

MINISTRY OF EDUCATION  
MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

REPORT BY H. M. INSPECTORS ON

*A Survey of  
Agricultural Education in Wiltshire,  
including the Lackham School of Agriculture*

INSPECTED DURING THE WEEK COMMENCING 19th NOVEMBER, 1956  
AND THE PERIOD FROM 13th to 17th MAY, 1957

NOTES

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HORSEFERRY ROAD, LONDON, S.W.1.

This HMI report from 1957 is held in the photograph album at Wiltshire College Lackham. It is reproduced here as it gives an interesting and historically useful "snapshot" of the College a scant 7 years after coming under Wiltshire County Council control ( for a full history of Agricultural Education in Wiltshire see J O Thomas' book)

The page layout of the original report has been kept but the page length is different and so a new Contents page has been constructed. The wording of the contents page is, however, as originally seen. The hyperlinks in this contents page will take you directly to the section required, clicking the [c] at the end of each section will return you to the Contents page.

The early history of the College is not widely known, and the publication of this report, Mr. Thomas' book and early photographs on the College website is an attempt to make this important period more accessible.

If you have any additional information please do get in touch

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August 2011

## Contents

### Introduction

#### SECTION "A" THE LACKHAM SCHOOL OF AGRICULTURE

- 1 History
- 2 Area Served
- 3 Government
- 4 Relationship with the Agricultural Industry
- 5 Premises - meals
- 6 Library
- 7 Accommodation
- 8 Staff
- 9 Social Life
- 10 Residential Short Courses
- 11 Courses of Study

General Agriculture  
Farm Machinery

- 13 The Farm

Farm Policy  
Farm Management  
Cropping and Livestock

- 14 Horticulture
- 15 Bee Keeping
- 16 Conclusion Recommendations

#### SECTION "B" SURVEY OF AGRICULTURAL EDUCATION IN WILTSHIRE

- 1 Day and Evening Classes
- 2 Rural Domestic Economy
- 3 Adapted Course for Women Students
- 4 Vacation Course for Wiltshire School boys and girls
- 5 Conclusion and Recommendations

## *Introduction*

The Prospectus of the Lackham School of Agriculture, Wiltshire, states that the School is the recognized home of Agricultural Education in the County. While the main purpose of the school is to provide instruction for its own students, the staff are also occupied in giving instruction at Part-time, Day and Evening classes, and demonstrations and talks to voluntary organizations in the County. The staff make advisory visits to domestic producers, small holders, poultry and bee keepers. The School co-operates with the National Agricultural Advisory Service as a centre for conferences and by providing demonstration plots, variety trials and grassland improvement schemes. It is difficult, therefore, to separate the Survey of Agricultural Education in Wiltshire from the Report on the School of Agriculture. The Rural Domestic Economy Department of the County Council has its own centre and Organiser in Trowbridge, but here again there is co-operation with the School, some of whose students attend the classes arranged at the Rural Domestic Economy Kitchen in Trowbridge on one day each week.

Following the Inspection of the School, a visit was paid to the Bath & West Agricultural Show at Swindon where the staff of the School and Rural Domestic Economy Department had given much time and thought to preparing comprehensive exhibits, in conjunction with then Ministry of Agriculture, Fisheries and Food. [c]

## *Section A*

### *The Lackham School of Agriculture*

#### 1 HISTORY

in 1945 the County Council purchased the L House Estate and it was loaned to the Ministry of Agriculture for the training of ex-service men, the administration being under the County Agricultural Executive Committee. The establishment was named the LSA and became the Wiltshire Farm Institute in 1950, with 250 acres of farm land attached to the School and two other smaller holdings let off. [c]

#### 2 AREA SERVED

Wiltshire has a population of 402,800. The number of employed persons in 1955 was 136,768, of whom 35,000 were females. The analysis of these employed persons within the main industries includes

Agriculture & Forestry	10,708
Engineering	11,349
Building & Contracting	12,729
Distributive Trades	12,605

Public Administration	12,048
Professional Services	11,029
Vehicles	23,254

Students are drawn from a much wider area than embraced by the County boundary. The geographical distribution of students since 1953 has been as follows

	in County	Out County
1953/54	31	13
1954/55	24	20
1955/56	30	19
1956/57	34	14 . [c]

### 3 GOVERNMENT OF THE INSTITUTE

The Lackham School of Agriculture has no separate governing body. When the Wiltshire Farm Institute was established in September 1950 the Education Committee decided that the Agricultural Education Sub-Committee should be re-constituted and should be called the Agricultural Education and Farm Institute Sub-Committee . Additional members were appointed to serve on the Sub Committee which appointed two sub-committees, one for matters relating to the Lackham Farm, Gardens and Estate and the other for matters relating to the School and Hostel. When appointing the additional members to serve on the main Sub Committee consideration was given to particular interests and knowledge of the people concerned.

The Agricultural Education and Farm Institute Sub Committee consists of 17members of the Education Committee and 8 non-Education Committee members together with the Chairman of the County Council and the Chairman of the County Finance Committee . The Education Committee in 1955 delegated to the Agricultural Education and Farm Institute Sub Committee certain powers and duties. . [c]

### 4 RELATIONSHIP WITH THE AGRICULTURAL INDUSTRY

Links with the National Farmers Union , National Union of Agricultural Workers, Regional Councils etc include the following :-

Farming members of the Agricultural Education and Farm Institute Sub Committee are also members of the National Farmers Union. Certain of them are also members of the County Agricultural Executive Committee

The County Secretary of the National Union of Agricultural Workers is a member of the Agricultural Education and Farm Institute Sub Committee and of the Lackham Farm Sub Committee

The County Agricultural Officer of the National Agricultural Advisory Service is a member of the Agricultural Education and Farm Institute Sub Committee

The School is a 'member' of the local branch of the National Farmers Union in the name of the Principal

The Principal is a member of the Agricultural Sub Committee of the South-West and Southern Regional Councils for Further Education and serves on the City and Guilds of London Institute Agricultural Advisory Committee. He is a member of the Technical Development Sub Committee of the County Executive Committee and of the Sub Committee of the County Federation of Young Farmers' Clubs

The School Children's Vacation Course which is held each year at Lackham the direct result of a suggestion put forward by the County branch of the National Farmers Union who make small grant towards the cost. Conferences etc are arranged in conjunction with the National Agricultural Advisory Service are held at Lackham from time to time and field trials are also arranged.

