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WISCONSIN ACADEMY REVIEW

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The Wood Engraver from Mazomanie

By Kay Price

Driving into the small village of Mazomanie, I never suspected I'd have any trouble finding the home of Frank Utpatel, one of this country's finest wood engravers. I stopped at a house I thought fit my vague directions, hoping it would be his.

"Frank Utpatel, who's he? I never heard of him," said the dark-haired woman who answered the door. Recovering from my obvious shock, I explained he was a famous artist, a well-known wood engraver. She insisted, "He don't live around here, I'd know, though I've only lived here two years."

As I walked back to my car, she stuck her head out the door and yelled, with a superior air of injured pride, "My neighbor lady is here and she never heard of Frank Utpatel either and she's lived here for 30 years! You must have the wrong town."

Utpatel met me at the door of his modest home, set against the poetic background of the Black Earth Creek. The lawn gently slopes to the edge of the winding creek which is bordered by many varieties of flowers. immediately began talking and I found Utpatel to be a good-natured, humorous man with a warm personality. Burly looking, of short height and stocky build, he reminded me of pictures I had seen of boxing champions. I found out later he had indeed been a semi-professional boxer around 1926-27, having boxed against Joe Sanger. the undeclared featherweight champion of the world.

"I've decided I want to paint and I've just rented an upstairs apartment for my new studio," he said with excitement. "I never wanted to do woodcuts and now I've done over 250

of them. I'm going to start out with landscapes using mostly acrylics and some oils."

He went on to explain that the apartment is perfect for a painter because there are three windows facing north which produces the best light to paint by, not too bright or shadowy. "Everybody wanted to rent that apartment, it has a kitchen and everything but the landlady gave it to me for \$20.00 a month," he said in disbelief. "I guess she wanted to see me paint."

As I looked over some of his latest woodcuts, I asked the obvious question: How did you get started as a wood engraver when you weren't even interested in it? Smiling, Utpatel answered, "One day I went to see a good friend of mine, the late August Derleth, who showed me some pictures in a magazine of some woodcuts he

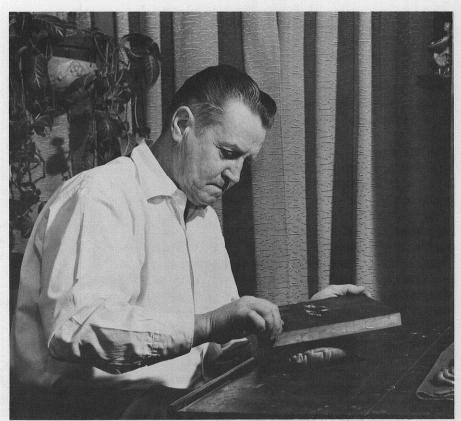
was crazy about. He kidded me and said that he bet that I couldn't do anything like them. I said I certainly could, and we got into quite an argument about it. I ended up so mad that I came home and tried it. That was thirty-five years ago and I ended up illustrating 18 of the 150 books he wrote."

He spoke with deep affection and admiration as he continued to reminisce about his old friend, the author August Derleth. "In 1960, I got a letter from Zurich, Switzerland, which said that I had been elected to The International Institute of Arts and Letters. I took the letter right over to show August and he said, 'Boy, they must have been scraping the bottom of the barrel, I was elected years ago.' "Before his death, August Derleth had hoped to publish a book solely of Utpatel's wood engravings.

Frank Utpatel's wood engravings have been shown in almost every major gallery from coast to coast including The Whitney Museum of American Artists Galleries, The Chicago Art Institute, The Carnegie Institute of Pittsburgh, The Library of Congress, The Seattle Art Museum and The Pennsylvania Academy of Fine Arts. One print was also shown in London.

The excellence of his work has reaped numerous prizes for Utpatel, such as The Printmaker's Prize at The Milwaukee Art Institute; The Purchase Prize at The Seattle Museum of Art; The First Prize in Graphics at The Wisconsin Union; and The First Prize at The Madison Art Association.

Looking around Utpatel's comfortable living room I was impressed by the large number of books I saw. "My hobby is reading," said Utpatel. "One year alone, I consumed 300 books and I have over 2,000 books in my library." Picking up a book by Carl Zigrosser, curator of the Philadelphia Museum of Fine Arts, Utpatel laughed and said, "Carl Zigrosser, August Derleth, John Steuart Curry and myself were together one day and we were crossing the street when a car almost ran us down. Shaken up, we talked and joked about the headlines we would have made if all four of us had been hit. After I gradu-



Dexter Haney Photo

ated from The Milwaukee and Chicago Art Institutes, I studied with John Steuart Curry at his studio at the University of Wisconsin."

I asked him about his background and he said he was born in 1908 and grew up in Milwaukee, the son of a brave policeman. "My father earned a solid gold badge for working in the toughest part of Milwaukee. I still have that badge around here somewhere. My mother was told that she would be a young widow because he wasn't afraid of the devil." Utpatel's grandfather came from Alsace-Lorraine, the historical iron ore region between France and Germany. Culturally and linguistically Lorraine was predominately French and Alsace was Germanic.

Spotting some engraving tools on the end table I asked to see them. "A beginner really only needs four tools to start with. I basically use five all the time but I have a total of eighteen tools which includes two gravers. This elliptical tint tool comes in twelve sizes ranging from one to twelve, the wider the tool the higher the number," he explained.

We digressed a bit when a huge, white Persian cat sauntered past, interrupting us. Utpatel assured me that the cat loved him but he didn't like the cat, in fact he is allergic to cat hair. Finding his favorite place in the sun, the cat proceeded to curl up and go to sleep, ignoring all my efforts to arouse him. I was told that most blue-eyed, white Persians are born deaf, a fact I had not previously known.

Utpatel continued, "Wood engraving is the oldest form of graphic art, discovered by accident, as so many things are. A Chinaman scratched a piece of wood that was inked and then found that it produced a thin line when he pressed it on paper."

He explained that first of all, he makes a pencil drawing which he traces on the wood backwards, with India ink, so that it will be the right side on the final prints. He then rubs printing ink all over the block of wood until it is dark but he can still see the India ink lines through it. The darkness is needed in order to see the lightness of the wood when he cuts it. He almost always picks a nature-oriented theme related to the Sauk-

Prairie or Mazomanie area.

"Wood engraving is simple in execution but very hard physically. There is a lot of pushing with your arm and hand and it is extremely hard on the eves. I can't work for long periods of time anymore because my eyes get too tired," said Utpatel as he paced up and down the room, lost in his thoughts. "The most important thing is to get the best quality of wood. I used to get Turkish boxwood from the Turkish boxwood tree for 10¢ a square inch, but it is no longer available. Now I use South American boxwood from the South American boxwood tree which costs 18¢ a square inch; I order all of this special wood out of New York. A 9 x 12 print usually takes a a month to complete."

Admiring one of the prints that Utpatel showed me, I asked why the numbers "2/30" appeared on the bottom, next to his signature. He patiently explained that this meant there were thirty prints made of this woodcut and this particular print was the second one turned out. If the edition is thirty, after thirty prints are produced the block of wood is scratched so it cannot be used again, which protects the artist and the buyer.

Frank Utpatel has illustrated a total of thirty books, several of which have been reproduced in France and Holland. Titles of books he did for August Derleth include: Village Year, Village Daybook, And You Thoreau, Wisconsin Country, Return to Walden West, Habitat of Dust and several

volumes of poetry. He also illustrated Robert Gard's Wisconsin Is My Doorstep, Alan De Voe's Lives Around Us, Jacob Soloway's Sherlock Holmes and Anna Gerneshauers Cats in Crime.

The American Mercury Magazine printed one of Utpatel's engravings every month from 1942 to 1946. This past summer a total of 120 of Utpatel's prints were on exhibit at Boerner Botanical Gardens in Whitnall Park, Hales Corner. "I picked the Botanical Gardens because my wife loves the flower displays they have there," said Utpatel with twinkling eyes. He speaks with pride about his wife's flower hobby. "Marion can make anything grow; she has orchids, roses and a hundred different kinds of lilies, which are her favorites."

Utpatel didn't hesitate when I asked him who he thought appreciated his work the most, other than other artists. "My daughter, Sandra," he said. Having traveled and studied abroad for many years, his daughter is currently doing graduate work in linguistics at the University of Wisconsin. Love lights up his face when he talks about his only child. As I listened to him I became convinced that she was a large part of the motivation behind his creativity. The beauty and sensitivity found in the intricate, delicate lines of his wood engravings speak of a keen knowledge and awareness of love for man and nature.

As we walked to the door, I commented on the difficulty I had in finding him and I noted that he lived at 17 Marion Street. "They were going to name this street Utpatel, after me, but it is too hard to spell so they named it after my wife, Marion, instead," said Utpatel laughing, as he waved goodbye.

As I drove away, I remembered that Frank Utpatel was listed in Who's Who in the Central States and in Who's Who in American Art and I noticed that his back lawn almost bordered the lawn of the dark-haired neighbor, the woman who had never heard of him—food for thought for my trip home.

Kay Price is a free-lance writer from Sauk City and a member of the Wisconsin Academy.



"I Am the Mississippi River"



By L. G. Sorden

I start my long journey of 2,466 miles at Little Elk Lake, five miles above Lake Itasca, Minnesota. I seep and crawl from Elk Lake through swails and cattails, aided by springs along the way to Lake Itasca.

Lake Itasca is a beautiful body of water, most worthy of me. 1.670 feet above sea level.

A man once wrote that when God made the world, He had a lot of water left over, and He told it to go where it pleased. I have been going where I pleased ever since, and they call me THE MISSISSIPPI RIVER. The name comes from the Chippewa Indians: Mee-Zee-See-Bee, meaning Father of Waters.

On my first sixty miles of travel, I flow northward as if going to Hudson Bay. Then I turn east a long way, as if to Lake Superior, helping to make many of the beautiful lakes along my way, before deciding to turn south on my long journey to the sea.

I do much wandering, and before I leave my native state of Minnesota, I have traveled one-third of my entire course.

While I am proud of the lakes I help create, I am equally proud of my islands, most of which I too created in my wanderings. Between St. Paul and St. Louis there are more than five hundred islands large enough to have a name or number. Many of the small islands are numbered.

A RIVER OF MANY MOODS

I am a river of many moods and have been called many names. Some of them are: Father Mississippi, Father of Waters, Old Man River, The Mighty River, The Placid River, The Roaring Monster and The Wicked River. Most people, however, just call me The River.

I am a Placid Stream, I am a Turbulent Stream-I am loved, I am hated-I am productive, I am destructive.

I drain forty percent of the United States, and my water comes from thirty-one states and a province in Canada. I rule about one and a quarter million square miles.

SOURCE

At my source in northern Minnesota's Lake Itasca, I am an attractive stream, rock bottom and fast flowing, with the appearance of the most beautiful of trout waters.

People boast about wading across me at my Lake Itasca outlet, where I am about ten feet wide. A recent traveler from Wisconsin waded across me at this point, but he got his pants wet. His wife waded across and back without mishap.

People say that between St. Paul and St. Louis I am a beautiful river. Trees line the banks right to my water's edge, at least in the spring of the year when waters are high, leaving no empty spaces.

Most of the trees are hardwoods, but there are a few conifers in my northern reaches. My many islands are tree covered. From a distance it appears as if the woodman's axe had never found these river trees. They, of course, had been cut, but new growth restored the original beauty.

I AM DISCOVERED

In May, 1541, Europeans viewed me for the first time. An army of about six hundred Spaniards under Fernando De Soto marched inland through what is now Florida, Georgia, the Carolinas and Alabama. After many months of unbelievable hardship, they discovered me in the area of what is now Chickasaw Bluffs, south of Memphis.

It was 132 years before white men visited me again. Rumors of my existence reached the French in the Great Lakes area. Hoping I would provide passage to the East Indies, a hope that had sent Columbus on his first westward voyage, the Governor of New France (Canada) asked Louis Jolliet and Father Jacques Marquette to find my outlet. With two canoes and five voyageurs they set out on May 17, 1673, from St. Ignace on the Straits of Mackinac, crossed Lake Michigan, and traveled the Fox River from what is now Green Bay to a point about a mile east of the

present city of Portage. There aided by friendly Indians, they portaged to the Wisconsin, and followed it to what is now Prairie du Chien where they finally entered my big stream.

It seems impossible that this historic event occurred only three hundred years ago, but it is fitting that we should celebrate its anniversary. It was 159 years later, in July, 1832, that Henry Schoolcraft discovered my starting lakes.

DAMS AND DIKES BUILT

True, I am the world's muddiest river, but one of my family, the Missouri, carries ten times as much solid material as I do above St. Louis. "Too thick to drink, too thin to plow."

I have given up most of my wild ways. The Army Corps of Engineers controls me. They built dams, twenty-nine of them, and then they built locks at each dam to let the river traffic through. South of Cairo, Illinois, they have built sixteen hundred miles of levees. Some are 150 feet wide at their foundations and 25 feet high.

I am just as happy—no, happier. I do not wish to destroy, but a six-inch rain or ten-foot snow is just too much for my channel, so I have to back up onto the lowlands, ruining farms and other property. I move buildings off their foundations, tear up roads, sometimes even sweep away bridges and generally make myself miserable. At those times people hate me for taking lives and destroying property. I still flood, but I do little damage compared with what I used to do before the dams and dikes helped control me.

I still flood periodically. In 1927 my flood lasted six weeks, killing about a hundred people and causing a loss of a quarter billion dollars. A historic flood more recently, 1965, caused about the same amount of damage. In my worst floods I rise as much as twenty-five feet above normal.

When I flex my giant flood muscles, I seem to say to man: "I need room. This flood plain belongs to me, it is a part of my being. Live beside me, but not on me. Let us live peaceably together."

Man answers: "We will control you."

And I reply: "You will control me only if you give me nough room, in my lower reaches I generally live peace-

ably with my people, but they give me room—lots of room. Learn from the flood lessons I teach every few years. Don't build on me, build alongside me, then let us forever be friends."

Before the dams were built I never could decide whether my bottom lands should be prairie, forest, meadow or marsh. Now the stable pools provide environment for food, nesting and one of the great flyways for birds in their spring and fall migrations.

DAMS AND LOCKS

The greatest change I have ever undergone was the building of the system of dams and locks to aid in navigation and to control floods. The first and still the largest dam was built at Keokuk with private capital in 1913 to supply electric power to that area.

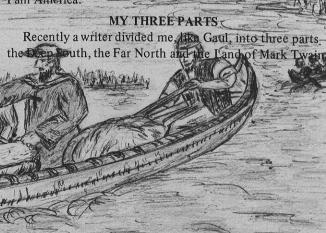
As early as the 1830's the government aided navigation by removing snags, sandbars and rocks and closing off some of the sloughs to confine the water in my channel. In 1878, a four-and-a-half foot channel depth was authorized by Congress. With the development of the mighty dieselpowered towboat and the steel barge, traffic on the river increased. In 1930, Congress authorized the U.S. Army Corps of Engineers to construct a nine-foot navigation channel with a minimum width of 400 feet. To achieve this, the engineers built a series of twenty-nine dams with locks. In principle, a lock is a very simple thing. It consists of two big gates, 110 feet wide and 600 feet long. A boat enters the lock through the open gates, the gates are closed, and then the water runs out of the locks to lower the boat going downstream to the lower stream level. Water runs into the lock to raise the boat going upstream to upper stream level. Sounds simple, doesn't it? And it is.

MY FAMILY TREE

I have an immense family tree. My Ohio branch extends to the Appalachian Mountains on the east, and as far north as New York State. My Missouri branch extends to the majestic Rockies on the west and even into Canada to the north.

I have 164 tributaries which feed into my main channel.

Thave played the greatest tolera, the history of America.



Truly in the old South the art of formal living was perfected as in few other places. It was the land of ladies who used "fans and had headaches," southern gentlemen, of large houses with spare rooms, of plantations and slaves. The South used to be the land of floods; now it is the land of levees. The quiet old South has now come alive and become a land of growing industry.

My northern reaches were originally a land of giant forests, the greatest white pine area in the world. This northland rang with the axes of the lumberjacks—the roughest, cussingest group of men who ever worked. Their job was the most dangerous of any industry. Unmarked graves along the river and armless and legless men bore mute evidence of this dangerous job. The Far North used to be the land of log drives and lumber rafts, a land where men fought as a recreation, not because they were mad at each other. These lumberjacks lived for one big spree after the spring break-up. At this time their only concern was what came in a bottle or a corset. It was the land of "Hurley, Hayward, and Hell" in that order. It was the land of the fur trader and wild animals, the land of Paul Bunyan and that monumental hoax, the Hodag.

In the land of Mark Twain, between the north and the South, was a land of tall corn, hogs, cattle and big farms; the land of kind, gentle people; the heartland of America.

LUMBERING

The greatest migration of people on earth filled my uplands and my valleys in a short span of fifty-plus years in the latter part of the last century. This huge influx of humanity caused unprecedented cutting of the pines. In order to build their homes, schools, churches and industries, they used my waters to float logs and lumber to areas of use.

THE STEAMBOAT

The very rapid development of the Midwest took place because I was able to provide transportation for its agricultural products. It was probably the most glorious page in my history.

The first steamboat loaded with cotton sailed down river in 1819.

The steamboat became a social as well as an economic institution. I was truly the life of the people for more than a half century. During that time music, art, gambling and entertainment were all important parts of my being.

But a new giant was awakening in my land, an iron horse, the railroad that was to take away my commerce. In 1854 I was linked to the East Coast by a railroad at Rock Island, and the East and West were linked in the Sixties and Seventies. The first railroads brought increased traffic to my river.

During 1860 more than a thousand steamboats arrived in St. Paul and five thousand in St. Louis.

Immediately after the War Between the States there was a new rush of river commerce. The stately new steamboats rivaled the railroads for a time, but by 1882 the river was empty. Steamboats were a dime a dozen, and most were left to rot along my banks. The cry "steamboat's comin'!" was heard no more.

According to Mark Twain, "Mississippi steamboating was born about 1812. At the end of 30 years it had grown to mighty proportions, and then in less than 30 years it was dead."

BARGE TRANSPORTATION

The "tow" is comprised of the towboat plus barges. A full tow consists of fifteen steel barges, three abreast and five long, which the powerful towboat pushes rather than pulls. Barges are tied firmly to the boat and to each other, and in this way the boat has firm control over them. A tow five barges long is about 1,000 feet, the length of the liner Oueen Elizabeth.

