

Wisconsin Academy review. Volume 2, Number 2 Spring 1955

Madison, Wisconsin: Wisconsin Academy of Sciences, Arts and Letters, Spring 1955

https://digital.library.wisc.edu/1711.dl/M7VWMQPYN447R8P

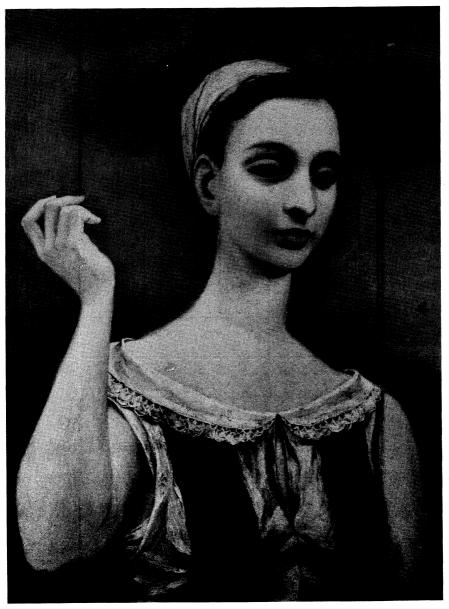
http://rightsstatements.org/vocab/InC/1.0/

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

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

WISCONSIN ACADEMY REVIEW

SPRING, 1955



PUBLISHED QUARTERLY BY THE

WISCONSIN ACADEMY OF SCIENCES, ARTS AND LETTERS

Spring, 1955

\sim	N.	TE	-

COVER - "Girl with Lace Collar" Robert G	rillev
The Milwaukee Center of the University of Wisconsin	
(A Brief History) Compiled by JOSEPH & BATER In	1
I Write a Book, A. W. SCHORGER	1 4
I Write a Book, A. W. SCHORGER	6
The New Audubon Camp of Wisconsin, WALTER W. ENGELKE	7
A Note on the Cover, AARON BOHROD	9
The Biography of a Pheasant "Flock," Northwestern Wis-	9
consin, IRVEN O. BUSS	
Some Humanistic Values in the Study of Chemistry,	10
EDWARD C. FILLER	- 4
EDWARD C. FULLER The Wayona Scientific Area, ALVIN M. PETERSON	14
Rededication of the Edward Dwight Eaton Chapel at Beloit	16
College PAH W POHENTI	
College, PAUL W. BOUTWELL	18
Phoebe Erickson, Compiled by GERTRUDE M. SCOTT	20
Domein of Letters PAIDUA MacANSE	22
Domain of Letters, RALPH A. McCANSE" Painted by Ann, Poem by FIDELIA VAN ANTWERP	24
Floise Genry Forest Dreducts Decreases Decreases	25
Eloise Gerry, Forest Products Researcher - Retirement	
Profile, DONALD G. COLEMAN	26
New Life Member, Guido R. Rahr.	28
Junior Academy News, JOHN W. THOMSON, Jr	29
Binary Notation, RALPH H. HAGEN	30
Report from the Secretary, ROBERT J. DICKE	32
Council Meeting, New Members, Donations	
News Notes	34
The Bookshelf	35
IN MEMORIAM - Elizabeth A. Oehlenschlaeger	38
IN MEMORIAM - Benjamin S. Reynolds	3 8
IN MEMORIAM - Richard Fischer	39
State and Academy News	4 0
Membership List (Geographical and Alphabetical)	42
Vice-President's Page (Letters), F. CHANDLER YOUNG Back	Cover

WISCONSIN ACADEMY REVIEW

Published quarterly in January, April, July and October by the Wisconsin Academy of Sciences, Arts and Letters. Active membership fee or library subscription of \$3.00 per year includes subscription to both <u>Wisconsin Academy Review</u> and the annual TRANSACTIONS. Address all correspondence concerning Academy business to Robert J. Dicke, Sec'y-Treas., 3 King Hall, Univ. of Wisconsin, Madison 6. Correspondence concerning the publication should be sent to the Editor concerned.

EDITOR: Walter E. Scott, 1721 Hickory dr., Madison 5 ASSISTANT EDITOR: Mrs. Walter E. Scott ASSOCIATE EDITORS:

(Arts) Aaron Bohrod, 432 Lorch st., Madison (Letters) Ralph A. McCanse, 110 Extension Eldg.,

Univ. of Wisconsin, Madison 6 (Sr.Acad.) Robert J. Dicke, 3 King Hall, UW, Madison 6 (Jr.Acad.) John W. Thomson, Jr., 209 Birge Hall, Univ. of Wisconsin, Madison 6

THE MILWAUKEE CENTER OF THE UNIVERSITY OF WISCONSIN

(A Brief History)
Compiled by Joseph G. Baier, Jr.
Biology Dept., Milwaukee Extension Division

With plans underway for holding the 85th Annual Meeting of the Academy at the Milwaukee Center of the University of Wisconsin, a brief history of that institution may be valuable to acquaint members of the Academy with this branch of the University prior to the May 6-7 dates for the meeting. Between 1892 and 1907, the University sent professors from the Madison campus to Milwaukee to lecture on literary topics before discussion groups meeting at several convenient centers. Also, professors in the fields of business and engineering were sent to teach classes usually organized by various industries and firms for specific training for their employees.

In 1907 a Milwaukee office of the University Extension Division was opened so as to make possible bringing the services of the University directly to the citizens of the area, especially in the fields of public lectures, evening classes, and correspondence study. The program began with one professor and 58 students in the evening school and over the years has grown to the extent that during the 1953-54 year, 3,843 different students in 308 classes were taught by 157 faculty members in the present evening school.

In 1919 the University Extension Division established in Milwaukee two 2-year terminal, technical institute type of courses, primarily for veterans of World War I. One of these was in Commerce, the other in building design and construction. In 1923 the regents of the University authorized an extension of the day school program to include regular freshman and sophomore credit courses, particularly in the field of Letters and Science. They made this program available to regular high school graduates where previously it had been restricted largely to veterans. The day class enrollment at this time was less than 200 students, but it increased several fold, varying during the depression and during World War II and reaching a high of 2,875 students after the war. then, with the passing of the great veteran load, it has stabilized and climbed slowly to the present enrollment of 1,267 students for the first semester of 1954-55.

In the period from 1923 to World War II, the expansion and development in the day school was mainly an augmentation of the program in areas of freshman and sophomore work. Chemistry, botany, zoology and physics laboratories were developed to provide for a strong

junior University program, especially in the fields of liberal arts and engineering. Emphasis was placed on pre-professional training in such fields as pre-medicine, pre-commerce, pre-forestry, and pre-education while offering freshman and sophomore work in mechanical, electrical, civil and chemical engineering. The development of the evening school during this time was somewhat similar, with non-credit and credit courses offered in liberal arts, commerce, engineering and in what is termed "liberal education" or "cultural education" in such fields as current affairs, anthropology, comparative religion and art education.

Graduate Training

Since World War II a number of programs which had their beginning much earlier have become important developments in the effort of the University to provide more complete and adequate service for the Milwaukee metro-politan community. The School of Education, which has been giving graduate courses in the Milwaukee area for many years, has increased the number of offerings materially. The College of Engineering, which began graduate work in the field of Mining and Metallurgy as early as 1927, has expanded its program so that the Master of Science degree in engineering can now be earned in the fields of Mechanical, Electrical, Chemical Engineering, and Mining and Metallurgy. There are now some 200 graduate students enrolled in this program. The School of Commerce at Madison is also offering an evening program leading to the degree of Master of Business Administration in which there are also nearly 200 students enrolled. The School of Social Work of the University has developed a large program in the Milwaukee area in which the Master of Science in Social Work is being offered. Some of the students take this course as full-time day school students; others take part-time evening courses leading to this degree. The entire graduate program in the Milwaukee area is under the direct supervision of the respective college or school at Madison and the Graduate School of the University at Madison.

In the day school there have been a number of interesting new developments. One of these is the prepharmacy-pharmacy program which is offered under the direct supervision of the Dean of the School of Pharmacy at Madison, with the assistance of a resident chairman in Milwaukee. In this program the students take their first two years' work in Milwaukee and then transfer to the Madison campus. It is planned in the near future that the Milwaukee program will be expanded to three years. There are a number of pre-professional programs in the Milwaukee day school in which the students



Administration Building, U.W. Milwaukee Extension Center

normally stay only one year in Milwaukee and then transfer. Among these are home economics, forestry, and architecture. There are other University activities carried out by the Milwaukee center of the University, but space prohibits any further presentation.

We can conclude this brief survey by a statement concerning growth of the physical plant. In 1912 the Extension Division took over the building at 741 Van Buren St. as the first permanent Extension Center in Milwaukee. It later moved to larger quarters at 137 Second St. In 1927 the Milwaukee Center moved into its newly constructed quarters at 623 West State St., now known as Science Hall. After World War II the great student load required the construction of several barracks, which are still in use. Also, several downtown office buildings were rented and remodeled as classrooms and rooms in several high schools were secured for further "off campus" instruction. One office building is still used (Mariner Tower 2nd floor). In September 1953 the new permanent unit of the Milwaukee Center, known as the Administration Building, was occupied. Among other facilities, it contains a new and greatly enlarged library, a cafeteria, enlarged quarters for the general office, and numerous classrooms and offices.

Academy members are invited to inspect the Milwaukee branch of the University and become acquainted with its facilities during the annual meeting on May 6 and 7.

I WRITE A BOOK

By A. W. Schorger

Dept. Forestry and Wildlife Management, UW

Like many an encore, this brief article is by request. The "Passenger Pigeon" is now between covers and peace to its memory. The reason for writing about this bird is given in the preface to the book. (Failure to mention it here is a sly attempt to stimulate sales.) Aside from the drudgery of searching for data, and writing, the work did have its lighter side.

I began the task by searching every Wisconsin newspaper published prior to 1900. Its completion was made possible by refusing to recognize the enormity of the project and sticking to it like the proverbial dog to a root. The lady in charge of the newspaper files once remarked to me in a tone of utter despair: "I have moved more tons of papers for you than any other ten persons in Wisconsin." Nor did she soften when I countered with the remark that due to the accumulation of impalpable dust my laundry bill was excessive.

Advantage will be taken of this opportunity to express my gratitude to those people who tried to be helpful. For example, I will quote a typed letter dated February 30, 1936 and received July 22:

Dear Mr. Schorger:

It has come to my attention that you are interested in the old passenger pidgeon flights of 1871 and thereabouts. Since I was only a youth of 86 at the time, I remember the flights quite well.

In 1843, when I was living in a cabin on the edge of what is now Kilbourne, one morning we (my dog Jeemes and I) were awakened by a noise like that of a half a dozen freight trains and steamboats nearbye. I looked out and saw a great flight of the birds going over. At that time the pidgeons were so much in their prime that they could carry at least 5 passengers and the youngest could carry at least one.

I immediately hitched up my small 12 inch cannon to my horse and started after them. The horse and I covered about 562 miles in 2-1/2 days, keeping the flight in sight all the time. When they finally settled down and I came up I hastened to load the cannon with about half a keg of black powder. I then made a long fuse, and after filling the gun with rocks and sand I touched it off. It blew off the tops of the trees for miles around and killed most of the birds which I loaded into a

knapsack and started for home. On the way I stopped in on some friends of mine in Milwaukee, the Brewers. When I finally got home I made the pidgeons into a batch of stew which I canned. (I am still eating the stuff.)

If you wish any more information, why, just drop me a line. This letter may not get to you for some time because old Jeb Wilson is still postmaster under Farley, and since he has a wooden leg and is blind he is a little slow.

Sincerely, Edgar Hawkins, Esq.

The Pinkerton Agency finally traced the authorship to my eldest son, then fifteen years of age. The complaint that the children of this generation have inadequate respect for their elders seemed justified.

Two years later I received a similar contribution on the stationery of the Anderson Motor Company, Fond du Lac, Wisconsin, from a man of voting age. It read in part:

"Sewart Ball had a net that would cover an acre, and he used to trap them, catching wagon-loads at a time. Mr. Robinson had a pole about 40 feet long and as smooth as glass. He would grease it, put it up in a tree, and set a bull-eye's lantern at the bottom. The pigeons would light on the pole and slide down as the light attracted them. In a few minutes time, he would fill a bed tick with pigeons -- believe it or not. I have many more to tell you if you desire."

There was the occasion when I was persuaded to attend a dinner of the League of Women Voters. All the husbands will be there, so you must come. We were three! During dinner the lady on my right strove valiantly to draw me from a brown sulk by lively conversation. She even brought up the passenger pigeon. When I did not warm even to it, she asked desperately, "Do you ever become interested in anything before it is extinct?" Having served my apprenticeship to the dead, I am now happy to turn to the living.

#





A "NEW ERA" IN WISCONSIN HISTORY

By Clifford L. Lord, Director State Historical Society



Recently the State Historical Society launched a campaign designed to introduce the Society to an even larger group of people. Results have been happy for all concerned. New members by the hundreds swell the Society's ranks and actively participate in its broad and wide-ranging program.

The Society's membership campaign (still going strong) was born early in Wisconsin's "New Era" in history. The phrase captures the spirit of the groundswell of interest in the heritage of state and nation and the growing curiosity about local history. With a fund of answers for the curiosity and a wealth of materials to feed the interest, the Society has moved quickly to meet the groundswell.

The campaign is based upon a special introductory offer of a one dollar membership. Besides general rights and privileges, special members receive two important publications: Then and Now, an illustrated monthly designed to link Wisconsin's past with contemporary events, and the Proceedings, an annual publication that sums up the various services of the Society.*

Though the tangible benefits of Society membership take the form of publications, equally important is the sense of participation members have in the ever-expanding program of the Society.

At home in its Madison headquarters the Society's healthy growth is measured in the constant development of its library, museum, research center, archives and publications program—the resources that place the Society first among its sister organizations across the nation.

Abroad in the state, the Society continues to stride forward with a far-reaching junior historian program; the Historymobile (a museum on wheels); much-visited historic sites such as Villa Louis and Wade House;

* - Regular membership in the Society is \$4.00 In addition to Then and Now and the Proceedings, it includes subscription to the quarterly Wisconsin Magazine of History, which is built upon richly-detailed articles on Wisconsin's past.

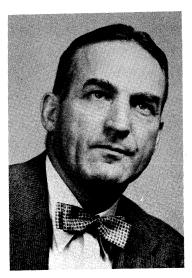
Stonefield, the state farm and craft museum at Cassville; motion picture, radio and television programs; and encouraging helps for newly-born or revitalized local societies.

Recognizing the growing conviction that history is everybody's business, the Society has introduced its special membership project with an eye to opening its doors wide. Wide-open doors seemed the necessary counterpart to the surge of intelligent interest in man's heritage.

