

## **The University of Wisconsin press bulletin. Vol. 32, No. 27 November 9, 1938**

Madison, Wisconsin: University of Wisconsin, November 9, 1938

<https://digital.library.wisc.edu/1711.dl/6QB7XCS4C4BKC8L>

This material may be protected by copyright law (e.g., Title 17, US Code).

For information on re-use, see

<http://digital.library.wisc.edu/1711.dl/Copyright>

The libraries provide public access to a wide range of material, including online exhibits, digitized collections, archival finding aids, our catalog, online articles, and a growing range of materials in many media.

When possible, we provide rights information in catalog records, finding aids, and other metadata that accompanies collections or items. However, it is always the user's obligation to evaluate copyright and rights issues in light of their own use.



THE UNIVERSITY OF WISCONSIN  
PRESS BULLETIN

The purpose of this Bulletin is to bring to the newspapers of Wisconsin and their readers—the people of the state—Pertinent news and information concerning their State University. The University Press Bureau will gladly furnish any special news or feature stories to editors. Address letters to R. H. Foss, editor, Press Bureau, University of Wisconsin.

Release Wednesday, November 9, 1938

MADISON, WISCONSIN

Vol. 32, No. 27

State-Wide Clay  
Search May Lead  
To New Industry

Search throughout the state for a clay which may eventually lead to the development of a new industry for Wisconsin in manufacturing tablewares and artistic pottery from local clays is now well in progress under the supervision of Prof. Della F. Wilson of the art education department at the University of Wisconsin.

At the present time, the state imports several thousand pounds of clay from Illinois annually. This clay is put to various uses including elementary modeling and pottery work in the elementary schools. Another use to which this clay is put is in the making of art pottery, some of which is made in art education classes at the State University. In addition, utilitarian objects are made of the clay, including such forms of tablewares as the brightly colored Fiesta dinnerware.

With the help of John Menn, state W. P. A. administrator and aid furnished through the federal agency, and E. F. Bean, state geologist, Prof. Wilson has received samples of several Wisconsin clays from areas near Waupaca, Wisconsin Rapids, Fond du Lac, and Vesper. Search for clays in other parts of the state is now being carried on and as soon as they are obtained, tests will be made to determine their possibilities and uses.

Illinois clays, as a general rule, have a definite grey color. When fired in the kiln, however, the clay takes on the buff color which lends itself so easily to the proper finish, handling, and coloring for pottery and modelling. Most of the Wisconsin clays already tested, on the other hand, fire red. This red clay melts at a lower temperature than does the grey type and therefore cannot be used where a high temperature glaze is desired, without additional processing to the clay itself. However, commercial glazes available everywhere can be applied to the local clay without any such "doctoring."

Already the state-wide search for new clays has helped to overcome one objection to Wisconsin clays used in the past. This objection was that known clays were not workable enough in hand work on art pottery. With the location of new clays, this objection is now largely overcome.

Prof. Wilson enthusiastically believes that sooner or later, new and now unknown Wisconsin clays will be found that will serve the needs of the state and its schools, and which may be the foundation for a new pottery industry.

Reference Aid In  
Buyer's Problems  
Is New U. Service

What the consumer should know about problems of commodity purchasing is made the subject of a reference publication, "Consumers in the Modern Market," issued by the University of Wisconsin Extension division as the first of a series of study aids on "Educating the Consumer." The material is shaped to meet the study purposes of women's clubs, teachers, home economics classes, and other organized groups and of individuals.

Eight phases of the subject are treated. The discussions are followed by references to authoritative literature, obtainable through the extension department of debating and public discussion.

One section discusses quality, quantity, price, and selection of the store; another, the role of the consumer and the producer. Other sections deal with the market itself—advertising claims, brands and trademarks, the sales person, labels, grades, standards, consumer credit, and price policies and regulation. Consumer organizations and professional and commercial agencies are discussed. Topics relate also to the government and the consumer buyer, and to ways to improve the consumer's position in the modern market.

