



“Rising Plate Meter” Helps Farmers Manage Pasture

In order to get the maximum benefit from pasture, farmers need to be able to judge when it is ready to be grazed and make plans to ensure that an adequate supply of high quality forage is available for the entire grazing season. A tool developed in New Zealand and recently calibrated for the Northeast helps farmers with these sometimes difficult pasture management decisions.

The device is called a rising plate meter, and it relates a pasture's height and thickness to yield through a carefully calibrated equation. The rising plate meter consists of a thin aluminum plate mounted on a shaft by a gear connected to a mechanical counter. As the rod is lowered into the pasture, the plate is supported at a height determined by the sward's thickness, height, and the plants that compose it.

A commercially available version of the rising plate meter – the FILIP's Folding Pasture Plate Meter, currently available from Kencove; <http://www.kencove.com> – was calibrated on several New York dairy farms during 1997, 2000, and 2001. Previous research on rising plate meters indicated that they needed to be calibrated to account for different plant species and for different times of the growing season. Since the FILIP's meter was developed

in New Zealand, where there are different pasture types and growing conditions, separate equations were needed from those developed by the manufacturer. The calibration done on New York pastures found different



equations for pastures of different species and for different times of the growing season.

The primary use for the rising plate meter is to determine whether pastures are ready to be grazed and to make pasture budgeting plans. The equations report the pasture yield in pounds of dry matter per acre.

The meter gives the best results when it is used on pasture that will be grazed in the next several days. It is not accurate when used on recently grazed pastures or those with a lot of weed pressure (especially newly seeded pastures with areas of bare ground and annual weeds). Care should also be taken when using the rising plate meter on pastures different from those on which the meter was calibrated. Future research may show that separate equations are required for growing seasons of different types (i.e., wet years vs. dry years).

For more information on the rising plate meter contact Gary Fick at Cornell's Department of Crop and Soil Sciences, 607-255-1704, or e-mail gwf2@cornell.edu.

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Michigan State U. Project to Study Diversity on Farms and Ranches

In February 2003, Dr. Ed Mahoney of Michigan State University launched a study to (a) develop a database of farms and ranches with diversified operations, (b) determine the relative performance of diversified and traditional farms and ranches, and (c) better understand the characteristics of diversified farms and ranches. A central component of this study is an on-

line survey to collect data on farms and ranches that have added new enterprises, such as value-added processing, packaging, and recreational or educational opportunities, among others.

If you would like to participate in the MSU study through the on-line survey, the survey Web site is <http://www.prr.msu.edu/agriculture/DiversifiedSurvey.htm>.

New and Updated ATTRA Publications

Call 1-800-346-9140 today to receive your copy or visit our Web site at www.attra.ncat.org

NEW

[Managed Grazing in Riparian Areas](#)

This publication is designed to help farmers and ranchers identify and use locally appropriate grazing practices to protect riparian resources. Methods for protecting these environmentally fragile areas include keeping livestock from streambanks, properly resting pastures to restore degraded land, and determining the proper duration and season for grazing pastures. It examines adjusting general recommendations to fit your particular management objectives and environmental conditions. 28 pages.

[Organic Rice Production](#)

This publication focuses on the special considerations particular to organic, rather than conventional, rice production. It addresses topics such as weed suppression, soil fertility, insect and disease control, profitability, and marketing. 6 pages.

[Protecting Riparian Areas: Farmland Management Strategies](#)

Designed to help farmers understand what healthy riparian areas look like, how they function, and why they are important to the environment, this

publication also looks at the costs and benefits of riparian management. It includes tables to help evaluate protection strategies and discusses how watershed residents can work together to carry out those strategies. 36 pages.

[Organic Compliance Checklist for Producers](#)

This Checklist assists in assessing the compliance of your farm or ranch operation with National Organic Program Standards. The Checklist is divided into eight sections. Sections 2 through 7 correspond to the six categories of information required in the Organic Production and Handling System Plan, including Practices and Procedures, Inputs, Monitoring, Record Keeping, and Commingling and Contamination. 20 pages.

[Organic Cotton Production](#)

This publication examines the allowed materials and required practices for raising organic cotton. Among the considerations addressed are soil fertility, weed and pest management, and marketing. Organic manures and soil amendments and the most common diseases and pests are discussed, as are

marketing and the economics of organic cotton production. 24 pages.

[Small-Scale Poultry Processing](#)

This publication covers small-scale processing, both on-farm and in small plants. A growing number of small producers are raising poultry outdoors on pasture, processing the birds on-farm or in regional processing facilities, and selling the meat directly to customers at the farm or at a farmers' market. Access to processing is a critical issue for small producers. This publication covers each step of processing poultry and offers examples of mobile processing units. 40 pages.

