INNOVATIVE FARM

ifo news

SARE Project LNC94-070

DEFINING SUSTAINABLE ...VALUES!

By
Charlie Eselgroth

Another growing season is winding down. For us, here in Ross County, it has been a hectic summer. Half the corn, and virtually all the soybeans were planted in June due to a wet May. When you start the season with a month delay, it seems like you never get caught up the rest of the summer. It's seasons like this that make a diversified farm like ours a real challenge to manage. On several days, when we had hay to bale, wheat to harvest, pastures to manage, weeds to control, and still try to find time to take the boys swimming, I envied the corn and bean boys. Man, if we only had two crops to worry about, we would have it made. A little of the "grass is always greener" syndrome, I guess. But the feeling never lasts long. Harvesting 60 bushel wheat that's worth $4 per bu., having a barn full of hay to sell, and a good bunch of calves grazing cheap pasture and crop residue goes a long way toward taking the sting out of a late planted corn crop. All the corn and bean boys can do is pray for rain at pollination and a late frost.

As I've mentioned in previous newsletters, we are beginning to have some dialogue with people that are new to the concept of sustainable agriculture. Often one of the first requests we get is to define sustainable agriculture. A fair question, but one that I find very frustrating to try and answer. I know what I consider sustainable, and my model consists of more or less equal parts: production practices; supporting your local community; and caring about your neighbors. These are all broad categories and usually not what the questioner is looking for. Many people in agriculture today are used to viewing things in a this or that, black or white, good or bad type scenario and

Continued on page 3

IFO's THIRD ANNUAL MEETING

Get out your calendars; IFO's Third Annual Meeting has been scheduled for ***Saturday January 20, 1996***. The location for the meeting has been switched from the Stratford Ecological Center to the Delaware Hotel, in Delaware. With this change, participants will be able to stay overnight if they chose, giving everyone more time to meet, share ideas and get to know one another. And maybe save us from another January snowstorm!

The meeting will open at 10am, following registration, and will conclude with an after dinner speaker from 7:30 to 8:30pm. Four workshops are planned for the afternoon. The workshops will run concurrently, but will be repeated twice during the afternoon. Details about speakers and topics have not yet been finalized, and will be announced at a later date. Our goal is to move beyond general overviews and get down to specific, practical information. If you have any thoughts or suggestions, please let us know.

We are trying something new this year. ***We are asking you to help add to the annual meeting by bringing something to share in the form of a SMALL POSTER DISPLAY*** (less than 3x4 ft). We will have room to display posters during the meeting, and one hour will be set aside for everyone to visit presenters at their displays. This should be another good way for participants to meet and get to know one another and to share useful ideas.

What might you show in a display? Tell us about ***your innovative marketing initiatives***. Or how about ***a few pictures and a description*** of that great little equipment modification you came up with? If you've recently begun rotational grazing, you could bring ***a drawing of your grazing cell design.*** Did you receive a S.A.R.E. producer grant? Here's a chance for you to meet some of your information sharing requirements. Or maybe you'd just like to show off ***some great pictures of your farm.*** The idea is to ***help people visit and talk about things of common interest.*** If you have any questions about preparing a display, drop us a note.

In this issue

BOARD NEWS

Short notes from board meetings; 7/18/95, 9/13/95

Future board meeting dates: Dec 5 1995, Feb 13 1996

7/18/95 Stratford Ecological Center–The board wishes to consider Sustainable Agriculture Research and Education (SARE) project internships for Ohio State University (OSU) (or other) students in Agriculture Communications to help with the newsletter by interviewing farmers in the field (this means you), writing original articles, and in the process, learning about agriculture from farmers. Funds would come from Clive Edwards' SARE Sustainable Agriculture Internship Program. This should also get the newsletter into your hands in a more timely fashion.

The board is also exploring ways to help OSU craft a broader vision statement and focus attention more on the farming community and the needs of farmers interested in sustainable agriculture.

IFO's activities are growing rapidly. The board has prioritized finding a part-time executive director answerable to the members (and the necessary funding for his or her salary) to help coordinate...

1. farm tours and workshops
2. grant writing
3. mailing
4. the annual meeting
5. newsletter preparation

More information about Clive Edward's SARE grant: "Innovative and Practical Education in Sustainable Agriculture in Ohio".

Its three objectives are:

1. To provide innovative opportunities for practical education in sustainable agriculture for agricultural students and young farmers.

2. To provide and expand venues for educational opportunities in sustainable agriculture with practical hands-on experience, for agricultural students and farmers, through a state-wide network of publicly and privately-operated demonstration farms.

3. To facilitate the further development of an association of "Innovative Farmers of Ohio" (IFO) to serve as a highly visible facility for practical student and young farmer education in sustainable practices and systems, particularly in providing venues for student experience.

The grant aims to facilitate the development and activities of IFO to include greater student participation through student memberships, work and projects on IFO farms, and other IFO student activities.

9/13/95 Malabar Farm–Charlie noted that Mark Bennett (who, with Mike Hogan, heads up the new Ohio Sustainable Agriculture Team) is looking for an IFO member participant in meetings to be held 3 or 4 times per year in Columbus. Charlie and Rich Bennett have tentatively agreed to share this responsibility.

IFO is supporting Mark Bennetts' efforts in seeking a grant from the Great Lakes Network for research in grazing, nutrient management, etc. (grass as production agriculture).

We're still hoping to have more involvement with OSU in "Project Reinvent"–not much to report in that regard.

Mike Coté and Jeff Dickinson are diligently working to secure funds for (through grants), and define the job description of an IFO coordinator.

— Treasurer's Report:

IFO membership account - $724.00;
Great Lakes grant - $4807.31

Louise Warner,
Secretary/Treasurer

THANKS
TO NEW MEMBERS!

Many thanks to all the new members who joined I.F.O. during 1995, and to all those who renewed their memberships. As of September 1, 1995, I.F.O. has grown to 70 paid members.

IFO's strength depends on its membership. If you read this newsletter but haven't joined please consider doing so today. If you are a member, please share this newsletter with a friend or neighbor and invite them to join. You'll find an application/renewal form on the back page. At $15 a year ($10 for students), an IFO membership is a good deal, bringing you this newsletter, including the Annual Research Summary that reports on research being conducted on IFO collaborators' farms, plus announcements for the annual meeting and IFO sponsored workshops and tours.

NON-PROFIT STATUS ACHIEVED!

Remember: on January 3, 1995, the I.R.S. granted IFO status as a 501(c)(3) non-profit organization. This means that your membership dues (except for $3 per year for the newsletter) are tax deductible. This designation is retroactive to February 2, 1994, the date of IFO's incorporation.

Memberships will now be established on a calendar year basis (January-December) to coincide with the annual meeting and to streamline bookkeeping. Memberships started after January will be discounted $1 per month. For more membership information or copies of previous newsletters and research summaries, see the back page, send us a note at 3083 Liberty Rd., Delaware, OH 43015, or call us at (614) 363-2548.

If you have internet access you can leave messages for us at... ferrucio@aol.com or you can send regular mail to

IFO
16354 Claridon-Troy Road
Burton, Ohio
44021

Phone me at

voice: 216-834-4757
fax: 216-834-0370

Mick Natco-Editor

DEFINING SUSTAINABLE...VALUES (Continued from page 1)

questions about community and neighborliness do not fit well in that type of thinking. The questions these people have are more like "Is sustainable agriculture organic agriculture?" (Not necessarily). "Is no-till sustainable?" (It can be, but isn't always). "Do I have to have livestock on a sustainable farm?" (No, but it would probably be to your advantage). All good questions, but ones that deal exclusively with production and avoid many of the driving issues in sustainable agriculture.

One of the main concerns of sustainable agriculture is our rural communities. This concern about our communities highlights what I believe to be the main difference between conventional and sustainable farming.

In mainstream agriculture, production is king. It is the end that justifies the means. And the producer is simply one of the means. As long as the inputs keep going in and the output remains high, the ag "industry" doesn't really care how many producers there are in the community. In fact, if one producer can grab land from 4 or 5 neighbors by bidding up the rent price, he is considered by industry to be "progressive and efficient". In the meantime, since job opportunities can be scarce in rural areas, at least a couple of those families displaced by the "progressive" farmer will leave the community. But as long as production is maintained, all is considered well with agriculture.

By contrast, in sustainable agriculture, the producer has priority. A good life in a community of good neighbors is the goal. Production is just a means to achieve that goal. And being a good neighbor means choosing production models that don't infringe on your neighbors ability to enjoy the good life too. Sustainable farmers also recognize that highest production does not necessarily guarantee highest profit. The best example of that is the grass dairy folks. Having multiple enterprises that complement each other and replacing some purchased inputs with good management also helps insulate the sustainable farmer from things he can't control such as weather, markets, input costs, etc. Couple that with the fact that virtually all sustainable farmers I know have made a conscious decision to patronize their local businesses.

