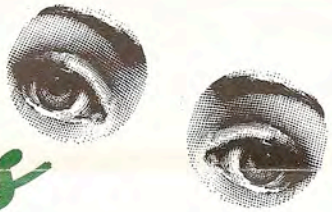
Volume 4, Number 1
January-February 1999

GLCI News

Grazing Lands Conservation Initiative

A voluntary partnership with private landowners

Looking for Answers



Southern Illinois Grazing Project

Submitted by Michael Stanfill, Illinois GLCI Coordinator

Graziers in southern Illinois are looking for ways to minimize the adverse impacts of hot, dry summers and cold, wet winters while optimizing production during the mild spring and pleasant fall seasons. Pastures in southern Illinois typically consist of tall fescue intermixed with ladino or red clover.

Generally, forage management systems consist of continuous grazing until cool season forages shut down, and then feeding hay until cool season grasses begin their fall growth. In the late fall, cattle are brought to feeding areas or pastures close to hay supplies where they are fed hay until early spring. This results in a high average cow cost of about $400 per head per year.

In order to address some of these concerns, a grazing demonstration project has been initiated at the University of Illinois Dixon Springs Ag Center. The Center is located in an area where improvements in grazing management and forage production have repeatedly been identified as priority resource concerns by local work groups during development of watershed plans and EQIP applications.

The Illinois Grazing Lands Conservation Initiative Committee, Natural Resources Conservation Service, University of Illinois Cooperative Extension Service, Shawnee RC&D Project, U.S. Forest Service (Shawnee National Forest), and Johnson County Soil & Water Conservation District have worked cooperatively in this effort. Representatives of each group have participated in development of goals and objectives, the plan of operations, installation of components, and operation of the project.

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Environmental Benefits of Grasslands

Cover photograph: Eastern gamagrass is an important part of the year-round forage system on the Dixon Springs Ag Center Demonstration Project in Southern Illinois.

The project will demonstrate how management-intensive grazing and low-cost improvements can enhance forage quality and grazing efficiency to enable graziers to lower operating costs, improve economic returns, enhance water quality, and improve wildlife habitat.

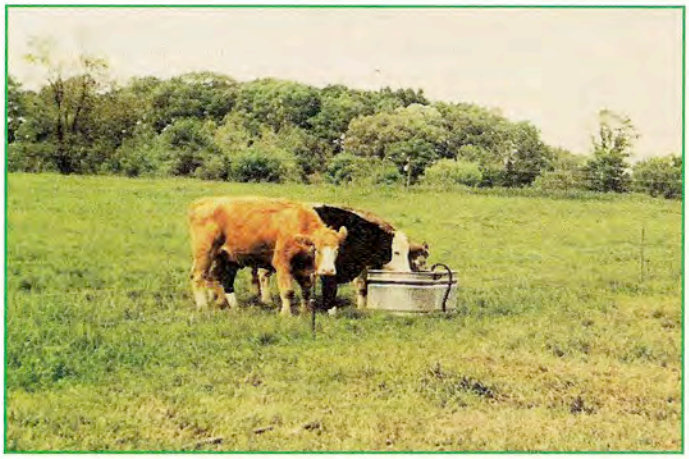
The demonstration is located on 36 acres of pastureland where tall fescue is the dominant forage species. It includes part of a special project area that was set up by Dr. C.J. Kaiser several years ago. In the 1970s, Dr. Kaiser established 8 acres of Eastern gamagrass and 9 acres of big bluestem. These warm season perennial grasses have been incorporated into the demonstration as key forage and hay resources. Legumes have also been frost-seeded to increase the diversity of available forage. Minimal rates of nitrogen fertilizer are applied to promote Eastern gamagrass growth and to stimulate tall fescue for late spring grazing and stockpiling.

In March of 1998, the demonstration area was stocked with 22 cows weighing an average of 1200 pounds each. The cows are bred for fall calving with a planned early weaning of 90 days. Dr. Frank Ireland developed this innovative early weaning program. Entering the third year of research, preliminary results indicate that early-weaned calves have outperformed traditionally weaned calves. Fall weaned calves will be evaluated to see if they perform as well. Early fall weaning will allow cows to re-breed during moderate weather on higher quality forage rather than during the midsummer heat on endophyte-infected tall fescue. Expected benefits are increased conception rates, reduced nutritional requirements, and lower winter feeding costs.