UPDATED

- [DEER CONTROL OPTIONS](#)
- [KENAF PRODUCTION](#)
- [ORGANIC CULTURE OF BRAMBLE FRUITS](#)
- [ORGANIC SMALL GRAIN PRODUCTION](#)
- [RANGE POULTRY HOUSING](#)
- [SUSTAINABLE DRY BEAN PRODUCTION](#)
- [SUSTAINABLE TURF CARE](#)

No-Till Farming Can Increase Yields

(ENS) - No-till farming can help Great Plains farmers increase yields, diversify crops, and reduce soil erosion, according to a 12-year study conducted by the federal Agricultural Research Service (ARS) Great Plains Systems Research Unit – a research group of the United States Department of Agriculture – and Colorado State University.

The traditional method of tilling soil on the Great Plains calls for two-year rotations of wheat the first year and then not growing crops the second year.

Using no-till experiments on three farms in three diverse climate zones, the researchers found the best rotation is one that grows wheat one year, corn the following – or sorghum in warmer areas – and then leaves the field fallow the third year.

The researchers also found that a

four-year rotation of wheat, corn (or sorghum), and millet, and then leaving the land fallow the fourth year also works.

Grain production can go up by as much as 70 percent in the three- and four-year systems, and it can increase profit by 25 to 40 percent over the traditional wheat fallow model, the researchers said.

Similar results were found at the ARS Central Great Plains Research Station in Akron, Colorado.

The scientists found that farmers can plant corn, sorghum, millet, or forage if soil moisture in the spring is good and the forecast for summer rainfall is average or above.

Rainfall can be scarce in Colorado, but no-till helps capture precipitation and retain the moisture in the soil better than traditional farming, the scien-

tists said. No-till farming, they said, also builds up soil organic matter levels and cuts down soil erosion.

NEW

Ask An Expert On-Line

You can now submit your sustainable agriculture questions on-line through "Ask a Sustainable Agriculture Expert," the latest addition to our evolving ATTRA Web site, <http://www.attra.ncat.org>. Farmers, ranchers, Extension and NRCS personnel, educators, and others involved in commercial agriculture in the U.S. are welcome to ask our staff of agriculture specialists questions not covered in our ATTRA publications and receive free, individually researched responses.

How Sustainable Ag Programs Fared in Congress

Before beginning its long Labor Day recess, the House completed its FY04 agriculture appropriations bill, but the Senate bill had just emerged from committee. Following an expected vote by the Senate in early September, a House/Senate conference committee will iron out any differences between the two bills before returning them to their respective houses for approval.

The following chart of selected programs was taken from a very useful table provided by Ferd Hoefner of the Sustainable Agriculture Coalition. The full table with additional explanation – including the complex status of programs such as CSP, EQIP, FPP, VADG, WHIP, WPR, and others – can be found at <http://www.sustainableagriculture.net/FY04.php>.

**Sustainable Agriculture Coalition's
FY 04 Agricultural Appropriations Chart
(\$ millions)**

Program	Bush FY04 Budget	HOUSE FY04 bill	SENATE FY04 – as approved by committee
SARE	9.2	13.7	13.7
SARE-PDP	3.8	4.8	4.8
ORG TRANS	0.5	2.1	2.1
ATTRA	2.0	2.5	2.5
RCDG	6.5	6.5	6.5
RBEG	44.0	44.0	48.0
FSMIP	1.35	1.35	3.4
NOP	1.2	1.2	1.5
FMNP	20.0	20.0	25.0
GLCI	21.5	23.5	23.5
RC&D	49.9	52.9	51.0

KEY - Program Name
(Lead Agency at USDA)

SARE - Sustainable Agriculture Research and Education (CSREES)
SARE-PDP - SARE's Professional Development Program (CSREES)
ORG TRANS - Organic Transition Program (CSREES)
ATTRA - Appropriate Technology Transfer for Rural Areas (RBCS)
RCDG - Rural Cooperative Development Grants (RBCS)
RBEG - Rural Business Enterprise Grants (RBCS)
FSMIP - Federal-State Market Improvement Program (AMS)
NOP - National Organic Program (AMS)
FMNP - Farmers Market Nutrition Program (part of the WIC program) (FNS)
GLCI - Grazing Lands Conservation Initiative – part of Cons Ops (NRCS)
RC&D - Resource Conservation & Development (NRCS)

Events

International Conference of Agricultural Science and Technology.
Oct. 12-15. Houston, Texas

The theme: "Toward a Sustainable Global Future." The 2003 ICAST will bring together scientists, academics, government policymakers, business and industry leaders from around the world with the goal of sharing knowledge, building consensus, and developing leadership to effect change for a common sustainable global future through agricultural science and technology. Contact: secretariat@2003icast.org.

BioCycle Conference on Renewable Energy from Organics Recycling.

Nov. 17-19. Millenium Hotel. Minneapolis, Minnesota.