Now I realize this short comparison is somewhat simplistic and anyone that is so inclined can probably find fault with it. But it serves to illustrate the main differences between mainstream and sustainable ag. Those differences are more about philosophy and values than they are about production practices. And unfortunately in our society today , and in particular agriculture, most people would rather take a beating than talk values.

But we must acknowledge our values as we choose our production models and plan our on-farm research. Tom Frantzen of Practical Farmers of Iowa once stated that it does our rural communities no good for us to learn to manage our nitrogen rates well, if there's only one farmer per township left to use it. I agree. Any technology is simply a tool that must be evaluated, then accepted or rejected based on the consequences of its use. And it takes a mature individual (or society) to reject something that might give them a short-term gain, but could inflict on them a long-term loss.

One church bulletin a few weeks ago contained a proverb that I find most appropriate: Measure wealth not by the things you have, but by the things you have for which you would not take money. Amen!

FARM NEWS

St. Croix Sheep - "You can breed them outside the usual sheep-breeding season and this means you could produce three lambs per ewe in 24 months, versus the usual two. That's a 33 percent increase in productivity." (Comments from Michael A. Brown, USDA-ARS, South Central Family Farms Research Center, Highway 23 South, Rte 2 Box 144-A, Bonneville, AR 72927-9214; telephone: 501675-3834. *(Agricultural Research,* June 1995, p. 5)

Who Gets What - According to USDA estimates, last year Americans spent about $617 billion on food; 55 percent for food at home, and 45 percent for food elsewhere.

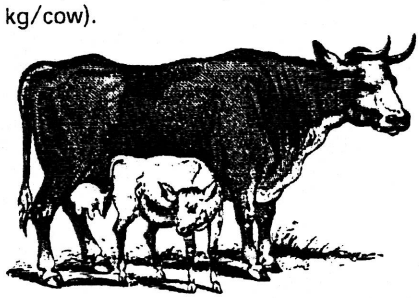
New High - "U.S. Agricultural exports in the last quarter of 1994 were a record $14.1 billion, a surge that pushed exports to a record $45.7 billion." *(The Cotton Gin and Oil Mill Press,* May 13, 1995, p. 23.)
from Small-Scale Ag Today

RESEARCH

Yeast culture proves positive in milk production Cedar Rapids, IA—

Dairy cows receiving yeast culture in commercial Wisconsin dairies showed a positive response in milk production in performance trials conducted by R. D. Shaver and J.. E. Garrett, of the University of Wisconsin-Madison, and Diamond V Mills.

The 11 commercial dairy herds contained approximately 1,200 lactating cows. Rolling herd averages were 22,000 to 28,600 Lb./ cow (10,000 to 13,000 kg/cow).



Cows received an average of 2 oz/day (57 g/day) of yeast culture throughout two, 30-day, DHIA test periods. Production data from 30-day DHIA test periods immediately preceding and following the yeast culture feeding periods were used as the control. A total of 585 cows (245 heifers, 340 mature cows) completed the feeding sequence.

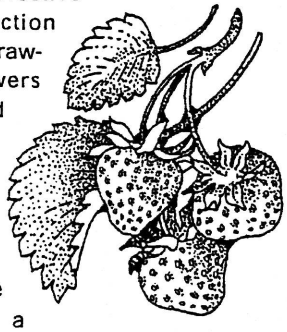
Average milk and 150-day adjusted milk yields showed a 1.9 Lb./day (0.9 kg/day) increase during the yeast culture feeding test periods. Component yields show no change in milk fat, Lb./day, but a significant increase in milk protein yield, Lb./day, due to yeast culture.

The results showed a positive milk yield response in 8 of the 11 commercial herds in the test, and indicates a definite relationship between milk yield and the addition of yeast culture to rations in high producing dairy herds.

Continued on page 4

FARM NEWS Continued

The Right Mite For Strawberry Fields



USING effective crop protection chemicals, strawberry growers have waged war against spider mites for decades. Thanks to Oregon State University, a new agent is entering the battlefield.

Brian Croft, an OSU entomologist, explains that the mite *Neosiuleus facillis is* an effective predator against spider mite. Just as small as the tiny spider mite, it can double the area it covers in eight to 10 days during an average Oregon summer. To do this, it lifts up its front legs when hungry, and is carried by the wind to the next leaf or row.

An added bonus: These biologicals stay active during winter and continue to provide control over the entire life of a strawberry field, usually two to four years.

From the American Vegetable Grower August • 1995

Non-Insured Crop Disaster Assistance Program

Producers of specialty crops and agriculture commodities which are not listed as "insurable" by USDA's crop insurance program should be aware that they do have disaster coverage available to them under the Non-Insured Crop Disaster Assistance Program (NAP). There is no charge for NAP coverage, but growers must report production acreage each year. Be alert to the reporting requirement and contact your local office of the Consolidated Farm Service Agency (formerly ASCS) for more details. Not all counties have offices.

ADDITIONAL INFORMATION RESOURCES

"Farm Scale Composting," a special 80-page publication of BioCycle, is available from JG Press, 419 State Avenue, Emmaus, PA 18049; (610) 967-4135.

"Planting the Future: Developing an Agriculture That Sustains Land and Community," 232 pages, is $14.95 plus $3 postage from Iowa State University Press, 2121 S. State Avenue, Ames, IA 50014; 1-800-862-6657.

"The Profitability of Four Sustainable Farms in Minnesota" is available free of charge from Minnesota Department of Agriculture, Energy and Sustainable Agriculture Program, 90 West Plato Boulevard, St. Paul, MN 55107-2094; (612) 296-1277.

"The Grass Is Greener: Dairy Graziers Tell Their Story" is $5 plus $2.50 shipping/handling from Wisconsin Rural Development Center, Inc., 125 Brookwood Drive, Mount Horeb, WI 53572; (608) 437-5971.

ALTERNATIVE AG WOULD HELP ENVIRONMENT, FARMERS, AND TAXPAYERS, SAYS WRI (World Resources Institute)

Minimizing agriculture's environmental impact is both possible and economically advantageous to taxpayers and farmers alike, a new study by the **World Resources Institute** has concluded. According to **Growing Green: Enhancing the Economic and Environmental Performance of U.S. Agriculture,**

" alternative production techniques alone, if fully available, and if farmers accounted fully for the costs of changes in long-term soil productivity, would achieve the following:

" Soil erosion and its off-site costs (such as water pollution) would decrease significantly -- by about 9% nationwide, with regional differences.

" About 74 million acres, 23% of the total, would shift to alternative practices such as crop rotations and different tillage methods.

" Pesticide spending would drop more than 3%, inorganic nitrogen use by 5%.

" Farm income would increase by 1% while fiscal costs would fall by 19%."

The report also said that if "green payment" policy changes were added to alternative farm techniques, environmental performance would be further improved.

"We have a simple optimistic message for the 1995 Farm Bill," said Paul Faeth, author of the WRI report. "You can cut program costs, reduce environmental impacts, and maintain farm income."

Growing Green, 96 pages, is $16.95 plus $3.50 shipping/handling from WRI Publications, P.O. Box 4852, Hampden Station, Baltimore, MD 21211; 1-800-822-0504 or (410) 516-6963.

Doug Billman (right), dairy farmer and host of the Ohio Grazing Field Day, discusses the merits of an intensive grazing system with (from the left) Debbie Stinner, researcher, Bobby Moser, Dean of the College of Food, Agriculture and Environmental Sciences, and Ben Stinner, researcher.

All photos ©Michael Coté

ITEMS OF INTEREST

From The Center for Rural Affairs

Some Farms Too Big to Cut Payments

The nation's largest farms would make little or no sacrifice under two proposals to cut farm program costs, while smaller farms would pay a heavy price, according to a Center report, ***Too Big To Cut?***.

Senate Agriculture Committee Chairman Richard Lugar's (R Indiana) proposal to cut target prices by 3 percent each year would reduce payments to large farms by 13 to 19 percent over five years, while moderate size farms would generally lose 39 to 49 percent of their payments. A second proposal to eliminate payments on an additional 10 percent of a farm's acres by increasing normal flex acres would reduce payments to moderate-sized farms by 12 to 13 percent. The nation's largest farms would have sufficient acreages to continue collecting $100,000 and take no cut.

Requiring moderate-size farms to bear a disproportionate share of the deficit reduction burden would weaken their ability to compete with large farms for land and markets. The likely result would be a decline in the number of family farms and greater concentration of production in large units.

Eliminating six figure payments to large farms by reducing the payment limitation to $35,000 and closing payment limitation loopholes is a better, fairer way to begin cutting farm program costs. KO

Also from The Center for Rural Affairs

Win Some, Lose Some —House Agricultural Appropriations

The U.S. House of Representatives Agricultural Appropriations Subcommittee voted to maintain funding for the Sustainable Agriculture Research and Extension (SARE) program at its current level of $8.1 million.