This publication was compiled by Mrs. Ruth Black Fowell under the direction of Prof. May L. Cowles, of the Home Economics department, as a joint WPA-Extension study aid project.

U. Students Chosen For  
Agricultural Glee Club

Following competitive tryouts, 31 students in the University of Wisconsin college of agriculture were selected for membership in the Agricultural Men's Glee club during the coming year.

Allan Bone, Madison, senior in the school of music and president of the University band, is the director of the club which has been completely reorganized.

Members of the Glee club are:  
**First tenor:** Melvin Gassen, Baraboo; Harland Austin, Oregon; Tom Green, Oshkosh; Spencer Hanson, Blair; Orin Swingle, Highland;

**Second tenor:** Henry Fortmann, Frederic; Dale Gillette, Madison; Paul Goede, Edgerton; Raymond Heinzen, Marshfield; Edward Mraz, Milwaukee; Roslyn Rohrer, Alma; William Schmidt, Arlington;

**First Basses:** Wilson Clark, Chipewa Falls; Philip Derse, Milwaukee; Robert Davenport, Stoughton; Merlin

U. W. Scientists Seek Information to  
Prevent Lead Poisoning in Humans

"The insidious feature of lead poisoning is that so many people are chronic sufferers from the condition and aren't aware of what's troubling them. Painters, linotype operators, and filling station attendants, as well as people living in old homes still supplied with lead plumbing in the drinking water system are constantly exposed to lead poisoning—lead intoxication."

Such is the statement made by Dr. Frank L. Kozelka, assistant professor of Toxicology at the University of Wisconsin, in explaining his research on chronic lead poisoning, at the State University. Well known throughout the state for his experiments and results in urinalysis and blood testings for determination of alcoholic intoxication, he is now carrying on similar experiments in the field of lead poisoning.

## Lead in System

"Another great difficulty in this research," he continued, "is the natural presence of a certain amount of lead in a healthy person. So many varied reports have been given on the normal lead level in the human system, that when a toxicologist is called before the State Industrial Commission to state whether a worker is suffering from lead poisoning and merits payment of compensation, he doesn't quite know where he's at. All he can do is venture an opinion, an approximation."

The normal appearance of lead in the system is in a tri-lead phosphate form which is deposited in the bones and has about the same chemical properties as calcium, the bone-building element. The primary problem, normal level of lead, and the levels which produce symptoms of lead poisoning. These symptoms are stippling,

or spotting of the red blood cells, chronic constipation, the appearance of the blue lead line on the gums, and a general feeling of ill-being.

Towards this end, the department has modified the quantitative technique for lead published three years ago in Germany by Helmut Fisher, and is now on the job of testing several hundred people who show no indications of having been exposed to lead poisoning. Once this is accomplished, the next step will be to make correlations with a large series of individuals exposed to small daily quantities of lead such as painters, plumbers, etc. Already, they are able to check lead concentration within two gamma, or two millionths of one gram.

## Can "De-Lead" Person

Direct results of the lead poisoning disease may be optic atrophy or blindness, slight anemia, and in the more severe and acute chronic cases a condition of encephalopathy may set in. This condition which brings first a state of delirium and then one of coma is usually the terminal stage. In earlier stages, the cure is relatively simple, according to Dr. Kozelka. It consists merely of "de-leading" the individual. This may be done in several ways. The individual is put on a carefully controlled diet and is given dilute solutions of hydrochloric or phosphoric acid. Ammonium chloride may also be administered.

"Our ultimate aim, of course," concluded Dr. Kozelka, "is to be able to set up accurate normals and accurate tests so that not only will cases like those of the State Industrial Commission be easily, surely settled, but also it will be possible for people who are exposed daily to lead to receive systematic regular examinations to determine whether or not they are getting too high a concentration of the metal in their system."

Wisconsin Art Salon  
Opens Nov. 16 at U. W.;  
Has \$300 In Prizes

Awards totaling \$300 are being offered by the Wisconsin Union and the Madison Art association in the fifth annual Wisconsin Salon of Art which opens in the Memorial Union at the University of Wisconsin on Nov. 16.