(Editor's Note: For application forms, write to State Historical Society, 816 State st., Madison, 6.)

#

THE NEW AUDUBON CAMP OF WISCONSIN By Walter W. Engelke, Director Madison, Wisconsin



Walter W. Engelke

On June 26 the National Audubon Society will open a new outdoor laboratory for amateur biologists in Wisconsin. A gift of 300 acres of land by a Minneapolis woman has made possible the establishment of a nature and conservation training center near Spooner, Wisconsin. The opening of the camp will culminate the efforts and dream of conservationists, biologists, bird clubs, educators, garden clubs and many others to provide the midwest an opportunity to share in the unique program of National Audubon Society camps without having to go to Maine, Connecticut, or California.

History -- A steadily growing demand in the midwest for an Audubon camp and the examination of many sites led to the selec-

tion of beautiful Hunt Hill in Wisconsin's northern lake country, given by Miss Frances Andrews to the Society in memory of her mother and brother. The site has a mixed hardwood forest, some pines, a spruce-tamarack bog, two lakes and some meadow. It is an ideal habitat for many birds, animals, and varied plant life. It is located in Washburn County on the south shore of Devil's Lake, four miles east of Sarona.

To remodel the present buildings, build new ones, and equip the camp an estimated \$68,500 was needed. Volunteer committees in Wisconsin, Minnesota, and elsewhere took on the job and in a few short months more than \$70,000 from over 1600 contributors was forwarded to the National Audubon Society. Mrs. F. L. LARKIN of Milwaukee was chairman of the Wisconsin Committee which did excellent work. Construction of two large buildings for sleeping quarters housing staff and campers, a large wash house, and alterations of a dairy barn to provide assembly hall, dining room, and kitchen was begun in the fall of 1954. Several business firms are contributing generous gifts of equipment.

Purpose -- The success of the Audubon camps confirms the need for providing first-hand experiences in the out-of-doors to teachers, other youth leaders and those with a professional or hobby interest in nature. The camps are limited to adults 18 years of age or over so that the experiences gained at camp may be multiplied many times as campers return to their communities. There is a wide range of ages in every camp session which is fairly well distributed. About half of those who attend are teachers, many of them in elementary grades. About 20% of the campers are men, and frequently husbands and wives both attend. Scholarships are provided by garden clubs, local Audubon branches, conservation groups, schools, and individual donors.

<u>Program</u> -- The camp will operate five 2-week sessions. Each session is intended to provide the same type of experiences. Through daily field trips in small groups campers learn to know the world around them; become aware of the interdependence of all living things and their relation to the soil, water, rocks, and weather; gain techniques for presenting this knowledge in a lively and fascinating manner in their own teaching and leadership situations. In the brief two weeks camp-



ers gain not only a fund of knowledge but a dynamic enthusiasm for the out-of-doors to impart to their students. The approach is an ecological one where nature is
not merely catalogued but interpreted in terms of process,
in terms of what is going on. In addition to morning and
afternoon field trips there are evening lectures, with
just enough fun, swimming, and fellowship mixed in to
make an enjoyable two weeks.

Staff -- The camp staff is composed of experienced teachers well-versed in camp life and field natural history, able to present their subjects with enthusiasm and in simple terms. They have been drawn from the ranks of college and public school faculties and from the Society's permanent staff.

(Note: Additional information can be secured from the Director of the camp, Walter W. Engelke, principal of Nakoma School, Madison, Wisconsin.)

#

A NOTE ON THE COVER PAINTING

Our cover for this Spring issue is ROBERT GRILLEY's "Girl with Lace Collar." Robert Grilley is a professor of art education at the University of Wisconsin. Young in years, but already widely known throughout the country for his dramatic and imaginative figure compositions, he strikes an unusual note in contemporary painting. Grilley is one of the few artists now active whose work seems to bring to the moment the qualities of the old masters.

After the photograph was taken from which the cover reproduction was made, the artist decided to add a motif to the extended fingers of the upraised arm. He painted a little bird which we will have to ask our readers to imagine hovering in the upper left hand corner of the composition. And before it became the property of a prominent Milwaukee art collector, the work was retitled, "Girl with Humming Bird." ---Aaron Bohrod

THE BIOGRAPHY OF A PHEASANT "FLOCK," NORTHWESTERN WISCONSIN* By Irven O. Buss**

Prof. of Wildlife Management State College of Washington, Pullman

The following annual events in the life history of the Ring-necked Pheasant are based on data obtained by trapping, banding, and direct observation of a population in the Excelsior Swamp near Menomonie, Wisconsin. Field work was done from 1942 to 1944, before the pheasant crash occurred throughout the midwest, and while most of the nation's game biologists were in military service. Therefore, the biography is a factual summary of an average population or "flock" of pheasants during their heyday on the northern or marginal fringe of their range. It is not expected that the same behavior would occur in other parts of Wisconsin or during years of population depression.

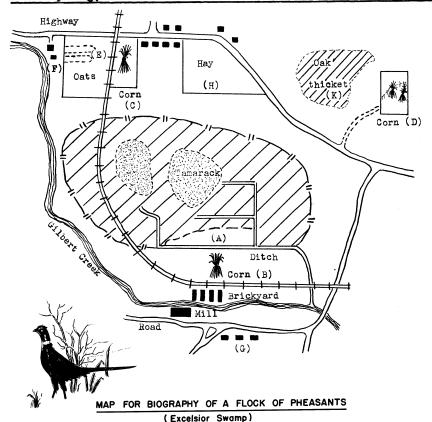
JANUARY: Forty-seven pheasants (15 cocks, 32 hens) are living in the area. They roost in the sedges and forbes near the south edge of the swamp at A and feed from corn shocks left in the adjoining field at B. During mid-day the birds use the south-exposed banks and the wooded edges of the swamp as their loafing ground.

The corn shocks at B, C, and D settled into the soft ground when they were shocked and then froze securely, preventing the farmers from hauling them away. The available corn at B has been eaten, and the pheasants now feed on the shocks at C, walking up the abandoned railroad right-of-way. They supplement their diet with ragweed seeds persisting above the snow in the adjacent oats field and acorns grubbed from the woodlots about the swamp, returning to the swamp to loaf and roost.

A brickyarder takes a short-cut through the swamp on his way home from work and flushes a group of hens from their night roosting site at A. The hens scatter and are unable to return to good roosts; one is picked up by a mink that includes the swamp in his regular circuit of travels; a horned owl takes another hen as she wanders across a snow-covered opening searching for a roosting site. A third hen dies of injuries from traps used by biologists in a winter banding study on the area. A cooper hawk and a red fox score on hens that lost their tails when a storm froze them to the ground.

^{*-}A similar biography was written, but not published, of a pheasant flock for southern Wisconsin by ALDO LEOPOLD.

^{**-}Formerly Chief of Wildlife Research, Wisconsin Conservation Department.



FEBRUARY: More snow and storms change the feeding and roosting habits of the remaining 42 pheasants (15 cocks, 27 hens). All of the ragweed and most of the nearby corn shocks at C are buried with snow, so the pheasants wander into the farmer's feed lot at F where they are interrupted in their feeding by the farm dog and by children skiing and sliding on the high creek bank.

Conditions improve when the farmer starts spreading manure at E. The birds feed there approaching via their old route to the corn shocks at C. Storms and low temperatures form a hard surface on the snow improving conditions for daily travel. The flock ranges up to a mile each day, flying or walking from one feeding site to another. Evening frequently finds them so far afield that they have to fly back to the swamp in semi-darkness. A cock breaks his neck flying into a telephone wire at the roadside between D and the swamp. A red fox that dines on the dead cock that night is shot the next day by a

hunter who examines the fox's stomach and concludes that foxes are worthless pheasant killers.

A blizzard changes conditions again, and completely buries the roosting ground in the sedges and forbes. The birds are forced deeper into the swamp and congregate into a single large flock. Some of the pheasants cruise southward finding waste grain at a mill on Gilbert Creek and garden remnants at G. A boy seeing the pheasants picking at sweet corn left in his father's back yard shoots a cock with his 22 caliber rifle. Dogs kill four cocks and four hens in the biologist's traps near the center of the swamp.

Late in the month the biologists hear two cocks crowing while they are spreading the shocks and making the last corn available at B, C, and D.

MARCH: A thaw uncovers the roosting ground and all the old feeding sites for the remaining 32 pheasants (9 cocks, 23 hens). There are occasional snows, but they are temporary and the pheasants disband into small groups dispersing over a mile to the uplands surrounding the swamp.

A hen that lost her tail in a sleet storm flew into a power line near the high bank at the north edge of the swamp, and a cock is stolen from one of the biologist's traps just before the banding study is terminated.

APRIL: The 30 pheasants (8 cocks, 22 hens) form harems in and near the swamp. Two hens with going nests in old forbes at the edge of the swamp are flooded out during a night's downpour. They escape from their nests, but in their bedraggled condition they fall easy prey to a mink and a horned owl just before sunrise. A cock and hen survive from the harem that originally included three hens. The two deserted nests afford a feast for a mink and a crow; numerous eggs laid at random by hens not yet serious about nesting are found quickly by crows, skunks, min, raccoons, foxes and other animals cruising the area.

MAY-AUGUST: Nesting activities by the 28 pheasants (8 cocks, 20 hens) continues. Most of the early nests are located in vegetation of the previous year; these nests suffer the heaviest losses. The unsuccessful hens renest, five in the hayfield at H and three in the oats at E. Mowers and binders destroy all nests killing four hens and a cock. The other pheasants fared a little better, but the many contingencies associated with the stress of nesting results in a loss of a cock and five hens.

Two hens fail to raise young; one hen with a family

is killed, but her young are acquired by foster parents resulting in a brood of mixed ages. The 16 adults are bolstered by 39 youngsters (18 cocks. 21 hems).

Late in August a local sports group liberates 100 pen-reared pheasants (50 cocks, 50 hens), eight weeks of age, at the edge of the swamp. Many of these artificial birds die soon after release.

SEPTEMBER: The 55 wild pheasants (24 cocks, 31 nens) thrive on an abundance of food and cover; the pen-reared birds have not learned to eat these foods, they are lost, and their ranks suffer continued losses shrinking to 13 cocks and 7 hens.

OCTOBER: There are 75 pheasants (37 cocks, 38 hens) living on the area. Hunters shoot 18 cocks (11 wild, 7 penreared), and cripple three cocks and a hen that escape into the swamp. Two of the crippled cocks die and are eaten during December by foxes that patrol the swamp; the other two cripples are caught and eaten within two days by raptors.

NOVEMBER: Fifty-three pheasants (16 cocks, 37 hens) are left. A rabbit hunter poaches a cock, and a hen is killed by an automobile while she is cruising toward an oak thicket at K.

<u>DECEMBER:</u> Fifty-one pheasants (15 cocks, 36 hens) are surviving. The abundant food and cover of September is greatly reduced exposing the pheasants to more hazards as they increase their search for different foods. In other words, carrying capacity has decreased with the advent of winter, and the pheasants become more vulnerable to the many dangers surrounding them.

Horned owls get four hens; the flock is back to its original size of 47 pheasants.

Biographic Deductions

- The winter survival of a pheasant flock is directly proportional to the quality and quantity of available food and cover.
- The availability of food and cover changes significantly by seasons and varies during a season with changing weather.
- 3. When weather conditions reduce available food and cover, pheasants must increase their daily movements, and consequently they become more vulnerable to predation and other kinds of mortality.
- 4. During severe winters even good ranges with excellent niches fail. With increasing severity of weather

there are fewer alternatives, less food and cover,

- and an increase in mortality.
 In the words of ALDO LEOPOLD, "A winter niche is habitable to the extent that it offers alternative food and cover combinations, i.e., diverse food and cover. "
- 6. In a given habitat the pheasant population ordinarily surviving normal winters is its winter carrying capacity. This differs from the spring carrying capacity which is probably governed largely by the pheasant's territorial requirements.

Whenever pheasants exceed the carrying capacity, some birds are forced into marginal niches where their security declines and their vulnerability increases.

There is a significant increase in adult mortality 8. during the breeding period; this accelerated mortality is the result of many environmental contingencies surrounding the stress of reproduction.

SOME HUMANISTIC VALUES IN THE STUDY OF CHEMISTRY By Edward C. Fuller

Dept. of Chemistry, Beloit College

(A 500-word condensation of an article with the above title which appeared in the February 1955 issue of the Journal of Chemical Education -- reprints of the complete article available from the author)



Many of us who teach chemistry in liberal arts colleges are engaged in defending the place of our discipline in a liberal education. I believe we can show that there are humanistic values in the study of chemistry. define humanistic values, the humanities, or humanism is very difficult. For the purposes of this paper, Walter Lippmann's statement, "Humanism signifies the intention of men to concern themselves with the discovery of the

good life on this planet by the use of human faculties", is helpful. If we are to live the good life in these days of conflict and controversy we need some guide lines. Here are a few which grow out of chemistry:

The solution of a difficult problem can be hammered out in constructive controversy; it is better to build a basis of agreement from differing points of view than to force acceptance of one point.

2. Man possesses the intellectual potential for continually improving his lot; there are no insoluble problems -- only problems of great difficulty.

- In the "free market of ideas", truth will prevail.
 Truth is not achieved by making one's opponent appear ridiculous or by discrediting him on the basis of his race, color, creed, or political affiliation.
- 5. The nearer we approach a true understanding of a situation, the more effective will be our solution of problems rooted in it.

I believe that attitudes like the above can be cultivated in our students if we consciously bear them in mind as we teach our classes in chemistry. For example, the development of our present concepts of valency and chemical bonding illustrate that many differing points of view have served to advance our understanding of these complex phenomena. That truth is not achieved by personal attacks on one's opponents is demonstrated by the spectacle of Russians repudiating the theory of resonance in chemical bonds because proponents of the concept are members of "a capitalistic, decadent, bourgeois society". That human intelligence is bounded by no lines of creed or nationality is illustrated in the growth of great unifying concepts like the atomic theory and the periodic Two Englishmen and two Germans, two Italians and a Russian, a Belgian and an American shared in the basic work of establishing correlations between atomic weight and chemical properties. A perusal of the historical introduction in Smyth's report, "Atomic Energy", reveals that half a dozen Americans and an equal number of Englishmen and of Germans, together with three Frenchmen, one Dane and one Italian, were responsible for the basic discoveries upon which nuclear technology rests. Included among these scientists are Jews, Protestants, and Catholics--liberals and conservatives, socialists and communists.

Our increasing effectiveness in dealing with complex situations as our understanding of them approaches more nearly to the truth is illustrated by the fruitfulness of our present knowledge of gases and of solutions. Calling attention to the successive refinements of concepts and mathematical equations dealing with quantitative measurements in gaseous and liquid systems points up the value of continually striving for more precise truth. Relative truth may not seem so satisfying as absolute truth but we need not feel insecure because we have not attained the absolute. In the words of Bertrand Russell: "One of the greatest benefits that science confers upon those who understand its spirit is that it enables them to live without the delusive support of subjective certainty".

