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WISCONSIN ACADEMY REVIEW

WINTER 1962

Milwaukee Journal

WISCONSIN ACADEMY OF SCIENCES, ARTS AND LETTERS

WISCONSIN ACADEMY REVIEW
Vol. 9 Winter, 1962 No. 1

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WISCONSIN ACADEMY REVIEW

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THE COULEE EXPERIMENTAL FOREST — A NEW FIELD LABORATORY FOR SOUTHWESTERN WISCONSIN

By Richard S. Sartz, Research Forester, La Crosse
Lake States Forest Experiment Station

Strange things are happening up on the hills and back in the coulees east of La Crosse. A man lowers a piece of pipe on the end of a cable into a hole in the ground. He tightens a clamp and turns to a box that is fastened to the other end of the cable a few feet away. He snaps a button; tiny lights start racing around a series of dials. The lights stop; he jots down something. He turns back to the pipe, lowers it farther into the ground. Back again to the box; snap the button; the lights. ...

Three men are doing something on a snow-covered hillside. One looks through a kind of telescope he holds at his eye. He is looking at one of the others who holds a red-and-white-striped pole straight up in front of him. The two men pick up a long, shiny tape and stretch it. The third man hammers a long stake into the ground. Row after row of stakes curve around the steep hillside. ...

A rattlesnake hunter comes across a shiny brass-topped bucket on a remote forest ridge. Nearby is another one, and a man who wears metal leg guards is pouring something from a jar into a plastic cylinder.

Strange goings on? Perhaps, to the curious observer. But it's just routine work for the scientists of the Lake States Forest Experiment Station's La Crosse research unit. The man with the cable rig was operating a neutron-scattering soil moisture meter, an atomic-age instrument that tells us how much water is held in the soil. The men on the snowy slope were laying out contour rows for an experimental planting. The scientist encountered by the rattlesnake hunter was studying the effect of direction of slope on rainfall. The place? The Coulee Experimental Forest, about 10 miles east of La Crosse.

The men at work were looking for new knowledge--knowledge about soil and water movement and its relationship to land use on forested slopes and on other steep lands of Wisconsin's, Minnesota's, and Iowa's rugged, unglaciated area; knowledge that is needed to solve practical problems in land and water resource management.

* - Mr. Sartz is with the Forest Service, U. S. Department of Agriculture, and describes research conducted in cooperation with the Wisconsin Conservation Department.

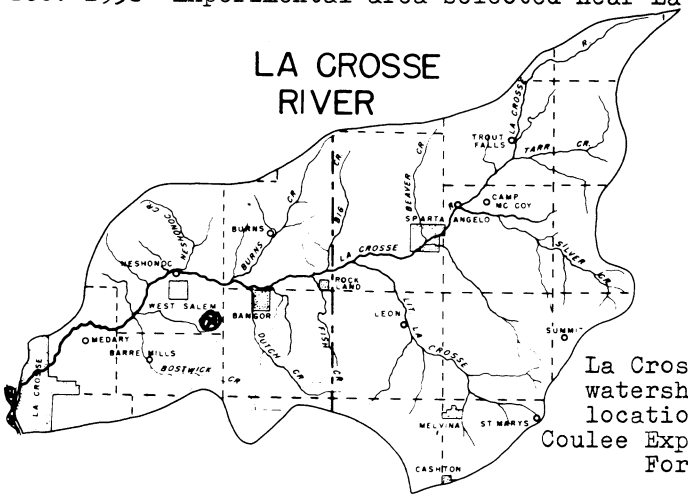
The soil, water, and forest resources of the "Driftless Area," so named because of its lack of glacial deposits, have gone a long way downhill from their original pristine condition. The demands of agriculture have too often exceeded the patience of nature, and floods and erosion are commonplace. The problems are not new but the approach is. Thirty years of work by the Soil Conservation and Agricultural Research Services have accomplished much. But the efforts of these agencies have been largely restricted to agricultural lands, which make up about three-fourths of the Driftless Area landscape. Meanwhile the forests and other nonagricultural wild lands had been quietly ignored.

This fact had been recognized for a long time, but except for a modest program by the Lake States Station in the 1930's, nothing concrete had come of it. Seeing the need for research information on forest lands, the Wisconsin Conservation Department sought out the Forest Service organization. The time was late fall, 1956. The result was a memorandum of understanding between the two agencies: the Forest Service would provide the people and conduct the research; the Conservation Department would buy and administer the land needed for the longtime research studies. By studying air photos we found a tract in central La Crosse County that was ideally suited. And thus was born the Coulee Experimental Forest.

A calendar showing the various actions would read:

Dec. 1956 Wisconsin Forestry Advisory Committee recommends forestry research center for the unglaciated area.

Dec. 1958 Experimental area selected near La Crosse.



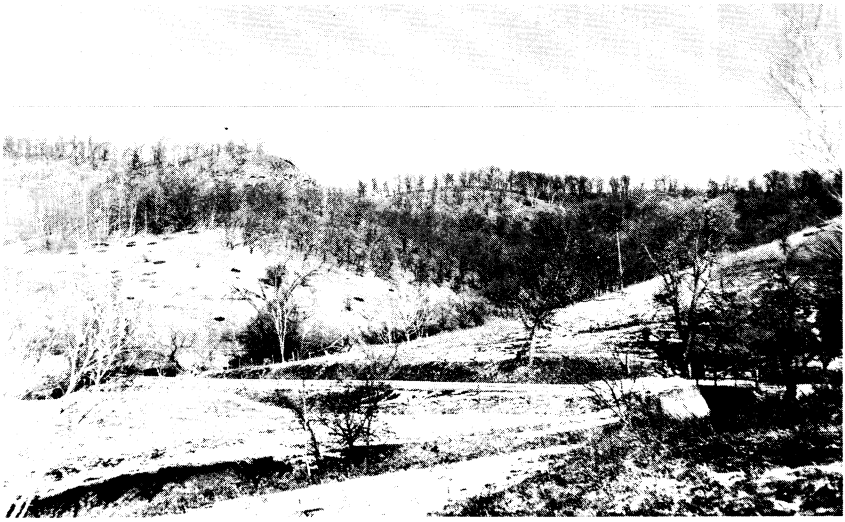
La Crosse River watershed showing location of Coulee Experimental Forest

Dec. 1959 About half of proposed area purchased.
June 1960 Coulee Experimental Forest formally dedicated.
Dec. 1961 Purchase of land nearly completed.

The experimental forest now includes about 2,800 acres. All of this was formerly in private holdings, either as whole, or parts of, existing farms, or as isolated wooded tracts. About two-thirds of the area is forested. Most of the open land had been either cultivated or pastured until bought by the State, and the rest was in various stages of natural succession following agricultural abandonment.

It is not necessary to describe the natural features of the problem area as a whole, apart from those of the Coulee Experimental Forest, for one describes the other. Indeed, the similarity between one ridge or valley and the next is one of the more remarkable features of the Driftless Area landscape.

Except for a handful of scattered white pines, the forest is composed entirely of native hardwood species. Oaks and hickories predominate, but basswood is an important component on the better sites. Aspen and paper birch are prolific invaders in forest openings and on abandoned fields. All of the forest land has been burned over at some time or another, and most of it has probably been burned repeatedly since the land was first



The relief is sharp. Most ridgetops and valley bottoms are narrow, and they are separated by steep slopes.

settled about 100 years ago. All but the more remote places have been pastured indiscriminately through the years.

Timber was cut on the various holdings as needed for fuelwood, fenceposts, and lumber on the farm. Occasionally a commercial sale was made, usually for crossties. Always the best trees were cut and the worst left to grow.

The terrain is best described as a dissected limestone cuesta. Unmarred by glacial actions, it is the product of weathering--geologic erosion, if you choose--through the millions of years since the first land appeared above the edge of some receding ancient sea. Except for gently rounded ridges of uniform elevation, the relief is sharp. Most ridgetops and valley bottoms are narrow, and they are separated by steep slopes. The short, narrow valleys are called coulees, and locally this is known as "the Coulee Region."

The uniform ridgetop elevation results from a caprock formation of dolomitic limestone which was relatively resistant to weathering. This is underlain by softer sandstone formations. These weathered rapidly once the caprock was broken through to form the steep slopes of today's driftless landscape.

Gullies slashed through the wooded slopes.

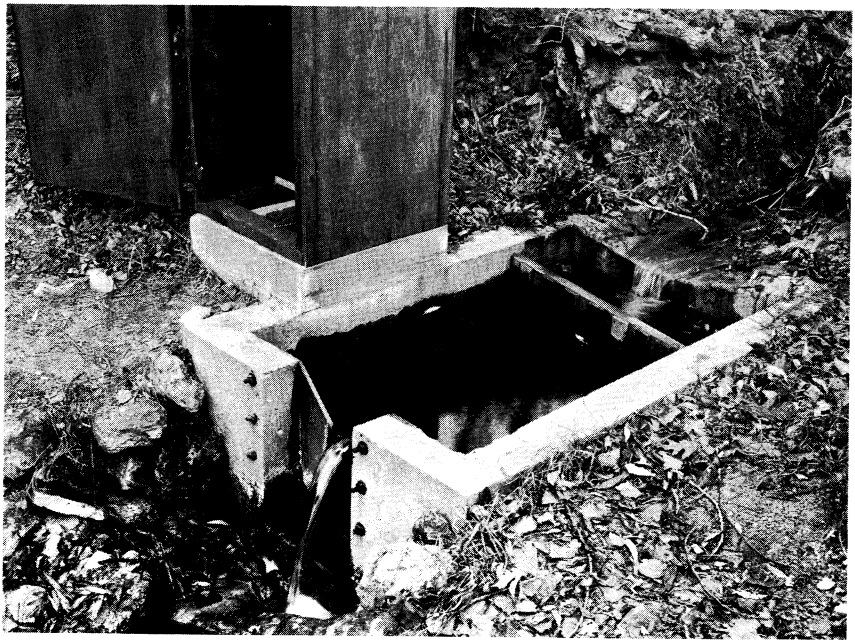
During some postglacial epoch a covering of wind-blown silt was spread over the area, probably blown from glacial outwash deposits along the Mississippi River. This formed a deep, fertile soil, even on the slopes. It was no wonder that the early pioneers overdeveloped the land for agriculture. Both ridgetops and valley bottoms were cleared. Only the steepest slopes and an occasional too-narrow ridge were left in forest.

With the extensive clearing and plowing of the land, particularly the ridgetops, a new manmade cycle of erosion began. The forest remnant became the dumping ground for runoff water from overlying fields. Gullies slashed through the wooded slopes, disgorging rocks and rubble and silt onto valley floors and into flooding streams. The age of civilization had arrived. Today the woodland gully is one of the distinctive and ubiquitous features of the Driftless Area--a scar of the battle between man, in quest of a livelihood, and an uncompromising nature.

This is the background and the setting for research on the Coulee Experimental Forest. Simply stated, we are concerned with the effects of forest condition and other land uses on storm runoff, erosion, and water yield from steeply sloping lands; and we are concerned with reforestation problems on these lands. We seek answers to such questions as: Does logging disrupt the natural protective value of forests? By how much and in what way? What about grazing? Does abandoned land heal itself? Can the forests of the area be made to hold back more runoff from overlying fields than they now do? Will changing the runoff pattern affect the flow of springs? Can trees be made to grow on naturally treeless slopes? Are they needed here for watershed protection?

We use a double-barreled approach: basic studies to give us a better insight to practical problems and to enable us to better interpret the results of applied studies; applied studies to give us information that can be put to practical use by resource management people.

What have we accomplished to date? So far most of our effort has gone into tooling up, so to speak--getting our basic instruments installed and operating--getting the trees in the ground. For our runoff studies we like to use complete watershed units wherever possible instead of small plots. This minimizes experimental error. We now have 23 water-measuring devices of different kinds installed and operating. Each is equipped with an expensive automatic recording device. We have a rain-gage network operating in conjunction with these.



Top - The man with the cable rig was operating a neutron-scattering soil moisture meter.
Bottom - Flowing springs are under continuous measurement, this one by means of a sharp-crested weir.

Five flowing springs are under continuous measurement, and we have started subsurface exploration of ground water levels. Last spring trees were planted on 20 acres in several different experiments. Ten more acres have been laid out for planting this year.

How soon will we be getting answers? It is hard to tell. We hope soon. We already know a lot more than we did three years ago. We have found, for example, that the woodland gully is a byproduct of upland agriculture and that the flow of springs is related to topographic position--upper level springs appear to have constant flow whereas lower level springs have normal rises and recessions. We now know that a wide variety of coniferous trees will grow (at least in the seedling stage) on quite different sites, that forests rarely yield surface runoff, and that much of the runoff from upland fields is taken up in the forested slopes. We have also learned much about seasonal and profile distribution of soil moisture; and we have learned that terrain features have little effect on the amount of rainfall.

But biological research in an outdoor environment seldom brings fast results. There are few quick, easy answers, for the most important elements--time and the caprices of nature--lie outside the realm of human influence. It takes more time to grow a tree than to cut one down, more time to build soil than to see it washed from the face of the land; and it takes time to bring an array of storm events that is such a necessary ingredient in watershed management research.

Yes, time is important to our long-range objectives. But there is much that can be learned while we are waiting.

# # # #

TELEMEDIOCRITY

Letters Editor's Note: On the next page we publish an evaluation of Telemation by a professor of French and Italian at the University of Wisconsin. The shrewd special pleading presented here by Academy member JOSEPH PALMERI meets a category of the critical consistently welcomed by the Review. From time to time, it is to be hoped, responses to such individual assessments can be elicited, to open for fullest discussion subjects of wide concern. Professor Palmeri's recent publication Par Les Grands Auteurs, Revision de Grammaire Conversation is meeting authoritative acclaim. Its important motivation is a certain fusion of scholarship and common practicality.

TELEMEDIOCRITY *

By Joseph Palmeri
Prof. of French and Italian
University of Wisconsin

The enthusiasm about the use of television as a teaching medium should begin to concern everyone in the teaching profession. Teaching by television is called Telemation. This ill-coined word carries no suggestion of teaching, of training to think, of leading the student to get his own answers (which is the essence of teaching).

The strongest argument advanced by the Telemationists and the Telemationphiles is that through this medium one can bring the best teachers into the classroom. We doubt most seriously whether the best teacher on television is as good as a poor, live teacher. For the sake of the argument--but only for the sake of the argument--we will grant that the efficacy of great teachers is not greatly impaired on television. Because we are as ignorant as the Telemationists about the possible physical harm done to the nervous system by many hours of watching television, we will discount this possibility, too. However, we shall have to state, on a minimum of evidence but on a great deal of logic, we think, that the long range harm done to the mental faculties and the attitude of the students toward learning far outweighs all benefits claimed by the partisans of Telemation.