The greatest impetus to barge transportation occurred as a result of the demands of World War I and World War II. When railroads could not supply the increased demand for moving goods, river barging came into its own. No other method of moving goods is as cheap as water transportation. In 1970 almost 3,000 towboats with 14,500 barges went through the locks at Rock Island carrying more than 16 million tons of shipping. The total moved was between 40 and 50 million tons. This traffic has doubled about every seven years and is still increasing.

Diesel-powered towboats move over ten times more tonnage annually than steamboats did in their heyday. The new high-capacity barges carry 85,000 bushels of grain or more than a million gallons of oil.

BEAUTIFUL AREA

I have memories going back to the ice age, so many memories it is difficult to remember them all. For centuries I served the Indian people and the wildlife that flourished in my water and the rich soil of the prairies. My service to the white man has been for only about three hundred years, which is only minutes in my lifetime.

I am always changing the landscape—it is almost never the same. When I change the water level, the size of the islands and the shape of my banks change. The color of the sky changes my color.

Chief Blackhawk, one of the great Indian chiefs of the Midwest whose rule terminated with the battle of Bad Axe said: "I loved my towns, my cornfields, and the home of my people. I fought for it."

REDISCOVER ME

I am a colorful part of America that has escaped most folks in this super-scientific age in which we are living. For most, the Mississippi is something to fly over or to cross over on a bridge as man speeds from one part of our great country to another. Sometime, water transportation may be developed to enable man to relive the glories of the past and enjoy the beauties and the meaning of the present mighty Mississippi. I am worth rediscovering.

L. G. Sorden is the author of several books on Wisconsin history and lore. He has been active in the Wisconsin Regional Writers Association and was recently elected second vice-president of the Council for Wisconsin Writers. His forthcoming book, I Am the Mississippi, will be published by Wisconsin House.

The Marquette-Joliet Exploration – What Came of It?

By Gib Bayley

An accurate and unbiased history of early explorers and their explorations is something which is frequently unattainable. The embellishments, the exaggerations, the errors, even the lies buried in the sometimes meager records left by early mariners and land rovers are bad enough; but many claims of accomplishment lack any kind of documentation.

Where there is no verification of deeds, and even many times when facts are available, an event is viewed quite differently and, indeed, written into history quite differently by writers of different nations or of different religious or political leanings.

The story of the discovery of the North American continent and the expansion westward from the Atlantic is not lacking in examples of "ify" history. The Norsemen sailed westward in the North Atlantic and the world is still trying to prove where they went and when.

Columbus was great and is remembered for his greatness not just because he discovered a new world, but because he had faith enough in his venture to search for that new world. His excursions in the late 1400's which took him to San Salvador, Cuba and other West Indies islands of the Caribbean showed the way toward hopedfor further exploration. The world would have kept on spinning if he had never accomplished his deed; but what the world did with its newly acquired knowledge is the real story of Columbus

Kings couldn't sit still until the boundaries of familiarity were extended further and further. So other nations siezed upon the new knowledge brought by Columbus, and in 1497 and again in 1498, Cabot explored the northern parts of North America and took New Foundland for England.

Cartier entered the St. Lawrence River Valley in 1535 and raised the French flag over "New France" or Canada. He touched the sites of Quebec and Mount Royal (Montreal), and thus another trust was made toward the west.

Eighty years passed before the next great progress was made. Samuel de Champlain pushed upstream from Montreal in 1615 and discovered Lake Ontario. As governor of New France he showed a great personal and nationalistic urge to extend the boundaries of his control farther into the unknown. He foresaw a profitable fur trade and he planned for it. He wanted to accomplish this himself, but governing a burgeoning country in trouble kept him from further personal participation in exploration.

Champlain had heard from the Indians about great bodies of water beyond the wilderness. The search was still on for a route westward to the So he commissioned Jean Nicolet to conduct a search. In 1634 Nicolet became the first white man known to visit the Old Northwest, and it is his exploit that marks the next great westward step by way of the Great Lakes and the Wisconsin route. His route became a familiar one in succeeding decades. The Ottawa River-Lake Nipissing-Georgian Bay-Lake Michigan-Green Bay water trail brought him to the mouth of the Fox River and to tribes on the shores of Lake Winnebago, Between LaBave and Winnebago he found, as did all those who followed in later decades the wild rapids at Des Peres, the two Kakalins, Grand Chute and Winnebago Rapids (DePere, Kaukauna, Appleton, and Neenah-Menasha).

Nicolet entered the Upper Fox River where it empties into Lake Winnebago at Oshkosh. He pushed on to locate the Fire Nation, the Mascoutin tribe, whose settlement he found south of Berlin. What Nicolet didn't know was that a three-day journey farther up the Fox would have brought him to the low portage between the Fox, flowing toward the St. Lawrence, and another stream out of the north flowing toward the Mississippi and the



Gulf of Mexico. He veered south to visit the Illinois Indians and returned to Quebec by a different route, thereby missing the opportunity to add the discovery of the Upper Mississippi to his list of firsts for the white race in the Northwest.

So that significant event, that unknown and only slightly expected event—the launching of a canoe of white men on the Great River—was still not at hand. Twenty-four years after Nicolet visited the Mascoutins, two French adventurers, Radisson and Groseilliers, were guests of this tribe, and

were guided on a circuitous journey in the Wisconsin country. Radisson wrote: "We ware 4 moneths in our voyage without doeing anything but goe from river to river." In his badly composed English accounts he referred to "ye great river" and, as Thwaites says, "describes a stream which answers to the Mississippi. It is reasonable to conclude that in the course of these four months of water journeys... the adventurers trimmed their bark to the current of the Mississippi."

Must we therefore conclude that it is anticlimactic to learn that fifteen years after Radisson, Joliet was selected by Count de Frontenac, the newly appointed governor of New France, to explore the regions of the Fox, the Wisconsin and the Mississippi? Does this mean that we should strip from our history books the well-publicized accomplishment in 1673 when Joliet headed a successful search into the unknown for the greatest river of North America? Indeed not; so let's look briefly at Joliet. Frontenac charged him not only to find the river. but to establish whether or not the great river flowed, as the Indians claimed it did, into the South Sea.

It is unlikely that Joliet had any knowledge of prior whitemen's visits to the Mississippi. Even though there is strong evidence that Radisson, Groseilliers and two others, later, Menard and Guerin, had all been in the upper river, and the Spaniard DeSoto had discovered the Lower Mississippi, poor reporting on the results of these travels leaves historians without definite knowledge of their routes. One historical writer, Hjalmar Holand, goes so far as to state bluntly: "The Great River had been discovered by the two adventurers Radisson and Groseilliers fifteen years before (the Joliet accomplishment), but this fact was not known until a hundred years later." The fact that Joliet's assignment not only resulted in reaching and navigating the Mississippi but also left records attesting to that fact entitles Joliet's name to receive high credit as an original explorer.

Father Marquette, a good Jesuit scholar and priest, woodsman and

canoeist, had been invited to accompany Joliet from St. Ignace on, although he was not officially connected with the expedition. However, it is fortunate that Marquette was there. After portaging from the Fox River to the Wisconsin River, and after paddling through the confluence of the Wisconsin and the Mississippi on June 17, 1673, the party continued

to bring the good word to the tough men of hand and mind, and to the Indians.

The canoe paddlers, the bateau pushers, Durham boat polers, and, ultimately, the steamboat dreamers came. Governments sent their soldiers and Indian agents and land office clerks. The land settlers and land hogs arrived. Meek wives came, subservient



their exploration to the mouth of the Arkansas River. They returned to La-Baye by way of the Illinois River and Lake Michigan, and Joliet hastened to Montreal to report his discovery.

Within sight of Montreal he lost his box of papers in the wild LaChine rapids. An oral report had to suffice. But later, Marquette's simple narrative of all that had been accomplished was delivered to Montreal by a group of Ottawas enroute to Three Rivers, and it is Marquette's record that has caused more glory to be leveled on his name than Joliet has ever received.

If Marquette and Joliet were not the original discoverers of the Mississippi River, what, then, is the real significance of their voyage? The reports of the June 17, 1673 arrival at the important water route into the west spread throughout New France. As more and more travelers and trappers, voyageurs and coureurs de bois ventured up Green Bay and the Fox River, and down the continuing water route which led both up and down the Father of Waters, the inevitable tide of humanity reached deeper and deeper. Fur traders and fur trade barons came. Trading goods for dealing with the Indians became a thriving business at important stopping points. Woodcutters and woodwasters arrived, as did fishermen and fishers of men. The latter came

to their robust settler husbands and tied to their large families of children who either helped with innumerable chores or died of dread disease.

There were the lead miners, the Indian fighters, the ferryboat operators, the road builders and railroad builders, the canal diggers, the gamblers, the woodworkers and many more. These followed Marquette and Joliet. It was a path for them that Marquette and Joliet blazed. Their story was communicated to first their own generation of folks back home and then to long processions of hungry people looking for treasure, to adventurous people, to oppressed people seeking freedom and breathing space and to oppressive people seeking land and power.

Word of newly acquired knowledge brought to people on the move—that is the true significance of the explorations of Marquette and Joliet who extended the work of Columbus, Cabot, Cartier, Champlain and Nicolet in letting it be known what was in and beyond the Wisconsin wilderness and how to get there.

Gib Bayley and his wife, Helen, reside at Winneconne. They have canoed the Wolf, Fox and Wisconsin waterways extensively and are recognized authorities on the natural and cultural history of the area.

The Mississippi River Research Consortium

By Joseph E. Kapler

During the 1960's, a series of National Science Foundation-sponsored symposia in biology were held at St. Mary's College at Winona, Minnesota. These symposia brought together nationally known researchers and college biology teachers from the Upper Midwest area. At the March, 1968, symposium, a group of biologists, mainly from academic institutions in Minnesota, Wisconsin, Iowa and Illinois met informally to discuss the possibility of establishing an organization of biologists with a primary interest in the natural resources of the Upper Mississippi River. The consensus of the group indicated a need for such an organization. A steering committee was established to plan a course of action for this new organization. Members of the original steering committee were Dr. Thomas O. Claflin, University of Wisconsin, La Crosse; Dr. Calvin R. Fremling, Winona State College; Mr. Raymond C. Hubley, Jr., Upper Mississippi River Conservation Committee (UMRRC); Brother George Pahl, F.S.C., St. Mary's College.

The first meeting of the newly-formed organization, the Mississippi River Research Consortium (MRRC), was held on June 7-8, 1968, at St. Mary's College at Winona, Minnesota, with approximately 50 interested persons in attendance. Organizational aspects, objectives and operation of the MRRC were discussed and the offices of President, President-Elect and Secretary-Treasurer were established. The first weekend in June was chosen as the time of the annual meeting and the meeting site would be the

home institution of the President. Dr. Thomas Claflin was chosen as the first President.

Among the highlights of this meeting were a panel discussion on hydrobiological research facilities on the Mississippi River and a report on research needs for the Upper Mississippi River.

At the second annual meeting, held at the University of Wisconsin, La Crosse on June 6-7, 1969, with Dr. Thomas Claflin presiding, the constitution and by-laws of the organization were adopted and the general format of future meetings was established. The constitution states that the objectives of the Mississippi River Research Consortium are:

- a. To establish and encourage communication between river scientists and between the scientific community and the public.
- b. To encourage pure and applied research concerning the water and land resources of the Mississippi River and its valley.
- c. To provide an annual meeting where research results can be presented, common problems can be discussed, information can be disseminated, and where river researchers can become acquainted with each other.
- d. To encourage cooperation between institutions and to encourage the sharing of facilities.
- e. To function as an advisory group to other agencies.
- f. To aid in the formation of a concerted and organized research effort on the Mississippi River.



The feature of the 1969 meeting was a symposium on the proposed 12-foot navigation channel for the Upper Mississippi River. The panel consisted of representatives from the U.S. Army Corps of Engineers, the Bureau of Sport Fisheries and Wildlife, the Izaak Walton League of America and the Missouri Conservation Department. Considerable reaction to the proposed deepening of the channel was expressed by those in attendance. The magnitude of the problems associated with such a major change in the Upper Mississippi River was brought to public attention, and discussion and debate have continued ever since. (In December, 1972, the Corps of Engineers, citing an unfavorable cost-benefit ratio. announced the discontinuance of further feasibility studies on a 12-foot channel on the Upper Mississippi River above the mouth of the Illinois River.)

The Saturday session of the meeting was devoted to the presentation of research papers by the membership and this has been an important feature of the annual meetings since then.

The third meeting was held on June 5-6, 1970, at Winona State College at Winona, Minnesota with Dr. Calvin Fremling as President. The theme of this meeting was flooding on the Upper Mississippi River. Speakers included representatives from the Soil Conservation Service, the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, the U.S. Weather Bureau Forecast Office and municipal

governments. Periodic floods in recent years have been a problem and this session was most informative to those in attendance.

St. Cloud State College at St. Cloud, Minnesota, the home institution of the 1971 President, Dr. Joseph Hopwood, was the site of the fourth MRRC meeting. The symposium portion of this meeting dealt with problems and advances in waste treatment in the Upper Mississippi River drainage area and with thermal effluent problems from power generators. Speakers represented industries, municipalities, pollution control agencies and academic institutions.

A new feature was established at this meeting—a field trip on the Mississippi River in the St. Cloud area. This was of great interest and benefit to those who were not familiar with the northern areas of the Upper Mississippi River.

In June, 1972, Loras College in Dubuque, Iowa, was the host institution for the fifth meeting with Dr. Joseph Kapler presiding, The meeting format was changed somewhat from that of previous meetings. Replacing the traditional symposium was a featured speaker and group discussions on research needs and priorities in the areas of industrial use, municipal use, wildlife habitat and navigation (transportation). Dr. Kenneth Hokanson of the National Water Quality Laboratory at Duluth was the featured speaker, describing studies on the thermal requriements of aquatic life, a timely topic.

The traditional Saturday research paper session was retained and a field trip on the Mississippi River in the Dubuque area was held.

The 1973 meeting was held June 1-2 at Quincy College at Quincy, Illinois, with Rev. John Ostdiek, O.F.M., as President. Southern Illinois University at Carbondale, Illinois, will be the host institution for the seventh meeting in 1974 with Dr. Jacob Verduin presiding.

The initial group involved with the organization of the MRRC consisted primarily of biologists from academic institutions; however, anyone with a sincere interest in the Mississippi River may join. The membership of approxi-



Several MRRC members attending the June 1972 meeting tour the Mississippi River at Dubuque.

mately 300 includes biologists, conservationists and other scientists and researchers, administrators and interested private citizens. Academic institutions, federal, state and municipal agencies, industries and private organizations are represented. Annual membership dues are two dollars. MRRC does not publish proceedings of its meetings, but papers and other materials are disseminated at the meetings. An exception was the second meeting in 1969, when funds for publication of the meeting's transactions were made available by the University of Wisconsin at La Crosse.

With its diversity in membership, the MRRC has attained some success in accomplishing the objectives stated in its constitution. The meetings have been successful in providing a forum for river researchers and in establishing communication between the scientific community and the public. Biologists, industrialists and engineers have discussed common problems. The public along the Upper Mississippi is becoming better informed as a result of annual meetings from St. Cloud in the north to Carbondale in the south. The U.S.

Army Corps of Engineers, charged with the operation of the lock and dam system and maintenance of the navigation channel, has been active in the organization since the second meeting. Biologists and engineers now have better understanding of common problems.

In the past, the various interests in river use have often remained aloof from each other. Better cooperation is now evident. The St. Paul District of the Corps of Engineers is now conducting a study of the environmental impact of the 9-foot navigation channel on the Upper Mississippi. This study involves the North Star Research and Development Institute of Minneapolis and some of the academic institutions along the river in the St. Paul District. The MRRC meetings in the past 5 years may have played a role in shaping and clarifying the need for such a study. The future outlook for the Mississippi River Research Consortium is encouraging.

Dr. Joseph E. Kapler is a Professor of biology at Loras College, Dubuque, Iowa. He served as president of the MRRC in 1971-72.

LaSalle and His Unrecognized Landing Sites in Wisconsin

By Peter H. Toepfer

Sieur de LaSalle was the most farsighted of the French empire-builders in America. It was he who discovered and first recognized the future greatness of middle America. It was he who first attempted its colonization. A visionary with great dreams, opposition and frustration was his lot, but he never lost faith.

France was an absolute monarchy, constantly embroiled in wars. This and the great extravagance of its court ground the peasantry into poverty. The royal court had only passing interest in its cold unprofitable colony on the St. Lawrence. New France was expected to turn a profit; only the fur trade held promise.

To the Jesuits, the New World held great numbers of souls for the saving. These were dedicated men, with a strange compulsion to seek hardship. Many welcomed the opportunity to seek martyrdom. To the Jesuits, New France was envisioned potentially as a pastoral church-directed Indian civilization, supported by the fur trade.

The colony had appeal to adventurous younger sons of the nobility who had little future in France. They were soldiers, and good ones, but they were of little benefit to New France. Farmers and artisans were needed. Peasants were recruited and filled the basic needs for survival.

New France, however, remained a feudal offshoot of its homeland. The same class distinctions were rigidly held. The colonists were subject to the same arbitrary rule. Those peasants who escaped to freedom did so by joining the Indians — much to the discomfiture of the Jesuits. The rough voyageurs were hardly a guiding influence to Christianity.

Rene Robert Cavelier, later to be known as Sieur de LaSalle, was the son of a Breton merchant. In 1666, at the age of 23, he moved to Montreal and there was granted a large tract of land. He soon entered the fur trade.

The upper Great Lakes were the greatest source of furs, and trade with Montreal was conducted by way of the Ottawa River-Lake Nipissing route to the head of Lake Huron. Iroquois raiders had made this trade route extremely dangerous. Only large well-armed fleets could break through. Because of the Iroquois menace, Lake Erie had remained unexplored during these early years. There were intermittent periods of peace with the French after LaSalle's arrival, but the Iroquois never relaxed their war upon tribes trading with the French.

LaSalle's early years were spent exploring Lake Erie, and he probably went overland to reach the southern end of Lake Michigan. He gained valuable knowledge of the Indian tribes, learned their languages and earned their respect. Count Frontenac, the governor of New France, looked upon LaSalle with great favor. When Fort Frontenac was built at the eastern end of Lake Ontario, LaSalle was placed in command. In 1674 LaSalle went back to France and, under Frontenac's sponsorship, was made a member of the nobility. He was granted a large feudal seigniory at Fort Frontenac.

