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WISCONSIN ACADEMY REVIEW

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WISCONSIN ACADEMY REVIEW
Vol. 10 Spring, 1963 No. 2

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WISCONSIN ACADEMY REVIEW

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THE PRESENT AND FUTURE OF THE PAST

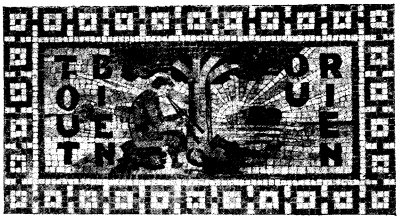
By Leslie H. Fishel, Jr., Director
State Historical Society

LESLIE H. FISHEL, Jr., seventh Director of the State Historical Society of Wisconsin, received his Ph.D. from Harvard University. A former faculty member of the Massachusetts Institute of Technology and of Oberlin College, he has taught advanced seminars on American political leaders and issues, and on the role of the Negro in American life and culture. While at Oberlin he served as executive director of the alumni association, and supervised fund-raising activities and an alumni-oriented program of adult education. He is affiliated with many professional organizations including the American Historical Assn., the Mississippi Valley Historical Assn., Civil War Round Table and Lincoln Fellowship. He has been a member of the Wisconsin Academy since 1960, after becoming Director of the Historical Society in 1959.

The illustrations on the following pages in this article are of printers' marks built into the mosaic pavement of the first floor in the State Historical Society building at Madison and were taken from the memorial volume edited by Reuben Gold Thwaites (1901) published in commemoration of the building's dedication on October 19, 1900 entitled "The State Historical Society of Wisconsin." This use of printers' marks is a recognition of the importance of the printed word to historians and the preservation of the history of mankind which is carried forward in the extensive publications program of the Wisconsin Society and its own symbol (upper lefthand corner of this page).

Historical societies are odd creatures, indeed. They, for the most part, have one main purpose--to make available to the present and future the past's record of transgression and triumph. Few institutions with so single a focus find themselves spread so widely over the totality of man's interests.

Historical societies are like crosses with vertical lines stretching from the past upward to the future and horizontal lines reaching out, umbrellalike, to embrace all of man's activities. From the circus to the science



MARK OF RIVERSIDE PRESS
Chosen as representing American printers. The design is by Elihu Vedder, modified by the architects for mosaic treatment.

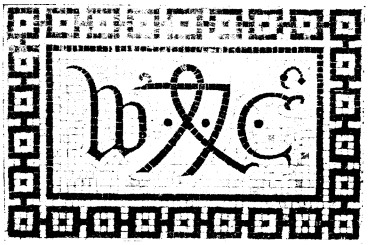
laboratory, from Broadway to Main Street, history is there. From legislative halls to Victorian mansions to Indian graves, wherever man was or is, there is history. And so are, or should be, historical societies.

The two earliest historical societies were established in the East and remain today among the nation's leading private or independent societies, untainted by continuing financial support from public authority.* The Massachusetts Historical Society and the New-York Historical Society were founded in 1791 and 1804, respectively, and have grown to contain irreplaceable records of early America in print, manuscript, painting and artifact. In the process, they have suffered through periods of financial stress and personnel strain, of reorganization and removal from site to site. They began as the brain childs of the few and depended for early growth upon the energy of a single and devoted person. Community and state leaders sat on their boards of directors and as members, yet argument and dispute characterized their race to maturity. Consistently they have redefined their policies and activities, generally following a narrowing trend of limiting the locus and intensifying the focus of their collecting energies.

A half century after Massachusetts and New-York, Wisconsin established and endowed an historical society in 1853 after two earlier abortive attempts. Its growth chart is similar in many ways to those of the Eastern pioneers. One man, its incomparable first superintendent, Lyman C. Draper, persistent, persuasive and peripatetic, sparked this Society into being and nurtured it for thirty-three years. Prominent citizens of the state lent their support and their substance, yet factional and partisan dispute marked the growing years. Problems of money, staff and space - there was never enough of any - hung with varying weights around the Society's girth, slowing it down for a time until legislative generosity, a fortuitous bequest,

* - Walter Muir Whitehill, director of the Boston Athenaeum, has recently published a provocative study of private historical societies from which this data on Massachusetts and New-York is drawn. See Whitehill, Independent Historical Societies (Boston, 1962), 3-64. Whitehill also comments on the Wisconsin Society (pp. 243-267). Throughout he adopts the view that societies are exclusively research institutions and have little obligation to a history-minded general public.

new staff, or new quarters temporarily relieved the problems. (See William B. Hesseltine, Pioneer's Mission, The Story of Lyman Copeland Draper (Madison, 1954).)



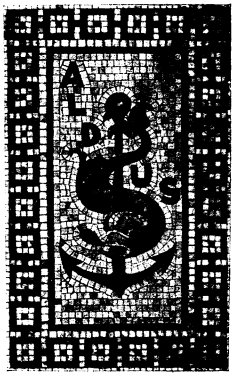
MARK OF WILLIAM CAXTON, 1489

Caxton was one of the earliest English printers. As commonly interpreted, the device reads, "W 74 C"—possibly the figures refer to 1474, the date of the introduction of printing into England.

But in some ways, Wisconsin's Society was, and is, unique. Unlike the private societies of the East, it has depended upon public funds from the beginning. In fact, it proudly claims to be the oldest historical society in the country to have had such legislative support on a continuing basis. The Society believed then, as it does now, that history belongs to and is the responsibility of all citizens. Restricted membership, inaccessible records, and an exclusive learned elite are vestiges which have never been part of the Wisconsin Society's traditions as they have in Eastern societies. History, we believe in Wisconsin, is important enough to deserve tax dollars.

Far from a restricted membership, the Society has always welcomed, and in more recent times encouraged (even urged) the public to become members. Dues are low, and benefits - for those who appreciate history - are high. And our members are dedicated. The University's Survey Research Laboratory recently has undertaken a membership survey for the Society and has reported that the returns from the questionnaire ran over 80%, so high a response, say the surveyors, as to be almost unbelievable. Only a community of believers could have responded in this fashion.

By statute, the Society's resources are open to all citizens under "such reasonable rules and regulations" as it must impose. We are told by friends and critics alike that inaccessibility of records has not been a problem, although we were non-plussed a few weeks ago when a youngster asked us for a "big, green book about George Washington" which he had seen in his school library. Our historical riches are to be used by any and all who will respect them for the treasures they are. Of this group, scholars and students, the learned elite, are by far the largest, but not the exclusive users. Increasingly items in our collections, be they book or pamphlet, artifact or photograph, are being used by laymen whose initial inquisitiveness has grown into intellectual curiosity. These diggers in historical raw material develop their own ideas and insights about history and while they might not publish the results of their diggings, they can read the publications of the learned elite with critical competence



MARK OF ALDUS MANUTUS, 1502
The Aldines were at the head of the printers of Venice.

and greater understanding. In Wisconsin's Society, scholar and layman labor side by side with mutual respect and benefit.

Wisconsin's Society differs most radically from private societies in the way it redefines its purposes. While Eastern societies refine their policies by restricting their emphases, Wisconsin broadens its outlook and widens its scope. There are obvious dangers involved in this: we might undertake more than we can handle properly. In fact, to be brutally frank, we sometimes do just that. But we believe, profoundly and respectfully, that to limit history is to distort it, and to deny service is a disservice. As long as we are charged to collect and make accessible the historical records of this state, of the Midwest, and of our American heritage, we will collect and serve wherever we can.

This panoramic view of the Society's mission has resulted in strength and diversification. In our manuscripts library rests the Draper Collection, a miscellany of letters and documents collected by Lyman Draper. Without reference to this collection, no historian can write on the history of the trans-Appalachian frontier. In the same library, the researcher can find the McCormick Collection, a remarkable mass of papers relating to four generations of the Cyrus McCormick family and the interests they fostered, the Raymond Robins papers, the Singer Manufacturing Company papers, the John R. Commons labor collection, the Textile Workers Union of America papers, the Moss Hart papers, and so on and on. Just recently we distributed diaries to Wisconsin's Peace Corpsmen in the hope that they will record their experiences and observations for posterity.

Our museum collection is equally strong and equally diverse. We range from dolls and toy soldiers to clothing, from guns to china, from Indian artifacts to circus memorabilia. In museum collecting, we do try to restrict ourselves to Wisconsin, but this is often no restriction at all. Wisconsin citizens used and collected articles from all over the world, and those things which are Wisconsin-made were generally distributed over a wide area outside of the state. But our Wisconsin collections do show what our people were building, using and collecting; and from

these artifacts we can reconstruct the important elements in their lives.

MARK OF THE ELZIVIRS, 1620
The Elzivirs were Amsterdam printers. The motto, "Non Solus;" this, with the device, symbolizes the preference of the wise for solitude.

While broadening our outlook and widening our activities, we also are intensifying these activities at the local level in the state. Our historic sites are one well-known example, but there are others. We have helped to organize the Wisconsin Council for Local History, a body representing each of the 77 affiliated local historical societies in the state, for the purpose of mutual assistance and exchange of information. This Council, just a year and a half old, is already an active group. We have created Area Research Centers in five of our state colleges and the University of Wisconsin-Milwaukee to collect and preserve the records of local history for college and community. We have undertaken a program of assisting local historical museums to help them prepare exhibits which are both attractive and educational. We have promoted a stimulating educational program for Junior Historians and high school students all over the state. And there is more to come.

The increasing complexity of living in the twentieth century poses a perplexing problem for those of us concerned with preserving history. How can we select from the mountains of data those two- and three-dimensional records which will adequately reflect what we are thinking and doing? No one has the answers to that question, but the Society has made some guesses. It is quite apparent that the twin influences of science and the city are among the most significant in this century of change. In each of these areas, the Society is making an effort to collect materials which will be useful for future research. In fact, progress has been sufficient to allow students and scholars to use these collections right now.

In another area, mass communications, the Society established a Center seven years ago to collect materials relating to newspapers, radio, television, advertising, public relations, and the theater. This Mass Communications History Center now is swelling with collections from all parts of the United States.

At each of our historic sites we have plans for the future. We expect to see Stonefield Village at Cassville double in size in the next five years. We hope that we

MARK OF MELCHIOR LOTTER, 1491-1536
A Leipzig printer. As "Lotter" is an old German word for "vagabond," the mark represents a beggar in a suppliant attitude.

can construct a fur-trading complex in Prairie du Chien, which was the fur-trade center of the upper Mississippi Valley for many years. With legislative sanction, now pending in bill 138-S, we hope to construct a state carriage museum adjacent to the Old Wade House at Greenbush to house the incomparable Wesley Jung Collection of horse-drawn vehicles. We have assisted the National Railroad Museum at Green Bay in its early years and expect to increase our collaboration in the years to come.

The Society has other programs designed to keep step with the twentieth century. We are now increasing our activity on radio and in television, and we are producing our own movies. We anticipate a museum education program which will reach beyond Dane County into school houses and public meeting halls across the state. We have plans to produce a new pamphlet series in Wisconsin history and we have even greater plans and greater hopes to organize and edit a multi-volumed history of Wisconsin to fill a long-standing gap.

And then there are the dreams of what an historical society might do someday. We talk about air tours of Wisconsin - a half-day or more of seeing Wisconsin and her history from the air. We envision a series of historic sites in the north country which might be visited consecutively in the course of two days and which would provide visitors with opportunities to do historic chores: iron mining, weaving, wood chopping, and so on. We think about a more closely-knit historical library and museum system in the state: about a program which would encourage retired people to become interested and expert in historical research; and about histories of Wisconsin's great industries and urban regions which badly need to be written. We even ponder space exploration: what can we do to make sure that this exciting breakthrough receives proper attention from historians?

We do not have enough time for this kind of star-gazing because there are scholars in the library, school children in the museum, bills in the legislature and visitors at our historic sites, and the inevitable trio of inadequacies - money, staff and space - still plagues us. Yet, we will look to the future on behalf of the past because we deeply believe that history is a source of knowledge and a power for good - an imposing force bearing down on the present, an intimate part of twentieth century living which must be understood to be properly used. # # #

THE HISTORY OF RURAL ZONING IN WISCONSIN

By W. A. Rowlands
Dept. of Agricultural Economics, UW

Academy member WALTER A. ROWLANDS is known as the man who made rural zoning in Wisconsin work. He is one of the pioneers in this field in which the state itself was, and is, a leader. In a broader sense his contribution is wise use of land and all other resources. He believes in citizen participation in planning--and even more believes that planning will not work without citizen participation. Rowlands joined the University of Wisconsin staff in 1923 after serving with the Land Clearing Assn. in Marinette county. He is a native of Montreal and a graduate of Ontario Agricultural College. For a number of years he was director of branch agricultural stations for the UW. In 1958 he received the Superior Service Award from the USDA. He is currently a specialist in land use planning in the department of agricultural economics and a national authority on the subject.

County or rural zoning as we know it today in Wisconsin is less than forty years old.

In 1925 members of the Milwaukee County Board of Supervisors came to Madison to ask for special legislation under which Milwaukee county could zone. They wanted legislation that would permit them to protect private property, especially private homes, against the unregulated expansion of commerce and industry of the city into rural areas, destroying nearby residential values.

An understanding legislature promptly passed the original zoning enabling act, Section 59.97 of the Wisconsin Statutes, under which Milwaukee county in 1927 enacted its county zoning ordinance. This applied only to Milwaukee county.

In 1927 the Wisconsin legislature asked its Special Interim Committee on Forestry and Public Lands to determine what might be done to help the growing economic and financial problems of northern Wisconsin through state legislation. From the early twenties, it was increasingly clear that land settlement (agriculture) could not absorb

the idle former timber lands of the north. A "wave of tax delinquency" swept throughout the 27 northern and central Wisconsin counties and the very solvency of many of these northern communities was at stake. Owners of cut-over land, seeing no possible sale of their lands for settlement, "dropped them" for taxes.

Such was the situation when the Special Interim Committee began its investigations. After considerable study and the holding of many public hearings throughout the northern and central counties, the committee stated that:

> "Both the orderly development of northern Wisconsin and the need for reducing expenditures because of tax delinquency, require that counties be given the authority to control development.
>
> "Counties should have the right to give every possible aid in agricultural zones with the aim of building up prosperous farming communities. But they should also have the right in sections of isolated farms, with heavy tax delinquency and numerous abandoned farms, to set such areas aside as forest and recreation zones and be empowered to control the construction of more roads and schools."

The Wisconsin legislature proceeded to amend the strictly urban county zoning law to include the words...

> "and determine the areas within which agriculture, forestry and recreation may be conducted, the location of roads, schools..."