A few years ago, an experiment carried out at the University of Nebraska showed that students taught by television were enthusiastic about the method but, as a result of this very experience, they came to misunderstand the role of the learner in the process of learning: they became passive and achievement suffered.

Television is a showing instrument and as such it is undoubtedly of great usefulness where visual illustration is of capital importance. In most fields, however, it will do a lot of harm unless it is used only as an aid and with much less enthusiasm than the Telemationists show. Telemation is essentially a spectacle. The students so trained will no longer wish to think, to imagine, to create or even to recreate. They will want to see--not as the poet or the artist sees--but in the fleeting, superficial way of the average traveler. Thus, they become mentally lazy.

Of whatever use television may be as an aid to the classroom teacher, it certainly is not a teaching medium because, in the long run at least, it creates a mentality which seeks easy answers. And, as everyone knows, there are no easy answers.

# # # #

*(See introduction, page 7)

THE FREE LIBRARY COMMISSION FACES THE '60s

By S. Janice Kee
Secretary of the Commission

In its public library development program, the sixty-six-year-old Free Library Commission faces the '60s with new problems and new opportunities--with documented areas of weakness and elements of strength. This is essentially the message of a state-wide study of public libraries made in 1960 by the University's Bureau of Government. The report is entitled Facing the '60s; the Public Library in Wisconsin.

Facing the '60s points to the following weaknesses of public library service in the state:

(a) Over 600,000 Wisconsin residents are still without legal access to a public library. Of the 312 public libraries in the state, over 250 receive such meager municipal support that they cannot provide service anywhere near minimum standards for book collections, hours open per week or properly trained and certified staff members. In this connection, the effectiveness of the local independent library board is questioned.

(b) County government contributes little to the support of either municipal or county library service; there are no state grants-in-aid to public libraries and the establishment and continuance of library systems currently is dependent upon limited amounts of federal aids, available only for library demonstrations.

(c) Evident is a lack of clearly defined patterns for coordinated library service among the state's institutions of higher education, the schools and public libraries.

(d) State appropriations for the Free Library Commission have scarcely kept up with the effects of increased costs in the last ten years.

On the other hand, the surveyors did recognize elements of strength in the state's library situation. For example, the Wisconsin statutes allow wide latitude to all units and levels of government for organizing and financing more effective units of library service (library systems), and with state leadership and incentive

grants under the federal Library Services Act, it has been possible in the last five years to carry on a variety of special library projects demonstrating the advantages of inter-library cooperation. As a result, it is observed that (1) local people who are closest to the public library operations are beginning to recognize there is a need for improvement in the community library service they are supporting, and (2) there is a growing favorable attitude toward inter-library cooperation among public librarians and library board members.

The Library Commission believes the great majority of the people of the state are unaware of the library conditions as described in Facing the '60s, and that upon recognizing the critical need for improvement, they will join librarians and library board members in a mobilization of effort to make substantial improvements in the state's library situation. For its guidance and that of interested individuals and organizations, the Commission has adopted a six-point program of action:

1) A public information program, well planned and concentrated, within the next two years.

2) Continued experimentations by the Free Library Commission in developing library systems.

3) A state-level program of continuous study and research and planning relating to library development.

4) Increased local effort to improve library services.

5) Developing a practicable pattern of financial support for public library improvement and extension, setting forth the responsibilities of local, state, and federal governments and determining on what basis and to what degree the state will participate in the support of public libraries.

6) A library legislative program in 1963, appropriate and necessary to further the improvement of library services in the state.

Copies of the complete program are available from the office of the Free Library Commission in the State Capitol, Madison.

# # # # #

ATTEND THE 92nd ANNUAL MEETING, MAY 4-6, 1962
WISCONSIN STATE COLLEGE — LA CROSSE
General Theme — "Upper Mississippi Valley"

LIBRARY FACILITIES NOTHING TO BRAG ABOUT

("On, Wisconsin" column from copyrighted Milwaukee Journal, April 29, 1961; reprinted with permission.)

The public library situation in Wisconsin is generally far from satisfactory. No other conclusion can be drawn from the factual study just reported by the University of Wisconsin bureau of government.

Even the bigger and better libraries in the cities, Milwaukee included, haven't been able to keep up with growth in population, rise in educational level, rapid development of human knowledge. Many small community libraries are hardly more than pitiful excuses. And while a few counties offer something in the way of library service, most provide none at all.

There are very good libraries, of course. But what can one say for libraries open only two, four and six hours a week? Or a library that spent $7 for new books in 1958? What kind of service can one expect from librarians paid 10¢, 30¢, 58¢, 70¢ or 77¢ an hour? These are actual figures from the report.

If it weren't for federal aid, which has been stepped up until it paid more than half of last year's $333,000 budget for the Wisconsin free library commission the whole state effort would be merely nominal. The commission has done well, considering its tiny staff and budget, in promoting library improvement.

There is need for much more community interest and more money. The UW report stresses need also for re-examination of the time honored system of independent library boards. School systems might do the job better in rural areas.

Two multicounty systems up north and the Shawano city-county library suggest need for further experiment with various large regional units. The whole library situation has been too long neglected.

# # # # #

INTRODUCING

REXFORD S. MITCHELL

REXFORD S. MITCHELL, the fourth president of Wisconsin State College-La Crosse, has held that post since 1939. During his incumbency, the college has known its greatest growth academically and physically.

Born in Manawa in 1896, he received his early education there and after an interruption in his college career to serve in the AEF in World War I, he obtained his bachelor's degree from Lawrence College in 1920. The University of Chicago granted him a master's degree in 1925 and in 1937 he received a Ph.D. at the University of Wisconsin. From 1920 to 1928 he taught social studies and speech at the State College at River Falls and also served as dean of men. He then returned to Lawrence College as professor of speech, associate dean in charge of alumni affairs and assistant to the president, where he served until coming to La Crosse.

He is very active in community affairs, having been president of several service organizations as well as of a number of regional education associations. In the WEA he has been chairman of the resolutions committee and the public relations committee, president of the Council of State Colleges Presidents, and is president-elect of the Wisconsin Assn. of College Deans and Presidents. He is a member of Phi Beta Kappa and Sigma Phi Epsilon Club.

--Mary H. Hebberd, Public Relations

# # # #

REFERENCE ARTICLES ON LA CROSSE AREA in Wisconsin Academy Review: Botanizing in the Coulee Region, Winter 1955,p.6 and The Wayona Scientific Area, Spring 1955, p. 16 (both by Alvin Peterson), The La Crosse Soil Conservation Experiment Station (Orville Hays), Spring 1957, p. 53; Soils of the "Driftless Area" (Francis Hole) Winter 1959, p. 8; Origin and Development of the Vegetation of Southwestern Wisconsin (J.T. Curtis) Winter 1959, p. 14; Forests and Waters: A Tale of Two Watersheds (Richard Sartz) Spring 1959, p. 55; Coon Valley and From Indians to Norwegian Pioneers to Atomic Age (Arnold Haugen) Spring 1960, p. 75.

WISCONSIN STATE COLLEGE — LA CROSSE

By Mary H. Hebberd
Public Relations Office
Wis. State College, La Crosse

Wisconsin State College-La Crosse, second youngest in the system of state colleges, first opened its doors to students in the fall of 1909. Known originally as La Crosse Normal, the college was established by the Wisconsin legislature to train teachers for the schools of the state.

Talk of establishing a college at La Crosse was heard as early as the legislative session of 1893, when the first bill for this purpose was introduced. However, it was not until 1905 that the legislature ordered the Board of Normal School Regents to take steps to provide such an institution at La Crosse. The City Council, foreseeing what an asset a college would be to the community, purchased two city blocks for the site of the campus.

Fassett A. Cotton, who had been state superintendent of public instruction for the state of Indiana, was appointed the first president in February 1909, and he took over the task of selecting the first faculty, many of whom were fellow Hoosiers.

For its first four years the college served not only as a training center for elementary teachers but also as a home college for area students who would later transfer to other colleges and universities to complete their educations. In 1914, the special field of training teachers of physical education was assigned to La Crosse by the Board of Regents. Since that time students have come from many states and have gone out across the nation to pursue careers in physical education. Today nearly one third of the student body have chosen this specialty. A non-teaching major in recreation is available to students this year.

Main Hall

In 1956 a program of graduate work, leading to a master of science degree in physical education, was inaugurated. Last year it was approved by the North Central Association of Colleges.

The fastest growing division now is that of Letters and Science, in which majors are offered in sixteen fields including medical technology and business administration. Bachelor of science and bachelor of arts degrees have been offered in this division since 1951, and many students from the La Crosse area, who previously would have transferred after a year or two, now remain to complete undergraduate work at the college.

The success of the college in training elementary teachers has been so outstanding that the United States Office of Education frequently sends foreign educators to the campus. In the Secondary Education Division, the college was one of the first in the nation to develop a program especially designed for the training of junior high school teachers.

Main Hall, the first building, was built on what was then open prairie between the Mississippi River and the bluffs, an area remembered by old timers as one of sand and sandburs. Since that time, Wittich Hall, the Campus School, the Florence Wing Library, and the Student Union have been added.

Although President Cotton, in his second report, emphasized the need for dormitories for the women students, not until after World War II did such facilities become available. Since then five have been constructed or purchased, and a sixth, now under construction, will be occupied in the fall of 1962. The increasing college population has speeded additions to the campus. Plans are being drawn for a million dollar field house-physical education building, and a two and a half million dollar science building is to follow.

Four presidents have held the office at La Crosse: President COTTON, 1909-1923; ERNEST ASHLEY SMITH, 1925-1926; GEORGE MERRILL SNODGRASS, 1927-1938; and REXFORD S. MITCHELL, 1939 to the present.

President Mitchell, who was assistant to President Henry M. Wriston at Lawrence College before taking the presidency of La Crosse, has been at the helm during a period of unprecedented growth and development: ten new buildings since 1939, a faculty of over 120, and a student enrollment of more than 2,000. In addition, expanded course offerings appeal to broad student interests.

Over the years, extension and Saturday residence classes have given teachers of the western area of the state the opportunity to continue their professional training during the school year. Many also take advantage of the eight-week summer session for enrichment. In addition, the college provides for extension courses in engineering in cooperation with the University of Wisconsin.

For the past several summers, the courses in the cooperative graduate program have been offered. Particularly designed for the improvement of the classroom teacher, the plan includes two summer sessions at La Crosse and then two at the University of Wisconsin.

A service agency of the college is the audiovisual center, one of the best-equipped in the Middlewest. Last fall the center expanded its services by the establishment of a film rental library, now used by many schools, clubs, and churches of the surrounding counties. The center is in a wing of the beautiful Florence Wing Library.

The college also serves as a cultural center, bringing to the townspeople art exhibits, musical events, good theater, and lectures. However, through its development from a normal school, state teachers college, and now a state college, its primary purpose is still the education of teachers--men and women of scholarship and broad interests, well-prepared for their roles in life.

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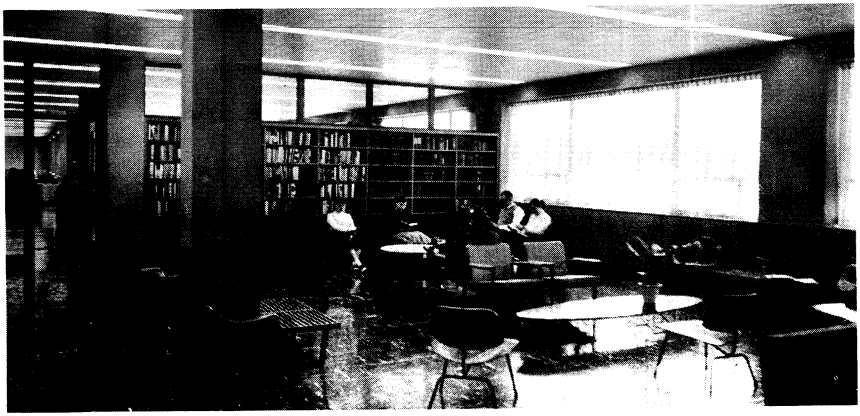
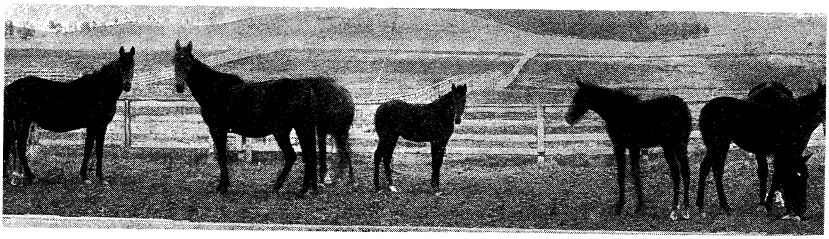


Browsing Room, Florence Wing Library



DOUBLE M RANCH

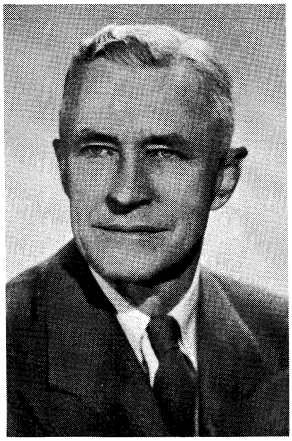
Some things the years do not erase.
I wondered what my grandsire found
That linked him to this hilly place
And made him buy this tired ground.
But now I know, for it is mine;
Its wooded hills are home to deer,--
And peace is sketched in every line
Of fields that stretch with freedom here.
The soul expands. Eyes print the flow
Of valley springs where gentle mares
Drink from this sweetness which they know,--
I call to them and each declares
Her trust in me. The eager thunder
Of hoofed approach will always be
A thrilling and untasted wonder--
Intense and sudden poetry.

--Marian Paust

Academy member MARIAN PAUST has in previous issues of the Review contributed poems distinguished in quality. "Double M Ranch," devoted to raising, training, and selling saddle horses, is comprised of wooded hills and peaceful fields near Richland Center. Both sides of the family, grass-rooted in the locale, are designedly represented in the "Double M."

YOUTH OF THE FUTURE

By Philip H. Falk
Supt. of Schools, Madison



The next generation is here. We have 1,121 pupils in the 12th grades in Madison's public high schools, 1,842 in 9th grades, 2,375 in first grades, and over 3,000 babies. Our total public school enrollment was a few more than 10,000 in 1947; it is over 24,000 today and will reach more than 35,000 in 10 more years.