Parties from Young Farmers' Clubs, Agricultural Discussion Groups, Wiltshire Association of Dairy Students, Women's Institutes etc visit the school. An Open Evening is held each year following Speech Day, and includes a farm tour.

The County Secretaries of the National Farmers Union and National Union of Agricultural Workers, prominent farmers, members of the National Agricultural Advisory Service, both county and provincial, visit the school during term as visiting speakers. [\[c\]](#)

## 5 PREMISES

The Lackham House Mansion was adapted to provide facilities for boarding, catering and teaching. The rooms are large but not conveniently situated for classrooms and parts of the building are apt to be gloomy.

The men students with one or two members of staff, have sleeping accommodation on the upper floor. The students sleep three or four in each room, with a separate bedroom for a member of staff. The latter provision is too small but cannot be altered.

The girl students' provision is small, one room for three students and one room for two students. The furniture in all the dormitories is rather poor and is a minimum provision. The girls' quarters could be made more attractive. There is a small

bathroom for them which is also used by the Assistant Matron. There is a sitting room with electric fire, but it is not very attractive. The girls students have a changing room equipped with bath and wash basins. There is an ironing room, and another room with lockers and lines for outdoor clothes. There are heating pipes in this room, but they are inadequate for drying wet clothes.

The Matron has a bed-sitting-room and private bathroom, but the accommodation for the Assistant Matron is only a small bed-sitting-room.

The only sick room is in the mens' quarters. If the girls are ill their food has to be carried up to the third floor to their own rooms.

### KITCHEN PREMISIES

These are at a lower level than the dining room with steps up to the service hatch. There is a pantry and a larder and, across a small yard, there is a vegetable store and preparation room. The equipment includes two Esse major cookers, and electric range and grill, a large Hobart mixing machine, a bacon slicing machine , a refrigerator and a potato peeling machine .

Staffing in the kitchens is adequate and the service of meals reasonable, but some adjustments might save labour.

The main meals are breakfast , dinner and high tea. The meals are well planned and are providing adequate diet. More fresh fruit and vegetables would be an improvement. The meals are generally well cooked and served really hot. It is recommended that vegetables should be cooked nearer the time they are to be served. Menus are not as varied as they might be. It would be more economical to buy more of the cheaper cuts of meat and it is understood that the contract is to be reviewed. Some foods which are at present bought in small tins might be made form the raw ingredients. Home made cakes would give better value for money than so many bought ones. . [\[c\]](#)

### 6 LIBRARY

There are some 500 books, and an annual expenditure of £75. The library is good considering how recently it was established. The technical books are up-to-date and there is a good link with the County Library. Quiet study facilities are provided. Section references and the organisation of the library are good.

The book shelves are conveniently arranged and the selection of books up-to-date. The annual expenditure is sufficient to keep student needs supplied. The chief agricultural, horticultural and farm machinery periodicals are available. . [\[c\]](#)

## 7 ACCOMMODATION

The Principal has a pleasant large room, used for staff and student interviews, and for some lectures

The office is a rather dark room, but it is conveniently placed and serves its purpose

There is a pleasant, adequately furnished staff common room and a large, rather bare students' room used by all the students. The girls also have a small room upstairs, exclusively for their use.

The offices for use by members of staff are very poor, cramped and cold hut sections. Better staff accommodation should be provided.

Rooms used for teaching in the main building are rather large but useful for evening talks when outsiders may come in. During the Inspection one large room was taken over for a social choral evening.

Conversion of stables near at hand has provided two useful classrooms and a science laboratory. . [\[c\]](#)

## 8 THE STAFF

The Principal has been well known in the field of Agricultural Education for many years. At Lackham he has built up a team spirit among his staff, and the students have confidence in him. He is a good organiser and keeps in touch with modern farming practice.

The Vice-Principal is a graduate on the Senior Assistant scale with a special responsibility allowance. He takes charge of the dairy herds and the pigs, and lectures in livestock husbandry.

The Warden is an Oxford graduate in History, a valuable member of staff.

The Assistant Lecturer in Livestock Husbandry is also a graduate.

The other full-time members of staff include a Lecturer in Agricultural Science; an Assistant Lecturer in Crop Husbandry, also acting as Assistant Warden, who teaches Crops, Soils and Farm Calculations; a lady who is Lecturer in Poultry Husbandry holding the NDP and a teaching certificate; the Horticultural Officer,



and his assistant, both qualified with the NDH, which implies commercial horticultural experience ; and a Lecturer in Bee Keeping, holding the Master Bee-Keepers' Certificate of the BBKA. There is a visiting Veterinary Surgeon.

The Farm staff and estate employees work under the general direction of the Principal. The Farm Bailiff supervises the workers on the farm. He has two head herdsmen; a relief man; an assistant herdsman; a practical instructor, a manual process worker; a pig and poultry man; a tractor driver; three general farm workers; three gardeners, and a poultry assistant. In addition there is an excellent woodman and estate carpenter.

The office has a Secretary-clerk who is responsible for the telephone switchboard, post, filing and many other things. The office is undoubtedly understaffed. Another junior for the telephone and taking messages within the School would seem to be necessary.

Although the Senior Lecturers and the Principal are first class teachers, there is some weakness among the younger staff, mainly due to lack of experience. The Principal frequently addresses the students, and visiting parties. He has personality, is a good leader of his staff, and an inspiration to the students.

The younger members would greatly benefit by a course in teaching method.

All the staff teach or demonstrate everyday at the School and during winter take Evening Classes two or three times per week. The Horticultural Officer also puts in 25 hours per week on extra-mural services. The woodman instructs in estate work, forestry, hedging and maintains 100 acres of woodland. The estate carpenter instructs in woodwork, and building repairs. These two men are fine craftsmen and invaluable in practical demonstrations.