New awards which will be made this year are in sculpture work and for the best piece of student work. Artists with three years of residence in Wisconsin, including the past year, and those living outside of the state who received three years of art training in Wisconsin or were in residence for ten years, are eligible to enter the competition.

A new policy this year, worked out cooperatively by the Wisconsin Federation of Artists and the salon committee, will permit each artist to enter one of his pieces without an entry fee, removing any financial obstacle to participation in the show.

A prize being offered this year for the first time is the Joseph E. Davies purchase prize of \$25 for student work, to be awarded to the outstanding piece submitted by a student of a recognized Wisconsin art school. An award of \$25 for the most meritorious work in sculpture will be made.

Because of the limited number of entries in the field of mural painting and architectural sculpture, the former award in this classification has been shifted to a \$25 watercolor purchase prize and a second prize of \$15 in watercolors and \$10 in graphic arts have been added.

The Salon was established four years ago to afford artists an opportunity to exhibit their work in the fall season and to foster the growth of Wisconsin art.

A significant part of the whole enterprise is the method of conducting the Salon, which is perhaps unparalleled anywhere in the field of large competitive art exhibitions. From beginning to end the arrangements are conceived and executed by State University students, working voluntarily as a committee of the Wisconsin Union and aided by the Union staff.

The Union Gallery committee is headed by Elizabeth Hunt, Madison, who has appointed the following members to take charge of plans for the Salon: Mary North, Madison; Muriel Culham, Stoughton; Louise Heskett, Toledo, Ohio; John Jenkins, Kenosha; Joseph Bradley, Madison; William Conrad, Milwaukee; and Floyd La Fayette, Kenosha.

## FARM DISINFECTANTS

"Disinfectants on the Dairy Farm" is the subject of a bulletin recently edited by Ernest C. McCulloch, formerly of the University of Wisconsin College of Agriculture, and now research veterinarian at the Agricultural Experiment Station, Pullman, Washington.

Goehring, Jim Falls; Richard Henkel, Winneconne; Lenard Hunt, Ashland; Raymond Hanson, Argyle; Neilus Larson, Stanley; Donald Sieg, Augusta; Berl Wildermuth, Janesville; Bruno Zucullo, Crivitz;

Second Basses: Zenas Beers, Elmwood; David Doperalski, Kewaunee; Elroy Hagberg, Bayfield; Earl Kluge, Milwaukee; Emil Mueller, Seymour; Lawrence Muskavitch, Shawano; Earl Tillema, Beaver Dam; Kenneth Wedin, Luck.

U. W. Students Attend  
Country Life Meeting

Students in the University of Wisconsin college of agriculture took an active part in the youth session of the American Country Life Conference held at Lexington, Kentucky, recently.

A group of 14 students from the University 4H club and the Blue Shield Country Life club represented Wisconsin at the national convention. There they met with representatives of similar organizations from colleges and universities throughout the United States.

Wisconsin students who led in various activities at the Kentucky meetings were Jane Maher, Wisconsin Rapids, who conducted a panel discussion on farm tenancy; Carolyn Hubatch, Antigo, who demonstrated soap carving in the learn-by-doing session; Darrell Metcalfe, Arkansaw, who demonstrated game equipment; and Milton Gutknecht, Lone Rock; and Corliss Rasmussen, Madison, who led in group discussion.

Other students who attended the conference include Edna Baumann, Edgar; Elda Jandt, Peshtigo; Donald Jensen, Amery; Stasia Loneragan, Saukville; Marjorie Stephenson, Hillsdale; John Braun, Racine; and George Briggs, Warren Schmidt and Glen Vergeront, Madison.

Gives \$5,000 to U. W.  
for Scholarships for  
Outstanding Students

A gift of \$5,000 to provide two annual scholarships of \$100 each which will go to two outstanding Dane county high school graduates each year was accepted by the University of Wisconsin Board of Regents recently.

