AGRES

QUARTERLY

SPRING · 1970
Volume IX No. 2

*S P R I N G * F I E L D * T R I P S *

APRIL 25 - Saturday

This will be an afternoon-evening field trip.We will first visit the Prairie-Heights Community School Farm in LaGrange County where teachers and students have achieved interesting programs for use of acreage near their school. At 4PM we are scheduled at the Carroll High School Planetarium where teacher, Robert Gorman, will guide us in a presentation and discussion on astronomy. From this fully equipped planetarium we will view the heavens as we hope later after dark (weather permitting and with the aid of school telescopes) to view the actual night sky. We will picnic at Dustin's woods following the visit to the Planetarium, and do our night viewing from the fields there.

MEETING PLACE: New Fortmeyer's parking lot,U.S.30 &By-pass 30.
TIME: 12:30 PM promptly!
BRING: Binoculars, star maps, etc.,flashlights. Picnic supper (There will be a cook fire for weiners and hamburgers) Warm jackets for evening.

MAY 16 - Saturday

Mr. Donald A. Strong's woods, Pleasant Township,Steuben County, will offer us a splendid display of spring wildflowers on this date. The flowering dogwood is especially beautiful in this woods. We will then go to ACRES Woodland Bog to make the first official use of the new trail made there by a work crew earlier in March. We'll be on the look-out for unusual species here as this Bog has not been studied with any intensity yet. Then a stop at Beechwood Reserve to check general Reserve maintenance.

MEETING PLACE: New Fortmeyer's U.S. 30 and 30 By-pass.
TIME: 9:00 a.m.
BRING: Suitable hiking clothes, including overshoes or waterproof boots. Sack lunch and drink. A tool such as rake, prunners, sickle to help with trail work.

JUNE 13 - Saturday

A wild orchid show at the Laketon Bog near North Manchester. Mr. Lee Brubaker, the owner of the bog, will give us a carefully guided tour. In the afternoon, we'll visit the first County Park site in Allen County - Fox Island. With acquisition now certain, it is time to visit this unique woodland-wetland-duneland so near to Fort Wayne.

MEETING PLACE: Atz's parking lot at Time Corners, U.S.24W.
TIME: 9:00 a.m.
BRING: Clothing suitable for hiking under situations where you're certain to get wet feet. Sack lunch & drink. Mosquito repellent.

NATURALIST IN CHARGE - Robert C. Weber 747-6030

QUARTERLY COVER ARTIST is Bess Dunten (Mrs. Louis H.). "Art-in-earnest" began for Bess at age 68. She has studied at St. Francis College and Fort Wayne Art Institute and is a member of the Ft. Wayne Artist's Guild.

SPRING IS ACRES MEMBERSHIP TIME

RENEW NOW AND INVITE A FRIEND TO JOIN

Regular: $2 Sustaining: $10 Patron: $50

STUDENT: $.50

A new ACRES membership year, 1970-1971 begins June 29th.

If you have paid your dues since Jan.1, 1970, you are a paid member for '70-'71.

IF A RETURN ENVELOPE IS ENCLOSED - YOUR DUES ARE DUE

If you can, add a contribution to the LAND ACQUISITION FUND. This will help insure the preservation of natural wildlife habitats in northeastern Indiana. All contributions are tax deductible.

SPECIAL NOTICE! IF YOU HAVE CHANGED YOUR ADDRESS, PLEASE NOTIFY THE ACRES OFFICE. Our mail is handled on a special bulk rate for non-profit organizations.The Post Office will not deliver if we have an incorrect address or zip.

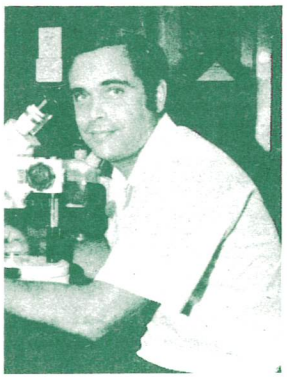
SOME ZIP CODES HAVE BEEN CHANGED IN FORT WAYNE THIS YEAR.BE SURE ACRES HAS YOUR CORRECT ADDRESS & ZIP.

