Grass Clippings

pasture research you can use

August, 2006 Volume 1, Number 1

UW Extension • UW-Madison Center for Integrated Agricultural Systems and College of Agricultural and Life Sciences • UW Agricultural Research Stations

In this issue

Dear friends:

Welcome to the first issue of *Grass Clippings*, a quarterly newsletter linking Wisconsin graziers with University of Wisconsin researchers, extension, and US Dairy Forage Research Center personnel working in grazing and pasture management.

With this and future issues, we plan to address pasture management ideas and information, as well as provide updates on research, demonstration and extension activities. We hope that the newsletter may also provide a forum to provide thoughtful, research-based answers to producer questions related to grazing and animal management on pasture.

continued on page 3

Test pasture forages to optimize mineral supplementation

Dr. Jeff Lehmkuhler, Extension Beef Cattle Specialist, UW-Madison

Grazing cattle often require supplemental nutrients. The diverse soil types found throughout Wisconsin can impact the soil mineral profile as well as fertilization and cropping practices. To more closely match livestock nutrient needs from grazed forage and supplements offered, producers are encouraged to test forages and develop mineral supplements accordingly. Mineral imbalances can be induced due to complex mineral to mineral interactions that can occur. For phosphorus (P) supplementation, there may be an environmental as well as an economic motive to monitor and alter supplementation based on forage tests.

A research trial was conducted at the University of Wisconsin Lancaster Agricultural Research Station using Holstein stocker steers to investigate the response to phosphorus supplementation. A total of 152 Holstein steers were used over the two-year trial. Each year steers were divided into four grazing groups. Steers averaged 550 lbs and 650 lbs at turnout during the first and second year. Mineral supplements utilized were a trace mineralized salt mixture offered free choice (TMS) or TMS with dicalcium phosphate added to obtain a 6% P mineral mixture (Phos). Within each grazing group, both mineral supplements were offered using controlled access feeders so that pasture forage differences did not influence mineral treatment effects.

Pasture samples were obtained from each grazing group at two week intervals to monitor pasture forage nutrient content. Cattle weight gain was measured for P supplementation. Mineral disappearance was monitored to determine differences between consumption of mineral supplements and calculate amount of P contributed to the daily P intake. A sub-group of steers were also fitted with fecal bags for four days to calculate dry matter and P intake twice during the grazing season the first year.

Forage analysis data can be found in Table 1 on page 2. The pastures were high in crude protein (19%+), organic matter digestibility (near 80%) and supplied a level of P averaging 0.33%, exceeding the 1996 National Research

continued on page 2

The newsletter will be posted at the UW Center for Integrated Agricultural Systems (CIAS) website at www.cias.wisc.edu/ in a downloadable format so that local grazing networks can copy and distribute it to their members as they meet during pasture walks and discussion groups. GrassWorks (www.grassworks.org) will have a link to the newsletter as well. Many thanks to CIAS for the editorial support provided and to GrassWorks for encouraging us to start this newsletter!

We hope you enjoy this first issue and invite you to provide us with feedback and/or ideas for topics to be discussed in future issues. May your grass always be green!

Rhonda

Grass Clippings features grazing-related research news from the University of Wisconsin and beyond.

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Test Pasture Forages ... *from page 1*

Council (NRC) recommendation of approximately 0.20% for a steer gaining 2.0 lb/day. No differences were noted in daily gain due to mineral supplementation. Steers gained approximately 1.75 lb/d in year 1 and 2.5 lb/d during the second year. Mineral intake levels were similar when averaged over the entire grazing season and differed only during one 28-day period the first year. Average mineral intakes ranged between 35 to 52 g/day (1.2 to 1.8 oz/head/day) over the two year trial.

Mineral supplementation treatment did not impact pasture intake. Calculated dry matter intake based upon fecal collection ranged between 2.6% and 2.8% of live body weight. Calculated P intake from forage ranged between 23 to 32 g/day (0.8 to 1.1 oz/day). Estimated mineral P contribution was small being less than 10%. Calculated fecal P excretion during the collection periods ranged between 9 to 16 g/day (0.3 to 0.6 oz/day) with those receiving Phos being statistically higher in the first collection and numerically higher the second. Fecal P levels were calculated to be approximately 40% to 55% of that consumed.