The Legislature of 1929 accepted the idea that the power to zone, wisely used, would enable the distressed counties to limit local government costs and promote the best land uses. Thus the Law 59.97 of the Wisconsin Statutes applied to all Wisconsin counties - rural and urban.

In 1931, the Interim Committee on Forest Fires and Delinquent Taxes asked the Attorney General his opinion on the constitutionality of the County Zoning Enabling Act. The Attorney General in an official opinion said:

> "The county zoning ordinance is undoubtedly in the public welfare. The cut-over areas of northern Wisconsin speak as eloquently against haphazard development as any city condition. The spotting of these lands with remote or abandoned farms, resulting in sparsely settled districts, with insufficient population or value to support roads and schools, or to afford the comforts of living that this day should give to all; with misdirected efforts to farm lands not well suited to agriculture, with resulting personal grief and social loss; the far-reaching economic ill-effects of stripping the state of timber; the fire hazard of cut-over lands and the fire

hazard of human habitation in their midst, all cry out for planning, for social direction of individual effort.

"...I believe the judicial tendency is going to be to recognize more and more the great social evil of uncorrelated and unrestrained individual and selfish enterprise, and hence to broaden its views of the power of government to plan the social and economic conditions of the present and the future."

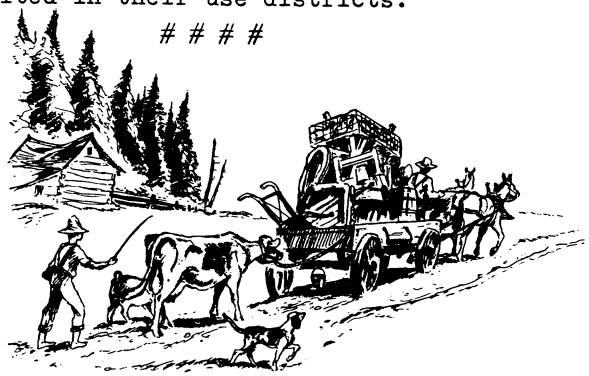
This now famous opinion written by Fred M. Wylie, Deputy Attorney General, has been widely used and quoted throughout the United States. It served effectively for 20 years until in 1951 when in a sweeping decision the Wisconsin Supreme Court, in the case of Timmel vs. Jefferson County, affirmed the validity of the county zoning enabling act and the Jefferson County Zoning Ordinance enacted under its provisions.

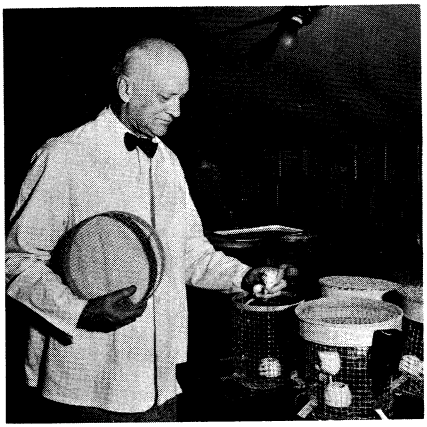
The amended State Enabling Act was passed in 1929. But it was 1933 before the first county, Oneida, took action to zone their lands under this new act. Since that time, Oneida county has amended its original ordinance several times and in 1960 completely revised and enlarged its purpose.

Forty Wisconsin counties have followed Oneida county with zoning ordinances. Another dozen counties are either in the process of making a comprehensive plan of land use preliminary to zoning or are in the process of developing a zoning ordinance.

The dominating motives back of all of these zoning ordinances is to protect private property and to stabilize property values - to provide for the best use of the land- and to give assurance to landowners that they can proceed in the development of their lands safe in the knowledge that indiscriminate uses which lower property values will be prohibited in their use districts.

# # # #





PATRON OF THE ACADEMY — HARRY STEENBOCK

A Life Member of the Academy, Emeritus-Professor HARRY STEENBOCK, has been elected a Patron of the organization, acknowledging his recent gift of $1000 to assist its sponsorship of the Junior Academy of Science. He received honorary Life membership in 1961 after 40 years of affiliation with the Academy.

On May 8, 1963 the State Medical Society of Wisconsin conferred its highest award on him for his research in nutrition. The council award recognized the irradiation process for adding vitamin D to milk which he developed and the founding of the Wisconsin Alumni Research Foundation.

At the time of his retirement from teaching at the University of Wisconsin in 1957, E. B. FRED, then President, remarked: "Harry Steenbock 'trapped the sun' by discovering and substantiating an inexpensive method for the artificial radiation of foodstuffs to create Vitamin D--the 'sunshine' vitamin. With this discovery he enabled mankind to end the great scourge of rickets and make the arms and legs of children throughout the world straight and strong, keep their backs erect and their bones and teeth healthy and normal.

"But that was not all. He helped create the Wisconsin Alumni Research Foundation which made the fruits of his research, and the discoveries of others, produce seeds and grow into further studies and developments benefiting mankind.

"But let us not allow these great contributions to overshadow Harry Steenbock the scholar and professor who, through brilliant teaching, introduced young men and women to the wonderful world of science and sharpened their intellects and curiosity in preparation for scientific careers. . . . The chief product of the Wisconsin Alumni Research Foundation hasn't been vitamin D or its other discoveries, but its production of researching young men and women. And the success of the Foundation has been due far more to Harry Steenbock's interest and guidance than to the patent on his greatest discovery."

# # # #

GIVING TO THE GIFTED

By Spencer W. Havlick
Associate Curator of Education
Milwaukee Public Museum

After obtaining his M.A. in Zoology from the University of Colorado in 1960, SPENSER W. HAVLICK returned to his native Wisconsin to become Associate Curator of Education at the Milwaukee Public Museum. His earlier training at Beloit College and teaching assignments in Junior Natural Science programs in Colorado heightened his enthusiasms for this phase of instruction.

A program designed to provide enrichment for capable high school students interested in the biological sciences is being undertaken by the Milwaukee Public Museum. At the conception of this idea, the author was aware that high school people were involved with seminar series in physics, chemistry, electronics and mathematics, but little effort had been made to serve talented students in other sciences. It was our hope that a high school biology seminar could be created.

Dr. Derward Lepley of Marquette Univ. Medical School staff in a presentation, "Current Problems in Cardiovascular Research."

The unique program which enables our institution to better serve this need was begun in 1961 in cooperation with Marquette University. Prof. Walter Rosen of that school helped the Museum's Education Division to organize and coordinate the High School Biology Seminar, which today provides encouragement and incentive to young scientists of tomorrow.

Admittedly, the major goal of most museums is to serve the general public through exhibits, publications, radio, television, research, educational programs and other facilities. Often the adult population throngs to a popular and dynamic lecture or exhibit and elementary school classes file methodically through the halls of enrichment under the demonstrative narration of a docent or a radio guide. However, the appalling gap in museum programming appears at the high school level. Some

of the apparent neglect might be justified in terms of heavily packed schedules--academically and socially--which burden the high school student. Often interest may reach a low ebb for high school visitors among museum halls, yet during these formative years, museum educators feel a special obligation to serve those who seek extra guidance in related museum fields.

Through the cooperation of the Biology Department of Marquette University, the Milwaukee Public School system and the Education Division of the Milwaukee Public Museum, a pilot seminar was started. Researchers and instructors from Marquette's Biology Department and Medical School have given freely of time, equipment, and meeting space. With the encouragement of Milwaukee's Superintendent of Schools, twenty juniors and seniors are recommended, screened, and selected from all of the public high schools. The participants represent the upper half of one percent of the public high school population with an expressed interest in the life sciences.

During the last three semesters, three selected groups have been exposed to biologists of diverse specialties; to list a few, a museum entomologist portrayed interrelationships in the natural world, a plant physiologist demonstrated electron microscopy, a marine biologist spoke about ecology, an industrial biochemist shared his research findings, a museum naturalist led a field trip into a bog, and a heart surgeon discussed medical research.

To give the reader an idea of how the discussions proceed, the following conversation was lifted from a seminar entitled "Relation of Environment to Plant Form."

Prof. Millington: The yellow water crowfoot (Ranunculus flabellaris) has two forms, one grows on land and the other in the water. The land plant has broad lobed leaves, where the water plant has narrow and deeper lobed leaves. What could be some of the regulating factors for the difference in leaf structure?

Student: The fact that the plant is in water might be a factor. Also a difference in temperature, or in the type of light reaching it through the water might cause the deeply lobed leaves.

Prof. Millington: You're right, those are all possible factors. Now, how could these factors be checked out? How can it be found if the difference in light is a factor?

Student: Could some of the plants be grown in several different colored lights?

Prof. Millington: Although we didn't do that, it is a very good idea. Other workers have put some of the

Lab session at Marquette Univ. Life Science bldg. - Use of living materials in studying polluted water, blood flow and parasitism in aquatic life.

plants under a tank of water so that the light had to pass through the water first. It was found that those plants under the tank had no obvious effects on the control plants.

Student: What were your results when you tried out the other factors?

Prof. Millington: We grew both land and water plants at different temperatures. We found that differences in temperature caused differences in depth of lobes.

Student: Did you find a specific reason for the difference in the forms of the yellow water crowfoot?

Prof. Millington: From our study we concluded that there were several factors responsible for the varied forms. . . .

It should be emphasized that attendance at the weekly seminars is purely voluntary and no academic credit is given. The intent of the Biology Seminar program is to provide an insight for the students into fields of active biological research in their community. Researchers speak informally (frequently in the laboratory situation) with the participants, who offer questions and often create a fruitful exchange of ideas. Aspects of biological research discussed from week to week cover activities of private and public institutions, pure and applied research, laboratory and field procedures in specific subject areas that would not ordinarily be duplicated in the high school classroom curriculum.

The Biology Seminar for high school students is indeed an "exhibit" of a kind. It is a traveling exhibit or demonstration of the Milwaukee Public Museum's intent to go to the industry and peoples of the community to fulfill an existing need. In fact, requests from private school administrators for enlarged participation are presently being studied. Of course, for the discussions to retain the

value of informal and free exchange the number of students involved must necessarily remain small. The possibility of obtaining a permanent record of Seminar events might be studied. If these sessions were to be filmed and taped, the value and experience enjoyed by only a few could be shared with many through the Museum radio, television, and other outlets of the Office of Information Service and the Audio-Visual Department loans. This giving to the gifted could then be shared by all of us.

# # # #

RICHARD P. BAILEY
President of Northland College

RICHARD P. BAILEY took office as seventh president of Northland College at Ashland on April 1, 1962. A native of Ashton, Illinois, he received the B.A. degree from North Central College at Naperville in 1943. He continued his studies at the University of Wisconsin, was granted an M.A. degree in 1949 and the Ph.D. in 1959. On the faculty of Wisconsin State College-Oshkosh from 1949 to 1953, he taught English and journalism. He then became associated with the office of the Board of Regents of State Colleges at Madison, where in 1957 he was appointed assistant director of Wisconsin State Colleges. From 1959 to 1962 he was president of Yakima Valley College in Yakima, Washington.

President Bailey has published extensively in both national and local educational journals including AAUP Bulletin, School and Society and the NEA Journal. His monthly column, "From Where I Sit," appears in the Wisconsin Journal of Education.

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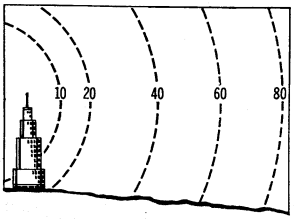


ORIGIN WISCONSIN — IMPACT NATIONWIDE

By Jessie Hill McCanse
Madison

MRS. RALPH McCANSE is well known for her work in the Wisconsin Council for Better Broadcasts. Her program, "Broadcast on Broadcasts," appears weekly on the state radio stations and her other interests include teaching and the YWCA. This paper was read at the 93rd annual meeting of the Academy in Milwaukee on May 4, 1963.

This year, 1963, marks the tenth time the Look-Listen Opinion Poll has been carried out under the auspices of the American Council for Better Broadcasts. The original project was conducted in Wisconsin in 1946-47 by the Wisconsin Association for Better Radio and TV, as it was then called. It was recommended as one of the projects to be taken up by groups who wished to join in the formation of a national organization. During the past ten years then it has been spreading across the country--even as far as Alaska! This year reports came in from 30 states and from the District of Columbia.

Anyone may monitor programs for this report. Some participants work through groups, some as individuals. Each participant is asked to give thoughtful attention to eight different programs (Radio or TV) on Saturday, Sunday, or in late afternoon or evening of other days (family time). Each is asked to rate the particular program as Excellent, Good, Fair, or Poor, and to give reasons for the rating. To avoid having too widely scattered monitoring, the listener-viewers are asked to monitor programs in the following four categories: Plays, Music, News and Information, and Children's Programs, and to report only on Network programs.

The purpose of this poll is to obtain a calculable reaction from a diversity of people and from different parts of the country. The unique contribution of the report is the emphasis placed on the reasons given for likes and dislikes. The monitors are asked to be definite; and many write additional comments in letters. The analytical report--without any participants' names--is sent to the Networks, Sponsors involved, the Federal Communications Commission, and appropriate Congressional Committees.

The actual number of persons taking part varies from year to year. This year the number was approximately

7,000 individuals reporting on 39,621 programs. The very interesting point about the participants this year is that they are for the first time about evenly divided between high school students and adults. The teen-agers were usually members of high school classes (or youth groups) and the adults were chiefly reached through PTA, church groups, service clubs, or branches of AAUW and American Legion Auxilliary, etc. An encouraging point in this connection is that if high school classes actually teach discrimination in listening and viewing, as they do in teaching reading, there will be a definite raising of standards among the viewing public.

To establish the winners, so to speak, among programs reported on, the following system is applied: an Excellent counts 2 points; a Good, 1 point; a Fair, minus 1; and a Poor, minus 2. Here is a listing of the top 20 (with points) and with division into adult and teen-age ratings:

	Adult	Teens	Total
Huntley-Brinkley	1212	282	1494
Bonanza	720	545	1265
Disney	563	288	851
Ben Casey	521	279	800
Hillbillies	231	564	795
Dr. Kildare	353	378	731
Andy Griffith	435	244	679
Hazel	543	104	647
Bernstein	548	139	597
Lawrence Welk	490	63	553
Firestone	492	47	539
Loretta Young	196	321	517
Capt. Kangaroo	458	31	487
Donna Reed	192	273	465
My Three Sons	225	237	462
Defenders	287	124	411
Discovery	276	111	387
Perry Como	339	44	383
Dick Van Dyke	147	233	380
Brinkley's Journal	237	140	377

There is some relation as to time of day, and day of the week. This is natural, and may influence some of the ratings.

