

Among ourselves: a house organ for the staff of the College of Agriculture. Vol. VI 1923/1932

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THE CORN BORER CAMPAIGN MOVES ON APACE

As vigilance is the price of safety it is highly important that our entire college staff should be kept fully cognizant of the latest information in re corn borer campaign. We propose therefore giving at frequent intervals the latest development in this field. We shall send a number of our staff members to get first hand information, but those who remain behind in the "reserve corps" should be kept informed as to the progress of events.

Uncle Sam Pays promptly. Within four hours from the time that the corn borer official inspectors certified farmer vouchers for payment for the "clean up" campaign in which all corn stalks were removed from fields, checks were in the mails paying the farmers \$2.00 per acre for the extra labor in cleaning up their own fields. \$5,000,000 of the federal appropriation has been ear marked for this purpose.

<u>Injunctions quashed</u>. Somebody always tries to throw a monkey wrench into the machine whenever any positive action is taken for the public welfare. This is the way democracy is supposed to advance. Running true to form injunctions were gotten out in Ohio (14 in this state alone), Hichigan and Indiana to prevent the enforcement of the clean-up regulations. In Ohio action has already been taken by the Supreme Court upholding the validity of the regulations. The same decision was rendered by an Indiana judge of a court of lower jurisdiction. In Michigan, owing to a technical flaw in method of procedure, the lower court held the regulations in this particular case nonenforcible without prejudice, however, to the merits of the matter upon more regular presentation.

upon more regular presentation. The corn borer moth "hopped off" about the Fourth, having been unduly delayed like the birdmen by unseasonable weather. Harley Wilson was in the field last week to witness the flight. He captured a number of moths and egg masses so as to make a series of Riker mounts for demonstration purposes.

CORN BORER REACHES LAKE MICHIGAN

Wilson reports that the borer has been found this spring in Berrien County, Michigan, which is the lake shore county in which Benton Harbor is situated. The invasion of Ohio from the Canadian shore by the way of Lake Erie raises the important question of the possibility of introduction by this water route.

SUMMER SCHOOL ATTENDANCE

Two hundred and forty-five students are registered in Home Economics courses this year in comparison with 206 last year. The only regular agricultural courses given this summer are in Agricultural Bacteriology, Agricultural Chemistry, Genetics, Education and Economics. One hundred and thirty-five credits in agriculture are being given this year on the fee basis in comparison with 113 last year. Professor Wehrwein of Northwestern University is substituting for Professor Hibbard in the newly organized nine weeks graduate courses in Agricultural Economics.

FARM ELECTRIC SERVICE EXPANDS RAPIDLY

For several years past the College has been cooperating with the Public Service companies in the state in studying the applicability of electricity to agricultural conditions under the auspices of an industrial fellowship assigned to Agricultural Engineering, F. W. Duffee, in charge. A recent conference was held at the College at which the results of this year were brought together and discussed by power engineers, farm organization people, farmers and their wives.

Besides the experimental line near Ripon where the main experiments have been conducted, 15 electro-test farms have been located throughout the state. These have been studied from the standpoint of economy in use of current and applicability of device.

The Service companies have approached the rate problem from the standpoint of developing this business on a permanent basis. While the cost for the lesser amounts of current consumed (as for lights alone) is, of course, higher in the country than in the city, due to higher capital investment for transmission line, when consumption reaches 85 kilowatt hours per month, the rural and urban rates are about the same. With a monthly use of 150 KWH, which would readily take care of all power loads for both house and farm purposes, the rural rate is considerably less than cost of city service.

In the last four years the number of electrically equipped farm homes in Wisconsin has more than doubled. This improvement in rural living is undoubtedly destined to exert more influence on the stabilization of country life than any other factor of recent introduction.

It is expected that extension work in rural electrification will be started next spring. A travelling fleet of two or three trucks equipped with the most practical of electrical appliances will be arranged so that current can be utilized for demonstration upon arrival at stated points.

VOCATIONAL CONFERENCE OF SHITH-HUGHES TEACHERS

The tenth annual conference of high school agricultural teachers was held at the College from July 11 to 16. Next year 30 schools will give Smith-Hughes work, an increase of seven.

The mornings were spent in discussions of educational problems and the afternoons in technical work in poultry, animal husbandry, engineering, economics, plant pathology and soils. Two of the agricultural teachers - Alvin Jacobson of Barron and Manley Sharp of Chippewa Falls - who have each spent two years in the Phillipine Islands gave fine talks on agriculture in the Phillipine Islands. C.R.Wiseman (U.W.'15) professor of agricultural education of South Dakota was here for two days. J.A.Linke, Federal Board of Vocational Education spent the week in the conference. A project tour to Sun Prairie, Marshall and Waterloo was taken for a day.

PEA. BREEDERS MEET

A plant breeding conference for the improvement of canning peas was held on July 11 and 12, participated in by representatives of our plant breeding work and guests from outside. O.E.White, Curator of Plant Breeding of the Brooklyn Botanical garden, Mr. Micholoy of the Wisconsin Canners Association, Doctor Woodbury of the National organization and D.N.Shoemaker of the United States Department of Agriculture were present. The work at the University and Hill Farms and the branch stations was discussed.

R.A.Moore gave a brief account of the activities of the Wisconsin Experiment Association in seed improvement work. Following the Madison conference an excursion in which C.B.Sayer of the Geneva, New York Experiment Station, joined, was made to the Penninsular Experiment Station at Sturgeon Bay.

LEGISLATIVE CAMPAIGN

This week the Senate by a vote of 14-3 killed the bill making a \$5,000 appropriation to the College of Agriculture for the investigation of the important disease of bovine mastitis and \$5,000 a year for the study of "no-lesion" cases of T.B. The next day on reconsideration the bill passed the Senate by a vote of 26-1.

The omnibus University bill was reported out by the Finance committee this week and is now before the Senate (611 S). As it now stands it carries more nearly the amounts asked for operation and maintenance of the Legislature by the Regents than has been granted at any previous legislative session.

The bill carries an appropriation for the east extension on the Agricultural Library, a feed storage building at the University Farm and an appropriation for the improvement in dairy equipment. The only major piece of construction which the Regents finally asked for as related to Agricultural College was for the west extension to the University Extension and Home Economics building, which was not included by the Finance committee in the new bill.

Budget allotments for the present fiscal year have been unduly delayed by the fact that the Legislature has not been in a position to act on the regular University appropriations. It is to be hoped that these can be made available in August.

NORTH CAROLINA STARTS HONORARY RECOGNITION

The North Carolina Agricultural College at their regular Commencement inaugurated this year our system of giving a certificate to farmers who have rendered unusual service to the Agricultural industry of the state.



IDEAS FOR RADIO SERVICE WANTED

The radio broadcasting of agricultural extension material is receiving increased attention by the various agricultural colleges. Plans are now being made for the 1927-28 broadcasting schedule at the University. It is earnestly desired that suggestions for the betterment of our agricultural radio programs be sent in by staff members. The aid of the county agents in this matter is especially solicited, as they are in position to know best what sort of radio programs will most appeal to the residents of their communities. Your suggestions can be addressed to Radio Committee, College of Agriculture.

BIG ATTENDANCE ON STATION FIELD DAYS

Unusually large meetings have been had this season at all of the Station Field Days held at the Branch Experiment Stations. Weather conditions have been unusually propitious but a constantly growing interest in this branch of our work is evident from the attendance and the interest of people in the results to be seen. Special emphasis has been given this year to the development of community entertainment. At Marshfield, County Agent Peterson of Wood County put on his Parent-Teacher Association folk dance that had earlier been presented at the University. Mr. Delwiche reports that 800 people attented the Peninsular Branch Station meeting at Sturgeon Bay. At Hancock there were over 350 cars. Farmers were in attendance from a distance of over 60 miles.

The cordial cooperation of the county agents in counties adjoining the location of these stations does much to broaden the sphere' of influence of these research and demonstration centers.

OLD SHORT COURSE GRADS REUNE

Six hundred old Short Course students with their families have attended fifteen get-together meetings that have been held in various parts of the state in June and July by a half dozen of our home staff and the county agents in the respective counties. This is the first time a definite effort has been made to get these groups together. The interest developed was such that in all cases it was the general sentiment that a meeting of this sort should be held each year. It was hoped that some one of the older group of the faculty would be able to attend each of these meetings but the committee was not able to carry this in complete effect on account of illness of some of the staff members. Of 387 wno registered in these meetings, 322 were now

Cally Day

farming; 35 additional men were engaged in some other specialized agricultural activity. No course in the University has such a large proportion of its graduates actually living in Wisconsin as is the case with the Short Course.

NOBLE CLARK JOINS EXECUTIVE STAFF

Noble Clark, one of our long course men (Class of '15), and for the past five years County Agent in Ontonagon County, Michigan, has been appointed Assistant to the Dean, vice-Walter Ebling. Mr. Clark was engaged in colonization work in Wisconsin for several years before going to Michigan. For several summers past he has been taking work in the field of Agricultural Economics, particularly Cooperative Marketing.

PRORESSOR COWLES RECEIVES ELLEN RICHARDS FELLOWSHIP

Miss May L. Cowles has been appointed to the Ellen H. Richards Fellowship in Home Economics. She will continue her graduate studies next year at the University of Chicago.

COOPERATIVE MOVELENT IN POULTRY DEVELOPING

County agents and their agricultural committees in a number of northwestern counties recently made a visit to the central receiving station of the Lake Pepin Poultry Producers' Association at Red Wing, Minnesota. This Association, made up of poultrymen in Pierce County, Wisconsin and Goodhue County, Minnesota, is one of the district units of the central marketing agency. the Lake Region Egg and Poultry Cooperative Association, St. Paul. The purpose of the trip was to study egg grading and become more thoroughly familiar with the details of poultry marketing.

Considerable interest is being manifested in the development of the cooperative movement with reference to poultry and eggs in this section. It is of interest that the agricultural committees of the County Boards are willing to spend the time with the farmers of their communities and county agents in getting first hand facts in regard to this movement.

SHORT COURSE LEN PURSUE ADVANCED FARM METHODS

At a recent meeting of short course alumni held at Milltowh, Pierce County, where 41 old students were present, it developed that 31 of these farmers were active members of cow-testing associations. If this same high percentage could be secured in the state at large, it would not be long before the boarder cow would be on the skids.

Colleg

LOW CUTTING MEETS REQUIREMENTS FOR CORN BORER CONTROL

In the amended regulations for 1928 adopted at the Toledo Conference held in July on the corn borer problem, it is significant to know that "fast" corn stubble in clean cornfields when the stubble is not more than two inches in height is not required to be turned under. This indicates that low cutting of corn for silage purposes is regarded as one of the most successful ways to combat the pest. Corn tissue that has been made into ensilage is entirely free from danger. Wisconsin farmers with their widely accepted practice of ensiling their corn crop will therefore be in the best possible position to fight the borer if it reaches our border.

RURAL ELECTRIFICATION GIVEN ADDED SUPPORT BY UTILITIES ASSOCIATION

The Wisconsin Utilities Association has indicated a willingness to continue the Industrial Fellowship under which the subject of rural electrification is being studied. This organization, which embraces the leading public utilities companies in the state, gives the Regents for this purpose the sum of \$2,700 for research and extension work. The work during the past few years has been entirely along the lines of research. The subject has now reached a position where the actual introduction of the most successful methods of using electricity for rural purposes can be carried on.

In addition to this \$2,700.00, a fund of \$1,000.00 is ear-marked for the extension activities in connection with this work. W.C.Krueger, who has been the Industrial Fellow for the last two years, will be continued in this capacity for the present fiscal year.

THE CHAS. PFIZER COMPANY INDUSTRIAL FELLOWSHIP CONTINUED

This fellowship, cstablished a year ago by the Chas. Pfizer and Company, Inc., of New York, has as its purpose a study of the action and utilization of citric acid and its salts in dairy manufacturing. The Company has again asked the Regents to accept a fund of \$3,000 for the ensuing year. H. L. Templeton, who held this fellowship, assigned last year to the Dairy Department, will be continued for the coming year, working under H. H. Sommer.

The results of the work for the past year indicate that the use of citrates increases the volatile acids, and improves the flavor, of ripened cream butter. Another very interesting test was made by the addition of small quantities of citric acid to cow's milk to increase its digestibility when used for infant feeding. The Wisconsin General Hospital is cooperating in this study with satisfactory results so far. The work for the coming year will continue the studies of the past season, and also attempt to utilize sodium citrate in the manufacture of processed cheese.

INDUSTRIAL FELLOWSHIP FOR STUDY OF MATIVE PLANT LIFE

One of the prominent citizens of the city who is an ardent advocate of wild flower gardens has placed at the command of the University the sum of \$600 to be used for the maintenance of an industrial fellowship. This fellowship has been assigned to the Horticultural Department and its incumbent, W.C.Meyer, will work under F. A. Aust's direction, primarily on the artificial propagation of bog and aquatic plants.



WHAT THE LEGISLATURE DID FOR THE AGRICULTURAL COLLEGE

Chapter 542 of the laws of 1927 includes the omnibus University bill providing for all appropriations for operation and maintenance, capital and sundry specified objects. The funds for the College of Agriculture for general maintenance are allotted in the main from the general University fund, which allocation is made through the Regents. Besides these sustaining funds, certain specific appropriations for various lines of work, which for several years have been incorporated in the general University bill, have been increased for the next biennium as follows:

EXPANSION IN SPECIFIED APPROPRIATIONS

Fund 3-B for the maintenance of Agricultural Extension Specialists was increased from \$40,000 to \$60,000 as a continuing appropriation. This increase is more apparent than real as \$40,000 has been totally inadequate in recent years to support this system. The increase now to \$60,000 will relieve the general operation budget (1A) to a considerable extent and provide for a very modest expansion.

The maintenance of the County Agricultural Representative System (3-E) was increased from \$57,000 to \$64,100 for each of the next two years, thus permitting of an increase in the number of county agent: by three for each of the next two years.

The funds for the Waushara County Station, as representative of the light sandy and peat marsh soils of the central region of the state, was increased by fifty per cent, making available for this purpose an unnual continuing appropriation of \$7,500. To this was added the sum of \$8,000 for the biennium for the purchase of additional land and the construction of necessary buildings.

BUILDING AND EQUIPMENT FUNDS

The following constructional appropriations for the enlargement of the agricultural plant at the University were approved:

(1) \$11,000 for a feed storage building, in addition to a small balance of \$2,000 in an earlier appropriation.

(2) \$14,500 for a fire proof addition to the Agricultural Library to be located on the east side of the auditorium annex to the central building. This structure has been very much needed for several years as our book collections have now materially outgrown the facilities in the west wing.

(3) \$25,000 for the modernization of the equipment for Dairy Husbandry.

FARMERS' INSTITUTES INCREASED

In the University bill was also incorporated an increase of \$10,000 as a continuing appropriation for the Farmers' Institute work, specifying that this sum must be used for providing "for institutes on cooperative marketing of farm products and the business problems of cooperatives".

NEW SPECIFIC APPROPRIATIONS

<u>Truck Crop Diseases</u>. In addition to the above specific appropriations two additional funds were created by the Legislature. The truck growers of the lake shore counties have for many years been importuning the University for increased study of insect and plant diseases. The Legislature made a two year appropriation at the rate of \$5,000 a year "for the study of insect and plant diseases affecting onions, cabbage, sugar beets and other truck crops". This will throw considerable added responsibility on the departments of Economic Entomology and Plant Pathology.

Corn Borer Legislation. The impending monace of the corn borer led the legislature to make provision for the next biennium of 95,000 each year for the study of ways and means to get ready to meet the corn borer situation. In view of the fact that no live insect material of this type can be moved outside of already infested corn borer territory under Federal quarantine regulations, it is necessary that the technical men in this field still have to do much of their work in regions already affected. The editorial office has started a wide-spread news service with dependable news information regarding the progress of the corn borer. It is of vital importance that all of our station forces be acquainted with the very latest information relative to this new menace, as in this way much aid can be given to inquiring farmers relative to this pest.

INCREASES FOR UNIVERSITY RESEARCH FUND

While the University did not secure all the funds requested for the more fundamental research, it is quite significant that an increase of two-thirds in this fund was finally approved. The staff of the Agricultural College had a considerable number of requests before the Graduate School for the support of certain specific pieces of research. The amount finally allotted we understand is considerably larger than that of any previous year.

GOVERNOR VETOED TWO SPECIAL AGRICULTURAL BILLS

The legislature passed both the "mastitis" and the "no-lesion" tuberculosis bills that are of special importance to the stockmen of the state. Although these items carried only \$5,000 a piece, they were vetoed on the ground of economy.

The state is now spending over a million dollars a year in indemnities for cattle that react to the tuberculin test without definite knowledge as to why many of these cows apparently react while no discoverable evidences of disease are found on post-mortem examination. It would have seemed the part of good business procedure to spend a few cents on the dollar to see if diagnostic methods could not in some practical way be improved so as to reduce the lossess that constantly occur from this source.

INDEMNITIES FOR T. B. ERADICATION

The last legislature increased the appropriation available for the payment of indemnities for cattle slaughtered on account of bovine tuberculosis. There is made available on July 1, 1927, \$1,050,000 and beginning a year from that date, annually, for a term of three years, \$750,000 to cover the work of bovine tuberculosis eradication under the area test plan, the accredited herd plan, and the local testing plan.

INDEMNITIES FOR JOHNE'S DISEASE TO BE PAID IN FUTURE

The state has taken an advance stop in making it possible for idemnities to be paid for cattle slaughtered on account of Johne's disease. This exceedingly insidious disease, which is frequently confounded with tuberculosis, has been found in quite a number of our Wisconsin dairy herds. The use of the diagnostic agent, Johnin enables this trouble to be readily detected.

Our staff interested in animal disease work has been foremost in the country in studying this disease, and in bringing the matter of its importance prominently before the live stock interests of the nation. Dairy farmers should be urged to give head to this relatively unknown trouble before it gets thoroughly established in the state.

The attitude of the state in making an appropriation (Chapter 521, laws of 1927) for this purpose will unquestionably hasten a recognition of this subject by farmers. Federal legislation already permits payment of Federal indemnity on reactors to Johnin test on the same basis as T. B. reactors.

BOYS' AND GIRLS' CLUB DORMITORY AT STATE FAIR

The growth of interest in the work of the boys' and girls' clubs led the legislature to appropriate the sum of \$40,000 for the construction and equipment of a dormitory on the Fair Grounds which shall be devoted to this type of education.

FORESTRY LEGISLATION

Probably the most advanced step which has been taken by the

state in the matter of modernizing our laws with reference to forestry legislation has been done by the last legislature. The two fundamental conditions that must be met before forestry in Wisconsin can be put upon a basis that is of direct interest to the <u>individual</u>, rather than merely as a state enterprise, is the development of (a) an adequate fire patrol to reduce the losses that are constantly occurring from forest fires; and (b) at least partial relief from annual taxation that heretofore has been imposed upon all lands carrying timber whether they were yielding an income or not. It is this latter feature that has compelled ruthless and complete timber removal regardless of the future.

The last legislature passed one of the most progressive forest tax laws that is to be found in the Union. Tracts of growing timber of 160 acres including wood lots, (lesser areas if accepted by the Conservation Commissioner permitted) are open for filing as "Forest Crop Lands", subject to the approval of the State Conservation Commission. On such lands the owner is relieved from the practice hi.therto followed of paying annual taxes on assessments which take the full value of the timber into consideration.

Hereafter the owner is to pay a nominal annual land tax of 10 cents an acre, to which the state will also add a similar amount to help take care of local governmental expenses such as schools and roads, such tax payable from a \$30,000 fund created this year. This will enable 300,000 acres of land to be established at once under the plan. This area is to be increased by an amount of 100,000 acres annually, until in 1934 a million acres a year can be brought under the terms of this law, and for which appropriations are now made.

Such forest crop lands are to be relieved from general taxation for a period of 50 years to permit of the maturation of growing timber. This growth period may be extended by mutual consent of owner and conservation commission, but in the event of the timber being removed, the state received a ten per cent severance tax on the full value of all timber cropped. The state further obligates itself that this law will not be modified during the life of any contract, except as the Conservation Commission and the owner may mutually agree. The rights of the public with reference to hunting and fishing are to be preserved. Under this progressive statute corporations and individuals may look forward to an era of reforestation by natural regrowth as well as afforestation by planting.

AUTHORIZATION FOR EXTENSION OF NATIONAL FORESTS IN STATE

Heretofore the U. S. Government has been limited in the purchase or acquisition of forest lands in Wisconsin for national forest purposes to 1000000 acres, but the last legislature has increased this limit to 500,000 acres. Already the nucleus of a Wisconsin national forest has been purchased in Forest County. The state of Wisconsin retains concurrent jurisdiction with the U. S. Government within these areas. The boundaries of the forests so selected must be approved by the Governor, Commissioner of Public Lands, Conservation Commissioner, and (as modified by the last legislature) by the county board of any counties in which such forests are to be located.



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September 16. 1927.

REGENTS APPROVE CHANGES IN AGRICULTURAL PERSONNEL

At the last meeting of the Board of Regents approval was given to the promotion of several members of the faculty of the College of Agriculture. A list of these, together with other recent changes in the personnel of the agricultural faculty, both in residence and off campus, is appended.

PROMOTIONS FROM ASSISTANT TO ASSOCIATE PROFESSOR

R. A. Brink, Genetics

Miss Bertha Dodge. (Foods and Administration) Home Economics E. M. Tiffany, Agricultural Education

PROMOTION FROM INSTRUCTOR TO ASSISTANT PROFESSOR

E. D. Holden, Agronomy

PROMOTIONS TO INSTRUCTOR

Miss Myrtle Shaw, Agricultural Bacteriology Miss Harriet Mansfield, Agricultural Bacteriology Miss Bertha Clow, Administration and Foods, (Home Economics) Miss Helen Winkleman, Administration and Foods, (Home Economics) C. H. Jofferson, Agricultural Engineering Russell Reed, Agricultural Engineering B. H. Roche, Animal Husbandry L. W. Kletzien, Agricultural Chemistry P. W. Miller, Plant Pathology. H. D. Chapman, Soils

THREE LEAVES OF ABSENCE GRANTED

Assistant Professor May Cowles, (Food and Administration). Home Economics, continued for an additional year to complete graduate study.

Assistant Professor Helen Parsons, same department for similar reasons.

Professor L. F. Graber, Agronomy, for the coming year to pursue graduate work with Professor Kraus at University of Chicago. Professor Graber will, however, keep in frequent touch with his research work here on root reserves so as to lose no momentum in this project.

PROFESSOR EMERITUS

Professor E. H. Farrington, Dairy Husbandry, goes on to the Emeritus relation after thirty-three year's service as head of the Dairy Department.

RESIGNATIONS

- Frank B. Morrison, Professor of Animal Husbandry and Assistant Director of Experiment Station, to become Director of the Cornell Experiment Station, and also the New York State Experiment Station at Geneva.
- H. W. Stewart, Assistant Professor of Soils, who enters the services of Marguette University.
- Miss Ella Woods, Instructor (Administration and Foods), Home Economics, who has accepted a position with the University of Idaho at Moscow.

NEW APPOINTMENTS

Professor H. C. Jackson of the U.S.D.A. and general manager of the Grove City Experimental Creamery, Grove City, Pa., comes to us in Professor Farrington's place as Chairman of the Dairy Husbandry Department.

K. F. Link, Assistant Professor in Agricultural Chemistry.
A. J. Riker, University research in Plant Pathology.
Noble Clark becomes Assistant to the Dean, vice Walter Ebling.
W. D. Popham, Instructor in Landscape Design (Horticulture).
Dr. C. R. Strange, Instructor in Veterinary Science.
E. F. Burk, Instructor in Vegetable Gardening (Horticulture)
Mrs. M. P. McCordie, Extension Specialist in Home Management, (Home Economics).