These data indicate that for soils managed according to soil tests where cool-season pasture forages are grown, offering a mineral supplement with 6% P is not warranted for stocker Holstein steers. The forage P data collected allowed for a daily P intake nearly double that suggested by recent research for

continued on next page

Table 1. Forage quality analysis (DM basis) of samples taken at two week intervals from pastures of grazing Holstein steers receiving supplemental or no supplemental phosphorus[1].

	Year 1		Year 2	
Item	Mean	SE	Mean	SE
P (mg/g)	3.28	0.08	3.27	0.11
DM (%)	21.0	1.1	19.2	0.7
CP (%)[2]	19.0	0.4	19.6	0.6
Ash (%)	10.0	0.2	10.6	0.1
OM (%)	83.6	0.4	80.7	0.2
NDF (%)	53.2	0.7	54.9	0.8
ADF (%)	31.4	0.4	35.6	0.6
48h $IVTD_{DM}$ (%)	80.2	0.6	78.6	0.8
Forage Availability (kg/ha)	2466	90	2141	133

[1]Unless otherwise noted, Year 1 n = 40, Year 2 n = 32.
[2] Year 1 n = 39.

Table 2. Pooled performance characteristics and mineral intake of Holstein steers allowed access to a trace mineral supplement with or without phosphorus.

Item	TM[1]	TMD	SE	P
Mineral Intake (g/d/animal)	48	44	5	NS[2]
P from Mineral (g/d/animal)	———	3.0	0.3	———
Apparent P Digestibility (%)[3,4]	57.4	51.8	6.1	NS[2]
ADG (kg/d)	1.08	1.05	0.05	NS[2]
Initial Weight (kg)	282	278	21	NS[2]
Final Weight (kg)	423	415	32	NS[2]

[1]TM = steers receiving supplemental phosphorus in the form of dicalcium phosphate, TMD=steers receiving no supplemental phosphorus.
[2]NS = not significant, P > 0.05.
[3]Calculated value using ADL as an internal marker (n = 48).
[4]Unequal n, largest SE reported.

Impact of outwintering and extended rest on roots

Carl Fredericks, Grass Mapping Enterprises, LLC

During 2004 and 2005, Dr. Walter Goldstein, Michael Fields Agricultural Institute, and I studied root health and productivity in outwintered and rested paddocks on three dairy farms (Bert & Trish Paris, Bill & Roz Gausman, Dan & Ruth Vosberg) in Green, Dane, and Lafayette Counties. A complete summary of our results is currently posted at: http://www.michaelfieldsaginst.org/programs/crops/outwintering.html

On the grazing farms in our study, outwintering means keeping stock (usually dry cows and heifers) outside on paddocks at times from December through March instead of continuously housing them in a barn or other confined shelter. Just as "controlled grazing" requires more management than continuous grazing an unimproved pasture, "controlled outwintering" requires a high level of planning and monitoring and does not mean merely keeping the cows outside in winter.

Paddocks are selected for improvement based on poor sward condition (weak grass stands and low yield), and suitability for outwintering (easy access by cattle, protected from extreme wind and snow drifting, location to other winter shelter). Hay is often placed in a paddock in the fall and rationed out with portable fence during the winter months, but on some farms is hauled regularly into the paddock if terrain and conditions permit. Cows are fed in paddocks during the day with access to loose housing at night. If there is a thaw, animals are removed until the soil is frozen again. Stock are often on these paddocks until green-up if the soil is firm.

After green-up, the grass grows ungrazed until mid-July, when it is cut (farmers often call this "fallowing"). Some farms leave the grass on the ground decomposing, others bale it for bedding or dry cow feed. The paddock is then rested until early September when it is grazed again, rested, and usually grazed again in November after killing frost. Paddocks are added to the regular grazing rotation the following year, and new outwintered paddocks are selected each winter to distribute nutrients around the farm.

