



Farm Profile: Is a Montana Dairy Farm the Model for Western Range–Beef Producers?

Dave and Jenny Scott have run a 50-cow Guernsey dairy on 29 acres of irrigated land in southwestern Montana for 20 years. They use an intensive grazing rotation—using all their land for pasture and none for hay production. All their 29 acres are in brome grass pasture, which produces 6.5 tons of forage per acre annually.

The Scotts move their 50 milk cows to a fresh paddock twice a day, after each milking. Right behind them follow another 30 or so dry cows and heifers. The dry cows and heifers are also moved twice a day, staying just behind the milk cows through the whole rotation.

The Scotts reseed 4 of their 29 acres to new pasture every year, so that in a 6-year period all of their pasture has been renewed. It is on the remaining 25 acres that the grazing rotation takes place. With the size of their paddocks and the twice-daily move to fresh ground, it takes 19 days to complete the rotation.

In addition to the cows and heifers, the Scotts run a small flock of sheep for grazing diversity, particularly for weed control.

When the Scotts first started their dairy operation, like most livestock producers in Montana, they raised and put up alfalfa hay from their irrigated fields. After a season when their hay was rained on heavily for six weeks, they decided the expense of making hay was not worth the risk to their machinery, so they opted to use their

land for grazing rather than hay. Ever since, they simply buy the hay they need for the winter months. Working with an ag economist from Montana State University, they've determined that by buying \$80 hay and using all their land for pasture, they are saving approximately \$27,000 per year.



With any given parcel of ground having only 19 days free from cows, parasites (worms) are a problem in the herd. The Scotts do use dewormers on a regular basis. The other main problem the Scotts have with the intensity of their system is a build-up of soil phosphorus. The Scotts used to apply all the dairy manure to their land, but with frequent soil testing they began to see their phosphorus levels rise. Now they compost the dairy manure and use only about half of it on their pastures for fertility, selling the other half. This has helped correct the soil phosphorus problem. They continue to test the soil several times during the grazing season.

Achieving a high plant population is very important in the establishment

of their newly seeded pastures. They've experimented with different pasture mixes and varieties, and have settled on a straight stand of Regar brome for consistently high yields. Recently, they have started trying a newer brome variety. In order to get the plant population they need to keep their yields in the

six-plus tons per acre range, they use an herbicide for broadleaf weeds in the establishment year. If weed pressure reduces the plant population at the outset, all the water and fertility in the world won't produce the tons of forage they need.

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Staff Spotlight: Rex Dufour

When NCAT decided to locate an ATTRA office in California in 2001, it was an easy decision to have Rex Dufour manage it. Since joining the ATTRA project in 1994 as an Agriculture Specialist in Integrated Pest Management, Rex had steadily proven his value as a manager as well as an agriculturist. But that really came as no surprise. Rex had spent the decade before he came to ATTRA developing agricultural projects in parts of the world where language barriers and bad roads paled next to land mines and insurgencies.

From 1985 to 1990, Rex was in Thailand, first as an employee of the

Royal Thai Government's Department of Agricultural Extension, later as a Peace Corps volunteer, and eventually as a Program Officer for the United Nations Border Relief Operation. In 1990, Rex took over the Lao-American Integrated Rural Development Project in Vientiane, Laos, where he managed the first U.S. government development project in Laos since America's withdrawal from Vietnam.

Since joining the ATTRA project, Rex has developed an IPM plan for the Upper and Lower Klamath Falls National Wildlife Refuge on the California-Oregon border and authored major publications on biointensive IPM and farmscaping to enhance biological control of pests. Most recently, he led the California office's successful effort to win a \$51K grant from the Risk Management Agency to develop a pilot program of risk-management workshops designed for Latino farmers.

"Risk management in the past," Rex says, "was a euphemism for crop insurance." But the approach by the California office goes well beyond that, examining and addressing the reasons why Latino farmers have not benefited from risk-management practices and expanding the concept of risk management to include production and marketing.

California's vast and diverse agriculture represents equally expansive challenges and opportunities for sustainability, and we are fortunate to have Rex leading our efforts there. His wide experience and thoughtful approach have proved to be — as we knew they would — solid cornerstones for furthering sustainable agriculture in the Golden State.