His next years, during which he challenged the Jesuit monopoly of the Great Lakes fur trade, were profitable and earned him the lasting enmity of the missionaries. From the Indians LaSalle continued to learn much about the Ohio and Mississippi Rivers and their fertile lands. These lands were

beyond the Jesuit missions, and it was here that LaSalle intended to expand the fur trade. In 1677 he again returned to France where he was granted the right to explore the Mississippi, claim lands for France, build forts and was granted a monopoly on the fur trade from these new lands. On this trip LaSalle enlisted his faithful lieutenant, the redoubtable Henri de Tonty.

In the winter of 1678-79 LaSalle led an expedition past Niagara Falls to the lower end of Lake Erie. There de Tonty was left in charge of building the first sailing vessel on the Great Lakes. This was the *Griffin*, named for the Frontenac coat-of-arms. It was a mere cockleshell, 40 feet in length with a single mast. The building of the *Griffin* was watched by the Iroquois who realized its purpose was to forestall their constant raids on trade canoes. Several attempts were made to burn the vessel.

LaSalle, meanwhile, was at Montreal fighting off creditors who had siezed his properties. It was not until late summer that the Griffin could embark from Niagara Falls. The ship set sail for Mackinac where LaSalle discovered that his advance voyageurs, who were to have traded for furs, had deserted. He sailed on to the stockaded Potawotami village of Mechingan at the entrance to Green Bay. There La-Salle's other voyageurs had assembled a shipment of furs. LaSalle and his men disembarked. The ship was loaded with furs and set sail for Niagara Falls. One day later a great storm struck; the Griffin was never seen again.

LaSalle and his men left Mechingan in canoes to reach the southern end of Lake Michigan. The storm that sank the *Griffin* caught them as they were

crossing the entrance to Green Bay, and it was with difficulty that they avoided disaster. They found shelter in a sandy cove and for five days waited out the storm. They again set off, but again were driven to seek shelter on a bare rock islet where two more days were lost. They next were forced to land on a rocky shore where they used up the last of their food. On the first of October the storms ended. paddled thirty miles before reaching the Potawotami village of Claybanks, where they obtained some corn. But their trials were not over. As they paddled along the western shore of Lake Michigan, they saved themselves from starvation by sighting crows feeding upon the carcass of a deer. After this "feast," game became plentiful; however, a serious confrontation with the French-hating Fox Indians very nearly turned into battle.

Unaware of the loss of the Griffin, LaSalle's party continued southward and then coasted the southern shore of Lake Michigan to reach the mouth of the St. Joseph River. There they built a "fort" while waiting the return of the Griffin. With freezing weather approaching, they could not wait long. They intended to winter with the Illinois Indians who previously had welcomed Father Marquette. men were left at the fort, and LaSalle with twenty-nine men ascended the St. Joseph. They portaged from the present site of South Bend to the headwaters of the Illinois River. LaSalle then had not known of the Checagou portage. Descending the Illinois, they reached the populous villages at the future site of Peoria, where they wintered.

On the first of March, 1680, the party separated. Father Hennepin set off to explore the upper Mississippi. LaSalle, with five hand-picked men, left for Montreal. De Tonty remained at the fort they were building, and was to build a ship to be sailed down the Mississippi on LaSalle's return. Their plan was to end that voyage by sailing to the French island of Martinique.

LaSalle's canoes were soon wrecked in the ice-choked river. They struggled through mud and snow to reach the mouth of the St. Joseph River, where they learned of the loss of the *Griffin*. They then walked directly east to the Detroit River, crossed on a raft and continued to Niagara Falls. His men could no longer go on; but with fresh men from his Niagara Falls post, La-Salle proceeded to Fort Frontenac. The thousand-mile trip, without trails and through the lands of the hostile Iroquois, took sixty-five days. It was an incredible feat.

Soon after LaSalle left, de Tonty's men mutinied, burned the fort and dispersed. Unarmed and with only a few loyal men, de Tonty made his way upriver to the Illinois villages at Le Rocher (later to be called Starved Rock) where he planned to await LaSalle's return. He sent a courier to inform LaSalle of the mutiny and to warn him that twelve of the mutineers were on their way to murder him. LaSalle returned to Niagara Falls and intercepted them, killing two and imprisoning the others.

De Tonty was not safe at Le Rocher. A war party of five hundred Iroquois struck, and he was severely wounded when he bravely confronted them. With his men, de Tonty fled up the river and crossed the Checagou portage to Lake Michigan. The Iroquois raiders destroyed the Illinois villages all along the river. After great hardship de Tonty reached a Potawotami village far to the north where he recovered during the winter. LaSalle returned to the Illinois River in early spring of 1681, searching for de Tonty. He found the destroyed villages and sought his friend among the many unburied corpses. Unsuccessful, he returned to Mackinac where news had come that de Tonty was safe and soon would arrive. They were rejoined in May of 1681.

LaSalle and de Tonty returned to Montreal for men and supplies. Again LaSalle's creditors caused great delay. Finally, that winter they embarked upon their exploration of the Mississippi. They paddled up the ice-cliffed shores of the Great Lakes—a daring and dangerous winter journey. Strangely, historians have brushed lightly over this part of the journey; those of us who know the Great Lakes in winter

can only regard it with awe. Only a man of LaSalle's great courage and determination would have attempted this. At the Checagou portage they put their canoes on sleds, which they pulled down the frozen Illinois River. Open water was first reached at what is now Peoria. The forty-one Frenchmen and Indians paddled down the Mississippi, reaching its mouth in April 1682. With elaborate ceremony, LaSalle claimed the entire Mississippi Valley for France.

On their return, they built Fort St. Louis at Le Rocher on the Illinois River, holding off an Iroquois assault during the construction. De Tonty remained in command while LaSalle left for Montreal.

In the meantime, a new French governor, LaBarre, had replaced Frontenac. Urged by the Jesuits, he did everything possible to block LaSalle. LaBarre confiscated LaSalle's holdings at Fort Frontenac and sent a man to sieze Fort St. Louis. At the latter fort, LaBarre's man panicked during an Iroquois attack, so no further attempt was made to replace de Tonty.

Again LaSalle returned to France, where he was received as a hero. He was authorized to establish a city at the mouth of the Mississippi to hold France's claim to that vast land. In 1684, with four hundred colonists in four ships, LaSalle returned to the New World. His ships, unfortunately, missed the mouth of the Mississippi and, continuing westward, finally landed at Matagorda Bay, where Houston has since been built, some four hundred miles west of their goal. Poor seamanship of his captains caused the loss of the ships, and LaSalle's colonists were stranded. A year was lost in exploration before they determined that the Mississippi was far to the east.

Early in 1687, LaSalle left the settlers and set out with sixteen men to make contact with de Tonty on the Illinois River. They traveled north, to avoid the coastal rivers, then turned east to intercept the Mississippi. After two months, ill feeling developed. Four men on a hunting party were treacherously killed while sleeping. To cover the crime, LaSalle was ambushed and

shot in the back. His bright red cloak, the badge of authority which he had proudly worn during all of his travels, was stripped from his body to be worn by his murderer. LaSalle's body was left unburied where it fell.

Six survivors ultimately reached the mouth of the Arkansas River where de Tonty, constantly looking for La-Salle, had established a post. Two of the murderers had survived, but had remained with the Indians.

De Tonty learned of LaSalle's death that winter. He immediately set out from Fort St. Louis to bring the murderers to justice. De Tonty, whose lost hand had been replaced by an iron hook, was known far and wide among the Indians and was regarded with great awe. The vengeful winter journey held great hardship. At the mouth of the Arkansas, four men deserted-leaving de Tonty with a single Frenchman and a single Indian. Yet he continued. Crossing a flooded stream, the three lost all their ammunition. pressed on. The news of de Tonty's coming had preceded him. When he reached what is now the northeastern corner of Texas, de Tonty found that LaSalle's murderers had been killed by their Indian hosts. The Indians did not want to be considered friendly to enemies of the famed "Iron Hand."

LaSalle's colonists were overwhelmed by Indians and the survivors enslaved. The pitiful remnant was later surrendered to the Spaniards and was thrown into Spanish prisons. Thus ended the first attempt to lay claim to the vast Mississippi Valley.

LaSalle certainly deserves his place among the greatest of explorers. It may be of interest to us to determine Wisconsin sites associated with LaSalle's journeys. We do have clues, which seemingly have thus far gone unrecognized.

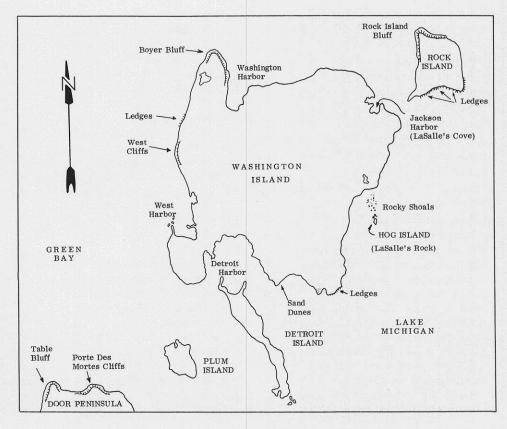
Both Washington Harbor and Detroit Harbor on Door County's Washington Island have been claimed as the site of Mechingan, the Potawotami village which LaSalle and the *Griffin* reached in September, 1679. Michigan's Summer Island to the north seems to have a better claim, one which has the support of Professor G. I. Quimby,

author of Indian Culture and European Trade Goods.

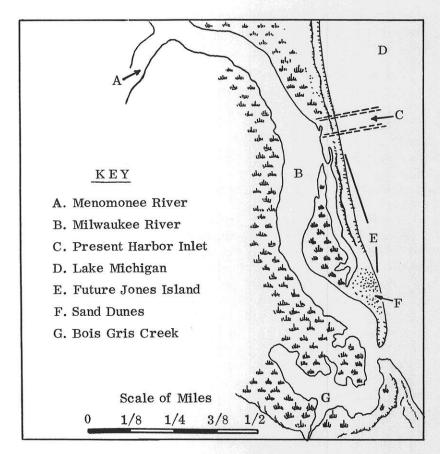
Logically, the Potawotami would have chosen a defensible island close to the northern shore for their main village. It was on the mainland to the north that they hunted the all-important beaver. Door County had no beaver and was controlled by the powerful Winnebago. Both factors would have discouraged use by the Potawotami.

During the storm which destroyed the *Griffin*, LaSalle's party took refuge in a sandy cove. Jackson Harbor almost certainly seems to be this cove. Located on Washington Island, the east end of Jackson Harbor is one of the few sand beaches found in Door County. A canoe travelling LaSalle's route would be sure to pass here and that would be the most logical landing after crossing the open water to the north.

During the same storm, LaSalle and his men again sought shelter, this time on a bare rock islet, the description of which could only apply to Hog Island. The only other islets along LaSalle's



All evidence seems to indicate that LaSalle's party made several stops in the Washington Island vicinity. Jackson Harbor and Hog Island provided shelter during a violent storm in 1679.



This 1836 Army Engineers map of Milwaukee harbor gives a clue to the location of a confrontation between LaSalle and Outagami Indians.

route are low gravel banks. The shallow reef extending south to Hog Island would have blocked the men from seeking preferable shelter on Washington Island. Assuming the winds to have been driving in from the north, it is not hard to pick the rock-walled shelter where the chilled voyageurs huddled around their driftwood fire. May I suggest that the name of Hog Island be changed to LaSalle Rock?

Francis Parkman, the great historian, gives the following account of the confrontation between LaSalle's party and an Outagamie tribe.

As they approached the head of the lake, game grew abundant, and with the aid of the Mohegan, there was no lack of bear's meat and venison. They found wild grapes, too, in the woods, and gathered them by cutting down the trees to which the vines clung.

While thus employed, they were startled by a sight often so fearful in the waste and the wilderness, the print of a human foot. A strict watch was kept, not, as it proved, without cause; for that night, while the sentry thought of little but screening himself and his gun from the floods of rain, a party of Outagamis (Fox) crept under the bank, where they lurked from some time before he discovered Being challenged, they came forward, professing great friendship, and pretending to have mistaken the French for Iroquois. In the morning, however, there was an outcry from LaSalle's servant, who declared that the visitors had stolen his coat from under the inverted canoe where he had placed it; while some of the carpenters also complained of being robbed. LaSalle well knew that, if the theft were left unpunished, worse would come of it. First he posted his men at the woody point of a peninsula, whose sandy neck was interposed between them and the main forest. Then he went forth,

pistol in hand, met a young Outagami, siezed him, and led him prisoner to his camp. This done, he again set out, and soon found an Outagami chief-for the wigwams were not far distant -to whom he told what he had done, adding that, unless the stolen goods were restored, the prisoner would be killed. The Indians were in perplexity, for they had cut the coat to pieces and divided it. In this dilemma, they resolved, being strong in numbers, to rescue their comrade by force. Accordingly, they came down to the edge of the forest, or posted themselves behind fallen trees on the banks. while LaSalle's men in their stronghold braced their nerves for a fight . . . Neither party, however, had an appetite for the fray. A parley ensued: full compensation was made for the stolen goods, and the aggrieved Frenchmen were further propitiated with a gift of beaver skins.

Where did this confrontation take place? We are given some clues. LaSalle's camp is stated to have been on a wooded peninsula, connected to the mainland by a sandy neck. No such place, past or present, comes to mind on Lake Michigan's straight western shore.

But one place and one place alone fits the description perfectly. A wooded sandspit a mile long originally extended between the mouth of the Milwaukee River and Lake Michigan. The sandspit was narrow at its midpoint, and here could have been the place where the confrontation was made.

When Milwaukee's harbor was built soon after the city was founded, a channel was dredged through the sand-spit at its narrow neck, and the half-mile end of the peninsula became Jones Island. Jones Island, now connected to the southern shore, seems to have been the site of LaSalle's camp.

Peter H. Toepfer, Milwaukee, has done extensive research and writing on the geology and mineral resources of Wisconsin and Montana.

CARP CONTROL and the Use of Fish Toxicants

Welcomed into Wisconsin waters as a highly-prized food and sport fish, the carp today is the center of controversy. The need to control carp is not in question. But "How?" to control carp population size is. This is the second of two articles dealing with the use of fish toxicants as a means of control.

By Edward Schneberger

Carp were introduced into the United States before the turn of the century with great expectations of beneficial returns for sport and food. Wisconsin participated in this program and eagerly helped to distribute carp to various waters of the state. Unfortunately, the dreams of a bonanza did not materialize, and the carp became known as a pest and harmful to the habitat in a very short time.

Wisconsin began an intensive carp control and removal program in the early 1930's when the State Legislature established a revolving fund of \$150,000 to be administered by the Conservation Commission. The founders of this program visualized the revolving fund as a "loan" to be repaid from the profits gained from the sale of carp. The funds were used to employ and equip removal crews and were supplemented to a very large extent by the emergency work programs (WPA, C.C.C., etc.) sponsored by the Federal Government as a means of combating the Great Depression. The sum of \$150,000 may not sound very big today, but at that time it was a very sizeable amount.

Many methods of catching carp were tried and utilized, but seining and trapping were the most productive and efficient. Carp gather in large schools in the spring and fall so that large catches can be made by using long seines, and at the time of schooling fewer game fish are caught in the hauls. Stationary traps are employed in a number of circumstances to capture carp migrating to spawning areas or to escape oxygen-low water. The amounts of carp caught at these times are greater than the market can absorb, and therefore it is necessary to store them in holding ponds pending favorable sales. Naturally, they must be fed and taken care of during these periods, thus adding to the cost.

The principal commercial outlet for carp has been New York City, where they were utilized by the Jewish community for gefiltefish. It is required for this market that the fish be alive when purchased; therefore, they are shipped in tank cars and tank trucks and held in aquaria in the various fish markets. There is considerable work involved in the preparation of gefiltefish, and the Jewish housewife, like other housewives, no longer cares to spend long hours in the kitchen over a hot stove. Eating habits have also changed so that gefiltefish has lost much of its popularity even though the product is produced commercially and is available (canned) in grocery stores.

Fishery administrators, like any other executives, whether in private business or in government service, attempt to carry on their operations as efficiently and economically as possible. The fishery managers responsible for carp control have been very diligent in trying to find ways of catching the carp as cheaply as possible and disposing of them to the best financial advantage. However, the odds against a successful financial return were, and are, too great. The costs of catching the fish and marketing them are simply much greater than the market will pay. The revolving fund was eventually totally utilized and the carp control program has been subsidized by the state since 1951.

Carp are caught most effectively and economically when they are schooling or migrating. Capture at other times is not practical because of the cost and the additional handling of game fish in the hauls. Nevertheless it is possible to reduce carp populations by mechanical capture and removal to the point that they do not cause damage to the habitat; and game fish, waterfowl and furbearers again begin to prosper. However, the situation is temporary, since the carp is very prolific and those remaining soon rebuild the population. The fishery manager, through experience, could quite accurately predict when the carp population would again be large. Critics accused the Department of carp farming in order to build up Department finances. Indeed, carp farming was taking place, but not intentionally and not at the profit erroneously claimed.

Wisconsin fishery managers have earnestly sought methods to stimulate the use of carp for both human and animal food. To encourage usage for human food, publicity and bulletins on dressing and recipes for preparation have been published by the Department of Natural Resources and are available. A simple, and economically constructed, homemade smoker has been designed and directions for smoking published. Over 80,000 samples of smoked carp were handed out to visitors at the State Fair. The then Governor of the State and members of the popular Milwaukee Braves baseball team were publicized eating the smoked carp. This is a tasty, wholesome food but, unfortunately, it is not an acceptable item to the general public.

Minnesota undertook to can carp for human consumption, and that state subsidized a sizeable undertaking shortly after the close of World War II. The canned product was originally labelled as "Lake Fish" and, as such, was quite successfully marketed. However, when the pure food authorities insisted that "Carp" be put on the label, the market quickly collapsed.

For several years, Wisconsin canned large quantities of carp for fish and animal food. The whole fish were ground up, cooked and sealed in 10 lb. cans. This product was used extensively in the state fish hatcheries to feed trout and at the game farm. It was also sold to other states, private fish hatcheries, and to mink and fox farms. As a fish and animal food, it was quite satisfactory; but, the cost of production and distribution exceeded the benefits. The carp cannery had a daily capacity of 4,800 lbs. It was originally located at the Nevin Hatchery in Madison, then moved to Milton Junction to be nearer the supply of carp, and then to Lake Delton so holding ponds could be utilized.