Farmers using outwintering and extended rest feel that the combination of manure and waste feed, over three months of root growth, and (on some farms) decomposing plant remains adds mulch to the soil surface and increases root biomass, building soil organic matter and fertility. There are large labor savings (irregular or no daily feeding and bedding/manure handling chores), large reductions in equipment use, and animal health advantages (better ventilation, fewer leg & feet problems), but excellent management is needed to avoid frostbite and loss of condition during extreme cold and wind. Soil compaction, erosion and runoff from lanes and gateways can also be issues during thaws.

Results, questions, and ideas

Our results show that 1) most roots were concentrated in the top three inches of the eight-inch topsoil profile regardless of farm or rest/grazing management, but that drought appeared to increase rooting depth; 2) Paddocks that were outwintered and rested had healthier roots than grazed control paddocks; 3) Paddocks that initially had low root mass and more root disease on two farms responded more (in root and grass production) to outwintering and rest than did paddocks having initially higher root mass and greater root health on a third farm; 4) Outwintering and rest increased weed root growth (mostly quackgrass) in weak paddocks.

We have been able to document changes in root length and health that are correlated with forage yields and management on three farms. However, several questions and future research needs emerge from our findings:

1) This project is an example of what Baars et al (2004) describe as

continued on next page

Test pasture forages *... from page 2*

finishing beef cattle and well above the 1996 NRC recommendations for growing cattle. Additionally, these data provide an estimate of fecal P excretion levels for grazing Holstein steers.

Forage testing enables producers to make decisions regarding the mineral supplement required to match livestock needs and minimizes overfeeding of these nutrients. We recommend that livestock managers test their pasture and stored forages for minerals and other nutrient levels before designing a supplementation strategy.

Impact of Outwintering ... *from page 3*

"experiential science" to develop "practical systems that work." For farmers, outwintering stock, it is a practical system for many reasons. An economic analysis was not done as part of this project, and a case study approach that considers the savings in reduced labor, equipment, bedding, and manure handling costs with outwintering compared with confinement facilities would be useful. Are there positive or negative impacts on animal health that affect profitability? What is the economic value of increased root growth?

2) Is it practical and beneficial to encourage root growth beyond three inches? Is this a matter of grass varieties and grazing management, or are factors like annual soil moisture and soil type and structure more important? Can alternating the timing of haying and grazing as proposed by Larin (1962) encourage deeper roots under the hay management?

3) North Dakota studies (Volk et al, 2003) suggest strong correlations between intensity of grazing management, grass root depth, and pasture condition. If root health determines stand dynamics, what management factors (manuring, fertilizing, grazing rhythms) affect root health under our higher rainfall conditions?

4) Which has more impact: manure (from outwintering or spreading) or rest? Manure increases yields, but can cause rank growth which lowers grass intake. Resting increases palatability by allowing manure to decompose. High soil P may be an issue on some paddocks on some farms. Shorter outwinter periods, larger paddock size, and increased feeding away from the outwintered paddock can be used to reduce manure amounts on the paddock.

5) Mulch management has a large impact on several variables including sward composition, grass tillering, legume content, soil moisture, and amount of decaying material on the soil surface. If legumes can be seeded in bare spots after outwintering, can they compete with tall grasses in rested paddocks? Will a shorter resting period (through June instead of August) encourage more legume growth?

6) What are the long-term phosphorus trends in outwintered paddocks? Do the long-term benefits of less runoff from more roots and stronger grass swards outweigh possible short-term soil phosphorus increases? Is phosphorus leaching from decaying plant material an issue?

Our results were influenced by the dry conditions of 2005. Long-term research on several farms will reduce year-to year variability, allowing more accurate forage yield and root growth data to be collected.

We would like to expand our work beyond manure applied from outwintering and look at composted manure from bedded packs, which is a common nutrient source on grass dairy farms using "hoop barns" and sheds for winter shelter. There is substantial scientific literature that suggests that composted manure can cause disease suppressive soils. Future on-farm research will investigate: 1) the role of pathogenic fungi in pasture decline and regeneration; 2) whether seeded clover can displace enhanced weed growth during the rest phase on weaker pastures; and 3) whether compost might improve grass root health and growth and thereby contribute to pasture improvement.