Miss Ruth Feeney, Home Demonstration Agent, Marathon County. Miss Laura Holmes, Instructor in Related Arts. (Home Economics) Miss H. L. Allen, Instructor in Related Arts, (Home Economics) Miss C. F. Abry, Assistant in Clothing (Home Economics) Miss Stella Munger, Assistant in Administration and Foods

(Home Economics) Warren Whitcomb, Assistant in Truck Crops (Economic Entomology) Lawrence Weyker, Assistant in Soils Miss Isme Hoggan, Assistant in Horticulture (Tobacco Investi-

gations)

J. M. Coruthers, Assistant in Dairy Husbandry

A. W. Oliver, Assistant in Animal Husbandry

J. L. Cartter, Assistant in Agronomy

G. A. Schrader, Assistant in Agricultural Chemistry E. C. Teut, Assistant in Agricultural Chemistry O. Allen, Assistant in Agricultural Bacteriology Miss Elizabeth Griffing, Assistant in Agricultural Bacteriology Miss Isabel Dow, Assistant in Agricultural Bacteriology

E. W. Hopkins, Assistant in Agricultural Bacteriology E. A. Martin, Assistant in Agricultural Bacteriology Nico Mogendorff, Assistant in Horticulture (Tobacco) Miss Elizabeth McCoy, Assistant in Agricultural Bacteriology L. E. Hawkins, Assistant in Genetics B. L. Wade, Assistant in Genetics H. H. Hull, Assistant in Soils A. F. Hock, Assistant in Soils

DRAINAGE LEGISLATION

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E. R. Jones, as secretary of the Wisconsin State Drainage Association, has prepared a digest of drainage legislation, acted upon by the 1927 Wisconsin legislature (bills passed, vetoed, and killed) which will be of interest primarily to county agents who are working in counties in which drainage projects are located. Anyone desiring such synopsis can secure copies by applying to secretary Jones.

The matter of most significance relates to the new law permitting a landowner to use drainage bonds, or part due interest coupons, to be used at face value in payment of his drainage taxes. As these obligations can now be bought at a discount, this bill affords some relief to landowners who can pick up these coupons at a discount. Wt also permits landholders to acquire tax deed to delinquent lands by paying the general taxes, thereby making it possible to pay the drainage assessments with unpaid interest coupons.

WISCONSIN CIRCULAR WINS FIRST IN MATIONAL CONTEST

"Outdoor Flowers For The Home", written by Professor J. G. Moore, and published last spring, was awarded first place in the class for popular bulletins in the contest held August 26, in connection with the annual meeting of the American Association of Agricultural College Editors at Fort Collins, Colorado. Other Wisconsin Winnings included second place on technical bulletins, and also on advertising printed matter.

Professor Moore's bulletin has had a wide domand. Farmers' wives have sent requests by the hundreds, and probably no recent extension publication of ours has had such an appeal to city people. Farm editors of daily newspapers have given the circular much publicity, and this has resulted in a remarkable number of requests from persons outside of the state, although a five cent charge per copy is made to non-residents of Wisconsin.

SPECIAL SCHOLARSHIPS OFFERED AGRICULTURAL STUDENTS

The Regents of the University at their last meeting, made available twenty special scholarships to agricultural college students. Five of these are for those enrolled in the long and middle course, and fifteen for students in the regular fifteen weeks short course. Each scholarship is for \$100.00.

The committee in charge of the selection of the boys to be awarded these honors consists of John Callahan, State Superintendent of Public Instruction; W. A. Duffy, Commissioner of Agriculture, and Dean James. Applicants are requested to submit a story in their own handwriting, in which is discussed at least the following four points:

- (a) What I have Done in the Field of Farming
- (b) Why I Wish to Make My Future in Agriculture
- (c) Reason the Scholarship is Desired
- (d) What I See Ahead in Agriculture

The scholarships will be awarded to Short Course students on the basis of the story (50%) and the personal data and reference reports (50%).

Farm boys close to the uncomfortable results of the recent agricultural depression can not always see clearly the many unmistakable factors now indicating that the pendulum of agricultural prosperity has passed the bottom and is climbing upwards again. Today, as probably never before, leadership is to be greatly needed and richly rewarded. It is to encourage country youth to investigate what lies ahead that prompted the Regents to grant the scholarships.

Ten years from now the state will need a group of trained and aggressive young mentto take the places of some of our present day rural leaders who will then want to pass on their responsibilities to others. Right now is the time for these young mentto secure their training at the University. The plot offered in one of these scholarships will nearly pay the necessary expenses of a short course student. It is not to be expected or desired that all farm bred boys remain on the farm. It is, however, highly important that a goodly portion of the more intelligent and aggressive boys, who like the open country, realize there is an opportunity for them in agriculture. We all have an obligation to cooperate in this service of locating, encouraging, and training the future rural locdership of Wisconsin.

Time spent in encouraging the right sort of farm boy to submit his story and application to Dean Jemes may well accomplish infinitely more for the agricultural welfare of the community than the same effort spent in an alfalfa or soil project or any other extension activity.



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September 28, 1927.

LONG COURSE UNDERGRADUATE SCHOLARS SELECTED

The five rural leadership scholarships offered by the Regents to meritorious freshmen in the long and middle courses in agriculture, have been awarded by the committee (Commissioner Duffy, State Superintendent Callahan, and Dean James) for the academic year 1927-28. The list is as follows:

> Henry Ahlgren, Frederic Merrill Ross, Belleville LeRoy Reese, Mineral Point Lee Jewell, Dodgoville Merl Stubbs, North Prairie

To those who have been wondering what is in the mind of rural youth a reading of the essays submitted in the competition for these scholarships is most illuminating. Here is one quotation.

"As I look into the future, I see a vast scientific agricultural machine slowly extending its influence and its teaching to every farming section of the land. As a result, farming will become a highly specialized science requiring all of the skill that higher education has to offer. Pure-bred cattle, diversified farming, and proper crop rotation, the right kind of homegrown seed, accurate farm accounting, and herd testing will all be essential for the success of the farmer. In time, efficiency will take the place of the present loss due to ignorance. When that time comes, the farmer will no longer be a grumbling pessimist but rather, a smiling manager of a highly efficient machine the farm. To take a small part, or to have at least a share in bringing about this change would be to realize an ambition that has steadily grown with the years".

Another boy says, "Pather finished only the sixth grade in country school. That is the reason he isn't able to make enough profit to help me. He says things to urge me to go to school. I like school and want to go because I feel that at the bottom of farm troubles is the lack of education..... A man that can produce quality efficiently wins everywhere..... The agricultural field has raised me, educated me and given me experience. I like it and am interested in its success - why should I leave it?"

All five boys have jobs to help make part of their expense while in the University. All five have done some productive work in agriculture. Each comes from a high school giving a four year course in agriculture. All of them look to agriculture for their life career.

A NEW SHORT COURSE IN TIMBER LAND MANAGEMENT

The passage by the legislature of a new tax law relative to the taxation of timber holdings makes economically possible, for the first time, individual or corporate holding of land for timber production. The modern methods of selective logging, so as to secure a more permanent rotating timber erop, will undoubtedly receive much more attention from Wisconsin lumbermen than has heretofore been the case where continued annual taxation necessitated the quickest possible removal of timber.

In the opinion of leaders interested in the forestry problems of Wisconsin it seems a propitious time for the presentation of the newer methods of cutting timber. In accordance with this arrangements have been made by the Regents for the holding of a special short course in timber land management. The course is designed especially for logging superintendents, camp foremen, forest rangers and fire wardens. The project has the active endorsement of many of the leading lumber companies of the state, and it is expected that it will be necessary to put a limit on the enrollment.

The course opens October 25 and closes November 19. The first part of the course will be spent in Madison, but a considerable part will be in the woods where selective cutting operations are actually in progress. The U. S. Lakes States Forest Station, U. S. Forest Products Laboratory, the Wisconsin Conservation Commission will cooperate with the College in providing instructors, laboratory equipment and material.

It is planned to stress six important items: Principles of forest management; Identification of Wisconsin trees; Timber surveying; Log scaling and lumber grading; Fire protection; and Recognition of defects in standing timber.

F. G. Wilson and John Swenchart will be our representatives that will be especially concerned in this new educational venture.

WISCONSIN REPRESENTED AT CLUB LIADERSHIP TRAINING CAMP

Recognizing the unique ability of 4-H club work to influence rural community action and thinking, Mr. Horace A. Moses of Mittineague, Mass., in 1923 subsidized a two works 4-H Club Leadership Training Camp at Springfield, Mass. Outstanding club members from the New England states were invited to attend, and all their expenses, including transportation, was paid by Mr. Moses. The plan proved so effective that it was made an annual event, and this year Mr. Moses was prompted to extend the field so as to include 23 states and 3 provinces of Canada. One club boy and one club girl are eligible from each state or province. Wisconsin's representatives this year, selected by the State Club Staff, were Ray Pavlak, Rush County and Grade Rountree, Racine County. Outstanding leaders in club work from the U. S. Department of Agriculture and the various colleges, act as instructors in the training camp.

LED STEWART GOES TO MICHIGAN

Lee Stewart, for the past two years county agricultural agent of Ashland County, has tendered his resignation to take effect October first. Provious to serving in Ashland County Mr. Stewart spent several years in a like espacity in Forest County.

Mr. Stewart has accepted an invitation to become the agricultural agent of Schoolcraft County in the Upper Peninsula of Michigan. His headquarters will be at Manistique.

SPUCIAL FIVE WEEKS COURSE FOR COW TESTERS

Because of the great demand for young men trained to serve as cow testers arrangements have been made to offer a special five weeks course to train men to serve dairying in this capacity. The course opens November 14 (simultaneous with short course and can be made a part of that course). All high school graduates are eligible and others with equivalent training, or exceptional dairy experience, may take the course.

Cow testing offers a splendid opportunity for rural leadership, and gives the tester first hand information regarding the forming methods used by the successful dairymen of the state. The position pays a good salary from the start, and for this reason it is expected the the new course will have an appeal to a large number of farm boys.

WISCONSIN WINS THIRD IN COLLEGE JUDGING CONTEST

Wisconsin's dairy cattle judging team won third place in the collegiate dairy cattle judging contest at Waterloo, Iowa, on September 26, held in connection with the Dairy Cattle Congress. The team is made up of Floyd Woldberg, Ralph Hodgson, Richard Brockett and George Humphrey. The students were coached by Mr. I. W. Rupel. It is expected that this same team will compete in the judging contest, to be held in October, in connection with the National Dairy Show at Memphis. Tennessee.

RADIO COMMITTEE FOR AGRICULTURAL COLLEGE ANNOUNCED

The University Radio Station W.H.A. opens the new season of broadcasting on October 3. The faculty radio committee, having charge of the Agricultural and Home meconomics portion of the radio programs, is this year made up of John Swenchart, Chairman, A. W. Hopkins, W. H. Wright, Mrs. May Reynolds, W.W. Clark, Miss Cladys Meloche, and Noble Clark. A copy of our portion of the radio programs for the month of October is enclosed with this issue of "Among Ourselves".

Radio broadcasting by educational institutions is receiving more and more attention. It is the hope that the programs broadcast by W.H.A. may be the best that we can make them. To do this will require whole hearted cooperation with the radio committee on the part of all who are asked to give radio addresses. The committee must have this cooperation if they are to put across the season's radio programs in a creditable manner. At all times the committee will appreciate receiving your criticisms and suggestions.

THE CORN BORER CONTINUES ITS WIDE SPREAD MARCH

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In spite of the herculean efforts of the United States governmont and the five invaded states bordering on Lake Eric, that in all probability received their infestation from the Ontario outbreak, the corn borer this season has succeeded in spreading into much new territory in all directions, north, west, and south. Detailed scouting to dotect its presence will not be completed for several weeks because the ravages become more readily detected as the corn maturing season progresses. Up to September 15th the borer had been found for the first time in 13 additional counties in Ohio. It is now 50 miles south of Columbus having advanced farther this year than in any previous season along the entire front toward the Ohio River. Fifty-five out of the eighty-eight Ohio counties are now involved. In Indiana its advance has covered 12 new counties. In Michigan 13 new counties were infected in 1926, while this year 4 additional counties have been added to the quarantined area. Last year in Michigan it was found in Borrion County (Benton Horbor) in the southwest corner of the state. This year it has not been reported here but its westward advance further north (Kalamazoo and Battle Creek) has been so pronounced that it is now only a single range of counties from the Lake Michigan shore.

It must not be inferred from this that the drastic clean up campaign has been a dismal failure, as numerous papers in the infested belt claimed when these results first became known. No one can foretell what would have been the situation if such repressive mechanical methods had not been instituted. We were shown one field last week that now contains on an average over 12 borers to each stalk and yet this field last year was in alfalfa and the whole surrounding region was thoroughly cleaned up of corn debris. As a result of this gigantic experiment at control, it is now definitely known that mechanical means of destruction alone (burying, beating, and burning) will not hold the enemy wholly in check. As in any war <u>every possible</u> means will have to be utilized. Complete reliance cannot be placed on any <u>single</u> arm of the service.

NEARLY ONE HUNDRED SAMPLES OF SUSPECTED BORERS EXAMINED

Our Department of Economic Entomology has examined, up to September 1st, nearly one hundred specimens of suspected corn borers. Most of these were specimens of the common stalk borers of which there are several species. The suspected insects were found mostly on corn, although some were found on potatoes, tomatees, hollyhocks and other weeds and plants. In no case was the genuine European corn borer found. Many inquiries concerning this post have also been received. This keen interest on the part of many inquirers is indicative of the interest that the Wisconsin farmer is giving to this new menace.

October Radio Programs for Farm Folks

Broadcasted from Station WHA., University of Wisconsin

New Wave Length - 319 meters, 940 kilocycles

Date	Speaker	Subject		
Oct. 3	President Frank	Serving 71 Wisconsin Counties What Lies Right Ahead in Farming Winter Compensations Farm news of the minute		
7:30 : P.M. :	K. L. Hatch			
	Mrs. Nellis Kedzie Jones W. H. Wright			
Oct. 10	Miss Wealthy Hale	: : Storing Vegetables for Winter Use		
7:30 P.M.	John Callahan	Why Farm Boys Should Go To School What Wisconsin County Agents Are Doing Now Farm News of the Minute		
	W. W. Clark W. H. Wright			
Oct. 17	Miss Edna Huffman	: : 180 Interesting and Nutritious School : Lunches		
7:30 P.M.	H. C. Jackson	: What the Future Holds for Wisconsin Dairy- ing		
	Eric Miller W. H. Wright	: Some Things To Know About Weather : Farm News of the Minute		
Oct. 24	: J. G. Moore	: Winter Flowers for The Home		
7: 30 P.M.	B. M. Duggar W. McNeel	Wisconsin Prosperity Depends on Healthy Crops and Plants Rural Leadership of Tomorrow		
	: Miss Grace Rountree W. H. Wright	: Farm Youths are Getting Ready : Farm News of the Minute		
Oct. 31	: : Dean Louise Nardin	: : Your Daughters		
P.M.	: C. K. Hart	: The Day of the Small Community is Not Passed		
	J. G. Moore	: Getting Ready for Winter in Orchard and Garden		
	: W. H. Wright	: Farm News of the Minute		



An increased registration of nearly 12% in the agricultural group and something over 7% in Home Economics shows a substantial improvement over the enrollment of preceding years in this College and is on a par with the increased registration in the University as a whole. All classes in the Long Course show a healthy increase. The same is true with Home Economics with the exception of the junior class. The increased registration of freshmen in Home Economics is the largest for a number of years. The registration data for the present and past two years is here appended:

	1925	1926	1927
Long Course I II III IV	74 48 .54; 44 220	68 54 57 <u>47</u> 226	71 63 64 <u>58</u> 256
Middle Course I II	$\frac{11}{\frac{4}{15}}$	19 <u>1</u> 20	10 $\frac{9}{19}$
Total Enrolled in Agriculture	235	246	275
Home Economics I II III IV	73 . 71 81 69	75 71 78 67	86 77 72 78
Total Enrolled in Home Sconomics	294	291	313
Specials	3	4	-
Total Undergraduates in College of Agriculture	532	541	588

JUNIOR LIVESTOCK EXPOSITION OCTOBER 25 TO 27

A. R. Mucks, Secretary of the Wisconsin Livestock Breeders' Association has announced the entry of 423 head of baby beeves, dairy calves, pigs and sheep in the Junior Livestock Exposition that is to be held in the Livestock Pavilion on October 25 to 27. Over \$2,000 in prize money, as well as a great many special awards, are available. Boys and girls from all parts of Wisconsin will be here with their animals that have been prize winners at the various local fairs.

On the closing day of the show, as has been the custom in past years, the fat stock will be disposed of at auction to buyers representing the different packing companies. This contest is one of the most stimulating events that is held in the state to encourage the young people in developing a real love for live stock.

KRUMREY MEMORIAL EXERCISES OCTOBER 13 AND 16

The movement for the cooperative marketing of agricultural projects has reached the point where the public has begun to recognize and appreciate the efforts of the pioneers in this highly important economic and social movement. These early workers in the field of cooperation faced a most difficult task in attempting to insert a new unit in a business world already crowded with competition; but their greatest problem was in educating the farmers as to what they might rightly expect of a cooperative association. In our day, with the farmers' cooperatives of the United States doing an annual business of $2\frac{1}{2}$ billion dollars, it is hard to realize the uphill fight the early missionaries had in attempting to win the confidence and support of farmers who knew little or nothing about cooperative marketing. We owe these pioneers of cooperation a debt of gratitude.

It is therefore very fitting that Wisconsin give honor to Henry Krumrey, the founder, and for its early years, the President, of the Wisconsin Cheese Producers' Federation. If ever a farmer gave service to his fellow farmers surely Henry Krumrey did. In any list of Bidger cooperative leaders his name is certain to be written high.

On Thursday afternoon, October 13, at 3:50, in connection with the exercises of the Wisconsin Farm Congress, a memorial tablet to Senator Krumrey will be unveiled in the campus of the College. It will become a permanent addition, to uur markers, along with those erceted in honor of W.D. Heard and W.A. Henry, both pioneers in the dairy industry of the state.

At the unveiling exercises, which will be held in front of the Deiry Building brief addresses will be made by Theodore Macklin and Senator John J. Blaine. Mr. J.H.A. Lacker, of Waukesha, a brotherin-law of Mr. Krumrey, will close the program with a biographical sketch.

On the following Sunday afternoon, October 16, similar exercises will be held at Plymouth, the choese center of the state, where the Wisconsin Cheese Producers' Fréeration had its origin and still maintains its central office. A replica of the tablet will be unveiled on this occasion.

THE BOTANIST CONTRIBUTES AN IMPORTANT CLUE IN CORN BORER RESEARCH

On certain soils with definite moisture relations specific plant forms are found. The ecologist recognizes these plant associations and characterizes the distinctive flora of the various soil types.

Insects often bear a striking relation to these more or less well defined plant associations. One of the most important relations in the distribution of the corn borer that has as yet been suggested is that the Professor Transcau of Onio State University. He has found a direct relation between the swamp forest types of vegetation and the regions of greatest prevalence of the corn borer. The borer has been found most abundant in damp soils of

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high organic content. Where this hypothesis has been tested out it is claimed that a surprising coincidence is to be noted. Transeau is in Europe this summer testing the validity of this hypothesis under European conditions.

Corn is so adaptable a plant that it can be grown under a wide variety of soil and moisture conditions. The large areas that are now recognized as of less value for corn culture may become of increasing importance if they are found to be a less congenial habitat for the development of the borer

DEMAND FOR AGRICULTURAL BULLETINS GREATER THAN EVER BEFORE

One day recently the mailing room of the College received 532 separate requests for bulletins. Most of these requests were for several bulletins, dealing with various subjects, so that the total number of publications mailed out ran into several thousands. Nor was this day especially exceptional. Nearly as many requests are coming every day, and the staff in the mailing room is sending out more printed matter than at any previous period in the history of the institution.

We now have 55,000 names on the regular mailing lists to receive the new material as issued. Over 50,000 of these are residents of Wisconsin. The material is sent only to persons who take the initiative in requesting this service. In every case it is necessary for those receiving these bulletins to make periodic requests to have their names kept on the list. It is a healthy situation to have so many Wisconsin people interested in studying the newer developments in agriculture.

STATE GRAIN SHOW AT ANTIGO, OCTOBER 2- TO 28

An unusually large number of entries have been made for the State Grain Show, which is to be held this year at Antigo, October 24 to 28. Because of the unfavorable weather for corn, there probably will not be a large number of corn exhibits, but the small grains and cash crops will more than make up the deficit.

E. D. Holden is assisting the Langlade County authorities in making the arrangements for the Show. A. L. Stone, E. J. Delwiche, and G. M. Briggs will do the judging.

Items for this house organ should be sent to H. L. Russell



AGRICULTURAL HIGH SCHOOL STUDENTS MEET AT COLLEGE

The High School Judging Contests which are held annually at the Agricultural College were attended this year by 825 students coming from 7⁴ high schools where agriculture is being taught. The Department of Agricultural Education, the State Vocational Supervisors, and the Live Stock Breeders Association were unusually successful this year in securing an attendance over 50 per cent larger than that of last year.

Through the cooperation of the several college departments, contests were held in stock judging, poultry and eggs, potatoes and apples, corn and small grains, farm mechanics and meat demonstrations. This latter contest, made possible through the aid of the Oscar Mayer Packing Company, and a boys' singing contest were new features in this year's work.

features in this year's work. These boys were practically all farm who have been doing directed practice (home project work) in connection with their school work. Five hundred and twentyfive of them had never been in Madison before. One hundred and eight of them are finishing their high school work this year.

It was an inspiring sight to see this group of Wisconsin youth at the banquet Friday night. All of them were in attendance at the football game Saturday where they were most loyal rooters for the home team.

In this connection it is interesting to note that 25 per cent of our college freshmen came to us last year from their schools with four units of agriculture and more than 50 per cent had two or more units. The Country Magazine is being sent free of charge to all seniors and juniors of this group.

TIMBER LAND MANAGEMENT SHORT COURSE BEGINS NOVEMBER 7

Considerable interest has been manifested by the leading timber companies in the newly proposed short course that is to be given in November. At the request of a number of the companies who found it difficult to furlough their foresters and woodssuperintendents for the entire period of three weeks, the course has been curtailed by the elimination of the Trout Lake trip. The work here at the University will be opened November 7th. Colonel W. B. Greeley, Chief of the United States Forest Service will be here on November 9th at which time he will give an address at a banquet in the evening of that day. This occasion will also serve as an opportunity for a meeting of the Advisory Committee of the United States Lake States Forest Experiment Station which includes the work in Minnesota, Wisconsin and Michigan.

Following the work here at Madison the class will spend several days in the north on the timber holdings of the Holt and Goodman Lumber Companies where selective logging operations are now in progress. Through the cooperation of the United States Forest Service, the Forest Products Laboratory and the State Conservation Commission, a full program has been provided.

"BIGGER AND BETTER THAN EVER" JUNIOR LIVESTOCK EXPOSITION OPENS

On October 25 the twelfth annual Junior Livestock Exposition opened with the largest number of entries in the history of the show. Badger boys and girls have brought to Madison their steers, lambs and pigs that have won premier honors in the club and open classes in the county and district fairs throughout the state. These junior showmen have fitted their animals to the pink of condition, and the character of the exhibits will compare favorably with that of our national livestock shows. Arlie Mucks is general superintendent of the exposition.

A new feature of the Exposition this year is a pen lot contest for market hogs, open to the state, in which are entered over 250 hogs. Most of the hogs in this class have been entered by Wisconsin farmers rather than club members. These hogs are quartered in a big tent at the west end of the Stock Pavilion. The Wisconsin Livestock Breeders' Association, in cooperation with the Wisconsin Live Stock and Meat Improvement Council, have put on this new contest in order that Wisconsin swine breeders may find out the type of hogs that will yield the greater percentage of the better cuts of pork and result in less loss in killing and cutting the carcass.

On October 27 an auction sale will be held of the baby beeves, lambs and pigs. This event has grown to be the largest sale held annually in the state at which meat animals are auctioned.

RECENT CHANGES IN COUNTY AGENT PERSONNEL

E. F. Pruett, who for the past three years has been county agricultural agent in Sawyer County, has been selected as agent in Ashland County vice Lee Stewart. He made the change in location on October 15.

Lynn Matteson, U.W.'22, has been appointed to succeed Mr. Pruett in Sawyer County. Since graduating from our long course Matteson has been managing and operating the home farm near Clintonville, Waupaca County.