The flesh of carp taken from some waters is "off flavor," so these fish cannot be used for human food. Paper mill wastes often produce a sulphide taste, while other factors will cause a musty taste. This situation further restricts the possibility of creating a desire or a demand for carp as a food. When off-flavor fish appear on the market, future sales are handicapped. Another drawback handicapping the use

of carp for human consumption is the large amount of waste encountered when the fish are dressed. Carp have large heads, scales and fins, and bulky alimentary tracts, thus creating a high percentage of offal. A hundred pounds of carp in the round will produce only about 30 to 35 pounds of dressed fish. Thus, a fish market might buy a hund-

single catch was 500,000 pounds, taken in a seine haul in Delavan Lake. A 400,000 pound haul was taken from Lake Mendota in 1966. Fish are currently being sold from $2\frac{1}{2}$ to $6\frac{4}{7}$ per pound.

The cost report of the Bureau of Fish Management for 1969 shows that the average selling price of carp was



Department of Natural Resources Photo This stringer of bass was made possible by the use of fish toxicants to control

red pounds of carp in the round for \$5.00 or 5¢ per pound—but cost of the dressed fish would be more nearly 15¢ per pound, plus the cost and inconvenience of dressing and disposing of the offal. All these costs must be added to the price of the product if the dealer is to make a profit. Thus a seemingly low cost item soon becomes rather expensive and the would-be customers are not willing to pay such prices for

undesirable species.

an item considered inferior.

The annual production of carp from the inland waters of Wisconsin is now about 2½ to 3½ million pounds. The record production was 11 million pounds produced in 1938. The largest

3.59¢ per pound. However, the cost of production—including removal or capture, holding pond operation and sales and service—cost the Department 9.19¢ per pound, or a loss of about 5¢ per pound. If the trend of rising costs continues in the future, this gap may be even greater as the production costs for 1968 and 1967 were 7.82¢ and 7.13¢ per pound, respectively.

Efforts to control carp populations by means of mechanical removal or harvest and subsequent utilization have been carried on for nearly five decades. It has been clearly shown that carp populations can be greatly reduced and brought under temporary control and that game fish and other wildlife benefit thereby. However, the procedure is very costly. It is truly carp farming, but at a high cost to the state. Nevertheless, efforts in this direction should continue. At the same time, studies must be devoted to the exploration of other methods, including the use of toxicants.

Control by means other than by the standard seine and fish trap removal have been investigated and test-There were experiments with electric seines, fish wheels, baiting, and even biological warfare through development of a carp specific disease. The use of fish toxicants was begun in 1941 when three small lakes in Bayfield County containing carp were treated with rotenone. Developmental work on fish toxicants was carried on by Department personnel as well as by many other workers in other states, in federal service and private organizations. A great deal of expertise is now available. Wisconsin workers were influential in the establishment of a fish control research laboratory in the Midwest, and the old federal trout hatchery at La Crosse was converted into the present laboratory.

Wisconsin fish managers have had a great deal of success in the production of good fishing through the control of rough fish and stunted panfish by means of fish toxicants. Little Green Lake in Green Lake County, treated 14 years ago, is a classic example. In this instance, not only was a productive, spectacular fishery created and maintained, but the renewed interest in water quality and good fishing resulted in property improvements. It changed from slum-like conditions to a very thriving and growing community. Thus the economy of the area, as well as the fishing, has benefited.

The application of toxicants as a fish management tool was first limited to small land-locked lakes and to rearing ponds. Such rehabilitation is not a haphazard operation within the Department; it is under strict control and definite operational procedures must be followed diligently. With the development of expertise it has been possible to devise techniques for application to

large bodies of waters. Public acceptance of the program has been good and is growing as the public sees good fishing develop. Treatment of streams and impoundments has also been developed. The dropping of water levels in impoundments is practiced to reduce the area and volume to be treated. The drawdown of impoundments produces many additional benefits, namely:

- 1. Poorly functioning septic tanks or disposal systems are exposed dramatically, causing immediate correction;
- Property owners have an opportunity to improve shorelines, thus correcting bank erosion;
- 3. Bottom silts are compacted to form firm bottom and create greater water depths;
- Needed watershed improvements are more easily visualized and work thereon accelerated;
- 5. A community cooperative atmosphere is created, resulting in permanent organizations such as a sanitary district or watershed association.

Critics of the program seem to think that things should be left in a natural state rather than subject the areas to drawdowns and chemical treatment. In the first place, there is no such thing as a natural state — the creation of impoundments on the Rock River altered conditions years ago. In addition, there have been alterations in the environment caused by pollutants and poor land management, which are now being corrected; these improvements are incorporated in the overall program.

Another complaint is that too many non-target species of animals will be killed or eliminated. The use of antimycin allays many of these fears as it has been clearly shown that this material, in the dosages used, is non-toxic to most invertebrate fauna or to warmblooded animals such as birds and mammals.

In reality, about the only non-target animals that might be affected might be a very limited number of littleknown and poorly-identified species of fish that probably make little or no contribution to the well-being of the environment. In addition, these seem to exist in the shallow water tributaries which would not be treated, thereby leaving seed stock for future repopulation.

Fish managers in Wisconsin have used toxicants as a fish management tool to control carp, to eliminate stunted panfish populations, and to prepare rearing ponds for walleye and muskellunge culture. Little has been said about the latter use in the present controversy. Yet, here is a positive, dramatic proof of the value and safety in the use of fish toxicants.

The Bureau of Fish Management carries on a large program of walleye and muskellunge culture to produce fingerlings for stocking in public waters. The program has tremendous public support. Many winter-kill ponds and pot holes are utilized as rearing ponds. Walleye and muskellunge fry are stocked in the spring, and harvest of fingerlings by seining and trapping takes place in the late summer and fall before freeze-up. Experience has shown that these ponds must be "clean," or devoid of predatory fishes before the fry are stocked if they are to produce the desired high yields. Experience has also shown in the case of walleyes, for example, that neither seining nor winter-kill can be depended upon for total removal of fish, and that there is certain to be a carryover of a few individuals surviving the following spring. If fry are stocked in waters containing these survivors, the fish manager knows that the survivors will grow fat on the stocked fry and the production of that pond will not be worth harvesting. Consequently, the fish manager is able to treat these ponds with toxicants each spring prior to stocking with fry and be assured of a crop of fingerlings in about 90 days.

These experiences certainly should show the value and safety in the use of toxicants. A technique that is productive year after year can hardly be labeled as a danger to our environment. Edw. W. Schneberger, a WASAL member since 1942, is the former director of the DNR Bureau of Research. He is presently serving as treasurer of the Wisconsin Academy.

Booth Courtenay has been interested in "the floor of the earth" all of her life. She has been working with wild mushrooms for 13 years and has photographed 450 species.

The five wooded acres around her Fox Bluff home are loaded with mush-rooms this time of the year and make a fine hunting ground for Mrs. Courtenay and her camera.

Yet, when she wants some mushrooms for cooking, she goes to the store and buys them. Why? Because she doesn't trust her own trained eyes to distinguish between the poisonous and non-poisonous ones. She says that beginning mushroom hunters who want to eat their finds may be "playing a fatal game of Mushroom Roulette."

"There are so many mushrooms and their relatives that not even scientists want to make a guess about their number," Mrs. Courtenay said. "Certainly there are more of them than there are wild flowers.

"Many of the mushrooms in our area are edible and delicious — but you must know exactly what you've found. Too many look alike. I have learned not to jump to conclusions, for I could well be mistaken."

One day, for example, Mrs. Courtenay photographed what she thought was a puffball, all of which are edible. To make sure of the species, she planted it in a bowl, and then had to go away for the weekend. When she returned, the "puffball" had grown and proved to be one of the Amanitas — the most deadly genus.



The Large White Coral Mushroom (Hieracium coralloides.)

Reprinted with permission from the Wisconsin State Journal, September 4, 1972.



L. Roger Turner Photo

WILD MUSHROOM HUNTERS, BEWARE!

Even the spores alone, Mrs. Courtenay explained, fallen on a basket of edible mushrooms, could kill an entire family. The symptoms of its poisoning don't show up until too late to prevent a death you wouldn't wish on your worst enemy, she said.

"Despite folklore and old wives' tales, there are *no* general rules to separate the good boys from the bad. Even the experts sometimes disagree," Mrs. Courtenay said. Between the relatively few true "killers" and those that are safe, there are a vast number that may cause allergic reactions or make a particular individual ill. They may affect one person and not another.

"And in this large middle ground, no one can predict for himself or for

By Joan Judd

anyone else what may prove dangerous or unpleasant," she said. She quoted Dr. J. Walton Groves, author of *Edible and Poisonous Mushrooms of Canada:* "There is only one test — if something makes you sick or kills you, it is poisonous."

Mrs. Courtenay said that early August to the first killing frost is the peak of the mushroom season. The great majority of them are found in wooded areas, some growing on the ground, some on wood.

She worries about the amateur hunters who are unaware that many edible and inedible varieties may look alike. Some deaths occur every year because of careless mistakes. Her advice is, if you want to gather wild mushrooms to eat, look for those that are "so characteristic all by themselves that they don't look like anything else."

She cites Professor Clyde Christensen who says in his book, *Common Edible Mushrooms*, that it is wisest to pick only the "big four." These are:

One. Most morels (spongy-looking mushrooms), which are found in the spring. One, however, the Hybrid Morel, looking very much like the others, may have "unpleasant" results for some people. Two. Puffballs, as long as they are firm and pure white on the inside.

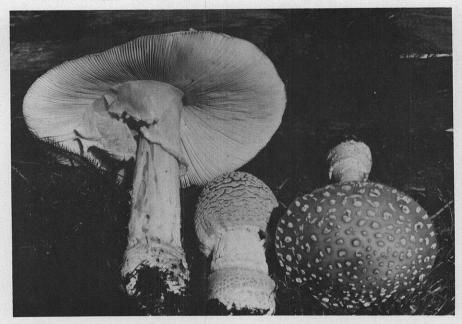
Three. Shaggy Manes (Coprinus comatus), before they begin to liquify into their black "ink." Four. Sulphur Shelf, beautiful and conspicuous in brilliant yellow and orange, found on trees or fallen logs.

Others, also unmistakable in their appearance, are the lacy Large White Coral, before the insects take over; and the yellow or orange Chanterelles, with their conspicuously blunt, forking ridges from cap to stem.

Mrs. Courtenay said that some of the "edibles" demand more detailed observations because of their similarities to poisonous varieties, and spore color for these *must* be ascertained.

To get spore color, take a section of the cap, place it gillside down on a piece of pure white paper and cover it with a glass or cup to keep it from drying out. Within a few hours or overnight, enough spores will have been deposited on the paper to give a clear idea of their color.

With this identification aid made positive, others among the approximately 40 safe and interestingly edible mushrooms are: the inch-plus tan Fairy Ring (Marasmius oreades), white spored; the Parasol (Lepiota rachodes) with white spores, remembering that a close relative looking almost identical but with green spores can be dangerous; Meadow and Horse Mushrooms (Agaricus campestris and A. arvensis). with deep-chocolate spores; and the Oyster (Pleurotus ostreatus), white or lavender-spored, growing on living or dead wood, with blue to lavender gills and flesh-colored spores.



The Fly Amanita (Amanita muscaria.)

Here are Mrs. Courtenay's mushroom collecting DOs and DON'Ts.

- DO use a guide book for identification.
- DO take time to compare your finds carefully with the book on returning home.
- DON'T experiment merely because they "look" good. Spore color and relationship of gills or tubes to stem *must* be noted for any degree of species certainty.

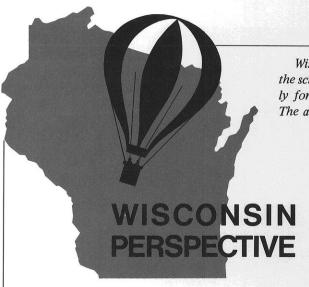


Honey Mushrooms (Armillaria mellea.)

- DO learn by heart the characteristics of the fatal Amanitas, remembering that the basal cup or shaggy bulbous base is often hidden under the surface of the soil.
- DON'T just snap off the cap. Pull away the soil from the base of the stem and beware of any with the basal cup or shaggy bulb.
- DON'T pick any that are bug-infested or clearly overage.
- DO put each different kind in a separate sack or basket.
- DO cook as soon as possible after picking and identifying. The delicious Shaggy Mane, particularly, must be used the same day; even in the refrigerator, it will turn to ink overnight.
- DO cook only one kind per meal. Mrs. Courtenay, painter of the round

jigsaw puzzle "Mushrooms," is the author of An Amateur's Guide to Genera of Mushrooms and Their Relatives. Released last summer was her book, A Guide in Full Color to Wildflowers and Weeds, co-authored by fellow Wisconsin Academy member James Hall Zimmerman and published by Van Nostrand Reinhold Co.

Joan Judd is a staff writer for the Wisconsin State Journal in Madison.



Wisconsin Perspective brings to focus, through photographs and commentary, the sciences, arts and letters of earlier days in Wisconsin. It is prepared specifically for Academy use by the staff of The State Historical Society of Wisconsin. The author, Paul Vanderbilt, is curator emeritus of the iconographic collections.

Hailing Port at Manitowoc

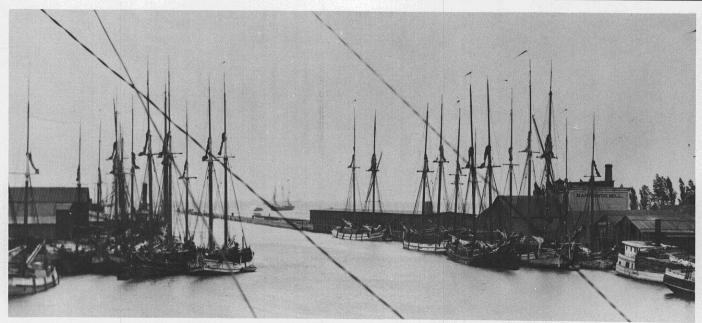
By Paul Vanderbilt



". . . local products were less important than shipments passing through . . ."

While there were very apparent natural advantages of location at Manitowoc, at the mouth of a river, the actual harbor had to be mainly artificial. There is a long and complicated history of surveys and appropriations, from the 1830's to the 1870's, marked by tentative efforts, until the "government harbor" was adequate to the potential and the need. The original settlement was not at the lake, but upriver, at Manitowoc Rapids, where Jacob Conroe had lumber freighted up from Chicago (at \$5 a thousand feet for transportation) and built a sawmill in 1835. This operation drew upon the nearby forests and moved the sawed lumber to the bay on scows, where it was transferred to lake sailing vessels. Even at this time, in 1834-35, there was promotion of an idea of a canal inland to Lake Winnebago, using the Manitowoc riverbed as far as Chilton.

But across the mouth of the river was a shifting sandbar, and the riverbanks at Manitowoc were swamps and marshes. At times the sandbar was dry land, forming a sort of dam, and there are recollections of oxen pulling a scoop to open a passage. Once a small schooner landed as far in as she could sail while her captain himself went to work on the sandbar with a shovel, digging a narrow drain to the slightly higher water on the other side of the "dam." The water flowing out through his handwrought channel soon wore an opening large enough to admit the vessel. Such vessels were traders out of Chicago or Milwaukee, carrying general supplies which were bartered for lumber, posts and shingles marketable in the cities. Depending on the condition of



Criss-crossed by supporting wires from the new bridge, schooners find refuge in the Manitowoc harbor during the winter of 1893-94.

Photos from the collections of the State Historical Society of Wisconsin

the sandbar, vessels might or might not be able to enter the primitive harbor. Small boys in Manitowoc liked to watch them try. When there was a good breeze and quite a sea on, a schooner would come down the lake under full sail, making for a certain hole in the sandbar, depending on speed to jump over the submerged sand and get inside.

Before the first real bridge across the river at Manitowoc was built in 1851, an Indian girl with a canoe ferried passengers for a fare of one penny. Then someone laid over a single row of timbers, which some could cross standing up and others, less able to balance themselves, would straddle and hop along, sitting down. There is an amusing description of Peter Kraemer, a prominent merchant, followed by his nine sons of various ages, all in a line, crossing in this fashion like a family of frogs. But business was indeed looking up, and something had to be done about the harbor. Eventually it was done; several piers and docks were built and the sand was dredged out of the channel, first to twelve, then to twenty feet of navigable water.

Germans began coming to this region in 1847. In the immediately following years, quite a number were refugees from the political turmoil of 1848, often intellectuals and idealists whose experience hardly fitted them for the rough life of the frontier. But many stayed and became successful officials, investors or businessmen. Except for lumber, fish and, later, ships, local products were less important in

Manitowoc commerce than shipments passing through, as the growing city was essentially a transfer point. One of the most frequently mentioned statistics is the number of vessels in port at a given time. In three months in the spring of 1856, 571 vessels entered or left the port. In the ninemonth season of 1859, there were 1,071; in 1901, the figure was 2,112. And an observer noted at one time "hundreds" of teams of oxen in town. Along with the refugee aristocrats, actors and musicians, skilled builders and craftsmen came to Manitowoc and partly because of location, partly because of business interests, the city became one of the principal shipbuilding centers of the Great Lakes.

The first ship built there was the Citizen of 1847. The list in Louis Falge's History of Manitowoc County for 1847-1900 shows 116 sailing craft, 40 steamers, 35 tugboats and 6 barges launched at Manitowoc, a total of 197 vessels. A few of the sailing craft were not schooners, but partially or wholly square-rigged. Some were known locally as clippers. Steamers were in service from 1848 on, although the first such vessel built at Manitowoc was not launched until 1861.

One aspect of the local lumber trade was the prominence of this point for fueling. The piers were usually piled high with firewood, since these early steamers were woodburners. While many individuals and firms were engaged in shipbuilding, the most productive group was the sequence of G. S. Rand, Rand & Burger, Burger & Burger and, eventually, the Manitowoc Shipbuilding Company. In later years, dredges, sand-suckers, barges, lighters and firefighting boats were built, and Manitowoc was very active in shipbuilding during the second World War.

WISCONSIN PIONEERS The Artist-in-Residence

By Fannie Taylor

Pioneering is not a matter only of sod huts, split rails, and the ploughing of ancient prairies; it can be the building of new institutions and the opening of minds to new ideas.

Pioneering has come naturally to the University of Wisconsin since its founding in Madison in February 1849, less than a year after the state was established. Pioneering with ideas has been the University's hallmark, but in the nineteenth century the emphasis was largely on sciences, engineering, agriculture—practical help to a new state carving its territorial identity out of the northern forests.