For more information on this project, contact Carl Fredericks, Grass Mapping Enterprises LLC, 10246 Gilbertson Road, Mt. Horeb, WI 53572 (608) 437-4395 rehlfred@mhtc.net, or Dr. Walter Goldstein, Research Director, Michael Fields Agricultural Institute, PO Box 990, East Troy, WI 53120 (262) 642-3303 wgoldstein@michaelfieldsaginst.org

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Graziers and researchers connect at Arlington pasture walk

Ruth McNair, UW-Madison CIAS

On May 16, 2006, a group of 32 graziers, researchers, and agency personnel met for a pasture walk and discussion at the Arlington Research Station. The morning pasture walk visited dairy and beef pastures at the station. In the afternoon, the group discussed what they had seen in the morning and larger pasture research issues. Below is a summary of the afternoon discussion.

Ken Albrecht discussed the best way to establish and manage Kura clover. He usually establishes Kura in a clean, sprayed pasture or prepared seed bed, but Kura was established at Lancaster with a nurse crop that was removed. One person had experience with no-till seeding Kura in an existing pasture, where it grew but did not like low spots. Research is needed on a variety of establishment and management techniques for Kura. Kura gets the same viruses as white clover, and will leave yellow blotches on the leaves, but Kura doesn't lose as much production in response to the viruses as white clover does. A dry summer is hard on Kura. Leafhoppers will attack Kura and turn the leaves purplish.

A broader view concern is that research station pastures are plowed up every 3 years or so with a focus on new species and varieties. On working farms, there are older pastures, some 10 plus years old, and the emphasis is on management. How can the University provide useful information on managing existing, older pastures? Coordination with on-farm research under different conditions was mentioned as one way.

The University needs to improve its communication on grazing research like how to establish Kura clover. Arlington should have a pasture walk once a year. A website can publish research updates, or have 1-2 page fact sheets. The GrassWorks newsletter would also be a good way to communicate. Research from other organizations, like the University of Minnesota, is available and should be presented by a central clearinghouse.

Intake research can be helpful, but the bottom line is to find the most economical way to turn pastures into milk. Some graziers feel that maximizing intake is not a goal in and of itself; cows that are forced to eat too much are stressed and don't breed back or last as long in the herd.

UW-Madison Agronomy Professor Ken Albrecht talks about kura clover in beef pastures at Arlington

Other graziers feel that measuring intake is of use to them. They want to know how difficult/costly it is to get a cow to 100% rumen fill on pasture rather than the 80% Dave has observed. An economist should be involved in the intake research to evaluate the cost and benefit of increasing pasture intake. While intake is a valid question for both confinement and grazing herds, there is a different mindset in the two systems. Each additional cow represents a lot of associated costs on a confinement farm, so the emphasis is on making each cow maximize production. Graziers often maintain that adding more cows with less milk production per cow can be profitable because the costs associated with each cow are lower than on a confinement farm. Replacements from within the herd are relatively easy on grazing farms because of low culling rates. We need to determine what the overhead costs per cow are for each dairy system.

The University needs to encourage researchers in other disciplines to take part in existing studies. Economists, veterinarians and geneticists, for example, could provide needed perspectives on the dry matter intake research.

Are the results from research station projects believable for graziers? Research stations can afford to do research that may result in lost income, and have things like fistulated cows available. But the University needs more farms that will participate in grazing research. Maybe pastures on working farms can be leased for research. There has been talk of splitting the dairy herd at the Pioneer farm into a grazing and confinement herd, but that faces challenges. What would be most meaningful

continued on next page

Federal funds available for technical assistance, education and research for managed grazing

Laura Paine, DATCP Grazing and Organic Specialist

The Wisconsin Grazing Lands Conservation Initiative will have funding available again this year for grazing research, education, and technical assistance. For the 2007 grant cycle, we will have $960,106 in federal competitive grant funds available to agencies, universities, and producers. The call for proposals is available now through the DATCP website: www.datcp.state.wi.us . The easiest way to access grant materials is to do a search for "grazing grants". You can also contact Laura Paine at 608-224-5120 or laura.paine@datcp.state.wi.us.