These children are going to inherit some very difficult problems from our generation. I mention only four.

1) The world wide population explosion. In the present world of three billion people in which it is estimated more than half go to bed hungry every night, we are told we shall have six billion people in 40 more years. Sir Julian Huxley, the eminent British biologist says: "Human population is probably the gravest problem of our time."

2) The rising aspirations of the underprivileged peoples of the world. These pathetic, ignorant, poverty stricken people are justifiably no longer content with their plight. But, as Helen Matheson has so aptly expressed it, they are determined to step from yesterday to tomorrow without going through today. They need our help and patience. These desperate people may not be too appreciative of our efforts to help them, and they may submerge us. Dr. Grayson Kirk, President of Columbia University, says: "The greatest challenge, or problem, we face is the determination of peoples of underdeveloped nations to achieve rapid progress. ... "

3) The upsurge and arrogant challenge of the totalitarian philosophy both at home and abroad. The free way of life has probably never been so blatantly challenged by totalitarians. All the modern techniques of brain washing are put to full use by those with fixed and final answers to all questions. In their dedicated

* - Slightly abridged text of a statement made by Supt. Falk to the First Congregational Church of Madison on November 26, 1961. Mr. Falk recently was honored by the Madison Education Assn. for his 23 years as public school superintendent there.

and determined desire to make all conform, they firmly believe that the end justifies the means. Most of our ancestors came to this country to avoid such dictatorship. Our next generation must face it again.

4) The vast recent increase in knowledge. Professor Hiebert of the Department of History of Science at the University published a little book about a year ago entitled, "The Impact of Atomic Energy." He states that in 1939 our most powerful aerial weapon was equal to one-half ton of TNT. By 1943 we had developed the Block Buster equal to 10 to 20 tons of TNT. In 1945 the bomb we dropped on Hiroshima equalled 20,000 tons of TNT. In 1955 the H bomb was equal to 20,000,000 tons of TNT. He says further there is no theoretical upper limit to explosive power. The implications for good or evil of this fantastic new power in the hands of men are obvious.

Space exploration involves and reveals unbelievable speeds, distances and magnitudes. In the opposite direction the electron microscope magnifies 1¼ million times. It has revolutionized our concepts of life and biology.

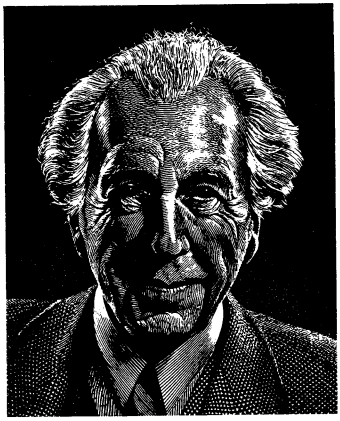
In spite of our achievements in science which enable us to move toward infinity in power and magnitude, and toward the infinitesimal in size, there is nothing in this new knowledge that throws light on values or purpose of life. They do not tell us or the next generation where we came from, why we are here, or where we go from here. That is a task for philosophy, religion and the church.

About 25 years ago I was affiliated with one of our State Teachers Colleges. I had the privilege of sitting in on meetings of the Board of Regents of those State Teachers Colleges. The President of that Board was a very well known, successful attorney. He spent many hours in meetings involving struggles for budgets and efforts to raise standards of two-year normal schools which, by legislative edict, suddenly became four-year degree granting colleges. He was in his 70's--had been honored by the legal profession, his church, and as a civic leader. He had attained about all the distinctions anyone could seek in life.

Out of sheer curiosity I asked him one day why, after his many years of public service and his attainments in life, he was willing to continue to spend untold hours as President of the Board. His reply was very simple. It was, "I am interested in the kind of teachers my grandchildren are going to have." He then added, "There comes a time in one's life when the most important thing in the world is what is going to happen to his grandchildren." We have just cause to be concerned. ##

FRANK LLOYD WRIGHT AT THE UNIVERSITY OF WISCONSIN

By Robert Spence
Art History Dept., Univ. of Wisconsin



(Portrait sketch by Irwin Smith, courtesy The Reader's Digest, from a Portrait by Karsh of Ottawa --copyrighted)

Probably many readers of Frank Lloyd Wright's autobiography have been puzzled by his account of his undergraduate sojourn at the University of Wisconsin. He speaks with feeling of this "best period of youth, lasting three and one-half years," and goes into considerable detail about certain experiences of his freshman year. (1) Then, unaccountably, he lapses into generalities and swiftly brings his reminiscences to a close. But he reaffirms that he persevered by grit and sacrifice until well into his last year--"Freshman, Sophomore, Junior, and part-time Senior"--even though he could not be bothered to take a degree. (2) The misfortunes and poverty of a broken home, the irrelevance to life of the classical curriculum which he allegedly was pursuing, and his youthful impatience to get on with a career in architecture are proffered as reasons for the precipitate end of his college training.

Commentators on Wright have tended to accept this testimony as authoritative. Indeed, when the University conferred a doctorate upon him in 1955, the honorary degrees' committee, in preparing the citation which was read at Commencement, generously rounded off the final year and declared that Wright "entered the University as a student in Civil Engineering at the age of fifteen and spent four years on our campus." (3) Alas, it is not so. Apparently the first writer who bothered to check Wright's undergraduate record was Grant C. Manson of the University of Pennsylvania, who is doing a full-scale biographical and critical study of the architect. Pro-

* - Editor's Note: The author of this piece of original research states that he has "the greatest admiration for Wright" and he is not trying to abuse him. He feels, however, that Wright now is a part of history and we should set the record straight in this regard. As with all articles in the Wisconsin Academy Review, they are the responsibility of the author and do not necessarily reflect the thinking or ideas of Wisconsin Academy officers or the Editor.

fessor Manson discovered that Wright's attendance at Wisconsin was "considerably less than two academic years." (4) He, too, is generous.

The plain fact is that Wright attended the University for less than one year, carried only three courses in all, and evidently failed to receive a grade in one of these. Registrar's records preserved in University archives show that he was admitted as a special student in civil engineering on January 7, 1886--a special student being defined in the general catalogue for 1886/87 as one of those "who have not yet obtained a standing in any regular course, or who, not desiring to graduate, wish to select their studies." The academic year at that time consisted of three terms of eleven to fifteen weeks each, and Wright was registered for the winter term (January 6-March 31). Perhaps because of dearth of funds and the fact that he had to work many hours each week to help support his mother and two sisters (his father having deserted the family), he enrolled in only one course, French, and for that no final grade was ever entered. The implication would seem to be that he failed to complete course requirements, and that the blank denotes what today would be called an Incomplete.

He did not register for the spring term, although he was undoubtedly on campus because he worked part-time for Allan Conover, professor of civil engineering. In September, 1886 he returned to school, carrying two courses in the fall term (September 8-December 22)--one in descriptive geometry and one in drawing. In each he received a passing grade. And that's all there is: that is his complete record. If, as he states or implies, he took other work in English, mathematics, and engineering, he must have done so as an unregistered auditor.

Small wonder, then, that the autobiography throws little light on Wright's university experience beyond the freshman year. There was none. In the spring of 1887 he went to Chicago to embark on a great career, and his school days were over. One need not speculate here on his motives for dissembling in regard to his college education. It is sufficient to observe that he, like many another artist, is not always a reliable source for the facts of his personal history.

1) An Autobiography (New York, 1943), p.58. 2) Ibid.,p.57. 3) Citation on file in President's Office, University of Wisconsin, Madison. 4) Frank Lloyd Wright to 1910 (New York, 1958), p. 13. Professor John F. Kienitz of the University of Wisconsin had earlier examined the record, and I am grateful to him for calling my attention to this curious little facet of Wright's career.

# # # # #

WISCONSIN ARTS FOUNDATION AND COUNCIL

By William W. Cary
President

Wisconsin is the only state which has a voluntary state-wide arts council. Community-wide arts councils have come into existence in more than forty cities in America, and three states have government-created and supported councils. In Wisconsin alone arts organizations have banded together for their common benefit.

The Wisconsin Arts Foundation and Council is the brain child of Professor ROBERT E. GARD of the University of Wisconsin and Wisconsin Idea Theater fame. Five years ago Gard and others interested in various arts fields met and established the organization, which Gard served as first President, later as Vice President and today as a Director and member of the Executive Committee.

WAFC undertakes to represent all of the arts and to serve as a common meeting ground for them. Its Arts Committee consists of representatives of the fields of drama, music, architecture, creative writing, dance, crafts and the filmic arts. To the Arts Committee are referred all questions of artistic definitions, development of policy relating to arts fields and the like.

Many Wisconsin residents are acquainted with the Wisconsin Arts Calendar, quarterly publication of the Council. It lists events in the arts fields mentioned above (and others) throughout the state. Dates, times, places and even admission prices are included.

The Calendar was the second step in a program initiated by the Council. First phase was the establishment of a central catalog of information about arts organizations in Wisconsin. Though admittedly still not 100% complete, the Council believes its catalog is the most complete listing of Wisconsin organizations interested in the arts that has been compiled. With nearly 1,000

"active" arts groups and several hundred "study" groups listed, the list fills 34 single-spaced typewritten pages.

In addition to the survey and the arts calendar, the Arts Council has undertaken such projects as exploration and promotion of arts programs of particular advantage to the state or regions within the state (the Council sponsored the unsuccessful effort to bring the Guthrie-Ray Repertory Theater to Milwaukee); preparation of a pamphlet to encourage inclusion of the arts in community observances such as centennials; efforts to broaden the interests of groups such as Women's Clubs in the arts.

The State Council also believes that cooperation among arts organizations on a community level is highly desirable. The State Council has sponsored the current discussions of a possible Milwaukee-Waukesha Arts Council with its officers taking leading roles in the development. An early project of a Milwaukee-Waukesha Council would be an arts festival in the area. Among future plans of the State Council are regional arts festivals in other parts of the state.

The Council is an organization of organizations. Major state colleges, symphony orchestras, art museums, theatrical groups are included among its members. In addition, individuals may become members, although they are not actively solicited. Individuals may subscribe to the quarterly Arts Calendar for $2.00 a year; membership and a Calendar subscription combined are offered for $3.00. The address is P.O. Box 1372, Milwaukee 1, Wisconsin.

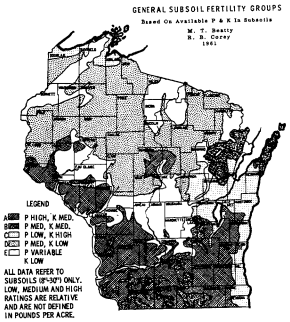
# # # # #

SUBSOIL FERTILITY OF WISCONSIN SOILS

By Marvin Beatty and R. B. Corey
Associate Professors of Soils
Soils Dept., Univ. of Wisconsin

The general map of subsoil fertility groups illustrates major geographic areas of the five most common conditions of "available" phosphorus and potassium in subsoils of Wisconsin soils. Use of the map will help to improve recommendations for phosphate and potash fertilizers based on tests of surface soil. Approximately 230,000 such samples are tested in Wisconsin each year. Since it is not practical to sample and test subsoils on a routine basis, the Soils Department and the Wisconsin Geological and Natural History Survey, in cooperation with the U.S.D.A. Soil Conservation Service, have been studying the "available" phosphorus and potassium levels of subsoils of the various soil types

throughout the state. "Available" phosphorus and potassium are relatively constant in the subsoils of most soil types, so a small number of carefully chosen samples can characterize each type.



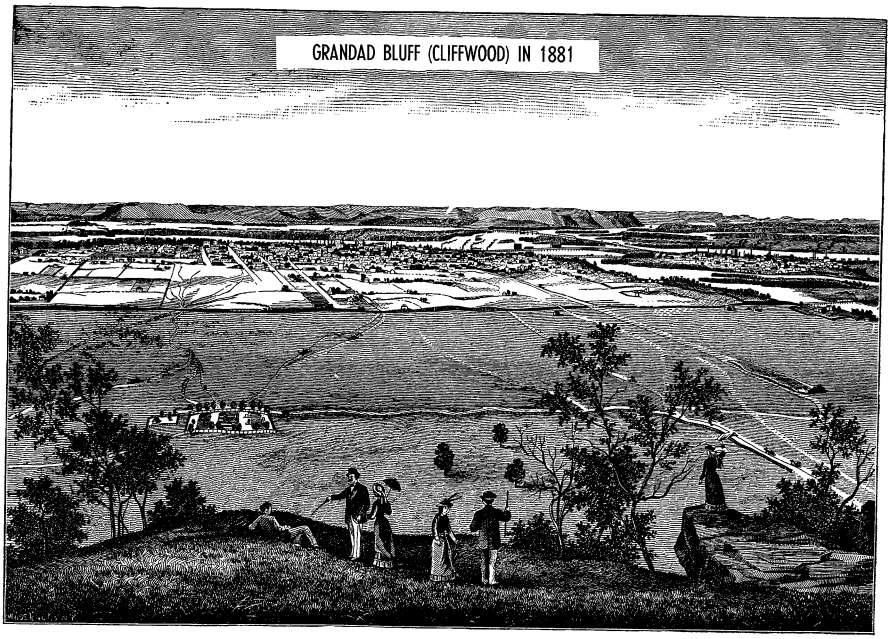
The results of the study have been generalized into the general subsoil fertility map. A more detailed version of the map will be used by County Agents and other professional agricultural workers to improve fertilizer recommendations. With the map, these workers can adjust fertilizer recommendations to the particular kind of soil from which the sample of tested surface soil was taken and thus take the subsoil fertility into account. Potential savings to farmers from this refinement to soil tests could be as great as $3.00 per acre fertilized in some cases.

The map shows a number of interesting relationships of soils to factors influencing their genesis and properties. For example, in southern Wisconsin, the soils in group B have developed under prairie vegetation. This has resulted in the accumulation of much organic phosphorus in the subsoils of these soils. This organic phosphorus mineralizes slowly and is relatively unavailable to plants. In the group A soils, which formed under a cover of trees, most of the subsoil phosphorus is inorganic, and considerably more of it is "available" to plants.

