legs, or Crane Fly.                  |
| „ 19.    | Pea and Bean Weevils.                           |

---

\* Copies of any of the leaflets may be obtained, free of charge and post-free, on application to the Board of Agriculture and Fisheries, Whitehall Place, London, S.W. The letter of application need not be stamped.



- No. 48. Pea and Bean Thrips or Black Fly.  
 „ 25. Chafer-beetles or White-grubs.  
 „ 259. Swift Moths.  
 „ 33. Surface Caterpillars.  
 „ 94. Millipedes and Centipedes.  
 „ 104. Aphides or Plant-Lice.  
 „ 109. Cabbage Moth.  
 „ 132. Slugs and Snails.  
 „ 299. Harvesting and Storing of Garden Vegetables.  
 Special L. No. 1. Suggestions to Allotment Holders for Autumn  
 Treatment of Land.  
 „ „ „ 26. Suggestions to Allotment Holders for General  
 Cropping during the Spring and Summer Months.

## 2. THE FRUIT GARDEN.

- No. 148. The Planting of Fruit-trees and Bushes.  
 „ 207. Strawberry Cultivation.  
 „ 162. Grafting Fruit-trees.  
 „ 252. Pruning of Fruit-trees.  
 „ 134. Apple Culture.  
 „ 30. Codling Moth.  
 „ 16. Apple Sucker.  
 „ 4. Winter Moths.  
 „ 34. Woolly Aphis or Apple-Root Louse.  
 „ 107. Mussel Scale.  
 „ 205. The Apple Saw-fly.  
 „ 70. Treatment of Neglected Orchards.  
 „ 12. The Gooseberry Saw-fly.  
 „ 20. The Magpie Moth.  
 „ 195. American Gooseberry Mildew.  
 „ 14. Raspberry Moth.  
 „ 98. Grading and Packing of Fruit and Vegetables.  
 „ 283. Storage and Disposal of Apples and Pears.  
 „ 250. Fruit-bottling for Small-holders.  
 Special L. No. 5. Fruit Preserving for Small Market Growers or for  
 Domestic Use.

## 3. THE FARM.

- No. 74. Composition and Properties of Concentrated  
 Feeding Stuffs.  
 „ 79. Rations for Farm Stock.  
 „ 121. Construction of Pig Sties.  
 „ 100. Breeding and Management of Pigs.  
 „ 298. Pig-keeping for Cottagers and Smallholders.  
 „ 29. Swine Fever.  
 „ 192. Farm Butter-making.  
 „ 291. Food Value of Acorns, Horse-chestnuts and Beech-  
 mast.  
 „ 160. Cultivation of Lucerne.  
 „ 182. Crimson Clover.  
 „ 184. Red, White and Alsike Clovers.  
 „ 268. Cultivation of Field Beans.  
 „ 280. Sainfoin.



- No. 297. Seed Testing.  
 „ 112. Weeds and their Suppression.  
 „ 166. Some Common Thistles.  
 „ 251. Common Weeds. I.  
 „ 72. Purchase of Artificial Manures.  
 „ 80. Use of Artificial Manures.  
 „ 93. Farmyard Manure.  
 „ 170. Use of Lime in Agriculture.  
 Special L. No. 45. Calf Rearing.
4. POULTRY, RABBITS, BEES, GOATS.
- No. 294. Poultry Houses and Appliances for Allotment-holders, Cottagers and others.  
 „ 305. Selection of Breeding Stock and Rearing of Chickens.  
 „ 114. Feeding of Poultry.  
 „ 129. Winter Egg Production.  
 „ 83. Preservation of Eggs.  
 „ 157. Sale of Newly-hatched Chickens.  
 „ 176. Poultry Fattening.  
 „ 295. Marketing of Eggs.  
 „ 201. Marketing of Poultry.  
 „ 167. Ducks and Duck Breeding.  
 „ 57. External Parasites of Poultry.  
 „ 58. Nematode or Round Worm Diseases of Poultry.  
 „ 66. Fowl Cholera.  
 „ 111. Co-operative Egg and Poultry Societies.  
 „ 300. Breeding of Useful Pigeons.  
 „ 265. Rabbit Breeding for Smallholders.  
 „ 301. Rabbit Breeding for Smallholders—Housing and General Management.  
 „ 128. Advice to Beginners in Bee-keeping.  
 „ 141. Preparation of Honey for Market.  
 „ 253. Microsporidiosis of Bees (Isle of Wight Bee Disease).  
 „ 306. The Goat as a Source of Milk.  
 Special L. No. 2. Notes on Poultry Feeding.

#### 5. WILD BIRDS.

- No. 43. Titmice.  
 „ 44. Lapwing, Green Plover or Peewit.  
 „ 45. Starling.  
 „ 50. Water Wagtail or Dish-washer.  
 „ 51. White or Barn Owl.  
 „ 54. Spotted Fly-catcher.  
 „ 55. The Swallow.  
 „ 84. The House Sparrow.

#### 6. GENERAL.

- No. 215. How to Obtain an Allotment or Small-Holding.  
 „ 221. Mutual Insurance of Livestock.  
 „ 244. Destruction of Rats.  
 „ 147. Fences and Hedges.  
 „ 240. Farm Bookkeeping.  
 „ 288. Cultivation and Collection of Medicinal Plants in England.