When President Charles R. Van Hise came into office in the early 1900's, however, the raw young society was beginning to grow up. It was a time of new vision, and out of it emerged the revolutionary concept of the Wisconsin Idea-that knowledge should be put to work, in every possible way, for the advancement of society. The humanizing quality of this concept began to seep into the Wisconsin consciousness and with it came new ways of looking at the world around us. President Van Hise saw the importance of the fine arts to this emerging new life style and often emphasized that the history and appreciation of the fine arts should be taught at the University. Actually, however, the bachelor of music degree program was not established until late in his term of office and another ten years passed before the department of art history was set up

under the distinguished German art historian, Oskar F. L. Hagen.

In the early golden years of Glenn Frank's University presidency the idea of experimental, innovative learning began to gain credence. The University became more a function of the society of the time, and less a reflection of the scholarship and outlook of a medieval world. In spite of his own creative brilliance, and perhaps because of it, Frank was caught himself in the maelstrom of conflicting, changing societal attitudes in the mid-depression era. He saw his own career as president terminate in charges, countercharges and political chaos.

Nevertheless, in the midst of this turmoil, one of Glenn Frank's last acts in office was to appoint an "artist-inresidence" at the University of Wisconsin, a new concept, a pioneering act, one which, increasingly since those pre-World War II days, has proved its vision and viability.

How did the idea of bringing an artist, that catalyst and scourge of our society, that humanist, idealist, offbeat, out-of-joint, truth-saying member of the human tribe, emerge at Madison?

The climate, which had been open to ideas and change under Van Hise, had closed in somewhat after World War I. The early Glenn Frank years were indeed gilded, as the whole society of the Twenties was, but some of the changes wrought by the president upon the University administration of the time sound today like band-aid assis-

tance on a social structure that within a decade was to collapse forever under the impact of the Depression of the Thirties and World War II. It is to the everlasting credit of the beleaguered Glenn Frank and his fragmented Board of Regents that, at a time when Governor Philip F. LaFollette's inaugural statement was still being echoed—"We cannot afford increasingly large expenditures with increasingly diminishing returns"—an idea of such exotic originality as the concept of an artistin-residence could have gained support.

Equally paradoxical, perhaps, is the fact that this program was given a home in the College of Agriculture. Wisconsin, of course, as a land-grant college, has always had a strong farm program. The activities of the agriculture faculty and their county agent arms throughout the state have been at the heart of the Wisconsin Idea.

But an artist? What did the farmer need of an artist when the cornfields in Adams county were blowing away?

The College of Agriculture in those years was blessed with a dean of great vision and strength, Chris L. Christensen, whose faith in the educational system was only matched by his ability to find statewide support. Years later he recalled his role in the establishment of the artist-in-residence, both as a concept and a personnel decision.

"Yes, I personally initiated the idea of this new educational venture; namely, the establishment of an Artist-in-Residence in the College of Agriculture. I felt that the talent of farmers and rural people in the area of the arts should be recognized and I presented my suggested program to the Board of Regents on July 23, 1936.

"In my presentation of this project to the Board of Regents, I expressed the following viewpoint—

"'Education, if it is to serve us to the fullest must include many things besides learning methods of increasing our financial income. We are all realizing that income is but a means to an end, and that end is the good life.

"'So it is that our educational process needs to deal with subjects that contribute to the growth of the cultural side of life, such as literature, arts, music and history as well as with practical training for the yocations.

"'In our agricultural education, both on and off the campus, we aim to help rural people create an economy which will give farmers a standard of living capable of promoting cultural growth."

"In September 1936, the Board of Regents approved this innovative, almost revolutionary, philosophy with the appointment of John Steuart Curry as 'Artist-in-Residence.'

"Financial support for this new project was provided by a grant from the University of Wisconsin Trust of the Brittingham Estate under the leadership of Governor Philip La Follette. The State Emergency Board made available funds for the construction of a simple one-room studio on the Agricultural Campus."

Dean Christensen added that the venture had the enthusiastic support of Professor Oskar Hagen of the Department of History and Art in the University, who expressed the belief that Mr. Curry, in his new position, would be destined to influence the art life of Wisconsin immeasurably.

Curry came to Madison in 1936 and settled into the community, working diligently in his Ag School studio. He is described by his long-time friend, Don Anderson, publisher of the Wisconsin State Journal, in a catalogue published by the Madison Art Center on the occasion of a John Steuart



Aaron Bohrod, University of Wisconsin artist-in-residence . . . "Ideas still abound."

Curry exhibition (January 19—February 23, 1969).

"His attitude toward his work was as simple as honest. Once I took a young artist to visit John in his studio on the campus. This chap had talent, but his production was low. He seldom painted anything. He said to Curry:

"'How do you get the inspiration to do all the work you get done?"

"Standing in his white overalls, with paint brush in hand, John replied simply:

"'Inspiration? I never worry about it. I simply put on my work clothes and go to the studio every morning at 8 o'clock and start painting. Some days I just paint pictures. Often in the midst of this, I get inspiration and then I paint what people say are good pictures. If I waited for inspiration I'd never paint anything.'"

Early in his Wisconsin assignment Curry accepted a commission to paint murals in the Kansas State Capitol at Topeka. The murals became a *cause celebre*, and the public, the press and the lawmakers battled over Curry's right to "freedom of expression," his

"portrayal of the true Kansas," his painting of a Hereford bull ("sheer imagination and not very good imagination at that,") the curl in a pig's tail. "The murals do not portray the true Kansas," the Kansas Council of Women stated. "Rather than revealing a lawabiding, progressive state, the artist has emphasized the freaks in its history—tornadoes and John Brown who did not follow legal procedure."

It all blew over finally; the murals still can be seen in the Capitol building in Topeka. A few years ago the Kansas Cultural Arts Commission put on a retrospective at the Topeka Capitol, with the murals as a focus. Art critic John Canaday of the New York Times, flew out to see the show and write about it.

History reversed itself. Canaday's evaluation was that John Steuart Curry, for all his noble tribute to the sturdy men and women who opened the west and fought for justice, was really not a very good painter.

Once again there was an explosion; this time of admirers of Curry who felt the artist had been personally maligned, versus the *Times* critic. Canaday defended himself as best he could, describing the retrospective show and its publications as being "a well-researched exposition of Curry's career and the first opportunity for an assessment."

"That means a good exhibition," he wrote, "and has nothing to do with my inability to find much good in the painting of this good man."

Curry died relatively young leaving only about 20 years of mature work. Laurence Schmeckebier, his biographer, writes of his work:

"Farm subjects and the Midwest were not end objectives but only the means to an end-that of unleashing the tremendous expressive power latent in American life. Curry's efforts were directed into many different directions: the lusty, colorful life of the circus, the picturesque landscape and historic traditions of upper New York state (Cooperstown), Kansas and Wisconsin and the exciting spectacle of American sports. His appointment as Artist-in-Residence at the University of Wisconsin seemed to intensify rather than divert this point of view, and his ten years' service with the agricultural college of this great state university saw the widening of his influence into every county and town in a genuinely artistic grassroots movement."

There was a short hiatus after Curry's death in 1946, and then Aaron Bohrod succeeded to the artist-in-residence post in 1948, a position he still holds. His realistic, meticulous style and mastery of trompe l'oeil are internationally recognized, but Bohrod himself has said that he does not feel a painting must set forth great "messages," and takes his fame modestly.

A familiar figure in Madison, Bohrod has been a genuinely contributing artist to the campus scene over the years of his appointment. His portrait of the late president Conrad Elvehjem hangs in the Inn Wisconsin of the Memorial Union; he was discovered like an eager student painting the fence which barricaded the construction site for the Humanities Building; his still life, "Summertime," graced the front cover of a Summer Session catalogue.

In 1966 the Milwaukee Art Center held a retrospective exhibition, at which time the associate director of the Center, John Lloyd Taylor, wrote in the introduction to the catalogue, "There can be little doubt that he ranks as the greatest American artist of World War II . . . Aaron Bohrod's place in the history of twentieth century American Art has thrice been established: as a social realist, as a war artist, and as a still life painter. With the latter, he departed from the mainstream movements of modern art for a style in which he could say what he wanted to say in a manner of his own choosing."

Bohrod himself writing in "A Decade of Still Life," has said:

"Some of my friends tell me that still life has too constricted a scope. They urge me to move on to something else. I find I cannot agree. Of course, every form has its limits, but within these limits there is an infinite array of subjects on which to comment. I can comment on time and the world in which we live, on man as reflected by the things man makes and lives with, on life and on death. Physical changes or extraneous events may force a halt to these particular esthetic proceedings. When my eyes fail and my feet flatten and my hand loses its steadiness, I will probably rationalize a reason for painting in another way. But ideas still abound. And since the required physical resources, though diminishing, are yet reliable, I hope I may be forgiven for saying there is still life in the old boy."

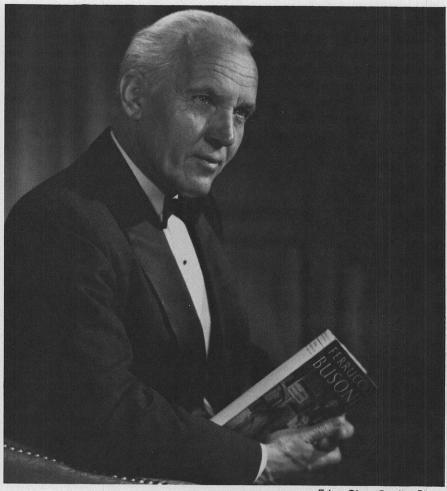
While the plastic arts were being supported on the Ag campus, there was also another artist-in-residence channel being cut deep in the University's College of Letters and Science. Gunnar Johansen, a young Danish composer and pianist, first appeared at Madison in 1937, playing 12 recitals of historical piano music under the patronage of Elizabeth Sprague Coolidge. Shortly afterwards he became a lecturer in the School of Music and in 1939 was appointed artist-in-residence, a post he has maintained unofficially ever since, although he has been a full professor of music for many years.

Johansen's full career has spanned composition, performance, recording, teaching and a hundred diverse interests, including the making of maple syrup at his Blue Mounds home. A man of ideas, ideals and energetic output, he has, for example, recorded the complete works of Johann Sebastian Bach, using a double keyboard piano, clavichord, spinet and harpsichord. In 1969 he performed a "musical miracle" with the Philadelphia Orchestra at Philharmonic Hall in New York when he replaced the indisposed soloist and played Beethoven's Sixth Piano Concerto in D Major with less than 40 hours notice.

The incredible thing about this New York performance was that while Johansen knew the Beethoven work as a violin concerto, he had never encountered the rarely performed piano transcription. He was able to get less than an hour's practice with Eugene Ormandy and the orchestra, and part of this time went into nine pages of cadenzas with the orchestra which he had to read at sight. Thus, at the concert on the evening of January 14, 1969, he used the score during the performance "which is understandable for someone who is hearing the concerto in its entirety for the first time," Donal Henahan explained in the New York Times. Harriett Johnson in the New York Post summed it up, "his performance demonstrated the master musician at work."

Johansen's interests span many areas—flying airplanes, planning an academy of arts and sciences, working on steam-powered automobiles, but he is particularly articulate on the subject of the artist-in-residence.

"I have even gone so far as to propose that Artist-in-Residenceships be established not only in every college and university but in the high schools of all our cities. Think how marvelous it would be for our young people to have contact almost daily with a real artist, one whose creativity would spark their own. What far-reaching effects on future generations! The present abyss separating our audiences from our serious composers, painters, sculptors, poets and playwrights could



Edgar Obma Studios Photo Gunnar Johansen . . . "a musical miracle."

be swept away—if there only were contact between those in the act of creating and those in the process of learning."

About the same time that Johansen joined the Madison faculty, another great innovation in the concept of the artist-in-residence took place, once again at the School of Music and with the support of four influential alumni of the University. The story of the Pro Arte Quartet, today the oldest continuously operating string quartet in the world, is a glorious saga of the international strength of music and its staying power in the face of the worst adversity.

The Pro Arte Quartet was established in 1912, in Brussels, Belgium by violinist Alphonse Onnou. Its other young members were Laurent Halleux, Germain Prevost and Robert Maas. It soon became the Court Quartet of

Belgium, and performed throughout Europe so successfully that such composers as Milhaud, Honegger and Bartok arranged to have the musicians introduce their new works. By 1926 its fame had spread to the United States, and again, that generous and far-sighted patroness of music, Mrs. Elizabeth Sprague Coolidge, helped with the arrangement for concerts in dozens of American cities and universities.

Among these campus visits was one to Madison in 1938, which was so successful that the Quartet returned in the spring of 1940 for a week-long engagement in the new Wisconsin Union Theater, playing all of the Beethoven string quartets. During that time, Belgium was invaded by the Nazis and the Quartet found itself questioning whether to return to the homeland, even though their cellist, Robert Maas, had stayed behind because of illness.

In a way, the problem was providential for the University. Authorities who had been considering asking the group to become artists-in-residence (the first such group appointment in the country) had their decision made for them quickly. Four alumni set up a fund to establish the group on the campus. They were Joseph E. Davies, attorney and former Ambassador to Russia; George I. Haight, widely-known Chicago attorney; Frank Sensenbrenner, long-time president of the Board of Regents; and Wisconsin industrialist, and Thomas E. Brittingham, investment counselor and philanthropist.

The Quartet stayed. It had a succession of cellists, Warwick Evans, George Sopkin and Ernst Friedlander, because Robert Maas never was able to rejoin his colleagues. Finally the Quartet settled in 1955 with Lowell Creitz, the present incumbent.

Shortly after the group moved to Madison, Alphonse Onnou died. His replacement was Antonio Brosa, who remained four years.

In 1944 Rudolf Kolisch, the foundder of the Kolisch Quartet and one of the world's foremost violinists, took over the leadership of the group, retaining it with great distinction until his retirement in 1967 when Norman Paulu became the first violinist.

Laurent Halleux remained at second violin until 1943 when Albert Rahier replaced him, followed in 1961 by Robert Basso, who was followed in turn by Thomas Moore in 1967.

Of the original group, Germain Prevost remained the longest followed by Bernard Milofsky, and in 1957 by the present violinist, Richard Blum.

The Pro Arte Quartet which began at the Court of Belgium has played in half the rural towns of Wisconsin. It has appeared regularly in concert in Madison and on tour. It is familiar to the state radio audience. After nearly 35 years at Madison it is the ever youthful grandfather of the resident artist program.

Today, the concept of the artist-inresidence, which was so innovative at Wisconsin in the era when breadlines were forming in the major cities and war hung over Europe, has become a standard educational commodity. Madi son, and now other campuses of the University of Wisconsin System, have had many artists-in-residence whose input in terms of contact with students and a wide public has been steadily humanizing and broadening.

The rationale is well expressed by Robert L. Clodius, former vice president of the University of Wisconsin during whose term as an administrator, to feed soul and spirit come alive in the arts. This is why the artist-in-residence concept is pure genius. The artist is not some remote figure but a living presence and visible evidence of devotion and dedication to the life of the arts. It is powerful teaching to old and young alike."

The idea of the artist-in-residence on college campuses is now universally accepted in education and has many variations in the present day. Among and providing a living for professional dancers never dreamed of even half a decade ago. The Affiliate Artist program is a kind of residency in reverse with an artist attached to a campus but moving away from it for many appearances elsewhere.

It was once thought among professional concert managers that a post as an artist-in-residence might be stultifying to a career. This is no longer Sometimes artists-in-residence have had to face problems and tensions involving relationships with their academic departments and colleagues. Some pundits even argue that the day of the artist-in-residence may be past, and the "extended concert" lasting a few days with master classes, open rehearsals and a culminating performance may be replacing it. This may be true for a musician but an artist cannot paint a picture or weld a sculpture in such a brief time, nor can a novelist produce a book.

In an unpublished monograph on "The Artist in Residence" written in 1971, President James W. Hall of Empire State College, State University of New York, summed up these positions:

"It may be that the specific designation artist-in-residence will be less used as all faculties in the arts become staffed with highly skilled practitioners with strong credentials. If so, the movement will point to an accomplishment which has transformed not only the teaching of the fine arts and the cultural climate of the university, but which has deeply affected the arts and artist in the United States. None will ever be the same again."

Perhaps someday the little Studio house on the Ag campus of the University at Madison will have a plaque attached to it, a historical monument which reads:

"Here the first artist-in-residence, John Steuart Curry, began a revolution of the arts in education."

Professor Fannie Taylor is a member of the UW-Madison Graduate School of Business-Arts Administration faculty. She is presently on leave to serve as director of program information for the National Endowment for the Arts.



The Pro Arte Quartet . . . from the Court of Belgium to half of the rural towns in Wisconsin. Members in the late 1950's included (I-r): Albert Rahier, Bernard Milofsky, Lowell Creitz and Rudolph Kolisch,

both the arts and the concept of the resident artist were given particular emphasis and support.

Dr. Clodius states: "A university is many things but surely one of its principle concerns should be with the quality of life. And in a great university we are concerned with more than the quality of the physical environment. Here is where the arts have so much to contribute. Music, theatre, art, dance all address themselves to the quality of life of the mind and of the senses. The beauty, harmony,

understanding and grace that we need the most popular are the short-term residencies, running for two or three days to a semester. There is much to be said for this concept, including the fact that the cost to the institution is modest and the constant turnover of artist and his ideas very stimulating. The National Endowment for the Arts has sponsored a national series of Dance Residencies, featuring major dance companies, which has practically revolutionized the world of dance in the past few years, broadening the audience

University of Wisconsin Centers, 1946-1972

By L. H. Adolfson

During World War II, University of Wisconsin Centers remained open in Green Bay, Kenosha, Manitowoc, Wausau, Racine and Sheboygan. Enrollments were low, falling to 26 at Racine and 29 at Green Bay in 1943. But the core of the Center System remained.

Beginning in 1946, there was a mad scramble among institutions of higher education to take care of the returning veterans. The University moved rapidly to revive former Centers, to continue those that remained open during the war and to open new ones. During 1946-47, Centers were located at Antigo, Boscobel, Delavan, Fond du Lac, Green Bay, Hillsboro, Hurley, Janesville, Kenosha, Ladysmith, Marinette, Manitowoc, Marshfield, Mauston, Menasha, Merrill, New London, New Richmond, Racine, Rhinelander, Rice Lake, Richland Center, Sheboygan, Sparta, Spooner, Sturgeon Bay, Wausau, West Bend and Wisconsin Rapids.