The Vice Principal gives well planned vigorous talks as a master of his subject. He has much practical experience. The assistant Lecturer in Livestock Husbandry has a quiet voice and unassuming manner but his knowledge is such that he is never at a loss for an answer to awkward questions and this is done with a touch of humour.

The Crop Husbandry Lecturer is keenly interested in the cropping of the farm, and the grassland management. The students respond well because the farm is brought so close to them in his talks. This lecturer helps on the social side and is a good influence all round.

The lecturer in Agricultural Science is well qualified, but attempts too much, almost to sixth form standards. He does not link his class work sufficiently with the farm outside, although very keen to teach facts. His approach to his work was discussed with him fully and he will no doubt improve. He would greatly benefit by attending a course on teaching method.

The instruction in Poultry Management is exceptionally good.

The part-time Veterinary Surgeon gave a masterly talk on some common diseases of livestock, and dealt most successfully with questions.

The organisation of the curriculum, the use of schemes of work and the balance in the timetable were matters discussed with the Principal.

The discipline maintained within the classrooms was excellent.

The Warden lectures in History, English, Calculations and Comparative Agriculture. His interest in liberal education is valuable. His is an experienced teacher and a first class influence with the students, by whom he is greatly respected.

The Matron is a woman of great character. She works very hard in the school house and has the comfort and welfare of the students always in mind. She is an invaluable member of the staff. . [\[c\]](#)

## 9 THE STUDENTS

Enrolments by age during the last four sessions are given below

		Total	Under 17 on entry	17 to 18 on entry	18 to 20 on entry	20 and over on entry
1953/54	Men	38	4	11	6	17
	Women	6	0	2	4	0
1954/55	Men	40	5	12	7	16
	Women	4	0	2	2	0
1955/56	Men	44	2	11	15	16
	Women	5	2	1	1	1
1956/57	Men	45	3	17	12	11
	Women	5	1	2	2	0

The students were of very mixed ability. Their background and previous education were as shown in the following table

	1953/54	1954/55	1955/56	1956/57
Public school	4	1	0	4
Grammar	16	16	17	16
Private	8	9	12	12
Sec.Mod or all range	16	18	20	16

*Faming*

*background*

Sons / daughters of Famers, Farm Workers	15	14	18	16
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*Employment after leaving Lackham*

The question is sometimes raised as to how many students on leaving remain in agriculture or some allied industry and how many farm at home. This is indicated below

	Since the School of Agriculture was formed including period used as an ex-servicemen's training centre	Sessions 1953/54, 1954/55 and 1955/56
Total	422	110
Farming on own account or home farm	16.1%	16.4%
Management	4.5%	2.7%
Overseas	11%	12.7%
Farm assistants	25%	21.8%
Horticulture	1.8%	0.9%
Poultry	1.7%	1.8%
Ancillary	10%	17.3%
Forces	4%	10.9%
Further Education	2%	10.9%
No trace	23%	4.6%

Examination results - those gaining the Certificate awarded by the School - are :-

	General Agricultural Course	Supplementary Course
1953/54	29	8
1954/55	28	7
1955/56	27	15

[\[c\]](#)

## 10. SOCIAL LIFE

The students are a nappy group. Their behaviour is good and most of them take an active part in the corporate and social life of the school.

### *Games*

All students take part in recreational activities on each Wednesday afternoon. This normally takes the form of the major game (Soccer or Cricket) together with other activities for the remainder (Squash, Cross Country Running, Athletics, Tennis, Swimming). The small number of students not Interested in any of these activities are taken in the Laboratory or Workshop.

- (a) *Football*, Coaching is given by the Warden and staff. Practice Games are held every Wednesday. Matches are played every Saturday. During the Season 1956-7 23 matches were played.
- (b) *Cricket*. There is a practice net and regular coaching is given by the Warden in the evenings. inter-Sectional games are played on Wednesdays. Matches are arranged on Saturdays, Sundays and evenings.
- (b) *Tennis*. Two hard courts are available and are extensively used. Play is organised on Wednesday afternoons and help is given to learners. Standards have not so far warranted the arrangement of matches.
- (c) *Squash*. The court is a valuable asset during the winter months. Matches are arranged fortnightly. Many students learn this game whilst at Lackham, Instruction being given by members of the staff.
- (d) *Athletics and Cross Country*. Facilities exist for both track! and field event practice in the summer and the cross country team has practice runs each Wednesday and at other times. Sports Day is held at the end of the session and 4 or 5 Cross Country races are held.
- (e) *Swimming* is one of the activities available on Wednesdays and a Swimming Sports is held at the end of the session. Every effort is made to teach non-swimmers.

### *Clubs:*

Activity of this sort varies greatly from year to year. Currently there are

a Choral Society meeting weekly for instruction and a Natural History Society which was formed in the Spring term and has met from time to time, including an organised excursion to Wild Fowl Trust at Sllmbridge.

A Record Club was formed in two sections, Modern and Classical, and has met fortnightly. A Boat Club rows at Bradford-on-Avon and is building a canoe for use at Lackham. Dancing classes are conducted by a student.

Other Social Activities include films on about 4 or 5 Sundays per term, 2 or 3 dances per term, Whist Drives and a participation in the Chippenham Carnival. Visits are exchanged with Gloucester, Somerset and Dorset Farm Institutes and take the form of a Farm Walk followed by sporting contests. . [c]

## 11. RESIDENTIAL SHORT COURSES.

Those held during the past three years have included: a school children's course during each summer vacation,

Rural Industries Bureau courses during each Christmas vacation\*

A course arranged in conjunction with The British Electrical Development Association during the Christmas vacation of the 1955/56 session,

A course for Wiltshire school teachers held during the summer I vacation of 1955 and a further course during the Easter vacation of the current session, and a course for Beekeepers during the summer vacation of 1953.