THE WAYONA SCIENTIFIC AREA By Alvin M. Peterson Onalaska, Wisconsin

Wayona is not of Indian origin, even though it may sound that way, but is derived from Midway and Onalaska, being the last three letters of the former and the first three of the latter. It was suggested as the name for a parcel of land that was set aside by the La Crosse County Board of Supervisors to preserve the remnants of a remarkable colony of pasque flower, located between Midway and Cnalaska, along the west side of Highway 53-35. The tract includes a little over three acres of land and lies east of the Chicago and Northwestern Railway, on the Midway Hill.

ALONZO POND in his little book, "Wisconsin Nooks and Corners," reproduces a picture of this colony of flowers as it looked three or four decades ago, when the flowers were more numerous and found in larger clusters than now. The colony then extended much farther eastward and was known to large numbers of people who picked the blooms all too freely in early spring.

The Wayona Scientific Area now is a permanent part of the La Crosse County park system and is dedicated to the preservation of this colony of pasque flowers and the prairie community of plants in which it is located. The formal resolution passed the County Board unanimously in December, 1953.



Pasque flowers at Wayona Scientific Area

Visit these three acres today and you will find them a mass of vegetation from late April until well along in the autumn. Visit them in November and March, when the ground is bare, and you still will find them well stocked with plants, the dead, dry remains of thousands of wild flowers that have had their day and fulfilled their destiny. Many, too, are the young green plants to be seen during these two months, rosettes in many instances, a promise of many blossoms when the next growing season arrives.

The plants in the area comprise a typical prairie community with thousands of pasque flowers to be found there the latter half of April. Also early are the small-flowered crowfoot, dwarf buttercup, lyre-leaved rock cress, and ever-present pussy-toes. Following close behind these are the birdfoot violet, puccoon and long-plumed purple avens.

In May come the star-toadflx, prairie phlox, blue-eyed grass, cream false indigo, spiderwort, smooth rose, New Jersey tea and silvery cinquefoil, to mention only a few. June finds several of these still blooming, and the Solomon's seal, smaller skullcap, frostweed, pentstemon, mock pennyroyal, lead plant and long-fruited anemone.

In July expect to see much of the lovely purple prairie clover, the white prairie clover, rose mallow, gray-headed coneflower, hoary vervain and false boneset. August and September add the beautiful stiff goldenrod, gayfeather and silky aster. Thus far we have said nothing about the coreopsis, devil's shoestring, white sage, gray goldenrod, tall wormwood and showy goldenrod, which also are found there in considerable numbers.

#

NEWS FROM THE INSTITUTE OF PAPER CHEMISTRY

HARRY F. LEWIS and M. A. BUCHANAN of the Institute of Paper Chemistry have patented a process called "Redwood Bark Cooking Process and Resulting Products." The process consists of cooking redwood bark, preferably in the form of chips, in a liquid mixture of alkali sulfite cooking liquor. It is cooked at 300° until the acids dissolve in the liquor and the resulting fibrous material may be separated. This fibrous material is then convertible into an excellent insulating board by standard means.

Up until this time the bark of the redwood tree has been considered a waste product, but about 50 percent of the waste can now be used to make board, and other substances can be converted into such things as an oil well drilling mud additive. -- Don B. Schlafke, Review Reporter

REDEDICATION OF THE EDWARD DWIGHT EATON CHAPEL AT BELOIT COLLEGE By Paul W. Boutwell Chemistry Department, Beloit College

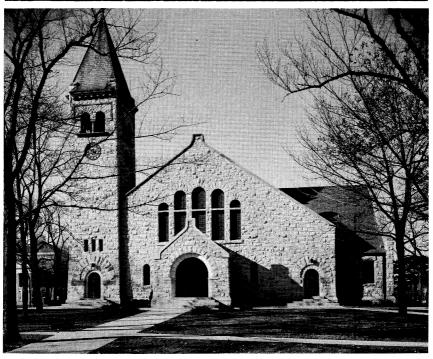
On December 12, 1953, on the eve of the traditional Christmas Vester Service, the Beloit College Chapel was almost completely destroyed by fire. It happened to coincide with the first visit of Dr. and Mrs. MILLER UPTON to Beloit College. The immediate response on the part of the friends of Beloit in meeting this emergency so impressed the Uptons that it had a strong influence on their decision to come to the College. At the Christmas Vespers the next day, transferred to the First Congregational Church, President CRONEIS predicted that at a year from that date, the Christmas Vespers of 1954 would be held in a new College Chapel. Through the efforts of Vice President WOOD this prediction was realized. Exactly one year later on December 12, 1954, two services were held in a new Chapel, larger and finer than the old one. The first, in the afternoon, was a service of rededication and the second, in the evening, was the traditional Christmas Vespers as predicted.

The new Chapel, now practically fireproof, with its seating capacity nearly doubled, is even more beautiful than the old building. A few weeks following the rededication, announcement was made of a gift of \$40,000 by Mr. GEORGE W. MEAD, of the Class of 1892, of Wisconsin Rapids, for a new organ. It is hoped that this organ may be ready for use at the Commencement Exercises of 1956.

The principal address at the rededication ceremonies was delivered by Dr. FILMER S.C. NORTHROP, of the Class of 1915, Sterling Professor of Philosophy and Law at Yale University. Others participating in the exercises were President MILLER UPTON, Dr. A. D. BEITTEL, Dean of the Chapel, and Dr. WILFRED A. ROWELL, '99, Chaplain Emeritus.

Dr. NORTHROP in speaking on "Comparative Religion in the Contemporary World," called for an effective international law in order for civilization "to remain practical enough to survive in an atomic age, if humanity is not to commit suicide." He said in part:

"This building is more than the physical and spiritual focus of Beloit College; it is also a temple of religion. Religion is something universal to mankind. Religion in its universal import is not merely universal; it is also a diversified universality. Hence the import of this occasion for others as well as for ourselves is that it signifies the impact not merely of religion but of



Edward Dwight Eaton Chapel at Beloit College

comparative religion upon the contemporary world. .

"To implement faith through deeds, faith must articulate itself philosophically and then embody that philosophy in law and implement itself with technology—a law and technology which can convey to Asians and Africans not merely our political constitutions and technological mechanisms but also the mentality, or, in other words, the philosophy necessary to operate them with comprehension and efficiency.

"It is because law, economics, political science, engineering and the other applied sciences need the spiritual resources of religion that a college needs a chapel. It is because religion requires philosophy to articulate its faith, and law, literature and science to transform that articulated faith into deeds, that a chapel needs a college—a college, moreover, such as this one, where students and faculty are free not merely to believe, but also to seek out the scientific evidence and philosophical reasons for what they believe."

THE IZAAK WALTON LEAGUE IN WISCONSIN

By Arthur Molstad, President Wisconsin Division



Defender of Soil, Woods, Waters and Wildlife is the credo of the Izaak Walton League of America, Inc.

It is a nationally organized group with 578 chapters throughout the United States and with Wisconsin well represented. Since 1922,

when the League first took form, the concept stated above has been the basis governing its thinking in behalf of Conservation. In holding to this philosophy, the organization in our own state has, since 1922, helped to achieve many of the objectives which has given Wisconsin leadership in Conservation.

In the years of its activities the Izaak Walton League has disdained becoming involved in lesser issues surrounding the program. It has held steadfastly to the broad perspective and a review of accomplishments will bear out this purpose.

The League was in the front in 1927 in bringing about the present Commission form of Conservation administration. Our present Conservation program has progressed under the aims expressed in Section 25.09 of the Wisconsin Statutes as follows: "To provide an adequate and flexible system for the protection, development and use of forests, fish and game, lakes, streams, plant life, flowers and other outdoor resources in the State of Wisconsin."

The area around Mauthe Lake, now the headquarters of the Kettle Moraine State Forest, was once operated as a game farm by the League and was later deeded to the state and now serves as a gathering place for thousands of people bent on recreation. The creation of this park reaching from Elkhorn to Chilton was originally an objective fostered by our State Izaak Walton League.

The League has spearheaded the fight against pollution in our lakes and streams. The State Committee on Pollution is the direct result of a hard drive by the Wisconsin Division. It has fought against the construction of dams on certain of our rivers. The memorable court decisions, both Federal and State, saving the Namekagon River from a dam and resultant flowage came about because of the active part played by League members as defendants. It is now the avowed purpose of the State Division to fight the contemplated construction of a dam across the Little Equ Pleine River.

The League has initiated effort and given leadership in the attainment of other noteworthy objectives, such as: restoration of Horicon Marsh, a continuing active interest in the betterment of our forest lands, the public hunting grounds program, conservation education in the public schools, encouragement to the youngsters in our state to acquire an early interest and knowledge of conservation needs.

On the national level the League has been foremost recently in the recurring struggle to save public grazing lands to the public. In the last session of Congress a vigorous fight was made to save Dinosaur National Monument from being flooded by a hydro-electric project. Presently the national office is assisting in our effort to save the Little Eau Pleine area. In the years past there have been many hard fought battles waged by the League to save our resources.

The several chapters in Wisconsin have brought, not alone to the State, but to the communities from which they draw membership, many real, also intangible gains. They cannot be evaluated in terms of money—rather the effect has been to keep our outdoors a better place and to retard the inevitable deterioration caused by pressure of population and changing trends of economics.

The League can attest that its adherence to the slogan in our opening sentence has left its mark on the outdoors of Wisconsin, and all of it, good.

(Editor's Note: IWLA Chapters in Wisconsin are: Appleton, Beloit, Brown County, Cudahy and South Milwaukee, Dane County, Fond du Lac, Green Lake, Horicon Marsh No. 20, La Crosse, Manitowoc, Marathon County, Milwaukee, Portage County, Sheboygan, Walworth, Watertown, Winnebago, and Wood County. Anyone wishing to affiliate with one or secure other data may write to President ARTHUR MOLSTAD, 5520 W. Philip Place, Milwaukee 16.)

#

ACKNOWLEDGMENTS - Sketches on pp. 5 and 35 by Jacob Bates Abbott in Pennsylvania Game News; p. 14 from Amalgamator, March, 1955; p. 48 from Mourning Dove Populations in North Carolina, ed. by Thomas L. Quay, June 1954, N. Carolina Wildlife Resources Comm. Photo p. 36 by Forrest R. Poe. Material on Phoebe Erickson compiled from letters from her and a story by John DiCorpo in the March 28, 1954 issue of the Sunday Republican, Waterbury, Conn.

Thorbe Erickson

Compiled by Gertrude M. Scott



"Cne of my truest childhood impressions, and perhaps the most enduring, was the yearly discovery of favorite wild flowers blooming again. Their faithfulness, always appearing in their proper time and season was, I now realize, a certain lesson in responsibility; once a job is started you don't fall down on

it." Thus Miss Erickson sums up what appears to be her own life philosophy.

She began drawing when a child in Door county. Any farmyard animal was a handy model for her practice work on coarse brown paper or birchbark. "I was the twelfth child in a family of 13. My father and mother migrated from Sweden in 1880 and settled in what was then wilderness near the tip of Door County, peninsula in Wisconsin... I was spending all my free time drawing now, and it was settled among the family that I would be an artist some day. . . . I was rather concerned because everything I tried to draw turned out to be a horse, whether it was my mother, or a flower, or the barn. I was plain horse daffy." When a colt was born on the farm, she almost gave up trying to capture its appeal, and spent most of her time training the animal. A faded snapshot of herself and the colt, which she found a few years ago, inspired memories leading to publication of "Elack Penny," her first full length book.

In her story she describes how she trained Black



Black Penny as a colt

Penny. "The actual accomplishment of such a thing by a child, and the real responsibility it placed on the child, seemed important, too, because it seems to me that the earlier we develop a sense of responsibility, the easier it is for us to cope with our problems as adults. I also wanted to say

something about a way of living, and I do not feel that this family relationship is anachronistic or unsuited to contemporary living."

Prior to "Black Penny" she had illustrated many children's books on nature subjects and had also written and illustrated short books on a little fox and a muskrat. "Daniel 'Coon" and "Baby Animal Friends" appeared in 1954 and she is currently working on a book on conservation and ecology for children. "It must have plot and action, and the kind of writing that will make youngsters read it. Factual fiction, in fact." From her rich background of memories of a child's love of the outdoors, she declares, "Conservation of all Nature is not just for the so-called Nature lover; it is the practice of common sense, and applies to everyone."

The little schoolhouse reproduced here from her sketch, was partly built by her father and uncles and she enjoyed her schooling there on the Lake Michigan shore. On a visit to her sister in Evanston, she discovered the free library, which opened a new world to the seeking



youngster. Not many years later she was back in Chicago, working to earn funds to attend the Art Institute. While there she became acquainted with Aaron Bohrod. Finally she moved to New York and began to edge into the field of illustrating children's books.

In 1947 she went to New Milford, Connecticut to live on a 15-acre tract in a house built by her husband, Arthur N. Blair. She keeps a journal of her observations of the animals and plants there, which aids in her writing and sketching. Her paintings have been exhibited at the Chicago Art Institute, the Whitney Museum, and the Metropolitan Museum in New York and in the Swedish Historical Museum in Philadelphia.

She still retains warm memories of her native Wisconsin. Some of these show in her sketches and writings. Recently she affiliated with the Wisconsin Academy and she also confesses to a "prideful" interest in the Ridges Sanctuary in Door county and the community that had the courage and foresight to preserve a part of its own heritage. " ###

DOMAIN OF LETTERS

Collected by Prof. Ralph A. McCanse Associate Editor in Letters

(Academy members are invited to submit essays, and make searching comment upon others' essays appearing from time to time in this section of the Review. Lively interchanges may result; they should afford readers the constructive profit that is sure to arise from frank well-rounded criticism. The following brief distillation from Wordsworth will perhaps call forth scholarly responses. Limitations of space should be kept in mind.)

THE VISIONARY GLEAM

Interpretation of the doctrine and art of William Wordsworth should be sound, more or less clear, and inspiring among us-here thirty years after the pioneering studies of the late Professor ARTHUR BEATTY, honored member of the Wisconsin Academy. As that enduringly constructive critic pointed out, the poet from whom an entire literary era took name was both psychologist ("romantic," but in this case also systematic, self-scrutiny) and philosopher.

The truth has become increasedly evident indeed that William Wordsworth's psychology-philosophy is commonsense, convincing, and meaningful. Despite the accusations (those by Babbitt, for instance) that he was "a devotee of idle reverie" (an assumption from isolated passages), Wordsworth developed a system—it is eminently that; it pervades his poetry with consistent reiterations—sure to repay richly all repeated resort to it.