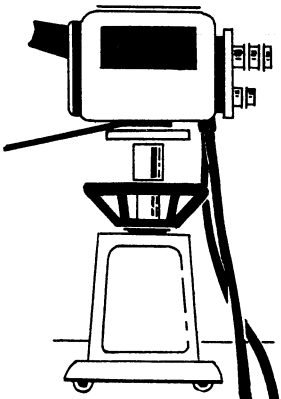
The heart of the report, called "Opinion Sampler," is the comment or reasons given by the monitors. Some of these listeners and viewers even note the fact that during the process of stating their opinions their thinking becomes more acute. In selecting what quotes to include, the Committee keeps in mind the ratings and would point out that if, for example, a program turns out to have 90 "Excellent" ratings and 50 "Poor" ratings, the comments cited will be 2 to 1 in that representation. For instance, on a Doctor Kildare report rated an "Excellent," the comment is "Raymond Massey's personality adds much to the enjoyment"

or, again, "Plots are well-written." And, "Beginning each episode makes you want to watch." In another rating of the same program marked "Fair," came the comment "Too much emotion," and as to "The Defenders," comment goes all the way from "Excellent--human dignity, law, and order are glamorized rather than violence," through "Good--dares to probe and offer a solution;" and then to "Poor--too much murder and crime." Hallmark productions were consistently rated "Excellent" or "Good," by adults; but few teenagers seemed to watch these, according to Look-Listen Project figures.

It has been suggested that this Look-Listen material reaches only an interested minority--that it does not really represent a cross-section of public opinion. In answer, let it be noted that classes in high school would be cross-sectional, average people. Also it was interesting to see that the T-V Guide awards followed much the same pattern: In "News and Information" category the Huntley-Brinkley series rated first in both, as did Bonanza in "Regular Series" and Walt Disney in "Children's Programs." Those awards were by general public. And--the report was scarcely out when we heard from one of the largest sponsors.

General comments mentioned that good family viewing should be given opportunity in the best family listening time; that there should not be so many good programs on at the same time; that ungrammatical advertising undoes the work of both home and school. And most comments showed a dislike for violence.

One of the most encouraging things about the whole report is the improvement in standards of the reporting: more definite reasons given, and more interest in good programs. This improvement applies to both adults and young people.



The public needs to be reminded that the airwaves belong to the people--who should learn to be more critical about what uses are made of their property, and who should help youngsters to become more discriminating. Perhaps the people of Wisconsin need to recall the pioneering work done here in radio broadcasting--recall efforts of the Wisconsin Association for Better Radio and T-V; and perhaps they need to regain their leadership in the field of evaluating the programs that come on their airwaves.

GENERAL NOTES ON BIRDS AND WEATHER, AT JEFFERSON, WISCONSIN, IN THE SPRING OF 1883

By W. W. Cooke
Jefferson, Wisconsin

EDITOR'S NOTE

WELLS WOODBRIDGE COOKE started his ornithological career in Wisconsin although he was born in Massachusetts in 1858. His records indicate that he studied birds for a number of years in the vicinity of Green Lake shortly after 1871 and in the spring of 1883 he did intensive field work at Jefferson while teaching school there. In the previous year he had started the systematic collection of data on bird migration in the Mississippi valley and with the formation of the American Ornithologists' Union in September of 1883, a committee was formed to study bird migration amplifying the work started by Professor Cooke. He was selected by Committee Chairman C. Hart Merriam to be superintendent of the Mississippi valley district and in the following year was hired by the U. S. Dept. of Agriculture under a special appropriation of $5,000 for this type of work as the "Bird Migration Expert."

Prior to this time he had published several short articles in the small ornithological journals on the order of the one here reprinted but in his remaining years he was author of several books on bird migration, of which the most important was "Report on Bird Migration in the Mississippi Valley in the Years 1884 and 1885" (1888). In 1897-98 he published "The Birds of Colorado" and his subsequent studies on the subject took him throughout the country from Indian Territory in the south to Minnesota in the north. Alexander Wetmore states in his "The Migrations of Birds" that Professor Cooke "amassed in Washington the most comprehensive mass of data on the subject ever brought together," and William Rowan, in his article on "Fifty Years of Bird Migration" rates him as "pre-eminent in American migration work."

The following article is more than a study of birds but includes many phenological observations relating to weather and plants as well as animals. While at Jefferson his house was situated on the west bank of the Rock river and his study area extended from there to the Crawfish river in what is known as the Rock river valley with most of the observations made on the banks of the Crawfish on the south end of town. On weekends he went north of town for two miles to the tamarack swamp near Jefferson Junction and most all of the observations were made during two hours before school in the morning and occasionally after school except for the more extended weekend trips. The following notes have been edited to remove references to ordinary days without significant observations in order to save space but otherwise are quoted directly from the text. Some quotations at the end also are taken from observations on a comparison of specific species during this migration season between St. Louis, Mo. and Jefferson, Wis., with only Professor Cooke's comments for Jefferson or Wisconsin given.

This report was published in the Bulletin of the Ridgway Ornithological Club with a title of "General Notes on Birds and Weather, at Jefferson, Wisconsin, in the Spring of 1883" and actually was a reprint from the "American Field" for December 1883 and January 1884 where it was originally published.

March 13 and 14.--Very warm with west wind, starting the waterbirds northward. Next day cold, with hard northwest wind. Winter once more and not a bird to be seen.
March 16 and 17.--Warm southwest wind.
March 18.--Cold, almost to zero. No migration whatever took place from this date until the 23d.
March 23.--Night of the twenty-third clear, barely 32 dgs. with south wind. Just the night for birds, and the

morning showed quite large arrivals of snowbirds, tree sparrows, robins, blackbirds and bluebirds. But Spring was not yet to come and from the 25th to evening of the 31st., the nights were cold and freezing, with northeast to northwest winds, and snow on two days. No increase in any birds.

The first of April, it began to change.

April 2--Was a bright, beautiful Spring day, with the night before clear and still, but so cold, that no migration was perceptible. The first frogs appeared, and mud-turtles were very numerous along the river bank.

April 3--During this day preparatory moves were made by ducks and geese, and the night of the 3rd ushered in the first real wave of Spring migration. Queer weather for migration. This day was a mixture of snow and rain, and the night was very damp and cloudy with a warm south wind, and mercury at 40 dgs. Yet this dark, cloudy night brought the bulk of the snowbirds and tree sparrows, many song sparrows, the first fox sparrow, ruby-crowned kinglets, Winter wrens, kingfishers, yellow-bellied woodpeckers, white-bellied swallows, phoebes, brown creepers and hermit thrushes, besides swelling the numbers of all kinds that were here.

April 6.--This day brings four inches of snow. It seemed strange while walking through it the next day to find two full sets of crows' eggs.

April 9.--Not Spring but Summer, with the mercury at 76 dgs. in the shade and a strong south wind with not a cloud to be seen.

April 10.--Another Summer day, with a slight admixture of New England weather, raining in the afternoon with the mercury at 60 deg., then the wind slowly changed from south to west, and northwest, and during the night it froze. No wonder the birds seemed discouraged this Spring.

April 12.--Bright, warm and windy, and in the afternoon cloudy. Mercury at 48 dgs., at 8 a.m. The first day this Spring that the air has been full of song. The great change was produced principally by the bursting forth in full song of the tree sparrows, which have been gradually increasing in melody since March 23. To-day they and the song sparrows were on every bush and tree, each one striving to outdo the others.

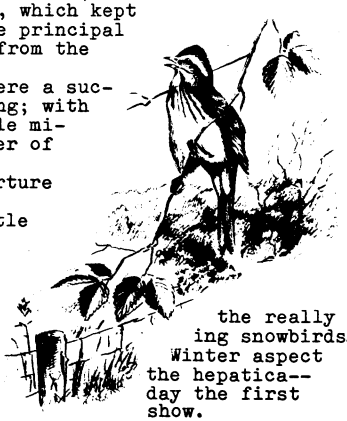
April 13.--Warm, with a strong south wind and bright sky. Night of the 13th was warm and clear. It was our first Summer night.

April 14.--At 7 a.m. the temperature was 65 dgs., with a strong southwest wind. At 9 a.m. the temperature was 76 dgs. and at noon a hard rain set in, and during the night of the 14th it cleared off cold. The first thing that struck me on reaching the woods this morning was the stillness; so different from two days before. Not one-tenth of the song sparrows were left and only four tree sparrows were seen, the scattered black birds were gone, and even the robins were much less numerous. It seemed as if all migrants, which had halted for a few days, had taken the favorable opportunity of the south wind and left for the north.

April 15.--Mercury at 42dgs. Cold and chilly all day, with a strong west wind, bringing all the white-bellied swallows, which for a week had been circling over the city, into one flock, which kept all day over one place on the river near the principal bridge, where they were somewhat sheltered from the chill wind by high hills and buildings.

April 16-April 24.--The next eight days were a succession of cold chilly nights, twice freezing; with rather clear, but not warm days. Very little migration took place, and the general character of the birds here was unchanged. Only one new arrival was noted, the chewink, and no departure at all.

April 24-April 28.--These days were a little better. The nights were still cold--the first two nights freezing--but the days were warmer, and bird life was more abundant and much more active. Almost every day showed new species, though none of Summer birds had arrived, and the linger- ruby-crowns and purple finches, gave a to our avifauna. The first wildflower-- opened on the twenty-fourth, and the next leaves of the earliest laurels began to



the really ing snowbirds, Winter aspect the hepatica-- day the first show.

April 29-May 3.--The next week was a transition period from Spring to Summer. The 29th and 30th were cloudy, cold with nights a little above freezing, with north and northeast winds; but the days were quite warm. Mayday showed a few flowers, the caltha, wood anemone, claytonia, sanguinaria, rue-anemone and one crucifer in blossom; while only a few shrubs, as the currants, raspberries, box elders, etc., had put forth leaves, and they were not more than one-tenth grown. A walk in the evening showed no new species, and scarcely any change in the birds from what they were a week before. The night of the 1st it rained all night incessantly, but not hard, the wind changing after 10 p.m., from south to north. In the morning we had a few hours of sunlight, and again steady rain from the afternoon of the 2d until 9 a.m. of the 3d. Yet these two dark, stormy nights brought us our first Summer birds, and marked a distinct and decided change from Spring to Summer. They brought us the house wren and the chippy, large flocks of white-throated sparrows and blackbirds, and, at last, the warblers. Six species were identified before a pelting rain drove me out of the woods.

May 4.--The night of the 3d was cold and foggy, mercury at 40 dgs., with north wind, and that of the 4th was not much better. But little movement took place, and the new birds noted--small billed water thrush, blue-yellow backed warbler, warbling vireo, etc., were in small numbers and inconspicuous.

May 5.--The afternoon was enlivened by the song of the first bobolink. A warm evening, and perfectly clear, still night, with mercury at 46 dgs.

May 6.--I expected to find that great movements had been taking place, and, indeed, considerable change was apparent, but a rain set in fifteen minutes after I left home at 6 a.m. and continued until just before I returned at 8:30 a.m. I found the first kingbird of the season awaiting me, around the corner was the first rosebreasted grosbeak, as full of song as he could hold, and at last a catbird, nearly three weeks behind his time. White throats had noted the favorable night and left. I found only one-tenth of yesterday's numbers. In the evening there was a strong south wind, with much thunder and lightning, and a little rain; very dark. Cleared off some time in the night.

May 7.--At 4 a.m. it was clear, with southwest wind and mercury at 58 dgs. Alternately cloudy and clear all day with wind suddenly changing to north at 10 a.m. Maximum temperature 70 dgs. Not much movement of any species, but some changes in nearly all. The chippy, chimney swifts, grass finches, phoebes, and martins have increased somewhat, and are in about full Summer numbers. The greatest change to-day is produced by the arrival of numbers of Baltimore orioles, rosebreasted grosbeaks, and red-headed woodpeckers, all in full voice, and the scream of the latter trying vainly to drown the beautiful melodies of the other two.

May 10.--The rain ceased at 3 a.m., and a walk in the woods from 5:30 to 8:30 a.m. revealed considerable movement among the birds. The most noticeable changes were the arrival of the goldfinches in flocks, and the decided increase in the bobolinks. The females of the grosbeaks, towhees and Baltimore orioles, had also arrived. Also quite a small army of warblers had come [with?] the rain, bringing the first redstart, magnolia, hemlock, black poll and Nashville warblers; and at the same time the first yellow-throated and blue-headed vireos were seen, also the first tanager. A great increase had taken place in the kingbirds, chimney swifts, and least fly-catchers. Strange that so much change should have taken place in the face of a north wind and a very heavy rain storm!

May 11.--Night before was clear for the first time in more than two weeks; wind northwest, and moderately strong; hard frost, and froze in lowlands. I was in the woods from 6 a.m. to 8 a.m. Apparently no change whatever; birds scarce owing to cold and I could not stay out until it was warmer. Only noticeable thing seen was seventeen blue jays in one flock passing leisurely north through the tree tops.

May 12.--Night before clear, with strong north wind, mercury 40 dgs. The morning was beautiful, but chilly, was out all day and found bird life quite abundant, but still far from full Summer numbers.

May 16.--This day was clear with maximum temperature of 71 dgs. No new arrivals were noted, and no increase perceptible in any, but decrease or total absence of some told that the night's favorable opportunity had been utilized. A decided decrease was apparent in all Hylocichlae.

May 17.--Night before was moonlight, warm and clear with south wind. Just such a night as birds most like for migrating. Yet, although some movement was apparent, it was not great.

May 18.--Night before cloudy with south wind, and from daybreak the mercury rose rapidly. The day was hot, sultry and cloudy, with a strong south wind from 9 a.m. to 2:30 p.m. The thermometer marked 82 dgs. in spite of the clouds. At 3 p.m., a regular cyclone of the Iowa kind advanced straight toward us until it reached the brow of the hill a mile and a half west, when it split and the two parts passed north and south of us, and destroyed two neighboring towns. Evening and night warm and rainy, the strong south wind still continuing. I was not in the woods at all on the 18th, but either on the night of the 17th or 18th there must have been much migration, as I found great changes when reaching the woods on the 19th.

May 19.--This day can be set down as the height of the season for birds at this place, but yet so many of the transients had already passed northward that, although the woods were full to overflowing with song, the most of the melody came from a few birds. The redstarts furnished a large part of the music, and the rest of the choir was composed principally of vireos and fly-catchers. With this day terminated most of the work in migration for this Spring. It was the grand swell of the migratory wave just before its final subsidence. The arrival of only six birds remained to be chronicled, and the next few days were so cold, cloudy and disagreeable that the departure of the transients still remaining was slow and hardly noticeable.