The school childrens<sup>1</sup> course and its content is worthy of special note. It seems to form a close living link not only with the schools but also with parents and teachers. The children delight in all they find to do. They are kept very hard at work and they enjoy it. The swimming pool is a great attraction recreationally. There are always far more applicants than places. . [c]

## 12. COURSES OF STUDY

The School offers:

### *General Agriculture (one year)*

The students spend approximately half their time on the farm and their theoretical studies are closely linked with practical application. They also visit farms, factories and research stations, to study special problems, including production and management.

There is a slight modification of the curriculum for women students. They take classes on one day per week in Rural Domestic Economy instead of farm machinery and estate work.

Students have just commenced taking the new National Certificate in Agriculture Examination and the City and Guilds examinations in Farm Machinery, Operation and Maintenance.

The curriculum includes Animal Husbandry, Crop Husbandry, Farm Management, Dairy Husbandry and Bacteriology, Elementary Veterinary Science, Farm Machinery, Poultry Husbandry, Horticulture, Beekeeping, Woodwork, Forestry and Rural Domestic Subjects (for women students).

Equipment for science teaching, particularly small equipment which students can use themselves, needs to be increased. Soil sieves and soil augurs are needed.

Lectures might more often give way to demonstrations and discussions, and to practical work by students. For more effective demonstrations a micro-projector and a binocular microscope would be useful additional equipment, and glass-fronted cupboards for specimens useful in teaching ought to be provided.

The many terms and names of organs, mentioned in animal nutrition, animal husbandry and veterinary science, would have more meaning if specimens could be shown to students in the laboratory or by visits to slaughter-houses. Plans should be carefully made for this sort of supplement to lectures.

The fullest possible use of the farm, particularly during the students' practical activities on the farm, is worth aiming at in the agricultural science classes. The schemes of work in animal nutrition and soil studies have some interesting features and some very effective lecturing was heard. The carefully organised system of "preparations" carried out in spare time by the students is a most interesting and valuable feature. The written work of the student is helpfully corrected. The special enquiries they undertake in their studies of the grasses and the legumes of the Institute farm is an approach to the subject which might be emulated in agricultural science.

The schemes of the Supplementary and Diploma courses contain much which also features in the main course. For students following on from main to supplementary courses this may mean repetition and wasted time. . [c]

### *farm. Machinery*

During the one-year course in Farm Machinery and Crop Husbandry, the students attend the North-West Wiltshire College of Further Education, Chippenham on half-a-day a week for Engineering Drawing and Workshop Practice. The instruction is on good lines and the students respond very well. Students on this course sit for the City and Guilds examination No. 260, Agricultural Mechanics Work.

The Accommodation and equipment are good and the workshop is well arranged but some extensions would be advantageous, particularly for B welding. It may be possible however to make greater use of the work-shop facilities at N.W. Wiltshire College at Chippenham. The teachers' schemes of work are well prepared. There is good co-operation with the College of Further Education and it is to be hoped that this co-operation will continue especially as the facilities at Chippenham are being improved.

A room is being prepared for use as a Mechanical Science laboratory. A separate laboratory to deal with Mechanics and Science applied to processes and operations connected with farming is desirable. If placed on the ground floor parts of machines could be used for simple experiments. At the present the technique is more of a "school" approach to fundamental science, whereas the study of fundamental principles should be traced on the design of an implement or the nature of an operation.

Experimental work should be carried out by the students themselves as well as demonstrations by the teacher.

The main branches of Engineering Science could thus be dealt with in the special laboratory or in the workshops. Much good practical work is done by "rule of thumb" rather than by a scientific approach. Thus in blacksmithing when heat is applied to metals, the student should know something of the change in structure of the material, and the consequent changes in working properties.

Cutting processes indicate the need for some knowledge of the design of cutting edges of tools, which require to be related to the variety of materials that a farmer is likely to require to cut. Hence some knowledge of the materials to be met in farming should form part of the Science curriculum.

To this could be added heat and simple heat treatments of metals; the principles of mechanics as applied to the design, operation and use of farm equipment and buildings; a knowledge of the influence of friction in the use and operation of machines; simple hydraulics; electrical circuits and the principles upon which they are based; the principles of design and operation of the more simple types of electric motors and generators; and their application to farm appliances. This list is not exhaustive and it is to be hoped that the school will be able to introduce more examples.

The senior lecturer for farm machinery is well qualified. Besides being a good teacher he undertakes the design of storage equipment. He has an able assistant with a competent manner.

The work done in the College or Further Education is satisfactory and it is to be hoped that the co-operation between the two institutions will be strengthened by more frequent discussions between the staffs concerned.

The students' keen interest in their studies and the generally pleasant atmosphere indicate that there is a good relationship between staff and students. . [\[c\]](#)

### 13. THE FARM

The property is easy of access, close to Chippenham, and extends to some 375 acres, of which 337 are farm land.

The soil varies from light oolitic brash at the western end to a ridge of Oxford clay type running east and west towards the north end of the property, with a sound medium loam in the centre. The river Avon borders the estate to the North East, East and South East, and some 63 acres adjoining the river are either steep or liable to flood, and remain as permanent

pasture. in addition there are some 30 acres of pasture for the dairy herds, making some 100 acres in all. There are four sets of buildings, and internal roads are good. . [c]

*Farm, Policy.* The north-west corner of Wiltshire is largely an area of small grass farms primarily devoted to livestock, and the same emphasis has conditioned the policy at Lackham.

The approach has been realistic and the development of the buildings and farm enterprises essentially that of the business farmer. The result is refreshing and has been equally valuable from the standpoint of the staff and the students - who have helped to modernise the buildings. in the result there are now sets of buildings for two dairy herds, pigs and poultry, and yarded stock, which have been economically developed.

It does mean, however, that tillage cropping is circumscribed within narrow limits. in spite of every endeavour it is difficult to introduce on an economic basis a farming policy which is characteristic of much of the land to the east and south, and in the light of the excellent 'Farm costings' which are kept at Lackham, to develop what is evidently the most profitable side of present day farming.