H.J. Rahmlow has resigned as county agent in Price County. Mr. Rahmlow has accepted the position of Secretary of the State Horticultural Society. November 15 is the date Mr. Rahmlow is planning to leave Price County.

A.M. Jacobson, U.W.'22 has been selected to succeed Mr. Rahmlow in Price County. Mr. Jacobson joins the extension force after a successful experience as Smith-Hughes teacher in the Barron High School.

FARMERS' INSTITUTE PLANS

The success which attended the cooperative marketing institutes held this past season under the auspices of the Farmers' Institutes was undoubtedly the basis for favorable action by the last legislature. The appropriations for this type of extension activity were increased 50 per cent bringing this appropriation to \$30,000 a year, \$10,000 of which is to be used to promote the work of cooperative marketing.

Plans are being made this year to hold approximately 35 of these cooperative institutes. H. W. Ullsperger, a former member of our staff and the leader of one of the most successful cooperatives in the state (Door County Fruit Growers Association) has been engaged as a conductor. Two series of these cooperative meetings will be run simultaneously by Superintendent Luther and Mr. Ullsperger.

These meetings will embrace the following commodities:- American and foreign cheese, butter, market milk, poultry and eggs, live stock and tobacco.

Besides these special feature institutes 140 two-day, 150 one-day, and 25 womens' institutes are being arranged for.

WISCONSIN CLUE MELBERS WIN AT MATICNAL DALRY SHOW

T. L. Bewick reports that Wisconsin dairy club boys and girls won signal honors with the twenty dairy calves that they took to the National Dairy Show at Memphis. First prize was won in the class for senior Guernsey calves, first and second on state groups in the Guernsey class, and grand champion individual Guernsey animal. With Ayrshires first prize was received in the yearling heifor class, and also grand championship. With Holsteins the Wisconsin entries secured first prize in the class for state groups. Not content with these excellent winnings in the club classes, several of the club members exhibited in the open classes and managed to get in the money on several occasions. The twenty club animals from Wisconsin won over \$400 in prize money.

STATE POTATO SHOW AT REINELANDER NOVERBER 1 to 4.

J. G. Milward, Secretary of the Wisconsin Potato Growers Association reports strong interest on the part of potato growers in the forthcoming state potato show that is to be held at Rhinelander, November 1 to 4. The University and the various state departments have arranged to install educational booths featuring disease and insect control, soil management problems, potato grading and standardization. Several hundred boys and girls enrolled in potato club work will be in attendance at the Show and will compete for the special prizes offered for potatoes grown by club members. W. McNeel will direct this part of the show.

BORER MAKES GREATEST ADVANCE IN OHIO

Four hundred and ten new townships have been added to the corn borer domain this year, According to government scouts reporting at the recent Toledo conference. Of these 228 are in Ohio, 57 in Indiana, and 61 in Michigan. The triumph of the borer over the drastic clean up campaign which was regarded as 95 per cent effective shows the improbability of being able to exterminate the borer as was done with pleuropneumonia and foot and mouth disease in cattle. It is becoming increasingly apparent that the corn belt has got to live with the borer as the cotton belt does with the boll weevil.

COUNTY AGENTS TELL WHAT MAKES EXTENSION PUBLICATIONS EFFECTIVE

A.W. Hopkins reports an interesting survey carried on this past summer in cooperation with C. B. Smith, Chief of the Office of Cooperative Extension Work, U.S.D.A. Seven extension bulletins, recently published by our Station, were submitted to 100 county agents in various parts of the country. Sixty-one replies were received from 35 states.

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Believing the county agents are peculi_arly able to measure the effectiveness of printed matter intended for extension teaching these men were asked to place the seven bulletins according to their merits in terms of length, illustrations, size of type, appeal of cover page, language, and actual accomplishment for extension purposes.

It is significant that the judgment of these county agents was overwhelmingly in favor of a relatively short bulletin, carrying many well chosen "action" pictures written in simple language, and with an especially appealing picture for the cover page. It is evident that we need to make every possible effort to shorten the bulletins intended for farmers and that it is hard to overemphasize the importance of simple language and really good pictures that tell a story. Mr. Hopkins will be glad to send you a complete summary of this investigation. If you will advise him of your desire for the same. The report is worthy of close study on the part of all of us who have the responsibility of preparing information for general use.



HIGH SCHOOL AGRICULTURE STIMULATES FURTHER STUDY

Does the teaching of agriculture in high school affect the attendance in agricultural courses at college? This is a question often asked. Last fall a study was made of the 153 freshmen in the Wisconsin College of Agriculture. It was found that 52% of the freshmen had agriculture in high school and 47% had two or more years of it. There were 24% who had four years of high school agriculture. A study of the freshmen of three years ago showed slightly less than 40% had two or more years of agriculture in comparison with 52% in the present study.

These 52% come from the 89 high schools of the state which teach two or more years of agriculture, leaving the 340 other high schools to furnish the remaining 48%. Sixty-two per cent of our agricultural freshmen come from high schools of less than 200 pupils.

An interesting study made recently in Virginia discloses the fact that 72% of the college freshmen enrollment in agriculture come from high schools which teach agriculture. It was found also that rural high schools not teaching agriculture send one out of every 122 male graduates to the Agricultural College while the agricultural high schools send one out of every 19.

AGRICULTURAL ENROLLMENTS IN UNITED STATES SHOW NO GENERAL INCREASE

Figures for first semester agricultural undergraduate enrollments for 11 agricultural colleges (California, Kansas, Michigan, Minnesota, South Dakota, Missouri, Nebraska, New York, Pennsylvania, Washington, and Wisconsin show a total of 4,015 students for 1926-27 and 4,019 for the present year. Six states (California, Illinois, Kansas, Missouri, New York, Washington) show a decreased enrollment. A study of the freshman agricultural enrollment, which is really more indicative of trends than total registration, shows decrease in six of the twelve states (California, Illinois, Kansas, Missouri, Nebraska, New York). Data for North Dakota and New Jersey, without comparative figures for last year, indicate increases in both states for freshmen and total enrollment.

Our total undergraduate collegiate enrollment has been increasing for the past three years. This year we had more transfers from other institutions than in any of the past four years. Of the twelve institutions mentioned, Pennsylvania, Minnesota, and Wisconsin only have shown increases in total registration for the past three years.

DR. BABCOCK PRESENTS HIS PORTRAIT TO OUR AGRICULTURAL GALLERY

The portrait of Dr. Babcock, painted in 1907 by Mr. Arvid Nyholm, which has hung in the Doctor's residence for many years, has been given by him to the Agricultural College to add to our gallery. The gift will be hung in the Agricultural Library along side of Dean Henry's portrait.

HOME ECONOMICS FRESHMAN MAINLY FROM TOWN AND CITY

Home Economics has an appeal for the firl in urban as well as rural environment. Most of the home economics freshmen at Wisconsin come from the larger high schools. Over 55% came from the high school of 300 or more and 36% from the high school of 200 or less. Only eight firls (11%) came with life experience on the farm.

Sixty per cent of the girls had some home economics instruction in high school and 37% of the freshmen had two or more years. In general home economics instruction is given but two years in high schools, and but six girls had more than two years of home economics. Forty-eight girls stated that home economics was offered in the high schools and 42 took the subject.

4H Club Work was taken by twelve girls, and nine of these had been members during the high school period, and eight had achieved honors in club work.

ACHIEVEMENT DAYS INTEREST RURAL WOMEN

Achievement day programs are giving to rural women an interest in the home economics work, and teaching them many valuable lessons. Home Extension Specialists Purcell, Stillman and McNulty recently held four such days in Eau Claire, Pierce, Taylor, and Shawano Counties. Some of these meetings were attended by 400 people; over 50 men were in attendance at one meeting, some stating that they came simply to drive in the women folks; others admitted "they wanted to see what the women were doing".

53 ENROLLED IN DAIRY SHORT COURSE

Switzerland, Washington, Tennessee, Indiana, Illinois and South Dakota are each represented in the group of men enrolled in this year's Dairy Short Course. Forty-seven of the 53 students come from Wisconsin.

Two-thirds of these men have had some high school training. Eighteen are high school graduates and two have B.A. degrees. Nearly all of them have had much more than the minimum of six month's practical experience in a dairy plant. Several actually own and operate dairy plants.

THE BORER INTRENCHES ITSELF IN ONCE INFESTED REGIONS

Despite the fact that the government's official pronouncement regards the corn borer clean-up campaign as successful, the borer has not only spread materially in the already affected states, but the amount of infestation has been increased in the earlier affected regions. Actual field determinations made this fall in over 725 townships in Michigan, Ohio, New York and Pennsylvania now show an average of 13 borers per 100 stalks as compared with 8 borers last year, and 2 per 100 stalks for 1925. In Michigan the borer population in "scouted" territory is 35 per 100 stalks this year as compared with 11 last year and 2 in 1925.

NUMBER OF CORN BORERS NECESSARY TO INCUR COMMERCIAL LOSS

The extent of infestation in a hill of corn registers the probable commercial losses to the corn crop. As the vitality of the corn plant is directly affected by the number of borers in the stalk, the density of borer population is most important. Where there are no more than five larvae per stalk there is but little actual commercial loss to the crop. When the borers increase in excess of about ten per stalk, an actual reduction in commercial yields is to be seen.

These relations are to be kept in mind in interpreting the statistical data that is now found in the press. The danger from the corn borer is the menace to the future. Actual commercial losses in Ohio as yet have been relatively small, and are wholly confined to the shores of Lake Erie. As yet no condition has developed in the United States that is at all comparable with the devastation in southwest Ontario. Fields showing a total loss there had an average of 33 borers per stalk.

RECENT CHANGES IN AGRICULTURAL FCONOMICS WORK

Several important changes and additions have been made in the Agricultural Economics department by the Regents at the last meeting of the Executive Committee.

Professor Geo. S. Wehrwein, formerly connected with the University, but for several years past a member of the staff of Dr. Ely's Research Institute of Land Economics and Public Utilities at Northwestern University, Chicago comes to us at the beginning of the second semester as Professor Agricultural Economics. Professor Wehrwein will give his entire attention to the research and teaching in the field of Land Economics which has been his specialty for a number of years. At present Professor Wehrwein is advising Commissioner Duffy of the State Department of Agriculture on a detailed Economic Land Survey in progress in Bayfield County.

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The work in cooperative marketing has been strengthened through the addition of Rudolph Froker from the University of Minnesota. Messrs. Bakken and Froker will spend one-half of their time during the fall and winter in connection with the Cooperative Marketing Institutes under Superintendent Luthers' direction, and the balance of the time in research work on similar marketing lines.

H. W. Ullsperger of Sturgeon Bay has been selected to conduct one of the series of Cooperative Marketing Institutes this winter. Mr. Ullsperger's long experience in the cooperative marketing field makes him a strong addition to the marketing program which is being expanded this year under the direction of the Farmers' Institutes.

ADDITIONAL EXTENSION POULTRYMAN SECURED

The growing interest, on the part of the farmers of the state, in the newer principles of poultry feeding, housing, and management has necessitated the appointment of an additional poultry extension specialist. Gerald Annin, a graduate of the University of Missouri, has been selected for the position, and is already at work assisting J. B. Hayes in aiding the poultry raisers of the state.

WISCONSIN HOME TALENT TOURNAMENT

Plays, and particularly one-act plays, form an important part of many rural community organization programs. The success of last year's home talent dramatic contests, both in Dane and Juneau Counties, has led to numerous requests from other counties, and finally to an inter-county or state tournament, which is to be held at the College of Agriculture Farmers' and Homemakers' Week, January 30 to February 4, 1928.

The tournament is being held in order that the best groups in the counties may be encouraged. The work is divided into two types of contest: (1) one-act plays; (2) novelties. The one-act plays are to demonstrate good drama; the novelties are a challenge to originality and exceptional individual talent.

In order to compete in the state tournament it is necessary that a county tournament be held first, and that at least four play groups, or three novelty groups participate. Since the project is designed for rural people, only rural communities may furnish contesting groups.

One hundred dollars in prizes will be offered the winning groups in the final tournament. The money will not be paid in cash, but will be paid toward any community improvement project which the winning group designates, meeting the approval of the state committee. The suggestion is that it be used for the furthering of dramatics in that community.

The committee in charge of the state tournament consists of K.L. Hatch, J.H. Kolb, and D.E. Lindstrom.



THE COLLEGE TO BE WELL REPRESENTED AT THE INTERNATIONAL

The College of Agriculture will be well represented at the International Livestock Show which spens at Chicago on November 26. The cream of the University herds and flocks have been entered in the various classes. Horses, beef cattle, sheep and hogs are all represented. It will be the first International in twentyseven years that Frank Kleinheinz has not accompanied the exhibit of sheep from the institution, but before his illness he had a hand in selecting the animals that were chosen to uphold Wisconsin's long standing premier position in the fat sheep classes, and no one is more eager than he to learn the results of the judges¹ decisions.

In the judging contests J. M. Fargo has coached the team to represent the College of Agriculture. As a result of the state contest for Smith-Hughes boys, held at the University on October 21, the livestock judging team from the Plymouth High School won the honor of being Wisconsin's representative in the junior livestock judging contest at the International.

Our Boys' and Girls Club department is planning to accompany a delegation of fifty club members from all sections of the state. The forestry club work being sponsored in Oneida County by County Agent Brann will have a special booth at the National Boys' and Girls' Club Congress that is held in conjunction with the Exposition.

TIMBER MANAGEMENT COURSE CLOSED LAST WEEK

Fifteen woodsmen, most of them logging superintendents and wood operators, attended the ten day Timberland Management Course which closed last week with a trip into the woods where selective logging is in progress. During the session of this course here at the College, the Advisory Committee of the Lake States Forest Experiment Station also held its annual meeting. With the new timber tax law becoming effective much interest is developing on the part of the progressive lumbermen with reference to these newer methods of logging. It now becomes possible for private owners to practice selective cutting which can be done more economically than clean cutting of both small and large timber, as well as thus providing a continuing crop of timber for the future.

ENROLLMENT IN SHORT COURSE

Registration in the Short Course shows a very gratifying increase this year. In the first year there is just a 100 per cent increase, 82 registering compared with 41 last year.

The total enrollment shows a 60 per cent gain, 160 compared with 100 last winter. It would be interesting to know in how far this favorable showing has been influenced by the improvement in the agricultural situation as compared with the efforts on the part of the staff to bring the matter of attendance to the attention of prospective students.

NEW COW TESTERS' COURSE OPENS WITH GOOD ATTENDANCE

an' Desurse This year the special course for the preparation of testers of herd improvement associations was extended to a five week period to be given coincidently with the first term of the Short Course. Twenty-six men have registered for this special work. Quite a number of those enrolled in the full three term Short Course also have in mind cow-testing work.

SHORT COURSE AGRICULTURAL SCHOLARSHIPS

For the fifteen one hundred dollar short course scholarships granted by the Regents to aid in the development of rural leadership, fifty-six applications were received. While only fifteen could, of course, be successful in obtaining this. recognition, thirty-seven of those who submitted essays in the competition have already registered for the course. These fifty-six applications came from thirty-two counties of the state, and one from outside of the state. Considerably over onehalf of those participating were high school graduates. About the same percentage were also 4-H Club workers. The essays submitted by these young men were full of human interest.

From the experience of this season, the efforts of the Regents in aiding us in the matter of encouraging student attendance has been most gratifying.

CORN BORER QUARANTINE INTERCEPTS PEST DISTRIBUTION BY AUTOS

Three million, three hundred seventy-eight thousand autos were stopped and rexamined this season by the federal quarantine officials on the edge of the corn borer infested territory. Over 5,600 dozen ears, mostly roasting ears of sweet corn, were found in these cars passing from infested to non-infested regions. In this intercepted material over 350 live specimens of the borer were actually found. The possibility of wide-spread distribution of the borer in this way is very great.

MENDEL'S LAWS OF HEREDITY GOVERN FATAL CALF MALADY

Lethal or death inheritance factors have not received the same attention from geneticists as has the study of the mode of inheritance of factors or qualities that have a positive value. This is but natural, and we are accustomed to reading of the contributions that have been made by specialists in heredity in the way of the improvement of grain varieties, and in the solution of perplexing problems in in animal breeding.

A unique study in the field of inheritance has just been completed by F.B. Hadley working in cooperation with L.J. Cole. For nearly a score of years Hadley has had brought to his attention a peculiar disease in certain new born calves. There is no hair on the legs, and the mucous membrane is entirely lacking in the nose and mouth. The calves soon die. Singularly enough all fifty of the affected calves were Holsteins, and by accident the discovery was made that they all traced to certain common ancestors that carried the blood of certain members of the Johanna family.

On further investigation it was learned that the dams of these calves carrying the epithelial defect would drop normal calves, but that a portion of their calves, when mated to a bull carrying the blood of Sarcastic Lad, (A famous Holstein sire), would carry the fatal defect. After working out a theory of the inheritance of the defect, experimental matings were made, and the defective calves were actually produced according to the Mendalian ratio of 1 out of 4.

This interesting example of the application of genetics . to the field of practical animal husbandry cleared up a perplexing problem in veterinary science, and demonstrated anew the unexpected manner in which economically important results may follow from studies in fundamental research in the sciences.

AGRICULTURAL COLLEGE DRAWS FOREIGN STUDENTS

The international character of this Agricultural College is shown in a recent compilation of foreign students made by Dean Goodnight. Out of a total of 125 foreign students in the whole university, coming from all parts of the world, one-fifth (21) are registered in the Agricultural College for graduate and under-graduate work. It is significant that the Agricultural College, which has eight per cent of the total enrollment of the University, is able to attract twenty per cent of the foreign students who are drawn to the institution. These students come from eleven foreign countries. Four are from China, a like number from the Philippines, five from Canada, one each from Jamaica, Australia and New Zealand, also a representative from Sweden, Bavaria, Japan, Korea and Mexico. Five of these men are undergraduates and sixteen are here for post-graduate instruction.

FOURTEEN PER CENT OF UNIVERSITY GRADUATE STUDENTS IN COLLEGE OF AGRICULTURE

Of the 981 students enrolled in the University Graduate School, 142 of 14.5 per cent, are working for degrees in the College of Agriculture. Fourteen of these are in Home Economics, and 128 in Agriculture.

AMONG OURSELV alli A HOUSE ORGAN FOR THE STAFF OF THE COLLEGE OF AGRICULTURE COLLEGE OF AGRICULTURE UNIVERSITY OF WISCONSIN RESILENT INSTRUCTION Vol. VI. No. 10. December 8. 1927

GUSTAV BOHSTEDT SUCCEEDS F. B. MORRISON IN ANIMAL HUSBANDRY DEPARTMENT

The Regents have recently approved the appointment of Dr. Gustav Bohstedt who, as Professor of Animal Hubbandry, replaces F. B. Morrison. Mr. Bohstedt will have general supervision of the research projects in Animal Husbandry, as did Professor Morrison, and also will carry instructional work in animal nutrition.

Mr. Bohstedt comes to us after winning conspicuous recognition for the work he has done in research in animal production at the Ohio Experiment Station, Wooster, where for the past six years he has served as chief of the Animal Industry Departmentment comprising the work in animal husbandry, poultry, animal nutrition, genetics, and animal pathology. He is now editor of the animal production section of "Biological Abstracts". Mr. Bohstedt and his family plan to arrive in Madison in time for the opening of the second semester.

COUNTY BOARDS STRONGLY SUPPORT COUNTY AGENT WORK

Nineteen county boards of supervisors at their November meetings voted on the matter of appropriations for county agent work, and all made a favorable decision according to information received at the Administration Office. The list of counties includes Washington, Monroe, Langlade, LaCrosse, Green Lake, Clark, Marathon, Kewaunee, Portage, Trempealeau, Kenosha, Pierce, St.Croix, Wood, Florence, Winnebago, Iron, Jefferson and Green.

This is the first time that Green County has voted to employ a county agent, and thus the number of agents in the state, actually provided for is increased from 52 to 53. On the **basis** of budget allotments there is opportunity for two additional counties after January 1 to organize this work.

In none of the nineteen counties were the appropriations for county agent work reduced, but in many counties substantial increases were granted. This speaks well for the character of work our county agricultural representatives are doing, and reflects much credit to them. There is a tremendous pressure being exerted to cut local taxes wherever possible, because farm taxes are now uncomfortably heavy. It is highly significant that this type of agricultural extension work which requires county initiative and financial support is able to justify itself and secure warm hearted local cooperation under these trying conditions.

A CASH DIVIDEND FROM EXTENSION WORK

Sometimes it is possible to show directly the increased financial returns coming as a result of extension work. A recent example has to do with the certified seed potato industry in Oneida County. In October 300 carloads of certified seed potatoes were sold from this County for shipment to Long Island, New York, bringing \$1.00 to \$1.50 a bushel to the growers, while the best table stock sold at 60 to 70 cents a bushel. It is true that the growing of the certified potatoes under the supervision of our potato specialists required increased labor and some cash outlay for spray materials. However, under most farm conditions the additional yields fully paid for these added costs, and the greater price received per bushel represents a net profit to the grower who is progressive enough to cooperate with the certified inspection service.

Over \$100,000 additional returns over the price of table stock will be received this year by the certified potato growers of Oneida County who have carried out the quality program of seed potato production.

CLUB WORK STIMULATES INTEREST IN COLLEGE ATTENDANCE

A recent survey shows that 18 per cent of the students now enrolled in the Long and Middle Courses in Agriculture were members of ⁴H clubs before their entrance to the University. Fourteen per cent of the Home Economics students have indicated their previous membership in some Boys' and Girls' Club, while 21 per cent of the Short Course boys have listed training they received in such clubs. It is significant that while club work now reaches only four or five per cent of the rural boys and girls of the state, seventeen per cent of our students come to us after receiving the stimulating influence of membership in one of these Boys' and Girls' Clubs.

UNIVERSITY LIVESTOCK WINS HONORS AT INTERNATIONAL

A Southdown lamb with a dressed weight of fifty-three pounds, bred and fed by the University, was declared the champion dressed lamb carcass at the recent International Livestock Exposition. Not only did the University win the first prize and championship in this class, but our entries also won the second and fourth prizes. The champion carcass sold at \$3.00 a pound.

Five first prizes in the classes demonstrating mutton improvement were won by our sheep.

Three first prizes were won in the classes for Poland China barrows, as well as reserve champion barrow.

A number of other prizes were secured by animals shown by the University, including second prizes on Clydesdale two year old mare, and junior yearling Shorthorn steer.

WISCONSIN AT THE INTERNATIONAL GRAIN AND HAY SHOW

Five firsts, four seconds, six thirds, and a total of seventy places is Wisconsin's record at the 1927 International Grain and Hay Show. One hundred ninoteen samples of corn and 107 threshed seed exhibits from the Badger state were on display.

Sixteen out of the first twenty-eight places in the class for ten ears of yellow corn, Region 2, were won by Badger entries. In flint corn Wisconsin took first, second, third, and fourth. The Wisconsin entries for this competition, in charge of E.D. Holden, deserve credit for their showing in the stiff competition of the world's largest crops exposition.

WISCONSIN CLUB MEMBERS WIN AT NATIONAL CLUB CONGRESS

Winning championship honors in sewing, canning and potato club projects Wisconsin's entries at the National Boys' and Girls' Club Congress, held in connection with the International Livestock Exposition, reflect credit to the

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calibre of work being done by the 4H club members of the state.

Out of thirty-five states represented in the National Health contest, Wisconsin's representatives won third in the class for boys, and the same for girls.

A DANISH FOLK SCHOOL IN LADISON

We hear much today concerning the spirit and results of the Danish Folk Schools. The subject matter of these schools is not of a technical agricultural nature but a study of community interests as interpreted through history, literature, and the social sciences. Dr. Joseph K. Hart, who has recently been brought to the University as professor of rural education in the College of Letters and Science, has had teaching experience in these folk schools, and is an enthusiast on the value of such instruction. Dr. Hart has consented to teach a second year short course group during the second term beginning January 5th, using the subject matter and method of the folk school as adapted to American conditions. We are anxious to give our boys the best we can secure in training them for leadership in rural communities and welcome this opportunity to make our short course embrace the spirit and method of these celebrated Danish institutions.