May 20-May 23.--These days were cloudy and rainy with wind shifting from west to north and northeast, and the mercury hanging around 40 dgs., with a fall, twice, to 32 dgs.

May 24.--After a hard rain the night before, we again had Spring weather and a bright, clear day. It showed the last arrival of the season of the Summer sojourners, the cuckoos, which usually bring up very near the end of the list; and it also showed the tawny and olive-backed thrushes as numerous as any time this Spring.

But little remains to be chronicled of this Spring's migration. The last transient visitors, the Connecticut and the Canadian fly-catching warblers, put in their appearance on the 26th; after a four days' visit, left us on the 29th, taking with them nearly all the remaining transients; and when the last olive-back departed on the last day of May, migration was ended.

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Bluebird.--Summer sojourner. On March 11 four were seen for the first time, slowly increased from that date on. Some were paired when they arrived, the rest mated as soon as they came. March 17. They began to be quite common, but the cold put a stop to all migration until the 23d, after which they have been quite numerous. April 9. They are now to be seen and heard everywhere in pairs, there being no flocks at all. I have not seen more than four birds together any time during this Spring.

Yellow-breasted Chat.--Summer sojourner. On May 19 first saw one male, which I shot; a second was seen on the 21st, and was twice heard later in the season.

Yellow-headed Black-bird.--Not seen, but may occur locally, as I know it is a regular breeder at Green Lake, fifty miles north of here. At that lake, twelve years ago, [1871] I found only one pair, breeding at the south end, the next year three pairs, and two years later they were quite numerous there, but nowhere else. The next year one pair moved to the north end of the lake, and this Summer on revisiting the place, I found them all around that lake and several neighboring ones.

# # # #

RETIREMENT PROFILES

EMMA L. FISK, Botanist

Professor EMMA L. FISK, who has taught courses in botany every semester except one since coming to the University of Wisconsin in 1920, will retire from teaching in June. A specialist in plant morphology, she will continue to conduct research on effects of growth regulators on anatomical development.

A native of Newark, N.Y., Miss Fisk went to Wellesley College to study mathematics but switched her major to botany. She was elected to Phi Beta Kappa and received a B.A. in botany and mathematics in 1914. She remained at Wellesley for two years as a graduate assistant and then became an instructor at Sweet Briar College in Virginia. Two years later she returned to Wellesley as an instructor, and in 1920 accepted an offered teaching assistantship at the University of Wisconsin to work under the noted cytologist, Charles E. Allen. A year later she received her M.A. and joined the Wisconsin Academy. Awarded the Ph.D. in 1925, she became assistant professor of botany the next year and in 1937 was raised to associate professor. For one semester in 1939-40 she was visiting professor at Wellesley.

A notable indication of Prof. Fisk's wide influence is the fact that more than 50 teachers and administrators now at Wisconsin have been her pupils at one time or another during their student careers. For many years she taught large courses in elementary botany as well as a wide variety of other courses from time to time. Throughout all these years she has taught the University's courses in plant anatomy and morphology. Miss Fisk has been active in many scientific societies and academic groups and committees. In 1961 she was elected a Life Member of the Academy in recognition of her 40 years of affiliation with the organization. -- Adapted from a UW Profile by Gene Rodgers.

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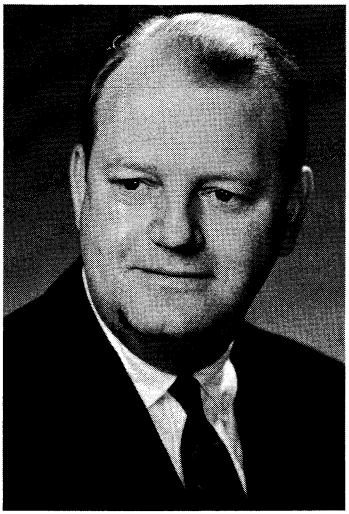
ELLA MAY MARTIN, Biologist

Professor ELLA MAY MARTIN, for 16 years professor of biology at Wisconsin State College-Platteville, retired in June, 1962. She received her B.A. degree from Lawrence College in 1915 and master's and doctor's degrees from the University of Wisconsin in 1920 and 1924 respectively. In January 1961 she became a Life Member of the Academy, and a biographical sketch appeared in the Fall 1961 issue of the Wisconsin Academy Review, p. 160.

# # # #

THE STORY OF WINGSPREAD — (MILWAUKEE JOURNAL EDITORIAL)



INTRODUCING LESLIE PAFFRATH

LESLIE PAFFRATH, President of The Johnson Foundation, was born in New York City and educated at Mercersburg Academy (Pennsylvania) and Union College. He pursued graduate work at the Institute of World Affairs, Geneva, Switzerland, and at Columbia University. The University of Cincinnati has conferred an honorary degree of Doctor of Humane Letters upon him.

His professional background includes affiliation with the Institute of Public Administration, New York City, and the state government of New Hampshire. Prior to becoming the first President of The Johnson Foundation in 1959, he was on the staff of the Carnegie Endowment. Elected secretary of that Foundation in 1950, he also was principal staff officer with the trustee building committee, whose task was planning and constructing the Carnegie Endowment International Center devoted to the use of educational and non-profit organizations. He is a member of the Council of Foreign Relations, New York City, and of the International Affairs Committee, National Council of Churches, as well as several national political and social science associations. In 1958-59 he was chairman of the Steering Committee of the New York City Foundations Group. Mr. Paffrath is a sustaining member of the Wisconsin Academy.

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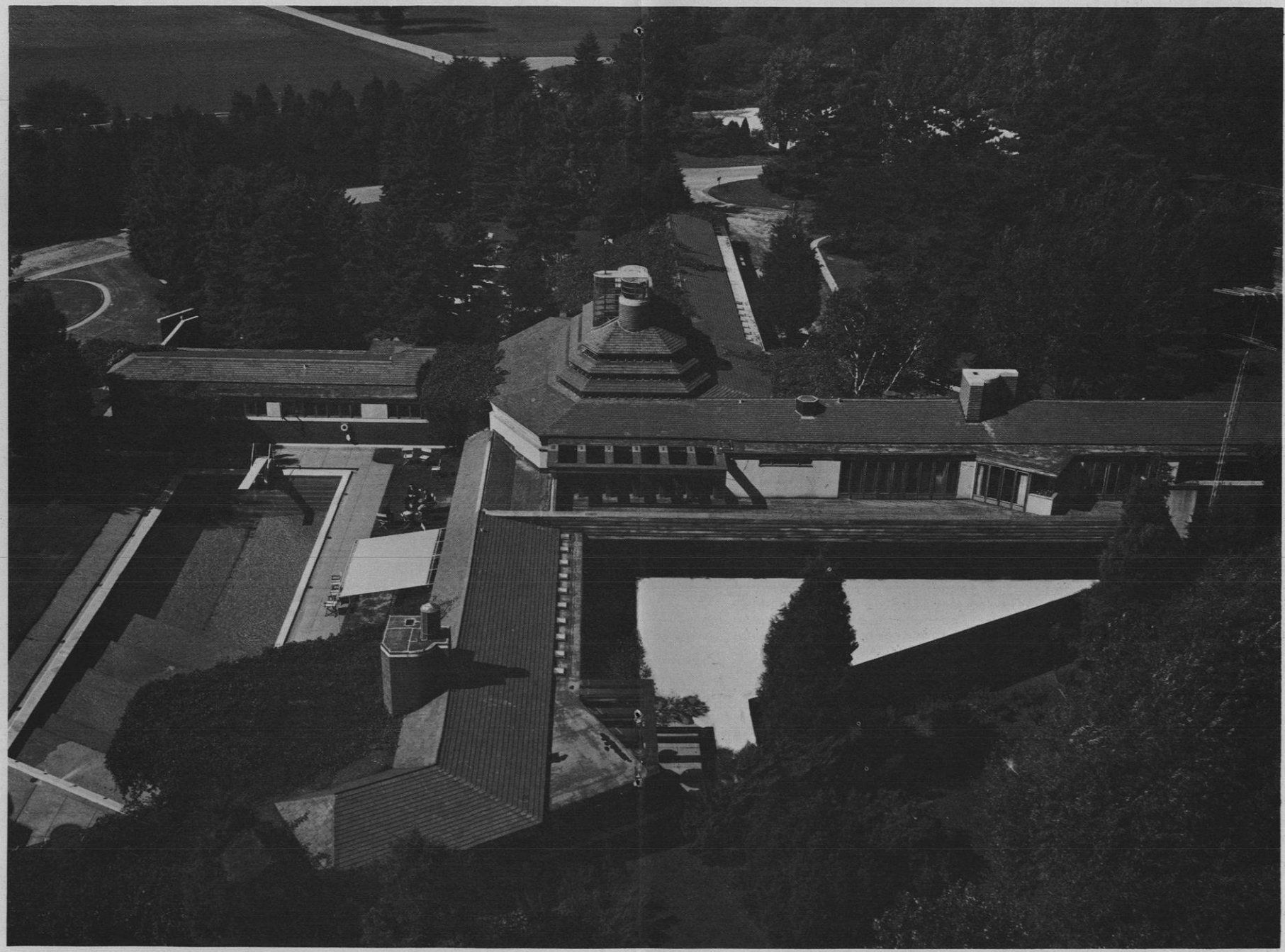
EDITORIAL COMMENT - The Milwaukee Journal, March 3, 1963

Wisconsin and mid-America have had a stroke of good fortune as yet only dimly realized. The five year old Johnson Foundation and its Racine conference center, Wingspread, are adding new dimensions in the midwest to both formal and informal education, to the arts, and to leadership and understanding in a wide range of human activities.

The foundation is supported by S. C. Johnson & Son, Inc., based at Racine, and the chairman of its board, H. F. Johnson. Wingspread, called the last and finest of the "prairie houses" designed by Frank Lloyd Wright, was the Johnson home. It was turned over to the foundation for a conference center in 1960. Set in the heart of 12 acres of landscaped grounds, partly wooded, it is ideally suited for an intellectual and cultural retreat from everyday institutional or business hubbub.

The foundation set out to be "an instrument for creative programs which serve man." Creative programs of special value to this state and region have manifestly had first call on its attention, facilities and funds. The institutions and organizations drawn upon most heavily for conferences and other foundation pro-

JOHNSON FOUNDATION'S RACINE CONFERENCE CENTER — WINGSPREAD



grams have been based in Racine, Milwaukee, Madison, Chicago or elsewhere in mid-America.

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There is a conscious effort to nurture and conserve resources that tend to be attracted to the Atlantic and Pacific seaboards. It is believed that Wingspread conferences, to which outstanding authorities in various fields are brought from all over the world, will gain greater recognition for our midwestern people, our institutions and our potentials.

Foundation activities and benefactions have covered a wide range. Areas of major interest are listed as: (1) International understanding, (2) educational excellence, (3) intellectual and cultural growth, (4) improvement of human environment and (5) scholarship support.

Wingspread conferences have dealt with subjects as esoteric as the medieval renaissance and such everyday matters as the multiplicity of local health fund campaigns. Various high level phases of international relations have been the themes at many gatherings, and the foundation has worked closely with the institute for world affairs education at the University of Wisconsin-Milwaukee. But Wingspread has also been host to a small party of farm leaders from India.

* * * *

Art exhibits and concerts have been held there, reflecting foundation interest in both the creative and performing arts. At the same time, much attention has been given to workaday matters such as productivity in industry, economic growth in the midwest and ethics in business.

If established leaders predominate at the small Wingspread gatherings, youth gets its day. One of the liveliest conferences was for a select group of Wisconsin and Minnesota high school students to consider national goals.

Growing concern has been shown for the schooling of the less fortunate, abroad and at home. The foundation has just provided a school for 400 pupils in a backward section of Brazil where 10,000 children are unschooled. The foundation is also financing a small experiment in Racine to see if some special, additional preschool training will help children from culturally deprived homes.

* * * *

Generally, the foundation is most interested in projects and ideas that show vision and a pioneering effort to meet common human needs. "It isn't how many Wingspread meetings we hold or how much we give away that counts, but how well we select from the flood of requests we get," the president of the foundation, Leslie Paffrath, observes.

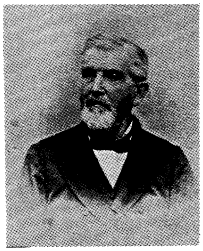
Paffrath and his four professional aides, along with the trustees, are feeling their way. They are trying to discover from experience the most useful roles for the Johnson Foundation and Wingspread. Yet in the very short time that they have been on the scene they have shown a real sense of direction.

They have earned gratitude and respect here at home and in faraway places. Their activities seem certain to be of increasing influence and benefit. # # # #

PRESIDENTS OF THE WISCONSIN ACADEMY

By Josephine L. Harper, Manuscripts Librarian
State Historical Society

Academy member JOSEPHINE L. HARPER is Manuscripts Librarian in the Division of Archives and Manuscripts in the State Historical Society. She obtained her M.A. and Ph.D. degrees at the University of Illinois and a certificate in archival preservation from the American University.