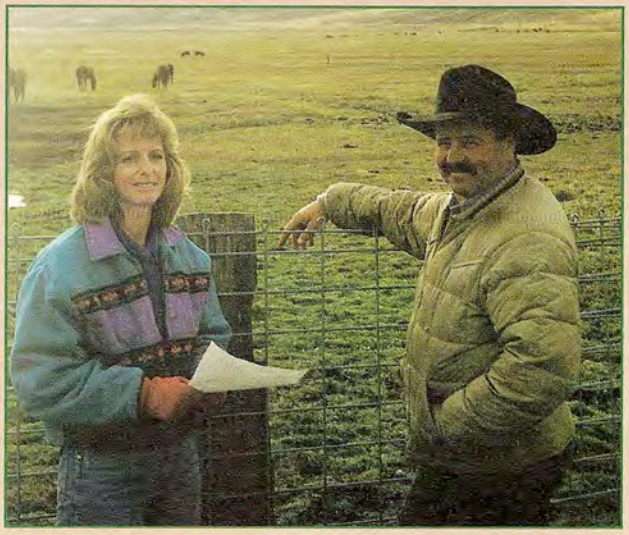
Another objective of the project is to reduce the dependency on hay by extending the grazing period with good quality forage. Hay still has to be fed from early September to mid October, from the end of the warm season growth period to the beginning of cool season grass growth. Utilizing warm season grasses and stockpiled fescue helps provide a year-round forage system. This minimizes hay expense and should greatly reduce machinery and labor costs.

So far, demonstration results have been very good. The 8 acres of Eastern gamagrass produced 29 round bales of hay weighing 1200 pounds with only 100 pounds of actual N fertilizer per acre. Big bluestem has responded very well to the rotational grazing. Prior to the demonstration, tall fescue had overtaken big bluestem on a large part of the area where it had previously been established. After only one grazing season, big bluestem is once again a significant component of the pasture, which has become a diverse mixture of warm season and cool season grasses. The cows are in good condition and will calve in mid September.

For more information contact Michael Stanfill, Illinois GLCI Coordinator for NRCS at 618/998-0493, or Tom Saxe, University of Illinois Cooperative Extension Service at 618/242-9310.



Six permanent paddocks can be subdivided as needed to regulate stock density, grazing frequency, or length of grazing period. Water is supplied to each pasture through an underground pipeline that delivers water to portable drinking troughs which are moved to the pastures being grazed.



Ceci Dale-Cesmat, NRCS Range Conservationist in Susanville, California, and Darrell Woods discuss the nutritional value of forage based on analysis of livestock fecal samples recently collected at his northern California ranch. Darrell uses the data to make decisions about his grazing system, supplemental feeding programs, and natural resource management on his operation. Ceci works with several other ranchers on similar projects.

Start Spreading the News...

Pastured poultry follow one paddock behind the beef herd in the rotational grazing system on the Carroll Farm near Cortland, NY.

New York State GLCI Hosts National GLCI Steering Committee

Submitted by Dick Warner and Dan Caudle

What do these words all have in common?
GLCI, pastured poultry, hydro-ram, tumble wheels, Rafters, sheep cheese, apple cider, graziers, Dinosaur Barbecue, and State Senator Hoffman?

Those who attended the recent National GLCI Steering Committee meeting in Syracuse, NY had the pleasure of learning a lot about all of those things and much, much more.

The New York State GLCI Steering Committee and Central New York were hosts to the National GLCI Steering Committee and invited guests at its fall business meeting October 25-27. More than 30 people from across the country participated in a diverse agricultural grazing tour on the Sunday before the business meeting began. Diversity was certainly evident at the Carroll Farm near Cortland where the group toured a variety of grazing systems established for the family's dairy, beef, and meat goat herds as well as their pastured poultry operations which include broilers, laying hens, and turkeys. The group got a close-up look at the Mobile Processing Unit designed, built and operated by Mike Carroll and his family. The unit allows for on-site processing of poultry produced on farms in the vicinity. Mike Carroll also showed and explained the Fleming Hydro-Ram Unit, which he installed to pump water from a stream to his grazing beef herd. Cost-share for the unit and associated streambank protection fence was funded through the Graze New York program with technical assistance provided by the Cortland County Soil and Water Conservation District.