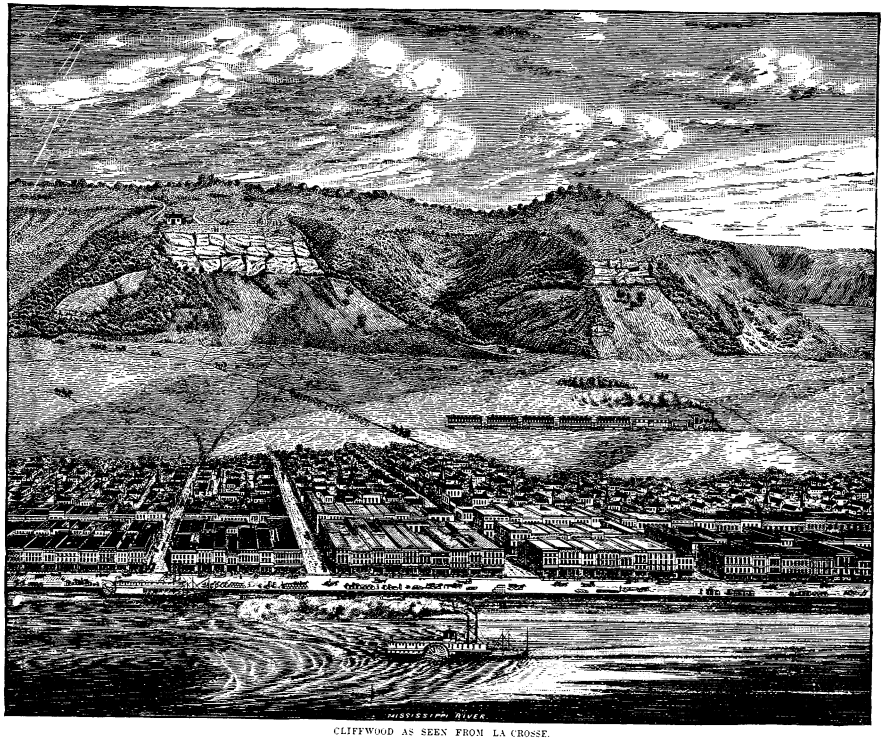
The soils in group C have formed from fine textured materials low in "available" phosphorus, but with a greater ability to supply potassium to plants than any other group of soils in the state. These differences appear to be associated with the source of the soil parent material, and, of course, ultimately with the kinds of minerals which it contained.

Subsoils of most of the soils in northern and central Wisconsin have relatively low abilities to supply potassium to plants. This is associated with sandy texture in the soils of group E, and with noticeable podzolization in the medium textured soils of group D. The sandy soils of group E are the only soils with highly variable subsoil fertility. The "available" phosphorus in these sandy soils varies considerably, apparently depending upon the mineralogy of the sandy parent materials from which the soils formed.

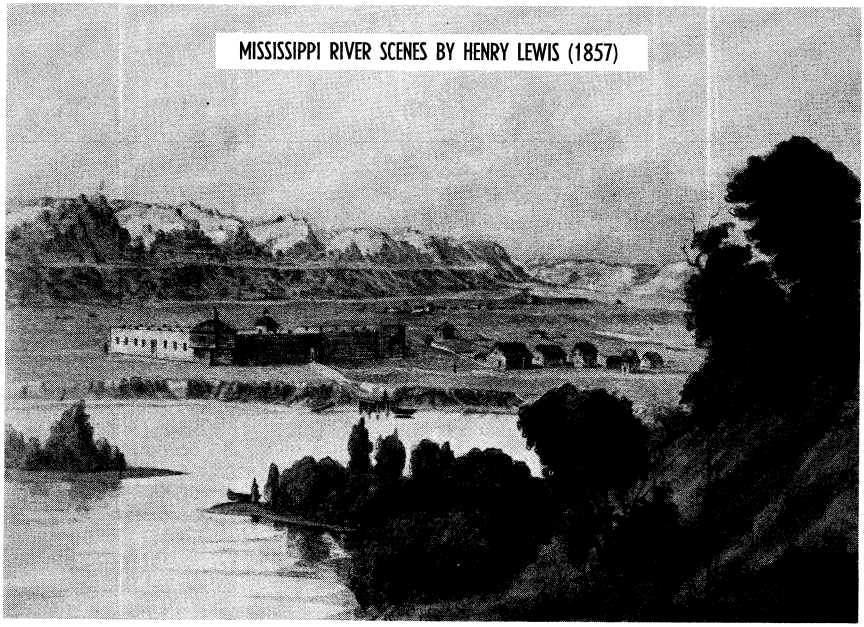
# # # #



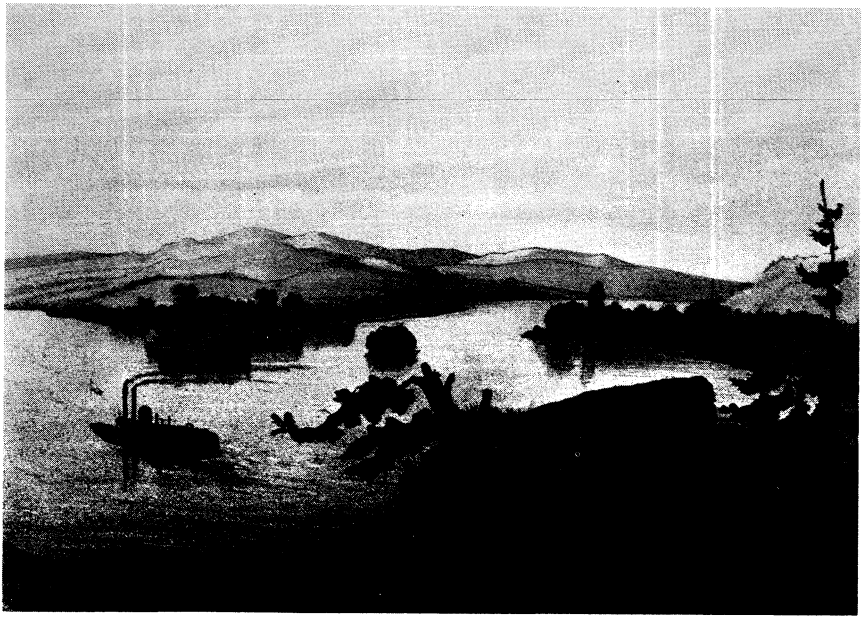
LA CROSSE AS SEEN FROM CLIFFWOOD.



CLIFFWOOD AS SEEN FROM LA CROSSE.



OLD FORT CRAWFORD ABOUT 1830.



MOUTH OF THE WISCONSIN RIVER.

WHAT DOES A PRAIRIE MEAN TO YOU?

By Hugh H. Iltis, Curator
Herbarium, Univ. of Wisconsin

In Norman C. Fassett's files in the Herbarium of the Botany Department at the University of Wisconsin, two documents recently came to light that have much meaning to the naturalists and conservationists in the 1960's, in fact, to all people concerned about the disappearance and destruction of Wisconsin vegetation, who would like to see at least some remnants of virgin land preserved. The poetry and eloquence, the sentiment and philosophy in both of these writings deserve our close attention.

The first is an appeal to save 40 acres of prairie, written by Aldo Leopold, the second a personal appreciation of Leopold, written after Leopold's death in 1948 by his friend and colleague, Norman C. Fassett.

EXIT ORCHIS

By Aldo Leopold

Wisconsin conservation will suffer a defeat when, at the end of this week, 75 cattle will be turned to pasture on the Faville Grove prairie, long known to botanists as one of the largest and best remnants of unplowed, ungrazed prairie sod left in the state. In it grow the white lady-slipper, the white fringed orchis, and some twenty other prairie wildflowers which originally carpeted half of southern Wisconsin, but most of which are now rare due to their inability to withstand cow or plow.

Thirty miles away a C.C.C. camp on the University of Wisconsin Arboretum has been busy for four years artificially replanting a prairie in order that botany classes and the public generally may know what a prairie looked like, and what the word "prairie" signifies in Wisconsin history. This synthetic prairie is costing the taxpayer twenty times as much as what it would have cost to buy the natural remnant at Faville Grove, it will be only a quarter as large, the ultimate survival of its transplanted wildflowers and grasses is uncertain, and it will always be synthetic. Yet no one has heard the appeals of the University Arboretum Committee for funds to buy Faville Grove prairie, together with other remnants of rare native flora, and set them aside as historical and educational reservations. Our educational system is such that white fringed orchis means as little to the modern citizen of Wisconsin as it means to a cow. Indeed it means less, for the cow at least sees something to eat, whereas the citizen sees only three meaningless words.

In preparation for the hoped-for floral reservation at Faville Grove, the Botany Department and the Department of Wildlife Management of the University have, during the last three years, mapped the location of each surviving colony of rare flowers, and each spring have counted the blooms. It was hoped to measure

against these data the response of the flowers to complete future protection. The data will now serve to measure the rate at which destruction by grazing takes place. It is already known that with the possible exception of ladies tresses, all the rarer species succumb to pasturing. That is why they are rare. Few of them succumb to mowing, hence the past use of the Faville Grove prairie as haymeadow has not greatly injured its flora.

In my opinion no individual blame attaches to the owner of the Faville Grove prairie for converting it to pasture. The public taxes him on the land. It is not his obligation to provide the public with free botanical reservations, especially when all public institutions, from the public school to the federal land bank, urge him to squeeze every possible penny out of every possible acre. No public institution ever told him, or any other farmer, that natural resources not convertible into cash have any value to it or to him. The white fringed orchis is as irrelevant to the cultural and economic system into which he was born as the Taj Mahal or the Mona Lisa.

John Muir, who grew up amid the prairie flowers in Columbia County, foresaw their impending disappearance from the Wisconsin landscape. In about 1865 he offered to buy from his brother a small part of the meadow of the family homestead, to be fenced and set aside as a floral sanctuary or reservation. His offer was refused. I imagine that his brother feared not so much the loss of a few square rods of pasture as he feared the ridicule of his neighbors.

By 1965, when the rarer prairie flowers are gone, the cultural descendants of John Muir's brother may look at a picture of the legendary white fringed orchis and wish they could see one.

Aldo Leopold (1887-1948) was the founder of the science of Wildlife Management and one-time professor of this subject at the University of Wisconsin in Madison. He is now well known as the author of the fundamental text in this field, as well as of the lyrical "Sand County Almanac." The above appeal, so simple, yet magnificent in its eloquence and emotional in its urgency, was written to save a 40 acre piece of Wisconsin prairie from "cow or plow." The results of this appeal were good. Faville Prairie eventually was bought and became one of Wisconsin's finest Scientific Areas. Today, administered through the University of Wisconsin Arboretum, it is useful in research, indispensible in teaching, and is unsurpassed for its beauty and biological interest.

This document was written on May 15, 1940. And yet, 22 years later, we still need to read it. Aldo Leopold still speaks to us today about an issue, the preservation of "Living Museums," which is, if anything, more urgent now than it ever was in his day. And what is the gist of Leopold's message? It is simply that both the professional and the amateur has to do his utmost in this fight, for such are the responsibilities, that they lie not only with conservation commissions, but with you and me and every other citizen that loves the land and the organisms that live on it.

Norman C. Fassett (1900-1954), Professor of Botany at the University of Wisconsin, and curator of its herbarium, was with

Leopold one of a handful of foresighted men who took the initial action to establish Scientific Areas in Wisconsin. The first of these, Parfrey's Glen in Sauk County, is dedicated to him. Leopold stimulated Fassett's conservational thinking (which in turn was based on that of M. L. Fernald, Fassett's teacher at Harvard University), and Fassett, also a man of many original ideas, influenced Leopold to no small extent. This touching manuscript, written with many corrections on a faded piece of yellow paper, is a testament of what Leopold meant, not only to his friend Fassett, but to all of us.

AN APPRECIATION OF ALDO LEOPOLD

By Norman C. Fassett

I believe that each of us can, if he will, take something from the great men he has known (and I mean men of great spirit rather than men of wealth or power), and that by knowing such men I can make them a part of myself. And so I know my spirit has been strengthened and I have been made more nearly the man I would like to be, by years of association with Aldo Leopold. In spite of the grief and sense of loss so many of us have, there is that, which cannot be taken from me.

# # # # #

A NOTE ON THE COVER

FRANK LLOYD WRIGHT, during a long and productive lifetime, created for himself a place as one of the great artists in the history of Western architecture. As with political, religious, and social leaders the magnitude of his accomplishment will tend to distort and even to conceal, his real life as a human being. And Wright was as human as he was great in the arts. ROBERT SPENCE's article deals with a minor but interesting aspect of the life of the master. (see page 19).

The cover photograph for this issue, which was loaned by the Milwaukee Journal, shows Wright's mastery of the dramatic qualities which public buildings should possess. From San Francisco to New York City, structures like the Milwaukee Greek Orthodox Temple pictured are daily attracting visitors by the thousands and critical acclaim internationally. Wright's late work based on the sphere and circular motifs has produced several masterpieces which are rivaled in world wide interest only by Corbusier's Chapel at Ronchamp and Saarinen's Idlewild airport building. For this reason the Johnson Building in Racine, the Guggenheim Gallery, the Marin County Center, the Dallas Theater have proven valuable economically as well as culturally to the communities in which they are located.

The Greek Orthodox congregation of Milwaukee has helped to bring into existence one more world masterpiece of art in the State of Wisconsin.

-- Frederick M. Logan

Editor's Note: Frank Lloyd Wright was elected an Honorary member of the Academy a number of years ago.

# # # #

WISCONSIN HIGHER EDUCATION ENROLLMENTS, 1951-1961

By Robert De Zonia
Joint Staff Member
Coord. Com. for Higher Education

A task undertaken annually by the Joint Staff for the Coordinating Committee is the collection and analysis of enrollment statistics from the state's public and private institutions of higher learning.* This report is concerned with some findings relative to a study of enrollment trends during the 1951-61 period.

Since the fall semester of 1951, enrollments in all higher educational institutions have increased by 82.4 per cent--from 40,085 to 73,117--and if students should flock to the campuses next fall as they did last September, it is highly probable that the increase then will approximate 100 per cent. Interestingly, the students who have made up record enrollments in recent years are products of the relatively low birth years of World War II. Institutions of higher learning can expect, with certainty, larger contingents of students in the immediate future when the babies born since 1945 reach college-going age.

This is not to say, however, that anticipated increments in college enrollments will depend solely upon the natural increase in the number of college-age young people, i.e., those in the 18-21 year age range. Last fall, for example, the estimated college-age population in the state increased by only 4.8 per cent, while attendance rose by 10.6 per cent. Clearly, other factors are operating and must be considered.

It is possible that the military emergency last fall had some effect on state-wide enrollments, but the increase in female undergraduates virtually equalled that of male undergraduates, 10.7 to 11.2 per cent. It is more likely that the young people of Wisconsin are more serious about pursuing a college education than ever before. Indeed, as Professor Little concluded from a survey of Wisconsin high school graduates, "high school graduation is fast becoming just a whistle station on the educational journey of the majority of Wisconsin's youth. There is a strong and persistent move toward training and education beyong the high school." (J. Kenneth Little, Explorations into the College Plans and Experiences of High School Graduates, Univ. of Wisconsin, September, 1959, p. 35.)