The SARE program funds farmers, university researchers and sustainable agriculture organizations to experiment with practical, cost cutting, environmentally sound farming systems. This is the only federally funded research program that involves farmers directly in deciding which projects are funded.

The subcommittee also voted to fund the Sustainable Agriculture Development and Transfer Program at $3.5 million, Water Quality Incentives Program at $11 million, and Organic Foods Production Act at $1.1 million.

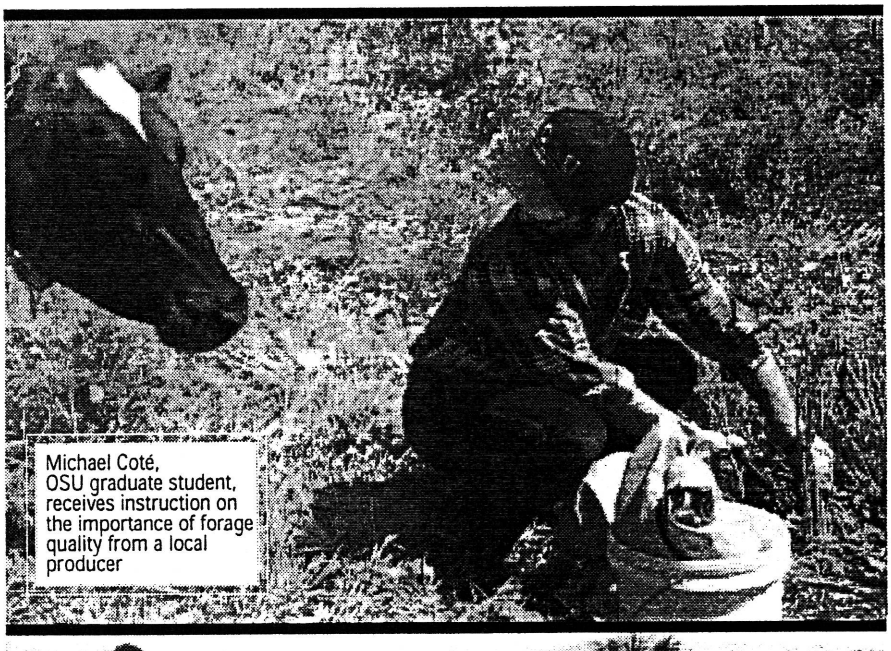
But on another front, the subcommittee has proposed drastic cuts of over $60 million in Farmers Home Administration direct loan funds that are already in very short supply. Beginning farmers rely on direct loans.

The Senate Appropriations Committee soon will decide funding levels for these crucial programs, and differences between the houses will be resolved in Conference Committee later this summer. KO/NT

From Buckeye Farm News, Sept 95

Agriculture Compliance Assistance Center

SUMMARY - The EPA recently formed a new Agriculture Compliance Assistance Center, coordinated out of the EPA Kansas City regional office, to help farmers and agribusinesses meet environmental requirements, prevent pollution before it occurs and reduce the cost of complying with EPA regulations. EPA insists that the focus of the new center is assistance, not enforcement. The telephone number is (913) 551-7864.



Michael Coté, OSU graduate student, receives instruction on the importance of forage quality from a local producer

A pasture walk led by a grazer during OSU Extension's Ohio Grazing Field Day on Doug Billman's dairy farm in Burbank, Ohio

All photos ©Michael Coté

MEMBER'S FORUM

CAUTION!
THIS AREA STILL UNDER CONSTRUCTION!

We want to hear from you.

As members of IFO, this newsletter is meant to inform you and to be a forum for your ideas.

If you want to express your feelings about something we've done or said as board members or if you wish to give your opinion about any farm related topic, please send us a letter or message to either of the addresses on page two. We promise to read everything you send us and will print as much as we can (space permitting). We reserve the right to edit what you send us (not for content, just for readability and length). **Please limit your letters to 200 words in length.** If you can provide your information to us as a text file on computer disk or as an e-mail message, that would be preferred, but **get it to us any way you can.**

If you'd like to submit an article about something you're doing or something you feel would interest other members, please contact us by mail or phone and we'll talk about your concept.

Gathering the information necessary to put this newsletter together in a timely fashion can be difficult, so **the more input we have from you the better it will be for everyone involved.**

Thank you to all have shown support for what IFO is trying to do.

Our board meetings are open to anyone. We'd like to see **you** there. See page 2 for contact information.

Quick!
Turn to the back page and Join Now!!!

GRAZING LAMBS LOWERS FEED COSTS, DELAYS MARKETING

By Mike Miller from research by Dr. Jim Clay (retired), OSU Animal Science Dept.

Grazing weaned lambs can lower feed costs, shorten the feedlot phase, and delay marketing. Forages contain less TDN (total digestible nutrients) than concentrates; therefore, gains on pasture will be slower. Factors that can cause variation in rate of gain on pasture include forage quality and quantity, internal parasite control, weather conditions, availability of clean water, and proper supplementation. Grazing, because of promoting slower growth, increases the slaughter age of lambs, and therefore, the slaughter weight at the same body-composition will be heavier.

Quality of pasture consumed by lambs is affected by season, forage species, maturity of pasture, and amount of pasture available. Quality is depressed in summer and quite low during winter, especially if stockpiled for a long period of time. Legumes are generally higher in quality than grasses, and as plants mature into a reproductive state, quality decreases.

A greater quantity of pasture allows lambs to select the higher quality portion. If you force lambs to clean up everything, then they are forced to consume lower quality material in order to satisfy their dry matter requirement. Lower quality material contains less digestible energy and protein and tends to move through the digestive system at a slower rate, therefore depressing the amount of forage consumed. If high rate of gain is desired, then provide lambs with sufficient pasture so that they can select the highest quality.

If you are rotationally grazing and desire to utilize a greater portion of the pasture during each rotation, then use maintenance animals, such as dry ewes, as second grazers to remove the lower quality portion.

During the summer of 1983, 1984, and 1985 in Wooster, Ken McClure in the Department of Animal Sciences, and other OSU researchers, grazed three groups of lambs weighing 53 pounds on orchard grass, ryegrass, or alfalfa and fed another group concentrates in a dry lot. Dry lot and alfalfa grazed lambs were slaughtered at 107 and 101 Lb. and gained .56 and .48 Lb./day, respectively.

Orchard grass and ryegrass grazed lambs gained .27 and .28 Lb./day and were slaughtered at 82 and 80 Lb., respectively. At OARDC during 1989, 1990, and 1991, we found that April/May born lambs, weaned the last of July weighing 50 Lb., and rotationally grazed on mixed pastures of bluegrass ladino and fescue, gained 25 Lb. over about 100 days. Shepherds in Ohio can expect lambs to gain .2 Lb./day during the summer and fall months. This can be enhanced with higher quality forages.

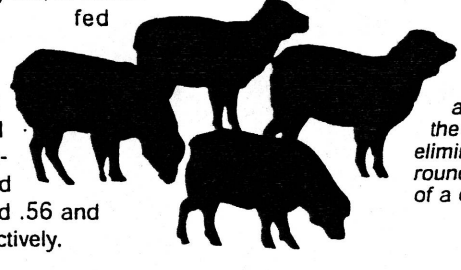
Internal parasite control is important in promoting growth, proper health, and preventing death loss when grazing lambs. Whenever possible, lambs should be grazed on "clean" pastures; A clean pasture in the summer and fall is where no sheep have grazed during the first six months of the year.

If pastures are contaminated with parasite larvae, then lambs must be monitored very closely because lambs are very susceptible to infestation. An effective deworming agent should be selected and properly administered to those lambs on a timely basis. Rotational grazing will not aid in sufficiently reducing internal parasite infestation of lambs. *

Hot and humid weather conditions will depress lamb growth. Provide an ample amount of clean water that is strategically placed in the pasture for lambs that are grazing. Salt and minerals must be provided. At the very minimum, use trace mineral salt containing the proper amounts of selenium and copper for lambs. Cattle trace mineral salt is too high in copper to be fed to sheep.

Grazing lambs can lower feed costs if: 1) quality forages are provided, 2) lambs are protected from internal parasites, 3) clean water is provided, and 4) proper supplementation with salt and minerals occurs.

Mike Miller is an ag agent with Ohio State University Extension-Medina County.