Most of these Centers were relatively small, but larger ones were beginning to emerge. Those with over 100 students included Green Bay, 181; Kenosha, 207; Manitowoc, 113; Marinette, 146; Menasha, 172; Racine, 603; Sheboygan, 152 and Wausau, 105.

That same year separate buildings for the exclusive use of the Centers were provided in three cities — Racine, Green Bay and Wausau. It was at this time also that the Regents developed the policy that the local communities, usually counties, should provide the land and buildings for Centers, while

the state would provide the equipment and all operating costs. Maintenance was to be divided equally between the state and the local communities.

During this period the 32 Centers were housed in an assortment of facilities. These included vocational schools, libraries, church basements, city and county board chambers and, in one case, the lounge room behind a bar. Libraries were makeshift. Some vocational schools provided small collections of books, as did local libraries. The University supplemented these local arrangements by providing "traveling libraries" which moved from Center to Center as needed.

The Extension field organization played an important role in this overnight expansion of the Center System. The field men organized the classes, enrolled the students, collected the fees, made certain that facilities were adequate, negotiated for instructors and generally nursed the programs along. The fact is that these Centers could not have been organized and operated without the field organization of the Extension Division.

The smaller Centers could not hold up long, so a contraction of the System began almost at once. Sixteen Centers were closed at the end of 1946-47, and five more by the end of 1948-49. As the veterans, who constituted the bulk of the student body completed two years, enrollments dropped significantly, and most of the Centers became too small to remain

open. The closing of many of the Centers caused real heartaches in the communities involved, because many community leaders had had hopes, and even dreams, of "their" Center evolving into a viable and permanent two-year college. Their dismay at seeing these hopes dashed so quickly is understandable.

From 1952 to 1964 the System stabilized at eight Centers located in the Fox Valley (Menasha), Green Bay, Kenosha, Manitowoc, Marathon (Wausau), Marinette, Racine and Sheboygan. Enrollments ranged from 47 at Marinette to 280 at Racine. Meanwhile, in 1958 the first new building for a Center campus was authorized by the Marathon county board at Wausau. The Center Director, Henry Ahrnsbrak, and a prominent member of the County Board, Fred Braun, became interested in the possibility of the county constructing a new building to supplement the inadequate old building in which the Center was housed.

However, counties may spend money only on activities authorized by state statute, and there was no such authorization for a University Center. With the help of their local legislators and others, Ahrnsbrak and Braun went to the state legislature and succeeded in securing the passage of legislation authorizing counties to appropriate money for "the construction, remodeling, expansion, acquisition or equipping of land, buildings and facilities for a University of Wisconsin Extension Center or state college branch campus if

the operation of it has been approved by the board of regents."

On the basis of this enabling legislation, the Marathon county board appropriated \$450,000 for a new Center building at Wausau.

Shortly thereafter there was a movement in Kenosha County, spearheaded by an active and imaginative citizen's group, to build a new building in Kenosha. In that situation it seemed best to have the facility financed jointly by the county of Kenosha and the city of Kenosha. There was no enabling legislation for the city to spend money for this purpose, so Kenosha legislators undertook the task of securing the necessary legislation enabling municipalities to spend money for University Center facilities.

Thus the legal groundwork was laid for new Centers to be constructed with financing by either counties or cities, or combinations of both. In the early 1960's new facilities were constructed for all of the Centers then in existence.

In 1963 President Fred Harrington decided that the Centers should be moved out of the Extension Division and set up as a separate unit within the restructured University. The chief argument against this move was that in all Center communities the twoyear program and Extension programs were commingled and developed together, an arrangement that benefited both. However, the Centers were in a new period of growth and development and it was felt that they would develop best as a unit in their own right. Moreover, President Harrington was already thinking about combining the Cooperative Extension Service of the College of Agriculture with the University Extension Division, and he viewed the Center move as laying the groundwork for that action.

Shortly after the Centers were split off from Extension, a faculty organization for the Center System was created for the first time. Two divisional committees were created, one for the biological and physical sciences and another for the social sciences and humanities. A faculty senate was organized, and it in turn, created several

system-wide committees. A university committee was created to serve as a sort of executive committee of the faculty. The assembled deans served as the chancellor's council.

A central administration for the Center System was also created at this time. It consisted of the chancellor's office, the vice-chancellor's office, the business office, the office of the registrar and recorder, the office of the assistant vice-chancellor for student affairs and the secretary of the faculty.

New arrangements were made, also, with the system-wide department chair-Historically, these positions were filled by faculty with split appointments between the Madison campus and/or Extension and the Center System. The formal ties with the Madison campus or Extension were now severed, with the Center System chairmen being elected by the faculty of each department from within the department. By 1972 only two chairmen of Center System departments, English and physical education, still had joint appointments with the Madison campus.

Between 1964 and 1968 five new campuses were opened. The first was at Marshfield in 1964 at the initiation of the Regents. The others were created by the Regents on the recommendation of the former Coordinating Council on Higher Education. In 1966 campuses were opened at Janesville (Rock County) and Waukesha; in 1968 they were opened at West Bend (Washington County) and Baraboo (Sauk County). These were the last of the two-year campuses to be developed by the University.

Meanwhile, the Center System lost six campuses in the creation of the two new four-year campuses at Parkside and Green Bay. Racine and Kenosha became the base of the new institution at Parkside; while Marinette, Fox Valley, Green Bay and Manitowoc went to Green Bay. The Center System was thus reduced to seven campuses, which remained until 1972. It is interesting to note that the last group of campuses created included the largest campus, Waukesha, and the smallest, Baraboo.

In 1972 the University of Wisconsin and the State University System were merged into a single system of higher education, known as the University of Wisconsin System. This occasioned adding seven two-year campuses to the Center System. The Fox Valley, Marinette and Manitowoc campuses came from Green Bay and the Rice Lake, Medford, Richland Center and Fond du Lac from the State University System. The Center System thus became a fourteen-campus system, with campuses widely distributed throughout the state.

While the Centers were a product of the Great Depression, the rationale for attending them has broadened over the years. Many students still attend for economic reasons, but many others attend because they prefer to begin college at a relatively small school compared to the University at Madison or Milwaukee or even the state universities. Many, also, simply prefer to stay at home a while longer before going away to school. Tied to this notion is the idea of "trying out" college while living at home rather than going away to do it.

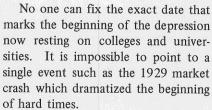
The Centers have played an important role in higher education in the State of Wisconsin over the past four decades and promise to play an even larger one in the decades ahead.

A final question: Will any of the Centers become four-year institutions? It is not likely, certainly not in the next decade or two. However, who knows what might happen at Waukesha, already the largest of the Centers and still growing? Nor can one predict the politics of higher education for all time. Freezes on enrollments at the larger institutions might well catapult enrollments at some of the Centers and engender pressures for four-year institutions that cannot be denied. Only time will tell.

Dr. Adolfson, who retired as chancellor of the UW Center System a year ago, is completing manuscripts for two books soon to be published—one, a history of UW Extension from the late 1880's to mid 1950's, and the other, a history of the UW Center System.

Learning to Live on Less

By Lon Weber



The late 1950's and most of the sixties were, in fact, years of unprecedented growth for higher education. In the decade ending in 1968, enrollments doubled, income and expenditures tripled, and physical plant value rose 400%. According to estimates prepared by the Council for Financial Aid to Education, foundation support alone for education had increased 500% for the decade 1954 to 1964 for a dollar rise from \$70 million to a peak of \$350 million, and the support from business and industry more than doubled during the same period. However, increases in revenue were more than outstripped by increases in the expenditures for higher education. Total expenditures per student rose at an annual average rate of 8% from 1960 to 1970. A Vanderbilt University study has shown that for several decades, expenditures for departmental instruction and research rose at the remarkably uniform compound rate of 7½% per student. In addition, the cost per student grew because universities were busy expanding research programs and community responsibilities. The emphasis of expenditures for research equipment shifted toward more graduate students and consequently more expensive instruction.

Consider salaries—the major cost item in any budget. In a labor intensive activity such as education, there are virtually no savings through increased productivity. In a recent study, the Carnegie Commission found that for colleges and universities there is "a more or less proportionate increase of inputs and outputs." In other words, higher labor costs cannot be offset by greater output.

The plight of university budgets becomes even more evident when one examines downward trends of federal support to higher education in recent years. The colleges and universities of this country are victims of inflation and of the policies used to fight it. The percentage of increase in federal support in every year since 1967 has been less than the increases in the cost of operation. In real terms, federal support has declined and continues to decline. Inflation has also affected government appropriations at the state level and it has contributed to the much discussed taxpayers' revolt. Appropriations of state tax funds for higher education have increased 24% in the last two years and 351% in the last ten. But other developments are foreboding. In June, 1970, for example, a California bond proposal for capital support of medical schools and health sciences was voted down in 55 of the state's 58 counties.

As a result of burgeoning costs and decreased revenue, many institutions of higher learning are finding them-



selves in dire financial straits. In the spring of 1970, a joint study by the Carnegie Commission and the Ford Foundation found that 29 of 41 institutions, or 71%, were either headed for financial trouble or were already in financial difficulty. An institution was considered headed for financial trouble if, at the time of the study, it had been able to meet current responsibilities but either could not insure that it could much longer sustain current program and quality standards or could not plan to support evolving program growth. Colleges and universities which were forced to reduce services or eliminate important educational programs were considered in financial difficulty. The study further estimates that 51% of all American universities, representing 62% of the total enrollment, were headed for financial trouble. An estimated 30% of the universities representing 19% of the total United States enrollment in higher education were already in a financial bind.

These grim economic realities are little surprise to our students who are facing their own financial hardships. College graduates are learning, to their sorrow, that a degree is no guarantee of a suitable job. English majors pumping gas, would-be engineers on assembly lines and prospective social workers on welfare point up the seriousness of the situation. For hundreds, perhaps thousands, of college graduates this disturbing dislocation is a reality—for a time at least.

The lagging pace of the recovery from the recession is only part of the Every year more and more people enter colleges and universities; in fact, to put things in perspective, the total number of American university students currently exceeds the entire population of Switzerland. It is true that many people are enrolled in college because it simply provides them with a favorable image. A large percentage of our students do not know what they want to make of their lives and find little in a college program to help them in their search. The bulk of the first protestors in the mid-60's were intelligent students who became dropouts-turned off by the meaninglessness of much of their educational experience. Not many listened to their complaints.

There are many persons not formally associated with colleges or universities who are not pained by the financial crisis on campus because they do not like what they see or what they think they perceive. Recently, legislators have pared budgets as retribution for campus unrest which they were unable to comprehend or tolerate. They formed an unplanned alliance with those students and nonstudents who, for romantic revolutionary reasons, sought a campus which could not be governed. All parties of this alliance recognized a fiscally difficult situation developing on campus. In addition, there are those members of the public for whom higher education has lost its allure and who, as a result, have changed their priorities. They may have compassion and understanding of the financial problems which exist on campus, but possess little apparent motivation to help ease those problems. With the beginning of a new decade, there is little optimism that this circumstance will substantially improve.

But at this time it seems as though there is little to be gained from more crepe hanging. Those in the administration of post-secondary education realize all too well that the dollar squeeze is on. It would be most unfortunate if continued increases in student fees were allowed to serve as a way out of this dilemma. Pricing education out of the reach of many young people certainly would be false economy. Higher education should address itself to the more important problem at hand—alternatives to the present situation and how, indeed, colleges and universities *can* learn to live on less as imaginative and innovative institutions. Instead of planning short-term austerity measures for the immediate crises, more efficient programs must be developed for the long run.

Several institutions, public and private across the nation, have already begun experimentation with a threeyear baccalaureate program. Last fall, as an example, college credit by advanced examination was offered to 1,300 freshmen at San Francisco State. Under the plan, a series of five examinations, worth six credits each, was given to entering freshmen. Those who passed all five were enrolled with sophomore standing. The tests included subject matter in English composition, social science, history, humanities, natural science, and mathematics.

At George Washington University some of the brightest of the undergraduates now have a chance to earn their bachelor's degree in three years because of changes which eliminate the compulsory physical education classes and eliminate specific introductory courses in physical and social sciences, as well as literature. The long-term goals of the George Washington plan include: (1) the creation of a 90-credit bachelor's degree instead of the usual 120 for extraordinarily able students whose records justify selection to the program by the faculty; (2) recognition of up to 30 credit hours for incoming freshmen on the basis of a variety of tests; (3) elimination of all college-wide requirements in specific courses or areas except for the provision that all students be required to demonstrate basic competence in English composition during their freshmen year; (4) having the academic departments themselves be responsible for the requirements of their majors; (5) specification of meaningful introduction into the three major areas of knowledge—humanities, social sciences, and physical and mathematical sciences instead of set general educational requirements; (6) provision for students to earn a double major; (7) encouraging students to select a major field as early as possible and to move at once to place themselves under the academic advising unit of the major department; and (8) provision for individualized interdisciplinary and interdepartmental programs for students with special interests as well as encouragement for departments to broaden interdisciplinary programs.

Obviously, some of these objectives might be goals for other types of academic innovation-graduate as well as undergraduate. For example, it was just announced that the University of the Pacific School of Dentistry will shorten its curriculum from four to three years—the third dentistry school in the nation recently to make such a move. The university has indicated that the new plan would make it possible to turn out one-third more graduates per year and ease the students' financial burden by eliminating the extra year. Other schools with the shortened curriculum are the Medical College of Georgia and the College of Medicine and Dentistry of New Jersey. No doubt more will follow.

DePauw University, in studying the merits of the three-year plan, recognized that such a time reduction can be accomplished without diminution in quality; rather, program quality can perhaps even be enhanced. The DePauw report shows the desirable effect of the three-year program in reducing the overall costs of obtaining the degree.

These reports suggest that only well-qualified, particularly able students may be admitted to three-year programs. In general, the three-year degree seems to add to the current feeling that there is nothing magical about earning the baccalaureate in the traditional four years. Obviously, the three-year degree is satisfactory for the British system, but longitudinal data for American higher education is scarce and therefore difficult to evaluate.

An additional observation should be made regarding the philosophical implications of the three-year program. The questions must be asked: By permitting or even encouraging students to finish the baccalaureate in three years, will the pressures which students already experience while attending the university be unduly increased? Does the undergraduate student indeed need four years to mature, develop his selfimage and interests, and choose a direction for his life? Will the student in a three-year program regard it as a shortcut to a guaranteed job only to be sadly disillusioned upon graduation?

An attempt should not be made to iterate all possible ways in which universities can learn to live on less. However, consideration should be given to the Carnegie Commission report entitled "Less Time-More Options." The report reminds us that Britain's new Open University relies on the mail syllabus, radio course, local tutorials, and institutional examinations for the core of its instructional program. Further, independent study, in combination with tutorials, followed by comprehensive examination, has long been used by the University of London in its extended degree program.

In this country, the University Without Walls, a degree-granting consortium of 20 colleges, began operation with 1,000 students who, with faculty assistance, largely develop their own curriculum. A number of other "open universities" are being planned, including one in Massachusetts planned to begin in fall of 1973. Impetus for the Massachusetts program came from a study showing that enrollment at the state's public system of higher education would reach 216,000 by 1980. At today's spiraling building costs, a new campus to accommodate just 5,000 of these students could cost as much as Given the financial \$100 million. crisis at most institutions, the proposal of such an expenditure is unrealistic.

The open university plan can also provide substantial savings to students. For commuters, the external degree program costs can be half that of a resident education, largely through savings in room, board, and transportation. A

recent Wall Street Journal article points out that, cost considerations aside, the flexibility of these new programs is expected to appeal to many freewheeling youths of today plus adults who are unable to leave family and jobs for regular on-campus class attendance. As a side benefit, this type of educational experience may be the answer for restless students whose existentialist needs are not met by the research university or by the vestiges of the liberal arts college. As we know all too well, many of the students in the late 1960's were not at home in these kinds of institutions.

A further suggestion might be that the open university concept should stress community involvement in addition to the heavy reliance upon independent study. Such an approach would tend to enlist all of the humanizing values, all of the research insights and all of the strength of the disciplines in a common attack upon the problems of our society. This is the communiversity approach at the University of Wisconsin-Green Bay. Research, teaching, community outreach—all are united to give the students a personalized and relevant learning experience. As sophomores, students at the Green Bay campus are enrolled in liberal education seminars and encouraged to work on off-campus projects. Such projects include environmental problems; tutoring the handicapped and disadvantaged; research in, and experience of, the cultural values of the region. By graduation, it is hoped students will not only understand the problems our society faces, but will want to take an active part in solving them. This approach has proven to be very effective and worthwhile on both a cost and a quality basis.

These broad concepts—the Open University and the three-year baccalaureate—are two of the more interesting and major academic innovations which should be carefully evaluated. They do not, however, represent an exclusive list. There are others. To what extent, for example, should graduate programs be reordered to: provide professional and medical programs which can be afforded by both the stu-

dent and the institution; make available flexible graduate studies which keep our students in contact with the real world, rather than cloistered in the refuge of academia; and, continue to generate competent professionals in the quantities needed to effect societal development and reform?

What untapped potential exists in comprehensive two-year campuses which would provide a consideration of: (1) extension of daytime credit programs into evening hours and estabof extension programs lishment throughout the service area; (2) an increasing selection of non-credit courses, conferences and workshops to respond to the more immediate interest and needs of local citizens; (3) a widening use of advisory groups representative of the broad spectrum of people and needs to be served (including minority group constituencies); (4) broadening the use of college facilities by an increasing variety of community organizations and informal groups; (5) a continuing effort to interpret community services to all citizens through a systematic program of public information; and (6) increasing concern for professionalization of the program reflected in staffing patterns as well as professional development programs for staff members? In addition, greater utilization of all postsecondary institutions should be explored, through the creation of voluntary consortia, to gain greater effectiveness and economy in the educational enterprise. More than sixty-five formal consortia are presently operating in the United States.

It is abundantly clear that the problems before us are simply stated but difficult to solve; however, solutions must be found. Some colleges and universities have already discovered how to live on less and at the same time preserve quality. They will make it through the seventies — the slow learners may not survive.

Lon Weber is Dean of Graduate Studies at Rhode Island College in Providence. He was previously director of the Communiversity Programs at UW-Green Bay and a member of the WASAL membership committee.