This upward thrust was dramatized last fall, when the state's colleges experienced their greatest numerical growth since 1955, gaining about 7,000 students over 1960 enrollments. Public institutions gained about 6,000 of these students, up 13.2 per cent; private institutions were up by 4.8 per cent.

Contributing significantly to the general growth was a gain of 2,933 students (18.7 per cent) by the Wisconsin State Colleges, which have recorded substantial gains since 1951, when students numbered 6,484. Last fall the State Colleges enrolled 18,577 students--a rise since 1951 of 186.5 per cent. In terms of percentage increase, the University extension center system has kept pace with a rise of 186.3 per cent. The UW-M is up 115.7 per cent, Madison by 43.5 per cent since 1951.

* - The Joint Staff is indebted to Prof. L. J. Lins of the University of Wisconsin for his annual enrollment reports compiled for the state's college registrars and admissions officers.

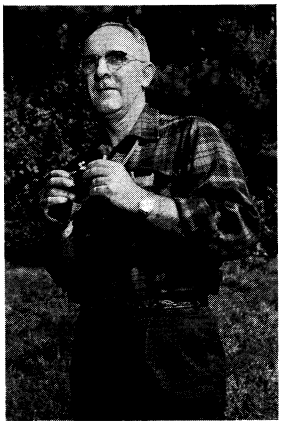
As total enrollments in the state have increased since 1951, so has the share of the total student population provided for by public institutions. In 1951 public colleges accommodated 63.5 per cent of the students; in 1961 that percentage rose to 70.2.

Since 1951 undergraduates in all colleges have increased by 91.1 per cent--from 34,140 to 65,258. Graduate registrations have risen by 60.9 per cent--from 3,501 to 5,632, but enrollments in professional studies are below 1951 levels by 13.5 per cent--2,088 as opposed to 1,807.

The proportion of 18-21 year olds seeking higher education has increased rapidly since 1951, when about one in five (22.7 per cent) of those in the college-age pool attended. Last fall about one in three (36.9 per cent) was in attendance. Between 1951 and 1961 the estimated number of 18-21 year olds increased by 22,141; during the same span of time college enrollments increased by 33,032. In the 1961-71 interval projections indicate that the number in the pool of potential college students may increase by 83,718. Obviously, there is no leveling off in sight for Wisconsin college enrollments.

# # # # #

"OUTDOOR WORLD" NEW TV SERIES



Professor ROBERT S. ELLARSON, well known to Wisconsin boys and girls through his Wisconsin School of the Air radio program "Wonderful World of Nature," now invites Madison area fifth to eighth graders to join him in the "Outdoor World" on Wednesdays at 1:30 p.m. on WHA-TV, Channel 21 in Madison. The new School of the Air Television series will be repeated at 1:45 p.m. on Thursdays.

Professor Ellarson, of the Cooperative Agricultural Extension Service and Dept. of Wildlife Management at the University of Wisconsin, hopes to develop in his tele-viewing students "an awareness and an appreciation of nature. We hope to help them in interpreting natural biological phenomena. ... We would like to acquaint students with some of the ecological principles of natural resource conservation; and finally we would like to give them a few skills and techniques useful in the study and appreciation of nature."

For himself, he states that "in spite of being born and reared in a large city, I have always been attracted to the world of nature." A native of Milwaukee, he received all his formal education--and wildlife education--in this state. His UW degrees are in the fields of agriculture, botany and wildlife management. He is a member of several professional wildlife and ornithological groups and joined the Wisconsin Academy in 1947. His radio program, "Wonderful World of Nature," has been carried by the State Broadcasting Service since 1956. During the 1960-61 School of the Air year, there were 55,200 course enrollments from grades 5 to 9 throughout Wisconsin representing the number of children participating each Monday at 9:30 a.m.

# # # # #

JUNIOR ACADEMY NEWS

JUNIOR ACADEMY REPORT

By Jack Arndt, Chairman
Junior Academy Committee

Dates for the spring meetings of the Junior Academy have been set. Many of you will want to attend these meetings, thereby lending your support and encouragement to these young researchers. On the basis of their research reports, three delegates will be selected from each of the seven districts to represent the district at the State Meeting where they will compete for financial scholarship credit. Check over the calendar showing location and chairmen and plan to attend the district meeting nearest you.

Senior High School District Meetings

March 31, 1962
Northeast District - Lawrence College, Appleton
BJORN CHRISTENSON, De Pere High School

April 7, 1962
West Central District - Sparta High School, Sparta
LLOYD HAVILLE

April 14, 1962
Kenosha-Racine District - St. Joseph High School, Kenosha
SISTER M. FRANCIS XAVIER
North Central District - Wisconsin State College, Stevens Point
ROLAND C. TRYTTEN
Southeast District - John Marshall High School, Milwaukee
CAMILLE OLIVER, Washington H.S., Milwaukee
SISTER M. EVELYN, Messmer H. S., Milwaukee
Southwest District - Wisconsin State College, Platteville
LAVERNE WEIDLER
Northwest District - Chetek High School, Chetek
GEORGE RAMHARTER

May 5, 1962
State Meeting - Wisconsin State College, La Crosse

Junior High School Regional Meetings

May 12, 1962
Green Bay Region - Franklin Junior High School
ANTONY NUSKIEWICZ
Milwaukee Region - John Marshall Junior High School
FRED WOOD, Audubon Jr. H.S., Milwaukee
Wausau Region - Univ. of Wisconsin Extension Center, Wausau
AMOS H. YONKE, Horace Mann Jr. H. S.

21st Annual National Science Talent Search

ANN MARGARET FELKER, Columbus High School, Marshfield, is among the 40 winners of the 21st annual national Science Talent Search. Her research report was entitled "Effects of X-Ray Radiation on Guinea Pig Immunity to Bovine Albumen." SANDRA LEE HAGER, Milwaukee Lutheran High School, and GEORGE ROBERT ROSSMAN, Regis High School, Eau Claire, 1961-62 co-presidents of the Junior Academy, are among the 356 students included in the Honors Group. Their research reports were entitled "Cancer Chemotherapy" and "Reactions of a Metal Detector to Rocks and Minerals," respectively, and appeared in the Summer, 1961 issue of the Review. JAMES WILFRED MEYER, Lowell P. Goodrich High School, Fond du Lac, was also included in the Honors Group for his research report entitled "Effects of Catalysts in the Formation of Phenol-Formaldehyde Resins."

First Statewide Junior Science Symposium Held Nov. 2-4,1961

Many Junior Academy members profited greatly from the first statewide Junior Science Symposium held on the UW campus Nov. 2-4, 1961. The program consisted of presentations of research work in progress at the University of Wisconsin. Several high school students also gave reports of their research.

About 117 11th and 12th grade students from 28 Wisconsin high schools attended the Symposium. Each geographic area of the state was represented. The program was financially supported by the U.S. Army Research Office (Durham, N.C.) and the Mathematics Research Center - U.S. Army (UW, Madison). Program planning and arranging was done by UW staff members headed by Dean of Students LEROY E. LUBERG.

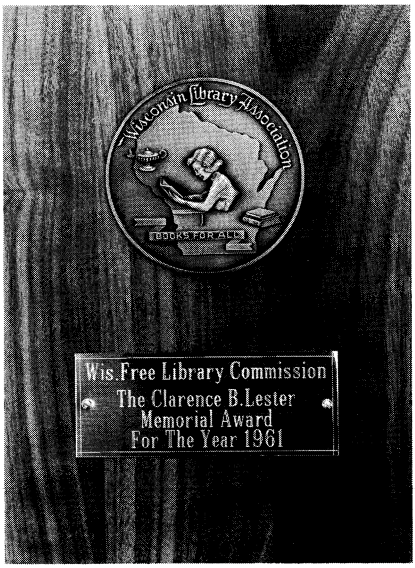
Academy members participating in the program included: UW Pres. C. A. ELVEHJEM, Professors LOUIS KAPLAN, LOWELL E. NOLAND, ROBERT A. RAGOTZKIE, WILLIAM B. SARLES, LINDLEY J. STILES, ROBERT TAYLOR, ROLAND C. TRYTTEN, CARL WELTY, and JOHN E. WILLARD. Other Academy members in attendance were: J.ARNDT, MARY A. DOHERTY, JEROME H. FISCHER, Sr. MARY LAURETTA, CHARLES W. SCRIBNER, and Sr. MARY VALERIAN.

Junior members of the Academy in attendance were: ROBERT BROCK, ROBERT GINSKEY, SANDRA HAGER, THOMAS KLUG, GEORGE ROSSMAN, MICHAEL SWANSON, R. JOHN SWING, Jr., and ALLEN TOBIN.

THE MICHIGAN BOTANIST is a new semi-annual publication which will be published quarterly after the first year if there is sufficient support. It is sponsored by the Michigan Botanical Club and the Editor-in-Chief is EDWARD G. VOSS, c/o Herbarium, University of Michigan, Ann Arbor. Subscriptions ($2.00 per year) should be sent to the Circulation Manager, Laura T. Roberts, 2120 Washtenaw Road, Ann Arbor. The first issue of this 6x9 inch magazine (March 1962) contained 48 pages and eight major articles on both technical and popular subjects with a broad range of interest. Because of the close relationship between Northern Michigan and Wisconsin, this publication also will be a most valuable tool here. -- W.E.S.

STATE AND ACADEMY NEWS

WISCONSIN FREE LIBRARY AWARDED LIBRARY OF THE YEAR AWARD



The Wisconsin Free Library Commission was awarded the highly coveted Clarence B. Lester Memorial Library of the Year Award for 1961. Miss DOROTHEA KRAUSE, Wausau, Chairman of the Awards and Honors Committee of the Wisconsin Library Association, read the citation and presented it and a plaque to the Secretary of the Commission. This was a highlight of the annual banquet meeting of the Association last October in Madison.

The Free Library Commission was cited for its expansion and improvement of state library services, for the stimulation it has given other libraries, for the progress it has made in effecting interlibrary and intergovernmental cooperation, and for its vision and courageous leadership in working toward a goal of quality public library service for all of Wisconsin's citizens.

Miss S. JANICE KEE, Secretary of the Commission, accepted the award, with the following remarks: "I am deeply appreciative of the privilege that is mine in accepting this award. I accept it for you--for all the people of Wisconsin whose state library is thus honored by the Wisconsin Library Association--actually, its initiator.

"The Free Library Commission, in Tennyson's words, is a part of all that it has met in the sixty-six years of its activity--and it reflects an extraordinary combination of characteristics of a lasting institution. It has a glorious history, a heritage, a record of progress and wide acceptance by the populace. It has the experience of adjustment to the changing conditions of life and the changing values and library needs of the people it serves. One of its essential parts is in the strength it gains from the public criticism and questioning of its usefulness that it is obliged to answer.

"This library was created through the efforts of men and women having faith in an ideal, original and great ideas, and the highest of purposes. It was built wisely because its leaders acted on a simple belief in the value of culture and learn-

ing in the life of any and all individuals, regardless of where or how they lived in this state.

"It grew rapidly because its boxes of books met a human need in the remote logging camps, villages and small towns. It continued to grow because, through the years, it has provided not only good books to country and townspeople but also it has given direction and guidance for community improvement, and therefore for human betterment.

"On its governing body and on its staff have been many strong and powerful personalities--men and women with supreme wisdom, foresight and ideals, and with ability and character to put them into practice.

"In accepting this award to the Free Library Commission, I pay special tribute to all of our predecessors who have contributed to the building of this enduring library. Great as the Commission's accomplishments have been in the past, on them we cannot rest. We face the ever-recurring, never-ending challenges of the future. We, who are now responsible for giving direction to this state's library program, value highly, indeed, the recognition and approval of our work as you have expressed it in this citation. We now pledge to you our very best and continuing effort to make of this library, in the words of Archibald Mac Leisch, 'a tower that will not yield.' We urge you to join us, with stout hearts and open minds, in moving ahead into the '60s with its new fields and new opportunities in library development. Thank you very much."

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UNIVERSITY OF WISCONSIN

Jack Burke
(UW News Service)

Professor MARK H. INGRAHAM, dean of the College of Letters and Science for 19 years, "retired" to teaching and research work in mathematics. ... Professor HELEN WHITE, English dept., was elected a Fellow of the International Institute of Arts and Letters. ... Professor JOHN D. FERRY, chairman, Chemistry dept., was elected president of the American Society of Rheology at its 32nd annual meeting, held in Madison. ... Named to two new posts was Professor REID A. BRYSON (Meteorology) as follows: chairman of the National Research Council Committee on Geography, and chairman of the American Meteorological Society Committee on Paleoclimatology. ... The Wisconsin Extension Workers Assn. granted honorary life membership to Professor WALTER H. EBLING of Agricultural Administration and Economics. ... Professor ROBERT A. RAGOTZKIE was named to coordinate a new graduate program in Oceanography. ... A literary pilgrimage to England, repeating a trip taken by his family last summer, is in the works for Professor ROBERT A. POOLEY, English dept. ... Soil Survey's Professor FRANCIS D. HOLE was elected vice chairman of Section V (soil genesis) of Soil Science Society of America.

Professor F. G. CASSIDY (English) was elected president of the Wisconsin state chapter of the American Assn. of University Professors at its organization session in Madison. ... Professor ARLIE C. TODD (Veterinary Science) reported that malaria organisms have been found in several Wisconsin chicken flocks recently. ... Researcher RICHARD COREY reported to the American Society of Agronomy that he and aides have worked out and tested a mathematical formula that "predicts" the lime requirement of soil. ... OSCAR RENNEBOHM, former governor and UW regent, was honored at the Fall Pharmacy Institute banquet.