NOTE ++++ Bob Weber will set the details for some day canoe trips. Interested? Send your name,address and phone; together with a self-addressed return envelope. Indicate if you would have space in your canoe for a passenger. Write: Mr. Robert C. Weber
3649 Algonquin Pass
Fort Wayne, Indiana 46809

GETTING AGRICULTURE "BACK IN BALANCE"

Ecologists offer guidelines

"Ten years from now environmental quality will be a major constraint on what people do "—Cantlon



"We need to take a hard look at ag research"—Cooper

"Multispecies cropping is less costly in energy expended. It should be researched"—Englemann

By Richard Lehnert

FARMERS have a job to do. That job is to produce food, fiber, oils, and other consumables. But the means of production are coming under attack. Changes are being forced.

Will farmers resist, insisting that they know best what the consumer wants and how it can best be produced? Or will they "keep their ear to the ground," and when a change in method is dictated and available, be ready to accept it?

This is the choice ecologists see farmers facing, and they have reason to believe farmers will choose the latter course. Throughout the history of agriculture, farmers have been sensitive to society's demands.

Society said "use science and produce." The farmers did. Society may now be saying, "you jerks, you poisoned the lakes."

It's easy to talk in theoretical terms. Society says it wants farmers to do this or that. But few people think or act in these theoretical terms. They don't understand that farmers use the methods they do —pesticides and all—because in the marketplace economy, customers—all people who eat—demand certain products and pay only certain prices for them. This dictates that they can only be produced in a limited number of ways.

Professor John E. Cantlon, ecologist in Michigan State University's Botany Department and University provost, sees evidence of a reshuffling of the public's attitude about environmental quality and this, in turn, alters political "muscle." Society is changing its mind about what it wants farmers to do, just as it is about automobile pollution in the air and sewage pollution in the streams.

Cantlon believes that the American public has, or is rapidly gaining, a better ecological understanding of the effects of pollution. He sees war brewing as society attacks environmental damaging activities of industries, agricultural and non-agricultural. Farmers, and other industrial producers, will be asked soon, "What progress are you making in shifting from practices that are injurious to the human environment toward practices that are less damaging?"

The outcome in the fight between the clean environment advocates and those who pollute the environment will be decided in favor of those who want a clean world, Cantlon says. And how farmers come out depends upon which horse they hook their cart to.

Cantlon sees the interests of ecologists and farmers as complementary, not opposed. "Of all industries, farming is potentially one of the most ecological, and farmers tend to be pretty good naturalists," he said.

"Farmers and most ecologists are really on the same side. Ecologists want a healthy environment. Farmers certainly want that, too. The farm is home to them."

FARM ORGANIZATIONS

In spite of this, Cantlon sees farm organizations as having cast their lot on the wrong side in several cases. "Most of the ecological literature calls for reasonableness in the use of chemicals, not abolition of them and a return to the nature of Thoreau," he said. "Ecologists are human, and most like low-cost food, cars, and modern homes. Farm organizations have been wrong in assuming that responsible ecologists want to abolish all pesticides. Those individuals who have an unreasoning fear of all chemical treatment in agriculture cannot win either."

Cantlon sees the real temporary adversary of all people who want a clean environment as the chemical industries, whose method of maximizing profits is to sell more—not less—chemicals. Thus, these industries can be expected to resist changes that reduce use of chemicals.

"In the recent fight over DDT, farm organizations appeared to see only the 'extreme' ecological view put forth by those very few who would abolish all pesticides," Cantlon said.

"Emphasizing that view, they used their power to fight the pesticide producers' battles for them, even though the use of DDT on farms had declined to trivial levels long before the recent decision. When DDT was banned, the farm sector's image was damaged, but the chemical companies avoided the headlines."

Cantlon's positive suggestion to farmers is this: "Instruct your farm organization to take the viewpoint that farmers, like the rest of us, are responsible members of society. Be willing to produce by whatever methods society demands. And if these seem like they are more expensive and less efficient, then society will have to stand the cost."