A. L. Chapin

Editor's Note: In anticipation of the Wisconsin Academy's Centennial in 1970 it was thought desirable to bring up-to-date certain basic information such as lists of past officers and locations of meetings. Academy member JOSEPHINE L. HARPER has prepared the first of this series and we hope to follow with lists of vice-presidents, secretaries and treasurers and librarians in future issues, if Miss Harper's energies prevail. In this present listing the professional position held by the incumbent at the time he was President of the Wisconsin Academy is indicated also.--WES

1870-75	John W. Hoyt	M.D., Madison
1876-78	P. R. Hoy	M.D., Racine
1879-81	A. L. Chapin	President, Beloit College
1882-84	Ronald D. Irving	University of Wisconsin
1885-87	Thomas C. Chamberlin	Beloit College and U. S. Geological Survey
1888-89	William F. Allen (died December 9, 1889 in office)	University of Wisconsin
1889-90	Edward A. Birge (elected to fill unexpired term of W. F. Allen)	University of Wisconsin
1891-93	George W. Peckham	Supt. of Schools, Milwaukee
1894-96	Charles R. Van Hise	University of Wisconsin
1897-99	C. Dwight Marsh	Ripon College
1900-02	Charles S. Schlichter	University of Wisconsin
1903-05	John J. Davis	M. D., Racine
1906-09	Louis Kahlenberg	University of Wisconsin
1910-12	Samuel Plantz	President, Lawrence College
1913-15	Dana C. Munro	University of Wisconsin
1916-18	Henry L. Ward	Director, Milw. Public Museum
1919-21	Edward A. Birge	President, Univ. of Wisconsin
1922-24	Melvin A. Brannon	President, Beloit College
1925-27	L. J. Cole	University of Wisconsin
1928-30	Samuel A. Barrett	Director, Milw. Public Museum
1931-33	Charles E. Allen	University of Wisconsin
1934-36	Rufus M. Bagg	Lawrence College
1937-39	Chancey Juday	University of Wisconsin
1940-42	Paul W. Boutwell	Beloit College
1942-43	A. W. Schorger	Pres., Burgess Cellulose Co., Madison
1943-44	" "	
1944-45	H. A. Schuette	University of Wisconsin
1945-46	" "	
1946-47	L. E. Noland	University of Wisconsin
1947-48	" "	
1948-49	Otto L. Kowalke	University of Wisconsin
1949-50	Robert K. Richardson	Beloit College
1950-51	W. C. McKern	Milwaukee Public Museum
1951-52	E. L. Bolender	Wis.State College, Superior
1952-53	Katherine G. Nelson	Milwaukee-Downer College
1953-54	Charles L. Fluke	University of Wisconsin
1954-55	Ralph N. Buckstaff	The Buckstaff Co., Oshkosh

1955-56	Joseph G. Baier	Univ. of Wisconsin-Milwaukee
1956-57	Stephen F. Darling	Lawrence College
1957-58	Raymond H. Reis, S.J.	Marquette University
1958-59	Robert J. Dicke	University of Wisconsin
1959-60	Henry Meyer	Wis.State College, Whitewater
1960-61	Merritt Y. Hughes	University of Wisconsin
1961-62	J. Carl Welty	Beloit College
1962-63	J. Martin Klotsche	Provost, UW-Milwaukee
1963-64	Aaron J. Ihde	University of Wisconsin

P. R. HOY, M. D.
PRESIDENT:
WISCONSIN ACADEMY of SCIENCE, ARTS and LETTERS,
RACINE.

Hon. T. C. CHAMBERLIN,
STATE GEOLOGIST.
BELOIT.

EDITOR'S NOTE: Above are portraits of the second and fifth presidents of the Wisconsin Academy as published in the 1878 "Historical Atlas of Wisconsin." Dr. Hoy was one of the pioneer naturalists of Wisconsin and Professor Chamberlin an eminent geologist. Both of these men, as well as President Chapin of Beloit College (third Wisconsin Academy president, figured on preceding page) were founders and charter members when the organization was created in 1870.

# # # #

A NOTE ON THE COVER

CLARICE GEORGE LOGAN did the cover drawing for this issue of the Review. She is a graduate of the Art Department of the Milwaukee State Teachers College (UW-M), was a painter on the Public Works of Art Project, and a designer on the Milwaukee Handicrafts project. She has taught in evening adult classes and in public schools, and has exhibited in local and national shows. Currently she is on the art staff of WHA-TV. -- Frederick M. Logan

FUTURE ASPECTS OF AGRICULTURE IN WISCONSIN: AN AGROMETEOROLOGICAL APPROACH

By J. Y. Wang
Depts. of Meteorology and Soils, UW

A native of Foochow, China, JEN YU WANG holds a B.S. degree from Fukien Christian University and both M.S. and Ph.D. degrees from the University of Wisconsin. For three years after coming to the United States, he was a research assistant at the University of Chicago, and later became research associate at the University of Wisconsin, where he is now assistant professor in the department of meteorology. He holds memberships in several professional societies and is on the Staff for Agricultural Meteorology for the National Academy of Science. A number of research projects in agricultural meteorology have been conducted under his supervision and he has published extensively in that field. The paper appearing here was presented at the annual meeting of the Wisconsin Academy at La Crosse on May 5, 1962.

I. Introduction

We have weather. We have had weather. We will have weather. We all know how important weather is to agricultural crops. The weather of the future will have an equally important effect on crops. The question then is what will the weather of the future, say the next 100 years, be like?

Paleoclimatologists have analyzed weather in periods of millions of years. The annual mean temperature over the last 500 billion years has ranged from 28° to 68° F. This change has been explained through variation in solar activity, reduction of insolation by volcanic ash, changing world distribution of land and water, and even a shifting of the earth's axis. It is entirely possible that all the above may have acted together to cause paleoclimatic changes. So far, explanations have not advanced beyond the theory stage. Predictions for the next 100 years on this basis are extremely hazardous.

Other workers believe in the periodicity of climatic cycles by studying tree-rings, sunspots, silt-deposits, and long-term weather statistics. On the basis of their findings, they predict that certain regions are becoming periodically warmer or colder, wetter or dryer. Most climatic forecasts, cyclical or otherwise, are based on historical climatic records. Unfortunately, these data are not too accurate. Weather data in Wisconsin have been collected since 1822. The stations that collect weather data have changed considerably in the last 140 years. For example, in one locale a large tree grew and completely shielded the raingauge. In Janesville, the thermometer is located next to a large electric transformer. In Wausau, the raingauge was located between two buildings.

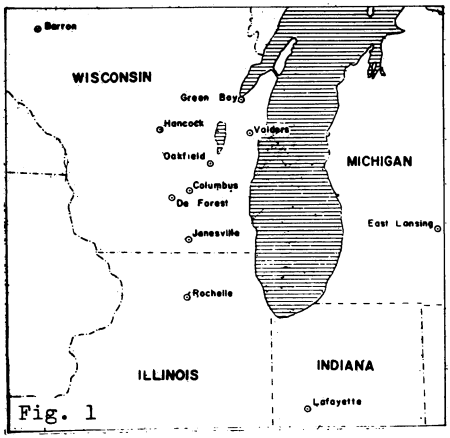


Fig. 1

Distribution map of Agrometeorological Pilot Stations, 1961

The sky was barely visible. Can the gauge possibly be accurate? Cities have enveloped weather stations. A warming trend could easily be deduced with all the heat transferred by the buildings. Further inaccuracies are introduced when a station is moved. This destroys the historical significance of the past data. Most stations have been moved several times; one in Racine was moved six times.

But even if all these theories were accurate in predicting general weather, they would be of little use in predicting agriculture in Wisconsin for the next 100 years. An agricultural plant's response to weather is usually most critical in only a few weeks, or even a few hours of its life. This period is known as the "significant period" and it is crucial and immensely important in revealing the plant's future development.

Alfalfa, for instance, may be subject to a crucial weather stress during its very early period of growth in Wisconsin. Severe frosts after early bud expansion may cause injury or killing. In southern Wisconsin, alfalfa starts coming up during the thaw. At night the melted snow freezes over in a sheet and traps the CO_2 given off by the young plant. Oxygen is used up and the plant suffocates. This is a serious problem in winter and spring in many years. In 1936, 30% or 235,000 acres of alfalfa were destroyed in southern Wisconsin in this way. In northern Wisconsin there is very little loss due to ice sheets. The alfalfa is well-protected by snow coverage.

Evergreens often become dry in winter, though there is plenty of moisture in the ground. The roots cannot take up sufficient water in the freezing cold, and the solar radiation transpires much of the moisture from the plant. This is further aggravated by dry winds. The tree dies from physiological drought, because water loss from the plant exceeds its uptake. It is the low soil temperature and high solar intensity which affects the survival of evergreens over the winter, and not the actual presence of soil moisture.

Apple trees may become susceptible to insects and diseases by cracking of their bark. Cracks occur, particularly in the winter, when trees are on a southwest slope. The trunk expands first from the enormous heat of the afternoon sunshine and then contracts rapidly when the sun sets behind the hill. This sudden contraction causes the cracking of the bark and eventually the tree may become easy prey to insects and diseases. The cracking may also cause a cambium layer injury and the tree may die of desiccation. This type of damage, known as "southwest injury" is dominated by the microclimatic conditions on the southwest slope and not the long general trend of weather changes over a large geographical area.

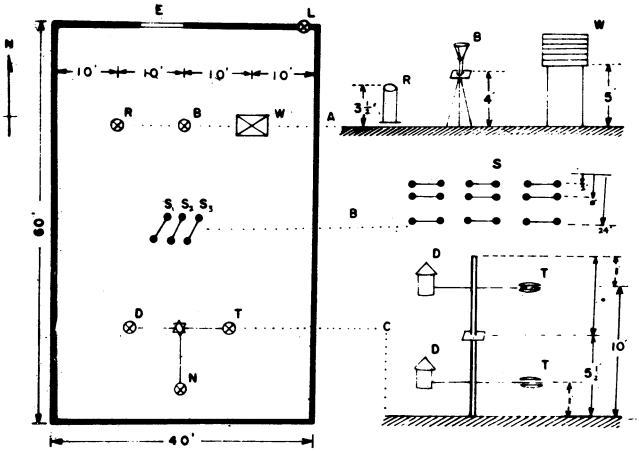
These are only a few illustrations, so you can see that long-term macroclimatic variations are not significant to agriculture in the next 100 years. The weather of the future will be much the same as the weather of today. What we need to find out is not general weather trends, but careful day-to-day occurrences of various weather and soil observations during critical periods of plant life. This microclimatic approach can be used to locate specific areas in Wisconsin where new crops and additional acreage of present crops can be planted.

We already know much of the weather and climate requirements of most plants. But we do not know all the weather and climatic conditions of our own state of Wisconsin. We do not know soil

Fig. 2, right

Fig. 4, below

PLAN FOR AGROMETEOROLOGICAL PILOT STATION

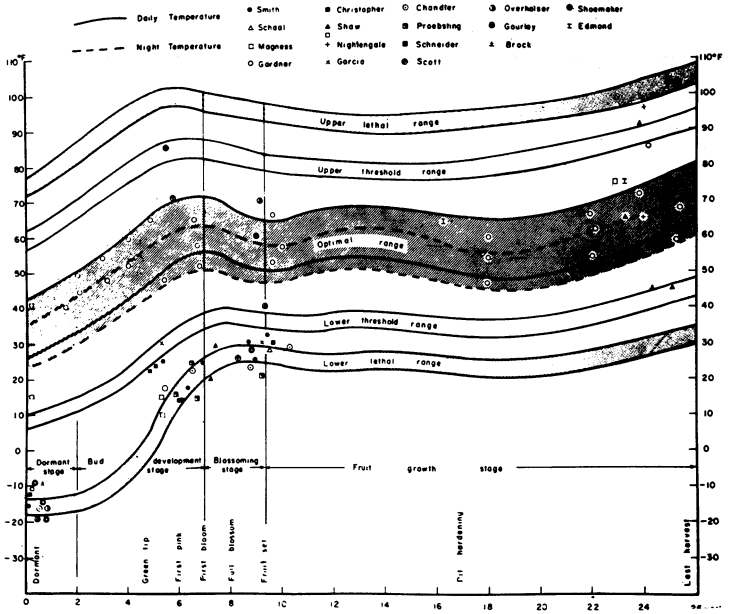


SYMBOLS

B — Bellani Atmometer
D — Foxboro Dewcel
E — Entrance
L — Black Light Trap
N — Net Radiometer
R — Rain Gauge
T — Air Thermistor
S — Soil Thermistor
W — Stevenson Shelter

N.B. - Two rustrak recorders and two max. and min. thermometers are in the weather shelter

Thermal Response of Peaches



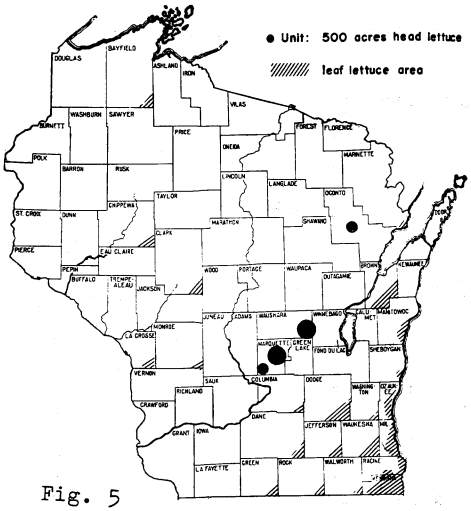


Fig. 5

MAJOR HEAD LETTUCE PRODUCING AREA IN WISC. 1961

(Total over 3600 acreage, approx.)

moisture, nor do we know our evaporation and transpiration. We do not have enough statistics on important parameters related to plant response, such as night temperature, interdiurnal temperature, crop-rainy days, and relative minimum rainfall. We know soil temperature in only six places. We know sunshine duration in but four locales. We have solar radiation intensity at only one location. The basic problem of knowing the future of agriculture in Wisconsin is one of knowing Wisconsin's weather and soil conditions in microclimatic terms.

Fortunately, the recording of these data were started in Wisconsin at an agrometeorological station in Oakfield in 1960. There are now 10 pilot stations collecting 13 items of weather and soil information. The function of these stations is to observe and record the climatic conditions as well as crop phenology. They are not for weather forecasting, but for crop forecasting. (See page 93.)

A brief description of the agrometeorological pilot station network is given in the following figures: Fig. 1 - Geographical distribution of pilot stations; Fig. 2 - Plan of pilot station; Fig. 3 - Pilot Station No. 2 at Janesville, Wisconsin.

Before discussing new commercial crop possibilities in Wisconsin, let us take a look at Wisconsin's general climate.

II. Wisconsin's General Climate

The general agricultural climate of Wisconsin is surprisingly diverse. The growing season duration ranges from 175 days around Milwaukee to only 90 days near Land o'Lakes in northcentral Wisconsin. The land along Lake Michigan maintains a steady 160 to 170 days for the growing season. The southcentral area and the Mississippi Valley have a margin of 10 to 20 days less. Northwest Wisconsin has about 120 growing days, while northeast Wisconsin has the fewest growing days, averaging 100.

During the planting season, a few degrees difference in temperature is very important. Again, a diverse range of temperatures is found. The Mississippi Valley is the warmest state-area in May with a normal daily average temperature ranging from 58° to 60° F. The Lake Michigan shore area ranges from 54° in Milwaukee, getting colder to the north with 48° at Washington Island. Central Wisconsin averages 54° to 56° F. The northeast stays around a 52° average, while the northwest ranges between 48° and 52° during May.

The total yearly rainfall of 31 inches is somewhat similar throughout the state, but the frequency differs significantly. The Mississippi Valley regions have less frequent, heavy rainfall

while the Lake Michigan coastal regions have more frequent, lighter rainfalls. Southcentral Wisconsin resembles the Lake Michigan coastal areas.

There are many other significant differences in the general composition of Wisconsin's climate. To obtain a glimpse of the future, however, we have to study the microclimate more intensively. Then, we can introduce new commercial crops in suitable climatic localities. We could also estimate the size of areas which could accommodate a certain crop that may or may not already be growing in Wisconsin.