This aspect is one that forces serious consideration. in brief 265 acres of farm land are being used in 1957 for cattle, which in the last year showed an appreciable loss, in spite of every endeavour at the full utilisation of home grown food. On the other hand there was a profit of over £1,000 shown from some 50 acres of cash crops -largely wheat, potatoes, and sugar beet - and a similar margin from the pigs which used only a very small acreage of land. The production of beef from the dairy herds might well be developed. . [c]

*Farm Management.* The livestock appear well managed and also the grass and crops. Modern techniques are used. The delegation by the Principal of responsibility for the various sections of the farm (under his general control) to members of the agricultural teaching staff is sound.

It will be interesting to follow the relative results at different levels of production of the Frieslan and Shorthorn dairy herds. Irrigation from the river should prove profitable. Above all it will be interesting .to Judge the relative profit- -ability of the various farm enterprises, which in the space of only six years are bound to have had their ups and downs. The last overall profit is satisfactory and forms a good basis for a teaching unit. . [c]

*Cropping and Livestock.* The whole enterprise is essentially one of livestock. There are four sets of buildings:-

1. Home Farm: there is a herd of 39 Frieslans and followers. Their production averaged as high as 1,275 gallons on three times a day milking and is now reduced to 1,050 on normal milking.
2. Notton Farm: 30 Dairy Shorthorns since 1952, plus followers, average 700 gallons. A few beef bullocks are kept.
3. Biddestone Lane Farm is on the other side of the main road and is used for wintering cattle. It is light land and is kept with 3.year ley and 2 year crop.
4. Cuckoo Bush Farm has been converted for pigs, poultry and a cattle yard. There are 6 Hereford cows and a number of cross bred animals are brought in to be fattened up for



beef. There is a small flock of 40 - 45 Clun ewes which appear to be doing well and the lambs are got out at 3 - 4 months. Some 300 tons of silage are made, using meta-bisulphate under a Dutch barn.

The conversion of the buildings has been sensibly carried out by a great deal of estate labour with student aid, and there is a practical farming aspect to the whole affair. The arable side is limited but as a live stock farm it should do well, provided that every care is given to economy and feeding, particularly of cattle.

Attention is paid to the management and use of grass. Silage making is a prominent feature, but other forms of grass conservation are also explored.

An electrically heated corn sack-drier, has recently been put up and its operational cost is being watched closely. The dairy herds are well managed.

The students' practical time-tables ensure that each one spends some days in each department on practical work. Students are punctual on their early morning rota of duty. The farm staff are reasonably co-operative and patient with students in teaching craft work and skills. The woodman and the estate carpenter are particularly good men and good demonstrators.

*The Poultry Section* is in different parts of the farm. There are battery and deep litter egg production units and some very useful breeding pens, and rearing facilities. The Poultry Instructress is responsible for this organisation.

*The Pigs* are well managed and organised for labour saving, easy weighing, and food control. Students can see how buildings can be adapted without capital expenditure, and at minimum cost for repair. In the piggeries, in the cowsheds, and in the poultry section details of feeding are clearly shown, and students make up their notes from the data given. They weigh, and record data of feed-g and of production, which enables them to link up class room eory with actual practice.

*& estate woodlands* are maintained and students are initiated into the elementary principles of the planting and the maintenance of woods. They are taught how to split timber for fencing stakes and how to make gates and repair fences. They are also taught concrete block making, suitable for building walls and partitions. . [c]

## . HORTICULTURE

*The Garden and Grounds* cover 12 acres, about three acres being ornamental and pleasure gardens, the remainder being used for produce-on and teaching. The ornamental gardens bear some fine specimen trees; a long shrub and herbaceous border leads to a woodland garden and a terrace near the house is planted with roses. One man is in charge of this area.

A walled garden of one acre, containing glass-houses, is cropped with vegetables, some under Dutch lights, (of which there are 250), and soft fruit. This garden is low-lying, surrounded by trees and expensive to maintain, and the long borders on the outside walls lead to the difficulties of upkeep. The glass-houses, 11 in all, are of an obsolete pattern, several are almost

derelict and the remainder do not appear to be worth the repairs they need. The potting shed is too small for teaching purposes.

A four acre orchard, planted in 1950 on higher land about a mile from the Institute, has just been allowed to go down to grass. It consists mainly of apples, one acre being Cox's, but several other varieties are included, as well as some pears and plums. The trees are now starting into production.

A field of three acres, some distance from the walled garden, is used for the mechanised production of vegetables, mainly roots and brassicas, and yet another acre plot carries soft fruit and rhubarb.

Apart from the work done by the students all these enterprises are maintained by one man and a girl. Produce is grown for use in the hostel, surpluses are marketed and an effort is made to cover costs of production. Taking into account the difficulties of maintaining the unit, the crops look well and the gardens are clean and neat equipment and tools are well kept.

The present facilities are adequate to meet the needs of the students taking the General Agricultural course. The main adverse comment is that almost no provision is made for giving instruction in the propagation of fruit or for the initial planting and training of young trees. This important aspect of fruit growing should receive consideration.

The students, who follow a syllabus dealing with commercial fruit and vegetable production, have one lecture a week and spend one week in six of their practical time in the gardens. The theoretical instruction is competently dealt with, but more careful scrutiny of the students' notebooks, some of which contain many spelling errors is required. Close links between theory and practice are maintained, but the practical instruction might be more effective if more demonstrations could be introduced. By this means every practical period would include the teaching of some particular operation and thus be of greater value than is always the case at present.

The extra-mural work in Horticulture is the responsibility of another member of the staff. It consists mainly of advisory visits to private gardens, and a considerable number of these, between 30 and 40 a month, is being made. While this work has its value, it is thought that the lecturer's time would be better spent in giving lectures and demonstrations to groups. During last winter only three or four single lectures and one course of seven lectures were given. This appears to have been the case in the previous winter as well.

In order to develop the extra-mural work better provision for teaching and demonstrating at the Institute is required. If a course in Rural Domestic Economy for women is to be started the modification of the horticulture unit will also be necessary for teaching the essentials of farmhouse gardening. The same kind of provision will meet both these needs.