These grazing grants help provide the research, education and technical assistance many farmers are asking for. More than 40% of dairy farmers feed pasture to their milk cows and about half of the state's beginning dairy farmers are using grazing as a strategy for getting started because it requires less capital outlay.

DATCP is coordinating the grant applications for technical assistance and education. The University of Wisconsin - Madison Center for Integrated Agricultural Systems is coordinating the grant applications for research. Both sets of grants are part of the Grazing Lands Conservation Initiative, a national effort begun in 1991. Senator Herb Kohl and Congressman David Obey are credited with helping to secure the funds for Wisconsin.

Following are the amounts and categories available for the grant categories:
$378,725 for grazing technical assistance
$189,362 for grazing education and on-farm demonstration projects
$392,019 for research projects

The research program has a strong emphasis on farmer involvement. It is divided into two categories: UW farmer-assisted projects and applied on-farm projects, including producer research projects.

Those eligible and encouraged to apply include county, state and federal agriculture and natural resource agencies; colleges and universities; nonprofit organizations; grazing networks and farmers using managed intensive grazing on their operations.

Deadlines are August 1 for technical assistance and education grants and September 1 for research grants. All grants are awarded on a competitive basis. Grant funds come from the U.S. Department of Agriculture's Natural Resources Conservation Service.

Researchers and graziers *... from page 5*

for graziers is research from a farm managed like a typical grazing farm, with experienced grazing cows on grass from April 15 to December 15.

Many ideas came up during the early afternoon discussion, including:
- Management practices that would be practical for 14 year old pastures.
- Annuals for the summer slump; also later season annuals for finishing beef animals on pasture. Include economics.
- What species of grass/legume are favored by higher/lower pasture residuals?
- Try a variety of establishment and management practices with Kura clover.
- Compare animal performance, economic data and productivity on pasture of Arlington research station cows and experienced grazing cows on working farms.

When asked for new ideas, the group suggested:
- Study flavor components in milk so graziers can manipulate taste with different combinations of forbs, legumes and grasses in pastures. Identify flavor components early in the process, not after the product is ready to sell.
- Identify plants high in tannins or other compounds that would act as natural wormers or have other natural health benefits for livestock.
- Compile a list of nutritional information for pasture plants.
- Identify optimal level of grain/forage supplementation based on economics of grain and milk/meat prices but also including effects on reproduction and lifetime production. This research would require a long-term

continued on page 9

Soil quality and the grass farm, part 1

Mark Kopecky, Price County UW Extension Agriculture Agent

During the past few years, farmers have been hearing about the importance of soil quality. Soil quality has always been important to farming and to civilization. Farmers know intuitively why soil quality is important—for maintaining crop yields and quality, preventing erosion, keeping water clean, etc. Even without consciously thinking about it, we consider soil quality in practical terms such as tilth, fertility, infiltration, aeration, and so forth. These qualities are practical illustrations of the more formal definition of soil quality: *The capacity of a specific kind of soil to function, within natural or managed ecosystem boundaries, to sustain plant and animal productivity, maintain or enhance water and air quality, and support human health and habitation (NRCS).*

The sustainability of civilization itself depends good quality soil in order to produce adequate supplies of good quality food. There are a number of books that address this fact, and one of the most prominent is *Conquest of the Land Through Seven Thousand Years*, written in 1953 by W.C. Lowdermilk. His study of how many ancient civilizations fell as a result of mismanaging their soils is one of the classics in conservation literature. For those of you who enjoy reading about regenerative agriculture, there are other interesting books: *Malabar Farm,* written in the 1940s by author and farmer Louis Bromfield, chronicles the reclamation of a group of worn-out farms in Ohio through the judicious use of grazing, crop rotations, and soil amendments. *Farmers of Forty Centuries,* written by the University of Wisconsin's own F.H. King nearly a century ago, details the soil building and nutrient cycling practices that were standard fare in much of China, Korea, and Japan before the advent of modern machinery and agrichemicals.