The technical tour then continued on to the Lew-Lin Farm near Dryden, which is owned and operated by the Stuttle family. The group saw a successful dairy grazing system that went from a total confinement operation with 120 milking cows a few years ago to the current system with more than 180 milkers. The Stuttles attribute their success to improved fertility management, grazing system advancements, laneway improvements, water system development, and better barn facilities. As a result of his success, Lewie Tuttle now travels extensively, learning more about grazing management and sharing his experiences, knowledge, and techniques with others. On one of his trips, he first saw the tumble wheel fencing system that he now uses on his own farm to move fence quickly and with limited help.

After a full day of viewing grazing land management, exchanging information and sharing knowledge, the group went to Rafters Restaurant in Virgil. They enjoyed a variety of New York State agricultural products including sheep cheese, apple cider, and apples prior to enjoying a bountiful beef dinner. Tiffany King, the Cortland County Dairy Princess, gave the group an update on the dairy industry in New York and then showed the latest "Got Milk" television advertisements. Following the dinner, Darrell Emmick presented "Pioneer Grazier Awards" to several producers and others who have been instrumental in the development and implementation of successful grazing management program in New York. Darrell was completely surprised when he was presented with an appreciation award in honor of his dedication and tireless efforts on behalf of improved grazing management in New York. The award was presented by Dick Warner, representing a group of New York State graziers, and by Rick Swenson, NRCS State Conservationist.

The National GLCI Steering Committee held a business meeting in Syracuse during the next two days. A report on highlights of the meeting is found elsewhere in this newsletter.

Only those who stayed through the entire meeting can relate to Dinosaur Barbecue. It seems that this well-known Syracuse eating establishment was recommended to the group by steering committee alternate member Bill Tracy of Auburn, NY. After an interesting, but confusing drive through downtown Syracuse in search of the place, a group of about 12 found its way through the motorcycles, and waited about 45 minutes outside in the cold, windy weather for a table in this tiny, crowded place. The wait was worth it. Not only was the food great, but the group was joined at their table by New York State Senator Nancy Larraine Hoffman. Senator Hoffman owns a farm near Syracuse where she raises beef cattle. She also raises oxen as a hobby. She enjoys taking her ox team to fairs, parades, and other public events. She enjoyed talking to the group and learning about GLCI. She was very interested in and supportive of our efforts. Another new friend for GLCI!

Grazing lands in New York??? <u>You bet!</u> A truly unique experience.

GLCI Steering Committee Actions

1. Reviewed Articles of Association. A question was raised concerning Article III (requirement that National GLCI Steering Committee members must be producers who are involved in the management of private grazing lands). Some members wanted to eliminate this requirement. After extensive discussion, the Committee voted to retain the Articles of Association as written.
2. Several Steering Committee members agreed to contact Nature Conservancy to encourage them to renew their membership on the Committee.
3. Voted unanimously to invite American Farmland Trust to become an associate member of the Committee.
4. Discussed the Research and Education Policy endorsement by affiliated organizations. SRM has approved the policy. Other organizations indicated they would have similar approval within the next few months.
5. Voted unanimously to approve the Research & Education Policy as modified at the Committee's 1998 spring meeting in Washington, DC.
6. Discussed status of state GLCI coalitions. Voted to request that NRCS establish a permanent full-time GLCI Coordinator position in each NRCS region and, as it can be accomplished, to establish a permanent full-time GLCI Coordinator position in each state.
7. Discussed the status of the 1999 fiscal year appropriations. GLCI appropriations for 1999 remain the same as for 1998 (a $15 million earmark within the NRCS' regular operation budget).
8. Discussed the status of "Conservation of Private Grazing Lands" legislation. The Committee wants this existing legislation to be funded and implemented.
9. Heard a report from Mitch Flanagan concerning a letter from NRCS Chief Pearlie Reed to all state conservationists asking for a report on GLCI progress and activities.
10. GLCI accomplishments and accountability were discussed. Progress and activity reports for 1998 are being prepared at this time. The National GLCI Coordinator will provide the Committee with a full report showing accomplishments by state, region, and a national summary by January 1, 1999.
11. Developed a strategy for the fiscal year 2000 GLCI appropriations process. Jack Cutshall, Tom McDonnell, and Rooter Brite were appointed to a subcommittee to carry out this strategy.
12. Discussed GLCI logo contest. (See contest rules and information in this newsletter.)
13. The GLCI newsletter was discussed. Some changes and improvements were recommended. Future funding of the newsletter was discussed.
14. Pete Jackson reported on Montana GLCI activities including production of four videos on riparian area management.
15. Bud Purdy reported on the Idaho Rangeland Resource Committee and the Idaho GLCI Coalition.
16. All current officers were re-elected to serve in their same positions for 1999.
17. Terry Lynott led a planning session for the National Grazing Lands Conference to be held in Las Vegas, NV in December 1999.