III. Introduction of New Commercial Crops

With Wisconsin's diverse climate, there is a host of new commercial crops that could be grown. Some of these crops are already growing in home gardens. In discussing these new possibilities, only the phenological probability will be considered, and not the economic probability.

We have a large production of fruits in Wisconsin, mainly apples, cherries, and cranberries. But the possibilities are considerably broader than just these few. Let us consider peaches - Fig. 4, Thermal Reponse of Peaches. For peaches, winter temperatures much below 0° F are not safe, although well-hardened trees may withstand -12° F or slightly lower for short periods of time. A range of 25° to 45° is needed to break dormancy, with the lethal temperature 20 below. During the blossoming state, temperatures should range from 50° to 70° F for optimal development, with 30°F being the lethal temperature. After fruit-setting, the optimal range is 50° to 65° F, but not lower than 35° F, nor higher than 85° F.

In southern Wisconsin there are many suitable locales with such weather and the required sandy soil. Of course, some pre-

Fig. 2
Dual-engine Wind Machine Protecting Orange Orchards from Frost Damage in California and Georgia

ventive measures should be made for avoiding freezing damage in trees over winter and buds in the spring. In 1954 Michigan raised over two million bushels of peaches from 1,700,000 trees of bearing age. Wisconsin raised 600 bushels from 1050 trees. There is a possibility that we too might be able to grow a sizable acreage of peaches. The requirements for apricots, prunes, grapes, English walnuts, and some berries are somewhat similar to peaches, so we potentially could grow these fruits in commercial quantities.

Of course, there are limitations. We cannot grow oranges, grapefruit, lemons, limes, dates, and figs. These require a subtropical or tropical climate. They could not endure anywhere in the Wisconsin environment.

Wisconsin is a leading state in the nation in harvested acreage of vegetables for processing. The top five vegetables in order are: green peas, sweet corn, cucumbers, snap beans, and lima beans. Once again Wisconsin's diverse climate has promise of producing many more, both for processing, and for fresh market sale.

Head lettuce has been grown commercially in significant amounts in Wisconsin for only eight years, and now 3600 acres are harvested. Lettuce requires muck soil that can hold a lot of water. A day temperature of 85° F or a high night temperature causes pre-bolting that ruins the head. A sudden rise in temperature or a high humidity may cause tipburn, particularly when the difference between the maximum soil temperature and the maximum air temperature is large. A temperature of 60° to 75° F and 14 hours of sunlight are required for best results. Many areas like this exist in Wisconsin, and it is estimated that three times the present 3600 acres could be planted. Figure 5 shows the lettuce production in Wisconsin and Figure 6 that in the United States.

Numerous other vegetables could be grown for both fresh market and processing use: asparagus, cole crops, celery, peppers, and rhubarb to mention only a few. Again, there are limitations. Wisconsin lacks the proper climate for commercial production of artichoke, honeydew melons, and certain other vegetables. But there is still a tremendous vegetable potential.

Wisconsin has had a varied history of grain production which indicates broad grain production capability. At present, oats and corn are the leading grains, but others once led. During the late 1800's, wheat was the leading grain harvested with over two million acres at times. Barley was also a leader in the past with over 800,000 acres at one time as compared to less than 100,000 acres lately. Rye and buckwheat were also once produced on a much larger scale than at present. With our past history of major wheat, barley, rye, and buckwheat production, we could grow much more than now if desired. There are new possibilities for Wisconsin. Hops, for example, are a distinct possibility for Wisconsin. All production is presently in the far Northwest and California, but Wisconsin could also raise this crop.

Hops thrive in a deep, mild soil. In its early growth stage frosts are of no consequence. Hops require a steadily increasing temperature, rising to a 50° to 60° average temperature in June and early July. Coarser varieties will do well in cooler climates. Hops need no rainfall in their early growth, but they do need large amounts during May and early June. A dry July and August is preferable. Due to a deep root system, severe cold winds do not affect this crop. Hops are grown in large quanti-

ties as far north as Albany, New York, and Chilliwack, British Columbia. There are many suitable localities for hops in Wisconsin, so we could grow notable commercial quantities.

Other crops could use increased acreage in Wisconsin. Soybeans, field peas, field beans, lentils, sorghums, and millets, to name a few, are some of these crops. However, there are some that cannot be grown here like cotton, peanuts, and tung nuts.

All the mentioned fruits, vegetables, and field crops are distinct possibilities in Wisconsin and some are even now being grown here domestically or experimentally. Commercial production will require large areas to be located in suitable climates. This location process will be the product of microclimatic studies. Matching crops with microclimatic conditions is the work of agrometeorologists. As we have said, much more intensive work remains to be done before this process will be workable.

IV. Conclusions

In crop environment studies, there are two approaches. Breeders change the crop to fit the environment by developing new varieties like cold-resistant and drought-resistant hybrids. Agrometeorologists control the microenvironment to fit the crop so that it will not be hindered by elements like frost and wind.

Breeders have made vital contributions to this state, such a as the 80-day Wisconsin corn hybrids, W900 and W909. But their new varieties will reduce the yield, they cannot resist all kinds of weather hazards, and they sometimes take 20 years to develop.

Agrometeorologists are successful in modifying and controlling local weather. But they can control only a few environmental variables in a limited area. For example, cranberry bogs in Wisconsin are flooded to prevent summer frost injury, and citrus groves in Florida utilize dual-engined wind machines to prevent frost injury. The latter machine is pictured in Figure 7. It is essentially a powered propeller on a revolving and mounted sta-

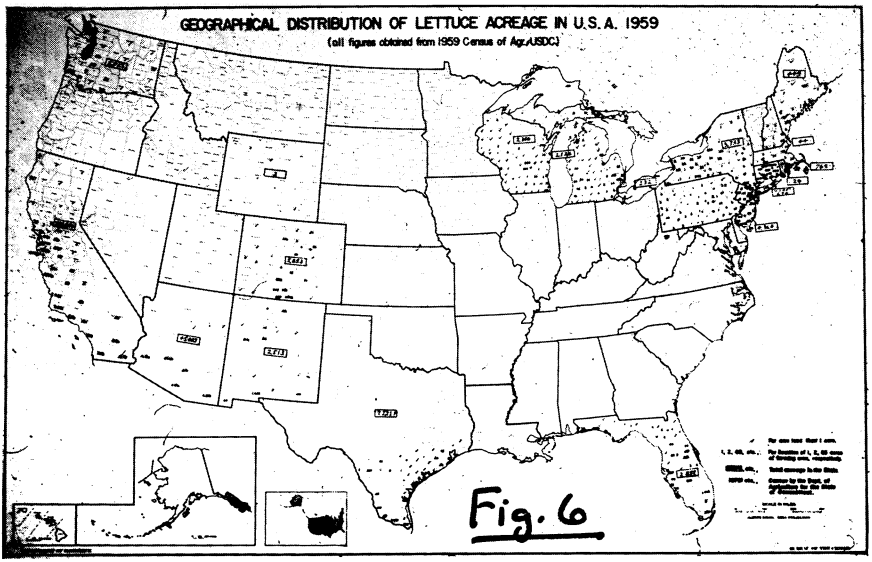


Fig. 6

tion that is 32 feet high. As it revolves, it blasts gusts of the higher, warmer air into the trees thus preventing frost. In California, peppers are protected from cold injury by constructing a 60° paper shield over the plant as shown in Fig. 8. These paper shields have a two-fold purpose. During the day, they concentrate solar radiation, and at night they act as a radiation baffle, shielding the plant from the cold sky which would cause a radiation heat loss and possible freezing injury.

But neither breeders, nor agrometeorologists are able to solve all the crop problems of a statewide area. The University of Wisconsin's new biotron research will prove helpful in this area. This research facility utilizes an environment in which rain, temperature, evening sunset, and other weather factors can be produced and controlled. Utilizing this, we will learn more precisely the responses of plants to environment. With microclimatic data and biotron research, we will be better able to select areas in Wisconsin with the ideal climate for a given crop.

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Acknowledgments - During the preparation of this paper, the author is indebted to Professors D. C. Smith, R. H. Andrews, of Agronomy Department, M. N. Dana, T. W. Tibbitts, of Horticulture Department, University of Wisconsin, and Mr. M. W. Burley, Wisconsin State Climatologist, USWB. To Mr. J. C. Holly, University of Wisconsin, the author wishes to thank for his assistance in editing and collecting of the relevant material for this paper.

References: Wang, J. Y. and V. E. Suomi, The phyto-climate of Wisconsin. 1) The growing season. 2) Temperature: Normals and hazards. 3) Moisture: Normals and hazards. Part A. Rainfall (Wang sole author). U.W. Agr. Expt. Sta. Research Reports No. 1 (1957), 2 (1958), and 7-A (1961) respectively. Also, Wang, J. Y. and G. L. Barger. Bibliography of agricultural meteorology. Univ. of Wis. Press, Madison (1962); and Wang, J. Y., Agricultural Meteorology, Pacemaker Press, Madison, 1962.

Figure 8. Paper-shield protection for growing off-season peppers in the Coachella Valley, California.

# # #

THE BOOKSHELF

THE ART OF BOOK REVIEW
By Ralph A. McCanse

The University of Wisconsin
Extension Division, Madison 6
1963 23 pp. $2.00; soft cover $1

To venture to review a book on The Art of the Book Review is like giving a music lesson to Johann Sebastian Bach. In the words of the author, "A glib or patronizing reviewer condemns himself outright. He should not, in any event, convey any effect of his own narrowness or superficiality." These are grim words of caution! But the reviewer is encouraged by the three essential objectives of his task:

"1. Contents. What is said in the book.
2. Style. How it is said.
3. Assessment. How true and significant the book is."

It will soon be evident to the reader whether or not this reviewer has learned his lesson.

The Art of the Book Review falls into two distinct parts. The first part is the author's introduction which presents his theory of the evaluation of any work of art and his application of this theory to the review of books. The second part is a detailed outline of all the elements which might conceivably be included in the entire range of book reviewing though only a few would be used in any one review. This section, including such topics as Bibliographical data, Classification, The Author and His Purpose, The Subject, Contents, etc., is the heart of the work, presenting detailed analyses of all pertinent matters under each head. This part closes with a brief section on the planning and writing of a review, concluding with this appraisal: "A reviewer may ... feel that he may nonetheless succeed in his task if he continues to leave in the minds of his readers some well contrived, well justified final assessment."

Because of the two parts the style of this brief book is divided. The introduction is literary and personal, reflecting the mind of a reader who has digested many books. The second part is conveyed in sound expository prose, the total impression being that of an essay followed by a working outline. To these two parts is appended a brief bibliography. Special praise should be accorded the design of the booklet and the distinguished art work by Robert Nelson and Harry Wood.

The experienced reviewer will enjoy this work as a handbook of his trade, but he is more likely to savor the introduction and its theory than the outline and its facts. The student and beginner, however, can profit from the detailed analysis as he practices reviewing and in time may grow into the theory of evaluations. The one element lacking, especially for the beginner, is the exact form of the bibliographical entry expected at the opening of a review. --- Robert C. Pooley, Univ. of Wisconsin

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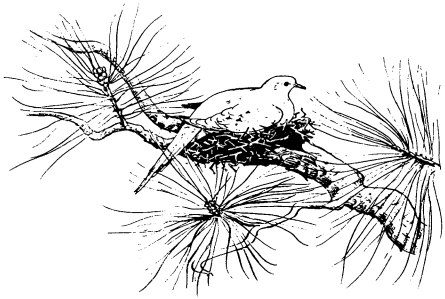
THE MOURNING DOVE IN ILLINOIS
By Harold C. Hanson and Charles W. Kossack

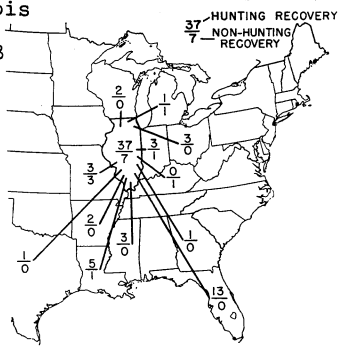
Southern Illinois University Press
Carbondale, Illinois
Ill. Cons. Dept. Tech. Bull. 2
(State Office Bldg.,Springfield)
Feb. 1963 133 pp. ill. and bibliog



Academy member CHARLES W. KOSSACK of Barrington,Illinois has contributed to a most interesting study of an important bird in this publication. The report is even more meaningful to him because of the colored frontispiece (by E. R. Kalmbach) contributed by him in memory of his wife, the late Margaret S. Kossack.

There are numerous findings in this report which have significance for Wisconsin biologists and conservationists. Among these are the facts that recoveries of banded nestlings indicate that doves return to the general area of their birthplace; that doves in the northern half of Illinois averaged only two nesting attempts per season with an average production of 2.38 young produced by the pairs under observation; and that losses from hunting (in Illinois) do not currently appear to be a serious factor controlling dove populations.

Figure 17 (adjacent) shows that some Wisconsin banded doves were recovered in Illinois by hunters. The figure of a nesting dove (above) is by Will Hon from the booklet "Mourning Dove Populations in North Carolina." --- W. E. Scott



- - - - *17. Number and kinds of recoveries in Illinois of mourning doves banded in other states, 1920–58.*

"WISCONSIN'S POPULATION" is the title of a new 38-page (15"x15¾") publication of the Dept. of Resource Development. The first of several of similar shape which will contain background data secured for preparation of the State Comprehensive Plan, the 2,000 copies printed will have restricted distribution to libraries, public agencies, etc. Future reports will be on such subjects as land use, recreation, transportation and economic development.... to the years 1980 and 2000. Wisconsin Academy member PHILIP SUNDAL was in charge of preparing the report (see back cover for 1960 population map from this publication).

JUNIOR ACADEMY NEWS

JUNIOR ACADEMY REPORT

By Jack Arndt, Chairman
Junior Academy Committee

The 19th season of Junior Academy activity in Wisconsin demonstrates the high quality of science-talented youth which will be available to help diminish the predicted shortage of scientific manpower of the future. Nearly 300 students participated in seven Senior High School Division district meetings and three Junior High School Division regional meetings held between March 30 and May 18, 1963. Winners received subscriptions to scientific periodicals, and all meeting participants received certificates of merit. A more detailed report of all Junior Academy activities will appear in the 1962-63 Annual Review of the WJAS. Publication date is expected to be about October 1.