Ecologist William E. Cooper, assistant professor in the Department of Zoology, says the same thing. Present farm methods produce surpluses using only a portion of the tillable land, he said. There is no reason, he adds, to use methods as intensive as now used. Less intensive methods can be used on more of the land.

Cantlon sees fertilizers as the next target of ecologists and society at large. And again, this largely urban society will forget that urbanites mismanage fertilizer on a grander scale than farmers. They apply huge quantities of fertilizer to small plots of land in areas constructed to maximize loss into storm sewers.

"Will farmers fight to allow urbanites to continue this practice?" he asked. "Will farmers ruin their already tarnished image to protect the urbanite who is attacking them? That's up to the farm organizations."

Assistant professor of Natural Science Manfred Englemann, MSU ecologist, sees other areas where farm organizations antagonize parts of society, especially groups like game management personnel. The Farm Bureau and the Grange each year pass a resolution asking for bounties on foxes, for example.

The tale of the red fox and the farmer's poultry is a legend, he says, but how many farmers now have poultry? And how many keep chickens in an open pen accessible to a fox? Might not liability insurance make more sense than a bounty program to compensate for these small, occasional losses?

"We cannot continue to eradicate predators just because they are predators," he said. "The predator serves an important function. Sure the fox eats pheasant and quail. But if there are any universal truths in nature, this is one: The predator eats the sickest, the weakest, the most parasite ridden, and the most wandering members of any species."

In Englemann's view, it is ridiculous to continue bounties on our few natural predators, like foxes and bobcats. The bounty was recently removed from timber wolves—but there may not be any left in the state anyway.

AG RESEARCH

An area of concern to the three ecologists is agricultural research, as conducted by the Michigan Agricultural Experiment Station and MSU's Department of Agriculture and Natural Resources.

"We need to take a hard look at ag research," said Cooper. "Has it been designed to integrate agricultural production techniques with the constraints of environmental quality for the next 20 years?" The answer, he says, is no.

"The Agricultural Experiment Station has been an important leadership force in arriving at our present highly productive system. It should be developing new ideas in practices and techniques related to the emerging limits on pollution as well as researching new and better crops.

"Farmers should support efforts that would shift the research effort toward new techniques that are in balance with the ecological system with which they work."

Cooper believes the ag experiment station is "barely keeping up" with research into current environmental problems, when it should be leading.

Englemann would like to see research with multispecies cropping, a system of planting more than one crop in a field. He sees this as a less costly (in terms of total energy expended) system, although yields are lower. On the positive side, better weed control and less soil erosion should result.

AG SCHOOL

From ecologist Cantlon's viewpoint, the Michigan State University college of agriculture has, in the past, tended to be a "holdout of traditional agriculturists," doing little in the way of leadership or research toward ecological balance. He notes it is already making significant corrections.

"Ten years from now, environmental quality will be a major restraint on what people do. Agriculture must prepare itself for that day," he said.

As far as the Extension Service is concerned, Cantlon views it as "very adept at facilitating the spread of new practices among farmers."

The Extension Service, of course, passes on information; it is not its job to generate it. Cantlon's concern is to encourage a change in part of the focus of the research groups from studying methods of maximizing output to research on methods that consider environmental quality.

SUMMARY AND AUTHOR'S NOTE

Now that the story's told—five articles on ecology are reaching an end—what has it all meant?

We've reviewed the confrontation, between farmers on one hand and ecologists and their disciples on the

other. The ecologists have said they don't feel that they and farmers are on opposite sides. True, they were at each others' throats in the hearings concerning dieldrin and the Japanese beetle and on the controversy over DDT.

Nonetheless, ecologists feel that farmer organizations probably did not really represent the best interests of farmer-members in that battle. Farmers and ecologists are both concerned with the basic productivity of nature.

In spite of this basic feeling that farmers and ecologists are both close to nature and concerned about it, the ecologists have made serious charges.