CROP ROTATION DOES NOT APPEAL TO MY LADY NICOTINE

Contrary to the best practice with most other crops the best results in tobacco production come from planting tobacco year after year on the same field, with no attempt at crop rotation, according to the findings of James Johnson and W.B. Ogden (Horticulture).

Science has demonstrated in this instance that sometimes old fashioned practices may be best. In the studies carried on by Messrs. Johnson and Ogden it was learned that clover and alfalfa sods cause a peculiar brown rotting of the roots of young tobacco plants, and that planting tobacco after a crop such as oats has somewhat the same objection.

Black root rot, a serious disease with tobacco, is caused by a fungus, and is responsible for the so-called "tobacco sick" soils. Using the root rot resistant strains of tobacco, such as Havana No. 142, developed at this Station, prevents crop losses from black root rot, and thus permits the growing of tobacco on the same field year after year, even though the soil may be badly infested with the root rot fungus.

A very practical bulletin, explaining the methods of securing the most profitable returns from tobacco production in Wisconsin, written by Johnson and Ogden, is now in the hands of the printer, and will soon be available for distribution.

TWENTY-FIVE MODIFIED ACCREDITED COUNTIES IN TUBERCULOSIS ERADICATION WORK

The number of modified accredited counties in Wisconsin more than doubled during the period July to December 1927. There are now 25 of these counties that have shown less than 0,5 per cent infection by the tuberculin test. Our extension forces in cooperation with the State and Federal Departments of Agriculture have spent much time and effort in urging the adoption of the area tuberculin test plan. The present rapid increase in the number of modified accredited counties represents the fruit of these years of endeavor.

BONUS FOR T.B. FREE SWINE LIMITED AFTER JANUARY 1

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On January 1st the packers will begin to pay the ten cents per hundredweight bonus for hogs coming from these counties that have just won the modified accredited rank. In an effort to aid in tracing the prevalence of avian tuberculosis the packers are requiring that hogs to secure the bonus must be tattooed at the point of shipment, so that hogs showing lesions of tuberculosis may have their origin established. With bovine T.B. practically eliminated from the counties in question the diseased hogs usually become infected from avian sources,



THE SEASON'S GREETINGS

Certainly farmers have reasons for a feeling of possession as regards the Christmas holiday season.

If at this period of the year we allow our thoughts to ramble where they may, naturally there comes to mind recollections of early childhood Christmas mornings, If on the farm, all of the farm animals were given an especially generous portion of feed, the family prepared to spend the day happily around the tree that was selected and cut by some member of the family, (not bought at the grocery store), making the most of this joyous and peaceful holiday.

Can we do better than to wish to each and every one of you and yours that this Christmas may be as joyous as were those holidays of youth.

COLLEGE PLANS TO UNDERTAKE FORMSTRY RESEARCH

The regents at their recent meeting authorized the Agricultural College to prepare definite plans for cooperative work in forestry research. In this work the resources of the State Conservation Commission and the Agricultural College will be united with those of the U. S. Forest Service.

The federal government has already established eleven regional stations for the prosecution of forestry research, particularly as applied to silvicultural problems. The Lake States Station, which is to cover the needs of Minnesota, Wisconsin, and Michigan, was established four years ago at St. Paul in connection with the University of Minnesota. Under this central organization, of which Dr. Raphael Zon is director, branch or sub-stations have been organized in Minnesota and Michigan. The movement here in Wisconsin is to plan for active participation in the general program of work that will be correlated with the work of the other locations.

At the outset no specific physical plant will be developed. For the immediate future several pieces of research will be formulated and arrangements made for staff appointments and assignments that will undertake the study of the problems wherever they can best be carried out. These will be supported jointly by the three organizations above mentioned. These studies will embrace the treatment and handling of the farmer's wood lot as well as the better management of commercial forest tracts.

ANOTHER WISCONSIN MAN TO HEAD UP POULTRY WORK

. C. E. Lampman resigns January 1 to become head of the Department of Poultry Husbandry in the University of Idaho. This makes the twelfth head of Poultry Departments in Agricultural Colleges and Experiment Stations of the United States who has received his training under J. G. Halpin since the organization of this work at this College in 1909. The growing importance of the industry in the state is also attested by the fact that when Halpin came to Wisconsin in 1909 the poultry products of the state were valued at ten million dollars, while the most recent data show a
value of over thirty-one million. In no field of live stock endeavor have there been such striking improvements made, within the past five or six years, through the application of the newer ideas of animal nutrition. This has been due in a large measure to the exceedingly close correlation of the fundamental scientific studies and the practical application in chick feeding and egg production.

GREEN OR YELLOW -- IT MAKES NO DIFFERENCE TO A CHICKEN

To an Irishman there is a world of difference between green and yellow (orange), but to a young chick there is no difference-provided the essential vitamins are present,--according to the recent findings of E. B. Hart and J. G. Halpin.

The so-called "Wisconsin Chick Ration", originated at this Station in 1924, has met with wide acceptance by practical poultrymen, not only in Wisconsin, but throughout the nation. In this ration a generous quantity of yellow corn is provided to supply the needed carbohydrate or energy elements, and also to furnish the much needed vitamin A factors.

In sections where corn grain is not grown it is highly important to find a cheap but effective substitute for the yellow corn. The experiments, just completed by Messrs. Hart and Halpin, indicate that by the addition of 5 per cent alfalfa leaf meal to the ration, it is possible to eliminate yellow corn entirely. Bright green alfalfa leaves, (bleached or weathered alfalfa will not suffice), have a high concentration of the important vitamin A factors, and abundantly meet the requirements of the growing chick, even though the balance of the ration is entirely devoid of vitamin A. In regions where yellow corn is not readily available, therefore, the "Wisconsin Chick Ration" can be modified by the use of alfalfa leaf meal that has been cured in such a manner as to retain the bright green color, and the corn can be replaced by barley, wheat, or oatmeal.

ELLEN H. RICHARDS FUND RECEIVES LOCAL SUPPORT

Active steps are being taken among Home Economics people throughout the United States to raise \$15,000 to apply toward the \$25,000 Ellen H. Richards Memorial Fund, the interest from which is to be used for Home Economics fellowships. The home economics people of this state have been assigned a quota of \$585.

Each member of the State Home Economics Association is increasing her annual dues \$.50, which is paid into the Fund. The various student organizations and faculty groups are also raising money for the Fund.

Miss May Cowles is serving as Fellow under this Fund for this year, and is carrying on her research work at Chicago. Last year Miss Lita Bane held the fellowship.

Miss Marlatt is Secretary-Treasurer of the group administering the Ellen H. Richards Fund.

ALL AGRIC PARTY A SUCCESS

On December 2nd the Euthenics Club sponsored an All Agric party at the Woman's Building that was well attended by students and faculty. The Club netted a small profit, a goodly portion of which was turned over to the Ellen H. Richards Memorial Fund.

JUNIOR FORESTRY CLUB WORK SHOWS HEALTHY GROWTH IN ENROLLMENT

Last year, 1926, a Four H club project in forestry was offered for the first time in this state. There was a total membership of 56 from four counties. This year 15 counties were represented and a total of 438 members enrolled. Wakelin McNeel and F. G. Wilson, who have this project in charge, report that the "Junior Forest Rangers", as these Forestry club boys are called, planted over 130,000 trees in 1927. Four forestry demonstration teams competed at the State Fair, and the winning team was invited to present their demonstration at the National Club Congress, at Chicago, the first of this month.

The Junior Forest Rangers are required to carry out definitely prescribed studies and tasks, in much the same manner as Boy Scouts, and the satisfactory completion of these permits the boy to quality for the four Orders of (1) Forest Crafter, (2) Forest Planter, (3) Woodsman, and (4) Cruiser.

The work of the Junior Forest Rangers is concerned especially with forest fire prevention, tree planting, identification of varieties of trees, and a study of the forest resources and needs of the United States.

FRESHMEN WEEK SCHEDULED FOR NEXT FALL

The University is to take a new step this next fall in designating the first four days of the semester as "Freshman Week".

This period has been set aside, by faculty action, for the purpose of providing freshmen with an unhurried opportunity to plan their courses in consultation with faculty advisors, make living arrangements, become more fully acquainted with their new environment, and generally to find out "what it's all about" before the regular class work begins. Some of us will undoubtedly be asked to help provide the program for this period, and it would seem a rare opportunity to render an appreciated service to the new student in helping him to become oriented and adjusted to his new environment. Experience has shown the great importance of the student getting the right attitude and understanding at the very start of his college career.

This movement is rapidly being adopted by many institutions. Over two score universities and colleges have inaugurated the plan in one form or other within the past three years.



RESUME OF INDUSTRIAL FELLOWSHIPS IN FORCE 1927-28

For several years the College of Agriculture has been offered funds by various interests (agricultural organizations, general business associations, and commercial concerns) for the purpose of enlarging the scope and activity of definite research projects. These applications have been investigated on their individual merits and where it has been determined that the problem to be studied could be wisely undertaken, memorandum agreements have been entered into between the Board of Regents of the University and the cooperating organizations or concern.

In no small degree has the work of the College been enlarged in this way, and the results obtained have been instrumental in the acquisition of knowledge, often of a fundamental character. In executing this arrangement, the fellowship has been assigned to some specific department and a graduate fellow appointed who has carried out the investigation directly under the control of some member of the professorial staff or committee having the work in charge.

In view of the growing importance of this comparatively new method of furthering research from other sources than the regular university budget, it has been thought worth while to summarize these activities so that the entire staff would have up to date information relative to this work. The station always retains the right to publish any data received in any way it sees fit, so that the interests of the public may be fully protected with reference to any findings made. In the furtherance of the idea that sound public policy will be kept foremost in consideration, no exclusive right to any findings is granted to the donor of any industrial research funds.

CHICAGO MEDICAL MILK COMMISSION FUND

This fund was first established in July, 1925. It was provided by the Chicago Medical Milk Commission for the purpose of studying the presence and significance of blood-dissolving (hemolytic) bacteria present in certified milk. This Fellowship is assigned to Agricultural Bacteriology and is carried on under the immediate direction of W. D. Frost.

For this academic year the sum of \$4,400 is available. Mr. R.C. Thomas and Miss Mildred Gumm are the present Industrial Fellows under this fund.

This study grew out of a ruling of the Chicago Board of Health that all hemolytic streptococci found in milk were dangerous and were capable of infecting humans with sore throat. When the certified milk industry was thus threatened with exclusion from the Chicago market, unless all such milk was pasteurized, the certified milk producers asked this Station to make an investigation as to the presence and significance of these organisms in milk.

Milks from all the certified herds supplying the Chicago market are regularly examined. It was soon demonstrated, even to the satisfaction of the Chicago officials, that most of the hemolytic bacteria found in these milks are not disease-producing in man. So far only nine animals, out of the thousands of cases examined have been found that have carried the dangerous bacteria, and these in the main have been animals that were not in certified herds.

These studies have been the means of increasing materially our knowledge of fine shades of distinction that are to be found in these closely related bacterial strains.

Our laboratory has developed a type of scientific control that is much appreciated, not only by the producers, but by those who have the responsibility of safeguarding the public health. This is apparently quite a new line of effort in applying the finer biological differentiating methods to the commercial handling of an important phase of the dairy industry.

UNIVERSAL MILKING MACHINE FUND

A fund of \$600 was established in March, 1927 by the Universal Milking Machine Company of Waukesha. The fellowship founded was assigned to Agricultural Bacteriology under the direction of E. G. Hastings. W. B. Sarles served as Fellow under this fund from March until August, 1927. Eugene Holst is serving as scholar during the present semester.

The purpose of this Fellowship is to study the bacteriological efficiency of the universal washer sterilizer, a milking machine cleaning device. This study has considerable practical value in that the present system of cleaning milking machines in many cases requires so much time as to offset in large measure the saving in time of milking brought about by the use of the milking machine.

In the studies carried on by Mr. Sarles it was learned that the equipment was highly efficient from a bacteriological standpoint, provided hot water, (at least 190°F.), was available for flushing and rinsing the milking machine. Unfortunately many farms do not have hot water readily available. To study a variation in procedure studies are now underway to test the efficiency of certain chemical compounds used in solution which may be effective in cleansing and sterilizing the equipment without the necessity of hot water, "Diversol", a commercial product which is a tri-sodium phosphate, is giving good results in the test. It appears that either the hot water treatment, or the treatment with the chemical sterilizer, is able to reduce the bacterial content of any sediment or deposit on the inside of the milking machine so as to remove from practical significance any contamination to the milk from the milking machine. What few bacteria are left in the machine are insignificant as compared with the number of bacteria which gain access to milk through other channels. It seems likely that the universal washer sterilizer used in connection with chemical sterilization will result in a great saving of time in the cleaning of milking machines and should also help considerably in controlling the bacteriological infection of milk from milking machines that are ordinarily very hard to clean and put in a sterile condition.

THE CHAS. PFIZER & COMPANY FELLOWSHIP

This Fellowship was first established by Chas. Pfizer & Co. of New York in 1926. For the academic year 1927-28 there is a fund of \$3,000 available. The Fellowship has been assigned to the Dairy Husbandry department and is supervised by H.H. Sommer. H.L. Templeton is now serving as Industrial Fellow.

The purpose of the Fellowship is to study the use of citric acid and its salts in dairy manufactures. Last year experimental work was done using citric acid to improve the quality of milk starters for butter making. It has been demonstrated that some of the volatile compounds responsible for aroma and flavor of butter are closely related to the amount of citric acid in the cream from which butter is made. Enriching the cream with small quantities of citric acid, (0.2%), has resulted in increasing the aroma and flavor of the butter. Experiments have also been carried out on the use of citric acid to acidulate cow's milk for infant feeding. Lactic acid is now frequently used for this purpose, but citric acid has certain advantages in that it is simpler and easier to use than the lactic acid which has very definite limitations regarding temperature, and the milk must be carefully agitated at the time the lactic acid is added. Citric acid comes in convenient tablet form, and can be applied at any temperature, and with practically no inconvenience or extra trouble. This phase of the study is being carried on in cooperation with Dr. Gonce of the Wisconsin General Hospital. The data that has been accumulated seems to favor the use of citric acid.

This winter studies will be made with reference to the use of citrates and phosphates in "processed" cheese. These compounds are now in common use in processed cheese, but little experimental work has been done to determine the limit of temperature or acidity, and the optimum quantity of the salts to use.

MILWAUKEE MILK PRODUCERS' FEDERAION FELLOWSHIP

Sponsored jointly by the producers and distributors of fluid milk in the Milwaukee district this fellowship has been in force since 1924. The dairymen donate a small levy on each can of milk they sell, and the money so raised is matched by the milk distributors of the city. The funds thus accumulated are used for the purpose of promoting a wider use of milk, more particularly in connection with the schools. Much of the work is done through such groups as women's clubs and organizations, parent teacher's associations, mother's clubs, etc. Excellent results have been secured on the wider use of milk among factory workmen. The sum of \$3,300 annually is utilized to support this fellowship. Miss Mary Brady is serving as fellow. The project is assigned to the Home Economics Department, and is supervised by Mrs. N.K. Jones and K.L. Hatch.

Milk consumption statistics for Milwaukee show that a real increase in the per capita consumption of milk in the area has taken place, thus indicating the effectiveness of the program. It has been possible to accumulate in this way a lot of valuable data regarding the wider utilization of milk that otherwise would not have been available.

THE COMMERCIAL SOLVENTS CORPORATION FELLOWSHIP

This series of Fellowships was established in February, 1925, by the Commercial Solvents Corporation, Terre Haute, Indiana, \$2,500 being made available for the support of two fellowships which have been assigned to the Agricultural Bacteriology Department. The work in question is supervised by E.B. Fred and W.H. Peterson. Perry Wilson and Louis Van Ermon are the present fellows.

The purpose of the study is to learn more about the fermentations produced by the butyric acid-forming bacteria. Miss Elizabeth McCoy was the first fellow under this fund, and in 1925 she made a study of all the strains of bacteria belenging to this group. This "typing" consisted largely of studies of the action of these various strains when grown under different conditions as to temperature and cultural media. Not only did these fundamental investigations throw light on the nature of the bacteria that are responsible for the production of a series of fermentation products, but it has made possible a better understanding of the relation of these compounds to the commercial production of these valuable volvents and industrial chemicals. Over 25,000 bushels of corn a day is now being used in the industrial plants of this corporation in the production of solvents from agricultural raw materials.

The subject under investigation this year is the refinement of the methods used to determine qualitatively and quantitatively the various organic acids that occur as a result of the fermentation processes brought about in the media that has been inoculated with the butyric acid bacteria.

E. R. SQUIBB & COMPANY FUND

This fund totals \$1,500 for the fiscal year and was made available July 1, 1927. The fellowship is assigned to the Agricultural Chemistry Department and is directed by E.B. Hart. Miss E.C. Van Donk is serving as fellow.

The chief study undertaken under this fellowship is the vitamin E content of wheat germ oil and the ability of this vitamin to promote iron assimilation, promote the building of blood hemoglobin, and prevent certain types of anemias.

Wheat germ oil is an important carrier of vitamin E, and some biological chemists have ventured the hypothesis that there is a close relationship between vitamin E and the peculiar ability of certain compounds to promote iron assimilation and prevent anemias. This study undertakes to learn definitely if such a relationship exists.

Rabbits and rats are being given milk diets that bring about pronounced anemias, and then they are administered ferric chloride plus various amounts of wheat germ oil to note their recovery from the anemia. To date the results seem to show a negative relationship, thus indicating that vitamin E and wheat germ oil probably do not supply the essontial factor for iron assimilation.

QUAKER OATS COMPANY FELLOWSHIP - (AGRICULTURAL CHEMISTRY)

This fund was established in July, 1925, by the Quaker Oats Company, Chicago, Illinois and is directed by Harry Steenbock (Agricultural Chemistry). The first year Dr. Black served as fellow, and last year Byron Thomas. This year Mr. Thomas is again serving and in addition W.P. Elmslie, while Alice Wirick is serving half time. For the fiscal year 1927-28 a total of \$7,000 is available.

The project grew out of a study of Mellanby, an English chemist, which was reported by the British Medical Research Council. Mellanby stated that oats were conspicuously deficient in the anti-rachitic factor, (vitamin D) much more so than the other cereal grains. Coming with the endorsement of the official British Council this led to widespread campaigns against the use of oat meal and oat products. Some Scandinavian countries even went so far as to prohibit the importation of oat meal.

Earlier studies at this Station indicated that oats were not inferior to other cereal grains in this particular, and this fellowship was established in an attempt to harmonize these earlier findings with the results published by Mellanby. The data so far obtained have served to verify and amplify the earlier experiments carried on here, and to question directly the conclusions of Mellanby. Oats are deficient in vitamin D, but so are all the cereals, and there seems no good reason for singling out oats for particular disapproval.

With the discovery that irradiating foods with ultra violet light increased their vitamin D content, studies were initiated under this fellowship to learn the optimum period and most effective methods of irradiation for various cereal products, butter, cheese, milk, and a great many other food compounds used in human and animal nutrition.

THE QUAKER OATS COMPANY FELLOWSHIP (ANIMAL HUSBANDRY)

The Quaker Oats Company established this fellowship in January, 1927 providing \$3,000 for its maintenance. The purpose of the study undertaken is to learn the feeding value of certain cereal by-products that are now imperfectly utilized in the milling industry, more particularly as to the possibility of utilizing oat hulls which are now largely a waste product. The Quaker Oats Company has provided a well equipped farm, known as the Monona Farm, located on the east side of Lake Monona, where large scale experiments are underway. Here they have arranged to maintain many experimental lots of all kinds of live stock. All farm management details are cared for by the employees of the Quaker Oats Company, but the scientific supervision of the experimental work is under the general oversight of A.W. Lathrop, who has been appointed Industrial Fellow assigned to the Department of Animal Husbandry. The general oversight of this work was under the direction of F.B. Morrison, but will be transferred to G. Bohstedt on his arrival.

NATIVE PLANT LIFE FUND

Six hundred dollars was made available in September 1927 by a lover of our native plant life who wishes to remain an anonymous giver. The fellowship created from this source was assigned to Horticulture. W. C. Meyer is serving as fellow unde the immediate direction of F. A. Aust.

The first purpose of the fellowship is to make possible an intensive study of the ecological factors governing the propogation and growth of the American lotus, a beautiful aquatic flower, related to, but not identical with, the Egyptian lotus; and long thought to be limited in its habitat to warm climates.

The lotus flower is cream yellow in color and stands 12 to 18 inches above the surface of the water. The empty seed pods are nearly as attractive as the flowers. Carloads of these empty seed pods are gathered for decorative purposes. The plant has become well established in several locations in southern and central Wisconsin, but nevertheless does not readily adapt itself to all types of water environment.

A most interesting relationship exists between the recent increased use of fur coats and the spread of the American letus. Muskrats are fond of the lotus, and it was only when the fur coat craze sent skyward the price of muskrat pelts that the muskrats were cleaned out of particular bogs and lagoons in which the lotus has not been able to spread.

So many people have been impressed with the rare beauty of the lotus that thousands of lotus tubers are dug and transplanted, but reports indicate that less than five per cent of these tubers become established in their new locations. The studies have demonstrated the necessity of a clay soil; sands will not do. Mr. Meyer is now making observations that should throw light on the matter of the proper soil reactions, temperature of the water, movement of the water, and other requirements of the plant. It is hoped that definite methods can be evolved that will make possible the wider spread of this singularly beautiful native wild flower, as well as other types of bog and aquatic plant life.

BARNEY LINK POSTER ADVERTISING FUND

This was established in July 1924. The purpose of the project is to study ways and means of improving the artistic quality and the effectiveness of outdoor poster advertising, to aid cooperative farm organizations in better utilizing poster advertising, and to help farmers in designing and adopting suitable roadside farm signs. For the academic year 1927-1928 the Outdoor Advertising Association of America has provided a fund of \$6,500. The fellowship gets its name from the late Barney Link, a man long prominent in the affairs of the Outdoor Advertising Association.

The projects are administered by a committee made up of four representatives of the Association, J.G. Moore, and F.A. Aust (Horticulture), A.W. Hopkins (Agricultural Journalism) and the Dean. John R. Campbell and Ellsworth Bunce are now serving as industrial fellows under the fund. Mr. Campbell is working on the horticultural and psychological aspects of the work, while Mr. Bunce is engaged on studies in rural advertising.

Mr. Campbell and Mr. Aust have worked out simple and inexpensive landscape designs that greatly increase the interest and attention appeal of poster signs. Detailed planting plans have been prepared to accompany these designs, and are now in the hands of the printer, and will be distributed to poster plant owners throughout America. Much attention has also been given to working out a standardized method of measuring the traffic passing a particular poster site, and means of determining the value of locations for poster advertising purposes. In cooperation with psychologists in the College of Letters and Science, much study has been given we the testing of the advertising appeal of good art in posters, and means of determining the artistic value of a particular poster.

Mr. Bunce is working with farmer-owned cooperative associations marketing agricultural commodities and helping them in the designing and use of poster advertising material. Other projects are registration of farm names; control and elimination of commercial signs in the open country; and the development of appropriate farm signs which have been adopted by a number of farm organizations such as the Door County Fruit Growers' Union, the American Holstein Freisian Association, the Wisconsin Experiment Association, the Wisconsin Accredited Hatcheries Association, and the Wisconsin Livestock Breeders' Association.

The thought might well be expressed that it would not seem feasible for the University to be able to aid this rapidly expanding poster industry in a better development of its work, but the appreciative recognition by the active officers of the Poster Association of the value of the results which have already been obtained, and the continued support which they have now given to this work for several years past, is the best index of its worth.

WISCONSIN UTILITIES ASSOCIATION INDUSTRIAL FELLOWSHIP

This was established in March, 1924, as part of the nationwide movement to study the applidation of electricity for rural use, and was assigned to the department of Agricultural Engineering, under the general direction of F.W. Duffee. This year the Wisconsin Utilities Association (the state association of the public lighting companies) has provided a fund of \$2,700, and also pays all necessary travel expense.

E. R. Meacham was the first to serve under this fund, and during the year he was in the work he was instrumental in establishing the Ripon Electro-Test Line, which serves six farms, and has furnished practical and very valuable data with reference to the installation of many kinds of electrical equipment in connection with high line current.