The gift was given to the State University by Victor Albright, president of the Randall State bank of Madison. Under the terms of the gift, the principal of each Dane county high school is to send the name of the student who ranks highest scholastically each year in his school to the Committee on Loans and Undergraduate scholarships of the University. When all the names are in from all of the high schools in the county, the committee will then select by lot the two winners of the two scholarships.

In a communication to the regents, Mr. Albright explained that he was establishing the scholarship fund for three reasons: to urge boys and girls to do their best work in high school; to encourage and assist boys and girls to secure a University education; and to impel students to do good work in their University courses.

Road Oil Research at U. W. Brings  
Better, Cheaper Black Top Roads

Two years of research at the University of Wisconsin into the problem of road oils for black top roads in the state have revealed definite findings which may result in substantial savings in Wisconsin's annual road expenditure of 18 million dollars, it was revealed today by Prof. O. A. Hougen of the chemical engineering department at the State University.

A cooperative project, the road oil research has been under the direction of Prof. Hougen, Prof. J. W. Williams of the physical chemistry department, Joseph Zapata of the State Highway Commission, and as consulting highway engineer, Prof. H. F. Zanda of the University's college of engineering. Funds were provided by the Wisconsin Alumni Research Foundation, the Highway Commission, and the W. P. A. Dr. A. J. Hoiberg directly supervised the technical work on the properties of road oils and John Swanson developed methods for increasing adhesion of road oils to Wisconsin material aggregates, assisted by the staff of the Highway Testing Laboratories.

## 20,000,000 Gallons Oil

The importance of Wisconsin's 2,500 miles of low-cost black top roads is clearly demonstrated by the fact that it costs approximately as much to build 25 miles of black top road as it does to build one mile of concrete road. For use on these black top roads, the state buys annually about 20 million gallons of road oil for repair and construction work at a cost of approximately one and a half million dollars.

While the highway commission has always set up rigid specifications for the purchase of road oils, and has always tested them to make sure that it purchased only those oils fulfilling these standards, it always worked under a distinct handicap because science had not yet been able to ascertain adequate specifications to assure road oil durability.

Certain oils stood up remarkably well on the road. On the other hand certain others of the purchased oils while fulfilling the same specifications, proved to be highly unsatisfactory in that they washed off after a rainfall or ravelled badly under traffic. In either case, holes developed in the road surface and costly repairs were necessitated.

## Sought Economy, Durability

Determined to develop scientific specifications for the purchase of road oils for the state and thus increase the durability and economies of low cost roads, the investigators proceeded to

separate five different oils from as many sources into their three components: resins, asphaltenes, and the oily constituents. With the aid of a \$2,000 pressure pilot plant built at the University for the special purpose, they separated road oils from five different refineries into their respective components. These components were then reblended in a separate plant. In all, 25 different blends were made from the components of the five original oils for a total of 125 synthesized oils covering the entire commercial range of composition.

## Put Oils Through Paces

The next step in the experiments consisted of "putting these oils through their paces." They were tested on three types of road material aggregates: dolomite from the Lannon quarries, quartzite from Baraboo, and granitic aggregates from northern Wisconsin. Tests were made for such qualities as adhesion, weathering tests, and for usual and special physical properties. As a result of these examinations, eight definite requirements for road oils were developed. It is believed that an oil fulfilling these specifications can be depended upon to give increased durability when applied under favorable conditions.

Still unsatisfied, the investigators determined to discover a method whereby the oils could be applied to the road base regardless of whether the latter was wet or dry. In the past, long, costly and often dangerous delays resulted because of inability to apply road oils during a wet rainy spell or to the wet aggregate.

## Roads More Durable

Experiments carried on during this year and recently culminated have produced a technique for applying the oil to a wet road base as well as to a dry one. In this way, low cost black top roads can be repaired and built even during the rainy season.