Nowhere are Wordsworth's authentic poetry and truth to the realities of human nature—his "music of humanity"—more revealing than in one famous phrase too often sentimentalized by readers. That expression, "the visionary gleam," occurs most notably in the great Ode: Intimations of Immortality from Recollections of Early Childhood. A few words at this late day will perhaps engage the reader in such provocative study that some service to literary appreciation will result:

To Wordsworth, this "gleam" in childhood is unearned, unpredictable, transient, and in a sense undependable. It is to be allocated to the early Fancy, rather than to the mature Imagination which he extols as "Reason in her most exalted mood." The "gleam" he elsewhere declares to be "the light that never was on sea or land. "That it is, even so, a "fountain light" is justifiable doctrine because the growing mentality as well as spirit takes incentive and "food" from it through all interdependent ages.

These critical issues may appear to be startling. They will nevertheless attest the rational esteem accorded by Wordsworth to vision (as a manifestation of the purer Mind of Man, and of the essential activity of that mind). William Wordsworth frequently exalts us. His heart attains the peaks of human aspiration. But his feet, if we may use the expression, are always firmly planted on beneficent earth. That basic stability accounts for our admiration; it is a well-spring of our inspiration from William Wordsworth.

"PAINTED BY ANN" (Inscription on an old landscape in oil)

Who were you, "Ann," who saw the year's first blush And, full enraptured, lured it with your brush? Beguiled the rose infolded in the bud; Immortalized the creek in freshet flood; With subtle artistry wrought this fair thing Of pigment magic, country-side in spring, Small part of all omnipotence sustains Tricked to your canvas with bright palette stains.

It fascinates me, and I ponder ever On what inspired your hand to this endeavor.

Were you, perchance, capricious April's child, Born on a day when nature wept and smiled? Who thrilled to life's awakenings from your birth; Could not endure to see the warming earth Take further step toward summer's ripening heat Or blossom wither, sacrifice to wheat; Who rendered frond and bud immune to time With clever artifice — this pretty mime?

While yet the snow is deep and winds are chilling, It moves men of the soil to thoughts of tilling.

Ann, I could touch your hand, almost, and dream Of kinship closer than through sanguine stream. For I have seen, as you, the willow's gold; Red-osier-bordered marsh; the sunny wold; And, tinting all the landscape of our days, Dust's poignant alchemy of orchid haze. Beheld all these, yet cannot reach you, quite-Wing's length away, but separate, as light

From dark and death, you have attained perfection; Have known, firsthand, the bliss of resurrection.

---Fidelia Van Antwerp

Miss Van Antwerp, who lives at Wisconsin Dells, is President of the Wisconsin Rural Writers Association, Inc.

ELOISE GERRY — FOREST PRODUCTS LABORATORY

(A Retirement Profile)
By Donald G. Coleman, Chief
Division of Information & Education, FPL

"Retirement to me will not mean slowing down, but merely changing emphasis to different fields of activity." These words reflect not only the attitude with which Dr. ELOISE GERRY retired last January 31, after more than 44 years at the U. S. Forest Products Laboratory in Madison; they are characteristic of her work and her way of life.

Dr. Gerry, one of the first women in the United States to specialize in forest products research, began her career as the only woman member of the original staff of scientists that formally opened the world's first forest products laboratory at Madison, June 4, 1910.

Almost from the beginning, her research on the physiclogical and structural makeup of wood yielded significant results that benefited all wood-using industries. Her findings about the fibers, pores, rays, ducts, canals, and other minute parts of the living tree have been applied in the naval stores industry, the preservative treatment of wood, in pulp and paper processes, and in evaluating the effects of growth conditions on the strength and other characteristics of wood.

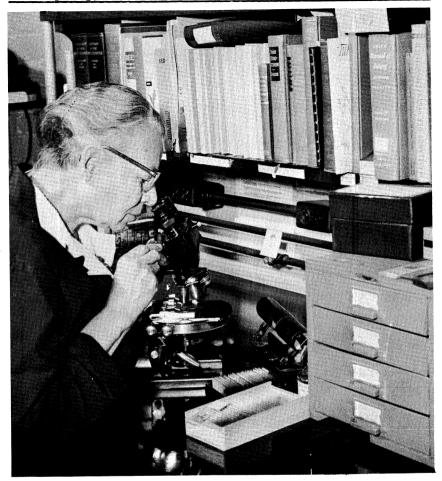
She pioneered microscopical investigations of the effect of tapping practices on the life of the turpentine pines of the South -- the world's major source of turpentine, rosins, and their by-products.

In an era when women scientists were a rarity and their venturing into the southern forests was practically unheard of, she traveled on foot, on horseback, and in Model T's through the forests of Mississippi, Louisiana, Alabama, Florida, and Georgia. Soon, her microscopic evidence convinced the industry that its tapping methods were "killing the goose that laid the golden egg." Her work did much to save the naval stores industry from self-destruction.

In recent years, she has become an internationally known specialist on foreign woods.

Dr. Gerry studied plant anatomy at Harvard University's Radcliffe College for Women. A native of Boston, she received her doctorate from the University of Wisconsin.

Dr. Gerry has been a member of the Wisconsin Academy since 1919. She is also a member of the Madison Branch of the International Altrusa Service Club, the Business



Dr. Eloise Gerry, 1105 Dartmouth Road, retired January 31, 1955, after more than 44 years of service at the U.S. Forest Products Laboratory.

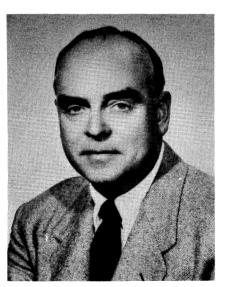
and Professional Women's Club, the American Association of University Women, the National League of American Pen Women, and Sigma Delta Epsilon. She is also active in the Madison Garden Club, the Badger Kennel Club, and the Dane County Humane Society.

Since leaving the Laboratory last January 31, Dr. Gerry has literally gone to the dogs. In her case, the dogs are an exceedingly rare tricolor strain of "bark-less" Basenji hounds from the African Congo. Dr. Gerry has raised Basenji hounds for many years; in fact, she has one of the first half dozen or so that were imported into the United States. She now plans to devote more time

to her beloved Basenjis and to increase her activities in training these remarkably handsome dogs, which were once pets of the Pharachs. Dr. Gerry will not spend all her time with Basenjis, however. She is laying rather extensive plans for work in her wildflower garden and miniature woodland at her Shorewood Hills home, and she plans to renew activities in many of the professional societies in hopes of interesting and encouraging women to take up research careers.

This, too, is characteristic of Dr. Eloise Gerry. As so aptly put by BENSON H. PAUL, her Laboratory colleague for many years: "She has given of herself not only in scientific fields but in the world about her with the generous impulses of a warm heart. Evidently, she has made a life pattern from the living forest that gives and gives yet seeks nothing in return. In performance of a task, it is not her habit merely to do, but always to do more than is normally required or expected. The long forgotten 'baker's dozen' exemplifies the characteristic living of Eloise Gerry."

####



GUIDO REINHARDT RAHR

NEW LIFE MEMBER

Mr. Rahr is a life-long resident of Manitowoc, Wisconsin, where he was born in 1902. After graduation from Yale in 1925, he became associated with Rahr Malting Co., and in 1933

became president of that firm which produces food products and malt for brewers and distillers. His deep interest in the heritage of his State has been responsible for his numerous activities in civic affairs. In 1941 he was appointed to the Wisconsin State Conservation Commission, and became Chairman of that body in 1951. The Rahr's have two sons and a daughter.

JUNIOR ACADEMY NEWS

By John W. Thomson, Jr., Chairman Junior Academy Committee



Great honor has been earned by our Junior Academy Co-president, KATHLEEN HABLE of Loyal, Wisconsin. She has won a \$2,000 scholarship in the National Science Talent Search, one of the two top prizes. Her project on Heredity involved breeding mice and fruit flies and studying human family traits. A student at Columbus High School, Marshfield, she was counseled by SISTER M. LAURETTA, sponsor of the Columbus Science Club. Kathleen plans to attend Marquette University and hopes to become a doctor of medicine.

Fine honors also go to JOHN E. HARRIMAN of the Appleton High School Nature Club. He was among the top 40 winners of the National Science Talent Search to be invited to Washington to compete in the final selection for the

grand prize. He was awarded a \$100 scholarship in the search.

Both of these young people reflect honor to their communities and to their teachers as well as to their parents and themselves. To compete in the Search, they must finish a creditable science project, pass an extremely difficult examination and have an excellent record. To be selected among the top 40 in the nation is indeed an honor.

Wisconsin high school students who earned honorable mention in the Search are ROBERT C. DIMICK of Appleton Senior High School, CHARLES W. McCLURE of Memorial High School, Beloit, SANDRA O. GEMMELL, Mary D. Bradford High School, Kenosha, VIRGINIA R. POCHMANN, West High School, Madison, and THOMAS P. McFARLAND, Jr., Wauwatosa High School. To these young people, we send congratulations. Some of them will be presenting their papers at the Junior Academy meetings and we hope you will be present to hear them. Following the National Science Talent Search, the papers and examinations of the participants are forwarded by Science Clubs of America to the Wisconsin Science Talent Search Committee of the Academy for Judging.

A busy spring is ahead for the Junior Academy. On March 26, the La Crosse Area meeting will be held at Wisconsin State College at Eau Claire. On April 2, the Appleton district meets at Lawrence College, Appleton. On April 16, the Stevens Point district will meet at Wisconsin State College, Stevens Point, and on April 23, the Milwaukee district meeting will be held at Marquette University. At the time of this writing, the Junior High School meeting place and time in May was yet to be announced. The Statewide meeting with the Senior Academy will be on May 7.

Science Fairs will occupy an increasing interest in Wisconsin this year. The Third Annual Kenosha County Science Fair sponsored by the Seminar Club of Mary D. Bradford High School will be held on March 27, 28 and 29th. This year a new fair, the Southeastern Wisconsin Science Fair, will be sponsored jointly by the Milwaukee Journal and Marquette University. Open to science students from eleven southeastern counties, this will be held April 15, 16 and

17th, at Brooks Memorial Union, Marquette University. Winners from this Fair will be sent on an expense paid trip to the National Science Fair at the Case Institute of Technology, Cleveland, Ohio, May 12 to 14. The Southeastern Wisconsin Fair is under the direction of FATHER L. W. FRIEDRICH, S.J., Dept. of Physics, Marquette University.

A very fine issue of the <u>Test Tube Times</u> was sponsored by the Science Club of West High School, <u>Madison</u>. Filled with interesting science articles by club members, it was edited by INGETRAUD RENNENKAMPFF and RALPH NAFZIGER, Jr. The copy and headline staff included SHIRLEY BERTLESON, TED ODELL, JIM SARDEN and FRED WILLIAMS; and SHIRLEY ARNOLD did the typing. Sponsor of this active club is RICHARD BUTLER.

BINARY NOTATION By Ralph H. Hagen Columbus High School, Marshfield

Binary or dyadic notation uses only 2 digits, 0 and 1, and regards 2 as the base number. The relations between the decimal and binary systems that: 0 = 0, 1 = 1, 2 = 10, 3 = 11, 4 = 100, 5 = 101, etc. indicate why the sum of 11 and 111 in the binary system is 1010 if two is carried over from one column to another just as ten is in the decimal system.



Most of my preliminary investigations were with binary equivalents of decimal numbers. But as decimal values increased in value I conceived the idea of constructing tools that would be useful in binary arithmetic.

My first device, a simple disk counter (Fig. 1) provides a rapid method of obtaining binary equivalents for a decimal number. By turning the opening of the upper disk opposite a decimal number on the lower disk the binary equivalent appears in an opening as shown in the figure 40 = 101000. Numbers above 50 are read from the counter if the decimal number is doubled and a zero is added to the binary. Thus the binary for 80 is the binary of 40 with an added zero or 1010000. For odd numbers as for example 81, one is added instead of 0. Numbers for the binary disk were obtained by dividing a decimal number down by 2 as for example:

The binary equivalent for 45 is the series of 1's and 0's read from the bottom up, namely 101101.

It is easy to lose a zero or a one in operating with binary numbers. To eliminate this difficulty I constructed a double bar slide rule for addition and subtraction, whose operation is easy and exceedingly helpful. For example, to add 110 and 101, the



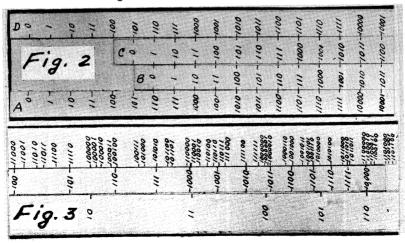
index of the lower or B bar (Fig. 2) is set above 110 on the A scale and 110 on the upper or C bar is set over the 101 of B and the answer appears below these numbers as 1011. For subtraction the top scale D is used and the addition operation is reversed.

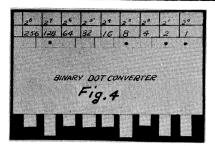
To avoid the long pencil work with small binary numbers, I made a slide rule for multiplication and division (Fig. 3). I constructed my instrument with divisions proportionate to the length of the rule but larger than those on a decimal slide rule. Also for very large numbers I Consequently, the 1 on the left end of

marked off a top scale C. Consequently, the 1 on the left end of the slider and the 10000 on the right end became the indices for the respective lower (scale A) and upper (scale C) rows of numbers. To multiply binaries the index on the slider is brought above the multiplier and the answer appears above the number multiplied. Thus for 110 x 101, the right index goes over 110 and the product is found above the 101 on the C scale.

To check or prove answers in binary work, it is advisable to resort to formulas. I have adopted the following formula which I have simplified so that each binary is recognized from the N with the proper subscript, multiplied by 2 raised to the indicated power: $(n_1 \times 2^0) \neq (n_2 \times 2^1) \neq (n_3 \times 2^2) \neq (n_4 \times 2^3)$... Thus to convert 10001011 to its decimal equivalent, the formula would be applied in this way starting from the right side of the binary: $(1 \times 2^0) \neq (1 \times 2^1) \neq (0 \times 2^2) \neq (1 \times 2^3) \neq (0 \times 2^4) \neq (0 \times 2^5) \neq (0 \times 2^6) \neq (1 \times 2^7)$ or 139. This conversion can also be worked out through the octal system if we regard these values:

Triplet 000 - 001 - 010 - 011 - 100 - 101 - 110 - 111Label 0 - 1 - 2 - 3 - 4 - 5 - 6 - 7Arranged in triplets 1,010,110 = 126 to base 8. To change 126 to base 10 and starting from the left the values produce this result:





 $(1 \times 8^2) \neq (2 \times 8^1) \neq (6 \times 8^0) = 86$. However, to dispense with the use of the formula operations I devised a pocket-sized binary - decimal converter or dot converter (Fig. 4). The values for the powers of 2 are in successive vertical spaces below which are dots covered by movable strips. Pulling the proper strips exposes the required dot for the power of 2 representing the binary value. Thus for 10001011 the dots exposed would be below these deci-

mal values 128 / 8 / 2 / 1 or 139.