W.R. Krueger, the present fellow, began his investigations in 1925. At first his time was largely taken up with gathering accurate power consumption and cost data on the various electrical appliances installed on the farms located on the Ripon Test Line.

When these investigations showed the importance of designing a small feed mill, adapted especially for operation with an electric motor, experimental grinders were designed and constructed in cooperation with F.W. Duffee. Two new grinders were perfected which have given such good results that they are now being manufactured commercially. Attention has also been given to the design and installation of running water systems particularly adapted to farm requirements and that do not necessitate a large initial expense.

During the 1926-27 period 18 additional Electro-Test Farms, in various parts of the state, were initiated, so as to provide information under more varied conditions than on the Ripon Test Line. On all these farms separate meters give a record of the power consumption of each electrical appliance, and the farmers keep a time record that serves as a measure of the service rendered by the equipment. Much of Mr. Krueger's time is now occupied with the assembling, summarizing and interpreting of the reports that come to him from these 18 farms and the Ripon Test Line.

Two projects are now receiving special attention. One is the use of electric refrigeration for the cooling of milk for several fluid milk producers in Walworth County who receive a bonus for all milk delivered at a temperature of less than 50° F. The other project is in connection with the plans for a short course, to be held at the University in February at which time practical instruction covering rural electrical problems will be given service men from the various electric companies of the state.

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WISCONSIN MANUFACTURERS' ASSOCIATION FUND

This fund was established in July 1926, and provides \$50,000 to be made available on a basis of \$10,000 annually for the immediate five year period.

The Wisconsin Manufacturers' Association generously provided this fund because of their interest in the welfare of the agriculture of the state and their desire to assist the College of Agriculture in an intensive study of the relationship between the plane of nutrition of dairy cattle and their susceptibility to contagious abortion which is regarded by many as the most serious disease menace to successful dairying.

The project is supervised jointly by a committee consisting of representatives of the Departments of Agricultural Chemistry, Animal Husbandry, and Veterinary Science (E. B. Hart, Chairman). Dr. W.T. Miller is serving as fellow under the fund.

Forty-four heifer calves were purchased a year ago, and placed on the new South Hill Farm. They were absolutely clean in respect to tuberculosis and contagious abortion, as determined by the history of all the cattle in the herds from which they came, and the tuberculin test for tuberculosis and the agglutination test for abortion.

The herd was divided in two equal groups, one being maintained on a well balanced nutritive plane; the other on a ration that is too frequently used but which is acknowledged deficient in phosphorus and lime.

It is planned to carry the heifers into the second lactation period before they are exposed to infection from contagious abortion. This will allow for an accumulation of the effects of the two contrasting rations, because of the mineral drain of the two lactation periods. This experiment has been most critically studied from all points of view and conclusions reached after a prolonged trial of this sort should be of much value to dairy science.

IN SUMMARY

The Industrial Fellowship offers an organization or an individual the opportunity to assist in the solution or promotion of a definite agricultural project in which they may have an interest. It is the means whereby willing cooperators may join forces with the University in aiding science to serve agriculture.

The foregoing account tells something of the industrial fellowships now in progress in the Wisconsin College of Agriculture. A number of such fellowship funds have been donated to our institution during recent years, a complete account of which would be too voluminous for this publication. Much benefit to the actual men on the farms of America, as well as to allied agricultural interests, has resulted from the joint studies which were aided by the financial assistance given the university by the donors of these fellowships.

The incumbents of these fellowships are given financial aid which has enabled a considerable number of persons to carry on further their graduate work. In a considerable number of cases fellows after completing their university work have found employment with these commercial organizations. With the growing importance of industrial applications of an agricultural character, this makes desirable outlet for our competently trained students.

SAVING AN INDUSTRY

We feel that we cannot do better in closing this account than to quote from a recent statement made by Martin Meeter, President of the National Kraut Packers' Association. This organization maintained a fellowship with us during the five year period 1922-27, to aid in the work being done by our Plant Pathology Department in the development of strains of cabbage that would be resistant to "cabbage yellows". Mr. Meeter said in part:

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"The yellews disease, particularly in hot weather, was destroying hundreds of acres of cabbage in southern Wisconsin, Illinois, Indiana, Ohio, and parts of Michigan.

"The National Kraut Packers' Association agreed to assist in subsidizing the work with the University of Wisconsin, making it possible to push the work faster and develop resistant strains in a commercial way.

"After the experimental stage was over, the work was turned over to others. "In many districts it is now impossible to grow any other than these

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varieties. We know of several kraut factories which today would positively be closed down and unable to operate on the cabbage in their locality were it not for these new strains, as the soil is diseased and nothing but these resistant strains can be grown in these soils".

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ANOTHER WISCONSIN GRADUATE MADE EXPERIMENT STATION DIRECTOR

F. J. Sievers who graduated from the Long Course in Agriculture in 1910 has just been chosen as Director of the Massachusetts Experiment Station at Amherst. Mr. Sievers was instructor in Soils in this college for two years following graduation, leaving us to take a position with the Milwaukee County Agricultural School. Since 1919 he has been head of the Soils department at the Washington State College at Pullman.

This appointment makes the <u>third</u> Wisconsin man in the past four months to assume administrative responsibilities in the guidance of experiment station work. F. B. Morrison and B. M. Gonzalez were recently chosen to head up respectively the work of the New York Station and the deanship of the Agricultural College of the Philippine Islands.

OLD BOSSY FAILS TO RESPOND TO THE "LIME-LIGHT"

Dairy cows are able to assimilate lime just as well while kept in a dark basement as when out of doors exposed to the direct sunlight, according to the recent findings of E. B. Hart and Harry Steenbock (Agricultural Chemistry).

Recent experiments, both at this Station and elsewhere, have shown that light plays an important part in the anti-rachitic property of hay and other feeds. Hay cut in the early morning before the sun comes up, and cured indoors out of the sun, has no anti-rachitic property. Exposing young chicks, goats, and many other animals to the sun's rays greatly increases the ability of the particular animal to retain and utilize the lime in the ration.

Hart and Steenbock undertook to answer the practical question, "Does exposure of heavy milking dairy cows to summer sunshine enable them to obtain and utilize from their pasture grasses sufficient lime to keep them on a positive lime basis?"

Last June, when the anti-rachitic properties of the sun were at a peak, careful metabolism experiments were carried on with cows placed in direct sunlight for six hours daily as compared to standing in a darkened barn. They were fed a grain mixture, silage, and 40 pounds daily of freshly cut green grass. The data obtained showed practically no difference in the assimilation of lime when the cows were in the sunlight or the darkened barn. Apparently then, the rays of the sun have a remarkably beneficial effect on lime assimilation by little chicks, pigs and goats, but with cows no such positive benefits can be observed.

TON LITTER CONTEST WINS WIDENING INTEREST

Exactly twice as many counties made entries in the 1927 ton litter contest as in 1924. The three year period saw an increase from 17 counties represented to 34. In all there were 103 litters entered this past year, of which 34 qualified with a weight of 2,000 pounds at the age of 180 days or younger. H. J. Brant (Animal Husbandry) who has this extension project in charge, reports that the entries averaged 10.7 pigs per litter, while the litters that made the ton figure at six months of age averaged 11.2 pigs per litter. The winning litter was made up of 12 pure bred Chester Whites that weighed 3,598 pounds, or an average of 300 pounds per pig, when 180 days of age. They were bred and fed by August Speerschneider, New Franken. The ton litter contest is accomplishing much in bringing to light the factors that make for low costs of pork production and greater hog profits.

TWENTY-TWO NEW ENROLLMENTS IN SHORT COURSE

The 160 students enrolled in the Short Course have had their number increased by 22. This number of new students entered at the beginning of the second term on January 5, thus making the total enrollment 182 as compared to 128 at the corresponding date a year ago.

SON FOLLOWS FATHER IN THE SHORT COURSE

A survey brings to light the interesting fact that five of the boys enrolled in the Short Course this term are sons of former students in our Short Course. All five of these former students are now operating farms, three in Wisconsin, one in Iowa, and one in Illinois. We are glad to welcome these sons to our campus and classrooms. We are offering them opportunities and facilities far beyond that available to their fathers who were here when the short course was an educational experiment. If they can make as good use of these opportunities and facilities as did those early graduates of our short course, we surely will have reason to be proud. of their records.

CORN BELT STATES URGE CONTINUANCE OF BORER CLEAN UP

The Secretary of Agriculture has recommended to budget director Lord that no special appropriation be made by the Federal Congress for the purpose of a corn borer clean up campaign.

Of last year's \$10,000,000 appropriation, approximately \$1,000,000 remains which will be used in cooperation with the various states on; (a) interstate features such as the cleaning up of river valleys where floods might carry infested material long distances, (b) that the regulatory campaigns within the states be carried by the states; (c) that the Federal Government carry on educational campaigns and investigational work.

The attitude of the representatives from the corn belt states, at the corn borer conference held in Washington on December 19, 1927, was, however, that another large appropriation was necessary and a strong presentation of this matter was made to the Secretary of Agriculture. He stated, at this time, that he did not oppose any such movement, but that since early in the summer the policy of the department had been determined this could not now be modified.

The International Corn Borer Committee is strongly in favor of the continuation of the 1927 policy to apply to all of the one per cent area and have asked for an appropriation of \$20,000,000 for the next two year period.

The 1927 campaign reduced the rate of increase in the number of borers in the infested area. Official counts showed one and a half times as many borers in 1927 as in 1926, compared with four times as many in 1926 as in 1925, when no clean up campaign was put on. But it did not stop the spread of the pest to new areas. In the opinion of the Federal Department the spread of the borer to the entire Corn Belt is inevitable.

TREE TRIMMING SHORT COURSE FEBRUARY 7 TO 10

For a second time the College of Agriculture, through the Department of Horticulture, is offering its services to the Wisconsin Utilities Association and the Wisconsin State Telephone Association in order that a school of instruction may be provided for the foremen of telephone, telegraph and electric utility organizations, who desire to learn the better care of trees along public highways. The course is scheduled for February 7 to 10, and will emphasize the identification of varieties of trees, proper pruning methods, and the care and treatment of wounds.

RURAL ELECTRIFICATION SHORT COURSE FEBRUARY 14-15-16

In connection with our research and extension activities with relation to the more effective utilization of electricity on farms, a short course for rural fieldmen of Wisconsin electric utility companies is to be held at the College February 14-15-16. Many special problems on farms make it necessary for methods different than those used in the city to be followed in installing electric service, and in operating the various motorized and electrified equipment suitable for farm requirements. The recent studies carried on in our Department of Agricultural Engineering have thrown new light on many of these problems, and it is the purpose of this school to make this new information available to the electrical fieldmen who are serving the farmers of the state.

NATIONAL ASSOCIATION HONORS H. F. WILSON

At the recent annual meeting of the American Association of Economic Entomologists, held at Nashville, Tennessee, H. F. Wilson, Chief of the Department of Economic Entomology of this College, was elected vice-president (section of agriculture) of the Association.

ANNUAL EXPERIMENT STATION REPORT TO BE RELEASED FEBRUARY 2

The annual report of the Director of the Experiment Station for the fiscal year 1926-1927, which is compiled from the reports of research work carried on in the various departments, has been in the hands of the printer for the past six weeks and will soon be available. It will not be released to the public until February 2. The report carries the title, "Forward Steps in Farm Science", and will be known as Bulletin 396.

CLAYTON HOLMES MADE INSTRUCTOR IN POULTRY DEPARTMENT:

Clayton Holmes, '27, has been appointed by the Board of Regents to fill the vacancy in the Department of Poultry Husbandry caused by the resignation of C. E. Lampman, who was recently made head of the Poultry Department at the University of Idaho. Mr. Holmes was one of the three students in the College of Agriculture to receive senior honors at 1927 Commencement. For the first semester of this academic year he has been engaged in research work in the Poultry Department of Pennsylvania State College.



DR. R. N. CHAPMAN TO ADDRESS CORN BORER CONFERENCE FEBRUARY 10

Dr. R. N. Chapman, Chief of the Department of Zoology and Entomology in the Minnesota College of Agriculture, has accepted our invitation to meet on February 10 with members of our staff who are interested in keeping in touch with the latest developments with reference to the corn borer problem. Dr. Chapman spent this past summer in Europe studying the research work that is being carried on in the various continental countries with a view to learning control measures that will help America to fight the damage of the corn borer. Dr. Chapman made a special investigation of the work that is being done in propogating parasites that will attack the borer. Announcement of the hour and room for the February 10 conference with Dr. Chapman will be posted on the bulletin board.

FRESHMAN SURVEY SHOWS BOYS FROM COUNTRY - GIRLS FROM CITY

Forty-three out of the sixty-seven agricultural freshmen of the present year have lived all their lives on the farm or have had a varying amount of farm experience. Twenty-two have had only city and town experience. Fifty-seven of the sixtyseven are natives of Wisconsin; Illinois sends six of the ten out-of-state students in the freshman class.

Of the sixty-nine home economics students only 20 have ever had any farm experience and of this number only eight are really farm girls. On the other hand 65% of the home economics students come from larger cities. Thirty-two of the home economics freshmen have had some home economics in high school. Of those coming to us with no previous training in home economics only thirteen came from high schools where home economics was taught. Fourteen of the freshmen came from schools where the subject was not offered.

Twenty-six of this year's class came from high schools with an enrollment of less than two hundred; twenty-four from high schools with a registration of over five hundred and 17 came from high schools with an enrollment of over 1,000. Thirty-one of these freshmen expect to teach for a living following their graduation, while 15 expect to be dietitians. Fifty-one, or 74% of the home economics freshmen came from the State of Wisconsin. Illinois furnishes 13%, or 9 students, the others coming from seven other states.

COUNTY BOARDS INCREASE COUNTY AGENT APPROPRIATIONS

Eighteen of the 28 counties of the state in which the county agricultural agent project came up for consideration in November, granted increases in appropriations ranging from \$100 to \$1,000 per year. The average increase for these 18 counties was \$358. Equally indicative of the growing confidence and support of the people in this important phase of extension work is the lessening number of County Board members who voted against county egent appropriations. For the 28 counties considering the proposition this past fall the number of opposition votes aggregated only 5.9% of the total votes cast, as compared to 9.5% in 1926, and 12.5% in 1925.

MILWAUKEE COUNTY VOTES TO EMPLOY HOME DEMONSTRATION AGENT

Milwaukee County is to have a home demonstration agent beginning February first. The Milwaukee County Board of Administration, at a recent meeting, asked the College of Agriculture to cooperate with them to make possible this local leadership in home economics extension work.

Miss Helene French, who graduated from our Home Economics Course in 1923, has accepted the appointment as demonstration agent. Since graduation Miss French has taught home economics in the high schools of Onalaska, La Crosse and Galesville.

GUSTAV BOHSTEDT ARRIVES

We are glad again to welcome Gustav Bohstedt to our staff. It has been six years since he left us to take up his duties as chief of the Animal Husbandry Section of the Ohio Experiment Station at Wooster.

His return to us at this time is in the way of a homecoming, and we are confident that we are voicing the sentiment of the entire staff in expressing our pleasure in his return to us. For the present Mr. Bohstedt's family are continuing to live in Wooster, but are planning to move to Madison this comrng summer.

RALPH O. NAFZIGER '20 NEW UNIVERSITY PRESS BUREAU EDITOR

Ralph O. Nafziger, '20, who majored in Agricultural Journalism, has been appointed editor of the University Press Bureau, vice Morse Salisbury, who has gone to Washington to serve as radio editor with the Department of Agriculture. Mr. Nafziger will assume his new duties February first. Since graduation Mr. Nafziger has had considerable experience in commercial newspaper work, and also served for a time as editor at the North .Dakota Agricultural College.

C. M. SLAGG 17 HEADS UP TOBACCO WORK IN AUSTRALIA

C. M. Slagg, who received his B. S. degree in 1917, majoring in Horticulture, and his M.S. in 1919 after doing intensive work in tobacco culture and diseases, has recently accepted a most attractive offer made by the Australian government to head up the tobacco investigations in that Dominion. After completing his work here Mr. Slagg served for a while as tobacco specialist with the Connecticut Agricultural Experiment Station, and from there went to Ottawa, Canada, as Chief of the Tobacco Division of the Canadian Department of Agriculture, which position he has held until his acceptance of this Australian offer. The Canadian authorities are turning to Wisconsin again for another man to fill Dr. Slagg's position.

CONGRESS CONSIDERS SPECIAL APPROPRIATION FOR BOYS' & GIRLS' CLUB WORK

The Capper Ketcham bill for the support of Boys' and Girls' Club work has been re-introduced into Congress, and was voted out favorably by the House Committee on Agriculture on January 17. This bill provides an annual appropriation of \$20,000 for each state for the first year and thereafter an annual increase of \$500,000 for all the states, the same to be increased by an equal amount each year for a period of eleven years until the aggregate sum of \$6,960,000 is reached.

A similar bill nearly passed Congress during the last short session. The gen eral sentiment is very strong for the support of this type of extension work, and it is highly probable the bill will receive favorable action at this session.

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HORSES FIND "HOME-BREW" NOT UP TO CLAIMS MADE FOR IT

Fermented and processed feed has failed to justify the claims made for it when used in feeding trials recently conducted by the Animal Husbandry Department. Ten teams of work horses, owned by the University, were used in the experiment, one horse in each team getting the fermented feed and the teammate the regular hay and grain ration. Weights were taken at the beginning of the trial, and at regular intervals thereafter. At first the horses getting the fermented feed were given 33 1/3% less feed (on a dry basis) than the horses on the check ration, so as to determine directly if the advertised claims of the manufacturers of the processing equipment, to the effect that fermenting feed would save one-third, could be substantiated.

The horses on the "home-brew" lost weight so fast, and tired so quickly when at heavy work, that it became necessary to increase their allowance of feed to 20% less than the check lot. Even at this level they still continued to lose weight. Then the amount of feed was made equal to that of the check lot. On this basis the horses regained the weight they had lost, but did not come up to the check animals, which had gained a total of 318 pounds over their initial weight.

The advice to farmers, on a basis of this trial, is to refrain from putting hard earned money into feed fermenting apparatus for the purpose of saving feed, at least until such a time as carefully checked experimental evidence justifies such expenditure. "Home brew" may have a strong appeal, but horses do not seem to be able to find it of much benefit when it comes to doing the day's work.

BADGER FARMERS STUDY FARM COSTS

Wisconsin farmers are taking a greatly increased interest in the keeping of farm records and accounts. Last year they purchased nearly twice as many farm record books of the College as they did the year previous. The exact numbers are 11,403 and 6.811 respectively.

A most desirable development of this project has been the growing tendency of interested farmers to band together in farm record clubs, and at group meetings with a representative of the College discuss methods of using the data obtained from their farm accounts in plans for reducing farm costs and increasing net profits. J.S. Donald, who has charge of this work, reports that many farmers send in their summarized record books, asking him to analyze their farm business and make suggestions that will help them to put their farms on a better paying basis.

That the keeping of farm accounts is an important aid to better farming and increased farm profits is attested by a host of letters that have come to the College accompanying orders for record books for the new year. Farmers are keeping these records year after year, and report that they would not consider running their farms without adequate accounting records.

WISCONSIN GRADUATE FELLOW HONORED BY AMERICAN PHYTOPATHOLOGISTS

Professor H. P. Barso, Head of the Department of Botany and Plant Pathology, Oregon Agricultural College, Corvallis, Oregon, who is on sabbatical leave this year and is pursuing graduate studies here as Honorary Fellow in Plant Pathology, was elected President of the American Phytopathological Society at the recent Nashville meetings.



[&]quot;FARMERS' WEEK" MOST SUCCESSFUL EVER HELD

The twenty-fifth "Farmers' Week" has passed into history. It was the best attended of any ever held at the College. A conservative estimate places the total attendance of outside visitors at 6,000; 1,590 men and 696 women were actually registered. Of the women 399 came from a farm home. Registrations covered 70 of Wisconsin's seventy-one counties. Thirty visitors were from out of the state. The social features, - banquets, - Little International, and home talent tournaments, attracted capacity audiences - Many "tried to get in" - but -

The outstanding need, developed during the week, is better seating and more adequate facilities for taking care of crowds in the auditorium and several of the sectional meetings, like poultry, cooperative marketing, etc.

SHORT COURSE MEN TELL WHY THEY CAME TO COLLEGE

Thirty-two of our present short course students, as indicated in a recent carefully conducted survey, obtained their first information concerning the short course from a graduate of the short course. To paraprase - "A satisfied customer is our best advertisement". In 14 cases the county agricultural agent gave them this information, while in 16 cases the agricultural teacher was the one that made the suggestion. With 22 of the boys they obtained their first information from a short course bulletin, while in 18 cases the agricultural magazine gave the information, and in 10 other cases credit was given to the local papers. Other sources listed were friends 21, parents 12, cow testers 8, brothers 7, and college faculty members 5.

Forty-one of the boys mentioned a relative, (father, brother, uncle, cousin) who was a former Wisconsin student, while 92 reported no relations who had attended the College.

Most interesting were the statements of the boys as to what they intended to do after completing the short course. In the past most of these students have been interested in employment as herdsmen, cow testers, etc. Of late there has been a tendency for a larger number to be consciously planning to return to the farm, and this year 94 boys indicated their intention to return to the home farm. Only 13 wished to become cow testers, 8 indicated a desire for employment as herdsman, and 20 others expressed a desire to obtain experience on another farm.

G. S. WEHRWEIN JOINS STAFF FEBRUARY FIRST

We are glad to welcome Dr. G. S. Wehrwein, who, on February 1, returned to us as Professor of Land Economics in our Agricultural Economic's Department. Mr. Wehrwein has served on our staff in the past, and we know we have the endorsement of all on the Agricultural Faculty when we express our pleasure in his return to our group.

E. L. DIVAN APPOINTED CLUB AGENT IN GREEN COUNTY

E. L. Divan, a successful breeder of dairy cattle and hogs, a recipient in 1927 of Honorary Recognition at the College of Agriculture for his services to agriculture, has been appointed by the Board of Regents, effective February first, as county club agent for Green County. During recent years Mr. Divan has served as a local leader of boys' and girls' clubs in Green County, and his achievements have been so outstanding that the people of the county, through their County Board, asked Mr. Divan to devote his full time to this important junior extension work.

CROP PROTECTION INSTITUTE RENEWS FELLOWSHIP

The American Association of Nurserymen, through the Crop Protection Institute, has renewed the fellowship in our Department of Plant Pathology, which it provided in 1924 and 1925. The fellowship was accepted by the executive committee of the Board of Regents at their last meeting, and S. S. Ivanoff appointed as fellow. The purpose of this fellowship is the study of crown gall and its control, in continuation of the project G. W. Keitt and associates have been working on during the past four years.

"SCIENCE NEWS-LETTER" HONORS L. R. JONES

"When some future chronicler of the science and practice of plant pathology draws up the genealogical chart of twentieth century phytopathologists, he will find the ancestral lines converging upon Jones of Wisconsin as the patriarch of the tribe. Even now, with the first quarter of the century scarcely closed, he is already an academic grandsire. For while his own classrooms and laboratories at Madison are still active in filling the ranks of his profession with young recruits, many of his earlier students have in their turn gathered groups about them who will in their turn go forth to preach the new gospel for the salvation of plants from parasitic damnation.

"The days of Professor Jones' admintstration have seen radical new revelations in plant pathology. The earlier science of plant diseases did not go much beyond compilations of lists of causal fungi, and the earlier practice of combating them consisted largely of drenching plants indiscriminately with "shotgun" sprays. Sprays are still the mainstay of the defense against such plant diseases as come to the surface, but attack on the hidden ills that plague the roots and interior organs, and even the hope of future combat against the surface enemies, are being sought in other ways. These ways are all based on the new gospel: study the physiologies of host and parasite, and the ecology of their inter-relations and of their several and joint responses to climatic and soil conditions; and then on the knowledge thus gained base your efforts to prevent or cure. And, true to the new trend in the companion sciences of animal and human pathology, prevention is now being stressed rather than belated curative efforts against entrenched foes.

"L. R. Jones was born at Brandon, Wisconsin, in 1864. He received his bachelor's degree at Michigan in 1889, and his doctorate at the same institution in 1904. His earlier teaching and research was carried on in Vermont; in 1909 he was called back to his native state as professor of plant pathology at the University of Wisconsin."