With these developments, the Wisconsin scientists expect to make it possible for the state to purchase the most suitable road oils, and to make it possible for willing refiners to produce a road oil that will render excellent service. As a result of these investigations it is expected that more durable black top roads will be built in Wisconsin at low initial cost and with increased safety to motorists. The proof of the value of these investigations, however, depends upon actual service tests in the roads which as yet have not been completed.

Badger Industries  
Urged To Use U. W.  
Research Facilities

Leaders of Wisconsin business and industry are invited to consider the extent to which the University of Wisconsin's College of Engineering may aid in solving their individual technical and research problems in a letter sent to industrial leaders in all parts of the state by Pres. C. A. Dykstra recently.

The letter inaugurates on a state-wide scale a new industrial survey of research possibilities in industries in Wisconsin, established by the University this fall. The new project is under the direction of Dr. James B. Friauf, physicist and engineer, who has joined the University's engineering staff to conduct the survey, which is designed to increase the University's services and scientific contributions to state industry.

In his letter to state business and industrial leaders, Pres. Dykstra wrote:

"One earnest desire of this administration of the University of Wisconsin is to place the facilities of the University even more effectively at the service of the people of the state in every appropriate way.

"This letter is to invite the leaders of Wisconsin business and industry to consider the extent to which our College of Engineering may aid in solving their individual technical and research problems. Moreover, an actual experience in investigating practical problems and in research is necessary in a first-class engineering college, both to stimulate the faculty and to train suitably gifted students for research in industry.

"We believe that much of such effort may wisely be expended upon those specific problems and researches the solution of which will be of real value to Wisconsin business and industry as well."

Pres. Dykstra asked the industrial leaders to indicate their interest in the new project to Dean F. Ellis Johnson, of the College of Engineering, who would arrange individual conferences for them with Dr. Friauf. Many letters have already been received commenting favorably on the service and promising the co-operation of industries in setting research problems for the engineering college.

U. W. Man To Judge At  
Guatemala Stock Show

George Werner of the animal husbandry department at the University of Wisconsin college of agriculture has been invited to serve as judge of the National Livestock Exposition in Guatemala City, Republic of Guatemala, Nov. 20 to 27.

Werner will leave for Guatemala by Nov. 15 and will reach there Nov. 18, going by way of Mexico City. Judging will begin Nov. 20 and will continue for five or six days. Werner expects to remain in Guatemala for a few days following the show in order to inspect some of the local dairy herds. He will return by boat from Puerto Barrios to New Orleans.

The show, which is sponsored by the municipality of Guatemala, consists largely of exhibits of dairy animals, mainly imported and native Holsteins, with a few Jerseys, Brown Swiss and native cattle. Dairying in the mountainous regions of the republic where the high altitude and occasional frosts protect the animals from ticks and other pests is an important industry in Guatemala.

A. J. Cramer, animal husbandman at the college of agriculture, has twice served as judge at previous shows. Donald Brance, Holstein breeder of Lone Rock, served as judge at the 1937 show.

Gabriel Moulton Asturias, former farm short course student at the University of Wisconsin in 1932-1934 and winner of the champion cup for fitting and showing a dairy animal at the 1933 Little International show in Madison, is taking an active part in the show.

Training Course In  
Heating, Ventilating  
Offered By University

Dealing with all the important technical phases, the University of Wisconsin home-study course in Heating and Ventilating has recently been revised by the department of mechanical engineering, and now covers the recent advances in engineering knowledge in this field. The purpose is to enable engineers, architects, draftsmen, estimators, contractors, plumbers, and others to secure a better technical preparation for the work of planning, estimating, and installing heating and ventilating systems.

The recent development of the unit heater, the increasing use of humidifying systems and thermostatic control, the air-conditioning requirements of modern heating and ventilating systems, the closer search for heat losses at every point, and the all-around refinement of practice are examples of the present trend. Wisconsin's correspondence course aims to give help in all phases of the subject.

Other correspondence courses in the same field include Heat, Heat Power Engineering, Steam Boilers, Steam Engines, Refrigeration, and Elementary Plumbing.