While we have discussed charges made against farmers, the problems ecologists see are surely deeper. They question the methods of the entire American technological system, and perhaps the methods of the entire Western European civilization.

The ecologists pointed out a fallacy. They say that American farmers don't know what "efficient" really means. Their job is to collect sun energy to feed the world's population. But in the process of collecting and distributing it to people, more energy in the form of oil and gasoline—stored sun energy from the past—is expended than what was captured from the sun in the present.

In addition, they say, we degrade the environment in using petroleum products—pollute the air and deplete the atmospheric oxygen in the process.

American society has gained benefits from this "parasitism" on ancient energy production—that is, oil. It has given us a "gap," freed people from farming to do other things. One of these "other things" is research.

We may perfect solar cells to collect energy directly from the sun, which can be used for the benefit of the entire world. We may discover how to control thermonuclear fission—the process firing both the sun and the hydrogen bomb. By producing a "tame" sun here on earth, again we'd achieve vast and nearly free energy.

But what happens if we don't? That's the basic ecological question. Behind all we have said is the looming threat of overpopulation. Some ecologists believe that large parts of the world are populated to the maximum level possible without degrading the environment.

If we overexpand population, we come to depend more and more on this stored energy, petroleum, to feed it. At the same time, we hope when it runs out there will be new technological methods and new fuels to replace it. Some day, men will have to revert to living off the sun's present energy or else find a way to supplement the sun. Petroleum is not a supplement to the sun; it is a result of the sun—energy stored from eons before man was on earth to consume it.

The same applies to elements as to energy. Today, it is cheaper to mine phosphate and potassium from the earth than to recycle them. So we dump wastes into the streams and rivers, polluting the world's waters. It won't always be cheaper, and then we will wish we had hooked the cities' sewage systems back to the farms, rather than to the streams.

Farmers can't, of course, do much to control human population growth. But they can recognize this fact: There is a limit to the number of people they can feed. And, with today's technology, the growth of environmental pollution resulting from large increases in production would be another problem. Farmers must look ahead to the day when energy is dear, not cheap; to the day when farmers won't have cheap petroleum; to the day when their methods are economically as well as ecologically inefficient.

Farmers can be effective forces in seeking change. By supporting research and introducing new methods as they become available, they can, in effect, demand that the cities give their minerals back.

They can be effective in urging that farmland be properly zoned and preserved. With population growth and our present system of nearly random development, it is conceivable that we'll all have to eat blue-green algae pancakes—not because the world is overpopulated, but because it is populated in the wrong places, on the best farmland.

It may seem highly unfair to attack farmer methods if, indeed, the entire "system" is at fault. But some ecologists see agriculture as the basic problem. After all, it was the development of agriculture itself that, 10,000 years ago, started the chain of events leading to vast world population and extensive interference in nature's processes.

Farmers are not in a unique position, however. Other industries, too, are being charged with "inefficiency" as they dump waste products—actually vital elements—into waters and into the air. And here, in the Great Lakes area where 20 percent of the world's fresh water supply is located, we can expect the pressures to be especially great.

In this series, we've discussed the ecologist and agriculture. But actually, the problem is broader. Ecologists are urging pollution-control devices on cars, control of industrial wastes. They're involved in everything up to and including family planning.

Before farmers go to battle against the massive array of damning information generated by ecologists, they should ask themselves: "Do I have the facts? Will my methods produce a better world? What do ecologists have that, if put to use, would build a stronger agriculture and a better world?"

This article is the last in a series of five on the subject "Ecology and Agriculture" that appeared in the MICHIGAN FARMER between September 6 and November 1, 1969. Author is Richard Lehnert, MICHIGAN FARMER Associate Editor.

STUDENT CONSERVATION ASSOCIATION in cooperation with the National Park Service again offers summer work programs for High School(age 16 and up), College and Graduate School students. If you want to know more about this program, write or call the ACRES office,456-4411.