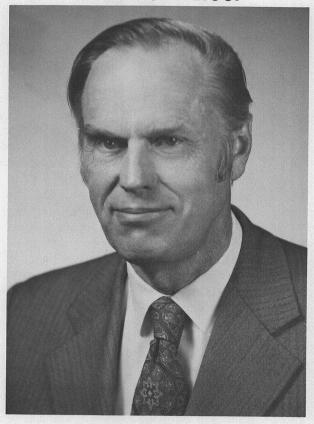
WISCONSIN ACADEMY OFFICERS for 1973-1974

President



RICHARD W. E. PERRIN, a Milwaukee architect, has been active in the areas of urban development and planning and the preservation of historical buildings in Wisconsin. In May he was the recipient of the Governor's Citation of Honor for Scholarship and Service to Historical Preservation in the State. A current project is the restoration of the Gates of Heaven Synagogue in Madison. Mr. Perrin attended Layton School of Art and the Beaux-Arts Institute of Design, Atelier Eschweiler, Milwaukee.

President-Elect



ROBERT HANSON is professor of bacteriology and veterinary science at the UW-Madison. A Native of Wisconsin, Dr. Hanson earned a BA from Northland College and master's and doctor's degrees from the UW-Madison. At the June UW Board of Regents meeting he was appointed Samuel H. McNutt Professor of Veterinary Science. Among his other interests, he serves as advisor to the Plum Island Animal Research Lab and is active in the Nature Conservancy and State Botanical Society.

Vice-Presidents



For Sciences . . . DANIEL O. TRAIN-ER is Dean of the College of Natural Resources at UW-Stevens Point. He received a bachelor's degree from Ripon College and master's and doctor's degrees in microbiology and veterinary science from the UW-Madison. His specific area of interest is the effects of environmental diseases on wildlife populations.

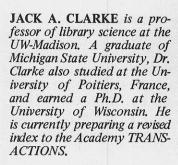


For Arts...ROBERT E.GARD established the Wisconsin Idea Theatre in 1945 and has pursued his interests in the theatre arts, creative writing and the collecting and publishing of Wisconsin folklore. He is a specialist in the development of the arts in smaller communities. He founded both the Wisconsin Regional Writers Association and the Rhinelander School of Arts.



For Letters . . . DONALD H. WIND-FELDER is vice-president of common stocks at Northwestern Mutual Life Insurance Co., Milwaukee. He received a B.S. degree from the Merchant Marine Academy and later earned a second bachelor's degree from the Babson Institute of Business Administration, He has served on WASAL's investment advisory committee.

Secretary







Treasurer

DR. EDWARD SCHNEBER-GER most recently served as Director of the Bureau of Research for the Wisconsin Department of Natural Resources, He received bachelor's and master's degrees from Kansas State University and a Ph.D. in zoology and fisheries from the UW-Madison, He is serving his second year as WASAL treasurer.



Librarian

JEAN CRONON (Mrs. E. David) is serving her second year as WASAL secretary. She received R.N. and B.S. degrees from the UW School of Nursing and was head nurse of the surgical ward at the VA Hospital in Madison. In 1954 she was a nursing instructor at Yale University. She is active in the madison Civic Chorus and enjoys travel, camping and hiking.

Editor, TRANSACTIONS

ELIZABETH F. McCOY begins her second year as editor of TRANSACTIONS. She earned bachelor's, master's and doctor's degrees from the UW-Madison and served as professor of bacteriology until her retirement this spring. Dr. McCoy has been involved with Academy activities since becoming a member in 1929.



Break out your armor and polish your sword, the time has come for the smiting of sacred cows! Once again the environmentalist must meet the challenge of identifying real issues in an area calling for decisive action.

The cover of a long withheld and only recently published Environmental Protection Agency (EPA) report boasts a startling illustration of a crowned dragon smugly eating his own tail. This ancient and amusing alchemical symbol, forerunner of the modern circular symbol of recycling and ecology, signals a growing concern over a national policy of wastefulness.

To date there has been no coherent national policy on material resource use, and things have just "happened." If anything, our economy, geared to use of virgin resource materials, has been a policy of depletion, aided by a tax structure favoring our extractive industries. Percentage depletion allowances, capital gains and special timing of tax payments have given special advantages to primary industries, leading to growing public concern over possible depletion of non-renewable resources.

Clearly, we must consider a national commitment to recycle, recover and conserve our remaining material resources, recognizing, of course, that future determinations in this area must be compatible with our economic, environmental, energy, transportation, defense and foreign policies. A decision to recycle would help conserve virgin resources, contribute to the foreign trade balance, while using less energy and generating less pollution in manufacturing. Recycling is also an attractive alternative in dealing with the mounting problems of solid waste management. Recovering waste materials for reuse in recycling and energy recovery would lighten the load of solid waste for disposal.

Our wasteful society now produces a staggering total volume of 4.5 billion tons of solid waste per year. Municipal or "post-consumer" waste, while a small percentage of the total, occurs in urbanized places and causes the most concern. Sheer volume of this urban waste presents terrible problems of collection and disposal, with the pro-

A GUEST COLUMN OF VIEWS

By Marian Possin

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jection of a volume tripled by the year 2000. The present cost figure, nationally, is \$5 billion per year and rising, as waste volume increases and communities comply with more stringent rules for proper disposal.

In 1970, the Solid Waste Disposal Act of 1965 was amended with the Resource Recovery Act, thus shifting the emphasis from disposal to recovery. This Act provided funding for recycling research and demonstration projects, and created a National Materials Policy Study to both identify future national materials requirements and study the materials-use chain.

Significant impediments to recycling lie in the area of economics rather than technology, since the technology exists to allow extraction of materials and energy from mixed municipal waste. Secondary materials, as legislatively handicapped by an unfavorable tax structure, simply cannot compete in the marketplace. In addition, transportation rates for secondary materials are inequitably high and many existing manufacturing facilities are geared to use of virgin materials; therefore industry turns to use of the more economical raw material. Biased labeling standards encourage consumers to reject recycled products, further diminishing markets. Also, federal, state and local governments do not traditionally gear buying policies in favor of recycled products. To put it plainly, there are simply not enough markets for large-scale recycling.

The withheld EPA publication, mentioned above, was a three-year study done for the EPA by Midwest Research Institute. In spite of its deceptively bland title, "Salvage Markets for Materials in Solid Waste," this report

could become the "Common Sense" of the modern-day battle over resource conservation. Legislative and policy considerations contained in the report were used as source material for the long awaited "Report to Congress on Resource Recovery." The actual "Report to Congress," completed in August of 1972, was not delivered on orders of the Office of Management and Budget (OMB) because it listed options that would have impact on the economy and major industries. Statutory power does not exist for such impoundment, but the OMB frequently exercises this power, reportedly to circulate burdensome reports among agencies for comment. Both reports are now available to the public.

The "Report to Congress" listed options such as tax credits to waste users, taxes on virgin materials, subsidies to lower prices, subsidies to process wastes, federal purchase specifications, changes in freight rates, changes in the depletion allowance system, changes in labeling regulations and limiting amount of virgin material in products. However, it should be emphasized that the report recommended that no specific incentives be placed as yet, since "more study of the complex materials and energy situation must be developed." The study indicated that effects of some options are not yet clear to predict.

Wisconsin claims, so far as we know, the only statewide environmental organization with interest oriented chiefly toward the issues of recycling, resource recovery and material resource conservation. The "Wisconsin Coalition for Recycling," formed in 1972, has sponsored two statewide "Recycling Workshops," and produces *The*

Recycling Rapper, an informative newsletter. Rapper now reaches subscribers far beyond the borders of Wisconsin. Academy Review readers who wish to receive The Recycling Rapper may write to P. O. Box 308, Waupun 53963 for information.

In conclusion, legislative considerations will be needed to set us on an effective course to conserve our material resources. The mood of the Congress toward this legislation will clearly reflect the amount and enduring quality of active citizen interest in this area. Continue to study these issues

and write to your Congressmen when you see the need for citizen pressure. Write "letters to editors" and join a lobbying organization. And don't be afraid to ask your merchant that magic question, "Is this made from recycled material?" If you ask that question often enough, you will begin to communicate to the manufacturer!

Marian Possin, Waupun, is one of the founders of the Wisconsin Coalition for Recycling and is charged by the Coalition with responsibility for following legislative developments in recycling at the national level.



VIS-A-VIS

By James R. Batt, executive director of the Wisconsin Academy.

I suppose Professor Henry Higgins has to be put down as a male chauvenist pig.

Who else would sing, as does he in the Broadway hit musical "My Fair Lady," "Why Can't A Woman Be More Like A Man?" Well, at least he is not a member of the Wisconsin Academy.

But, while the Battle of the Sexes rages on, there are women among us who have, for years, quietly and effectively demonstrated that the quality of humanness and the act of accomplishment are not a matter of gender. Such a woman is Dr. Elizabeth McCoy.

Dr. McCoy retired this spring, following a remarkable career of 43 years with the University of Wisconsin department of bacteriology. A departmental reception was held in her honor at the Alumni House one fine May afternoon, and it was good to see the crowd of friends, colleagues, students

and former students paying tribute to one so richly deserving.

Elizabeth McCoy embarked upon her career at a time when nursing might have seemed a more "appropriate" choice for a woman with a scientific bent. But her gentle demeanor was accompanied by a quick and a disciplined mind. Enrolling at the University of Wisconsin, she obtained her B.S. in 1925, her M.S. a year later and two years following that, her Ph.D. (She remains a good friend of her graduate studies adviser, former UW president E.B. Fred, at whose insistence she joined the Academy in 1929.)

The McCoy resume is a record of continuous professional achievement. She was a National Research Council Fellow at the Rothamsted Experimental Station in England in 1929 and at the Karlova University in Prague in 1930. During the same period she studied at the University of London and at the Sir John Cass Technical Institute. She returned to Madison to become an assistant professor of bacteriology in 1930 and, by 1943, had become a full professor. Between that time (in 1937) she served as an associate in research medicine at the University of California, George Hooper Foundation, San Francisco.

Although several scores of students completed their Ph.D. degrees under her guidance, Dr. McCoy also taught both undergraduate and University-level short courses. Somehow, she

found the time to participate in a number of professional organizations and to establish an enviable record in research and publication in industrial bacteriology, bacterial taxonomy, aquatic bacteria and waste disposal. She is a Fellow of both the American Academy of Microbiology and the American Public Health Association, and is an Honorary Life Member of the Wisconsin Academy.

There is much more to the record. I don't know that all the high points have really been listed. And just how do you capture the human side of the story? What can you say of a person who, along with farming and wildlife and conservation, also lists "students and friends" as her hobbies?

Elizabeth McCoy can, and does, show you where the fox vixen plays with her kits, where a hickory tree has stretched a long neck of a trunk through underbrush in search of the sun, where pussy willows first catch spring, and where her grandfather, in 1853, erected the grand old farm home in which she now resides. And all of this she has committed to the Wisconsin Alumni Research Foundation for the benefit of the University she has so long and so well served.

Somehow, I can't quite picture Professor McCoy in retirement. I doubt it will be necessary to do so for many a year. She will continue to maintain an office at the University, and she will continue to edit the Academy TRANS-ACTIONS. Most of all, she will go right along being herself—showing that a 150-foot snow-covered driveway is as susceptible to a "woman's touch" as is the problem of tracing pollution bacteria, that grace and charm can coexist with career, and, of greatest importance, that the full life is the life which is shared with others.

Elizabeth McCoy may never forgive me for this. She is too modest a woman to have me traipsing about these pages in such fashion. But for all she has done for her University, for the Academy, for colleagues, students and humanity in general—it had to be said.

Put that in your pipe and smoke it, Professor Higgins. Put that in your pipe!



THIS MYSTERIOUS RIVER, by Mel Ellis; Holt, Rinehart and Winston, New York, Chicago, San Francisco, 1972. 208 pp. \$5.95.

There is a lot of the little boy left in Mel Ellis, and his many readers are the richer for it.

Perhaps the Wisconsin author, columnist and WASAL member has, like most adults, lost that precious gift of actually perceiving the world with the fresh wonder of childhood, though I doubt it. But if he has, why then thanks be to the gods of memory and muse for his ability to recall and express what it was like.

And so it is with his latest book, This Mysterious River — the tragicomical account of a summer in the life of Hammond Drumm, a 12 year old lad of the Great Depression era, coming to age along the banks of rural Wisconsin's "Big Pike" river.

The story line is based on the adventures and misadventures which befall young Master Drumm in his efforts to replace the \$10 "borrowed" from the church collection plate for the acquisition of a "blue racer with the balloon tires and the silver trim and the rubber handle bar grips."

But this is only the framework within which is woven the incidents, insights and confusions which inevitably introduce youth to the Knowledge of Adam and the demise of the age of innocence. Ham discovers he can "lie as easily to a priest as to anyone else," yet, immediately following that encounter we find him huddled in the back seat of the family car "watching the moon make every conceivable shape of shadow" and understanding and appreciating his mother's simple prayer: "Thank God. Thank God, for a beautiful, beautiful night."

In Ham, in his mother—in some of us—the jaundice which is a part of

accumulating years remains just that—only a part. Like the Big Pike, the mysterious river of our youth flows into the larger lake, "treacherous as all large, shallow bodies of water." But, along with Ham, "the river and the lake fascinate us, we learn their secrets like a dry slough sucks up water" and we come to understand with Ham that, "One wisp of wisdom only opened doors to wider horizons, and he discovered quickly that even old men never knew it all."

This Mysterious River, a book for all ages, is a sensitive story of our ages. -JB.

THE GENESIS OF THE FRONTIER THESIS, A STUDY IN HISTORICAL CREATIVITY, by Ray Allen Billington, The Huntington Library, San Marino, California, 1971. \$8.50.

Wisconsin Academy members and members of the Wisconsin State Historical Society will be delighted with this book by Ray Allen Billington. No person living has an intimate a knowledge of Frederick Jackson Turner's personal life and professional accomplishments as has Dr. Billington. No other person, to this reviewer's knowledge, could attempt the unraveling of the myriad thread of environment, historical setting, education and personal associations that culminated in Turner's essay, "The Significance of the Frontier in American History."

That Dr. Billington is qualified to write about American history is obvious. As Smith Mason Professor of History at Northwestern University, and as the author of many extremely significant books on American history, his stature in the field is preeminent. The significance of the present volume lies in the fact that it adds a human dimension to Turner that scholars of today and tomorrow can put to good

use. Turner's boyhood in the "young" town of Portage, Wisconsin, his education at the University of Wisconsin and Johns Hopkins, and his professional and personal friendships with men of statute in his own and related fields are recreated for us in a three-dimensional panorama that is informative and exciting.

The book, is as one might expect, completely documented. This adds, rather than detracts, from its readability because of the author's intimate personal knowledge of his subject. Renaissance scholars talk of the quintessence of an emotion or matter. Dr. Billington has, with the rare insight given only to the gifted scholar, distilled a voluminous quantity of biographical material on Turner to present for us his quintessential self. Thus, we leave the book reluctantly, charmed with the knowledge that Turner's creative sense of history was supported with the confidence that his theory would survive the test of time and the challenge of future generations of historians.

Here is a book to read, reread and cherish in your library. It is a solid building-block in the foundations of Wisconsin and United States history.

- Norman C. Olson, Milwaukee.

WISCONSIN: A STATE FOR ALL SEASONS, Jill Dean and Susan Smith, editors; Howard Mead, publisher; William T. Pope, designer; Wisconsin Tales and Trails, Inc. of Madison, 1972. \$15.

WISCONSIN: A State for All Seasons, latest of the publications offspring of Howard Mead and his WIS-CONSIN trails staff, arrived at my desk at a most opportune moment.

An abundance of September rains in southeastern Wisconsin had made autumn a reluctant successor to summer, whose greenery dominated the outdoor fashion scene well into October. Then, with but the blush of the debutant season flirting about the landscape, the contretemps was magnified: An icy cold of 15 December degrees froze the juices of forest and field, leaving a rustling wake of leaves

which were never to know the fire of

Requiescat in pace, autumn 1972. Death at an early age.

And then arrives the New Book. Autumn lives! Right there on pages 96-134. Oh ho! Look here: page 100: "Golden maples line a lakeshore on the Lac Court Oreilles Indian Reservation in Sawyer County;" page 104: "Autumn sets the hills of La Crosse County's handsome coulee country ablaze with color;" "A roadside stand near King in Waupaca County overflows with pumpkins and other fruits of the harvest." In brilliant color! And supplemented by a sensuous assortment of black and white photographic artistry!

What we have here, my friends, is an all-season picture tour of Wisconsin—with accompanying.text ranging from the poetic to the explanatory. A smidgen of the former, this by our own Edna Meudt:

Look backward down the aisle of years
To what it was in its first snowfall:
The faceted gem of a world transformed,
A pristine world in pristine forms.

A sampling of the explanatory: well, you've a wide seasonal range. There's "May is for Morels," "County Fair," "Woodland Harvest," "A Christmas Tapestry," and two score others, with a bountiful display of photographic art throughout (40 in full color and more than 250 in finely printed black and white).

Cover blurbs know no modesty, regardless of publisher. This one tells us that it embraces an "elegant and illuminating book." And so it does. Actually, it's a collection of what the editors deem to be the "best material of the first dozen years of WISCONSIN trails," something which represents "the essence of Wisconsin."

For the regular readers of WISCON-SIN trails, there will undoubtedly be a feeling of winding along familiar byways. So if you think a one-time trip to Gays Mills at appleblossom time is sufficient, or that once you've seen one fall flight of Canada Geese at Horicon you've seen them all, why then you may not be interested in this year-around passport to Wisconsin. I rather imagine, however, there will be no shortage of people booking passage.

Somehow, some way, the people at Howard Mead's shop have learned the art of capturing the forces of life, of transplanting the pulse of the people and places of Wisconsin into the pages of a book. Such a book is WISCON-SIN: A State for All Seasons. — JB

WORLD ECO-CRISIS: INTERNA-TIONAL ORGANIZATIONS IN RE-SPONSE, Ed. by David B. Kay & Eugene B. Skolnikoff, The University of Wisconsin Press, Madison, 1972.

On the second day of my freshman environmental studies course the students wanted to know what they could do to end the environmental crisis. I suggested they would not be ready to do anything until they had spent four years studying the problems. World Eco-Crisis is one of the books they will study.

World Eco-Crisis will be useful to all kinds of environmentalists from the businessman who gets his information in bits and pieces from the media to the natural scientist with little knowledge of the social parameters of his decisions. Political scientists and economists will find it appeals to their students. Most significantly, World Eco-Crisis will provide international perspective for the often parochial American environmental movement.