Lewie Stuttle and his family operate a successful dairy grazing system on the Lew-Lin Farm near Dryden, NY.

AMAZING GRAZING

By Dick Warner
Resource Management Advocate
New York State GLCI

Amazing Grazing, too simple it seems
To use the grass that's free.
But costs were up and prices down,
So now the light I've seen.

Dividing land around the barn
Into paddocks large, then small.
The object is to keep the cows
On grass that's six inches tall.

With several rubber water tanks
And some plastic pipe we've laid,
We've found fresh water availability
To be more important than shade.

We move the cows at intervals
No longer than a day;
If pastures get over twelve inches tall
We make them into hay.

Amazing Grazing, too simple it seems
But I know it works for me,
And I'd rather move a little fence
Than give shots of BST.

If you'd like help with what you've heard,
Here's what I'd suggest...
Get in touch with the Grassland Committee,
Your County Extension or NRCS.

Pennsylvania GL-FCC Grazing Field Day

Submitted by Candace Burke, GL-FCC Vice Chair of Communications

The Pennsylvania Grazing Lands-Forage Conservation Coalition held a Grazing Field Day, Pasture Walk, and Tour on Bob Hockenberry's Project Grass beef farm near Huntingdon on October 23, 1998. A total of 52 people from 26 counties attended. A variety of speakers provided valuable information to participants.

Dr. Marvin Hall, from the Grazing Research and Education Center, led the pasture walk, identified the different forages on the farm, and discussed their nutritional values and uses. He explained that pasture is the least expensive source of feed for dairy cattle, beef cattle, and sheep. Knowing how to optimize the contributions of pasture to meet the nutritional needs of the animals can greatly reduce feed costs and enhance profitability. Dr. Hall said that well-managed pastures generally require less pesticide and fertilizer than cropland forages. Established pastures help stabilize the soil, and reduce erosion, runoff, and contamination of ground and surface waters.

J.B. Harold, Project Grass Coordinator, told the group that Project Grass representatives would visit farms and provide free consultation on how grazing can fit into the farming operation. Those interested in assistance should contact their local county Conservation District.

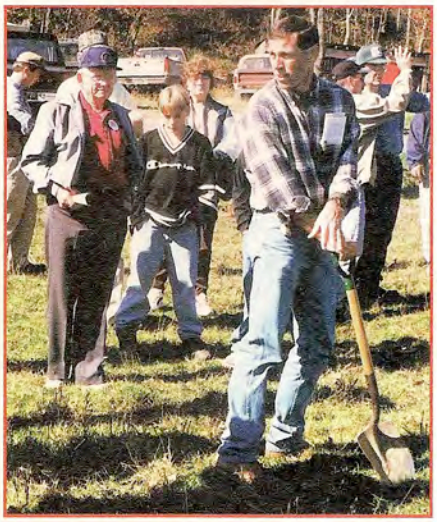
Nick Pinizzotto, Nutrient Manager for Conservation Districts in Armstrong, Butler, and Indiana counties, said that having a farm nutrient management plan can help protect farmers from potential problems. He also said that grazing management and nutrient management work hand-in-hand because fertilizer applications can be reduced, there is less nitrate buildup around the barn, and there is less runoff, erosion, and potential contamination of ground and surface waters.

Dr. Matt Sanderson, from the USDA-Agricultural Research Service in State College, discussed forage production and demonstrated several different types of grass gauges to estimate forage yields.

Al Rotz, with the Pennsylvania Pasture Lab, stressed that pasture systems for dairies need to be developed for the specific location they are in because of the wide variations across the state. He said that grazing dairy cattle do better than confinement cattle.

Tom Calvert, sheep producer and retired Project Grass Coordinator, talked about the profitability of grazing. He stated that grass is the cheapest feed you can grow. He discussed different types of electric fencing and the costs.

Bob Hockenberry talked about his Triple Creek Beef Farm and his grazing system. He grazes 90 head of beef cattle through 17 paddocks from April until the first of December. He demonstrated his method of rotating his cattle from one paddock to another.