The four devices greatly reduced the labor of handling long binary values and helped to supply a nice background in the study of electronic computors.

###

REPORT FROM THE SECRETARY By Robert J. Dicke, Secy.-Treas.

COUNCIL MEETING - A meeting of the Academy Council was held March 19 at the Buckstaff Observatory in Oshkosh. Our council members were indeed fortunate to conduct their meeting in such pleasant and interesting surroundings and to be the guests of our gracious hosts, President and Mrs. RALPH BUCKSTAFF. The meeting was called to order at 11:00 a.m., temporarily adjourned from 12:30 to 2:30 p.m. for the excellent dinner served by our hosts, and finally adjourned at 3:40 p.m. Council members present were R. N. BUCKSTAFF, R. J. DICKE, C. L. FLUKE, C. L. KOWALKE, K. G. NELSON, L. E. NOLAND, A. W. SCHORGER, D. SCHLAFKE, H. A. SCHUETTE, F. C. YOUNG, and by invitation W. E. SCOTT, Editor of the Review and J. W. THOMSON, Jr., Chairman, Junior Academy Committee (see photo).

The applications of 91 Active, 4 Sustaining and one Patron memberships were presented for approval, and all were accepted unanimously. It was ordered by the Council that beginning with the fiscal year corresponding members be required to pay an annual subscription of \$1.00 for the Review.

Although the Academy's financial resources have been seriously curtailed by the reduction of funds received from the Legislature, the Council ordered the Secretary to proceed with publication of the TRANSACTIONS. As a means of reducing printing costs, the Council approved off-set printing for this issue on a trial basis. A deadline date of April 30, 1955 has been set for all papers submitted for publication in this issue. Publication of the <u>Misconsin Academy Review</u> will be continued. The Council ordered that the Editor of the <u>Review</u> be paid an annual salary of \$200.00. In recognition of Mr. Scott's previous contribution to the Academy as Editor of the <u>Review</u>, the Council awarded him a set of TRANSACTIONS from Vol. 2 to date.

Following a report by the Chairman of the Junior Academy Committee on the activities of our junior scientists, the President was directed to appoint a committee to investigate and promote scholarships for outstanding junior members. Another committee was authorized to study our endowment investments and to invest current proceeds from Life memberships. A report of the Nominations Committee was heard, and a slate of officers for 1955-56 was approved.



Left to Right (Seated): Mrs. NELSON, Prof. NOLAND, President BUCKSTAFF, Sec.-Treas. DICKE; (Standing): SCHLAFKE, Profs.THOMSON, SCHUETTE, SCHORGER, KCWALKE, FLUKE and the Editor, SCOTT

NEW MEMBERS - It is a pleasure to announce the following new members whose names have not previously been published in the Review:

Patron - BOSTROM FOUNDATION, INC., Milwaukee

(Karl A. Bostrom, Chm. of the Board)*

Sustaining - KARL A. BOSTROM, Manufacturer, Wauwatosa
CHARLES L. REED, Manufacturer, Fond du Lac
H. R. SWANKE, Tigerton Lumber Co., Tigerton
J. L. WEILL, Manufacturer, Sheboygan

Life - GUIDO R. RAHR, Rahr Malting Co., Manitowoc
Active - J. M. BARRETT, Marquette University, Milwaukee
D. M. BENJAMIN, Univ. of Wisconsin
V. J. BUKOLT, Lullaby Furniture Corp., Stevens Point
H. DEAN COCHRAN, Reg. Forester, USFS, Milwaukee
R. B. COREY, Univ. of Wisconsin
NORMAN T. DAVIS, Univ. of Conn., Storrs, Conn.
Sister MARY ELAINE, Edgewood College, Madison
J. T. EMLEN, Univ. of Wisconsin

J. T. EMLEN, Univ. of Wisconsin

PHOEBE ERICKSON, Artist-Author, New Milford, Conn. Miss M. S. FRASER, U.W. Ext. Center, Racine

Mrs. NEITA O. FRIEND, Ed. Creative Wisconsin, Hartland

ANN L. FURMINGER, Sulphite Pulp Mfg's Research League, Inc., Appleton Sister M. GERALD, C.S.A., Marion College, Fond du Lac

M. R. HAAG, Crops & Soils, Madison

LOUISE W. HANLEY, U.W. Ext. Center, Wausau

M. L. HEDGES, Univ. of Wisconsin
RICHARD HULTMAN, U.W. Ext. Center, Racine
R. A. HUNT, WCD Waterfowl Research, Horicon
A. S. JACKSON, Jackson Clinic, Madison
L. R. JAHN, WCD Waterfowl Research, Horicon

C. S. KOSSACK, Barrington, Ill. H. G. LIEBHERR, Beloit College, Beloit

Mrs. H. G. LIEBHERR, Beloit

Mrs. JESSIE H. McCANSE, Madison

H. L. MANN, Green Bay

Mrs. DOROTHEA MEYER, Ripon

W. F. MILLER, Milwaukee

^{* -} Complete report on this membership will appear in Summer issue.

Active - JEROME ONHEIBER, U.W. Ext. Center, Wausau
D. C. SCHMIEGE, WCD Forest Entomologist, Antigo
H. L. SHANDS, Univ. of Wisconsin Mrs. W. E. SIEKER, Madison Mrs. HELEN C. SMITH, Evansville G. E. SPRECHER, WCD Asst. Director, Madison CHARLENE STEINDERG, U.W. Ext. Center, Sheboygan WILLIAM F. STEWART, U.W. Ext. Center, Green Bay Mrs. H. C. TEISBERG, Madison JOHN H. TINGLUM, Port Edwards School ROY G. TULANE, Asst. Atty. General, Madison G. A. VOGELSANG, Milwaukee JOHN F. VOZZA, U.W. Ext. Center, Racine MAURICE WATERS, U.W. Ext. Center, Green Bay P. G. WHITE, Am. Scientific Laboratories, Madison Miss B. E. WHITNEY, U.W. Ext. Center, Kenosha LILLIAN ZARLING, U.W. Ext. Center, Green Bay DONNA ZYWICKI, U.W. Ext. Center, Green Bay

Our membership to date is as follows: Patron - 3; Life - 31; Sustaining - 4; Active - 514; Library - 16; Corresponding - 10; Honorary - 4; for a total of 582.

DONATIONS - Several members very kindly increased their annual dues as a donation to our general fund. The following donations were received since the first of the year:

Dr. E. B. Fred \$7.00 D. J. Stewart \$20.00

Gov. Walter J. Kohler 7.00 Francis Zirrer 2.00

A. J. Schlaeger 1.00

#

NEWS NOTES

Movies and TV - A branch film library of the UW Extension Division Bureau of Audio-Visual Instruction has been set up at River Falls in cooperation with the Wisconsin State College there. It serves the Northwestern part of the state with over 300 educational films. ... Three new movies produced by the Milwaukee Public Museum are ROBERT RITZENTHALER's "Mexican Kickapoo Indians," ARTHUR NIEHOFF's "Many Faces of India," and EDITH QUADE's "Parade of Wisconsin Folkways." ... For the first time, Univ. of Wisconsin television courses were presented on commercial TV stations early in March. L. H. ADOLFSON, UW Extension Division director, announced that a series on "Conversational German" will be presented from Marinette and "Looking at Music" from Green Bay and Wausau.

Art - The second eight-week summer session of the Madeline Island Arts Center will begin July 27 under direction of Prof. DEAN MEEKER, UW Art Education Dept. He declared that the island locale provides a vast "fund of raw material" for the artist. ... The Clearing, in Door county, where the late Jens Jensen maintained a cultural center, will be the scene of a summer art school supervised by WM. C. HANSEN, President of Central State Teachers College, Stevens Point, and J. MARTIN KLOTSCHE, President of Wisconsin State

College, Milwaukee.

Conference - "The Computing Laboratory in the University" will be the subject of a conference at the Univ. of Wisconsin Aug. 17-19. PRESTON C. HAMMER, who directs Wisconsin's laboratory, is chairman of arrangements, and CONRAD A. ELVEHJEM, dean of the UW Graduate School, will present the keynote address.

Fund - Academy member W. D. STCVAL, M.D., is chairman of the Wisconsin State Medical Society's Section on Medical History which is collecting funds to transform the old Fort Crawford Military Hospital into a medical museum. ###



THE PASSENGER PIGEON — Its Natural History and Extinction By Arlie William Schorger The University of Wisconsin Press 811 State Street Madison 5, Wisconsin January, 1955 - \$7.50

Doctor Schorger, Professor of Wildlife Management at the University of Wisconsin, past-president of the Wisconsin Academy, one of the six commissioners of the Wisconsin Conservation Commission, masterful research compiler and interrogator, has given us a scholarly work on the passenger pigeon. The book consists of a preface, table of contents, list of the 5 tables, list of the 22 figures, 16 chapters of text covering 302 pages, 105 pages of references and notes, and an excellent index, and let us not forget "Dedicated to my wife, whose patience surmounted extinction."

Chapter 1, Early Accounts, tells us that recorded history of the passenger pigeon began on July 1, 1534, when Jacques Cartier saw wood pigeons at Cape Orleans, Prince Edward Island, and recites other early incidents. Behavioral characteristics, such as voice, fear, intelligence, physical habits, sociability, and domestication are covered in Chapter 2, and the next (3) includes a discussion of food under such headings as methods of feeding, plant foods, animal foods, mineral substances, and effect on agriculture. Then follow chapters on (4) Movements, including flight, shape of flocks, effects of weather, crossing lakes; (5) Roosts; (6) Nesting,—colonial nesting, nesting procedures, aberrant nesting, number of nestings; (7) Utilization,—the Indian and the pigeon, squabs, commerce, trapshooting; (8) Methods of Capture, netting, shooting. Under (9) Decrease and Extinction is offered much pabulum for careful digestion by conservationists, sportsmen, and legislators, for here are topics of population figures, decrease, enemies, extinction, conservation and legislation. Description, Anatomy and Physiology, Nomenclature, Distribution, and Migration, chapters 10 to 14, though more or less technical subjects are all delineated to the interest of a layman, and particularly might anyone find absorbing the many names listed under nomenclature.

Schorger in his chapter 15 on Late Records states, "I am willing to accept as the very last record the specimen taken at Sargents, Fike county, Chio, in March 24, 1900," (p.286). Others less conservative may feel that one of the, say, 100,000 sportsmen's guns to the one collector's gun might be more likely to have killed the last passenger pigeon, and that not all the "pigeons" reported from 1901 to 1908 were misidentified mourning doves.

Our master research compiler assembled "a bibliography of approximately 2,200

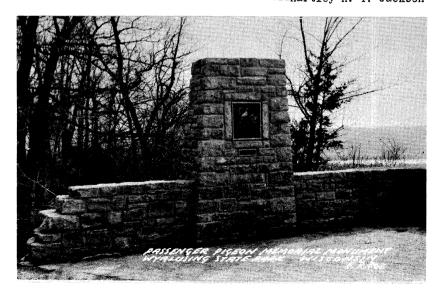


titles" and "if there were included all the references to the newspapers ... the list would readily extend to 10,000." He avoids repetition of a fact, yet gives reference to many sources offering statements in common. It requires judgment to thresh the grain from the chaff of the many assertions found particularly in old newspapers and sporting magazines. Tendency for exaggerations and even false statements in sportsmen's tales were probably no less then than now. Many conflicting statements about the passenger pigeon appear in the literature even as written by careful researchers. Schorger cites or quotes these various views, in many cases conferring his own good judgment by suggestive curt corrections, in others by politely implying doubt as to the statements, and leaving the reader to conclude as to truth or error.

Schorger believes that to the best of our knowledge no other species of bird ever approached the passenger pigeon in numbers, and that "As a guess, I would place this population at 3,000,000,000 at the time of the discovery of America, with a possibility of 5,000,000,000." (p.204). The decline became precipitous from 1871 to 1880; "Public sentiment against the shooting of pigeons at traps was growing rapidly, but the history of all humane or social legislation shows that it is usually very slow in reaching fruition." (p.164). "The sacrifice, however regrettable, was not in vain, for the passing of a bird known to millions has furnished a most poignant example of what will happen when man is heedless of his heritage." (p.230).

Not only will biologists, sportsmen, conservationists, and historians treasure this book, but it will find a place with the general reader of good books. The best fiction offers a no more lively and interesting story. Wisconsinites in particular should read this book, for at Wyalusing State Park stands the beautiful monument to the passenger pigeon. Unfortunately the book contains no picture of this monument, though the jacket illustration is from the plaque. It should have been used also as a tailpiece to chapter 9, where the monument is described.

---Hartley H. T. Jackson



A BIBLIOGRAPHY OF WISCONSIN VEGETATION

Milwaukee Public Museum 818 W. Wisconsin avenue Milwaukee 3, Wisconsin February, 1955 - \$1.50

The MILWAUKEE PUBLIC MUSEUM has recently published "A Bibliography of Wisconsin Vegetation" by H. C. GREENE and J. T. CURTIS of the Department of Botany of the University of Wisconsin. Both of the authors are members of the Wisconsin Academy. This is an annotated list of all publications relating to field botany in Wisconsin which have appeared from 1667 through 1953. More than 135 of the papers were published in the TRANSACTIONS of the Academy. This paper-covered book contains 84 pages and a valuable introduction and index by author. ——Albert M. Fuller

MISCELLANEOUS BOOKS AND BOOKLETS

Following is a list of recently published books, principally by members of the Wisconsin Academy or relative to Wisconsin. Some of them will be reviewed in

greater detail in future issues of the Review.

"Probing Cur Past" is a book of essays written over the last 30 years by Professor MERIE CURTI of the U.W. History Department. The book is available from Harpers for \$4.00. He is also the author, with KENDALL BIRR, of the book "Prelude to Point Four" published recently by the U.W. Press at \$5.00.

Professor SCOTT L. KITTSLEY of Marquette University has published a textbook on "Physical Chemistry." It is No. 97 in the College Cutline Series of Barnes and Noble.

The Ronald Press has just published a book called "Cinco Yanquis en Espana" by Professor EVERETT W. HESSE of the U.W. Dept. of Spanish and Portuguese in collaboration with HUGH RODRIGUEZ-ALCALA (previously with the U.W.; now at State College of Washington).

A book entitled "Solar Energy Research" will be published by the U.W. Press this spring. It is edited by Wisconsin Academy member FARRINGTON DANIELS, Chairman of the Chemistry Dept., and JOHN A. DUFFIE, of the Engineering Experiment Station.