This three-day conference will explore the impact of renewable energy from organics recycling on creating power, improving soils, and cleaning up our water and air. The conference is designed for project managers, researchers, consultants, policy makers, investors, and business developers who are establishing a role in renewable energy. For more information and to review the list of co-sponsors, visit <http://www.jgpress.com/Conferences/energy2003/energy2003.html>. Contact: Rill Ann Goldstein Miller, The JG Press, Inc., 419 State Ave., Emmaus, PA

18049. 610-967-4135, ext 22; fax 610-967-1345.

PASA 13th Annual Farming for the Future Conference. Feb. 5-7, 2004. State College, Pennsylvania.

The Pennsylvania Association for Sustainable Agriculture (PASA) 13th annual Farming for the Future Conference, State College, PA. "Pathways to Prosperity: The New Face of Agriculture". Call 814-349-9856 or go to <http://www.pasafarming.org> to receive the complete brochure. Contact: Heather House Project Coordinator, PASA. heather@pasafarming.org, 814-349-9856, ext.2.

NRCS Updates on 2002 Farm Bill Programs

Grassland Reserve Program

The Notice of Funding Availability for the Grassland Reserve Program was published in the Federal Register on June 13, 2003. Contact: Leslie Deavers, NRCS Natural Resource Manager, at 202-720-1067, or leslie.deavers@usda.gov.

Income Limits

The Adjusted Gross Income final rule was published in the Federal Register on June 4, 2003. Contact: Anne

Dubey, Acting Director, NRCS Resource Conservation & Community Development Division, at 202-720-2847, or anne.dubey@usda.gov.

Technical Service Provider Assistance

An amendment to the TSP interim final rule was published in the Federal Register on July 9, 2003. This amendment establishes an approval process for public agencies to be TSPs separate from the certification process.

The TSP policy, handbook, and amendment to the rule are available on the NRCS Web site at <http://techreg.usda.gov/>. Contact: Melissa Hammond, NRCS TSP Group Leader, at 202-720-6731, or melissa.hammond@usda.gov.

As of July 24, 2003, nearly 1,700 entities have registered through the TechReg Web site at <http://techreg.usda.gov>, of which 868 have been certified as technical service providers.



Appropriate Technology Transfer for Rural Areas
P. O. Box 3657 • Fayetteville, AR 72702
1-800-346-9140
1-800-411-3222 (Spanish only)

A project of the National Center for Appropriate Technology

“Our Readers Ask . . .”

Q.: Where can I find information about effective organic controls for fleas in chicken coops? I’ve been told I can use pyrethrum.

T.C.
Washington

Answer: Pyrethrum is fine to use, just expensive. The resources listed below include both general and specific information on several different types of fleas.

The material from “Parasites” in the Chicken Encyclopedia discusses the use of diatomaceous earth for flea control in poultry.

The e-mail from Permaculture-Oceania discusses the use of Vaseline to kill fleas on chickens. The article “Stickfast fleas of poultry” states that the application of organic oil-based products will also suffocate attached fleas.

Resources:

Anon. 2003. Parasites. Chicken Encyclopedia. 6 p. <http://www.geocities.com/KelliAnn293/parasites.htm>

Bio-Integral Resource Center. 2003. Introduction. 2 p. <http://www.birc.org>

Crapp, Bob. 2000. Stickfast fleas of poultry. Department of Primary Industries, Queensland, Australia. 3 p. <http://www.dpi.qld.gov.au/poultry/5158.html>

Wright, Felicity. 2002. Re Stick fast fleas on poultry. 1 p. <http://lists.cat.org.au/pipermail/permaculture-oceania/2002-August/000538.html>

Correction

In the January/February 2003 issue of *ATTRAnews*, Volume 11, Number 1, we erroneously reported that the intensively-grazed Dave and Jenny Scott dairy in southwestern Montana had realized a savings of \$27,000 a year by grazing its entire 29 acres and purchasing hay rather than growing it. In fact, the Scotts have seen a savings of \$10,000 a year using their system. The figure cited in *ATTRAnews* was an estimate developed by a Montana State University agricultural economist, based on beef cattle production using the Scotts’ program.

We also erred in reporting that the Scotts’ fields produced 6.5 tons of forage per acre. They produce 6.0 tons.

We apologize to the Scotts and to our readers for these errors.

ATTRAnews

Teresa Maurer
ATTRA Project Manager
Paul Williams

ATTRAnews Editor
Gail Hardy, Art and Production
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ATTRAnews is the bi-monthly newsletter of Appropriate Technology Transfer for Rural Areas. It is distributed free throughout the United States to farmers, ranchers, Cooperative Extension agents, educators, and others interested in sustainable agriculture. ATTRA is a primary source of information about sustainable agriculture in the United States. ATTRA is funded through the USDA Rural Business-Cooperative Service and is a project of the National Center for Appropriate Technology (NCAT), a private, non-profit organization that since 1976 has championed sustainable technologies and community development that protect natural resources and assist people, especially the economically disadvantaged, to become self-reliant.