SCIENCE NEWS-LETTER JANUARY 28, 1928.

AMERICAN BACTERIOLOGISTS HONOR ALICE C. EVANS

Miss Alice C. Evans, who received her Master's degree here in 1910, and who served in our Agricultural Bacteriology Department until 1914, was in December elected president of the Society of American Bacteriologists at their annual meeting in Rochester, New York. This is the first time a woman has been elected to this office, and the third time a Wisconsin trained bacteriologist has been so honored by the Society.

Miss Evans has won international recognition for the work she has done on the relation existing between the organism of malta fover of goats and man, and the organism causing contagious abortion in cattle. It is now believed by many workers that bovine contagious abortion may prove to be of as great sanitary importance as is bovine tuberculosis.

INTERESTING PROGRAM ARRANGED FOR RURAL ELECTRIFICATION MEETING

An especially interesting program has been arranged for the Rural Electrification Short Course that is to be held at the College February 14, 15 and 16. From various parts of the country leaders in the movement to make electricity better serve the farmer have accepted our invitation to take part in the discussions. The advance registrations in the course insure a good attendance of electric rural service men from nearly every section of the state. Some of the program features will appeal to our staff members, and we urge all who are interested in this project to obtain copies of the program from the Department of Agricultural Engineering.

ANOTHER THEORY FAILS WHEN PUT TO THE TEST

The agglutination test for bacillary white diarrhea is not accurate enough to justify the dependence that has been placed upon it by many poultry disease specialists, according to the recent findings of Messrs. Beach, Merrick and Wisnicky (Veterinary Science), Halpin and Lampman (Poultry Husbandry).

Millions of baby chicks die each year due to causes that have been attributed to white diarrhea infection. The annual financial loss for the United States runs into several millions of dollars. In many states hundreds of thousands of breeding hens are now being blood tested to determine if they react to the agglutination test for <u>Salmonella pullora</u>, the white diarrhea organism. This is being done with the hope that in this manner the disease may be stamped out and the huge loss of life in young chicks prevented.

But now comes our B. A. Beach and associates, and they proceed to knock into the proverbial cocked hat this theory of solving the problems of bacillary white diarrhea and the loss of life in baby chicks. Identical blood samples which they sent to veterinary laboratories in five other states gave widely divergent results. In only five out of 38 cases did the five laboratories report the same findings. Three weeks later blood samples from the same hens were again sent to these same laboratories, and in only 14 out of 26 cases did the particular laboratories get the same result that they did with the first set of samples.

In an endeavor to account for the wide discrepancies, samples of the test fluid (antigen) were procured from the cooperating laboratories. It was found that these antigins varied from 150 million to 636 million organisms per cubic centimeter. This wide difference is sufficient to account for much of the difference in the results obtained by the various laboratories.

Other studies carried on by our workers showed that a hen might react today, for a while give a negative reaction, - and then at a later date react again. It was also learned that a surprisingly large number of infected hens, as shown by bacteriologic examination at time of slaughter, failed to react to any test. More than 50 per cent of the infected hens failed to react to any of the five tests to which they were subjected.

Hatching tests brought out equally conflicting data. Eggs from reacting hens hatched practically as well (63.6%) as those from the non-reacting hens (70.8%). Out of 219 chicks hatched from eggs laid by infected hens, infection was found in only two chicks, when these 219 chicks were killed as soon as hatched and the enclosed yolk sac cultured. It would appear that very few infected eggs actually hatch

The results of this study are so erratic as to warrant the belief that in its present form the agglutination test for bacillary white diarrhea is quite unreliable.



[&]quot;LET'S NOT HOLLER UNTIL WE ARE HURT", SAYS CHAPMAN

"Nothing can stop the spread of the corn borer to the entire corn growing section of the United States, but we are going to continue to secure good yields of corn, at no large extra cost for corn borer control measures", said Dr. R. N. Chapman, chief of the Department of Zoology and Entomology at the University of Minnesota, in his conference with our staff members on February 10. "Many Americans have made us the laughing stock of European scientists because of the sweeping prophecies of calamity that have won publicity and popular belief in connection with the spread of the borer in the United States. To Europeans who have lived with the corn borer for generations our panic and fear of the borer, before we have actually suffered economic loss, seems most unscientific and almost childish".

Dr. Chapman, who recently returned from a year spent in Europe working at first hand on the borer, brought us the most valuable and illuminating data that we have yet received with reference to this pest.

The corn borer is found universally in Spain, France, Italy, Hungary, Austria, Jugo Slavia, Roumania, and most of central Europe. Of ten million acres of corn there grown, Chapman reports he saw but a few hundred acres that were badly enough infested to cause an observable economic loss and these areas were in regions where corn stalk refuse was allowed to accumulate from year to year, thus affording an ideal breeding ground for the borers. Damage varies greatly from year to year, and from one country to another. In western Europe where fields are small and methods of cultivation much more exacting than in the Danube Valley losses were trifling. Dry seasons are unfavorable to the borer. Average yields of corn have steadily increased in the chief European corn regions in the years since the war, thus indicating that the borer has not been a serious limiting factor in their corn production.

Chapman believes that there is a correlation between the extent of borer infection and the soil type on which the corn is growing, as suggested by Dr. Transeau of Ohio State. This ecological relation shows that swamp forest soil types are best adapted to borer development, and it may be that we will have to give up corn on soils of this type, and grow some kind of substitute crops. Fortunately, only a small portion of the prairie Corn Belt soils are of this type. In general it is Chapman's opinion that the American farming community that makes reasonably complete disposal of the corn stalks, such as ensiling or shredding, will not have its corn crop seriously injured by the corn borer. Within a few miles of the very worst infection in Canada there are livestock farming communities where the corn is nearly all put in the silo, and these people hardly know the corn borer is present.

The Federal Department has recently declared its plan for the coming season. The United States Department of Agriculture will continue its scouting work to determine the rate of spread and the enforcement of quarantine regulations, but the continuance of the drastic clean up campaign of last year will not be maintained by the Federal Government. Much effort has been given to biotic methods of control . (parasites and predators) but such methods naturally are slow of advancement and are not regarded by European students as contributing more than a very small percentage of borer destruction.

We wish it had been possible for the entire college staff to have heard the very stimulating address by Dr. Chapman.

FARMERS ! WEEK SHORT COURSES SHOW INCREASE IN ENROLLMENT

The special short courses, sponsored by the various departments during our annual Farmers' and Homomakers' Week, are showing a substantial growth in attendance. These special group meetings make possible the wider spread of many of our extension projects, and also allow our resident staff workers to obtain first hand contact with the farmers who are facing the problems that our research workers are attempting to answer.

In the Department of Dairy Husbandry there were three short courses of four days duration. The enrollment follows:

32 in the Creamery Operators and Managers Course.

29 in the American Cheese Making Course.

12 in the Ice Cream Course.

The Boys' and Girls' Club Department cooperated with J. H. Kolb and the workers in Rural Sociology in a series of morning conferences throughout the week. The average attendance was 50.

Other special interest meetings have reported an average attendance as indicated below:

Soil Fertility Program	150
Home Economics Program	340
Farm Croos Program	325
Cooperative Livestock Marketing School	125
Poultry Program	125

SURVEY SHOWS INCREASED MILK CONSUMPTION BY SCHOOL CHILDREN

Educational work in schools, both urban and rural, has resulted in marked increases in the use of milk by the children, according to surveys conducted by Miss Gladys Stillman, milk specialist, (Home Economics). Not only do the surveys indicate that children who were not drinking milk before are now taking it regularly, but those who drank milk occasionally increased their daily consumption to a considerable degree.

In the case of 1,500 rural school children in Washington County the milk campaign resulted in a 15 per cent increase in numbers drinking milk, and an increase of 16 per cent in the amount per child. In Pierce County the per cent drinking milk increased from 53.6 per cent to 70 per cent, and the average amount per child from 1.3 cups daily to 1.6 cups daily, as a result of a milk campaign.

Milk consumption in Milwaukee County is higher than for some of the rural counties, yet even here the milk compaign brought about significant increases in milk consumption. The survey before the campaign showed 71.8 per cent of the children drinking an average of 1.78 cups of milk daily. Four months later, after the campaign had closed, enother survey was made and the results showed 79 per cent of the children drinking an average of 2.08 cups milk daily.

PIERCE COUNTY FARMERS BUY CARLOAD ALFALFA SEED

County Agent H. G. Seyforth of Pierce County, has arranged with a cooperative alfalfa seed growers association in South Dakota for the purchase of 18,000 pounds of registered Grimm alfalfa seed, and 8,000 pounds of South Dakota No. 12 alfalfa seed. This aggregates a corload and will be shipped to the county in March. Distribution to the farmers will be made through the local dealers. Making this large direct purchase permits of a considerable saving to farmers, as well as arousing much local publicity with reference to the alfalfa growing project.

SPECIAL COURSES WIN POPULAR SUPPORT

Recently there were held on the campus two special courses that were put on at the request of industrial organizations that desired to have their employees receive intensive training in respect to certain aspects of their work. The first of these was a Tree Trimming Short Course, February 7 to 10, sponsored by the Horticultural Department, with the cooperation of the Wisconsin Railway Commission and the members of the Wisconsin Utilities Association. Sixty men were in attendance, representing eleven companies and three municipalities. Emphasis was placed on proper pruning methods of roadside trees and the care and treatment of wounds of trees.

The other special course, The Rural Electrification Short Course, held February 14-15-16, had a registration of 70. This course was put on by the staff of the Agricultural Engineering Department, with the aid of several outside speakers, and had as its purpose the instruction of the rural service men of electric utility companies in the adaptation of electrical power and equipment to rural requirements. There was no attempt to "sell" rural electrification, but rather a serious consideration of the peculiar conditions surrounding farm utilization of electric power, so as to enable the rural electric service men in attendance to better understand and answer the practical questions they are daily facing in their work of extending the service of electricity to the farms of the state.

SWISS CHEESE MAKERS TAKE COLLEGE COURSE

The ninth annual two weeks school for makers of Swiss cheese, held February 6 to 17, was attended by 12 cheesemakers. Robert Hardell of the Bureau of Dairy Industry, U.S.D.A., together with Gottlieb Marty of the Wisconsin Department of Markets, and Jacob Lehnherr of the State Dairy and Food Commission, assisted J.L. Sammis and the other staff members of our Dairy Department with the instructional work. This practical course in the manufacture of better quality Swiss cheese has the active cooperation of the Southern Wisconsin Cheese Makers! and Dairymens! Association. Reports tell us the instruction given previous years has exerted much beneficial influence in connection with the quality campaign now underway in the Swiss cheese factories of the state.



DR. ZON ASSUMES LEADERSHIP OF FOREST RESEARCH

The Board of Regents, at their meeting on March 7, definitely established a program of forestry research to be carried out by the College of Agriculture in cooperation with the Federal Lakes States Forest Experiment Station and the State Conservation Commission.

Dr. Raphael Zon, a recognized authority in silviculture, and director of the federal station has accepted appointment as non-resident Professor of Forestry, and will have general charge of the experimental work that is to be carried on, most of it in Northern and Central Wisconsin. Other members of the federal station will also assist in the supervision of some of these projects as well as some members of our own resident staff.

FARM COMPANY OFFERS PASTURE IMPROVEMENT FELLOWSHIP

The work which G. B. Mortimer (Agronomy) and Griffith Richards (Soils) have been carrying out on the improvement of permanent pastures, particularly with the use of fertilizers, has led the Brook Hill Farm Company of Genesee Depot, Wisconsin, (Howard Greene, Agr. 19, manager) to offer the University the sum of \$600 for the maintenance of an Industrial Fellowship to enable these research studies to be conducted on a large scale basis. Besides furnishing the funds for the fellowship the Farm Company also agrees to supply fertilizers, supplies, and all necessary labor.

The Board of Regents at their recent meeting accepted this offer. With this additional aid Mortimer and Richards are hopeful that they may discover methods of pasture improvement that will aid in the more economical production of milk by Wisconsin dairymen.

SHORT COURSE GRADUATION EXERCISES ON MARCH 15

President Frank at 9:45 A.M. on Thursday, March 15, will award the certificates to this year's graduates of our Short Course. The exercises will be held in the Agricultural Auditorium.

This group of 54 boys represents the forty-second short course class to be graduated from our institution. It is of interest to note that 49 of these boys are from Wisconsin, and four from Illinois. Especially significant is the announcement that 47 of the 54 are definitely planning to return to the home farm. Only seven are in the field for outside positions, and we understand these have already been placed.

A YEAR'S PROGRESS IN COUNTY EXTENSION WORK

Annual reports are notoriously dry reading. But as very few staff members have a chance to see the complete summaries of the county agent project, the editors take the opportunity of bringing to the attention of the staff some of the more striking results obtained in 1927.

One might naturally expect in these times of dire distress from heavy taxes that a system that is as close to the local population, as is that of the county agents, would be subject to an excessively high mertality rate. The actual situation is quite amazing. During 1927 the number of county agents remained stationary at 52. Two counties dropped out and two new counties came in. For these 52 counties there were only four men to leave the service. Arlie Mucks came to Madison as Secretary of the Wisconsin Livestock Breeders' Association, W. A. Duffy was appointed State Commissioner of Agriculture, H. J. Rahmlow was elected Secretary of the State Horticultural Society, and Lee Stewart stepped across the state line to become county agent in an upper Michigan County.

Not all the county agents in their college days had the benefit of specialized training in journalism, but many of them are "learning by doing" as indicated by a recent extensive survey of Wisconsin rural papers. An average of six column inches of news material pertaining to county agent work is being used each week by local weekly newspapers. Of the total farm and home material used in these papers 17 per cent is furnished by the county agents. Somewhat over one-third of the country papers carry regularly agricultural material emanating from the county agent's office.

Soil Acidity Holds Back Legume Expansion.

Animal nutrition research is constantly advancing new evidence of the need of alfalfa and other legume roughages in the ration of our farm animals. County agents have made aggressive efforts to increase legume acreages in their counties, and have made much progress. The biggest factor holding back the more extensive growing of legumes is soil acidity. Most Wisconsin soils are too sour to grow alfalfa, sweet clover, or even red clover, unless lime in some form is first applied. County agents each year test a great many soil samples, (Glenn Lycan of St. Croix County reports over 2,000). Approximately 4,300 farmers in county agent counties in 1927, used lime for the first time. Over 50,000 tons of crushed limestone, and an undetermined amount of marl, paper mill lime sludge, and sugar beet refuse lime, were applied to Wisconsin farms last year.

Use of Commercial Fertilizers Expanding.

Commercial fertilizers are steadily coming into more general use. For special crops as well as for soils that have long been cropped their use has been advantageous. County agents report that 5,600 farmers in 1927 adopted improved practices in the use of purchased fertilizers.

T. B. Eradication

Wisconsin's rapid progress in the eradication of bovine tuberculosis by means of the area test has come about for a very definite reason - namely, the aggressive leadership of our county agents in the T.B. testing campaign. Ninetyeight per cent of the county agent counties have been tested or have applied for the test. Of the six counties not yet signed up only one had a county agent previous to 1927.

Herd Improvement Work.

A new and interesting experiment sponsored by the county agents has to do with a new type of cow testing work. County agents have taken a leading part in the organization and aid given regular herd improvement associations, but during recent years the number of active testing associations has stood at about 160. In an effort to evolve a plan that would result in the testing and culling of more herds Robert Amundson (Outagamie County) H.M. Knipfel (Clark County) and W.J. Rogan (Marathon County) have in operation a plan whereby milk samples are taken by the farmer, mailed to the county agent's office, and the testing done there. Altogether 685 herds with about 12,000 cows are now participating in this new project, which enables the farmer to have production records of his cows at less cost than formerly, although it is admitted that the data is not as complete as with the standard herd improvement association, - as the cow testing associations are now called.

Farmers have adopted improved practices in poultry management and feeding even more readily than they have been persuaded to accept improved methods in many other lines. The excellent research work carried on by the Experiment Station has aided materially in giving the county agents definite educational matter to relay to the farmers. Thirty-six counties had poultry projects. Culling, feeding, disease identification and prevention, and the erection of demonstration Wisconsin "Straw Loft Poultry Houses" received special attention.

Forestry is a new but popular extension project. Seventeen counties listed forestry projects in 1927. The organization of clubs for Junior Forest Rangers, planting of demonstration reforestation plots, and wood lot management, are important phases of the forestry program.

COUNTY AGENT KUENNING WINS WOMENS' INTEREST

Monroe County women have given evidence that women will follow a leader, even a mere man, if they can be interested in the project at hand. County Agent L. G. Kuenning reports that he now has forty-three womens' clubs functioning, and three other groups are applying for the home economics extension projects that are being put on by staff members from the College in cooperation with the county agent's office.

POACHER ARRESTED IN UNIVERSITY WILD LIFE REFUGE

George Hutton landed a poacher in the hands of the State Conservation Commission this past week, relieving him of twenty-odd traps which he had set for muskrats on the University bay refuge. New metallic signs are being installed this week to inform the public that all wild life is protected on the University grounds.

HOME EC. GIRLS PLAN NOVEL DEMONSTRATION

A new house, designed by a local firm of architects, owned by Mr. and Mrs. A.G. Hinman, and located at the corner of Regent Street and Vista Road, during the month of April will be the practical laboratory in which advanced students in house decoration (Related Arts) will have an opportunity of showing the general public the results of their endeavors.

Draperies, rugs, furniture and other household accessories will be loaned by local stores from which the students choose them. Here the students will have an unusual opportunity to balance their sense of the artistic with a wise appreciation of what is practical and represents a wise expenditure of funds.

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During the afternoons of Better Homes Week, which comes in April, the house will be open to visitors and the students will be present to explain and answer questions.

NURSERY SCHOOL MOVES TO HOME EC. PRACTICE COTTAGE

The nursery school which was organized last year by home economics graduates, and held at the Luther Memorial kindergarten and gymnasium rooms, has been reorganized with one of the number as chairman, and is now meeting at the Practice Cottage with the surrounding yard as a playground. The junior girls in dietetics as a part of their required laboratory work will prepare the lunches and help in training the children in food habits. Mrs. Helen Gunderson will be in general charge of the work at the Cottage. The mothers pay for the cost of the food. The school has been christened the Dorothy Robers Nursery School in honor of Dorothy Roberts. All of the larger pieces of apparatus have been purchased from the income of the Dorothy Roberts Memorial Fund.



NO SURPLUS IN HORSE POWER ON WISCONSIN FARMS

In these days when nearly everyone is talking about an agricultural surplus as being one of the fundamental conditions adversely affecting farm prosperity it is worthy of note that during 1927 more than 22,000 horses had to be imported into Wisconsin to meet the horsepower needs. This situation developed in spite of the fact that motorization of farm machinery steadily proceeds.

This existing demand for horses has created a renewed interest in horse breeding and production. J. G. Fuller (Animal Husbandry) and E. R. Jones and staff (Agr. Engineering) have given at county fairs and on other occasions, this past year, thirty-five horse pulling demonstrations and forty-three big hitch demonstrations. There has been a ready acceptance, on the part of numerous farmers operating the larger farms, of these multiple team hitches. It is estimated that not less than 150 of these big hitch outfits are now in use. Over fifty requests are already on file in J. G. Fuller's office for such demonstrations in 1928.

The big appeal of the multiple hitch is that it permits farmers to utilize in a more effective manner the horses they now have and the machinery at hand, without the necessity of any particular additional expense.

John Craig '27 has just received appointment by the Regents as temporary assistant in Animal Husbandry to assist in the conduct of big hitch demonstrations, and to carry on extension work with the horse breeders in the state. This extension work in horse management and production was urgently requested by the Wisconsin Horse Breeders' Association at their meeting held during Farmers' Week.

FRANK PETERSON TO JOIN DUPONT SALES FORCE

Frank Peterson, Florence County Agricultural Agent has tendered his resignation, to take effect April 15. It is understood that Mr. Peterson has been offered a position as field man in farm explosives for the E. I. Dupont de Nemours Powder Company.

MARK MITCHELL APPOINTED SCHOLAR UNDER BROOK HILL FARMS FUND

The industrial scholarship provided by the Brook Hill Farms, Waukesha County, for the purpose of studying the improvement of permanent pastures, particularly through the use of fertilizers, has made possible the employment of an industrial scholar, effective May 1. Mark Mitchell, a sophomore in the long course, has been appointed to this scholarship by the Regents. His work will be supervised jointly by the Agronomy and Soils Departments.

WISCONSIN IN FRONT RANK IN COOPERATIVE BUTTER MANUFACTURE

A recent survey made by the Bureau of Agricultural Economics, U.S.D.A. shows that a larger portion of Wisconsin's creamery butter is made in cooperative plants than is true for any other state. The percentages for the leading states are: Wisconsin 72 per cent; Minnesota 66 per cent; and Iowa 44 per cent.

Much attention of late has been called to the importance of large volume of business in a creamery if it is to keep down its overhead charges and thus pay the producer the maximum amount the market affords. In this connection, also, Wisconsin cooperative creameries lead the Union. The average annual quantity of butter manufactured in Wisconsin's cooperative creameries is 428,293 pounds, while the average for cooperative creameries in other leading dairy states is as follows: Iowa 332,073, Minnesota 288,005, New York 176,597, and Vermont 140,831 pounds.

WISCONSIN STILL LEADS IN HERD IMPROVEMENT WORK

The U.S.D.A. Bureau of Dairy Industry, has compiled a most interesting summary of the status of the Dairy Herd Improvement Association project as of January 1. 1928. Of the 947 associations active on that date 166 are credited to Wisconsin. Michigan and Minnesota are tied for second place with 105 associations each. For the entire United States there are a total of 414,891 cows on test, with 69,115 of these in Wisconsin. California has the next largest number of cows on test, 61,176. The California associations are very large, averaging 41.3 herds and 1,911 cows per association, as compared to Wisconsin's average of 26 herds and 416 cows per association. California is credited with the largest percentage of the cows of the state under test, i.e., 10.2%. Other states in order are New Jersey 7.6%, Oregon 4.2%, Vermont 4.0%, Wisconsin 3.5%, Michigan 3.3%, Massachusetts 3.2%, Idaho 2.9%, Virginia 2.8%, Pennsylvania 2.7%, Minnesota 2.3%. The average for the United States is 2.0%. It might be mentioned that Wisconsin's figure for number of cows on test, and percentage of the cows of the state on test, would be increased if the cows being tested under the new plan in Clark, Marathon and Outagamie counties, referred to in a recent issue, were included.

CANADIAN CLEAN-UP CAMPAIGN REDUCES BORERS

Canada has carried on a corn borer clean-up campaign similar to that under way in the infested regions in the United States. In his report for the 1927 season, Mr. L. Caesar, provincial entomologist for Ontario, summarizes the year's campaign of fighting the borer by means of deep plowing, burning of the corn stalk refuse, ensiling, and other methods of destroying the overwintering larvae of the borer. This clean up is required by law and inspectors carefully check on the manner in which the work is done by the farmers. Later in the season counts are made of the borers found in the growing corn to determine the effectiveness of the campaign. In this connection it is significant that in Essex and Kent Counties, where the infestation is the worst, the number of borers was decreased 50%. In three of the eight counties under the compulsory act there was an increase in the numbers, but this was chiefly where infestation was not so great, and farmers were not aroused to the importance of the work.

It would seem that the clean up has not been able to prevent the spread of the borer to new areas, but where efficiently done it has been possible to curtail the <u>amount</u> of infestation, and considerably reduce the number of borers, and correspondingly cut down the economic damage to the corn crop.

STATE POTATO SHOW PLANS NEW CONTEST

Wisconsin potato growers will be invited to compete in a new kind of potato contest this year in connection with the State Potato Show that is to be held at Rice Lake October 22-26. Instead of distributing all the prize money on the exhibits that are shown at Rice Lake, certain specific awards will be made in special classes that are designed to reward the potato growers who, during 1928, accomplish the most in improving their methods of disease and insect control, bettering their cultural methods, improving their fertilizer practices, and increasing their net profit per acre of potatoes grown. In other words the attempt will be to recognize the man whose production methods are most efficient and progressive, rather than give all the prize money to the men who select and exhibit at the state show the best potato samples.