Kay and Skolnikoff recognize that solving institutional problems is as crucial to man's environmental challenge as answering scientific questions. Since aspects of pollution are worldwide, they investigate the ability of the United Nations to meet the global crisis. Following an introduction by Maurice Strong, father of the U. N.'s Stockholm Conference on Man and the Environment, Nazli Choucri (M.I.T.) analyzes the global implications of population, resources and technology. His conclusions are sobering. The next ten essays examine the U. N.'s strength and weaknesses as it readies for the task of preventing further deterioration of the biosphere. The message is that major institutional obstacles must be cleared away before scientists can apply their expertise to the problems.

To start, the less developed nations have a radically different estimate of the crisis than do their wealthy U. N. colleagues. Contributor Joao Castro of Brazil writes, "There is a pollution of affluence and a pollution of poverty." He notes that in most areas the quality of life suffers from a deficiency of economic development and that a moratorium on development, in the name of environmental protection, would doom many passengers on spaceship earth to second class status.

A related problem, and an issue that remains a sacred cow in some quarters, is population. The less developed nations are looking at indices other than raw numbers, such as per capita pollution and regional carrying capacities. They conclude that the earth can tolerate dramatic population increases. Whatever the merits of these third world views, that they are held poses obstacles to international cooperation, showing the Stockholm Conference to have been a major achievement.

A problem rarely perceived by U. S. environmentalists is that a pollution abatement measure enacted here may have a negative effect on the quality of life in other countries. For example, a ban on certain chemicals or the high cost of anti-pollution technology may upset the fragile economies of supplier nations and cause their governments to spend their limited resources on social welfare rather than pollution abatement. The lesson here is that the international trade network must become a part of the environmentalist's frame of reference. Institutional mechanisms must be worked out to prevent environmental protection from becoming what some third world critics have already charged-a ruse to keep the world's poor in their place.

Coordination is another main task. Many U. N. agencies now deal with environmental problems, but these agencies are autonomous satrapies. Plans for coordinating these rivals are discussed, including those adopted at Stockholm.

Finally, an issue this reviewer believes crucial was raised but not given adequate analysis, and that is the basic weakness of the U. N. Its inability to grow beyond national sovereignty has limited its peace-keeping ability and certainly threatens the enforcement of whatever ecoprograms the member nations agree to in principle. Still, as Kay and Skolnikoff conclude, the U. N. offers "the only real opportunity for providing an institutional base with widespread participation." The Stockholm Conference has kept alive that opportunity.

The book is a valuable addition to environmental literature. A second edition would profit from a glossary of U. N. agencies (letter-designations such as ECOSOC are confusing). World Eco-Crisis is one book we must read if we are to act intelligently. — Kent D. Shifferd, Assistant Professor of History, Sigurd Olson Institute of Environmental Studies, Northland College, Ashland, Wisconsin.

OUTCASTS FROM EVOLUTION, by John S. Haller, University of Illinois Press, 1971. \$7.50.

John Haller's book on scientific attitudes of racial inferiority takes as its period the years between Charles Darwin's publication in 1859 of Origin of Species and the discovery in 1900 of Gregor Mendel's experiments in genetics. Haller discusses principally American scientists, who were caught up at least as much as their European counterparts with the triumph of evolutionary ideas during the last half of the nineteenth century. The non-American with whom Haller deals most extensively, Herbert Spencer, is evidently introduced primarily because of his impact on American scientists.

The title Outcasts from Evolution comes from the almost universally accepted scientific view during this period that the Negro race (as well as most other non-white races, possibly excepting the Chinese) had not shared in past evolutionary progress—and more important, could not share in future evolutionary progress. The Americans had before them the example of the Indian, who it seemed was perishing

naturally before the onslaught of the higher white civilization. Would not the same fate meet the Negro? Many scientists so believed and thought that science itself indicated the inevitable. Furthermore this prediction came at a critical juncture of American history: the triumph of evolutionary theory coincided very nearly with the Emancipation Proclamation. Would not the Negro now be exposed to the full rigors of civilization's struggle and competition, no longer protected by his white master?

Haller makes the most of the historical irony that the Civil War not only liberated the Negro from his supposedly protected position, but actually contributed some of the first evidence drawn upon by scientists to predict the downfall of the "inferior race." This initial evidence came through the agency of the United States Sanitary Commission, which Lincoln had established on June 13, 1861 with the object of improving army life by examining the physical and moral condition of the troops.

As part of its work the Sanitary Commission made anthropometric measurements on a scale nowhere before approached on the federal soldier, black or white. Among the significant things noticed by those who scanned these statistics for indication of racial differences was the longer relative arm length and smaller chest capacity of black compared to white-a difference which was interpreted to mean (and this was no surprise to anyone) that the Negro was nearer the level of the ape in his development. Seemingly even more convincing that these anthropometric statistics, however, were the comparative vital statistics which began to be available in increasing numbers after the war. Some of these (sometimes erroneous) vital statistics revealed the Negro to be particularly beset by death and disease-and even by lunacy. The nineteenth century scientist interpreted such statistics as further evidence of Negro weakness and inability to compete with the more highly evolved race; it was only necessary to extrapolate the same statistics to prophecy the eventual extinction of the race. Looking back now on over a half century of demographic history it is absolutely startling to find that in 1900 one scientist could write on the basis of current census information that "it is sufficient to know that in the struggle for race supremacy the black race is not holding its own."

The really problematical thing debated by the nineteenth-century scientist was not whether the Negro was an outcast from evolution, which was generally agreed, but what if anything could be done to ameliorate the situation. Could the Negro be submitted to a rapid process of education which would elevate him on the evolutionary scale, or was racial evolution by necessity a gradual thing? Should mixed marriages be encouraged as the only salvation of the black, or would this simply result in the deterioration of the white? These are the sorts of questions raised by the scientists discussed in Haller's book-the anthropologists Daniel Brinton and J. W. McGee the dean at the Lawrence Scientific School, Nathaniel Southgate Shaler, and the California evolutionist Joseph LeConte, among others. They were questions, however, which could not be easily answered with the knowledge available. Above all they were questions which required a much better knowledge of genetics than was available in the days before Mendel. Some scientists were strict hereditarians, and others were believers in the direct power of the environment, but none found a successful solution to their self-imposed dilemma concerning the future of the black man.

Haller's book is testimony to the great difficulty which Americans—both scientists and non-scientists—have had in coming to terms with human diversity. Although many of the racial differences described by nineteenth-century writers were imaginary, some were real enough. There were (and are) some genuine anthropometrical differences between black and white. And there were (and are) differences revealed by comparative vital statistics of black and white. Even the belief that the Negro might not survive in competition with the whites was by no

means entirely silly—the extinction of the Tasmanian aborigine in the later nineteenth century offers an example which shows that races are not guaranteed survival. The difficulty lay in accepting certain genuine differences without concluding that these differences represented levels of acceptability, or, in nineteenth century terms, development. One wonders if even Haller sees that this has been the fundamental problem, for he occasionally writes as though the recognition of differences was itself an example of race prejudice-although a twentiethcentury writer should be aware that the clear recognition of a racially peculiar disease like sickle cell anemia may be a real step forward. - Victor L. Hilts, Associate Professor, History of Science, UW-Madison.

NAMES ON THE LAND, George R. Stewart, Random House, 1945, 418 pp., cloth \$3.00. Revised 1958, Houghton Mifflin, paper \$2.45.

AMERICAN PLACE NAMES, George R. Stewart, Oxford University Press, 550 pp., cloth \$12.50.

Where did Lake Itasca get its name? In 1832, reports George R. Stewart in Names on the Land, after finally discovering the elusive fount of the Mississippi River, two searchers, the Rev. William T. Boutwell and Mr. Henry R. Schoolcraft, cried "Veritas Caput"—true source. They then combined the last two syllables of the first word with the first syllable of the last word to make the Indian-sounding, Latin hybrid "Itasca."

The question, "What's in a name?" may have surprising and almost always interesting ramifications. Place names are especially significant, notably on this continent, where 3½ million of them were created in the 480 years since the Santa Maria and its sister ships dropped anchor off San Salvador. The influence of religious heritage is at once apparent here on sea and land.

"The Admiral of the Ocean Sea" was denied the honor of having the western lands named after him. That distinction fell to Amerigo Vespucci, who "hove to" by South, rather than North, America. But Columbus does survive in the district surrounding our

national capital, in the capital city of one of our north central states, in a mighty river to the far northwest and in a university in our largest city.

Names on the Land is full of less spectacular name pedigrees. But its historical reports reveal diligent research that comes through in engaging narratives.

The second of Stewart's place-name volumes is subtitled "A Concise and Selective Dictionary for the Continental United States of America." George Ripley Stewart — author, historian and teacher — is a Berkeley Fellow of the University of California. The jacket of the volume correctly observes that here is "the work of a single author, unencumbered by research assistants, and the culmination of a life-long fascination with American place names." It should be in every school and library.

Twenty-six American states bear Indian names, a rather remarkable fact, when it is remembered that on the white man's arrival there was no written Indian language. All that had to be created by careful listening and phonetic transcription, as when John Eliot transliterated a Bible for the Algonkin Indians.

Only one state bears the name of a president, and that was reserved for the Father of Our Country. And it was more than half a century after his death that the corner of the country farthest from his Virginia was designated "Washington." No other won such an honor.

There are twenty-eight Madisons in the United States. But James Madison had just died in 1836, when the territorial capital of Wisconsin was being laid out in the oak thickets between lakes Mendota and Monona. Statesman Madison has been called "the broadest and most accurate scholar among the Founding Fathers," the "Father of the Constitution," and the "Author of the Ten Amendments," which constitute our Bill of Rights.

The streets in the center of Madison are named, not for signers of the Declaration of Independence, as is sometimes thought, but for the framers of the Constitution of the United States: Pickney, Mifflin, Carroll, King, Lang-

don, Gilman, Gorham—and Main Street was originally Morris.

Dane County was named, not for any Scandinavian settling on the "Ouisconsin," as the French called it, but for Nathan Dane of Massachusetts, author of the Northwest Ordinance of 1787, which provided that in the lands north of the Ohio "There shall be neither slavery nor involuntary servitude . . . and schools and the means of education shall be forever encouraged."

Topographical features often give names to the land, as Green Bay, continuing the French Baie Verte. But neither terrain nor fortification gave title to Bunker Hill, which was named for the constable of nearby Charlestown. The Rocky Mountains fulfill that descriptive title, but Pike's Peak was named, without his suggestion, for Captain Zebulon Pike, who in 1806 began the westward exploration of the Louisiana Purchase. And Long's Peak is not so called for shape or size, but for Stephen H. Long, major of the engineers, who launched western explorations in 1820.

Most frequent is our heritage of names on streets and avenues, the personalities back of which we forget, as we walk their onetime lanes, or buzz along their boulevards, from Washington Avenue to Bascom Hill.

Those who wish to follow these intriguing matters further would do well to contact the American Name Society, Stonybrook, New York, which issues a quarterly.

And it is a happy fact that we have close among us here Frederic Cassidy's Dane County Names, (1968, 264 pp., paper \$1.95) and Robert Rudolff's Wood County Names, (1970, 132 pp., cloth \$3.95) both published by the University of Wisconsin Press.

Stewart, on the title of his earlier book, quotes Francis Bacon—"Name, though it seems but a superficial and outward matter, yet it carrieth much impression and enchantment."

What's in a name? More than anything else, people, who silent walk among us still.

Great men leave behind them— Name prints on the hills we climb. — Alfred W. Swan, Madison.



Editor:

After reading your article, Vis-a-Vis, I thought that possibly my small story about a very little known and disappearing Wisconsin natural treasure will be of some interest to you:

More than a century and a half ago, when American pioneers were pushing west and northwest, their agriculture moved with them. The prairie chickens retreated from the advancing white man. They retreated to the depths of prairies, together with diminishing herds of American buffalo. Both the birds and the bison required open, uncultivated grass-covered areas. As the waves of settlers changed the entire area of prairie into farms, the buffalo and the prairie chickens remained only in those marshy-grass areas where the farmer-settler found that the poor soil provided too small a reward for his work.

But in a narrow strip of partly abandoned farmland in central Wisconsin there remained these interesting inhabitants of the prairie, and I should like to relate my own encounter with prairie chicken booming and dancing. I met not only the birds, but also two very interesting and wonderful people, Dr. Frederick Hamerstrom, a zoologist, and his wife, Dr. Frances Hamerstrom, a biologist. The Hamerstroms have spent most of their professional lives absorbed in a study of the remnants of Wisconsin's prairie chickens which cling to survival in the sandy-marsh areas near Plainfield.

Twenty-three years ago this past spring I received an invitation to visit

the Hamerstroms and observe the booming of prairie chickens. After arriving at the "cranks" (as the Hamerstroms were called by some neighborhood farmers) we headed for an abandoned farmhouse which stood near the booming grounds. Here we stayed overnight. Around 2:00 a.m. we got up, and after preparing an omelet and coffee on the kitchen range, set off in the Hamerstrom's car.

Now it is dark and the brush and forest seem to be a solid dark wall. But Dr. Hamerstrom knows this place perfectly. Bending down the brush, his car creeps confidently through a small swamp to a drier area laced with black drainage ditches. The car is now rolling as on soft cushions. We cross some questionable log bridges, where from right and left sides of the car we hear the fearful clatter of the decking. Soon the road disappears completely and we proceed on hummocks, pits, bumps and brush. This the doctor refers to as "the straight road."

At last the journey ends. The place we have reached is *exactly*, he assures me, where he wished to bring us. Not far away are the blinds. His map shows the number of birds for each viewing site.

I sit with him in a blind made of branches. It is calm and the stillness is only now and then broken by the distant hoot of a great horned owl.

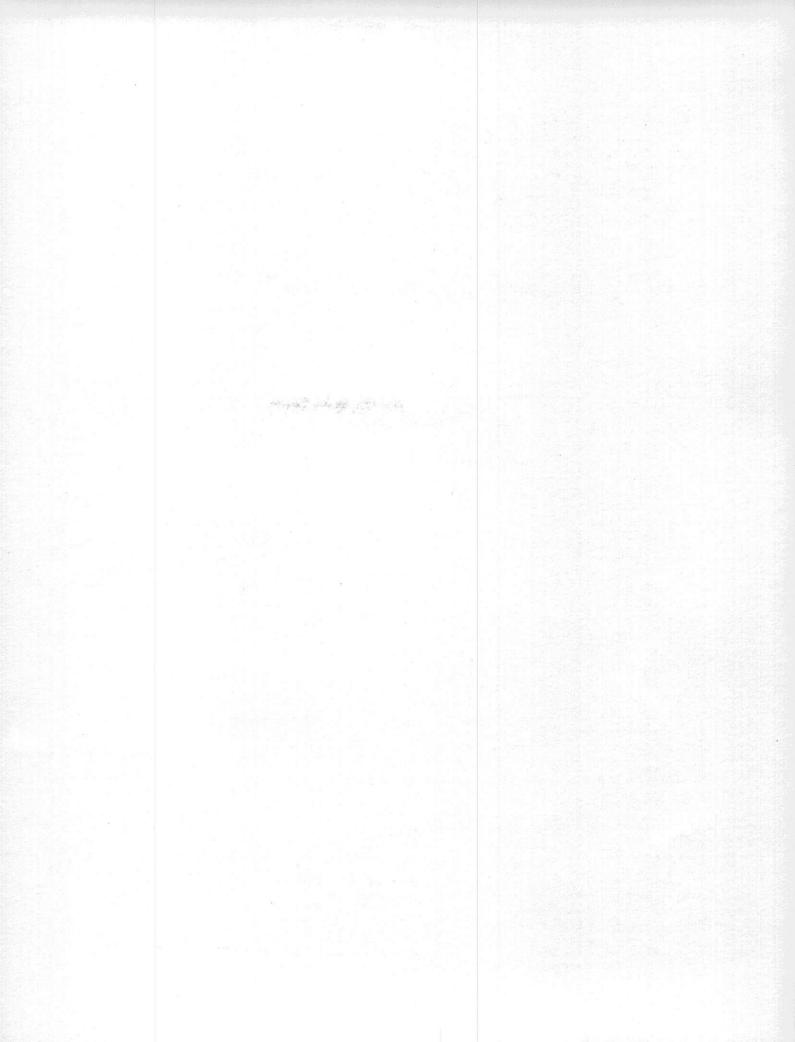
As the sky in the east gradually becomes brighter, the country around us can be distinguished as a marshy meadow covered by dry yellowish grass and low sedge. On the far horizon is the black wall of a low forest, set in silence. Suddenly there is a murmuring booboo-boo-sometimes strong, sometimes weak. It reminds me of the booming of the European grouse (Tetrao tetrix, the black cock) in faraway Russia. The tone is somewhat more monotonous, but the overwhelming feeling of awakening spring and pulsing nature are the same. Simultaneously, two grey forms drop down near our blind; they are prairie chicken cocks.

For some moments the birds stand still before each other. Then they stretch their necks forward, and behind their ears swell two bright yellow bags. Their "ear" tufts point forward. their tails fan out, and there issues that soft but penetrating call. Soon others appear among the grassy hummocks, seeming to rise up from nowhere. In the next ten minutes the number reaches twenty. Some drop their wings and rapidly stamp their feet, executing elegant little half-circles. Others stand still, completely absorbed with their "singing," while still others flutter up and crash together with a clattering cackle of dispute over territorial boundaries. All the while the booming grows stronger and fills the air with a mighty humming that seems to come from everywhere.

For nearly three hours the dance continued. Then, as the sun rose higher, the birds gradually grew silent. On the grass could be seen the silver drops of dew. One by one the birds drifted off into the yellowish grass of nearby brush.

"The booming is ended for today, let us go," said the kindly doctor. Later, I learned that the Hamerstroms had settled in this lonely part of Wisconsin just to be closer to the birds they studied and loved. "Outstanding researchers," said some people. "Screwballs," said others. But I never think of prairie chickens and their magical rites of spring without thinking of the Hamerstroms, friends of man and bird alike.

Sincerely, Dimitri Pronin



WISCONSIN ACADEMY REVIEW

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ABOUT OUR COVER ...

June 17, 1673 . . . for the first recorded time in history a group of white men looked upon the waters of the Mississippi River at its northern reaches. The waterway which they explored and mapped became the roadway for a wave of human migration which was to change all of the land beyond. The Wisconsin Academy *Review*, in this issue, looks back on the explorations of Marquette and Joliet and the mighty river which they opened to settlement. The cover design is the emblem of the Mississippi River Tricentennial Committee which is coordinating the anniversary celebrations.