What is envisaged is a small, compact unit which would be reasonably economic to maintain and would be so planned that modern methods of cultivation could be employed and new techniques demonstrated. Above all, the standards of cultivation should be high, an impossibility under present conditions. The present walled garden and associated glass-houses is not satisfactory for this purpose, and cannot be made so. It is suggested, therefore, that, as soon as

convenient, a new unit should be designed specifically to meet the present and future demands. This might consist of one or more allotment plots and small fruit gardens, to show the production of fruit and vegetables for the household, together with propagation plots and sufficient space to allow the cultivation of ornamental subjects, herbaceous plants, shrubs and climbers. In conjunction with such a unit there should be a small and well planned glass-house area, possibly comprising one commercial type tomato house, a small plant house, and a propagating house. A Dutch-light structure would also be of value, and would utilise some of the Dutch-light frames already available. For use with this unit a new potting shed, sufficiently spacious to accommodate visiting parties for demonstrations, would be necessary. This change of emphasis will affect the production of crops for sale to some extent,, but some reduction is unavoidable in the interests of educational efficiency.

The horticultural unit should be well to the fore as the educational centre of the county to which domestic and private producers can look for example and advice. . [c]

## 15. BEE-KEEPING

The facilities for Bee-keeping are among the best in the country. About twenty stocks of bees and a dozen or so nuclei are admirably sited for demonstration purposes. Within easy reach is a well-equipped extracting room with access to a spacious workshop with ample storage space as well as benches for the assembly of appliances < by the students. The equipment, generally, is particularly applicable to commercial bee-keepers, although the needs of the domestic users have not been overlooked.

The county was fortunate in having an enterprising County Beekeeping instructor in the early days. His influence is still apparent. He was succeeded two years ago by a keen man whose standards of work, demonstration and teaching are creditable and whose interest in colour photography has been well used in the preparation of sets of coloured slides for use with students, with pupils in schools and in lecturing to County Associations.

A well-defined course has been devised. The Principal has arranged a programme of exceptional interest. All the students are introduced to the craft during the first term, after which those selected (nine this year) complete the course and are usually successful in passing the Preliminary examination of the British Bee-Keepers' Association. Allied to their normal crop experiences on the farm and animal husbandry courses, the students must leave with a balanced appreciation of the value of bees for pollinating seed and fruit crops; in this connection, detailed observation by students of bees visiting flowers is a valuable training. In the workshop the students are meticulous in the construction and accurate assembly of frames and the wiring of sheets of bees wax. This training is also being fostered in the laboratory where an observation hive had been established for the study of the behaviour, life cycle and habits of the bees as a living community.

A close link is maintained by the County Bee-Keeping Instructor with the County Association and its twelve or so branches. He is also seconded during the summer months to operate the Foul Brood and Diseases Order: this dual role he performs with skill and satisfaction. It is gratifying to find that he has access to schools, yet it is somewhat surprising to hear that only six schools are known to be interested in bees; that this should be so in a county-like Wiltshire is most unusual. Another feature that seems exceptional is the small number, (said to be fifty

last year) of advisory visits paid by the County Bee-keeping Instructor; that the demand should be so slight, in spite of the publicity given the School and the issue of helpful leaflets and charts prepared by the Instructor, is difficult to understand. No doubt, as the public become aware of the excellent facilities available, greater use will be made of them. . [c]

## 16. CONCLUSION

The Lackham School of Agriculture offers a splendid opportunity for further education in agriculture. There is a personal touch which encourages students and individual tutorial help is available from the staff. The course is adapted for women. The Principal and his staff work well together and confer frequently.

Special interest in Farm Machinery will continue as farmers are becoming more and more machinery conscious.

The County Council is to be congratulated on the establishment of a School of Agriculture which is already recognised as a leading one in its field of work.

The Principal is to be congratulated on his foresight and zeal in keeping ahead of farm developments and on utilising his facilities and opportunities to such good advantage, both at the School, and in extra-mural activities. Co-operation with the schools in the County and with the National Agricultural Advisory Service is a pleasing feature of the work.

The exhibits contributed to the Bath and West Show at Swindon deserved special praise. Student demonstrations at this Show attracted much attention.

## RECOMMENDATIONS

1. The farm policy, Including choice of breeds, needs constant review and possibly a change of emphasis.
2. The technique in dealing with Mechanics and Science needs adjustment to relate the simple principles of Applied Mechanics to the field Implements.
3. Instruction on simple heat treatments, friction and simple electric motors, could be added to the Science syllabus.
4. Equipment for Science teaching needs to be supplemented. Specimen cupboards should be provided.
5. A cine-projector would add to general teaching facilities, and enable more use to be made of scientific films bearing on research.
6. Better horticultural provision is necessary.
7. The horticultural unit may be needed for teaching essentials of 'farmhouse gardening in connection with the R.D.E. course later on, but cannot teach sound practice in Its present state.
8. Better office accommodation is urgently required for members of the teaching staff.

9. The adaptation of the general course to suit women students must be strictly limited under present conditions. Finding better facilities than are available at the Trowbridge kitchens it is doubtful whether Rural Domestic Economy should be included in the women's course. The scheme of work is too ambitious for the time allowed.

10. The delay in building a properly planned Rural Domestic Economy Block at the School of Agriculture with adequate hostel accommodation has been a chapter of disappointment. It has meant the continued use of cramped inadequate premises. It is hoped that plans for development at Lackham will be implemented as soon as possible. . [c]

*Section "B" Survey of other Agricultural Education in Wiltshire*

**1. DAY AND EVENING CLASSES**

This work is organised partly by the Principal of the Lackham School of Agriculture and partly by the County Organiser for Rural Domestic Economy whose headquarters are at County Hall, Trowbridge.

The Schedule arranged for the 1956-57 Session covered day and evening classes at a number of centres throughout Wiltshire.

Part-time nrv classes one day per week for sixteen weeks were at Chippenham, Devizes and Salisbury.

Evening classes were held as follows:-

Burbage	Farm Machinery
Salisbury	Poultry Keeping
Swindon	Pigs and Poultry
Tisbury	Crops and Grassland
Trowbridge	Livestock Husbandry
Warminster	Poultry
Warminster	Livestock Husbandry.