**You would need to rotate your lambs out of the pasture for 2 winters and 1 summer, or rotate the field out of pasture to eliminate parasites (primarily roundworm) without the use of a dewormer.*

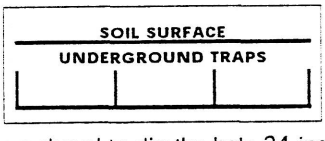
DEAR IFO... (LETTERS)

March 25, 1992 -1995
From: Olin L. Collins

To Whom It May Concern,
Subject: Artificial Water Table

In 1970 I began studying ways of trapping rainfall for plant growth that resemble nature's shallow water tables. Shallow water tables in nature are swamps, lake shores, wetlands, and certain naturally formed "perched water tables." I became interested in knowing how at the University of Georgia where I was in Graduate School studying plant physiology. I have long been curious why the idea is not in widespread use, because the idea is quite simple. I have found some related usage of the idea, but I like to farm with it.

A true water table can be established at any depth under the ground between four inches and four feet. The depth needed would be determined by the soil type (Water will rise in sand almost a foot) and the crop being produced. The method would even work in a rice paddy, but I would like to see someone try it in a desert situation where ten inches or less of rainfall occurs annually. The method is as follows: A single sheet of six mil black plastic is inserted under the ground forming large beds with sub-surface walls to form large rectangular waterproof beds at some depth under the soil.



I use a shovel to dig the hole 24 inches deep, 4 feet wide, 8 feet long, and I throw the dirt from the second hole into the first hole. I put the top of the walls six inches under the surface. Ideally the above is done with a machine. Also, an underground spray blade could be used to form the barrier by spraying a fast drying liquid polymer- that would do as well the black plastic. The use of heavy equipment in this manner would not disturb the soil horizon as many other ways would do. Naturally, I was unable to afford heavy equipment, but I made one half of an acre of semi-arid sand land into an area having a water table that stays between six inches and one foot below the surface depending upon the season of the year. However, anytime during the year there is a vivid demarcation between the changed area and the adjacent scrub oak land that was planted in pines after cotton wore the land out over 40 years ago. The evident differences are: (1) The soil in the changed part is always moist, no matter how long the drought. (2) The soil in the changed part becomes rich topsoil at the rate of one quarter inch to one inch annually using standard farming procedures. (3) The changed area produces a massive thickness and complexity of plant life. Also, I have noticed of late that the animal life has greatly increased. (4) Fertilization in the changed area becomes almost unnecessary. (5) Pesticide use in the changed area is greatly reduced or eliminated depending on the crop. (6) Additional irrigation in the changed area during a drought is minimal. (7) Any bare soil in the changed area is always cool to bare feet, so the humus does not burn under the influence of the sun. (8) The area that is natural will not grow any crop without intensive irrigation, fertilization, and pest control, and the changed part produces a large crop with almost no effort.

I welcome anyone who wants to see these eight differences in fact to arrange to have me show the area, or build beds of their own. For those of you who build your own, I know you will be impressed within a matter of days Things that won't happen are: (1) Roots won't grow thru the plastic. (2) It won't get too wet. (3) It won't be too shallow to cultivate. (4) The plastic won't break down. I believe that the world in general will soon have to discover and use this method to prevent pollution and produce food economically. In my studies, I have found that it is commonly believed that the United States had an average topsoil depth of three feet when it began, and the latest estimate is that there is an average left now of four to six inches. This seems to be a result of plowing the fields, and leaving the field bare to the sun and wind for periods of time. Growing up on a Georgia farm, I saw the fields go from dark rich soil to a sandy grey. Thus, now the push is on to conserve what is left by "no till methods. Even though 'no till' will conserve, it will not make new topsoil as fast as is needed. Nature makes topsoil at rates as slow as one inch every twenty thousand years in many places. Nature's rate in swamps is much higher.

I have been studying to find how much pesticide and fertilizer are trapped in the beds, and thus kept from reaching the aquifer (drinking water). I already know it traps water, and makes a beautiful garden! Much more research is needed on this method, but I believe the idea is environmentally, and economically sound.

Olin L. Collins Work 904-488-5499
8746 Flicker Rd. Home 904-421-5172
Tallahassee, Florida 32310
Update; June 1995, I have bought a little backhoe.

Coordinators Selected for OSU's Sustainable Agriculture Team

FROM: Ohio State University Extension
Agriculture and Natural Resources
2120 Fyffe Road Columbus, OH 43210-1084
Phone 614-292-4077 Fax 614-292-3747

TO: IFO

Thank you for your patience and continued interest in OSU Extension's role in Sustainable Agriculture educational program development. I am very pleased to announce that we have two coordinators selected for our Ohio Sustainable Agriculture Team. I feel that we have two individuals in Mark Bennett, Knox County Agriculture Agent/Eastern Ohio Grazing Coordinator and Mike Hogan, County Agriculture Agent, Carroll/Harrison County who have proven records as effective Extension educators.

Mark and Mike are very familiar with sustainable agriculture principles and will complement each other's discipline strengths as they develop in service programs for their fellow agents and assist in conducting applied research and educational programs for Ohio's farmers. As many of you know, Mark has given leadership to Management Intensive Grazing (MIG) and currently writes and edits our Extension forage newsletter entitled "Amazing Graze". Mike Hogan has given outstanding direction to Ag-Excel Programs in the East Extension District and is currently a Team Leader within our successful Management Excel Programs.

They both are excited about this new opportunity and look forward to meeting with both IFO and OEFFA in the near future.

We look forward to working with you in the future. Thank you again for your patience and consideration.

Sincerely,

Stephen R. Baertsche
Asst Director Agriculture & Natural Resources

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Publishing reader's letters does not imply endorsement of their ideas, however we do applaud anyone's attempt at expanding knowledge and understanding. With that in mind, take what you see here and run with it. Let us know what you think and please, send us *your* letters and ideas!

books & book reviews

"THE SOUL OF SOIL: A Guide to Ecological Soil Management,"

by Grace Gershuny and Joe Smillie, is now available in a new, extensively revised third edition. A practical introduction to managing soil for long-term productivity, this reference provides useful guidelines for making management decisions based on ecological principles, with minimal reliance on "off-farm" fertilizers.

Sustainable agriculture aims to protect the soil's ability to regenerate nutrients lost when crops are harvested. This regenerative capacity depends on the diversity, health and vitality of the organisms that live, grow, reproduce, and die in the soil.

The goal of ecological soil management is to enhance conditions for the billions of microbes found in every gram of healthy soil. These microscopic organisms supply plants with the necessary nutrients at the right time, and in the right form and amount.

The authors describe good management of soil organic matter and humus to achieve long-lasting soil fertility. These methods include the use of green manures, crop rotations, on-farm composting, and mineral fertilizers. Detailed information is given to help the farmer with everything from collecting soil samples to using practical, on-farm tests that measure soil structure, water-holding capacity, and fertility.

This guide also tells farmers how to improve their skills of observation, evaluation and management, as they must when reliance on purchased inputs is reduced. Specific "how-to" information is given for monitoring and analysis of many practices, such as application of composts and manures, interpreting soil test results, and crop responses to different fertility programs.

In addition to soil building techniques, "The Soul of Soil" discusses record keeping, cultivation, weed control, maintaining nutrient balances, and soil testing. For those who are considering or have already implemented organic certification, this book will aid in planning farm operations.

The authors are experienced farmers, farm advisors and writers. Joe Smillie has worked worldwide as a consultant in ecological agriculture since 1976. He is co-author of "The Orchard Almanac." Grace Gershuny edited "Organic Farmer: The Digest of Sustainable Agriculture" from 1990 to 1994, and recently joined the staff of the USDA's National Organic Program to implement its accreditation program for organic certification.

"The Soul of Soil" includes many tables, a glossary, lists of resources, and a bibliography. Published by agAccess, the 158 page book sells for $16.95, soft cover. To order, send a check for the cover price plus $4.00 shipping & handling (Californians please add 7.25% sales tax) to agAccess, P.O. Box 2008, Davis, CA 95616. MasterCard, Visa and purchase orders are accepted. Telephone Monday through Friday 9am to 5:30pm PST and Saturdays 10am to 4pm PST (916) 756-7177. E-mail to agaccess @davis.com or fax to (916) 756-7188.

Our Field: A Manual for Community Shared Agriculture, 1994.

Tamsyn Rowley and Chris Beeman. Community Shared Agriculture (CSA), often called "Community Supported Agriculture" in the U.S., is described and promoted as means for farmers to better connect with community members and for community members to have more influence over how food is produced. Chapters focus on beginning and marketing CSA projects, as well as on the best agricultural practices suited to CSA. Includes appendix of CSAs across Canada. 89 pp. Canada $15. Tamsyn Rowley, University of Guelph, Guelph, Ontario, Canada N1G 2W1; phone (519) 824-4120 ext. 8480; fax (519) 763-4686.

"A BETTER ROW TO HOE: The Economic, Environmental, and Social Impact of Sustainable Agriculture."