Soil quality is influenced by many factors, some of which are determined by how the soil formed (parent material, climate, age, physiographic position, and biological activity). Some factors can't be changed, like the texture of the soil (sand, silt, and clay content) and its landscape position. Other characteristics can be influenced by management, including fertility, aggregation, porosity, infiltration, organic matter content, pH, and so on.

Just as every person has unique gifts and limitations, each type of soil has its own set of strengths and constraints. It's not possible to get a sandy soil to behave like a clayey soil with respect to nutrient holding capacity, and a clayey soil will probably not dry out in the spring as quickly as a sandy soil. But with management that adds organic matter to each of these soil textures, it may be possible to improve the quality of both. Adding organic matter to the sandy soil increases its water and nutrient holding capacity. For a clayey soil, organic matter can improve structure and porosity, improving infiltration of air and water, which influences how quickly the soil dries out and warms up in the spring. We can manage whatever soil we have in ways that will improve its characteristics, within the constraints that naturally come with that type of soil.

In the next issue, we'll look at the objectives for attaining and conserving good soil quality and some of their implications for the grass farmer. Note: During the past couple of years, a group of educators and agency professionals from Wisconsin has been conducting educational programs on soil quality. We held field days on four farms last year and have done three more so far this year, with three more scheduled for late September. At least two of these will be held on grazing farms. If you're interested, please watch the state agricultural papers for details on dates and locations.

Great Lakes Grazing Network 2000-2004 dairy economic report

Tom Kriegl, UW Center for Dairy Profitability

The fifth year report, "Regional Multi-State Interpretation of Small Farm Financial Data Report on 2004 through 2000 Great Lakes Grazing Network Grazing Dairy Data" is on the UW Center for Dairy Profitability home page. The direct address is http://cdp.wisc.edu/pdf/GLGN%20USDA%202004%20ReportF.pdf

The report outlines methodology and assumptions used in the analysis narrative, two case farm reports (one from Wisconsin), and brief discussions about the impact of asset valuation on the calculated financial measures, a discussion about the per hundredweight equivalent (CWT EQ) method plus the CWT EQ worksheet. The balance of the report includes AgFA generated farm earnings, cost of production, balance sheet and financial measure reports which summarize several major comparisons illustrated in the report.

These major comparisons and conclusions include:

- A comparison between the most profitable half and the least profitable half of graziers sorted by net farm income from operations per hundredweight equivalent (NFIFO per CWT EQ) shows a large range in financial performance. The ratio between the top half and the bottom half's NFIFO per CWT EQ and NFIFO per cow was greater in the lower profit years (usually with lower milk price) than in the higher profit years (Chapter XIII).
- The average grazing herd with less than 100 cows had a higher NFIFO per cow and per CWT EQ than the average grazing herd with 100 cows or more. The smallest margin appeared in the 2003 data (Chapter XIV).
- Non-seasonal calving/milking herds had a large advantage in NFIFO per cow and per CWT EQ in 2000 and 2002. The seasonal herds (stop milking at least one day each calendar year) had a large advantage in NFIFO per cow and per CWT EQ in 2001 and 2004 and a very small advantage in 2003. Careful examination of the data suggests that achieving a given level of NFIFO per cow or per CWT EQ is more difficult in a seasonal system. The seasonal group had a smaller range of financial performance within a year but experienced more variability in financial performance from year to year. Less than 15 percent of the herds in the data were seasonal (Chapters XV, XVI).
- The average grazier had a higher NFIFO per cow and NFIFO per CWT EQ than their confinement counterparts in all years in New York and Wisconsin (the only two states with the necessary data for this comparison), except in 2004, when the average New York confinement herd had a slightly higher NFIFO per cow than the average New York grazier (Chapters VI, XVII and XVIII).
- The breed of cattle is probably a minor factor among the many variables affecting the profitability of dairy farms. However, because it is an easily recognized variable and one of great producer interest, the profitability of herd by breed was examined. Herds categorized as Holstein had higher levels of NFIFO per cow four consecutive years and NFIFO per CWT EQ three consecutive years than herds of other breeding (Chapter XIX).
- Relatively consistent differences in financial performance between states have appeared in all years. These differences must be considered when interpreting the data (Chapter VI).
- The ranking of major cost items is very similar between grazing and confinement herds (Chapter XVIII).