These evening classes were virtually short courses of 8 to 12 weeks in duration and commenced at 7.30 p.m. The County National Farmers Union Branch Secretaries helped with publicity. The syllabuses covered elementary principles and were adapted to meet the levels of ability of the students. The staff of the Lackham School of Agriculture were mainly responsible for the talks given, but some help was given by staff of the National Agricultural Advisory Service. The programme for Part-time classes was as follows: -

Chippenham	Attendance 13	10.30 -12. 0	Machinery
		1.0 -3. 0	Livestock & Crops
Devizes	Attendance 8	10.0 -12. 0	Livestock
		1.0 - 2.30	Machinery

Salisbury

Attendance 15

10.0 - 12.0

Crops

1.0 - 2.30

Machinery

The evening classes mentioned were taken, in each case, by only one lecturer with the exception of Swindon where the course dealt with more than one subject. In this case there was close cooperation with the staff of the Advisory Service.

The same weakness in teaching was apparent with one or two members engaged in this work as was noted during the Lackham School 'Inspection. There is insufficient preparation and a tendency to go too fast for the class to understand. Poor use is made of the black-board. On the other hand some of the talks, particularly at Burbage, were excellent and held the audience completely. As always, the bringing of material, such as worn parts of implements or samples of fertilisers and foods, greatly improved the relationship between class and teacher. Students attending these talks are often (physically tired after strenuous farm work. This was apparent once at Chilpenham where some of those attending came from local Services' camps.

At one centre, there was a repetition of notes given a year [previously. One of the students, who was attending for a second year quite rightly complained. It is important to make clear to students [what the composition of the course is to be; in any case it is 'desirable for lecture content to be reviewed year by year. This emphasises the need of some training in teaching method, at some time or other, for each member of staff.

At Chilpenham the subject "Rearing of Calves", with practical points of management and actual examples of digestive troubles, kept the audience very attentive. The talk was given and summarised very ably. The only serious weakness was that no member of the class said a single word or asked a question for 57 minutes. There were some good questions in the last two minutes, but the class was by then restless and impatient to get away.

Another talk, on "Tillages", was most ably prepared with plenty of material to break up the talk. There were some excellent illustrations of effects of cultivation, shown as lantern slides.

A talk on "Milk Recording" was very good. The class was shown from actual examples the value of complete records as a basis of selections for breeding. This was a good practical approach to a complicated subject.

The evening class at Burbage had 44 on the register, most of whom were present. The subject was the "Maintenance and Care of Power-driven Grass Mowers and Binders". The audience was critical but constructive and this talk was most valuable. Many were farmers, or sons of farmers, and one or two were local farm contractors. The Lecturer was a man of great experience and was obviously held in great respect.

The course in Pigs and Poultry at Swindon was held in the Technical College. This was the largest audience of all and the most intelligent. There had been joint preparation and co-operation in publicity by the Ministry of Agriculture staff and the Lackham staff, and every help was given by the College, the main lecture hall being used. Attendances varied from 40 to 60 at the six Monday lectures. A charge of 5/-d. was payable or 1/-d. for any single lecture.

The course was very full, as it dealt not only with principles, but also with costings and management, with comparative returns by good and not-so-good methods. Those attending the course were given a brochure of leaflets setting out all the main economic points, with actual costs and figures. After the course arrangements were made for members to visit notable pig and poultry holdings.

Evening classes were seen at other centres including Salisbury where a practical demonstration was given in December on the preparation and trussing of poultry, a topical subject which filled a room, to standing only, with members of the local Poultry Club.

The full list of extra mural work by members of the Lackham staff for the week commencing 19th November is shown below: -

<i>Day</i>	<i>Subject</i>	<i>Day or evening</i>	<i>Place</i>	<i>Time</i>
Monday	"Pigs"	Evening	Tech. Instlt Swindon	7.30 p.m.
	"Livestock Husbandry"	Day Release	Forncett Hse.	11 a.m. -12 noon
	"Farm Machinery"	Day Release	Salisbury )	1-2.30 p.m.
	"Livestock Husbandry"	Evening	Nelson Haydon ) Boys' School ) Trowbrldge )	7.30 p.m.
	Lecture - )			
	"What is a fresh egg" )	Evening	Chseldon	7.0 p.m.
	Horticulture	Evening	Allotments Assn.) Wroughton, Nr. ) Swindon )	7.30 p.m.
Tuesday	"livestock Husbandry"	Day Release	King's Head, ) Market Place)	1-2 p.m.
	"Farm Machinery"	Day Release	Chippenham	10.30 a.m. to 12 noon
	"Poultry Husbandry"	Evening	F.E. Instlt. ) Warminster )	7.30 P.m.
	"Crop Husbandry"	Evening	Beckford Arms,) ) Tisbury )	7.30 p.m.
	"Beekeeping"	Day	Tldworth Down ) Sec. Mod. School )	1.30 p.m.
Wednes- day	"Livestock Husbandry"	Day Release	Lansdowne House	10-11 a.m.
	".Farm Machinery"	Day Release	Devizes	1-2.30 p.m.
	"Farm Machinery"	Evening	Village Hall ,) Burbage )	7.30p.m.
	"Poultry Husbandry"	Evening	St. Thomas <sup>1</sup> Sch.) Salisbury )	7.30 p.m.
	"Beekeeping"	Day	Pewsey Sec. Mod.) School )	2.50 p.m.
	"Beekeeping"	Day	Dauntsey's Sch.)	4.45 p.m.

			West Lavlington )	
Friday	"Allotments"	Evening	Ramsbury Sch.	7.30 p.m.

This work, additional to teaching in the daytime at the School of Agriculture, demands a good deal of travelling, preparation and application.

The extra-mural work, also includes several occasional and short groups of talks as the demand arises.

The average attendance for Part-time Day classes is approximately twelve, and for Evening classes twenty, but weather conditions have a great effect upon attendances in rural centres.

The Horticultural Officer spends some 25 hours per week, on advisory services and visits to Individual domestic producers.