DR. MARVIN HALL, Grazing Research and Education Center, discusses selecting pasture forages at the Pennsylvania GL-FCC Grazing Field Day.

GLCI Logo Contest ! ! !

The National GLCI Steering Committee is conducting a national contest to select a new design for the GLCI logo.

The new GLCI logo should be a symbol that represents the diversity, importance, and multiple benefits of our grazing land resources and reflect the stewardship of those who own and manage our grazing lands.

Chairman Bob Drake will appoint a subcommittee of National GLCI Steering Committee members to evaluate all contest entries. From these, the subcommittee will select 3 to 5 finalists. The finalists will be presented to the full National GLCI Steering Committee for review. The winner will be selected by September 1, 1999.

The winner will receive:

A Trip for 2 to the National Grazing Lands Conference in Las Vegas, NV from December 7-9, 1999

Trip Includes:

- round trip airfare
- three nights lodging at Bally's Hotel and Casino
- complimentary registration for the conference

Entries must be received no later than **July 1, 1999.**

Mail entries to:

Gary Westmoreland, National GLCI Coordinator
101 S. Main St.
Temple, TX 76501-7682

Environmental Benefits of Grasslands

Submitted by Herb Manig, American Farm Bureau Federation

Water quality improves with pasture quality

Water quality improves as grassland vegetation becomes denser and soil conditions improve. A University of Wisconsin study showed that grasslands are the best "crop" for reducing runoff, erosion, and phosphorus pollution. A similar study done at the USDA-Agricultural Research Service North Appalachian Experimental Watershed at Coshocton, OH showed that both surface and ground water from a grassland watershed was as good as or better than water from the adjacent pristine forested watershed. ***Grassland soils are an excellent biological filter*** to recover nutrients passing through the soil. Grass roots are active almost year-round and can recover nutrients from the soil that can leach out from other land uses.

Wildlife habitat & fish populations improve with controlled grazing

Because of their permanent and diverse plant cover, grasslands provide good habitat for wildlife as well as forage for livestock. Research has consistently shown that ground-nesting birds and small mammals thrive in properly managed pastures. Grazing lands can provide nesting habitat, cover, and food when adequate plant residues remain following grazing or mowing. Research has shown that grazing animals can be used to manage streambank vegetation to enhance fish populations. Studies in Minnesota and Wisconsin resulted in fish populations two to three times greater in streams inside pastures where cattle were being grazed in a management-intensive grazing system compared to pastures where cattle were totally excluded from the streams.

Grazing and the "Greenhouse Effect" *

The "greenhouse effect" is the warming of the Earth's atmosphere due to increased levels of some gases (primarily carbon dioxide) that allows incoming short-wave radiation from the sun to reach Earth, but absorbs the outgoing long-wave radiation from Earth's surface back to space. Grassland soils are a tremendous reservoir for storage of this organic carbon. Think of them as "carbon sinks". The top meter of soil worldwide contains almost double the amount of carbon contained in vegetation and the atmosphere.

Total organic carbon is twice as abundant in prairie soil as in forest soil. In grassland ecosystems, more than 90% of the organic matter produced is found in the roots, while more than half of the organic matter in a forest ecosystem is above-ground. Grasses and legumes use atmospheric carbon as building blocks for plant tissue. The unutilized and decomposed plant tissue is returned to the soil and becomes part of the carbon pool. This process helps reduce carbon dioxide levels in the atmosphere and reduces the "greenhouse effect". A permanent grassland ecosystem stores significantly more soil carbon than cropland areas do. ***Any initiative that supports grassland agriculture will, over the long term, support an effective carbon sink.***

* source: Ohio Livestock Environmental Assurance Program – Level 1

GLCINews

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Fort Worth, TX 76115

Contact these affiliated organizations:

American Farm Bureau Federation
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(847) 685-8785

American Forage and Grassland Council
Dana Tucker
1-800-944-2342

American Sheep Industry
Tom McDonnell
(303) 771-3500

Dairy Industry
John Roberts
(802) 462-2252

National Association of Conservation Districts
Robert Toole
(405) 359-9011

National Cattlemen's Beef Association
John Pemberton
(202) 347-0228

Society for Range Management
Craig Whittekiend
(303) 355-7070

Soil and Water Conservation Society
Craig Cox
(515) 289-2331, ext. 13

Visit the GLCI homepage at http://www.glci.org