The complete plans are not yet worked out, but it is apparent that this new type of crop contest will require careful expense and labor accounts by the potato grower, and will also necessitate the inspection of the various contesting potato fields, at least twice during the season, by competent potato specialists who will act as judges in the contest. All this will require considerable time and effort, but it is thought that such a contest will do much to draw attention to the profit factors, as compared to the purely exhibit factors, in potato growing, and will stimulate growers to a greater interest in potato improvement work.

WISCONSIN COUNTIES WIN HONORS IN NATIONAL POULTRY SANITATION CONTEST

J. F. Thomas, Waukesha County Agricultural Agent placed fifth, and S. S. Mathison, Sheboygan County Agricultural Agent, placed fifteenth in a poultry sanitation contest which was recently completed under the sponsorship of the United Egg Society. Some 50 counties in 17 different states were entered in the contest, many of them counties in which the poultry industry is a major enterprise.

The basis of awards was the county program of improved poultry sanitation, and the results that have been obtained in connection with the carrying out of such a program. Special credit was given for construction of approved type new poultry buildings, adoption of improved methods of poultry management, and economic results as indicated by increased egg production.

J. M. COYNER FIELDMAN FOR MEAT IMPROVEMENT COUNCIL

J. M. Coyner, former Jefferson County Agricultural Agent, on March 1 was appointed fieldman for the Wisconsin Live Stock and Meat Improvement Council. This council is made up of representatives of the meat packing establishments in the state, the farmers' organizations interested in meat production, and the educational forces - particularly the College of Agriculture.

The purpose of the council is better to acquaint the meat producer with the new and changing consumer and packer demand for meat. Particularly an effort is to be made to get Wisconsin farmers to put more fat on their veal calves before they market them, and in the case of hogs to encourage the practice of turning out a market animal that will be well finished at around 225 pounds. Too many Wisconsin hogs are not full fed early enough in their growth, thus resulting in the development of a large frame that when properly fattened will yield a market animal of 250 pounds and more. What more frequently happens is that the hog is marketed at the 225 pound weight, for the farmer knows that this is the weight desired by the packer, but because the hog was not full fed early enough the carcass is underfinished, shrinks in weight during storage, and yields cuts of meat that are only second grade in quality. Mr. Coyner is emphasizing the desirability of growing more barley on Wisconsin farms so as to have available fattening feed earlier in the season than is possible where sole dependence is placed on corn.



"RED" COPPER MAKES POSSIBLE RED HEMOGLOBIN IN THE BLOOD

Man does not live by bread alone. Neither is it sufficient to consider just the carbohydrates, proteins and fats. The discovery of vitamins, scarcely more than a decade ago, demonstrated this, and showed the necessity for satisfying the "hidden hunger". Of even more recent years much new light has been thrown on the fundamental importance of minerals in animal nutrition. Today, April 12, E. B. Hart, is making an announcement at the meeting of the American Society of Biological Chemists, at Ann Arbor, Michigan, the import of which is that we must add one more factor to our list of nutritional necessities.

A mineral element, hitherto not considered as vital to the growth of mammalian life, whas been demonstrated as a necessary ingredient in the diet of young rats, as the result of investigations that have been in progress in the Department of Agricultural Chemistry for the past three years under the direction of E. B. Hart and his associates H. Steenbock, C.A. Elvehjem and J. Waddell.

The mineral element in question is copper, and its specific function in conjunction with iron is in building the hemoglobin of the blood.

It has long been known that iron plays a leading role in the production of hemoglobin in the body, and where patients have had a low hemoglobin content in their blood, (known technically as anemia), physicians have prescribed various forms of iron, and with greatly varying degrees of success. This lack of uniformity in results from the use of iron in anemias has caused much confusion, and has baffled medical scientists.

Other investigators recently learned that liver, dried liver extract, lettuce and some other organic compounds seemed to benefit, and frequently to cure, cases of anemia. The problem undertaken here was to answer the question as to what was in these organic compounds that made them potent for the building of hemoglobin, and to explain why inorganic iron salts were sometimes effective, and as often failed. Our workers first convinced themselves that the factor was not organic, because when the liver or lettuce was burned to an ash, and the resulting ash fed with inorganic iron salts to young rats suffering from anemia induced by a whole milk diet, almost immediately the hemoglobin increased, thus indicating that hemoglobin building was taking place.

It was noted that this ash had a peculiar bluish color, and relying on one of those "hunches" that so frequently show the way to a puzzled research worker, they tested the material for copper and found a trace of it. The rest of the story followed rapidly. Minute quantities of pure copper sulfate added to the common dosage of inorganic iron were given to rats about to succumb to anemia, and in every case complete recovery ensured. Careful analysis of the inorganic iron salts that gave erratic results when fed alone showed that the potent samples carried a trace of copper as an impurity, \rightarrow the others did not. Copper has not been reported in the composition of the hemoglobin, but seems to be necessary as a sort of catalytic agent in the building of hemoglobin.

It remains to be determined if this copper and iron relationship has therapeutic value in other anemias, such as pernicious anemia, for all of these experiments have been carried on with animals suffering from anemias caused by a restricted milk diet. Actual tests of the copper relationship are now being carried on in three nationally known hospitals with patients afflicted with pernicious anemia.

From the standpoint of the farmer one direct benefit of the discovery is immediately available. "Thumps", a more or less common ailment of suckling pigs, is a form of anemia caused by the restricted milk diet of the little pigs. There are good reasons to expect that many of the losses that have heretofore been caused by "thumps" can be prevented if minute quantities of a copper salt, plus a standard dosage of iron salts, are administered to the young pigs.

From the medical standpoint the most obvious service of the discovery will be the clearing up of the confused scientific background for the treatment of anemias produced by whole milk diets, particularly in the case of infants. Thousands of young mothers, under the advice of their physicians, are now feeding liver to their anemic babes. If tests now in progress are successful, and there is much promise that they will be, a tiny quantity of a copper salt, mixed with a small amount of an iron salt, can be added to the milk, and the milk so fortified will be capable of promoting hemoglobin building, thus preventing or curing anemias caused by the milk diet.

AMERICAN MEDICAL ASSOCIATION OFFERS FELLOWSHIP TO STUDY RELATIONSHIP OF COPPER TO HEMCGLOBIN BUILDING

Through its committee on research, Dr. Ludvig Hektoen, Chairman, the American Medical Association has tendered the University an industrial fellowship paying \$600 for the fiscal year 1928-1929, for the purpose of studying the copper content of common food stuffs, and the relationship of this copper to hemoglobin building in the animal body. This fellowship was accepted by the Regents on March 30, and the fellowship assigned to the Department of Agricultural Chemistry.

EIGHT WISCONSIN COOPERATIVE CREAMERIES JOIN "LAND O'LAKES"

Eight more Wisconsin cooperative creameries are going to give a trial to centralized cooperative butter marketing. These factories are located in Trempeleau County and they have signed contracts pledging their butter to the "Land O'Lakes Creameries, Inc". It is understood that these creameries aggregate over five million pounds of butter produced annually, and that the Land O'Lakes organization plans to place them in a field district of their own with a supervising fieldman to work with them in standardizing their producing and manufacturing processes so as to turn out a uniform quality of Land O'Lakes sweet cream butter.

CHANGES IN COUNTY AGENT PERSONNEL

Stanley Sand, Juneau County Agricultural Agent, resigned April 1, to become identified with the Wisconsin Chick Hatchery in the distribution of baby chicks and other poultry products.

V. E. Brubaker, Bayfield County Agent, has tendered his resignation to take effect May 1. Mr. Brubaker plans devoting all of his time to his farm near Washburn on which he produces on a commercial basis hardy perennial flowering plants, and also strawflowers.

A. J. Brann, Oneida County Agent, has been forced through illness to drop his work and enter the sanitarium at the Old Soldier's Home, Milwaukee. Recent reports carry word that Mr. Brann is making progress towards recovery.

SUCCESSFUL COMMERCIAL FORESTRY CONFERENCE HELD IN MILWAUKEE MARCH 28 AND 29

Conventions and conferences have come to be a routine and a habit in present day American life. Now and then we come away from some of these group gatherings wondering if it was really worth while, and whether any single concrete achievement can actually be credited to the meeting. The Wisconsin Commercial Forestry Conference, held in Milwaukee, March 28 and 29, left an unusual impression on the minds of those in attendance.

Wisconsin folks are deeply interested in the promotion of forestry and the more profitable utilization of the idle "cut-over" lands in the state. Lumbermen, paper mill owners, foresters, farmers, public officials, summer resort owners, and representatives of a score of other walks of life were in attendance at the conference, and much lively discussion followed the various papers that were presented. F. G. Wilson, K. L. Hatch, and Walter Rowlands supervised the University's exhibit showing the dependence of man upon wood.

At the close of the conference plans were made for the creation of a permanent commercial forestry association in the state. New interest and increased enthusiasm for forest planting and forest protection should help to make possible a vigorous attack on Wisconsin's biggest economic problem - making ten million idle acres go to work.

SCHOOL FORESTS A NEW EXTENSION PROJECT

The most recent development of forestry extension work has to do with the formation of school forests. Areas of 40 acres or more adjacont to, or near, school houses are donated to, or otherwise secured by, a particular school, and are to be managed so as to insure that they remain in perpetuity the property of the school. Each year a portion of the area will be replanted, (if replanting is deemed necessary), the thinning operations carried out as required by the growing trees, fire lines kept clean, and other good forest management practices kept up by the school children under the direction of the forestry extension specialist from the College of Agriculture. W. McNeel and F.G. Wilson are cooperating in promoting this project. There are many very desirable possibilities that should accrue from this school forest project when it is remembered that the hundreds of schools in northern Wisconsin not only touch the lives of the entire population of the area, but they also are most admirably distributed so as to serve as wide spread demonstrations of the possibilities of forest development. Already much interest is being taken in these school forests, especially in the cut over sections of the north. Soveral such forests are to be dedicated in Forest County this month.

In the promotion of forest thought in the state at large, it is especially necessary that the coming generation be forest-minded for it is upon these younger shoulders that the burden must fall of restoring to the state adequate timber supplies that are requisite to meet the wood needs of our expanding population.

CLARK COUNTY MAKES PROGRESS REPORT OF NEW TESTING PLAN

H. M. Knipfel, Clark County Agricultural Agent has just issued a statement covering the tabulations of the first 112 herds to complete a year's work in the new herd testing plan, (sometimes called the "mail order plan"). The 112 herds contained 1904 cows; and their average production for the year was 7126 pounds of milk with an average test of 3.59 per cent, which is equivalent to an average of 256.2 pounds of butterfat per cow.



REGENTS MAKE NEW APPOINTMENTS

At their meeting yesterday, April 24, the Board of Regents confirmed several new appointments in the College of Agriculture, among which were: Verne V. Varney, Assistant Boys' and Girls' Club Leader. Mr. Varney graduated from our long course in 1918, served in the world war, and for the past several years has been in the employ of the South Dakota State College in the capacity of General Secretary of the Y.M.C.A., Superintendent of Dormitories, and part time Boys' and Girls' Club Leader. Mr. Varney will take over a major portion of the general agricultural club work formerly carried on by Wakelin McNeel, releasing Mr. McNeel to concentrate on the supervision and promotion of the Junior Forest Ranger project which is developing so rapidly in the state. Mr. and Mrs. Varney expect to reach Madison on May first.

R. J. Holvenstot, County Agent for Bayfield County, vice-Brubaker. Mr. Holvenstot was graduated from the Platteville Normal in 1914, has taken some graduate work in agriculture, and has been principal of the high schools at Marshall and Kingston. He later was agricultural supervisor in the U. S. Veteran's Bureau at Milwaukee. For the past two years he has managed a general farm near Markesan.

Leland G. Sorden, County Agent for Oneida County, vice Brann. Mr. Sorden graduated from Iowa State College in 1923, was a county agent in Iowa for four years, and during the past academic year has been in residence at our University where he has been engaged in graduate work in agricultural economics.

Thomas Lotti and J.L. Deen, assistants in forestry research, detailed to the project "Fire Hazard as Affected By Forest Cover and Weather Conditions". This research is being carried on in the northern part of the state in cooperation with the State Conservation Commission and the U.S. Lake States Forest Experiment Station. J. A. Mitchell of the Lake States Forest Experiment Station will have charge of the work.

HOUSE FURNISHING CLASS USES HINMAN HOUSE AS LABORATORY

Well over a thousand people visited the Hinman house at 1 Vista Road, during the five day period it was open to the public under the auspices of Miss Laura Holmes' class in House Furnishing. The girls followed a budget of \$3,000 in selecting the interior furnishings for the six room, \$12,000 house. The complete effect was especially striking because of the free use of bright and varied colors. All in all it proved to be a most stimulating laboratory exercise for the girls, and many requests were made, both by the public and the students, that in a similar manner as the opportunity is presented other houses be taken over as a practical project.

LAND GRANT COLLEGE SURVEY NOW UNDER WAY

The 69 Land Grant Colleges in the United States are being subjected to an exhaustive survey under the auspices of the Bureau of Education of the Department of the Interior. The survey was requested by the Association of Land Grant Colleges and Universities, and a year ago the Congress appropriated \$107,000 for the biennium July 1, 1927 to June 30, 1929, to defray the costs of the survey.

These 69 Land Grant Colleges were attended by 327,000 students last year. The institutions have an aggregate annual income of about \$130,000,000, of which approximately \$4,000,000 comes from the Federal government. According to John J. Tigert, U. S. Commissioner of Education, the survey is to be "a national study of the accomplishments, the status, and the future objectives of the land grant college type of education".

In the survey attention is given primarily to work in Engineering, Agriculture and Home Economics, although data are gathered from other colleges and divisions in so far as they offer instruction that is required or elected by students in the above listed groups.

Throughout the next year various representatives of the survey will visit Wisconsin, and the other land grant institutions, gathering the desired statistics and information. About twenty comprehensive questionnaires along particular lines have been prepared that are to be filled out by former students, present undergraduates, staff members, county agricultural agents, and the officers of the institutions such as the Board of Regents, the President and the Business Manager.

President Frank has asked the various colleges to give their active cooperation to the survey, and it is expected that committees in each college will be delegated the responsibility of supervising the details of the survey in their particular college. For the College of Agriculture President Frank has appointed Noble Clark, E.M. Tiffany and G.B. Mortimer.

H. B. GURLER, EARLY DAIRY SCHOOL INSTRUCTOR, DIES

H. B. Gurler, the first practical dairyman to use the Babcock milk test, and an instructor in the Wisconsin Dairy School in 1891, the social year of its dristence, died April 3rd, at the home of his son in De Kalb, Illinois, according to a letter received by Dr. Babcock from Mr. Gurler's son.

There are not many members of our present staff who were here when Mr. Gurler served the institution, but all who are familiar with the development of the dairy industry, a generation ago, are aware of his outstanding services, both as a pioneer in the field of practical dairying, and as an inspiring teacher.

VILAS COUNTY VOTES FUNDS FOR COUNTY AGENT

The extention office has received word from Vilas County stating that at the last meeting of the Vilas County Board of Supervisors a resolution was passed authorizing the employment of a county agricultural agent, and making the necessary appropriation for salary and expense. Vilas County has not had a county agent during the past four years, so that the action just taken is evidence of their belief that county agent work is a necessity even in a small cut-over county like Vilas.

REGENTS APPROVE NEW STACK ROOM FOR AGRICULTURAL LIBRARY

A new stack room, similar to the present one at the west side of the Agricultural Library, is to be built on the east side of the building, in the space now used as a parking area for automobiles, according to the action taken yesterday by the Board of Regents. It is planned to start the work of construction just as soon as the money is released by the Governor.

W. C. KRUEGER GOES TO NEW JERSEY

W. C. Krueger, Industrial Fellow in Rural Electrification, resigned April 10, to take up similar work with the New Jersoy College of Agriculture (Rutgers University). New Jersey is just starting a state wide program of research and extension in rural electrification, and has been given a very substantial appropriation for this line of work.

THE HUMPHREYS LEAVE FOR HAWAII

Mr. and Mrs. Geo. C. Humphrey started April 14 for Hawaii where, early in May, Mr. Humphrey will judge livestock at the Hawiion Fair. They expect to return to Madison about May 20.

SMITH-HUGHES MEN COOPERATE IN TON LITTER CONTEST

In the 1927 ton litter contest in Wisconsin 53 per cent of the owners who entered were high school students of vocational agriculture. These boys entered 57 per cent of the animals that competed, and came through with 59 per cent of the animals that finally weighed in with the required weight of 2,000 pounds per litter at six months of age. This record reflects much credit to the cooperative spirit shown our Extension Service by the teachers of agriculture in the schools of the state.

HOME ECONOMICS EXTENSION WORK EXPANDS IN MONROE COUNTY

County Agent L. G. Kuemning of Monroe County has over sixty home makers' clubs carrying on organized home economic extension projects according to an announcement by Mrs. Nellie Kedzie Jones. Recently three club officers' training schools were held in the county in cooperation with extension workers from the College. The women have pledged their aid to an aggressive program of boys' and girls' club work, as well as the execution of their regular home economics projects.

STEER FEEDERS' DAY TO BE MAY 19

The Animal Husbandry Department is sending out announcements of an interesting program to be held at the College on May 19 in connection with the Annual Steer Feeders' Day. Five lots of young cattle, all raised in Wisconsin, have been fed experimentally during the past winter. Comparisons have been made between linseed meal and cottonseed meal in the ration, and between Angus, Holstein, and Angus-Holstein crossbreds. Several leading beef cattlemen, some from out of the state, have consented to appear on the program.

"ALFALFA HAY MAKES FARMING PAY"

The above slogan has just won first prize in a slogan contest among school children sponsored in Vernon County by County Agent E. W. Schelling, in connection with an alfalfa promotion campaign Schelling is actively pushing this year.

More than 3,000 acres of alfalfa seeding will be put in by Vernon County farmers this year according to a survey made by the children in the rural schools.

OUR "TRUE STORY" FOR THIS WEEK

The three year old daughter in the family of H. C. Jackson (Dairy Husbandry) asked her mother, "Who is that man who just went down in the basement?" Mrs. Jackson answered, "He is from the City Water Department, and has gone to read the meter". "Oh", said daughter, "He is one of those Daughters of Demeter".



FOREST COUNTY DEDICATES THREE SCHOOL FORESTS

Crandon, Laona and Wabeno in Forest County, have recently won state wide attention because of their initiation of a new type of forestry promotion. Forty acres of cut over land have been secured by the local schools in each of these three villages, and have been set aside as perpetual school forests. Replanting of adapted varieties of trees will be carried out by the school children under the direction of our extension specialists in forestry.

On April 26 and 27 dedicatory exercises were held at the three school forest locations. State Superintendent John Gallahan and and H. L. Russell made addresses. Those chiefly responsible for the initiation of this new forestry project are W.A. Rowlands, F.G. Wilson and W. McNeel. The school forest idea is winning much favorable publicity, and promises to be quite widely adopted throughout the state. When carefully followed up with the advice and counsel of technical foresters, and the school children are enrolled as Junior Forest Rangers carrying out the tree planting and forestry management practices as part of a regularly organized project, much benefit should accrue, both to the pupils as a practical method of education, and to the community and the state in its demonstration of what can be done to make our idle cut over acres again productive. In far off Australia, where these school forests have been under way for a period of years, they are now in widespread operation, and have won the recognition and support of the general public and the state.

FARMERS SHOW INTEREST IN "BIG-HITCH" DEMONSTRATIONS

J.E. Craig, special assistant in the Department of Animal Husbandry, reports holding thirty "big hitch" demonstrations, with an average attendance of 47, in eleven different counties during the month of April. In these demonstrations farmers are shown how to utilize the combined power of four, five, six, seven or eight horses, when hitched to large sized farm implements such as gang plows and disk harrows. The increased use of these big hitches results in speeding up the farm work, especially during the rush season of fitting and planting the fields.

No less than 160 of the farmers attending the demonstrations indicated their intention to secure the required "big-hitch" eveners and driving lines, so as to use the hitches on their farms. Mr. Craig also reports that the horse shortage is making it necessary for many communities to import carloads of horses. Some communities have shipped in as many as six carloads this spring. Farmers are taking more interest in the breeding and raising of colts, and there are many indications that the horse breeding industry is to have a revival in the state.

CHICAGO BUSINESS MEN TO VISIT COLLEGE ON MAY 21

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On Monday, May 21, the College of Agriculture will have as guests the Agricultural Committee of the Chicago Association of Commerce. This Committee is coming to Madison upon the joint invitation of the College and the Madison Association of Commerce. The Wisconsin Manufacturer's Association is also cooperating in the program of entertainment. It is planned to spend a large portion of the day examining some of the experimental work now under way here at the College.

REGENTS APPROVE PURCHASE OF ADDITION TO HANCOUK STATION

The Board of Regents at their meeting on April 25, approved the purchase of a 68 acre tract of improved farm land which lies adjacent to the present Experimental Farm at Hancock. The last Legislature provided \$4,000 annually for the biennium 1927 to 1929 for the purpose of purchasing additional lands, and the eraction of suitable buildings at the Hancock Branch Station. Governor Zimmerman has released a sufficient amount of this appropriation so as to make possible the purchase of this 60 acres at this time. The present Station farm of only 95 acres, because of its limited size, has for many years seriously handicapped the progress of the experiment work done.

Plans have also been perfected for the planting of a 10 acre demonstration forest plot alongside the Hancock Station Farm on an area owned by the Hancock community, and which has been purchased as an addition to their cometery. The University has been given a 25 year lease of the plot, with full suthority to carry on such reforestation projects as seem best suited to the grea. At present there is a scattered stand of scrub oak which is to be underplanted with various conifers, particularly Norway and White pine.

An experiment to test the suitability of various tree species as a windbreak on the sandy soil of the area is also being started on the Station Farm. All of these forestry projects are being fitted in with the research program in forestry now under way throughout the state under the auspices of the College of Agriculture, and supervised by Raphael Zon. F.G. Wilson is immediately in charge of the details concerned with the forestry work under way at Hancock.

U.S.D.A. SPECIAL REPRESENTATIVE TO CIVE ACCOUNT OF NEW ZEALAND AND AUSTRALIAN WOOL TRADE

Staff members and students on Tuesday afternoon, May 15, are invited to hear a first hand account of a recent study that has been made of the sheep and wool industry in Australia, New Zealand, and South Africa. J.T. Walker, whose achievements with the Ohio Cooperative Wool Pool have won for him widespread recognition, was commissioned, a year ago, by the U.S. Department of Agriculture to visit these important sheep producing countries and make a careful study of the development of the sheep and wool industry. Mr. Walker has just returned to the United States, and we are told he not only has some very significant information as relates the probable trend of the world wool industry, but that also Mr. Walker is an interesting speaker who is able to give his listeners many graphic impressions gained during his extensive travels. The conference with Mr. Walker will be held in the Auditorium of Agricultural Hall at 2 P.M. Tuesday, May 15.

AMERICAN BANKERS ASSOCIATION TO PROVIDE 167 LOAN FUNDS

One hundred sixty-seven collegiate loan scholarships will be provided by the American Bankers Association Educational Foundation, 96 of which are now being proffered to 71 selected colleges and universities in 34 states, it is announced by John H. Puelicher, President Marshall & Ilsley Bank, Milwaukee, Wisconsin, as chairman of the foundation's board of trustees. The scholarship awards will be available for the scholastic year beginning next fall and will provide recipients with loans of \$250, to be repaid on easy terms following their entry into earning business life. The present allotments provide that in the cases of several of the institutions, among which is listed the University of Wisconsin, one of the scholarships awarded shall be in agricultural economics.

Scholarship payments will be given only to those whose means of education are dependent in whole or part upon their own efforts and will continue only during satisfactory scholastic standing or conduct.

The scholarship loans are at five per cent beginning the first day of the second January after the date the scholar leaves school and no interest will be charged if repayment is made prior to that time.

TARE EDITORS COMING MAY 25

Editors of Wisconsin weekly farm papers, and city dailies carrying an agricultural page, are planning to visit the College on Friday, May 25. The first of these conferences of farm editors at the College was held last fall, and the response of the editors was so enthusiastic that at their request this second conference has been called. The group will consist of about twelve men. Their time while here will be divided between inspection of research projects under way and round table discussions covoring timely agricultural topics of general interest to the entire state.