A 17-member committee, headed by Dean LINDLEY J. STILES (School of Education) last fall recommended to the faculty that the UW step up its leadership role in conservation education. "Just as the need for and the importance of the conservation of human and natural resources touch every aspect of our daily lives, so does the opportunity arise in every discipline to contribute to the education of our students in the field of conservation of human and natural resources." ... Leading dedication ceremonies at the new Extension Center at Kenosha, President CONRAD A. ELVEHJEM said that "democracy cannot be realized unless young people are given fullest opportunity for higher education." The third such structure built in the past two years, it was financed by citizens of Kenosha city and county, equipped by state funds, and is staffed and administered by the Extension Division. Centers at Wausau and Menasha (Fox Valley) already are in use and others are under construction or planned for Green Bay, Racine, Manitowoc and Sheboygan. # # # #

MARQUETTE UNIVERSITY - Miss Ann Grattan, Reporter
(Marquette News Bureau)

Biology classes opened in the new five-story $1,583,000 Life Sciences building on February 5 as the second semester of the 1961-62 school term got under way. Designed along modern functional lines and constructed of reinforced concrete with brick and granite facing, the building offers ideal conditions for teaching at the undergraduate levels and both teaching and research opportunities for graduate students and faculty. Two powerful electron microscopes costing about $35,000 each and acquired through grants, will be added. An unusual feature is that there is an inch of styrofoam and three-quarters of an inch of plaster on the walls, plus acoustical ceiling, which provides a soundproofing effect. Professor JOHN W. SAUNDERS, Jr., departmental chairman, remarked, "Our new building means much to us because of the stress we can place on individual work among the undergraduates, despite their great numbers; because of the expanded possibilities for research among graduate students, and because of the improved teaching and research facilities provided for the faculty." ... A three-week institute for faculty advisers of high school publications will be sponsored at the College of Journalism by the Newspaper Fund, Inc., during the 1962 summer term. It will be in addition to fellowships granted to faculty advisers wishing to attend journalism courses in the regular summer session. ... CLARENCE R. WILKINSON, assistant chairman of the department of Modern Languages, is the new vice-president of the state chapter of the American Assn. of Teachers of French. ... The College of Journalism is sponsoring a series of five Lucius W. Nieman Chair lectures honoring the late founder of The Milwaukee Journal.... With the support of grants from the National Science Foundation, an 8-week summer institute for secondary school teachers of chemistry and physics and a 6-week summer institute for teachers of senior high school mathematics will be offered.

NEW PRESIDENT for MARQUETTE UNIVERSITY --
Father WILLIAM F. KELLEY, S.J., formerly academic vice-president of Creighton University in Omaha, was named President of Marquette on February 18. He succeeds Father EDWARD J. O'DONNEL, S.J., who will remain as chancellor. An "Introduction" will be presented in a forthcoming issue.

A three-week institute and work-shop in school plant planning for administrators who face school building problems will be offered June 25 to July 13. They are invited to bring specific problems for consultation at this 1962 summer session institute. # # #

WISCONSIN STATE COLLEGES

There are several changes in the summer conservation workshops offered at Trees for Tomorrow Camp near Eagle River, according to EUGENE R. McPHEE, director of state colleges. This year two three-week programs will be sponsored, running from June 17-July 7 and July 8-July 28. "We hope the schedule change will enable more teachers to upgrade themselves in conservation education," said Mr. McPhee. Three residence credits may be earned at each session, for a total of six at both sessions. Graduate credit will be granted only for six weeks study. Professor BERNARD WIEVEL, head of the conservation department at the state college at Stevens Point, will direct the program, assisted by Professors HENRY KOLKA (Eau Claire), GERALD REED (Oshkosh) and LEE ANDREAS (Stevens Point). Two new courses, one in nature study and the other in geography, will be available. Further information may be secured from Professor Wievel. ... President WILLIAM C. HANSEN, Stevens Point, will retire in June after heading the college for 21 years.

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MILWAUKEE PUBLIC MUSEUM (Wallace N. MacBriar, Jr., Publicity Chairman)

The Museum has just published an outstanding series of 36 Sioux Indian Drawings from the Capt. R. Miller collection in portfolio form. The color drawings are suitable for framing and come in a beautiful storing enclosure accompanied by an 8-page explanatory booklet. (Price per folio $6.50 from Sales Manager, Room 417, Milwaukee Public Museum, Milwaukee 3, Wis.). The Museum acquired this collection of Sioux Indian drawings in November of 1900, and it was entered in the catalogue as: "Book from Wounded Knee battlefield painted and written by Red Hawk, purchased for $20." It is a leather-trimmed ledger book, and on its blue-and-red, ledger-lined pages are found 116 drawings, in pen and ink and crayon, by Sioux Indians, many by one named Red Hawk. At the back of the book is one list of 15 and another of 12 Sioux names written in English script by one person, apparently an Indian. The ledger was sold to the Museum by a Capt. R. Miller. He had captured this unique document in the battle in South Dakota on January 8, 1891.

In 1939 the drawings were individually mounted on cardboard for purposes of better preservation, and a representative series put on exhibit. It is felt that this folio holds appeal and interest for a varied audience--to the student of art, particularly those interested in the art forms of primitive peoples; to the anthropologist and historian who will recognize its historical and ethnological value; and finally, to the layman who enjoys distinctive and decorative illustrations for his library or as wall hangings. The 36 drawings are grouped by subject matter under War Episodes, Horse Capture, Ghost Dance Shirts, and Miscellaneous.

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STATE HISTORICAL SOCIETY

Director LESLIE H. FISHEL, Jr. reports that a special research grant of $5,100 has been awarded the Society by the National Research Foundation. A project will be conducted by the curator of anthropology, JOAN FREEMAN, and will be carried out by WILLIAM H. WILSON, graduate research assistant in physical anthropology at the UW. A theory of "cultural transition through migration" will be tested.

Skeletal remains of 88 individuals were found last summer on the north bank of the Wisconsin river in a burial ground believed to be nearly 2,000 years old. They indicated that two types of people lived in a nearby village site at the same time, one group much larger and taller than the other. Objects excavated at the village site belonged to both the Late Archaic-Early Woodland and the Early Hopewellian cultures. The latter group is believed to have migrated to Wisconsin at about the time of the birth of Christ.

# # # # #

WISCONSIN ACADEMY COUNCIL MEETING

By Ted J. McLaughlin
Secretary

PRESENT: From Madison - Jack R. Arndt, Merritt Y. Hughes, Cyril Kabat, Walter E. Scott, Roy D. Shenefelt; from Milwaukee - Joseph G. Baier, David J. Behling, J. Martin Klotsche, Ted J. McLaughlin, Katherine G. Nelson; from Beloit - Carl Welty (President, presiding); from La Crosse - Howard Young; and from Galena, Ill. - Kenneth R. Mahony.

Following are the summary highlights of the council meeting held February 3, 1962 at Milwaukee:

After approval of the minutes of the previous meeting, Treasurer Behling distributed copies of a financial report as of February 1, 1962. It was agreed that he and Secretary McLaughlin should study the effect of a suggestion that Life membership be granted after 10 years of $10 sustaining membership. The next budget to be proposed in May will maintain the present levels of operating expenses, except for a recommended increase for the Junior Academy of Science from $600.00 to $1,000.00.

Other actions taken included the following:

1) Provost Klotsche reported for the Long-Range Financial Planning Committee that the Mayer Foundation has rejected a request for support but that the Johnson Foundation has not yet given a firm response. The need for a new approach for foundation support based on program development and the functions of the Academy was noted.

2) Secretary McLaughlin reported on membership matters (see list of new members inside back cover) and it was voted to confer Life membership on Dr. C. N. FREY and RALPH W. BUCKSTAFF as 40 year members. It was further agreed that President Welty will invite Dr. Frey, Mr. Buckstaff, Prof. H. A. SCHUETTE and other Life members who have not been previously so honored to be present at the 1962 annual banquet to receive Life membership certificates. His report showed that the total Academy membership as of this date is 1,197 in the following categories - Life: 44, Sustaining: 39, Active: 1,016, Library: 91, Student: 5, Honorary: 2, and Family: 106.

3) Editor Scott discussed plans for the Winter, 1962 issue of the Review and reported approximately 200 membership questionnaires had been returned from the recent survey.

4) Editor Beck reported by letter that the latest volume of the TRANSACTIONS is expected to be off the press in a few days. It was voted that he be requested to obtain estimates of cost of an additional printing by various methods for wider distribution of the index it contains covering the 1945-60 period.

5) As Chairman of the Junior Academy of Science, Mr. Arndt reported on current and planned activities. Approval of the application for a National Science Foundation grant is expected soon. Because of his junior standing, Robert Ginskey was ineligible for the Marquette University scholarship. It was voted therefore that a regular Academy student scholarship $100 credit award be granted to Robert Ginskey for any college of his choice if qualified. (See Mr. Arndt's more detailed report in Junior Academy section on page 31.)

6) Librarian Shenefelt led a discussion of the problem of over 18,000 excess copies of TRANSACTIONS stored in the University of Wisconsin library. It was voted to establish a policy that after 10 years, 100 copies be retained; and after 20 years, 50 copies be retained. It was voted further that Librarian Shenefelt and Editor Scott should prepare specific suggestions at a future Council meeting for disposal of surplus copies of TRANSACTIONS. It was voted that Miss LAUREL NELSON, as University of Wisconsin Exchange Librarian, be named Associate Librarian of the Academy with membership at no charge.

7) Prof. Dicke reported by letter that he had been unable to attend the recent AAAS and Academy Conference meetings. It was voted that the Secretary should attempt to secure a representative member to attend future meetings when the Academy delegate is unable to attend.

8) As respective Chairmen of the Program Committee and Local Arrangements Committee for the 1962 Annual Meeting at La Crosse, Provost Klotsche and Prof. Young discussed planned activities and publicity. (See detailed report on 92nd Annual Meeting on page 39.)

9) Upon motion of Treasurer Behling, it was voted to recommend to the annual business meeting of members on May 5, 1962 that Bylaw I, Section 7 be amended to provide for annual dues of five dollars.
NOTE: THIS IS OFFICIAL NOTICE OF PROPOSED CHANGE.

10) Progress reports were received from Prof. Nelson, chairman of the Long Range Program Planning Committee and Mr. Mahony, Chairman of the Membership Committee.

11) Provost Klotsche reported that Prof. ADOLPH A. SUPPAN has accepted appointment as Chairman of the Local Arrangements Committee for the 1963 annual meeting at the University of Wisconsin-Milwaukee.

12) With the advice and consent of the Council, President Welty appointed the following committees to report at the 1962 annual business meeting: Nominations: MERRITT Y. HUGHES (Chm.), JOSEPH G. BAIER, KATHERINE G. NELSON; Resolutions: CYRIL KABAT (Chm.), ROE-MERRILL S. HEFFNER, G. W. LONGENECKER.

13) It was voted that the Long Range Program Planning Committee recommend to the Council at its next meeting the composition and specific functions of a special Centennial Planning Committee for the 1970 meeting at the University of Wisconsin in Madison.

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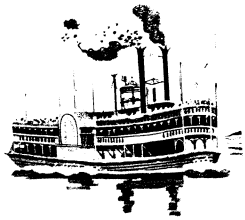
LAKELAND COLLEGE (Plymouth) will be celebrating its Centennial this year and has planned an extensive building program costing approximately a million dollars, including the first unit of a college union and chapel complex and a 102-unit men's dormitory.



ATTEND THE 92nd ANNUAL MEETING, MAY 4-6, 1962
WISCONSIN STATE COLLEGE — LA CROSSE
General Theme — "Upper Mississippi Valley"

Friday, May 4: Council Dinner and meeting, 6 p.m.

Saturday, May 5: Registration, 8:30 a.m.

9:30-11:30 a.m. Morning Symposium

Upper Mississippi Valley Region

History — Miss ALICE SMITH, Research Director, State Historical Society

Economic Aspects — Prof. RAYMOND PENN, Dept. of Agric. Economics, Univ. of Wis.

Natural History — GEORGE HANSON, State Geologist and Director of Soil Survey

Arts & Letters — Prof. DONALD EMERSON, English Department, UW-Milwaukee

* * * *

Junior Academy Sessions will run from 9:30 to 11:30 a.m. and 1:30 to 4:00 p.m.

* * * *

1:30-4:00 p.m. Senior Academy General Sectional Meeting
Reports and Papers

4:30 p.m. Annual Business Meeting

7:00 p.m. Annual Banquet, Award of Honors and Presidential Address by President CARL WELTY, Beloit

Sunday, May 6: Field Trip or Boat Trip will begin at

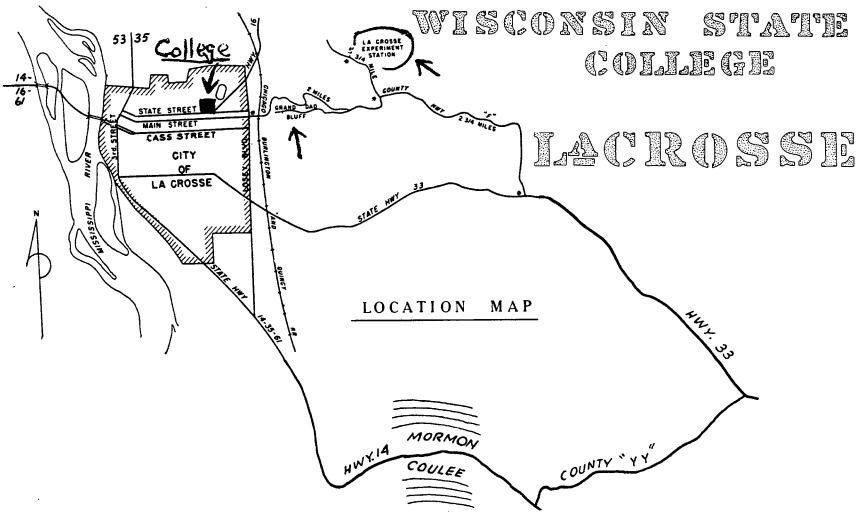
9:00 a.m. with both groups joining to have a

12:30 p.m. Picnic Luncheon at Myrick Park

Field trip will go to Granddad Bluff (see center spread); from there to La Crosse Soil Conservation Experiment Station; then to the Fisheries Research Station on the Mississippi river; then to the historic home of Academy member Miss KATHARINE MARTINDALE, furnished with antiques; then to the park for lunch.

Boat trip on houseboats will last 2½ hours and go through Dresbach dam, on the way up and down the Mississippi river; return to the park for lunch.

Make your plans now!
COME TO LA CROSSE ---
Send your reservations to Prof. HOWARD YOUNG now.



News

On February 17, 1962 Lapham Hall, a new $2½ million science building at UW-M, was dedicated with impressive ceremonies. Not the least of these was the presence of Increase Lapham's granddaughter, MRS. RICHARD FRISBY of Milwaukee. With her brother, she presented a bust of Lapham for exhibition in the building's entrance hall. As he was one of the Wisconsin Academy's founders, this occasion was of special interest. The Governor sent a message and the major addresses were delivered by GEORGE GAYLORD SIMPSON, Alexander Agassiz Professor at Harvard University, and WALLACE R. BRODE, President of the Society of Sigma Xi. Academy members participating in the program included Past President JOSEPH G. BAIER, Chairman of the Dedication Program; President-elect J. MARTIN KLOTSCHE (UW-M Provost); UW President CONRAD A. ELVEHJEM and UW Board of Regents President CARL E. STEIGER.