This timely report was published in December, 1994, by the Northwest Area Foundation. It tallies the results of 6 years of research in the northern plains states and Oregon/Washington, comparing "conventional" and "sustainable" systems. Practical Farmers of Iowa participated in the study. Copies of the full text or of an abbreviated text (Executive Summary) can be obtained free of charge from the Communications Department, Northwest Area Foundation, 332 Minnesota Street, Suite E-1201, St. Paul, Minn. 55101-1373. Phone: (612) 224-9635.

Key Findings, as published in the Executive Summary:

- Sustainable agriculture is a modern, emerging technology. It relies on sound management and intensive, often site-specific information.
- Sustainable agriculture has real and measurable environmental benefits, including reduced toxins in soil and water, less erosion, enhanced wildlife habitat, and lower energy use.
- Sustainable agriculture can be economically competitive with conventional agriculture, as evidenced by the performance of the best sustainable farmers. However, to become the technology of choice for most farmers, the management systems and technology required of sustainable agriculture must be further developed, refined, and taught.
- Current public policies, especially federal commodity programs, discourage the adoption of sustainable agriculture.
- Sustainable agriculture can provide new farming and business opportunities for people in rural communities, but local business infrastructure must respond to the different production and market needs of farmers.
- It may be even easier to start a farm with sustainable practices than to convert one that is heavily invested in conventional practices and technologies. Many beginning farmers may find sustainable agriculture attractive because it depends more on skilled labor and management and less on capital resources.

MAJOR POLICY RECOMMENDATIONS:

- Federal farm commodity programs should be reformed to reward environmental performance, remove penalties for converting to sustainable agriculture, and end the discrimination against sustainable farmers (who have fewer acres in subsidized crops because they have planted soil-conserving crops instead).
- Greater emphasis should be placed on sustainable agriculture in research and education programs to strengthen the technology base of sustainable agriculture.
- A comprehensive rural development policy will help sustainable agriculture by developing the business infrastructure to support sustainable farming and by providing off-farm income opportunities that many farmers - both sustainable and conventional - need. At the same time, rural development will benefit from the new farm and business opportunities fostered by sustainable agriculture.
- Private lenders and public credit programs should increase access to capital and accompanying management assistance programs for beginning farmers who practice sustainable agriculture.

Basic Butchering of Livestock and Game

by John J. Mettler, Jr., DVM, for anyone who is slaughtering. The cost is $15.20. Contact: Storey Communication, P. O. Box 445, Pownal, VT 05261-9988; telephone: 1-800-441-5700.

"events" CALENDAR

Oct. 18-20, OSU Extension Sustainable Agriculture In-Service Training at Malabar Farm State Park and the OARDC campus in Wooster. (See details in column 1, page 10)

Oct. 23, See detail listing under "FROM YOUR KITCHEN TO THE MARKET COMMUNITY FOOD INITIATIVES"

Oct. 27-28, Growing Home, an introduction to permaculture design & bioregional living at Greenfire at Pilgrim Hills, Permaculture is the conscious design of "cultivated" ecosystems that have the diversity, stability, and resilience of natural ecosystems. It is a harmonious integration of people into the landscape in such a way that the land and its inhabitants grow in richness, productivity, and aesthetic beauty. For more information call: Mary or Dick Hogan at 1-614-4353 or Bill Wealand at 1-800-282-0740

Oct. 30, See detail listing under "FROM YOUR KITCHEN TO THE MARKET COMMUNITY FOOD INITIATIVES"

Nov. 6, See detail listing under "FROM YOUR KITCHEN TO THE MARKET COMMUNITY FOOD INITIATIVES"

Nov. 8-10, National Blueberry Conference and Exposition, Amway Grand Plaza & Grand Center, Grand Rapids, MI. For visitor or exhibitor information, call 800 878-5131 or 616-434-6791.

Nov. 20, See detail listing under "FROM YOUR KITCHEN TO THE MARKET COMMUNITY FOOD INITIATIVES"

Nov. 27, See detail listing under "FROM YOUR KITCHEN TO THE MARKET COMMUNITY FOOD INITIATIVES"

Dec. 1, Free training on the Ontario Environmental Farm Plan. Norwalk, Ohio. See data on page 10

Jan. 12-13, 96 Michigan Agriculture Mega-Conference, Lansing Convention Center, Radisson Hotel, sponsored in part by Mycogen Plant Science. Educ. program, crop, cattle, sustainable agriculture & spouse specific topics, trade show, pesticide cert. credits, banquet. For complete information contact Cindy Reisig, coordinator, 517-669-8589 or at P.O. Box 387, DeWitt, MI, 48820-0387.

JANUARY 20TH 1996 IFO 3RD ANNUAL CONFERENCE

See the details for this event on page 1. We're going to have several very interesting speakers. The new meeting site at the Delaware Hotel should give us much more freedom, especially for those who stay in rooms at the site.

"Michael Oliver's Restaurant" at the hotel is supposed to be quite good and will be providing meals for the conference.

Saturday night from 9:00pm to 1:00am the "Bob Allen Trio" will be performing in the lounge, and there is no cover charge.

There is a pool, jacuzzi, sauna and a 16 station workout area for 18 and over.

These events are open to the public.

FROM YOUR KITCHEN TO THE MARKET COMMUNITY FOOD INITIATIVES

Cook it, sell it, take your money to the bank... It's just not that simple! But it may not be that difficult either...

"From Your Kitchen to the Market" is a low cost series of classes offered by Community Food Initiatives (CFI) to anyone interested in food products, processing, or farming.

The series consists of several related topics but each class will be complete in itself as follows:

Oct 23 Wholesale Marketing and Distribution, Joanne McGonagle, President, Pasta Fresca, New Lexington, OH

Oct 30 Food Industry Processing Regulations, Dr. Winston Bash, Director, OSU Food Industries Center Roland Hayes, FDA Inspector, Ohio Dept. of Agriculture

Nov 6 Poultry and Livestock Market Opportunities Linda Lee, VISTA Volunteer with Rural Action

Nov 20 Containers and Packaging, Craig Cornett, Co-Owner Frog Ranch Foods, Ltd. Millfield, OH Peter Linn, General Manager Rossi Pasta, Marietta, OH

Nov 27 Safety and Sanitation Regulations in Food Handling and Processing Rich Newman, Ohio University Food Service

Each class costs only $5 or all ten for $40. CFI members receive a 50% discount. All programs will be at ACEnet's Conference Room located at 94 N. Columbus Rd. in Athens on scheduled evenings from 6 to 8 PM.

Call CFI for reservations and information.

Kathryn Lad (614) 592-3854

Community Food Initiatives, 94 North Columbus Rd., Athens, OH

Don't forget to ask about membership.

Ed Zaborski

OSU Extension Sustainable Agriculture In-Service Training

One of the first activities of the newly-formed OSU Extension Sustainable Agriculture Team is the development of a three-day in-service training program for agents and other team members. This three-day training program is being conducted jointly with agents from West Virginia University, led by Keith Dix. The goal of the program is to introduce agents to issues and topics in sustainable agriculture, and to research, activities and information resources in Ohio. Some of the topics and presenters include:

•Sustainable Agriculture in the U.S.: Where is it Heading and What is Extensions Role?

Dr Jerald DeWitt, Iowa State University

•Using Whole Farm Case Studies To Improve Farm Family Decision Making.

Dr. Steve Simmons, University of Minnesota

•Holistic Resource Management.

Dr. Deborah Stinner, The Ohio State University

•Research updates from various O.A.R.D.C. researchers.

•Farmers' organization updates.

Charles Eselgroth, President, Innovative Farmers of Ohio and

Molley Bartlett, President, Ohio Ecological Food and Farming Association

The program, scheduled for October 18-20, is being held at Malabar Farm State Park and at the O.A.R.D.C. campus in Wooster, and includes tours of Spray Brothers Farm and other farms in Ohio utilizing more sustainable farming practices.

This program is supported in part by the Sustainable Agriculture Research and Education Program, North Central and North Eastern Regions, under Chapter 3 (Extension Training) of the 1990 Farm Bill.

MIKE HOGAN - OSU Extension Agent & Co-Coordinator, Sustainable Agriculture Team

News from the Great Lakes Basin Comprehensive Farm Planning Network

THE ONTARIO ENVIRONMENTAL FARM PLAN

In 1992, the Ontario Farm Environmental Coalition released a farmers' analysis of the seventeen key environmental issues facing Ontario agriculture, called "Our Farm Environmental Agenda." As part of this agenda, the coalition is calling upon all of the farmers of Ontario to voluntarily complete Environmental Farm Plans. These plans demonstrate the commitment of Ontario farmers as stewards of the land. In the process of completing an Environmental Farm Plan, farmers raise their own awareness of the environmental quality on their farms, highlight environmental strengths on their farms, identify areas of environmental concern, and develop realistic goals and practical solutions to improve environmental conditions. The Environmental Farm Plan Workbook includes twenty three worksheets (developed by farmers and technical experts in a diversity of agricultural ministries), covering all aspects of the farming operation and properties (Please see sidebar for list).