ROBERT R. SINGERS, Milwaukee Custer, and JOHN D. WASSERSTRASS, Monroe Senior High, were rated as winners at the 18th Statewide Meeting held at UW-M on May 4, 1963. They were awarded $100.00 Steenbock-Academy Scholarships for their presentations entitled "Hyperbolic Geometry: Solid and Conic Sections" and "Indimetry: Inter-Dimensional-Measure," respectively.

Other district delegates to the Statewide Meeting included: CRAIG L. BEECHER, Sparta Senior; THOMAS G. DERBER, Appleton Senior; EDWARD F. ELLINGSON, Salem Central; MARGARET M. GRINVALSKY, Stevens Point Maria; BARBARA J. HAUCK, Milwaukee Messmer; RONALD H. HORN, Milwaukee Nicolet; CHARLES V. JOHNSON, Lake Geneva Badger; PHYLLIS A. KING, Marshfield Columbus; WAYNE R. KIRKHAM, Rice Lake Senior; RONALD D. KRIPPNER, Eau Claire Regis; DENNIS L. MATTHIES, Wauwatosa West; JAMES F. MAYR, Sheboygan South; MICHAEL D. McNAMARA, LaCrosse Aquinas; DAVID P. SHERIFF, Racine Lutheran; SHEILA A. TAFT, Richland Center; CHARLES E. TAYLOR, Portage Senior; DALE F. VASLOW, La Crosse Central; HAROLD R. WENTZEL, Kimberly; THOMAS O. WILDES, Rice Lake Senior; and ROBERT J. ZYGARLICKI, Marshfield Columbus.

Junior High School Regional Meeting Winners

Among the "A" winners were: JACKIE BROVOLD, JULIE LINDLEY, JOHN PASCH, and JOHN TERRILL, Green Bay Franklin; DAVID BOYCE and MIKE FONDER, Green Bay St. Jude; WAYNE WEBER, Green Bay St.Philip; PAT ARNDT, JOHN LOVEN, and KAREN OLLAR, Racine Jerstad; SUSAN BUCHHOLZ, Merrill Junior; PAT CHROUSER and BILL JENSEN, Wausau Muir; and KATHERINE KONWINSKI, Wausau Mann.

"B" winners included: CHRISMARY DURMICK and CAROL RAABE, Stevens Point Maria; DONALD RADDATZ, Wausau Muir; PHILIP SCHAADT, Tomahawk Washington; GARY WOODWARD, Merrill Junior, ANNE WOLFE, Green Bay Franklin; BARBARA FOELLER, Green Bay St. Francis; MICHAEL ANDERSON, Green Bay S.S. Peter and Paul; MICHAEL SANTELL, Manitowoc Wilson; WESLEY KRAFT, Kimberly Holy Name; CINDY FEULING and LINDA THIELKE, Madison Schenk; PAUL SPRECHER, Cottage Grove; and JOHN SURAK, Racine Lutheran.

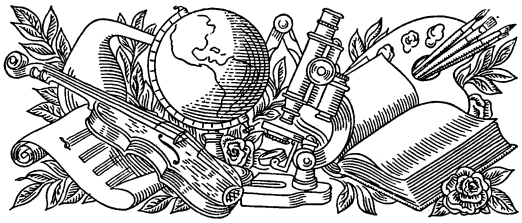
Honorable mentions were awarded to: DALE FARWELL, JOANN MOE and DAVID REPPEN, Cottage Grove; and ERIC ROOD, Racine Lutheran.

# # # #

ACADEMY MEMBERS RECEIVE AMERICAN MOTORS CONSERVATION AWARDS

Award winners are shown at the luncheon during which awards were presented by Governor John Reynolds. Left to right, Oscar Laper, Rock Springs; Ed Zern, director of American Motors conservation awards program; Ruth L. Hine, Madison; Governor Reynolds; Herbert VanderBloemen, Manitowoc.

Two Academy members were among 20 conservationists to receive awards from the American Motors Corporation recently. Both are professionals employed by the Wisconsin Conservation Department and each received a plaque and check for $500. RUTH L. HINE is a publications supervisor in the Research and Planning Division. She came to the UW in 1946 where she obtained an M.A. degree the next year, and a Ph.D. in zoology in 1952. Her work is primarily in the writing and editing of research reports, both technical and popular, since 1957. In 1962 she received the Gordon MacQuarrie award for conservation journalism, recognizing her editorship of the Department's bulletin, "Wildlife, People and the Land." HERBERT VANDERBLOEMEN, conservation warden at Manitowoc, was recognized for his years of educational work in the county in all phases of conservation. He was instrumental in establishing Conservation Education, Inc. and serves as president. Workshops for teachers have been conducted for 10 years and college credit is now given to those wishing it. Thousands of dollars for conservation purposes have been collected as well. A public access to lakes program in the county was spearheaded by him and he assists in many IWLA projects--in 1956 signing up the most new members in the country. OSCAR LAPER of Rock Springs was winner of the third award in Wisconsin, in a non-professional category. He has participated for years in soil and water conservation work.



STATE AND ACADEMY NEWS

THE 93RD ANNUAL MEETING, MAY 3-5, 1963

By Ted J. McLaughlin
Secretary

Editor's Note: This is a brief summary of the retiring Secretary's detailed official minutes for the joint meeting with the Wisconsin Junior Academy of Science held at the University of Wisconsin-Milwaukee, May 3-5, 1963. It was a memorable meeting in many ways with total attendance over 200 and about 100 at the papers sessions and business meeting. The "field trip" on Sunday morning led by ELMER F. AHLMAN and UW-M Professors DONN HAGLUND, J. KENNY and R. STOVEKEN proved very interesting and instructive to a bus-load of members. As it was impossible to secure photos of all new officers in time, several will be published in the next issue. --- W.E.S.

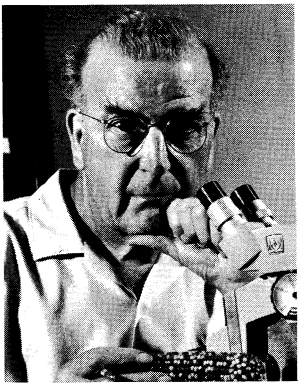
Pres. and Mrs. IHDE

Council Meeting

Sixteen Council members were present (Mrs. NELSON and Messrs. ARNDT, BAIER, BEHLING, BERQUIST, DARLING, DICKE, IHDE, KLOTSCHE, McLAUGHLIN, MEYER, SCHUETTE, SCOTT, SHENEFELT, THRONE and WELTY) as well as EUGENE M. ROARK (Secretary-elect, W.C.D., Madison), ADOLPH A. SUPPAN (Chm. Local Committee on Arrangements) and F. CHANDLER YOUNG (Chm. Long-Range Financial Planning Committee). Besides approval of the minutes of their February 9, 1963 meeting, the following action was taken:

1) Accepted a budget similar to the previous year totaling $8,700 broken down as follows: TRANSACTIONS, $4,000; Academy Review, $2,000; Operations, $2,000 and Junior Academy of Science, $700. Treasurer BEHLING distributed his report showing a sound financial condition and he also reported the following gifts for Junior Academy activities: ALLEN ABRAMS (Wausau) $25; Mrs. JACQUE VALLIER (Milwaukee) $10 and HARRY STEENBOCK (Madison) $1,000. Several additional gifts received since this time will be listed next issue.

2) Heard a report from the Long-Range Financial Planning Committee by Chairman F. CHANDLER YOUNG recommending increased emphasis on institutional memberships as well as a joint meeting with the Long-Range Program Planning Committee.



Prof. R. A. BRINK

3) TRANSACTIONS Editor BERQUIST received confirmation of the following appointments of advisory editorial board members: Biological Sciences, ROBERT J. DICKE (UW, Madison); Physical Sciences, STEPHEN F. DARLING (Lawrence, Appleton); Social Sciences, FRANK L. KLEMENT (Marquette, Milwaukee) and Humanities, GARETH W. DUNLEAVY (UW-Milwaukee).

4) Professor NELSON's Long-Range Program Committee report was accepted and it was agreed to accept invitations for the 1965 annual meeting at the University of Wisconsin in Madison and for 1967 at Wisconsin State College-Oshkosh. Next year (1964) the meeting will be held at the UW Marathon County Center in Wausau on May 1-3 with a general theme of "The Natural Resources of Northern Wisconsin."

5) Twenty-seven new members were accepted in addition to a new Life member (Mrs. M. S. BERGSENG to be cited in next issue) and two new library subscriptions. See inside back cover for new member list. The Secretary reported present membership totaling 1,130 in the following categories: Life, 44; Sustaining, 36; Active, 844; Library, 94; Student, 16; Honorary, 3; and Family, 94.

6) Reports were heard from the Chairman of the Program Committee (President-elect IHDE) and the Chairman of Local Arrangements (SUPPAN) as well as from the Editor of the Academy Review.

7) It was voted to elect HARRY STEENBOCK as a Patron Member because of his substantial financial support of the Wisconsin Academy and to name two $100 Junior Academy of Science annual awards "Steenbock-Academy Scholarships."

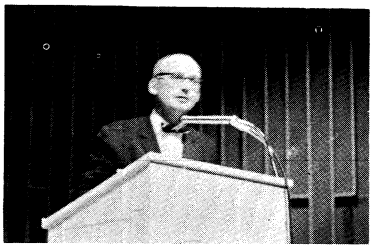
8) Chairman CARL WELTY reported for the Nominations Committee (including MERRITT Y. HUGHES and HENRY A. MEYER) the following new officers in addition to continuation of Treasurer BEHLING and Librarian SHENEFELT: President-elect, WALTER E. SCOTT; V-P (Sciences) ALLEN ABRAMS (Wausau); V-P (Arts) TED J. McLAUGHLIN (UW-M); V-P (Letters) HARRY HAYDEN CLARK (UW, Madison); Secretary, EUGENE M. ROARK (W.C.D., Madison).

9) With Mr. SCOTT absent, it was voted that the Council approve an award of $500 to Mr. and Mrs. WALTER E. SCOTT in appreciation of their editorial services on the Wisconsin Academy Review during the past nine years and that the award be announced at the annual banquet on May 4, 1963.

Annual Business Meeting

The following action was taken at the annual business meeting on May 4, 1963:

1) Four resolutions were adopted unanimously on appreciation to the UW-Milwaukee for hospitality shown at the annual meeting; appreciation to those responsible for the program arrangements; recognition of the outstanding work of JACK ARNDT as Chairman of the Junior Academy of Science and to honor the memory of members who died in the past year. All such deceased members have been recognized through "In Memoriam" statements recently published in the Academy Review except KENNETH D. BROWN (Milwaukee), WILLIAM H. SPOHN (Madison), O. W. STOREY (Santa Barbara, Calif.) and HENRY TIEDEMANN (New York City) on which details were not available.



Prof. ROBERT C. WOOD of MIT

2) Minutes of the 92nd annual business meeting were approved as also was the Treasurer's Report dated April 24, 1963 which was distributed to members in conjunction with a report of the Auditing Committee.

3) New officers were elected unanimously following a report of the Nominating Committee (as listed in the Council Meeting minutes above). There were no nominations from the floor.

4) An amendment to By-law VII, Section 7, was unanimously approved to read as follows: "A committee on the Junior Academy of Science shall supervise the activities of the Junior Academy of Science. The chairman of this committee shall be designated by the Council."

5) Academy Review Editor SCOTT reported that he and Mrs. Scott will complete their 10th year of service in this capacity with the Fall, 1963 issue and invited prospective candidates for the editorship to submit applications for consideration by the Council.

6) Provost KLOTSCHE installed Professor IHDE as new President of the Academy (see p. 79 of Spring 1963 Academy Review for summary statement about him.) Professor IHDE complimented Provost KLOTSCHE for the fine job he did as President of the Wisconsin Academy during the past year.

Miscellaneous Meeting Notes

At the annual banquet, award winners of the Steenbock Scholarships were announced (see p. 87 for names in Junior Academy report). Citations for outstanding work for many years to the Junior Academy were presented to Miss MARY DOHERTY of Kenosha and to ALFRED HORNIGOLD of Wisconsin Rapids (in absentia). Life Member WALTER A. FRAUTSCHI of the Democrat Printing Company (Madison) also was cited for generous assistance given to the Wisconsin Academy over the years. Professor R. A. BRINK of the UW Dept. of Genetics was presented an honorary Life membership (in absentia) for 40 years of participation in the Wisconsin Academy (see photo on page 90). Provost KLOTSCHE's excellent address on "European Universities: Urban and Urbane" will be published in the next TRANSACTIONS.

Officers attended a cosmopolitan-type reception at the home of Provost and Mrs. J. MARTIN KLOTSCHE on Saturday afternoon where Milwaukee

Pres.-elect SCOTT, Pres. IHDE, TRANSACTIONS Editor BERQUIST and Treasurer BEHLING on field trip

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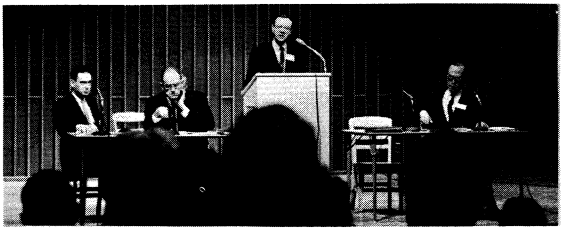

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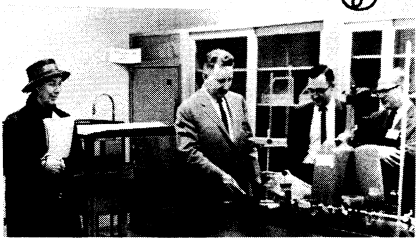

Sentinel photographer DONALD M. EMMERICH secured the fine picture of President and Mrs. IHDE used on p. 89 (from Sentinel of May 6, 1963). Pictures of other informal receptions and "coffee breaks" as well as meeting activities are shown opposite in addition to two on page 91. The keynote address by Professor ROBERT C. WOOD of the Massachusetts Institute of Technology was an ideal introduction for the symposium on "The Developing Metropolis" the following morning. It is hoped that this series of papers can be published and distributed to Wisconsin Academy members. Many other papers presented at this meeting will appear in the TRANSACTIONS and several are scheduled for publication in this and future issues of the Academy Review. The entire meeting went along smoothly as the result of good planning.