Other recent books by U.W. professors include: "Religion and the Moral Life" (\$3.50-Ronald Press, N.Y.) by Professor A. CAMPBELL GARNETT; revised edition of "Family, Marriage, and Parenthood" (Heath and Co., Boston) by Professor HCWARD BECKER: "Sourcebook in Marriage and the Family" (Houghton Mifflin) by Professor CRVILLE G. BRIM, Jr., and "Growth of Art in American Schools" (\$3.50-Harper and Brothers) by FREDERICK M. LOGAN.

As a result of his recent trip around the world for the <u>Wis-consin State Journal</u> (Madison), Wisconsin Academy member DON ANDERSON published a booklet of his stories entitled, "It's Really Round." Copies are available for 35 cents.

In cooperation with the U.W. and the Wisconsin Geological and Natural History Survey, U.S. Geological Survey personnel ALLEN F. AGNEW, ARTHUR E. FLINT and R. P. CRUMPTON (all at Platteville) prepared a map on the scale of $5\frac{1}{2}$ inches to the mile of the lead-zinc deposits area of 19 square miles in SW Wisconsin from Cuba City eastward to a line just north of Shullsburg. Copies are available for 75¢ from State Geologist GECRGE F. HANSON, Science Hall (Madison).



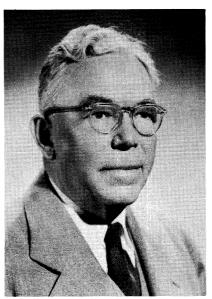
In Memoriam

Miss

Elizabeth A. Gehlenschlaeger 187 -1954

ELIZABETH A. OEHLENSCHLAEGER died in Milwaukee on Dec. 27, 1954 at about 80 years of age. She had been a Wisconsin Academy member since 1943. Her intense interest in ornithology was specialized in the study of birds of prey, healing of sick and injured birds and conservation education. She was also an active member in the A.O.U. and W.S.O. and published a number of papers in their journals. Born in Denmark, she came to

America as a young girl, when her family settled near Oconomowoc. She had a deep appreciation for literature and the arts, and translated into English a tragedy called "Axel and Walburg" by her grandfather, Adam Gotlob Ochlenschlaeger, once Denmark's poet laureate. In the 1937 picture shown here she is handling a peregrine falcon. ---W.E.S.



In Memoriam

Benjamin Smith Reynolds 1885-1954

BENJAMIN SMITH REYNOLDS, who died in Madison on Dec. 20,1954, was a member of the Wisconsin Academy since 1944. He was a manufacturer and Chairman of the Board of the Research Products Corporation in Madison as well as a Director of several other companies. He graduated from the University of Wisconsin in engineering in 1909 and in 1952 was honored on Engineer's Day. As alumni representative on the University of Wisconsin Board of Visitors, he served as the Board's Secretary.

A leader in projects aimed at community betterment, Reynolds gave freely of his time and energy for civic work. There is being established in his memory at the University of Wisconsin an annual

award of a medal and \$1,000 to the faculty member who contributes most to the instruction of engineering students. It is an award "for excellence in teaching future engineers." He is survived by his wife and a son. ---W.E.S.



In Memoriam

Richard Fischer

1869-1955

RICHARD FISCHER, emeritus professor of chemistry at the University of Wisconsin, died at Minneapolis on Feb. 7, 1955. His affiliation with the Wisconsin Academy began on December 27, 1896 and he was one of its oldest living members. He was elected a Life Member on April 12, 1946.

Fischer was born at New Ulm, Minnesota on November 18, 1869 and received his early schooling there. He joined the staff of the University of Wisconsin Department of Pharmacy in 1894 after receiving a B.S. degree from the University of Michigan. In 1898-1900 he studied at the Universities of Berlin and Marburg and he received a Ph.D. from the latter school in 1900. In 1950 that school honored him by re-conferring upon him the Ph.D. degree on the fiftieth anniversary of his graduation.

In 1903 he was appointed chemist to the Wisconsin Dairy Food Commission in addition to his teaching duties as an assistant professor in the Department of Pharmacy. In 1909 he was appointed State Chemist and Director of the Chemical Laboratory and from 1913 to 1930 he was Consulting Director to the Commission. When the University established the Chemistry Course in 1909, Fischer became a full professor in the Chemistry Department. The next year he reached the goal of his ambition, to teach organic chemistry.

Wisconsin was a pioneer in establishing pure food laws and Professor Fischer possessed unique experience and ability in this field because of his chairmanship of the Interstate Food Commission's Committee on Standards. In anticipation of the enactment of the Pure Food and Drugs Act of June 30, 1906, the Secretary of Agriculture set up a six-member Committee on Food Standards. Professor Fischer was selected as one of the members of this group which prepared an historic document in the annals of the interstate traffic of foods in America. His work with the State Dairy and Food Commission did much to promote wisconsin's dairy industry and prosecute violations of the food laws in the courts.

Students of Professor Fischer loved and respected him. He was always glad to assist them and his kindly way of helping was one of the fine characteristics he possessed. Although he never married, he had many friends. His final gesture was a bequest of \$10,000 to the University of Wisconsin Chemistry Department to establish a permanent trust fund for loans to needy students in chemistry.

Richard Fischer was also an honorary member of Alpha Chi Sigma, professional chemical fraternity, and a member of the American Chemical Society and Die Deutsche Chemische Gessellschaft. --Adapted from a U.W. Memorial Resolution prepared by the following committee: Michael W. Klein, Karl Paul Link, J. H. Mathews, S. M. McElvain and Henry A. Schuette (chairman).



State and Academy News

NEWS NOTES FROM MARQUETTE UNIVERSITY
Collected by Professor Scott L. Kittsley
(Review Reporter)

Fr. JOHN P. O'BRIEN, C.S.V., of the Biology department, recently took a trip to the Argonne National Laboratory where he dis-

cussed the progress of the research project he is doing for the Atomic Energy Commission with several of the scientists there. Making the Journey with him were his two assistants, ED FRANK and Miss BARBARA HERBES. Main purpose of the trip, according to Fr. O'Brien, was to give these two an opportunity to acquaint themselves with the facilities of this large government laboratory. The project which Fr. O'Brien and his assistants are working on began at the start of the school year, and should continue for at least three years. It concerns a series of experiments in radiobiology. The Atomic Energy Commission gave a \$12,000 contract for the first year which made the work possible. In all probability, Fr. O'Brien said, the AEC will renew the contract until the job is done.

Fr. C'Brien is also the president of the Milwaukee Sigma Xi Club which was officially organized last September. Sigma Xi is a national scientific fraternity devoted to the promotion of research. It embraces all scientific fields. JAMES M. BARRETT, also of the Biology department, is the treasurer of the organization.

NICK J. TOPETZES, Education department, is giving a series of lectures on mental health to the Pierce Street School P.T.A. He spoke February 15 on "Emotional Health" and will speak March 8 on "Rejection and Acceptance" and April 5 on "Emotional Independence." He also spoke to juniors and seniors at Washington High School recently on the subject of "Teaching."

"The Mental Health of the Teacher," an article by CYRIL C. O'BRIEN, Education department, appeared in the January issue of The Journal of School Health, published by the American School Health Association.

A TRIBUTE TO LIBERTY HYDE BAILEY (By Albert M. Fuller, Milwaukee Public Museum): "Bailey did more to shape or guide the trend in agriculture and horticulture in this country than any other man. He was editor of the Rural Sciences Series of publications for Macmillan Company. The first book of that series was "The Soil" by Professor F. H. KING of the University of Wisconsin. I collected Wisconsin blackberries for him since 1924. He described 14 new species from my material. The first new species was Rubus wisconsinensis collected near Red Granite and described in 1932. Rubus Fulleri, collected near Necedah, was described in 1941. Rubus Fassettii, collected by FASSETT in Bayfield county, was also described in 1941. Two new species were collected by RICHARD SCHNEIDER. Rubus Pohlii was collected in Milwaukee county and described in 1947. Bailey described a total of 18 new species for Wisconsin.

"After KRUSCHKE's work on the hawthorns is published, I plan to complete the field collecting and publish on the blackberries of Wisconsin."

EDUCATIONAL BROADCASTING AT LAWRENCE COLLEGE - This spring Lawrence college will have its own FM radio station on the air. The Green Bay Press-Gazette Publishing Company recently presented a 3,000-watt transmitter, formerly used at WJPG-FM, to the college. The station will be operated as an educational, non-commercial enterprise. A faculty committee will meet with the Wisconsin State Broadcasting Service and the National Association of Educational Broadcasters about programming, and it is hoped that an arrangement can be made with the State FM Network for an exchange of programs. The station will have a coverage of 40 to 50 miles and will operate 8 to 12 hours per day. --- Don B. Schlafke (Review Reporter)

MISCELLANEOUS NEWS

Two Wisconsin Academy members, HENRY A. SCHUETTE (Editor) and AARON J. IHDE (Asst. Editor), are publishing an issue of Badger Chemist each summer in the interest of alumni and friends of the U.W. Department of Chemistry. ... JOHN Z. BCWERS, M.D., will become the Dean of the U.W. Medical School on July 1... Abbot BERNARD H. PENNINGS, President and Founder of St. Norbert College in Green Bay, died March 17. ... GEORGE L. COLLIE, oldest graduate and first professor of anthropology at Beloit College, died on December 28, 1954. ... EDWARD MILLMAN of Woodstock, N.Y. recently joined the faculty of the Layton School of Art in Milwaukee. ... FREDERICK OLIVER PINKHAM became President of Ripon College on April 1. He was educated at Kalamazoo College and Stanford University and, at 34 years of age, is one of the youngest college presidents in the country. ... Professor J. G. WINANS, Academy member in the U.W. Physics Department, gave a seminar talk in February at the University of Chicago Laboratory of Molecular Structure and Spectra. He has also "made the headlines" coast to coast with his experiments in "pinwheel" airplane take-off from Lakes Mendota and Kegonsa. ... Prof. HASKELL M. BLOCK, U. W. Dept. of Comparative Literature, has an article, "The Humanities and General Education," in a recent number of the Journal of Higher Education. ... Prof. XENIA GASIOROWSKI, U.W. Dept. of Slevic Languages, has contributed an article on "Recent Trends in Soviet Literature" to Modern Language Forum. ... I.C.M. PLACE will join the U.W. faculty in July as associate professor of forestry and wildlife management.

HONORS and AWARDS

FARRINGTON DANIELS will be awarded the 1955 Willard Gibbs medal, one of the highest honors to an American chemist, "because of his eminent work in, and original contributions to, pure and applied chemistry. " ... U.W. President E. B. FRED recently was the recipient of an honorary Doctor of Laws degree from Michigan State College on the occasion of their Founder's Day convocation...
WALLACE B. GRANGE is the 24th recipient of the Burroughs Medal presented by the John Burroughs Association for his book, "Those of the Forest. " ... AARON BOHROD had a one man show in the Associated American Artists Galleries in New York recently. ... At the Annual Awards Dinner of the Milwaukee County Historical Society, WALTER BUBBERT received honorable mention for "conceiving and promoting" the Milwaukee Road Centennial Special commemorating the first train to Madison. ... EVERETT W. HESSE, U.W. Department of Spanish and Portuguese, is the newly elected President of the American Association of Teachers of Spanish and Portuguese. . . I.O. HEMBRE was re-elected Chairman of the Wisconsin Chapter of the Soil Conservation Society of America and CYRIL KABAT of W.C.D. was elected Vice-chairman. This organization's National Convention will be held at the American Baptist Assembly, Green Lake, Wis., September 12-14. ... ERIC KNEEN, Vice-president and Research Director of the Kurth Malting Co. of Milwaukee, will receive the 1954 Cincinnati Achievement Award for his research in behalf of the brewing industry. # # #

Nelson, Lewis F. (A 53)

BUTLER

Domagalla, B. P. (A 24)

MEMBERSHIP LIST WISCONSIN ACADEMY OF SCIENCES, ARTS AND LETTERS (to March 19, 1955)

<u>кеу</u>

Type of Membership

A - Active

C - Corresponding
H - Honorary

L - Life

L - Life

E - Library
P - Patron

Date - Year of first
affiliation

Form - Alphabetical and
geographical

WISCONSIN CAMBRIDGE
Dahlen, J. H. (A 54)
Sivesind, Raymond S. (A 54) ANTIGO Schmiege, D. C. (A 55) APPLETON Berry, A. C. (A 54) CEDARBURG Brauns, Fritz E. (A 43) Brown, Relis B. (A 54) Cunningham, M. P. (A 54) Darling, S. F. (A 53) Stephenson, R. G. (A 46) <u>CUDAHY</u> Dahm, Robert E. (A 51) Furminger, Miss A. L. (A 55) Gilbert, W. Paul (A 45) DELAVAN Gilbert, W. Paul (A 45)
Institute of Paper Chemistry (LB 54)
Isenberg, I. H. (A 54)
Knight, Douglas M. (A 54)
EAGL
Knight, Paul (A 53)
Schlafke, Don (A 41)
Sealts, M. M., Jr. (A 54)
Wiley, A. J. (A 54)
Wiley, A. J. (A 54)
Wiley, Mrs. M. W. (A 54)
Wise, Louis E. (A 42)

ASHLAND
Dexter N R (A 54)

FISH Davies, Ithel B. (A 37) EAGLE RIVER
Goldsworthy, V. (A 54) EPHRAIM Holand, R. H. (A 54)
Wilson, Harold C. (A 54)
EVANSVILLE Smith, Mrs. Helen C. (A 55) FISH CREEK Stock, Kurt (A 22) FOND DU LAC Dexter, N. B. (A 54) Gerald, Sister M. (A 55) Reed, Charles L. (S 55) FORT ATKINSON BABCOCK Grange, Wallace B. (A 54) BARABOŌ Walker, D. W. (A 54) Walker, J. T. (A 54) Montie, Earl J. (A 54) BELOIT

Aronson, C. D. (A 54)
Boutwell, P. W. (A 21)
Brown, Robert M. (A 49)
Eells, John S., Jr. (A 49)
Finch, J. V. (A 54)
Fuller, Edw. C. (A 53)
Godfrey, William S. (A 54)
Huffer, Ralph C. (A 49)
Irrmann, Robert H. (A 49)
Liebherr, H. G. (A 55)
Liebherr, Mrs. H. G. (A 55)
McGranahan, Mrs. Floyd (A 49)
Porter, L. C. (A 54)
Upton, R. Miller (A 54)
Welty, Carl (A 35)
BIRNAMWOOD
Lonsdorf, John A. (A 54) GENESEE DEPOT
Greene, Howard T. (A 44)
GREEN BAY BELOIT GREEN BAY
Armitage, K. B. (A 54)
DeCleene, Rev. L.A.V. (A 29)
Guilford, Harry G. (A 54)
Kellogg Public Library (LB 54)
Mann, H. L. (A 55)
Stewart, W. F. (A 55)
Waters, Maurice (A 55)
Westenberger, Rev. E.J. (A 33)
Zarling, Lillian (A 55)
Zywicki, Donna (A 55) HARTLAND Friend, Mrs. Neita O. (A 55) HAYWARD Lonsdorf, John A. (A 54) BLACK RIVER FALLS Kahmann, Karl (A 54) HORICON
Hunt, Richard (A 55)
Jahn, L. R. (A 55)
Poulter, R. W. (A 54) Conservation Dept. (Fisheries) (LB 54) Posekany, L. A. (A 54) Roberts, H. D. (A 54) KAUKAUNA

