

# Accurate Moisture Measurement Is Key To Preserving Forage

ITHACA, N.Y. — The moisture content of stored forage is the key to successful preservation of silage and hay. A bulletin from the Natural Resource, Agriculture, and Engineering Service, Forage Moisture Determination, describes methods of obtaining forage samples and measuring their moisture content on the farm or in the laboratory.

Estimating the moisture content of forage by appearance, smell, and feel usually results in underestimates of silage moisture content and overestimates of hay moisture content. If the moisture level is underestimated, silage can spoil or hay can catch fire. If the moisture level is overesti-

mated, silage, and hay lose some of their nutritional value.

Forage Moisture Determination, NRAES-59, is intended for forage producers, extension specialists, consultants, and researchers. The 28-page book contains guidelines for taking representative forage samples, discussions of on-farm and laboratory methods of moisture determination, a glossary, a table of U.S.-to-metric conversion factors, a table summarizing features of the described methods, and a list of references. It is illustrated with 11 drawings and graphs.

The bulletin was edited by Ronald E. Pitt, a former pro-

fessor of agricultural and biological engineering at Cornell University. Its authors are Pitt; Gerald H. Brusewitz, Department of Agricultural Engineering, Oklahoma State University; Larry E. Chase, Department of Animal Science, Cornell University; Michael Collins, Department of Agronomy, University of Kentucky; Stephen R. Delwiche, Beltsville Agricultural Research Center, USDA-ARS; James W. Garthe, Department of Agricultural and Biological Engineering, Penn State; and Richard E. Muck, U.S. Dairy Forage Research Center, USDA-ARS.

Forage Moisture Determination, NRAES-59, is avail-

able for \$6 per copy plus shipping and handling from NRAES, Cooperative Extension, P.O. Box 4557, Ithaca, NY 14852-4557. Shipping and handling for one copy is \$4.25 within the continental U.S. New York residents add 8 percent sales tax (calculated on both the cost of publications and the shipping and handling charges). If ordering more than one book or if ordering from outside the U.S., contact NRAES for shipping rates and possible quantity

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## Forage Information, PFGC And AFGC On World Wide Web

Many of Penn State's forage fact sheet publications and connections to other forage related sites can now be accessed on the web at [www.forages.psu.edu](http://www.forages.psu.edu). The PFGC also has its home page at this site. Take a look sometime!

The AFGC Website can be accessed through the PSU forage site or directly at [www.afgc.org](http://www.afgc.org). The AFGC site provides information about the many AFGC activities as well as links to affiliate council Websites across North America.

## Conference Report Covers All Aspects Of Silage Production

ITHACA, N.Y. — Silage is a central component of animal agriculture in temperate climates, with most farms feeding 50-100 percent of their forage in the form of silage. Because silage is the most unstable feedstuff producers grow and handle, providing high-quality silage is a constant challenge. The publication *Silage: Field to Feedbunk* offers practical recommendations regarding mechanical and managerial factors involved in meeting that challenge.

*Silage: Field to Feedbunk*, NRAES-99, is the proceedings of a February 1997 conference in Hershey, where over 490 producers, producers' advisors, industry representatives, and researchers met to discuss all aspects of silage production and use. The publication offers 36 papers divided among eight key areas: plant and field issues; harvesting high-quality silage; storage methods; additives management; mycotoxins and spoilage; quality evaluation; feeding; and silage system management.

The proceedings will be a valuable resource for agricultural and industry professionals including silage producers and users; extension and university educators; agronomists; crop consultants; feed, seed, and equipment sales representatives; plant breeders; animal scientists; agricultural engineers; nutritionists; veterinarians; IPM professionals; and analytical laboratory staff.

Conference sponsors were Agway Agricultural Products; the American Dairy Science Association; the American Society of Agronomy; Cargill Animal Nutrition Division/Cargill Hybrid Seeds; the Crop Science Society of America; Pioneer Hi-Bred International, Inc.; Soil Science Society of America; USDA Agricultural Research Service; and the Natural Resource, Agriculture, and Engineering Service (NRAES).

*Silage: Field to Feedbunk*, NRAES-99, is available for \$30 per copy plus shipping and handling from NRAES, Cooperative Extension, P.O. Box 4557, Ithaca, NY 14852-4557. Shipping and handling for one copy is \$6 within the continental U.S. New York residents add 8 percent sales tax (calculated on both the cost of publications and the shipping and handling charges). If ordering more than one book or if ordering from outside the U.S., contact NRAES for shipping rates and possible quantity discounts. Orders from outside the U.S. must be prepaid

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