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THE 93RD ANNUAL MEETING, IN PICTURES, opposite page: 1 - Symposium on "The Developing Metropolis" (l.to r.) JOSEPH MANGIAMELE (UW-M), G. COLEMAN WOODBURY (UW, Madison), FRANK P. ZEIDLER (Dept. Resource Development) and JACK WILSON (Harnishfeger Corp.); 2- Group at a reception; 3 - Start of Sunday morning Milwaukee "field trip;" 4 - Viewing Menomonee Valley Industrial area from Mitchell Park; 5 - Car ferry unloading at Jones Island, Milwaukee Harbor; 6 - President IHDE and Retiring President KLOTSCHE at reception; 7 - The DAVID BEHLINGs inspecting mounted buffalo at Milwaukee Museum; 8 - Milwaukee Museum tour guide KENNETH MacARTHUR (center) explaining new laboratory equipment to Mrs. AGNES G. BODENSTEIN (Madison) and (l.to r.) newly-elected Academy Secretary EUGENE ROARK (Madison) and ALLAN A. WANGEMANN (Sheboygan). Note: Pictures of new Vice-presidents will be featured in next issue.

# # # #

ELECTRONICS INTERNATIONAL CORPORATION
3869 N. PORT WASHINGTON RD.
MILWAUKEE 12, WISCONSIN

EDITOR'S NOTE: A letter from JON E. OLSON of Electronics International Corporation (Milwaukee) advises that a brochure, price and other more specific information is available from them on a group of instruments used for field installation to accurately forecast crop production. (See Professor WANG's article in this issue on the subject - pages 77 to 84). They are the sole distributors of such agricultural forecasting instruments manufactured by the Martin Engineering Company. The instruments are marketed as the "AGROMETEOROLOGICAL RESEARCH STATION" reportedly at a price low enough to make it an inexpensive and invaluable tool for research and industry. Pilot plant results have verified its accuracy and recorded information is processed through University of Wisconsin computers without charge for this service. The project was inaugurated by UW Professor JEN YU WANG several years ago in cooperation with the Johnson Service Company of Milwaukee.

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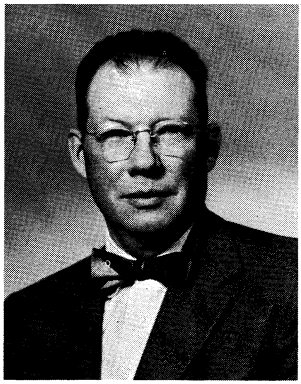
Due to lack of space and scarcity of reported news notes from colleges and universities at the busy close of classes season, these items have been omitted and will be featured in the Summer issue. Reporters are encouraged to submit items by August 1.



In Memoriam

Paul L. Errington

1902-1962

PAUL L. ERRINGTON was born at Bruce, S.Dak. on June 14, 1902 and died at Ames, Iowa on November 5, 1962. He obtained a B.A. degree at S. Dakota State College in 1930 and came to the University of Wisconsin to do graduate study under Prof. Aldo Leopold. A Ph.D. degree in zoology was granted in 1932 and he joined the Wisconsin Academy in that same year. His 30-year professional career was spent on the staff of Iowa State University, where he rose from Research Assistant Professor to Professor in 1948. In 1958-59 he was on leave to serve as visiting professor at Lund University, Sweden. Throughout most of his career he was a research professor without responsibility for formal courses. However, interested students could always accompany him on field trips to be instructed firsthand in conservation concepts and field observations. He shared his love of the out-of-doors and concern for its understanding, thus influencing many Ames students and adding to their appreciation of life.

Professor Errington had a world-wide reputation among animal ecologists and wildlife managers for his work on population dynamics of midwestern game species, particularly the bobwhite and muskrat. He believed in studying animals in their natural habitats and his carefully recorded mass of data was used to interpret laws of population dynamics with clarity and an unmatched understanding of their complex interactions. His skill in reading nature dramas from tracks and other sign developed early when he was a professional trapper near his birthplace in S. Dakota and around Red Lake, Minnesota.

A naturalist in the best modern usage of this title, he was featured in the December 1961 LIFE magazine as one of 10 outstanding living naturalists. He was also classed as one of the "four great pioneers of animal ecology" in the dedication of Prof. F.S. Bodenheimer's book, Animal Ecology Today. Besides his extensive correspondence with ecologists around the world, he served in several editorial capacities for the Ecological Society of America and for the Wildlife Society. He was twice selected by the Wildlife Society for outstanding publications in the field of wildlife ecology and management and in 1962 was awarded their Aldo Leopold Medal, an honor particularly appreciated because he obtained much of his graduate training under Professor Leopold.

Of Men and Marshes, his first popular book, was followed by Muskrats and marsh management and a monograph on Muskrat populations was to be published this year. Two anthologies for college English courses have selected his articles as examples of fine prose. One, "A question of values" is a delightful expression of Prof. Errington's philosophy of conservation, and has been often reprinted, including a translation into Swedish. He was an honorary member of the Wildlife Society, a fellow of the AAAS and the Iowa Academy of Science, and a member of many other professional societies. --- Adapted from memorial statement submitted to the Faculty of Iowa State University of Science and Technology.

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Stanley A. Tyler
1907-1963

STANLEY A. TYLER was born at Aztalan, Wisconsin in 1907 and died at Madison in January, 1963. After obtaining B.A. and M.A. degrees at the University of Wisconsin, he taught at N.Dakota State Agricultural College. In 1935 he was granted a Ph.D. degree at Wisconsin and joined the faculty as a geology instructor. He rose to full professor by 1946 and was chairman of the geology department from 1950 to 1955. His breadth of coverage was such that most geology majors took his courses during their UW careers. A leading authority in iron ore geology, he is best known for his discovery, with two colleagues, of microscopic fossils in southern Ontario after a 10-year search--the fossils approximately two billion years old--and the world's oldest coal deposit near Iron River, Michigan. From 1937 to 1953, Professor Tyler was a consulting geologist to the Jones & Laughlin Steel Corporation. He was a fellow of the Geological Society of America and a member of other professional societies, having joined the Wisconsin Academy in 1937. His published works are articles in science journals and chapters in books related to his field.

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Harold R. Wolfe
1905-1963

HAROLD R. WOLFE was born in New York City on December 25, 1905 and died in Madison on February 1, 1963. He studied at the University of Miami (Fla.) and Rutgers University before obtaining his Ph.D. at Wisconsin in 1932. He joined the faculty of the zoology department in 1931, became a full professor in 1948, and served as chairman for some years. In his field of animal serology, he was well known and highly respected. He was a leader in recent discoveries linking the thymus glands with disease defense mechanisms of animals. About 30 papers concerning his research were published. He was a member of the American Society of Zoologists, the American Society of Mammalogists, and several other professional organizations and had been an Academy member for 28 years.

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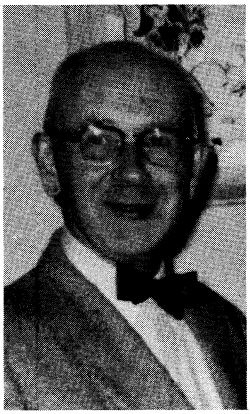
Mrs. James T. McCalmont
1896-1963

ROSE BARRICKLOW McCALMONT was born in Beaumont, Kansas in 1896 and died at Janesville, Wis. on Feb. 8, 1963. She received a B.A. degree from Tarkio College (Mo.) and did graduate work in Kansas and at Iowa State College prior to teaching for several years in Iowa high schools. Married to James T. McCalmont in 1924, they came to Wisconsin in 1930. She was a member of the National Pen Women's Assn. and had served as president and secretary to the state association. Her poems appeared in many publications. She was a member of the Janesville Little Theater and affiliated with the Wisconsin Academy in 1957.



W. Howard Dawe
1903-1963

W. HOWARD DAWE, a native of Milwaukee, was born in 1903 and died there on Feb. 12, 1963. He graduated from Wittenberg College in Springfield, Ohio and obtained a master's degree from the University of Virginia in 1932. An English instructor at the University of Wisconsin-Milwaukee, he made frequent trips to Europe, where he attended special courses at Oxford. He had received three awards from the Institute of International Education, New York, to study in England. From 1932 to 1938 he was an English instructor at the American University in Beirut, Lebanon, and also later taught at UW extension centers in Racine and Kenosha.

Hugo W. Rohde
1877-1963

HUGO W. ROHDE was born in Milwaukee in 1877 and died there on Jan. 19, 1963. Before his retirement 11 years ago, he had been chief chemist in charge of production and control at the Jos. Schlitz Brewing Co. On May 3, 1958 he was honored by the Wisconsin Academy as its member of longest standing, having been affiliated with the organization for 60 years at that time. The Spring 1958 issue of the Wisconsin Academy Review published a "personality profile" of him detailing the several honors conferred upon him by professional chemical societies and other notes.

NEW MEMBERS

Family:

WILLIAM and Mrs. JOAN W. GOODWIN, Milwaukee
ROBERT J. and Mrs. LUCILLE SWING, La Crosse

Active:

BENJAMIN H. ASHMAN, Madison
NILS P. DAHLSTRAND, Rhinelander
RICHARD E. FREDERICKS, Milwaukee
FREDERICK C. HERVEY, Chilton
FLOYD L. HOCKMAN, Ripon
Mrs. CHARLES PLUSS, Milwaukee
ARNE J. SALLI, Madison
HERBERT P. SCHOWALTER, West Bend
KURT SPIELMANN, Hartford
J. NASH WILLIAMS, Madison
WALKER D. WYMAN, Whitewater

Library:

NEVILLE PUBLIC MUSEUM, Green Bay
SCHREINER MEMORIAL, Lancaster

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ACKNOWLEDGMENTS not otherwise mentioned:

Photos: p. 49 - State Historical Society; pp. 55, 70 (upper), 77 to 85, 90 - UW Ext. Div. Dept. Photography; p. 58 - UW News Service; pp. 72-73 - Johnson Foundation; p. 91 (upper) and Nos. 1, 2 & 6 on p. 92 - UW-M News Service; p. 91 (lower) and Nos. 3-5, 7-8 - Stephen F. Darling; p. 95 - both from UW Photo Laboratory; p. 96 - Rohde photo from "The Amalgamator" of Jan. 1958.

Sketches: p. 57 - Farms or Forests, UW Col. Agr. (1958); pp. 66-69 - "Conservation Sketchbook" by Charles W. Schwartz (Mo. Cons. Comm.); p. 75 - "The Columbian History of Education in Wisconsin" (1893).

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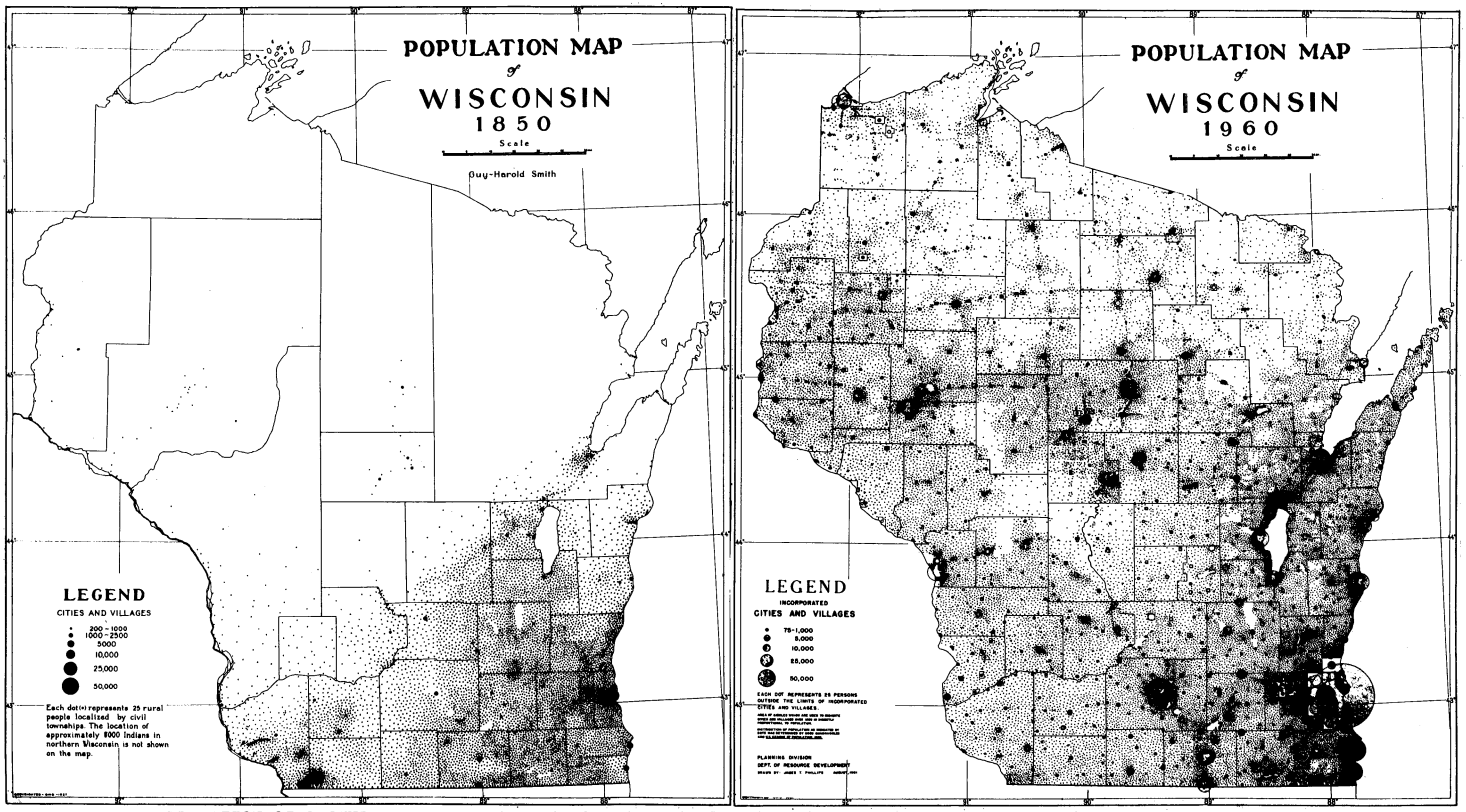
ASSOCIATE LIBRARIAN: Miss Laurel Nelson, Memorial Library, U.W.



EXPLANATION OF LEGEND: Both maps identical, with circles for cities and villages approximately proportionate to actual size graded down in the legend to 50,000, 25,000, 10,000 and 5,000. In map on left the smallest village shown is 200-1,000 while in map on right it is 75-1,000. Each dot in rural area is = to 25 persons. About 8,000 Indians are not shown on map at left. Guy-Harold Smith copyrighted the 1850 population map in 1927 and it originally was used in the Geographical Review for July 1928 and later republished in a larger article by him in Wisconsin Academy TRANSACTIONS Vol. XXIV (1929). Map on right drawn by James T. Phillips for Wisconsin Dept. of Resource Development and first published in their "Wisconsin Population" by Philip Sundal (1962).