MADISON (Continued)
Doherty, Mary A. (A 46)
Greco, Jennie (A 45)
Whitney, Miss B. E. (A 55)

LA CROSSE
Comeau, Roger (A 54)
Hardiman, Audrey (A 51)
Rovang, Theo (A 54)
Rozelle, Lee T. (A 51)
Sharp, Terry (A 53)
Uehling, Gene (A 53)
LADYSMITH
Bauer, W. B. (A 54)
Olsen, Miss I. C. (A 54)
LOGANVILLE
Kruse, Mrs. Carla (A 54)

MADISON (Continued)
Dicke, R. J. (A 47)
Dicke, Mrs. Hermine (A 52)
Doane, Gilbert H. (A 37)
Duncan, C. G. (A 54)
Ebling, Walter H. (A 54)
Ekern, Paul C. (A 50)
Ellaine, Sister Mary (A 55)
Ellarson, Robert S. (A 47)
Elvehjem, C. A. (A 44)
Emlen, J. T. (A 55)
Enck, John J. (A 52)
Engel, Martha S. A. (A 48)
Evans, H. P. (A 54)
Evans, Richard I. (A 29) MADISON (Continued) KENOSHA LADYSMITH
Bauer, W. B. (A 54)
Olsen, Miss I. C. (A 54)
LOGANVILLE
Kruse, Mrs. Carla (A 54)
Kruse, Harold (A 54) Ferry, J. D. (A 54)
Finch, Vernor C. (A 21)
Fisher, E. H. (A 54)
Fisk, Emma L. (A 21)
Fluke, C. L. (A 19)
Fluke, Mrs. S. M. (A 52)
Ford, J. C. (A 43, L 44)
Fowlkes, John Guy (A 44)
Fox, Philip G. (A 42)
Fraser, L. A. (A 51)
Frautschi, W. (A 42, L 48)
Frazier, Wm. C. (A 46)
Fred, E. B. (A 22)
Gerry, Eloise (A 19)
Gilbert, E. M. (A 07, L 49)
Gojmerac, W. L. (A 54)
Graber, L. F. (A 29)
Grace, Harriett M. (A 44)
Greene, H. C. (A 42) LOYAL MADISON

Aberg, Wm. J. P. (A 45)
Allen, T. C. (A 46)
Anderson, Don (L 42)
Baerreis, D. A. (A 53)
Baldwin, Ira L. (A 32)
Baumann, Carl (A 44)
Beale, J. A. (A 54)
Beack, Stanley D. (A 54)
Becker, Robert M. (A 53)
Benjamin, D. M. (A 55)
Bergseng, Mrs. M. S. (A 54)
Bird, H. R. (A 54)
Blackshear, Mrs. O. (A 54)
Blanshard, Rufus A. (A 53)
Bohrod, Aaron (A 54)
Brandenburg, F. S. (L 48)
Brettingen, David (A 53)
Brink, R. A. (A 23)
Browne, Frederick L. (A 21)
Bryson, R. A. (A 54)
Busse, L. W. (A 46)
Butler, Richard (A 54)
Cassidy. F. G. (A 54) Thomas, J. R. (A 54) Greene, H. C. (A 42) Guyer, M. F. (A 12, L 51) Haag, M. R. (A 55)
Halbert, Charles A. (A 42)
Hall, N. F. (A 34)
Hammer, P. C. (A 54)
Hanner, W. M. (A 45)
Hanson, George F. (A 53)
Harper, Josephine L. (A 51)
Hasler, A. D. (A 40)
Hedges, W. L. (A 55)
Hembre, I. O. (A 54)
Heffner, R.M.S. (A 44)
Herman, Elmer F. (A 47)
Herrick, C. A. (A 29)
Herriott, J. H. (A 54)
Hesseltine, W. B. (A 54)
Hickey, J. J. (A 48)
Higuchi, Takeru (A 49)
Hole, Francis D. (A 52)
Hougen, O. A. (A 25)
Hrubesky, C. E. (A 43)
Huffer, C. M. (A 54)
Hughes, Merritt Y. (A 40) Cassidy, F. G. (A 54)
Clark, Harry H. (A 30)
Clark, Paul F. (A 21, C 53)
Clarke, H. M. (A 48)
Coleman, Thomas E. (A 42)
Cooper, D. C. (A 29)
Cooper, Edwin L. (A 54)
Corey, R. B. (A 55)
Cottam, Grant (A 53)
Conservation Dept. Cottam, Grant (A 55)
Conservation Dept.
(Fisheries) (LB 54)
Curti, Merle (A 54)
Curtis, John T. (A 33)
Daniels, Farrington (A 21)
Davey, Charles B. (A 53)
Deutsch, H. F. (A 42)
Dever, D. A. (A 53) Ihde, A. J. (A 45) Ihde, Mrs. Olive (A 53) Ingraham, M. H. (A 29)

ADJSON (Continued)
Jackson, M. S. (A 55)
Jackson, M. L. (A 47)
Jacobson, J. R. (A 46)
Jenkins, John W. (A 53)
Jones, Mrs. Edith (A 53)
Jones, F. R. (A 19)
Jones, Robert H. (A 54)
Jutton, Dorothy R. (A 51)
Kent, Fritz (A 44)
Keitt, G. W. (A 17)
Kirchhoff, Roger C. (A 42)
Koerber, T. (A 51)
Kohler, W. J. (A 54)
Kowalke, O. L. (A 19, L 49)
Kowalke, O. L. (A 19, L 49)
Kroeber, C. B. (A 54)
Larsen, Edwin M. (A 47)
Larsen, J. A. (A 54)
Levi, H. W. (A 47)
Livi, H. W. (A 47)
Livy, Charles N. (A 54)
McCabe, Robert A. (A 46)
McCabe, Robert A. (A 46)
McCabe, Robert A. (A 46)
McCanse, Mrs. Jessie H. (A55)
McGanse, Mrs. Jessie H. (A55)
McCanse, R. A. (A 54)
McCabe, Robert A. (A 46)
McCabe, Robert A. (A 47)
Mphee, E. R. (A 54)
McCane, C. L. (A 47)
Mphee, E. R. (A 54)
McShan, W. H. (A 53)
Mackenthun, K. M. (A 47)
Mahony, K. R. (A 54)
March, H. W. (A 21)
Marshall, W. R. (A 54)
March, Raymond J. (A 44)
Schneger, Edwin R. (A 29)
McGly, Elizabeth (A 29)
McGly, Elizabeth (A 29)
McBlvain, S. M. (A 29)
McGly, Elizabeth (A 29)
McHan, S. M. (A 21)
March, Raymond J. (A 44)
Sarler, J. D. (A 52)
Schmidt, Erwin R. (A 29)
Schubring, Mrs. Selma (A 20)
Schubring, Mrs. Selma (A 20)
Schubring, Mrs. Selma (A 20)
Schubring, Mrs. Gertrude (A 54)
Soott, W. E. (A 41)
Schwartz, Sidney L. (A 43)
Sacten, Mrs. Jessie H. (A 55)
Sacten, Mrs. Jessie H. (A 55)
Sacten, Mrs. Jessie H. (A 55)
Sactentrud, Mrs. Jessie H. (A 54)
Schorger, Mrs. Margaret (A52)
Schubring, Mrs. Selma (A 20)
Sch MADISON (Continued) Thwaites, F. T. (A 16)
Neess, John C. (A 53)
Neff, G. C. (L 53)
Nero, R. W. (A 54)
Neuenschwander, H. E. (A 51)
Nichols, M. Starr (A 35)
Nichols, R. E. (A 54)
Noland, L. E. (A 54)
Noland, Mrs. Ruth C. (A 53)
Ockerman, John W. (A 53)
Orsini, G.N.G. (A 54)
Parsons, Helen T. (A 29)
Paul, Benson H. (A 45)

Thwaites, F. T. (A 16)
Todd, Arlie C. (A 54)
Truog, Emil (A 21)
Tulane, Roy G. (A 55)
Tyler, Stanley (37)
Urdang, Geo. (A 43)
Vanderwall, E. J. (A 42)
Walker, Mrs. Edna D. (A 54)
Walker, J. C. (A 17)
Welsh, S. W. (A 54)
White, Helen C. (A 32)
White, P. G. (A 55)

MADISON (Continued)

Peterson, T. A. (A 54)
Pooley, Robert C. (A 51)
Rathbun, John W. (A 53)
Reese, Hans H. (A 42)
Rennebohm, O. (L 44)
Reynolds, May S. (A 54)
Rindt, K. E. (A 54)
Ritter, Geo. J. (A 39)
Roark, Raymond J. (A 44)
Roberts, R. H. (A 54)
Rohlich, G. A. (A 49) Teisberg, H. O. (A 37)
Teisberg, Mrs. H. O. (A 55)
Thomas, Frederick L. (A 53)
Thompson, Mrs. Noel F. (A 53)
Thomson, J. W., Jr. (A 37)
Threinen, Charles W. (A 54)
Thwattes, F. T. (A 16)
Todd, Arlie C. (A 54)
Trenk, F. B. (A 54)
Truog, Emil (A 21)
Tulane, Roy G. (A 55)
Tyler, Stanley (37)
Urdang, Geo. (A 43)
Vanderwall, E. J. (A 42)