INTERNATIONAL EDUCATION BOARD AWARDS FELLOWSHIP TO UNIVERSITY

The International Education Board has announced the awarding of a fellowship at this University for the academic year 1928-29. The fellow appointed is Dr. Franz Zucker of the University of Buda Pest, Bungary. He will specialize in research with legume bacteria under E.B. Fred.



ANNUAL STATION DAY SET FOR SATURDAY, JULY 14.

The committee in charge of plans for Station Day, (John Swenehart, Chairman) has announced that the event will take place this year on Saturday, July 14.

Two reasons were responsible for the change from the recent plan of holding Station Day on the same day as Commencement. This year Commencement exercises are to be held in the morning, rather than in the afternoon, which makes it almost impossible to have both events on the same day. Departments concerned with growing crops also requested that a date in July would suit them better than in June, because plant growth would then be further advanced, and hence the variations caused by improved varieties, fertilizers, inoculation, and protection from insect and disease injury, etc., would be much more apparent.

The reason that Saturday was selected was to make possible a week end visit to Madison. This request came from several Station Day visitors during previous years.

THE COLLEGE, THE PRESS AND THE PLOW

The second conference at the College of editors of farm papers, country weeklies, and agricultural editors of city dailies, was held on Friday May 25. The chief topic discussed had to do with a better use of Wisconsin's idle lands. Talks were made by Geo. F. Wehrwein, W.A. Rowlands and H.L. Russell. Considerable round table discussion followed each talk. At noon the members of the group were luncheon guests at the A.W. Hopkins' home in College Hills. The conference closed with a laboratory demonstration and discussion given by H. Steenbock on the subject, "Some Things we are Learning About Controlling Animal Disorders".

The farms and homes of Wisconsin need the service of the press. The printed page, whether in the daily or weekly newspaper or the farm magazine, has proved to be an effective supplement of the demonstration, display and discussion,

Credit for whatever headway has been made in any branch of the state's agriculgure must be shared with some 500 publications, whose editors early realized that the progress of the state was inseparately linked with the prosperity of its farms. The rank and file of this purposeful group has maintained a sympathetic and optimistic attitude toward agriculture and have sought to place and keep this great industry on a parity with other fundamental businesses.

Besides nearly a dozen farm magazines, Wisconsin is served by about 55 daily newspapers and more than 350 country weeklies. The columns of these publications have continually recorded the new facts of science and restated many of the old practical ideas in such a manner that many marked improvements, on or about the farm, have been traced to their method of handling the news. The newspaper may adapt considerable of its rural news and information from nearly two full columns of farm and family articles which the editorial office of the College of Agriculture prepares each week. Special articles are also used to further record the state's agricultural progress. New ideas and practices are carried in the little publication, known as BUILD WISCONSIN, that is sent to the community editor every week. This publication has for its main purpose the improvement of the country weekly. Wisconsin's weekly newspapers are looking better than they did years ago and they are serving their communities in a more effective manner.

This output brings the total number of available publications up to a figure well beyond a hundred. They present information on nearly all phases of farming, and are supplied to Wisconsin folks free of charge. A slight charge is made to people outside of the state, who annually request several thousands of Wisconsin publications.

Farmers of the future, as well as farmers of today, are interested in Wisconsin publications, as evidenced by the yearly requests from schools for material on agriculture.

NEW STAFF APPOINTMENTS

The following new appointments in the College of Agriculture have recently been confirmed by the Board of Regents:

Miss Geneva L. Amundson, Galesville, temporary assistant in Boys' and Girls' Club work. Miss Amundson has received training at the La Crosse Normal School and at St.Olaf's College. Last year she was winner of a national club contest at Chicago.

R.H. Larson, assistant in Plant Pathology. Mr. Larson comes to us from Ripon College, and will assist in the research studies on the causes of various bean diseases and also of aster wilt.

Donald Anderson, assistant in forestry research. Mr. Anderson is just completing his sophomore year in the long course. He will assist Dr. Zon and his associates in the making of measurements of tree growth on drained swamps, to determine the effect of drainage on such growth.

George W. Lord, who graduated from our Long Course in 1926, has been appointed Florence County Agricultural Agent, vice F.R. Peterson. Mr. Lord has had experience on sheep ranches in Australia and New Zealand. Last year he served for a time as temporary state boys' and girls' club leader. He began his new duties in Florence County on May first.

Dr. M.C. Hawn, Johnson, Nebraska, industrial fellow in Veterinary Science, vice Dr. W.T. Miller, resigned. This fellowship is in connection with the investigation now under way at the South Hill Farm with reference to the effect of the plane of nutrition on susceptibility to contagious abortion. It will be remembered that the Wisconsin Manufacturers Association is making a gift of \$10,000 annually for this study.

CHICAGO BUSINESS MEN VISIT MADISON AND INSPECT EXPERIMENT STATION

On Monday, May 21, about 35 members of the Agricultural Committee of the Chicago Association of Commerce, visited Madison and the University as the guests of the Agricultural College and the Madison Association of Commerce.

This committee is made up of representatives of the meat packing corporations, the railroads, the seed trade, the grain trade, farm paper editors, and similar organizations associated with agriculture.

Inspection trips included the Hill Farm, the Gregg Farm, the Monona Farm (Quaker Oats Farm), and a visit to several of the college laboratories. This is the third Agricultural College to be visited by the committee, they having already been to the University of Illinois and to Purdue.

E. R. SQUIBB & SONS AND QUAKER OATS COMPANY RENEW THEIR INDUSTRIAL FELLOWSHIPS

At the meeting of the Board of Regents on May 25 acceptance was made of the offer of E.R. Squibb. & Sons and the Quaker Oats Company to renew for the fiscal year

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1928-29 the industrial fellowships now maintained in our Department of Agricultural Chemistry by these two organizations. In each case the funds made available for the year were increased from the present amount, E.R. Squibb & Sons increased from \$1500 to \$1800, and the Quaker Oats Company from \$7,000 to \$9,000.

The Squibb fellowship (Miss E.C. Van Donk present fellow) is for the purpose of studying the relation of inorganic salts as supplements to iron in hemoglobin building. The Quaker Oats fellowship, (Byron Thomas, W.P. Elmslie and Alice Wirick, present fellows), deals with studies on the existence and correction of those properties of cereal grains which tend to make them rickets producing, and especially with the effects of irradiating with an ultra violet light food products made from the cereal grains.

RURAL ELECTRIFICATION INDUSTRIAL FELLOWSHIP RENEWED

The Wisconsin Utilities Association has renewed its grant of \$2,700 annually, plus expenses, for the promotion of research and extension in the field of rural electrification.

J.P. Schaenzer, who graduated from our long course in 1921, has been appointed fellow under this fund, vice W.C. Krueger who resigned April 10 to take charge of rural electrification extension in New Jersey. Mr. Schaenzer is now teaching agriculture in the Portage High School.

THREE HOME ECONOMICS SCHOLARSHIPS OFFERED BY PHI UPSILON OMICRON

Phi Upsilon Omicron, the home economics professional sorority, is offering three scholarships of \$50.00 each to 4H club girls who are entering Home Economics at the University this fall, and who are partially or wholly self supporting. The money for one of the scholarships is being given by the active chapter and was won as a prize from the Spun Silk Research Committee, New York City, for obtaining 400 questionnaires from women living in various parts of the country. The other two scholarships are given by the Phi U alumni.

ROCKEFELLER FOUNDATION AWARDS SECOND FELLOWSHIP TO COLLEGE

The Rockefeller Foundation recently made a second fellowship assignment to our College. Dr. S.K. Kon, Warsaw, Poland, formerly an assistant of Dr. Casimer Funk, who was the first to recognize vitamins as definite chemical compounds, and who coined the name by which they are now known, is now studying in our Department of Agricultural Chemistry.



MCSWEENEY-MCNARY MEASURE SIGNED BY PRESIDENT

This important Federal act, passed in the closing days of the last Congress, and signed by the President, establishes a ten year program for forest research, much of it in cooperation with various state agencies. About a million dollars a year is now being spent annually by the Federal government for this purpose. Under the terms of the McSweeney-McNary bill this amount is to be increased \$250,000 each year until the maximum of \$3,500,000 is reached. All classes of forestry research are contemplated by the bill.

The United States Forest Products Laboratory at Madison will probably be considerably expanded, as a result of this new legislation, as will also the personnel and scope of the United States Lake States Forest Experiment Station, (Raphael Zon, Director), with which the Wisconsin College of Agriculture is cooperating in its program of forestry research. The regular appropriation for the operation of the U.S.D.A. carried a special fund of \$20,000 to supplement the present appropriations for the Lakes States Forest Experiment Station, so that forestry research in this region is now assured of considerably increased financial support from the Federal government. This action places upon the State the necessity of providing additional funds to carry on their portion of the cooperative program.

HOME ECONOMICS STUDENTS WIN FIVE UNIVERSITY SCHOLARSHIPS

Out of the fourteen undergraduate scholarships in the University that are available for women for the year 1928-29, five have been granted to home economics students because of their high scholarship. Zilla Bradsteen, Home Ec. 2, with an average of 92.3 was awarded a \$300 scholarship; Viola Antholt, Home Ec. 2, with an average of 89.8, and Jeanette Stewart, Home Ec. 2, with an average of 93, were awarded \$140 scholarships; Marie Stephens, Home Ec. 3, with an average of 90.7; and Bertha Schmid, Home Ec. 3, with an average of 89.9, were awarded \$100 scholarships.

DATES FOR STATION DAYS AT BRANCH STATIONS ANNOUNCED

The following dates have been selected for the Station Days at the various Branch Experiment Stations.

Ashland	July	18		
Sturgeon Bay	July	19		
Marshfield	July	24		
Spooner	July	26	and	27
	- 11	-		

At Madison the event will be held on July 14. Because the trunk line highway running past the Hancock Station is being torn up preparatory to the laying of concrete no regular Station Day will be held at the Hancock Station this year, but certain "visiting days" for residents of nearby counties will be announced at a later date.

F. B. MORRISON TO HEAD UP ANIMAL HUSBANDRY DEPARTMENT AT CORNELL

Friends of our former colleague F.B. Morrison have read with interest the recent press accounts of his resignation as Director of the New York State (Geneva)

Experiment Station, and of his acceptance of the chairmanship of the Department of Animal Husbandry at Cornell. Professor Morrison may however retain the directorship of the Cornell Experiment Station for the next year or so.

It is understood that Director Morrison was led to make the shift so as to enable him to devote more of his time to research, rather than to administration.

The last session of the New York legislature materially increased the salary for this Animal Husbandry chairmanship to which a substantial addition has since been made by a special fund raised by the livestock interests of the state.

SPECIAL TRAIN BRINGS 1,000 FROM OUTAGAMLE COUNTY TO MADISON

Over one thousand rural boys and girls, their parents, relatives and friends, filled 14 coaches making up a special train that came to Madison from Outagamie County on Saturday, June 9. The occasion was arranged as a feature of the eighth grade graduation exercises for the schools of the county, and was made possible through the combined efforts of A. G. Meating, County Superintendent of Schools, and Robert Amundson, County Agricultural Agent.

This new type of extension work seemed to have a very strong appeal to those making up the group, and it is understood that other counties are already considering the possibility of carrying out a similar plan.

While in Madison the folks from Outagamie County visited the Zoo at Vilas Park, saw the University Stadium, and walked the length of the University Campus. While at the College of Agriculture they had the opportunity of seeing Dr. Babcock and his first Babcock testing machine. Dean Russell spoke to the group for a few minutes. Later the party gathered at the Capitol Building and met the Governor.

NO FUNDS PROVIDED FOR CORN BORER CLEAN-UP

The resolution appropriating seven million dollars for special corn borer control work failed to pass Congress in the rush of legislation incident to the closing days of the session which ended May 29. With the failure of this resolution, there is no money available to carry out the widespread corn borer clean-up campaign, the present special appropriation lapsing on June 30.

The bill providing funds for the various Bureaus of the U.S.D.A., as finally passed by Congress and signed by the President, made available financial support for the various research studies under Federal auspices now under way in the United States and in Europe. Provision was also made for the maintenance of the quarantine around the present corn borer-infested territory.

Secretary Jardino has summarized the Department's position as regards the corn borer as follows:

- 1. It is improbable that the natural spread of the borer to new territory can be retarded materially.
- 2. It is possible to keep down the number of borers, and to prevent serious commercial damage to corn by a thorough concerted clean-up in infested territory.
- 3. It is possible to prevent, for the most part, long distance spread of the borer by human agencies.
- 4. It is not possible to eradicate the borer.

CONGRESS PROVIDES \$50,000 TO STUDY CONTAGIOUS ABORTION

For the fiscal year 1927 Congress has just made available to the Department of Agriculture a special fund of \$50,000 for a study of contagious abortion of animals. A part of the fund will be spent to assist studies now under way at cortain state experiment stations. This station has just signed a memorandum of agroement in which the U.S.D.A: has agreed to assist financially in our studies on the inheritance of resistance to contagious abortion.

STATION WHA COMPLETES SEASONS' BROADCASTING

On Monday evening, June 11, Station WHA will be closed, but it is planned to resume the radio service about October first. Strong efforts are being made to secure a more favorable wave length from the Federal Radio Commission, and it is hoped that next fall it will not be necessary for WHA to be so limited in its ability to reach the various portions of the state due to the interference of other ratio stations on the same or nearby wave lengths.

Besides broadcasting the weekly program on farming and home making, the College Radio Committee has cooperated with 17 other radio stations in the state, furnishing every week timely material on farm and home economics subjects.

H. W. ALBERTZ SENDS GREETINGS FROM ALASKA

Asking to be remembered to his former colleagues at Madison, H. W. Albertz, Director of the Alaska Experiment Station at Fairbanks, in a letter to H. F. Wilson (Economic Entomology) tells of some of his experiences in his new location. "Our greatest problem in economic entomology for the moment", he says, "is mosquitoes. They are a torture to both man and beast and their number is legion. They lost their habit of being nocturnal, and work 24 hours of the day (daylight is continuous here at this time of the year)".

4H CLUB MEMBERS IN CAMP ON CAMPUS

The nineteenth annual ⁴H Club Camp at the University opened on June 13. Tents back of the Agricultural Engineering Building are in use for the serving of meals, but the sleeping quarters are indoors - the boys going to the Men's Dormitories, and the girls to the Wisconsin High School. The use of the dormant "Dorms" for this live purpose is an experiment which we hope will continue.

The camp program is designed to interest the older club members in the work of group leadership, and the programs for each day carry features that are inspirational, as well as educational and recreational. The camp closes Monday, June 18, when the club members will have an opportunity to witness the University Commencement exercises, including the granting of an honorary degree to Chas. Lindberg.

SOUTHERN STATES PLAN SEED POTATO BUYING POOL

Wisconsin growers of certified potatoes will watch with much interest the development of the new "All Southern Seed Potato Buying Pool", which was launched at a recent conference at New Orleans of potato specialists, growers, potato dealers and farm organization officials.

Under the plan adopted the Louisiana State Farm Bureau will act as buying agent for other southern states until such time as a permanent central organization is formed.

Uniform certification standards have been worked out, which will guide the organization in its purchases of certified seed potatoes this fall. Insofar as mosaic and other virus diseases are much the most important problems in maintaining high quality in seed potato stocks, it is expected that the extensive program of potato improvement work, carried on in Wisconsin, particularly by the tuber-index method, will help to give Wisconsin certified seed potatoes a preferred position in this large and important southern market.

ACHIEVEMENT DAYS AND CAMPS INTEREST RURAL WOMEN

May and June are busy months for our extension specialists in Home Economics. Successful Achievement Days marking the close of the season's work in the various group projects have recently been held in Door, Adams, Monroe, Trempealeau, Rock and Dane Counties. As many as 900 people have turned out to these gatherings.

Three camps for rural women have just been completed at the State Fair Grounds, and another is under way in Pierce County. The attendance has been excellent, and the farm women of the state are showing unmistakable evidence of their appreciation of the opportunity these camps afford for relaxation, recreation and inspiration.

DANE COUNTY SHORT COURSE REUNION SCHEDULED FOR JUNE 21

Dane County graduates of the short course in agriculture are planning a picnic and program on the college campus, on June 21. Melvin Thompson and wife, Mt. Horeb; Rufus Gillett and wife, R.R. Madison; and A.L. Stone and wife of our Department of Agronomy make up the committee that is making the plans for the event.

MARKING THE CAMPUS REMEMBRANCE TREES

This week distinctive boulders bearing the name of the staff members in whose honor the tree was planted have been placed at the foot of the four "Remembrance Trees" on the Agricultural Campus. The two oaks planted by Dean Henry and Dr. Babcock in 1921, when this tradition was first inaugurated, have just been marked by a huge single glacial erratic with the legend

"HENRY AND BABCOCK OAKS" 1921

These two names which have been so intimately connected with each other throughout all of the early life of the College will in this visible way maintain their close association as the slowly maturing twin oaks develop in full their rugged beauty.

The Alexander Elm on the mall in front of the Stock Pavilion and the Farrington Pine on the west slope in front of the Dairy Building have also been similarly marked.





COMMENCEMENT STATISTICS

The following data gives the number and distribution of students completing courses this June in the College of Agriculture.

Long	Course Agriculture		35
	Wisconsin students	27	
	Illinois	2	
	Colorado, New York, Georgia,		
	Maryland, Indiana, one each	5	
	China	ì	
Home	Economics		69
	Wisconsin students	50	
	Michigan		
	Illinois	6 5	
	North Dakota, Florida, Missouri,		
	Indiana, Mississippi, Washington,		
	Ohio, and Pennsylvania, one each	8	
Midd	le Course in Agriculture		5

Thirty of the 35 long course graduates have already been placed or have made definite plans for the coming year. Eight have accepted positions with industrial organizations connected with agriculture, such as Armour and Company; The Purina Company; and the United Fruit Company. Seven will engage in farming. Seven will return to this or some other University for graduate study. Eight will teach agriculture in secondary schools.

Of the Home Economics graduates twenty-seven are going into the teaching profession in the schools of Alabama, Michigan, Minnesota, and Wisconsin; eighteen are going into hospital dietitian or institutional management work; eleven are married or are going to be married in the near future; one is going into socretarial work; one into journalism; one into the bacteriological field; one expects to continue as a graduate student with us next year: three are going into the commercial field as costume designors and into commercial shop work; three are planning to be at home; and three have as yet not decided what work they will take up. Only seven of those joing into teaching are not placed.

All of the graduate students in Home Economics have been placed, and there has been a call for many more people with advanced degrees than we have available. Requests have been especially numerous for qualified woman to fill faculty positions in Home Economics Departments of Colleges, for home demonstration agents, for

research workers in Home Economics, and for the new field with public utility companies.

COMMENCEMENT REGISTER SHOWS EXTENT OF GRADUATE STUDY IN COLLEGE OF AGRICULTURE

Of the 7⁴ Doctors in Philosophy granted at Commencement, 16 were in agricultural subjects, and 9 more were jointly with departments in other Colleges of the University and with our division. Thus 25, or 3⁴ per cent, of those receiving the degree of Doctor of Philosophy took a large portion of their work in the College of Agriculture.

Exactly one-half of the 68 Masters of Science granted were based on majors in the College of Agriculture. Six were in Home Economics and 28 in Agriculture. In addition to these foregoing higher degrees three Masters of Arts were granted to students in this College.

Analysis shows that 22 of the total of 62 higher degrees in agriculture were to residents of Wisconsin, 6 to Illinois; 3 each to Indiana and Oregon; Nebraska, Iowa, Washington, and North Carolina, 2 each; and one from Missouri, Oklahoma, North Dakota, New Jersey, Colorado, South Dakota, Kentucky, Minnesota, Kansas, Michigan and New Hampshire. Foreign students included two from England, two from China, two from the Philippines, two from Canada and one from Jamaica.

CAPPER-KETCHAM ACT NOW LAW

Official notice has come to the executive office of the additional Federal appropriation for county extension work as provided in the Capper-Ketcham Act passed by the last Congress. Twenty thousand dollars is made available during the 1928-1929 fiscal year in each state in addition to the regular Smith-Lever funds. In 1929-30, and annually thereafter, this amount is to be approximately \$30,000 for each state.

According to the provisions of the Act 30 per cent of the appropriations thereunder "shall be utilized for the payment of salaries for extension agents in counties of the several states to further develop the cooperative extension system in agriculture and home economics with men, women, boys and girls".

It is further provided "that the extension agents appointed under its provisions shall be men and women in fair and just proportions".

RAPHAEL ZON OUTLINES FORESTRY RESEARCH PROGRAM

At our request Raphael Zon has prepared a brief statement of the lines of work that it is planned to carry out in the Lake States region as a result of the passage of the McSweeney-McNary Bill, which we referred to in our last issue. His statement is as follows:

"This recent forestry legislation carries no appropriation of money, but it correlates all branches of federal research having to do with forests; it gives organic recognition to the several experiment stations and other agencies doing forest research. It sets up a program for financing these agencies by authorizing later appropriations up to certain limits.

"As appropriations become available under this legislation the Lake States region, and Wisconsin in particular, can benefit by it in several ways.

"1. The Lake States Forest Experiment Station in existence since 1923, but not hitherto specifically recognized by Act of Congress, is named as one of the 15 regional forest research units which the Secretary of Agriculture is directed to maintain. It covers the States of Minnesota, Michigan, and Wisconsin, and is engaged in studies of growth and yield of forests, methods of natural and artificial reforestation, methods of fire prevention and control, etc.

-2-

"2. Studies in diseases of forest trees and decays of wood and other forest products, very necessary to both forester and timberman; these fall within the province of the Bureau of Plant Industry.

"3. Studies in insects injurious or beneficial to forests and forest products, methods of controlling epidemics that are at times so disastrous to forests, is an expansion of what the Bureau of Entomology now covers.

"4. Investigations of forest animals and birds which are inter-related with forest management, either detrimentally or as a supplementary forest resource, a function of the Biological Survey.

"5. Studies of the relationship between forest fires and the weather, particularly the technic of predicting "fire weather", in expansion of such work as the Weather Bureau is now doing with success in this region.

"6. Experiments in physical and chemical properties of wood and the utilization and preservation of wood and other forest products - a line of work which the Forest Service is now doing chiefly at its Laboratory in Madison, Wisconsin, but which has nation-wide application.

"7. Investigations in the economics of timber growing, including a survey in cooperation with the state of the present timber supplies and of the present and prospective requirements for timber and other forest products.

"The research or fact-finding program set up by this legislation should supply the information necessary for giving the forest lands of the region good technical care and protection, for improving the practices in manufacturing and using forest products, and for balancing the national budgets of forest production and utilization."

GOVERNOR ZIMMERMAN RELEASES FUNDS FOR ADDITION TO AGRICULTURAL LIBRARY

The appropriation of \$14,500, provided by the last legislature for an additional fire proof stock room for the agricultural library, has been officially released by Governor Zimmerman, and the State Architect is now proceeding with the drawing of plans for the new building. Besides providing much needed fire proof storage space for the ordinary requirements of our library, the new addition will also make possible the adequate housing of the Miller Memorial Library in Apiculture which was recently donated to the University.

COUNTY AGENT KEENAN MAKES LONG TIME CONTRACT

We have been advised that J.B. Keenan, Grant County Agricultural Agent, was married on June 14, at Pewaukee, to Miss Betty Beaumont, who for the past two years has been teaching the Lancaster schools. After a two weeks' auto trip Mr. and Mrs. Keenan expect to be at home in Lancaster.

G. H. TRUE, U. W. '94, DIES ON JUNE 13

Gordon H. True, professor of Animal Husbandry at the University of California, one of the leading livestock men of the nation, a graduate of our Long Course with the class of 1894, died at his home in California on June 13. Mr. True was the son of Hon. John M. True of Baraboo, who for many years had charge of the State Fair and was Secretary of the State Board of Agriculture.

Last December he was the guest of honor at a great gathering of live stock breeders and college men at Chicago during the International Livestock Exposition, when his portrait was hung in the "Saddle and Sirloin Gallery".