Upcoming events

August 30, 2006 Agronomy/Soils Field Day Arlington Ag Research station, Tours of research on soils, annual crops and weed management at 8:30 and 10:30 a.m; Managed grazing resarch discussion 1-3 p.m. with Randy Jackson, Dick Cates, Mary Anderson, Paul Nehring, Dan Truttmann, Karen Breneman, Rhonda Gildersleeve and Laura Paine. For more information contact Agronomy at 608-262-1390 or Soil Science at 608-262-0485. In case of rain, presentations will be held inside.Visit http://www.soils.wisc.edu/extension/upcoming/current/2006afd.pdf

September 28, 2006 Truttmann Dairy pasture walk, N9682 County J, Blanchardville, one mile north of Hwy 39 at Dane/Green line. 10:30 am to 2:30 pm, lunch provided. Morning will be walk and grazier led discussion, afternoon will be directed questions. For more information, contact Dick Cates at rlcates@mhtc.net or 608-588-2836.

Direct marketing grass-fed beef survey

Craig Saxe, Juneau County UW-Extension Agriculture Agent

Direct marketing grass-fed beef begins with producers understanding consumer needs, and then finding opportunities to share what they have to offer. The Living Off the Land Grazers' Network (Juneau and neighboring counties) hosted an educational event entitled "A Taste of Country" on September 24, 2005 at the Irvin Osterloh Farm. Although other locally grown or raised products were promoted, the focus was on direct marketed grass-fed beef.

A survey was taken to given to provide feedback on the program and interest in direct marketed grass-fed beef. Based upon survey results (n=33) 58% of participants considered themselves non-farm residents, 36% farm owner/operators and 6% other. A comparison of survey responses showed no difference between non-farm residents and farm owner/operator categories, so the combined results are reported.

Attributes most looked for when buying meat

Importance	Very	Somewhat	Not
Locally grown	71%	23%	6%
Humanely raised	73%	23%	3%
Grass fed/pastured	79%	21%	0%
Antibiotic free	90%	3%	7%
Hormone free	94%	3%	3%

When asked how likely is it that they would consider buying meat directly from the producer, 91% indicated "Very Likely", or "Somewhat Likely" and 9% indicated "Not Likely". When asked what predetermined size they would prefer 7% answered "Whole", 59% answered "Half", 10% answered "Quarter", 17% answered "Eighth" and 7% answered "Other". When asked if it would increase their desire to purchase directly from the producer if they could purchase selected cuts (steaks, roasts, ground, etc.) rather then predetermined sizes, 64% said "Definitely" or "Maybe" and 36% said "Probably Not".

Participants were asked to place an importance on attributes that they look for when buying meat. All participants indicated that "grass-fed/pastured" beef was "Very Important or "Somewhat important" to them. Other attributes are summarized in the table above.

One educational component of this event was to present benefits of CLA beef. Ninety-seven percent of participants indicated "Considerable" or "Some" increase in knowledge about the benefits of CLA beef. When asked what ideas they would take home with them that they hadn't heard before, the majority of comments were regarding the benefits of CLA. Selected comments given included: "benefits of CLA", "Increase CLA in family's diet", "Importance of CLA(s) and exercise" and "the connection between farmers' raising beef on pasture increases the CLA amount and equals more healthy consumers".

Although some of these numbers will be similar across the region, the greatest benefit of this type of survey is to the local producer, in this case, Irvin Osterloh. Irvin now has a much clearer understanding of what his customers are looking for. All direct marketers should consider some type of information gathering process when developing their marketing plans.

Researchers and graziers ... *from page 6*

commitment. Dave recommends 'Supplements for Dairy Cattle' by Callaway and Borda to understand how supplements fed now affect cows next year. Also, the group of first calf heifers in the pasture/cheese flavor study that did not receive supplemental feed gave 38 pounds of milk a day compared to 70 pounds for the two supplemental feeding groups, but economic performance is unknown.

- Use graduate and undergraduate students for smaller research projects like locating existing grazing research and identifying missing research.