The issues covered by the Environmental Farm Plan are relevant to Ohio farmers as well. Once farmers have the basic information needed to complete the plan, they can voluntarily take a close look at the environmental quality of their own farm and make their own decisions about solutions, if necessary. The Ohio Working Group for the Comprehensive Farm Planning Network is hosting a FREE training on the Ontario Environmental Farm Plan, on December 1, 1995, in Norwalk, Ohio. The training will last from 10 to 3 pm, and include lunch. All participants will receive their own copy of the Environmental Farm Plan Workbook, and instructions on how to work through the worksheets.

If you are interested in learning more about the Environmental Farm Plan and attending the one day training, please contact:

Anu Rangarajan, Dept. of Entomology, OARDC/OSU, phone 216-263-3725.

The topic areas of worksheets in the Environmental Farm Plan Workbook:

1. Soil and Site Evaluation
2. Water Wells
3. Pesticide Storage and Handling
4. Fertilizer Storage and Handling
5. Storage of Petroleum Products
6. Disposal of Farm Wastes
7. Treatment of Household Wastewater
8. Storage of Agricultural Waste
9. Livestock Yards
10. Silage Storage
11. Milking Center Washwater
12. Noise and Odor
13. Water Efficiency
14. Energy Efficiency
15. Soil Management
16. Nutrient Management in Growing Crops
17. Manure Use and Handling
18. Horticultural Production
19. Field Crop Management
20. Pest Control
21. Stream, Ditch and Floodplain Management
22. Wetlands and Wildlife Ponds
23. Woodlands and Wildlife

Also covered: How can I develop my own Action Plan?

-Introduction to the Action Plan

-Completing the Action Plan

-Barriers to action

-Action Plan

BMPs AREN'T ULTIMATE Rx

By George Boody (boody002@gold.tc.umn.edu)

Land Stewardship Project, 2200 4th St., White Bear Lake, MN 55110 • Phone: (612) 653-0618

Sometimes people confuse one prescription for an overall cure. In the case of agriculture, best management practices (BMPs) such as reduced- or no-till crop production, contour strips, terraces, manure lagoons and planned grazing are prescriptions, or tools, that could be a valuable component of a larger strategy for curing what ails farming. That larger strategy must take into account the whole environmental, social and economic picture, something that cannot be accomplished by adopting a few select BMPs.

But whole farm planning methods such as Holistic Resource Management (HRM) do take into account the pig picture. HRM is a goal-based decision-making process that allows a farmer to look at his or her operation as a whole, rather than as a series of problems to be solved in isolation of each other. BMPs can be a part of a whole farm strategy such as HRM, but they can't replace it.

Continued on page 12

Research and Education Efforts Recognized and Funded at Locust Grove Farms, a diversified family farm

Herman Beck-Chenoweth and Linda Lee, owners of Locust Grove Farm, have received two grants this year to support their research and education interests. Their research grant, entitled "Improving Manure and Eviscerate Management at Locust Grove Farms, a Small Poultry Operation," was funded through the Paul C. and Edna H. Warner Endowment Fund, through the Ohio State University Sustainable Agriculture Program. This fund was established to support on-farm research in sustainable agriculture and to encourage collaborations between OSU faculty and Ohio farmers. Linda and Herman also received a Producer-Initiated Sustainable Agriculture Grant to help them develop a free-range poultry production and marketing manual.

All photos ©Michael Coté

Debbie and Ben Stinner, OARDC researchers, and Herman Beck-Chenowith, free range poultry farmer, redefining scientist-farmer collaboration in Creola, Ohio

Locust Grove Farm, located in Vinton County of southeastern Ohio, produces range raised chickens, turkeys and eggs. Birds are mated, hatched, grown and slaughtered on the farm, and poultry is sold direct to consumers and restaurants. As the business has grown, production of manure waste in the laying house and eviscerate from slaughter have increased. Initially, there was only a small amount of these wastes produced, and eviscerate and blood could be re-fed or buried. Now, the increased production of these wastes warrants development of a composting scheme. The overall goal of this project is to develop a viable method for Locust Grove Farms to minimize the ecological and environmental impact of their manure and eviscerate wastes in an economically viable way, at the same time recycling nutrients on the farm and minimizing purchase of off-farm inputs.

Drs. Harold Keener and Dave Ellwell, (Agricultural Engineering Department, Ohio Agricultural Research and Development Center/OSU, Wooster, Ohio) will assist Linda and Herman in the development of their composting facilities. Harold became involved in composting research in 1987, after received a grant to develop composting methods for poultry manure. Harold has also been involved in developing manuals for composting of dead animals, including swine and poultry. Dave joined the composting research group at OARDC a few years ago, after working on solar pond research and plant growth modelling.

Linda and Herman's Producer-Initiated SARE grant will allow them the extra management flexibility they need to put together a production manual on free range poultry production and marketing. This manual will educate potential poultry producers about a viable, low cost method to produce, process and direct-market poultry and eggs from the farm within a geographic region. Because free-range poultry systems were largely replaced by confinement operations, much of the information related to this farming system was lost or buried. The currently available pasture poultry system lacks information about value-adding, is very labor intensive, and is basically a confinement operation on grass. Linda and Herman have spent many hours researching and developing a poultry range system, testing it, and now want to make this information available to other farmers. The topic headings in the manual will include land/financial needs, poultry stock selection, management of laying and meat flocks, brooding and rearing, pasture management considerations for poultry, slaughter, and turkey breeding and artificial insemination, marketing and value-adding. This poultry system was utilized in the past, and is presently used in Europe. Herman and Linda hope to build a network of farmers interested in free range poultry production, to share future ideas and innovations. This information may enable farmers with a few acres and a small amount of capital to start a successful enterprise which can keep them on the farm and part of their rural communities.

From ANU RANGARAJAN

HOUSE-SENATE CONFERENCE COMMITTEE SUPPORTS ATTRA FUNDING

In the early hours of the morning on September 28, the ag appropriations conference committee voted for $2.3 million to the portion of the USDA budget that contains two programs: ATTRA (Appropriate Technology Transfer for Rural Areas) and RTCDGP (Rural Technology and Cooperative Development Grants Program).

Although final allocation between the two programs is not known at press time, the bill retained Senate language which called for ATTRA to be funded up to $1.3 million. "We were very thankful that the committee decided to keep funding for both programs in our USDA category," said Teresa Maurer, ATTRA Project Manager. Jim Lukens, Sustainable Agriculture Program Manager for the National Center for Appropriate Technology, the nonprofit which administers ATTRA, added: "We are also very appreciative of those individuals and organizations active in sustainable agriculture who took precious time in a frantically busy week to express their support at key times to key people."

ATTRA's service goal is to "respond to farmers, information providers, organizations and communities seeking information that will help change, renew and support an ecologically and economically sound agriculture." ATTRA is available by calling 1-800-346-9140, or sending e-mail to: askattra@ncatfyv.uark.edu.

B M P ' s

Continued from page 10

Here in Minnesota, the need for understanding the distinction between a single prescription and an overall cure is becoming clear as we debate the future of the Minnesota River, the biggest contributor of pollution to the upper Mississippi and the dirtiest major waterway in this state.

A report by the Minnesota River Citizen's Advisory Committee graphically illustrates the environmental problems caused by monocultural row-crop farming. The report attempts to address ways we can end the sad cycle of degradation a watershed experiences when industrial agriculture and its emphasis on all-out maximum production takes over. In the Minnesota River valley, soil erosion from mono-cropped fields contributes nutrient-laden sediment to the watershed at an alarming rate. As a result, fish, wildlife and plant habitat is depleted, reducing the biodiversity of the area.

Mono-cropping has degraded the Minnesota River valley's human environment as well. Relying on the thin profit margins offered by, for example, corn-soybean farming, producers have been forced to get big, or get out. The result of an economy based on too few crops is a situation where entire rural communities can be devastated by a bad weather or market year. Just as the biodiversity of the natural environment is diminished, so too industrial agriculture has reduced the numbers of farms and towns in the region.

Some see BMPs as the answer.

Since the onslaught of fencerow-to-fencerow cropping, scientists and government officials have attempted to use various forms of environmentally-friendly BMPs to modify farming practices focused on maximizing production. These BMPs are part and parcel of the conservation compliance program implemented by the federal government.

Some of these recipe-book BMPs may have narrow, positive impacts on local ecosystems. The trouble is, they are often implemented under the assumption that maximum productivity of the existing crops should always be the bottom-line goal. Alternatives that shift that emphasis are not likely to be prescribed.

What about net profitability for the individual farmer? Quality of life for the farm family? Community impacts? Wider environmental influences?