Six members of the Wisconsin Academy were appointed by U.W. President CONRAD ELVEHJEM to an eleven-member Conservation Advisory Committee to guide efforts to prepare teachers and inform students about resource use problems. They are LINDLEY J. STILES (Chairman), IRA L. BALDWIN, RICHARD B. COREY, JOHN T. EMLEN, ALVIN L. THRONE and HARVEY A. UBER. The latter two are on the staff at UW-Milwaukee. ... LOUIS KAPLAN is Secretary-Treasurer of "Friends of the Library-the University of Wisconsin" and FREDERIC G. CASSIDY is a member of the Executive Committee. A similar group was formed a year ago at the UW-M campus where Academy member FRANK P. ZEIDLER is one of the project's sponsors. ... GRANT COTTAM is Chairman of the UW Arboretum Committee and G. W. LONGENECKER, Academy Vice-President (Arts), is Executive Director. J. R. JACOBSON is Superintendent and the new Secretary is MRS. JOHN T. CURTIS (329 Birge Hall). They publish the interesting "Arboretum News" leaflet. ... PHIL SMITH (Madison) of the State Dept. of Agriculture, is new President of the Wisconsin Phenological Society. ... Carthage College expects to enroll its largest freshman class in 1962 with about 350 students scheduled to attend classes at the new Kenosha Campus. ... J. M. CONRADER (Oconomowoc) was elected to the Council of the Citizens Natural Resources Association of Wisconsin. # # # #

THE BOOKSHELF

POEMS OUT OF WISCONSIN
Edited by Maude Totten

Castle-Pierce Printing Co.
Oshkosh, Wisconsin
1961 $4.00

Recently issued by The Wisconsin Fellowship of Poets and bearing rather shrewdly the exploitable title Poems Out of Wisconsin is a volume "written by our contemporary poets, those who were born here, or who call this state home." It should command the quick interest of loyal collectors. Famous names appear. The recurring names of contributors to Northern Spring, earlier volume under the same auspices, will gratify their admirers. And a list "In Memoriam" is nostalgic testimony to the mutual devotion in the Fellowship.

Any specific mention in selecting from the roster of contributors would be to discriminate ill-advisedly. The poetry itself, however, can well be quoted winningly--though again to single out lines can only be to suggest, not invidiously discriminate. The first test of a volume like this is its representative character; the second its intrinsic worth. In both these aspects Poems Out of Wisconsin demonstrates the critical discernment of its Editor, Maude Totten, and her staff of aides. Notable are phrasings such as this from August Derleth:

"Here hangs, at thickening twilight, sharpened air."

--And this from Horace Gregory:

"Bronze-green Dante with its laureled head...the more than human pity and grace..."

(Dante is scarcely indigenous; but no matter! Wisconsin perceptions are oftentimes universal ones!)

Derleth and Gregory are but two Wisconsonians from among many whose names here are for any reviewer to conjure with.

The format of this fine volume is beautifully rendered. That the jacket and frontispiece are harmonious reproductions of drawings--themselves esthetic idyls of Wisconsin--by Frank S. Moulton needs in utter fitness to be acclaimed.

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AGRICULTURAL METEOROLOGY
By Jen-Yu Wang

Pacemaker Press
1919 Jefferson street
Madison 5, Wisconsin
1961 $7.00

Agricultural meteorology is an emerging science related to and linking meteorology and the several physical, biological, and agricultural disciplines. It is a basic science to which workers in all the related fields of agriculture must turn for vital information. Recent important topics fully treated in the book are photoperiodism, foliar leaching and uptaking of nutrients from natural rainfall, and the development of the phytotron and the biotron--almost completely controlled chambers for plants and for plants and animals. The book points the way for transfer of laboratory and greenhouse techniques and findings to the open field, and delineates the present state of knowledge on protection of crops and livestock from weather hazards, and on environmental controls. With its concluding section - A Guide to Research in Agricultural Meteorology - it becomes a guide for agricultural science in general.

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BIBLIOGRAPHY OF AGRICULTURAL METEOROLOGY
By Jen-Yu Wang and Gerald L. Barger

University of Wisconsin Press
430 Sterling Court
Madison 6, Wisconsin
Spring 1962 688 pp. $6.75

This usable book is a comprehensive listing of more than 11,000 references, mostly to current literature but including classic works. Coverage is world wide and the authors have provided a user's guide, list of abbreviations, as well as commentary throughout. The principal list is complemented with author and subject indexes.

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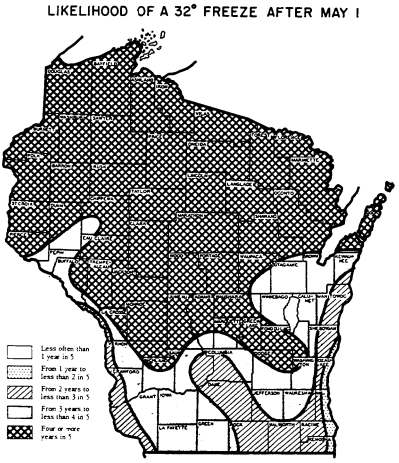
WISCONSIN CLIMATOLOGICAL DATA

Wisconsin Crop Reporting Service
Box 351, Madison 1, Wis. $1.00
Processed in ring binder
(Nov. 1961)



This map is one of 27 in this half-inch thick compendium of facts on Wisconsin weather conditions. Besides a report on vital freezing dates in Spring and fall, there are maps showing the chance of a dry week and an inch or more of rain during the growing season. All basic data was supplied by State Climatologist Marvin Burley based on both regular and cooperative weather stations whose records are usually summarized back to 1930. Agricultural Statistician C. D. Caparoon, who is in charge of the Crop Reporting Service, states that the purpose of this publication is to bring source material together in a single convenient source book. "Many of the time series have not been available before."-WES

RECENT BOOKS BY MEMBERS

From Questionnaire Reports

A questionnaire sent to all members of the Academy in January 1962 requested information as to books they had authored or assisted in editing during the past year. All material reported in this category appears in the following list and in some cases may have extended slightly before or after the period indicated. Some of these items may have been reviewed previously or will be in the future. However, we include them for informational purposes. No effort has been made to supplement data reported and it appears as given by individual members.

The Rev. R. BANKS BLOCHER - Blazing Study Trails (A Manual of Study Techniques), Cramwell Pub. Co., Adams, Mass.
FREDERIC G. CASSIDY - Jamaica Talk, London (Macmillan)
FARRINGTON DANIELS - Physical Chemistry (with R. A. Alberty) Selected Topics in Chemical Kinetics
LOYAL DURAND, Jr. - Economic Geography, Thomas Y. Crowell Co., New York
WALTER H. EBLING - Origins of Agricultural Data Systems, U. S. Dept. of Agriculture, Washington
PAUL L. ERRINGTON - Muskrats and Marsh Management, The Stackpole Co., Harrisburg, Pa. (183 pp.)
EMMA L. FISK - Atlas of Plant Morphology, Vol. II, (with W. F. Millington), Burgess Pub. Co.
Mrs. LOUISE W. HANLEY - Study Guide, Instructor's Guide, and Manual of Solutions for English Composition I, Freshman English (3 components for US Armed Forces Institute)
TAKERU HIGUCHI - Pharmaceutical Analysis (Author and Editor)
RUTH L. HINE - Wildlife, People and the Land (Editor); The State Park Visitor; Basal Area and Point Sampling, all published by Wis. Conservation Dept.
FRANCIS D. HOLE - Soil Survey of Bayfield County, Wisconsin (with J. K. Ableiter), Soil Survey Series, No. 30, USDA
CHARLES MORSE HUFFER - Modern Space Science (with Trinklein), Holt, Rinehart and Winston, publ.

ALBERT G. KAIS - The Effect of Environment on the Development of Dutch Elm Disease in the American Elm, Master of Science degree thesis, Univ. of Wis.
FRANK L. KLEMENT - The Copperheads in the Middle West, Univ. of Chicago Press
KARL KROEBER - Romantic Narrative Art, Univ. of Wis. Press
GERHARD B. LEE - Soil Survey of Marquette County, Wisconsin (with T. R. Peck)
EDWARD G. LOCKE - Wood--A Source of Raw Material for Chemical Utilization; Contributions of Wood Chemistry to Wood Utilization (with J. F. Saeman); Trends in Forest Service Research in Forest Products Utilization; New Wood Manufacturing Processes and Products
D. G. MARSHALL - Population Change and Migration: 1950-1960, No. 1, Population Series--Wis. Pop. (with others)
WILLIAM SHAINLINE MIDDLETON - Chapter IV, European Theater of Operations, Medical Consultants, Medical History of World War II, Office of Surgeon General, Dept. of the Army
KENNETH E. MILLER - Supplementary Manual for Organic Chemistry

ROY E. NICHOLS - Cattle Diseases (co-author with many others) Amer. Veterinary Public. Inc., Evanston
MARIAN PAUST - Several poems in Poems Out of Wisconsin, edited by Maude Totten

RICHARD S. SARTZ - Field Calibration of a neutron-scattering soil moisture meter (with Willie R. Curtis), Lake States Forest Expt. Station Paper No. 91

JOHN M. SCOTT, S.J., - Your Romance Through Space, Franciscan Press, Pulaski, Wis.

MERTON M. SEALTS, Jr. - Billy Budd, Sailor, by Herman Melville, edited with Harrison Hayford, Univ. of Chicago Press

STEPHEN L. STOVER - Physical Geography, a Study Guide for Correspondence Course 1-HSA, Ext. Div., Univ. of Wisconsin

JEN-YU WANG - Phyto-Climate of Wisconsin: Moisture--Normals and Hazards, Part A. Rainfall, Agri. Expt. Sta., Univ. of Wis. 68 pp.

Bibliography of Agric. Meteorology, Univ. of Wis. Press, (edited with G. L. Barger), 688 pp.

S. A. WILDE - Fostliche Bodenkunde, Verlag Paul Parey, Hamburg und Berlin, 233 pp., 84 ill.

BETTY C. WISLINSKY - Amer. Inst. of Biological Sciences Biological Sciences Curriculum Study; Student's Study Guide and Teacher's Manual, Amer. Inst. of Biol. Sci. Film Series

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WILDLIFE, PEOPLE AND THE LAND
Edited by Ruth L. Hine

Wisconsin Conservation Dept.
P. O. Box 450, Madison 1, Wis.
83 p. (Free in Single Copies)

In this new publication (Pub. No. 621) all previous popular general wildlife bulletins have been incorporated. Some portions such as the "Wildlife Portraits" with sketches by Charles W. Schwartz have been available before essentially in this form while much of the remainder of the book is new. Illustrations of fish and other lower animals by Jens von Sivers and Mrs. Jessie Hewitt respectively add much to the booklet. Besides the editor, other Wisconsin Academy members who contributed to this publication were Cyril Kabat, Charles W. Lemke, Walter E. Scott and C. W. Threinen.

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MISCELLANEOUS BOOKS AND BOOKLETS

The Joint Staff of the Coordinating Committee for Higher Education (Wisconsin Center Bldg., Madison) has issued the following recently: "A report on college-going in Wisconsin's 71 Counties and a study of the areas in the state which provide high or low percentages of new freshmen" (Study 41), "Enrollment Projections" (Paper 6), "Wisconsin College Enrollments" (Paper 7) and "Who Goes to College--Rank in Class" (Paper 8). ... New publications available free from the Wisconsin Conservation Dept. (P.O.Box 450 Madison 1): "Surface Water Resources of Green County" (also Kenosha, St. Croix and Walworth available); "Licensed Shooting Preserves in Wisconsin" - Tech.Bull.No.24; leaflet on "Waterfowl, People and Places;" Forest Pest Leaflets No. 1 and 2 respectively on "Oak Wilt Spread and Control" and "Root Rots of Conifers;" and "Inventory of Forest Resources of Rusk County Forest" (Florence and Forest also recently available.) ... The Dept. of Resource Development (State Capitol) has issued "Economic Profile" leaflets on Door, Green, Grant, Juneau and Milwaukee Counties. ... "Dutch Elm Disease Report - 1961" has been issued by the Plant Industry Division of the Wis.Dept. of Agriculture (State Capitol) ... A "Handbook of Suggestions for School Library Activities" (Curric.Bull.26) is available from Wis. Cooperative Educational Planning Program, Room 147N, State Capitol, Madison 2. ... Lake States Forest Expt. Station (U.S.F.S., St. Paul, 1, Minn.) has issued "Growing White Pine in the Lake States to Avoid Blister Rust" and "Pulpwood Production in the Lake States Counties-1960."

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NATURAE SPECIES RATIOQUE

EDITORIAL POLICIES FOR THE ACADEMY'S TRANSACTIONS

By Publications Committee

The TRANSACTIONS of the Wisconsin Academy of Sciences, Arts and Letters is the medium through which Academy members may publish original contributions to their areas of academic interest. The 1870 Wisconsin State Legislature incorporated the Academy (Public Law 376) and charged it with responsibility for "the diffusion of knowledge by the publication of original contributions to science, literature and the arts." The TRANSACTIONS has been the principal means by which this important function has been effected.

Traditionally, the TRANSACTIONS has enjoyed a fine reputation for maintaining a high quality of scholarship. In the present day, well qualified workers in the sciences, arts, and letters have many other scientific journals and scholarly publications available to them as outlets for their contributions. This situation does not diminish the functions of the TRANSACTIONS or the Academy, but it increases the importance of maintaining a careful vigil to insure that the articles appearing in the TRANSACTIONS continue to be of the highest quality.

Publication in the TRANSACTIONS is open to all members of the Academy, and it is hoped that an increasing proportion of the membership will take advantage of the opportunity to utilize this medium of publication. Papers submitted for publication must be authored or co-authored by Academy members, and they must represent original research. Reprints of previously published work, summaries, and compilations are not acceptable. Reviews of existing knowledge are acceptable, providing that they are analytical in nature, rather than merely compendious. A journalistic style of presentation should be avoided, as it generally lacks the precision and clarity required. Popularized write-ups are more properly submitted for publication in the Wisconsin Academy Review.

Papers bearing on Wisconsin problems and interests in natural science, history, sociology, technology, arts, and literature are particularly suitable for the TRANSACTIONS. In the five most recent volumes of the TRANSACTIONS (vols. 43 to 47), half of the total number of papers and 70% of the scientific papers have dealt with Wisconsin subjects.