The Lecturer in Bee-keeping pays up to thirty visits per week to apiaries in the County as Foul Brood Officer. . [\[c\]](#)

## 2. RURAL DOMESTIC ECONOMY

The County Education Committee provide a Rural Domestic Economy lecture, demonstration, and advisory service for country housewives.

This service is also available to Day and Evening Institutes of Further Education and to all Voluntary Organisations in the County, such as Women's Institutes, Townswomen's Guilds, young Farmers' Clubs, Dairy Students, British Legions, Horticultural Associations, etc.

The subjects dealt with cover a wide field such as,-the preservation of produce, the utilisation of the country housewife's resources, the garden, the land and education, etc.

Practical classes can be arranged at the Rural Domestic Economy kitchen or at Palmer Gardens, Trowbridge, or at suitable village or town centres, private gardens or kitchens anywhere in the County.

The staff responsible for this work are the County Organiser for Rural Subjects and Rural Domestic Economy with three Assistant Organisers.

This service has been provided by the L.E.A. for many years. It has always been under the general direction of the Rural Subjects Organiser, whose interest and enthusiasm have successfully guided it through some difficult periods. The extra-mural work, and the short courses arranged by her comprise the major section of the activities undertaken by the two instructresses, one of whom is experienced and has qualifications in horticulture and the various branches of food preservation. The other joined the staff recently and is a graduate of Queen Elizabeth College, London University, with wide experience in several directions. This is her first post as a Rural Domestic Economy instructress.

The programme and the planning of the service are detailed and adequate notice of future courses is circulated to the organisations concerned so that they may make up their annual programmes. Single lectures and demonstrations are given to Women's Institutes, Towns-



women's Guilds and British Legion meetings, and to the following clubs:- Youth, including Young Farmers, Young Wives, Garrison and Service Wives, and Parent Teachers' Associations.

Short courses of more than one session with practical work are encouraged and the demand is increasing. An interesting feature in this connection has been the holding of small cookery and preservation classes in farmhouse kitchens. Judging at shows and assisting with competitions and proficiency tests in various crafts are also undertaken. Both instructresses quickly establish good relations with adults, whether in small or large groups, and much of the success of this side of their work is due to the mutual respect between them and their audiences or students. In some of the demonstrations seen during the Inspection there was perhaps a tendency to give too much information. Sometimes the lack of ordered sequence made the teaching a little difficult to follow. The importance of emphasising a few really essential points was not always appreciated.

The above work is carried out at a small basement kitchen in Trowbridge. It is also used as a teaching kitchen for women students from the County Farm Institute as well as for short courses and practical classes. It has no larder or other storage accommodation, and, although it is reasonably well-equipped, working conditions (particularly when extra-mural demonstrations have to be prepared while a practical class is going on) are very difficult. Indeed, its use was expected to be temporary, but the delay in building a rural domestic economy block at the Farm Institute has meant the continued use of very cramped and inadequate premises. It is to be hoped that the plans for development at Lackham will be implemented as soon as possible. . [c]

### 3. ADAPTED COURSE FOR WOMEN STUDENTS FROM THE- FARM INSTITUTE

Five women students from Lackham go to Trowbridge for one day a week for three terms. The scheme covers cookery, nutrition, food preservation, gardening, butter and cheesemaking, in addition to various aspects of farmhouse management. It is too ambitious and too wide in scope for the conditions imposed by the premises and for the time allowed. The major part of the teaching is in the hands of one of the Instructresses, who is assisted by other members of the Authority's staff. The conditions already referred to and her limited experience in the teaching and organising of practical classes make her task a very difficult one. She has, however, faced the problem with courage and common sense and her good scientific knowledge of domestic science has made the theoretical aspects of the subject of considerable interest to the students.

The following points need consideration:-

- (a) Until better premises and more time can be provided the scheme should be limited in scope
- (b) The general plan of work might be so devised that the more theoretical aspects could be taken in the afternoon thus leaving a reasonably long period in the morning for practical work such as Cookery.
- (c) In the practical cookery sessions there should be more emphasis on the planning, cooking and service of simple meals rather than on isolated dishes. It is important that the

students should finish the course having enough confidence and practical ability to cook a variety of simple meals.

- (d) The varied background of the students is a difficult problem but it should be possible to make plans which would allow the more able girls to do more advanced work.

A good many of the difficulties inherent in the above course should disappear when proper premises and conditions are provided at Lackham. At present Rural Domestic Economy has to be treated in isolation and the desirable Integration with the farming background is very difficult, If not impossible, to achieve. Failing the provision of adequate premises It is doubtful If Rural Domestic Economy should be included in the women's course. . [c]

#### 4. VACATION COURSE FOR WILTSHIRE SCHOOL BOYS AND GIRLS

This course is held at the School every year at the close of the summer term and is one of the most valuable and rewarding activities of the staff. It is organised in co-operation with the schools. in one sense It forms a shop window for schoolchildren to see for themselves what goes on at a Farm Institute. But it is much more than this. It gives some of the children their first real Impression of living things and the part which science plays in such a variety of ways in agriculture.

The course is very popular and applications for admittance are far more than the places available. Over 100 applications were received from the schools for the io.s6 Course which eventually contained £7boys and 28 girls. The girls occupied the bottom floor of dormitories ana the boys the top floor, each floor under firm and friendly supervision, in residence. The fee charged for the Whole course is a bare cost-of-living fee, only £3.10.0 for 11 days. The National Farmers' Union grants aid with £10 to help those who otherwise might not be able to Join. The schools in Wiltshire, as well as the N.F.U., think highly of the educational value of this course and help with the selection of applicants. . [c]

#### 5. CONCLUSION AND RECOMMENDATION

The staff is fully extended on extra-mural work, additional to teaching at the School.

The demand increases, but is being met as far as possible.

Staff, particularly junior staff, should receive instruction by attending courses on teaching method when available.

The Rural Domestic Economy Service is in constant demand but the R.D.E. staff work under cramped and unsuitable conditions in basement premises at Trowbridge., A new centre for R.D.E., with a girls<sup>1</sup> hostel attached, at the School of Agriculture would solve many difficulties. Girl students from Lackham have to travel to Trowbridge at present, to cover their adapted course. . [c]