One popular BMP being promoted to mitigate soil erosion is crop residue management. When applied to row-cropland, this means using reduced or no tillage. Reduced tillage and high residue levels on top of the soil will likely reduce excessive losses of soil in the Minnesota River valley. But will it reduce the amount of chemicals used in that soil? Not necessarily. In fact, some reduced-tillage practices increase chemical use to make up for lack of mechanical weed control.

And would widespread application of these and other singular technologies address longer term goals of having a thriving agricultural community?

Probably not. A community that relies on one or two crops is still at risk, regardless of how little erosion those crops cause.

Even Paul Johnson, chief of the Natural Resources Conservation Service, recognizes the limitations of singular BMPs in attaining a truly sustainable farming system overall.

"There's been fantastic progress within the past 10 years in reducing soil erosion," he told the Land Stewardship Letter. "But soil erosion is not the only issue and sometimes in trying to solve one problem we cause other problems. I think we need to take a look at things much more holistically."

Just changing the tools won't cut it if they're being wielded by the same old narrowly-focused attitudes. The Citizen's Advisory Committee identified "cultural factors involving attitudes, behaviors and perceptions of rural and urban landowners" as being fundamental barriers to achieving the kind of change necessary to help the river become swimmable and fishable.

The need to change behaviors goes beyond the adoption of a singular technology such as reduced tillage. It requires developing a holistic, long-range vision that integrates high quality of life, profitability for farms and rural communities as well as long-term health of the ecosystem.

That in turn requires farming systems that are based on decision-making that takes into account everything from what's best for the ecosystem to what's best for the family. It will require, as Donald Worster says, "thinking like a river." In other words, the impact of farming -- or any land uses, for that matter -- on our rivers and the watershed in which we live must become part of our consciousness and evaluation of what is appropriate.

The Citizen's Advisory Committee wisely calls for increasing financial assistance for whole-farm planning and for innovative partnerships that help farmers and other resource managers participate in total resource planning and decision-making.

The Land Stewardship Project wholeheartedly supports whole-farm planning and thus is providing courses in HRM. This decision-making system creates goals and then selects tools to help achieve them, rather than vice-versa.

When put in that context, BMPs become prescriptions for achieving the goals of an overall farming system, not the end in itself. That's not merely a band-aid, but rather a comprehensive cure we can all live with.

Did You Know?

- According to the 1992 Census of Agriculture, there are 1,925,350 farms in the United States. This is the first decade since 1850 that our Nation has had less than 2 million farms!
- 3.67 million people were working on American farms and ranches as of July, an increase of 5% over July of 1994. 1/3 of these workers were hired directly by farm operators at an average wage rate of $6.44 per hour, up from $6.21 last year. 19% of these workers were provided housing, 8% received meals, 9% received cash bonuses, 18% had health insurance provided, 7% were provided transportation and 17% received other benefits.
- That Harvey Firestone was an Ohio farmer who introduced the world to pneumatic rubber farm tires in 1936.
- More than a million American families depend on cattle for all or part of their incomes. Cattle are raised in every state of the union, with the most in Texas–148,000 operations–and the smallest number in Alaska–130 operations. Ohio has around 19,500 operations.

AN INVITATION TO PARTICIPATE IN A GLOBAL INFORMATION EXCHANGE PROCESS

A Collaborative venture between UNDP (United Nations Development Programme) & INFORUM (an international non-governmental organization)

The Sustainable Agriculture and Rural Development (SARD) FORUM is an electronic venue for the exchange of information among people and institutions everywhere that share an interest in SARD issues. If you are willing to share what you are learning and are interested in learning from others, you are invited to join the SARD FORUM and to participate freely in the exchange process.

To subscribe to one of these E-mail Lists you must have access to an electronic mail service that allows you to send mail to INTERNET addresses. If you can send and receive INTERNET mail you can participate in the SARD-FORUM information exchange.

SARD-FORUM is an information exchange process, not an electronic magazine where others do all of the work and you read the results! You can, of course, simply subscribe to the SARD-FORUM mail lists and download information from others, but the primary purpose of this electronic forum is to SHARE information.

If only a small fraction of the thousands of people involved in Sustainable Agriculture and Rural Develop (SARD) join and participate in using SARD-FORUM, a community of people that share a common interest can come together electronically. Anyone interested in Sustainable Agriculture and Rural Development that is willing to share what they are learning and is interested in learning from others is welcome to join the SARD-FORUM electronic community.

FOR MORE INFORMATION ON SARD-FORUM

Contact either:

Friedel von Mallinckrodt, Principle Technical Adviser, Sustainable Agriculture Programme, United Nations Development Programme, One United Nations Plaza, New York, NY 10017.
tel: 212-906-5032, fax: 212-906-6947, E-mail: friedel.mallinckrodt@undp.org

or Bob Hart, Executive Director, INFORUM, 611 Siegfriedale Rd., Kutztown, PA 19530. tel: 610-683-1408, fax: 610-683-8548, E-mail: bhart@undp.org

1995/6 Organic Farm Management Handbook

We are pleased to announce that the 1995/6 Organic Farm Management Handbook (2nd edition) edited by Nic Lampkin and Mark Measures is now available from (and published jointly by) the:

Welsh Institute of Rural Studies
University of Wales, Aberystwyth, Dyfed SY23 3DD
Tel: (01970) 622248 Fax: (01970) 622238
E-mail: nhl@aber.ac.uk
ISSN 1354-3768

Organic Advisory Service, Elm Farm Research Centre Hamstead Marshall, Nr Newbury, Berkshire RG15 0HR Tel: (01488) 658298 Fax: (01488) 658503
ISBN 1 872064 18 3
Individual copies: UK £10, Overseas £13 (including postage)
Trade and bulk orders (more than 5 copies): £6 plus postage
Payment should accompany orders for individual copies.

Further information about the publication, including prefaces for the first and second editions, foreword by Prof. John Nix (editor of the Farm Management Pocketbook published by Wye College), and the contents, can be obtained by contacting the above.

Here is a partial list of contents:

What is organic farming?; The nature of the organic farm business; Gross margins and organic farming systems; Marketing and the organic premium; Market outlets; Market developments in 1994/5; Organic food promotional events; Marketing and processing grants; Certification; Organic farming production standards and legislation; Developments in 1994/5; UK Register of Organic Food Standards; Soil Association Organic Marketing Co. Ltd.; Organic Farmers and Growers Ltd.; Bio-dynamic Agricultural Association (Demeter); Scottish Organic Producers Association Ltd.; Irish Organic Farmers and Growers Association; International Federation of Organic Agriculture Movements; Converting to Organic Farming; The conversion process; Conversion costs; Conversion planning; UK Organic Aid Scheme; Republic of Ireland organic farming and conversion support scheme; Crop Production; Crop husbandry principles; Permitted input costs; Crop production subsidies; Arable Crop Gross Margins; General information on, Wheat, Barley, Oats, Rye, Triticale, Beans; Field-scale Vegetable and Horticulture Gross Margins; Prices and marketing costs for, Potatoes, Carrots and parsnips, Beetroots and swedes, Leeks, Onions, Brassicas, Broad beans, Raspberries, Strawberries, Coldhouse cucumbers and tomatoes; Forage Crops and Green Manures; Forage/catch crops; Green manures/cover crops; Undersown forage; Grassland; Forage row crops; Livestock Production; Organic livestock husbandry; Livestock feed nutritional values and prices; Livestock Gross Margins; Milk production; Beef production; Sheep production; Pig production; Poultry production; Whole Farm Gross Margins; Whole farm output, variable costs and gross margins; Arable systems; Dairy systems; Beef/sheep systems; Specialist horticultural systems; Fixed Costs like, Land, Labour and machinery costs, Manure handling and storage, Buildings and other capital assets; Environmental Management; Environmental management and organic farming; Hedges, woodland and forestry; Landscape and nature conservation schemes; Agri-environment programme; Rural Environment Protection Scheme (Republic of Ireland); Environmental advice and further information; Sources of Further Information; Events; Publications; Organic Advisory Service (Elm Farm Research Centre); Centre for Organic Husbandry and Agroecology (Aberystwyth); Addresses; Index

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IFO ON-FARM RESEARCH in 1995

Ed Zaborski

All photos ©Michael Coté

Rich Bennett (center), farmer and IFO collaborator in a Whole Farm Planning SARE project, leads an Innovative Farmers of Ohio Farm Tour of his on-farm research in Napoleon, Ohio August 1995

IFO farmers are involved in a number of on-farm research projects this year. Look for reports on these projects at the IFO annual meeting in January, in IFO's upcoming 1995 On-Farm Research Summary, and in future newsletters, workshops and farm tours.

David Meyer of Putnam County set up a trial to look at the effect of liquid calcium applied in the row at planting for soybeans. The role of calcium in soil tilth and soil fertility has been a question on the minds of many Ohio farmers for many years, and we hope that David's trial is the first of many conducted around the state.