Papers submitted for publication will be reviewed by the editor and one or more authorities competent in the subject areas concerned. The papers may then be accepted, returned for revision, or rejected. In the case of controversy, the final decision as to whether a paper is to be accepted or rejected rests with the Publications Committee. In case that there are more papers submitted than can be published in a given volume of the TRANSACTIONS, priority is given to those papers which have been presented at an annual Academy meeting. However, presentation at the Academy meetings does not necessarily make a paper worthy of publication in the TRANSACTIONS.

Manuscripts intended for publication should be typed in double spacing throughout. Footnotes, references, quotations, and all parts of the text should be double spaced. Footnotes

should be numbered consecutively from the beginning of the paper and placed at the end of the manuscript. Graphs and line drawings must be clear, uncluttered, and ready for reproduction. Either the originals or glossy prints should be submitted with the manuscript. In laying out graphs and charts, the 4½ x 7 inch page size of the TRANSACTIONS should be kept in mind. Photographic illustrations must be sharp, clear, and show good contrast. A mediocre photograph makes a very poor printed illustration.

Manuscripts should be mailed flat and addressed to: Stanley D. Beck, 105 King Hall, University of Wisconsin, Madison 6. Those received prior to July 31 will be considered for publication in the current volume.

It is hoped that this short statement of editorial policy will help to clarify questions that members of the Academy may have concerning the TRANSACTIONS. It is also hoped that it will serve as a reminder to those who have been intending to submit a paper. As the Academy continues to increase in numbers of active members, the TRANSACTIONS should also grow in size and influence.

-- The PUBLICATIONS COMMITTEE: Stanley D. Beck, Carl Welty
Ted J. McLaughlin

# # # #

A Retirement Profile

EDGAR C. KNOWLTON
English Professor

EDGAR C. KNOWLTON, professor of English and comparative literature at Wisconsin State College-La Crosse, retired with emeritus status in June 1961. He had been on the college staff for 26 years. His degrees were all obtained at Harvard University, the B.A. in 1912, M.A. in 1913, and the Ph.D. in 1918. He also studied in Germany and Greece and is an honorary Phi Beta Kappa. Before coming to La Crosse, he taught at Lafayette College, Easton, Pa., the University of Illinois, Ohio Wesleyan University and in summers at the Universities of Texas, Washington, and Wisconsin and Stanford University. He was in the AEF overseas in World War I.

Professor Knowlton is author of "Outline of World Literature" and co-author of texts for freshman English. His articles and reviews cover the fields of drama, concepts of nature, genius, pastoral, and allegory. More recently he has written about Flemish tapestries of the sixteenth century. He is a member of the Modern Language Association and other societies and has been affiliated with the Wisconsin Academy since 1959. He hopes to continue travel, research, and philosophizing.

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WANTED: Copies of Vol. I, No. 1 (Winter, 1954) Wisconsin Academy Review are needed to fill library sets. Editor will pay $1.00 per copy - can you spare yours?

In Memoriam

Benjamin D. Leith
1875-1962

BENJAMIN DONALD LEITH was born on September 2, 1875, at Kirkwood in Fond du Lac county, Wisconsin. He attended rural schools and graduated from Oshkosh Normal School in 1902. Afterwards he taught in schools at Phillips and Appleton and was principal of Eleva graded school for three years. In 1907 he entered the University Short Course in Agriculture but changed to the Long Course in the second semester. He developed his techniques in plant breeding in the summers and in 1910 was given charge of crop variety testing and experimental work in grains for the Agronomy Department. He was awarded the B.S. degree in 1911. Later, he studied for short periods at Minnesota and Cornell.

He taught plant breeding courses to undergraduates and graduates and managed the experimental farms for many years. He developed and distributed a number of varieties of small grains. His popular, high-yielding Wisconsin 38 barley was grown widely by farmers in this region for many years. He bred States Pride oats and took part in developing Vicland oats. Wisconsin 38 barley was recognized as an outstanding contribution by its choice for the Crops Hall of Fame Exhibit at Chicago in 1932.

Professor Leith held membership in Sigma Xi, the American Society of Agronomy, and in 1945 became a Life member of the Wisconsin Academy. He died on February 3, 1962 in Madison.

# # # # #

Mrs. L. M. Van Horn 1913-1961

MRS. L. M. VAN HORN, wife of the dean of Milton College, died on October 2, 1961, at Madison, Wisconsin. Born in Lost Creek, Virginia, in 1913, she attended high school there and was a graduate of the normal course at Salem College. She received her B.A. degree at Milton College. Mrs. Van Horn taught elementary school in West Virginia and was a substitute teacher in the Milton vicinity for several years. She was a past president of the Milton Village Improvement Corporation and had joined the Wisconsin Academy with her husband in 1958.

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Leland W. Gillespie

1903-1959

LELAND W. GILLESPIE, a native of Green Bay, died in Washington, D. C. on June 27, 1959 at the age of 56. After graduation from Green Bay schools, he attended Lawrence College and the University of Wisconsin. Entering the investment business in 1922, he formed the firm of Gillespie & Wouters with Russell F. Wouters seven years later. He was also a vice-president of The Milwaukee Company, with which the partnership merged in 1954. He was a director of several local corporations and personally handled long-term financing for several Fox River Valley corporations. In World War II he served as an Air Force officer with the War Department General Staff Intelligence Division.

Mr. Gillespie was donor of the home and site of the reputed Lost Dauphin, Eleazer Williams, for a state park, as well as "The Scullery" at Fort Howard Hospital museum. He was a director of the Peninsula Players at Fish Creek, a member of the Brown County Historical Society, several clubs including the Adventurers Club of New York, a 32nd Degree Mason, and had affiliated with the Wisconsin Academy in 1957.

# # # # #

Parker Davies Trask 1899-1961

PARKER DAVIES TRASK was born in Springfield, Mass. in May, 1899 and died November 17, 1961 at Berkeley, California. After receiving his B.A. at the University of Texas, he took advanced work on the Berkeley campus, receiving an M.A. in 1920 and the Ph.D. in geology in 1923. He taught at Yale University and the University of Wisconsin before returning to Berkeley in 1952. He became professor of geological engineering there in 1956. He had also been a research associate for the American Institute of Petroleum and a geologist for the U. S. Geological Survey. Believing that geological factors are important in the construction of dams, buildings, tunnels, etc., Prof. Trask became a pioneer in the field of geological engineering. Because of his unique qualifications, he frequently was called upon to study and to consult on major projects. He was consultant to the Peruvian government in 1952 and to national governmental agencies in several overseas assignments. He was the author of many technical papers, a member of numerous learned societies, and had been affiliated with the Wisconsin Academy since 1946.

# # # # #

NOTICE: Copies of the book, "History of Fish and Fishing in the Upper Mississippi River," by Harriet B. Carlander, will be available for purchase at the La Crosse Annual Meeting of the Wisconsin Academy - 50¢ paper and $1.00 cloth bound. The book was published by the Upper Mississippi River Conservation Committee.

NEW MEMBERS

Sustaining:
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Prof. and Mrs. CARL WELTY, Beloit (formerly Family)

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JAMES and Mrs. JO ANNA SHEA, Urbana, Illinois

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PHILIP SUNDAL, Madison
KENNETH G. WATTERSTON, Madison
PHILIP A. WHITAKER, Kenosha
KENNETH B. YOUNG, Madison

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ACKNOWLEDGMENTS (Not otherwise credited)--
PHOTOS: P. 12, 13 and 15 from News Bureau, Wisconsin State College-La Crosse; p. 16 (horses) from Geography Handbook and Gazetteer of Wisconsin (1898); p. 17, De Longe Studio (Madison); p.30 and 33, Dept. Photography, UW Ext. Div.; p. 47, copyrighted by Warner-Medlin (Madison). SKETCHES: p. 24 from colored lithographs in "Illustrirte Mississippithal," Düsseldorf, Germany (1857); p. 25 from "History of La Crosse County, Wisconsin," Western Historical Co. (1881); p. 26 from "Who's Who Among the Wild Flowers and Ferns" by W. J. Beecroft (1910); p.39, flower from Outing Magazine (March 1888); p. 40 map from "A Tour Guide of the Soil Conservation Station" (Wis. Agr. Expt. Station, La Crosse); and back cover from U.S. Corps of Engineers leaflet "The Upper Mississippi River...Nine-foot Channel."

# # # #

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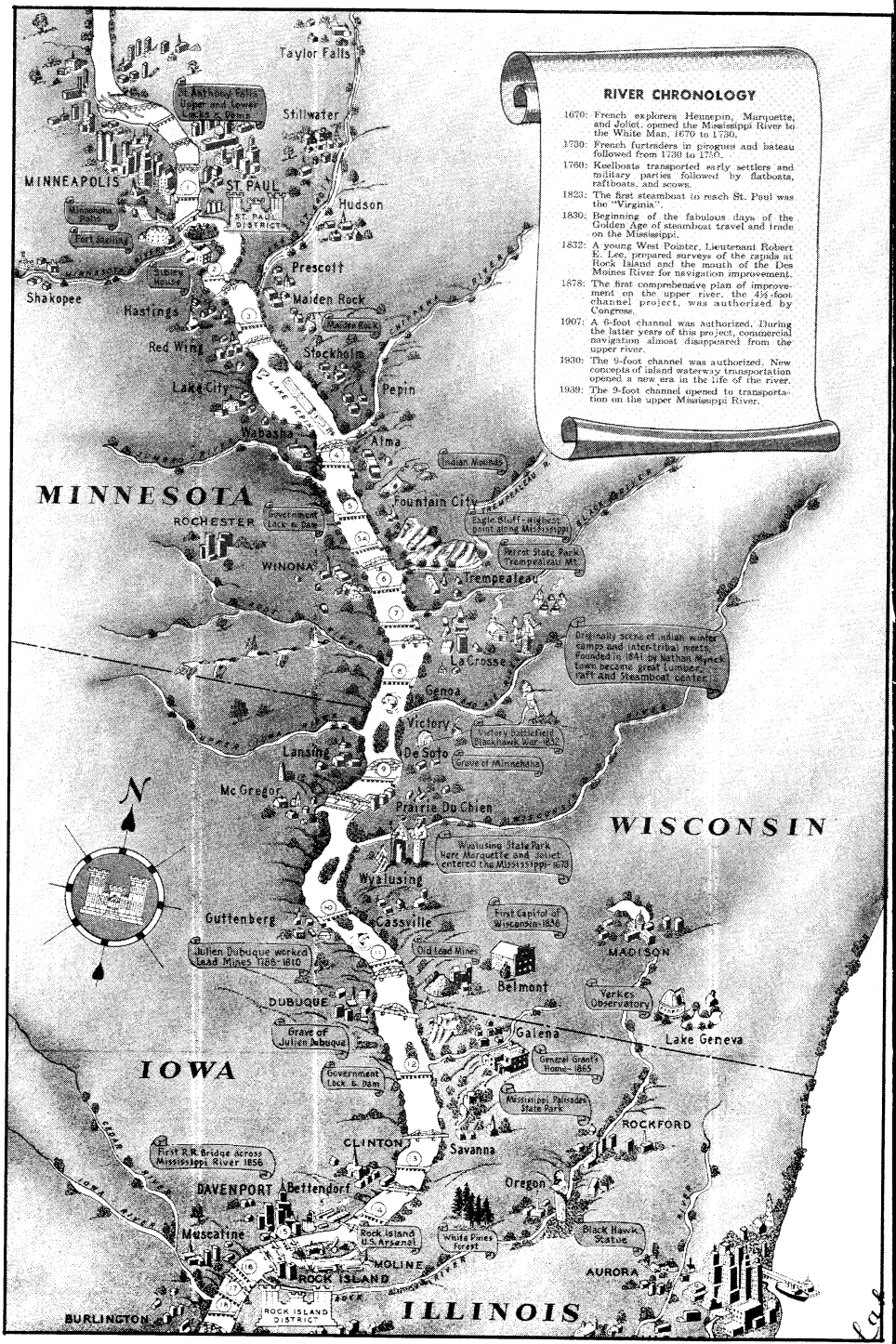
RIVER CHRONOLOGY
1670: French explorers Hennepin, Marquette, and Joliet, opened the Mississippi River to the White Man, 1670 to 1750.
1730: French furtraders in pirogues and bateau followed from 1730 to 1750.
1760: Keelboats transported early settlers and military parties followed by flatboats, raftboats, and scows.
1823: The first steamboat to reach St. Paul was the "Virginia".
1830: Beginning of the fabulous days of the Golden Age of steamboat travel and trade on the Mississippi.
1832: A young West Pointer, Lieutenant Robert E. Lee, prepared surveys of the rapids at Rock Island and the mouth of the Des Moines River for navigation improvement.
1878: The first comprehensive plan of improvement on the upper river, the 4½-foot channel project, was authorized by Congress.
1907: A 6-foot channel was authorized. During the latter years of this project, commercial navigation almost disappeared from the upper river.
1930: The 9-foot channel was authorized. New concepts of inland waterway transportation opened a new era in the life of the river.
1939: The 9-foot channel opened to transportation on the upper Mississippi River.
Taylor Falls
St. Anthony Falls Upper and Lower Locks & Dams
Stillwater
MINNEAPOLIS
ST. PAUL
ST. PAUL DISTRICT
Minnehaha Falls
Fort Snelling
Hudson
Prescott
Shakopee
Hastings
Maiden Rock
Red Wing
Stockholm
Lake City
Pepin
Wabasha
Alma
Indian Mounds
MINNESOTA
Fountain City
ROCHESTER
Eagle Bluff - Highest point along Mississippi
Forest State Park Trempealeau Mt.
WINONA
Trempealeau
Originally scene of Indian winter camps and inter-tribal meets, formed in 1841 by Nathan Myrick, town became great lumber, raft and steamboat center
La Crosse
Genoa
Victory
Victory (battlefield) Blackhawk War 1832
Lansing
De Soto
Grave of Minnehaha
N
Mc Gregor
Prairie Du Chien
WISCONSIN
Wyalusing State Park Here Marquette and Joliet entered the Mississippi-1673
Wyalusing
Guttenberg
Cassville
First Capital of Wisconsin-1836
MADISON
Julien Dubuque worked Lead Mines 1788-1810
Old Lead Mines
Belmont
Yerkes Observatory
DUBUQUE
Grave of Julien Dubuque
Galena
Lake Geneva
General Grant's Home-1865
IOWA
Government Lock & Dam
Mississippi Palisades State Park
ROCKFORD
CLINTON
Savanna
First R.R. Bridge across Mississippi River 1856
Oregon
DAVENPORT
Bettendorf
Muscatine
Rock Island U.S. Arsenal
White Pines Forest
Black Hawk Statue
MOLINE
ROCK ISLAND
AURORA
ROCK ISLAND DISTRICT
BURLINGTON
ILLINOIS