And if you're going out for Thai food, take Rex along. He knows how to ask for it really hot.

Events

February 27–March 1. Upper Midwest Organic Farming Conference. LaCrosse, WI. 715-772-3153. <http://www.mosesorganic.org>

March 3–5. BioCycle West Coast Conference 2003, "Composting, Organics Recycling and Bioenergy: New Realities, New Opportunities," Los

Angeles, CA. Contact: The JG Press, 419 State Ave., Emmaus, PA 18049. 610-967-4135, ext. 21. E-mail: biocycle@jgpress.com. <http://www.biocycle.net/Conferences/WC2003/RegForm.html>

March 7–8. Michigan Organic Farming Conference. Michigan State University, East Lansing, MI. Contact:

517-432-0049. www.moffa.org.

March 12–13. The 3rd Annual New England Direct Marketing Conference & Trade Show. Holiday Inn Boxborough Woods, Boxborough, MA. Contact: Charlie Touchette, 413-529-9100, info@massfarmstands.com.

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Two small, one-span center pivots are at the core of the Scott's pasture rotation. With the more frequent, light water applications made possible by the pivots, the Scotts are able to move the cows right behind the pivot span. They use wedge-shaped paddocks and moveable electric fence. It only takes one person a few minutes to move the fences twice a day. The Scotts also have some hand-line sprinklers, which apply more water less frequently than the pivots. The hand-line requires a three-day wait before grazing, so the cows don't compact the wetter ground.

The Scotts have run Guernsey cows from the beginning of their operation. Recently they have bred their cows to Jersey bulls to expand their herd genetics. Dave says the only dairy breeds in

the US getting enough attention to keep the genetics robust are the Holstein and the Jersey breeds. There simply aren't enough Guernsey bulls any more to assure adequate genetic diversity.

Dave Scott sees this type of system holding promise for Montana's cow-calf beef operators. He believes that beef producers can cut their costs and stay profitable if they quit raising hay on their irrigated ground and, instead, intensively graze it. They, like the Scotts, would buy the hay they need for their winter feeding. If they can save the kind of money the Scotts save every year by grazing instead of producing hay, they just might be able to stay economically viable.

Dave would like to help Montana's beef producers learn about his type of

system. Some Montana beef producers use intensive grazing rotations on their rangeland pastures, but not typically on their irrigated fields like the Scotts. This is the shift Dave would like to help them make. With this in mind, he plans to start offering his services on a consulting basis.

The youngest of the Scott's children will be starting college soon. With none of the kids inclined to take over the dairy operation, the family would like to sell the herd. Dave and Jenny plan to raise sheep — 300 — on their 29 acres instead of cows. That way, when Dave is on the road working with cattle ranchers, Jenny will be able to handle the sheep by herself. With this shift, they anticipate the farm will continue to provide the bulk of their income.

AgEnergy Briefs

Survey Dispels Myth That Tourists Are Put Off By Wind Farms

A 2002 survey by the British Wind Energy Association and the Scottish Renewables Forum found that nine out of ten tourists to some of Scotland's top beauty spots say the presence of wind farms makes no difference to them when choosing a holiday destination. And eight out of ten said they would like to visit a wind farm during their stay.

"This survey is good news for both wind energy and rural communities," says Alan Mortimer, Head of Wind Development at ScottishPower, the U.K.'s largest wind-farm developer.

Rob Forrest, Chief Executive of the Scottish Renewables Forum sees only

winners in wind energy: "We can use these resources to benefit the economy, the environment, and now tourism."

USDA Awards \$5-Million For Ethanol Projects

Twenty-two proposed ethanol projects in 14 states will be sharing \$5-million in grant funds aimed at fostering ethanol as an alternative energy source that can boost farm income and increase jobs in rural areas. Iowa received the largest amount of the funds—\$2.2-million—for projects ranging from feasibility studies for dried distiller's grain as an ethanol feedstock to a 40-million gallon ethanol plant. The grants come from the USDA Value-added Agricultural Prod-

uct Market Development program, part of the 2002 Farm Bill.

USDA Grant Goes To Montana Growers For Study Of Oil Seeds

The Montana Peaks and Prairies Oil Seed Growers Cooperative has garnered a USDA Rural Development grant of \$46,300 to study the feasibility of producing oil seed crops for biodiesel feedstocks. Working with Sustainable Systems LLC—a Missoula-based renewable energy research, development, and commercialization company—the co-op hopes to create an integrated supply chain and a steady market for their oil seed crops.