Richard Bennett of Henry County has a number of trials this year. In one trial, he is testing whether corn hybrids use nitrogen in different ways by comparing early and late nitrogen fertilizer applications to "workhorse" (Countrymark 693) and "racehorse" (Pioneer 3394) corn varieties. The answer could have implications for hybrid selection in production systems that make use of on-farm nitrogen from hay and cover crops, and on the use of nitrogen management tools such as the late spring soil test. In a second trial, Rich is evaluating annual medic as a weed-suppressing living mulch under corn.

This is the second year of this evaluation; Rich found last years results to be less than satisfactory. This is also the fifth year of Rich's long term comparison of corn-soybean-winter wheat rotations grown with and without hairy vetch and winter rye cover crops. Rich is particularly interested in learning more about the effects of cover crops on soil tilth, water infiltration, nitrogen availability, weeds and profitability. Rich also received funding for a Producer-Initiated Grant from the U.S.D.A. Sustainable Agriculture Research and Education Program. Collaborators on his project, "MEASURING NITROGEN BENEFITS OF HAIRY VETCH COVER CROPS FOR CORN PRODUCTION AND EVALUATING A PORTABLE SOIL NITRATE TEST KIT", include **Alan Sundermeir, Extension Agent and Acting Chair for OSU Extension in Henry County,** and **Ed Zaborski, a Researcher at the Ohio Agricultural Research and Development Center.**

Charles Eselgroth of Ross County is repeating an experiment he conducted last year and is comparing herbicide-only weed control in no-till soybeans to winter rye cover crops and reduced rate herbicides. After several years of experience with the cover crop system, Charlie is confident that he can maintain his productivity. His goal with this trial is to document the profitability of the system in comparison to a conventionally managed no-till soybean system. Last year, he found the cover crop system to be more profitable than the conventional system, even without considering benefits like added organic matter and greater protection from soil erosion.

Several farmers from around the state are collaborating in a U.S.D.A. grant to IFO and the Ohio State University entitled "EVALUATING SOIL ORGANIC MATTER AND SOIL BIOLOGY FOR IMPROVING SHORT AND LONG TERM MANAGEMENT OF SOIL NITROGEN SUPPLYING CAPACITY. The objective of this grant is to learn more about how soil nitrogen availability is affected by soil organic matter and soil biology, and how all of these are affected by different management practices. Much of the nitrogen taken up by crops does not come from fertilizer, but is produced by naturally occurring biological processes in the soil. OSU researchers are working with IFO farmers to monitor these processes in production fields with different crop rotations, and in on-farm trials comparing cover cropping, manuring and nitrogen fertilizer practices.

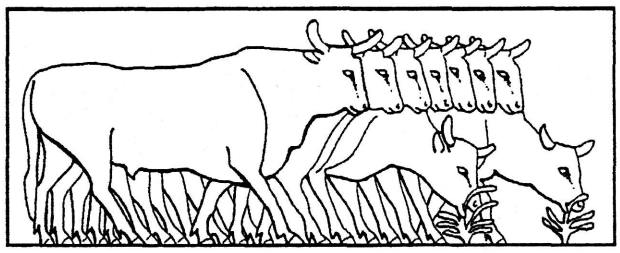
Farmers and researchers will also evaluate nitrogen management tools, such as the pre-sidedress soil nitrate test and the end-of-season stalk test, under Ohio's growing conditions. The ultimate goal is to improve the management of on-farm nitrogen resources by making their availability for crop production more predictable. This should reduce dependence on purchased nitrogen fertilizer inputs, and increase the reliability of production systems that capture nitrogen from the atmosphere, thus increasing their profitability and reducing the opportunity for groundwater contamination.

IFO farmers and OSU researchers are collaborating in another USDA-funded project to evaluate whole-farm planning tools.* Farmers include **Herman Beck-Chenoweth** and **Linda Lee**, who produce, process and market pasture-raised poultry, eggs and vegetables on their farm in **Vinton County,** ** **Joseph and Margaret Logan**, who operate a dairy in **Trumble County** and converted to management intensive grazing this year, and **Rich and Nancy Bennett** from **Henry County.**

**Other whole farm planning activities of interest include: Anu's article-"The Great Lakes Basin 'Comprehensive Farm Planning Network'" page 3 in the last newsletter; Anu's article "The Ontario Environmental Farm Plan"; and George Boody's BMP article in this newsletter on page 10.*

***See Anu's article-"Research and Education Efforts Recognized and Funded at Locust Grove Farms, a diversified family farm" on page 11.*

INNOVATIVE FARMERS of OHIO is a grassroots farmers network dedicated to promoting, through research, education and community building activities, an agriculture that preserves and strengthens the economic, social and environmental well-being of Ohio's farms, farm families and rural communities, and protects and improves the health and productivity of Ohio's land and waterways.



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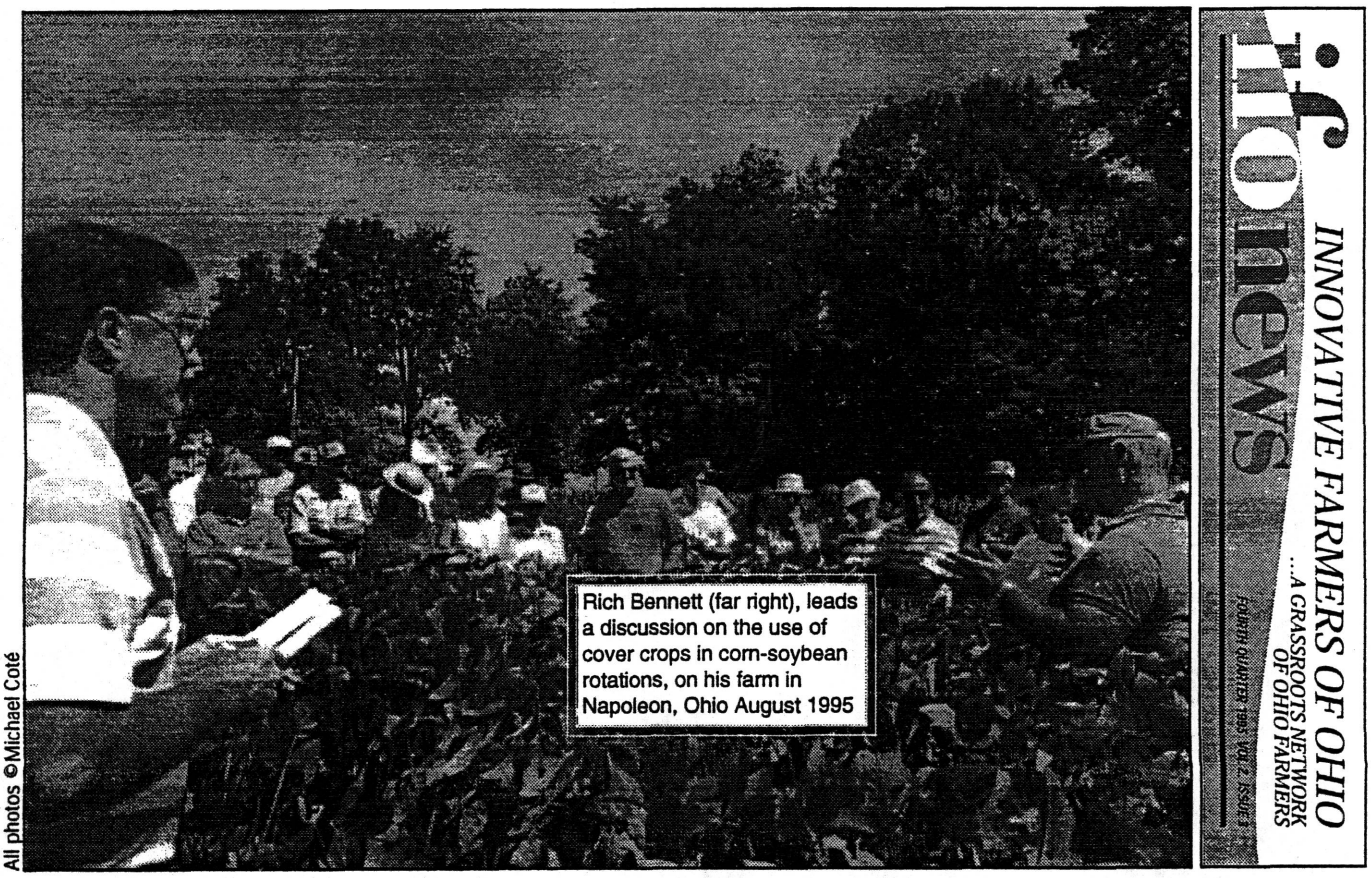

Rich Bennett (far right), leads a discussion on the use of cover crops in corn-soybean rotations, on his farm in Napoleon, Ohio August 1995

ifo news
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FOURTH QUARTER 1995 VOL 2 ISSUE 1