BOOTH AT SPORT SHOW (Feb.)termed a "success". Thanks to the many helpers! We're going to do it again!! ACRES booth at the Home, Flower & Garden Show (April 21 - 26) will be part of the Show's emphasis on the environment.Can you help? Call Mr.&Mrs.Paul Henkel, 456-5685.

REPRINT SOON AVAILABLE of Ruth Christensen and Martha Seaman's famous, cooking-from-the-Wilds cookbook "To Eat -or- Not To Eat". This is the cookbook originally compiled for ACRES eating-from-the-wilds field trip. Copies will be 10¢ each.

ACRES WELCOMES NEW BOARD MEMBER John H.Eddy, Jr., R.R.#3, Angola.John is Plant Superintendent at Hendrickson Tandem Corp. in Butler, Indiana.

HELEN SKELTON ADDS BOOKS to ACRES library. Volumes include: Without Reserve, S.Burnford; The Mammals, D.Morris; What's Left, B.Roueché; Lost Worlds of Africa,J.Willard; Dolphins - Sea People, E.F.O'Brien; Bankers, Bones & Beetles, Geoffrey Hellman; The World of the Polar Bear,R.Perry; Wild America, R.T.Peterson; The Poison Makers,R.D.Lawrence; Strange World of the Moon, V.A.Firsoff; America's Natural Resources, C.H.Callison; Song Birds of the World,Austin-Singer-Zim; Attracting Birds from the Prairies to the Atlantic,V.E.Davison; The Audubon Guide to Attracting Birds, John H. Baker. Thank you Helen!!

PHOTOGRAPHIC BENCH MARKS ESTABLISHED - Tom Kohlmeyer constructed three photographic bench markers each for Spurgeon, Bender and Lonidaw Reserves. Installation locations for these have been established by naturalist Bob Weber who has also begun a photographic record from these points. Over the years these photographic records, taken always from the same bench mark positions will provide data on vegetative cover and changes at the three reserves.

ACRES supports the funding for Allen County's park system and the initial acquisition of Fox Island Natural Area Park. This particular area has long been recognized by ACRES as an outstanding county natural area and its acquisition as the first area of a county park system is applauded.

AMERICA THE BEAUTIFUL FUND grant will help ACRES, under the able direction of Art Eberhardt, produce a series of Public Service TV announcements. We'll be sharing the finished product with several other groups doing natural area work in southern Indiana, Ohio and Michigan.

THE PRESIDENT'S COLUMN

It looks as if we're making a break-through. Conservationists are no longer alone in their concern for the environment: the general public is becoming aware of the need for protecting what Dr. Hardin has aptly called our "commons". For the air, the water, the soil are to us what the early New England commons was to the pioneers. And it is because of the abuse of the commons that the present environmental crisis has arisen.

If in early New England you pastured one more sheep than the number allotted to you, you profited from the wool and meat of your sheep but the damage done to the commons by your extra animal was distributed among all those who used the commons. It often appeared that such exploitation of the commons paid. Today, exploitation of our commons, pollution of air,water and soil seems to bring profit to the individual, or community,or corporation but the damage is a cost shared by all who use the commons.

We're all suffering. The average family in New York pays $800 a year in deterioration of paint and rubber of automobiles,extra dry cleaning, and the like as a result of air pollution. This invisible tax is often ignored when people count their gains. Moreover, there are definite health hazards involved, and this cost cannot be assessed in simple terms.

We have such a long way to go even to arrest the deterioration of the environment: but there is hope. Restoration will require cooperation of the entire community. ACRES is making a contribution. Your continued support of our program and of the programs of like organizations will help.

John W. Klotz

" I DID NOT FIND THE WORLD DESOLATE WHEN I ENTERED IT;
AND AS MY FATHER PLANTED FOR ME, SO PLANT I FOR MY CHILDREN."
the TALMUD

ACRES, Inc.
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Fort Wayne, Indiana

NON-PROFIT ORGANIZATION

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MEMBERSHIP: Student, $.50; Regular, $2.00; Sustaining, $10.00; Patron, $50.00 payable annually to ACRES, Inc., 106 W. Wildwood, Fort Wayne, Indiana 46807.