NCAT Awarded Grant for Risk-Management Workshop

On September 24, 2002, the NCAT office in Davis, California, signed a \$51,186 contract with the Risk Management Agency to create a pilot program of risk-management workshops designed specifically for Latino farmers.

According to Rex Dufour, California Project Manager, "Risk management in the past was a euphemism for crop insurance, and projects to help farmers with risk management were based on that premise." The approach by the California office is different—in some aspects, in fact, unique.

As a pilot program, the "Non-Traditional Risk Management Outreach" project will seek first to evaluate where the participating farmers stand in regard to current risk-management strategies. Then the workshops will focus on those barriers that prevent the farmers from understanding and implementing risk-management plans that go beyond crop insurance. Indeed, many of the participants are at present unable to benefit even from crop insurance, because they lack the record-keeping skills necessary for recording data used in filing claims.

All three of the NCAT staff in the

California office—Rex Dufour, Martin Guereña, and Ann Baier—have experience working overseas, in Asia and Central America. They see many similarities between the groups they worked with there and the those they will serve in California. Both groups, they say, are often disenfranchised, underserved by government programs, and outside the cultural mainstream.



As a result, the California team will be using approaches they found successful outside the U.S. to develop the workshops for their client farmers here. In this, the project is certainly unique.

The NCAT project, unlike most risk-management approaches of the past, will be guided by the themes of community involvement, flexibility, and mutual learning. Not only will the

participants make the decisions about what practices to adopt, the NCAT team will look to the communities for local knowledge and strengths that can benefit the workshops. Based upon what the participants want and what the community has to offer, the nature of the workshops will change, adapting in ways that best realize the goals of risk management.

The project is currently working with 11 Latino growers who are all members of an organic marketing cooperative. This winter, the project will survey the participants and develop the initial curriculum. The first workshops will begin in spring 2003. Among the strategies they will explore are alternative marketing (including CSAs, institutional and organic markets), improved record keeping, and crop diversification.

For more information about the times and locations of the workshops, contact the NCAT California office:

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A project of the National Center for Appropriate Technology

ATTRAnews Goes Bi-Monthly and Electronic

This issue of ATTRAnews marks the beginning of a new year and a new beginning for the newsletter. From now on, ATTRAnews will appear bi-monthly, bringing you six issues a year of expanded coverage. Among the new features you'll be seeing are releases from the USDA, Farm Bill updates, reports on activities from Sustainable Agriculture Working Groups around the country, and a question-and-answer column, "Our Readers Ask . . ." that offers examples of the kinds of questions we ad-

dress every day.

In the past, you could get ATTRAnews only in the mail or by downloading it from our Web site. You still can, but now you can also sign up to receive it by e-mail, by going to our new, redesigned Web site, <http://www.attra.ncat.org>, and clicking on the "Newsletter" button, or by giving us a call at our toll-free number, 1-800-346-9140.

We are excited about these changes and hope that you will let us know what

you think of them. And if you'd rather write, send your letter to Paul Williams, editor, ATTRAnews, NCAT-ATTRA, P.O. Box 3657, Fayetteville, AR 72702, paulw@ncatark.uark.edu.

ATTRAnews

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ATTRAnews is the quarterly 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.



New and Updated ATTRA Publications

- A Brief Overview of Nutrient Cycling in Pastures (new)
- Anaerobic Digestion of Animal Wastes: Factor to Consider (new)
- Cucumber Beetles: Organic and Biorational IPM (new)
- Drought Resistant Soil (updated)
- Farmers' Markets (updated)
- Grain Processing: Adding Value to Farm Products (updated)
- Label Rouge: Pasture-Based Poultry Production in France (new)
- Organic Farm Certification and the National Organic Program (updated)
- Protecting Water Quality on Organic Farms (new)
- Scheduling Vegetable Plantings for Continuous Harvest (new)
- Solar-Powered Livestock Watering Systems (new)
- Sustainable Agriculture: An Introduction (updated)
- Sustainable Farming Internships & Apprenticeships (Web only; updated)
- Wheatgrass Production (new)

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