Spring, 1900	
WARTON / Continue 3	MILMAUVEE (Continued)
MADISON (Continued)	MILWAUKEE (Continued)
Whitley, Alsin (A 52)	Kittsley, Mrs. Helen (A 48)
Wilde, Mrs. Martha H. (A 54)	Kittsley, S. L. (A 50)
Wilde, S. A. (A 44)	Knisely, Merton E. (A 51) Kruschke, Emil P. (A 40) Lay, Mrs. Anne B. (A 50)
Wilds, Alfred L. (A 48) Williams, Harold Fish (A 46)	Kruschke, Emil P. (A 40)
Williams, Harold Fish (A 46)	Lay, Mrs. Anne B. (A 50)
Winans, J. G. (A 46)	MacArthur, Kenneth (A 58)
Wisniewski, T. F. (A 48)	McDonough, E. S. (A 37)
Wittry, Warren L. (A 53)	McKern, W. C. (A 45)
Wittry, Warren L. (A 53) Wolfe, H. R. (A 32)	McKern, W. C. (A 45) McKern, Mrs. W. C. (A 54) McLoughlin, T. J. (A 54) Miller, W. F. (A 55)
Wurster, Dale E. (A 51) Young, F. C. (A 52)	McLoughlin, T. J. (A 54)
Young, F. C. (A 52)	Miller. W. F. (A 55)
Zimmerman, Fred R. (A 35)	Milw.Public Museum (LB 54)
MANITOWOC	,
Rahr, Guido (L 54)	Nelson, F. H. (A 53)
MARSHFIELD	Nelson, Mrs. Kath. (A 43)
Hagen, Ralph (54)	Neumyer, W. J. (A 49)
Lauretta, Sister M. (A 46)	OlBrien C C (A 50)
Vanabetald Trac Tibrary (1954)	O'Brien, C. C. (A 50) O'Brien, Rev. John P. (A 50)
Marshfield Free Library (LB54)	Delegate S. T. (A. 50)
Weigel, Mark (A 52)	Peloquin, S. J. (A 54) Peppler, H. J. (A 48)
MAZOMANIE	Peppier, H. J. (A 40)
Sorenson, D. D. (A 53)	Perry, James C. (A 43)
Sorenson, Mrs. Juanita (A 51)	Peterson, W. F. (A 54)
MENOMONIE	Polacheck, S. (A 54)
Cox, Eleanor H. (A 42)	
Marshall, Anne (A 48)	Reis, Rev. Raymond H. (A 43)
MERRILL	Reith, Allan F. (A 29)
Peroutky, J. W. (A 54)	Ritzenthaler, R. E. (A 53)
T.B.Scott Free Library (LB 54)	Salamun, P. J. (A 48)
MIDDLETON	Saunders, John W. (A 50)
Hafstad, George E. (A 53)	Schroeder, Myron (A 51)
MILTON	Squier, Theo. L. (A 32) Steil, Wm. N. (A 19)
Dunn, Percy L. (A 54)	Steil, Wm. N. (A 19)
MILWAUKEE	Strenlow, Elmer W. (A 40)
Albright, Miss M.A. (A 51)	Studer, Sister M. Mira (A39)
Baier, Joseph (A 45)	Swendsen, Mrs. Lucile E. (A32)
Barrett, J. M. (A 55)	
Barta, E. F. (A 32)	Throne, Alvin L. (A 30)
Barta, E. F. (A 32) Belknap, E. L. (A 54)	Vogelsang, G. A. (A 55) Werwath, K. O. (A 54) Walker, Ruth (A 27)
Bostrom Foundation, Inc. (P 55)	Werwath, K. O. (A 54)
Karl A. Bostrom	Walker, Ruth (A 27)
Chairman of the Board	washburn, R. G. (A 32)
Bruder, Edgar G. (A 54)	Whitford, Mrs. Kathryn (A 54)
Bubbert, Walter (A 43)	Whitford, P. B. (A 49)
	Zych, Wilhelm (A 53)
Cochran, H. Dean (A 55)	MINOCQUA
Devitt Andrew B (A 48)	Churchill, W. S. (A 45)
Dickinson, W. E. (A 49) Drescher, Milton A. (A 47) Frister, C. P. (A 54) Fuller, Albert M. (A 25) Gates, Charles B. (A 42)	MOSINEE
Drescher, Milton A. (A 47)	Hemp, Richard A. (A 54)
Frister, C. P. (A 54)	- •
Fuller, Albert M. (A 25)	NECEDAH
Gates, Charles B. (A 42)	Madura, W. H. (A 54)
Gillan, A. Joseph (A 47)	NEENAH
Gromme. Owen J. (A 51)	Brown, Mrs. Irene (A 54)
Hainer, F. W. (A 54)	Brown, Wm. J. (A 54)
Hainer, F. W. (A 54) Hainer, Mrs. Ruth D. (A 54)	Brown, Wm. J. (A 54) Millar, J. B. (A 54) Reud, Wm. F. (A 53)
Hanawalt, Ella M. (A 32)	Read. Wm. F. (A 53)
Hanawalt, Ella M. (A 32) Hayes, Merlin L. (A 40)	Sage, Charles H. (A 53)
Heun, A. L. (A 30)	
Heun, Mrs. Marie (A 52)	OCONOMOWOC
	Lindsay, Ruth H. (A 29)
Kesselman, William (A 45)	Rhode, H. W. (A 29, L 47)
Kieckhefer, Mrs. Alfred (A 54)	

```
ONALASKA
                                                                               SHEBOYGAN
     Peterson, Alvin M. (A 54)
                                                                                   Mead Public Library (LB 54)
 OSHKOSH
                                                                                   Prisland, Mrs. Marie C. (A54)
     Buckstaff, Mrs. Annie L. (A 52)
Buckstaff, R. N. (A 22, P 54)
Conservation Dept.
                                                                                   Steinberg, Charlene (A 55)
Weill, J. L. (S 55)
                                                                               SPENCER
    Conservation Dept.
(Fisheries) (LB 54)
Pfefferkorn, E. B. (A 40)
Public Library (LB 54)
Public Museum (LB 54)
Reed, G. G. (A 54)
Steiger, Carl (P 54)
Talbot, H. W. (A 40)
Unger, James W. (A 53)
                                                                                   Reinholz, E. G. (A 54)
                                                                               SPOONER
                                                                                   Conservation Dept.
                                                                                        (Fisheries) (LB 54)
                                                                              SPRING GREEN
Wright, Frank Lloyd (H)
                                                                              STEVENS POINT
Bukolt, V. J. (A 55)
Pierce, B. R. (A 54)
Schmeeckle, F. J. (A 54)
Sylvester, W. R. (A 48)
 PLAINFIELD
     Hamerstrom, F. N., Jr. (A 53)
PLATTEVILLE
Martin, Ella M. (A 48)
Newlun, C. C. (A 48)
Smith, W. N. (A 42)
Zellmer, Luther A. (A 41)
                                                                               SUPERIOR
                                                                                Anderson, H. W. (A 54)
Bolender, E. L. (A 32)
Cooper, Berenice (A 37)
Gradin, Robert W. (A 54)
Parish, Glenn A. (A 53)
Seguin, Hazel A. (A 42)
 PORT EDWARDS
     Kilp, F. George (A 54)
Tinglum, Jahn H. (A 55)
                                                                              TIGERTON
                                                                                   Swanke, H. R. (S 55)
     Packard, R. L. (A 54)
 POYNETTE
     Becker, Geo. C. (A 42)
                                                                              VERONA
PRAIRIE DU CHIEN
                                                                                  Monthey, L. G. (A 54)
     Scott, Rev. John M. (A 54)
                                                                              WAUKESHA
                                                                                   Carroll College Library (LB 45)
     Cameron, Donald H. (A 33)
                                                                                  Christoph R. J. (A 54)
Richason, B. F., Jr. (A 55)
    Cameron, Donald H. (A 33)
Esser, Robert E. (A 47)
Fraser, Miss M.S. (A 55)
Goder, Harold A. (A 52)
Gunlogson, G. B. (A 46, L 48)
Hultman, Richard (A 55)
Lewis, Ronald E. (A 53)
Vozza, John F. (A 55)
                                                                              WAUSAU
                                                                                  Hanley, L. W. (A 55)
Onheiber, Jerome (A 55)
                                                                                   Seto, Frank (A 53)
                                                                              <u>WAUWATÓSA</u>
                                                                                  Bostrom, Karl A. (S 55)
Evans, Clarence T. (A 21)
Henderson, Dion (A 51)
RIPON
    Barber, W. H. (A 12, L 51)
Conant, G. H. (A 33)
Hagquist, Carl W. (A 52)
Holden, Marjorie C. (A 53)
Kohl, E. J. (A 42)
                                                                              Henderson, Dion (A 51)
Lamers, Wm. (A 39)
Neidhoefer, J. R. (A 36)
Neumann, A. P. (A 54)
Reyer, Harold B. (A 45)
Warner, E. D. (A 49)
Wiegand, Phillip A. (A 53)
Zillmer, R. T. (A 54)
WEST DE PERE
Keefe, Rev. Anselm M. (A 27)
WHITEWATER
Chappe Leaph J. (A 37)
Limback, John P. (A 48)
Meyer, Mrs. Dorothea (A 55)
Meyer, Henry (A 48)
Pratt, Clarence H. (A 40)
RIVER FALLS
    Kettelkamp, B. H. (A 54)
Lieneman, Miss C. (A 54)
Muto, Peter (A 54)
                                                                             Chopp, Joseph J. (A 37)
Grant, G. P. (A 54)
Lahti, Hugo E. (A 54)
Prucha, R. W. (A 54)
Williams, E. J. (A 54)
WILLIAMS BAY
Ven Blesbroock G. (A 22)
     Setterquist, T. (A 54)
ROTHSCHILD
     Abrams, Allen (A 42)
     Everest, D. C. (A 42)
                                                                                   Van Biesbroeck, G. (A 27)
                                                                             WISCONSIN DELLS
Marshall, Ruth (A 35, L 46)
SARONA
    Bailey, Robert (A 54)
                                                                                 Van Antwerp, Fidelia (A 54)
```

DPI INE, 1900	
	MOODDIES
WISCONSIN RAPIDS	WOODRUFF
Brener, W. H. (A 54)	Conservation Dept.
Brener, W. H. (A 54) Olson, Ted (A 51)	(Fisheries) (LB 54)
11m2 - man = 2 N D / A 54 \	,
Underwood, N. D. (A 54)	
WOODFORD	
Eastwood, John P. (A 51)	
<u>out</u> of	STATE
ALABAMA	ILLINOIS (Continued)
Barker, A. L. (A 34)	Cull, Irene M. (A 47)
	Peoria
Auburn	V (1 W (A 55)
CALIFORNIA	Kossack, C. W. (A 55)
Bradley, H. C. (A 08, L 49)	Barrington
Berkeley	Schlaeger, A. J. (A 47)
Continue C 14 /A EZ	
Goethe, C. M. (A 53)	Chicago
Sacramento	Stewart, Duncan J. (A 48)
Storey, O. W. (A 42)	Rockford
Santa Barbara	Woodman, Mrs. Patricia (A 53)
Danta Darbara	
Struve, Otto (27, C 50)	Chicago
Berkeley	Woodman, W. J. (A 52)
Trask, P. D. (A 46)	Chicago
	Zirrer, Francis (A 42) Villa Park
Berkeley	Walle Denk
Wilson, H. F. (A 16, C51)	VIIIA PAIK
La Canada	INDIANA
CONNECTICUT	Hiestand, W. A. (A 26, C 49)
Alcom Doul (A 30)	Lafayette
Alcorn, Paul (A 37)	Omnumt Philip A (A 51)
Storrs	Orpurt, Philip A. (A 51)
Davis, N. T. (A 55)	North Manchester
Storrs	Potzger, J. E. (A 41)
Erickson, Phoebe (A 55)	Indianapolis
EFICKSON, PROCESC (A 55)	TOWA
New Milford	IOWA
Frasche, Dean F. (A 37)	Errington, Paul (A 33)
Greenwich	Ames
	Ferris, Deam H. (A 47)
Jannke, Paul J. (A 37)	
Storrs	Lamoni
Voigt, G. K. (A 49)	Robinson, W. Merle (A 45)
New Haven	Mt. Pleasant
	KANSAS
Wilbur Cross Library (LB51)	AANDAD MILL MA AA C EO
U.Conn., Storrs	Sperry, Theo. M. (A 37, C 50)
DISTRICT OF COLUMBIA	Pittsburgh
U.Conn., Storrs DISTRICT OF COLUMBIA Bertrand, Kenneth C. (A 37) Doolittle, Sears P. (A 33)	LOUISIANA
bertrand, Kenneth C. (A C)	Suzuki, Howard K. (A 47)
Doolittle, Sears P. (A 33)	Buzuki, nowaru k. (A 41)
Jackson, H. H. T. (A 10, L 50) Lenroot, Miss K. (H)	New Orleans
Lenroot, Miss K. (H)	MARYLAND
Wetmore, Alexander (H)	Drebhsler, Charles (A 19)
we omore, michander (m)	Beltsville
Winslow, C. P. (A 42)	Gt. A G. table 2.8 (A. C2)
Wright, Stillman (A 27)	Steiner, Gotthold (A 23)
FLORIDA	Mt. Ranier Wing, Monta E. (A 36)
	Wing, Monta E. (A 36)
Denniston, R. H. (A 05, L 48)	Baltimore
Winter Park	DALUIMOTE
Hawley, John C. (A 42)	MASSACHUSETTS
Delray Beach	Forbes, Esther (H)
	Worcester
Twenhofel, H. W. (A 19, C 52)	Mead, W. J. (A 11, L 51)
Orlando	
GEORGIA	Belmont
Nevins, Beatrice I. (A 29)	Seymour, Rev. F. C. (A 49)
	Dighton
Valdosta	MICHICAN
Stoddard, Herbert L. (A 42)	MICHIGAN (A 57)
Thomasville	Curry, Laverne L. (A 55)
ILLINOIS	Curry, Laverne L. (A 53) Mt. Pleasant
	Durkin, Joseph T. (A 54)
Burgess, Jackson (L 45)	
Chicago	Marquette

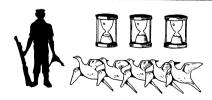
MICHIGAN (Continued) Eggleton, F. E. (A 36) Ann Arbor Hile, Ralph (A 32) Ann Arbor Jeserich, M. W. (A 47) Big Rapids Oberdorfer, Claude (A 51) Iron Mountain Schorger, W. D. (L 54) Ann Arbor MINNESOTA Davis, E. W. (L 45) St. Paul Marshall, A. M. (A54) Red Wing Marshall, Mrs. A. M. (A 54) Red Wing Noland, W. E. (A 50) Minneapolis Ordway, John G. (A 44) St. Paul Wadmond, S. C. (A 03, L 47) Minneapolis MISSISSIPPĪ Pierce, R. S. (A 53) Vicksburg MISSOURI Haberman, W. O. (A 47) Webster Groves Whitehead, Marvin D. (A 50) Columbia NEW YORK Dodge, B. O. (A 12, L 51)
_ New York Frey, Charles N. (A 22) Scarsdale Gloyer, W. O. (A 08, L 50) Geneva Klak, George E. (A 32) Brooklyn Mader, Donald L. (A 53) Gloversville Marquette, W. G. (A 44, L 50) Pleasantville Neuman, A. K. (A 51) New York Reynolds, Edw. D. (A 54) New York Stout, Arlow B. (A 41, L 49) New York

NORTH CAROLINA Dogger, James R. (A 50) Raleigh Lawton, Gerald W. (A 52) Chapel Hill OHIO Bartsch, A. F. (A 45) Cincinnati Catenhusen, J. (A 43) Steubenville Oberholser, H. A. (A 15, C 52) Cleveland OKLAHOMA Tomlinson, C. W. (A 21, L 45) Ardmore OREGON Oregon State College Library Corvallis (LB 50) PENNSYLVANIA Blocher, Rev. R.B. (A52,C53) Malvern Honey, E. E. (A 43, C 49) State College RHODE ISLAND Browning, H. W. (A 20) Kingston Snell, Walter H. (A 19) Providence SOUTH DAKOTA Vaughn, C. M. (A 48) Vermillion TEN<u>NESSEE</u> Durand, Loyal, Jr. (A 35) Knoxville VIRGINIA Van Engel, W. A. (A 46) Gloucester Point WASHINGTON Buss, Irven O. (A 42) Pullman CANADA

Wales, Julia G. (A 31, C 47) St. Andrews E., Quebec

Summary

Academy membership represents 75 Wisconsin communities, 28 other states and Canada.



OFFICERS OF THE WISCONSIN ACADEMY OF SCIENCES, ARTS AND LETTERS

PRESIDENT

Ralph N. Buckstaff

The Buckstaff Co., Oshkosh

VICE-PRESIDENT (SCIENCES)

Joseph Baier

UW Extension Div., Milwaukee

VICE-PRESIDENT (ARTS)

Don Schlafke

Institute of Paper Chemistry, Appleton

VICE-PRESIDENT (LETTERS)

F. Chandler Young, UW, Madison

SECRETARY-TREASURER

Robert J. Dicke, UW, Madison

LIBRARIAN

Gilbert H. Doane, UW, Madison

COUNCIL

The President

The Vice-Presidents

The Secretary-Treasurer

The Librarian

Past Presidents:

Paul W. Boutwell

A. W. Schorger H. A. Schuette

L. E. Noland Otto L. Kowalke

W. C. McKern E. L. Bolender

Katherine G. Nelson

C. L. Fluke

COMMITTEES

Publications:

The President, ex officio The Secretary, ex officio

Fred R. Jones

Membership:

The Secretary, ex offico C. L. Fluke, Chm.

G. Van Biesbroeck

J. J. Chopp

Elmer F. Herman

Henry Meyer

REPRESENTATIVE ON THE COUNCIL OF THE A.A.A.S.: Robert J. Dicke, University of Wisconsin

CHAIRMAN, JUNIOR ACADEMY OF SCIENCE John W. Thomson, Jr., University of Wisconsin

A Message from the Vice-President

In 1870 the founders of the Wisconsin Academy appealed successfully to prominent citizens of the State in their "Call for a Meeting to Organize". They recognized then, as members and citizens do now, how important the Academy can be for the well being of the State and for its individual members. Note the opening paragraph of this historic document:

"The undersigned believe that the prosperity and power of a State depend not more upon its material resources than upon the culture of its people and the extent of their knowledge of nature and man. Accordingly, we recognize the high claims of all properly organized institutions of learning, as being essential to the public welfare, and hence clearly entitled to the fostering care of government and people. But we also recognize the fact that such culture and knowledge as are furnished by all schools and colleges are themselves primarily dependent on the discoveries, inventions and labors of men and associations of men devoted to original investigation; and that, therefore, it has been the policy of every enlightened country of modern times to encourage establishment of societies and institutions for the promotion of such objects."

Many Wisconsin people have the kind of inquiring mind, the degree of fascination with new knowledge and the depth of appreciation for scholarly endeavor to enjoy membership in this Academy. We who are members can understand how the Academy can enrich one's life and contribute to the cultural and intellectual life of the State. But we must take time to explain to those who share our interests how unique and important the Academy is. Each of us owes it to our colleagues, to our youth, and to our State to increase even more rapidly our growing membership. Each of us now must write to or call on our own friends.

F. CHANDLER YOUNG Vice-President (Letters)

BE SURE TO PLAN ON THE 85th ANNUAL MEETING AT THE U.W. MILWAUKEE EXTENSION DIVISION, MAY 6 and 7!