

**Sustainable Agriculture Research and Education Program
Farmer/Grower Grant Final Report Format**

Please follow the format below in your final report.

1. Restate the goals of your project. *Demonstrate methods of pasture management to produce high quality forage for Northeastern Mass farmer*
2. Update the information on your farm since you received a farmer/grower grant. Include acres farmed, crops/livestock. *Acres farmed: 125 AC Livestock: 15 Brood Cows Crops: ~~So~~ Native grass/hay*
3. Who were your cooperators and what were their roles in the project? *Bruce Clement - NH Coop Ext Mr. David Green Norfolk Cty Ag H.S. David Kennard - Welcroft Farm, Chesham NH*
4. Tell us what you actually did in your project and how it was done. *Planted Alternative Successive Season Crops to ~~extend~~ increase forage/Extend Grazing Season*
5. What were your findings and accomplishments? Did you have unexpected results? If so what were they? *Drought made findings difficult to measure, but we would use this system again. "Look-up" Phosphorus from Soil - was ↑ due to poultry Manure.*
6. Is there any specific site information relevant to your project or the results? *Next time would use another Brasicus, Cattle ate turnips, which limited our ability to Multi-Crop - would try Kale/Swedes next time*
7. What were your economic findings (if relevant to your project). *Alternatives to chemical application - limit use of Herbicides*
8. Have the results from your project generated new ideas about what is needed to solve the problem you were working on? What would be the next step? *Use of Brasicus alone - They did a great job limiting weeds; the tricale/field pea wasn't very beneficial (Drought)*
9. Will you continue to use the practice you investigated? Why or why not? *Yes, ~~Bras~~ Brasicus - benefits ~~high~~ high Phosphorus in soil, a good cool season crop*
10. What do you tell other producers about your project and the results? *It worked we were satisfied w/ results*
11. Explain what you did in your outreach program. Please send a copy of any articles written about your project. *Pasture Walk, Interviewed by Sheri Russell - Country Folks*
12. *Complete the farmer profile (enclosed)*



FOCUS ON New England Beef

Fall 1999 Newsletter



Turnips Extend Grazing and Improved Fertility at Walpole Beef Farm

by Sherry Russell

WALPOLE, NH - The Brookfield Farm in Walpole, New Hampshire hosted a pasture walk on October 26 to share the results of trials with brassicas as a supplement pasture forage for beef cattle.

Chris and Holly Gowdy were awarded a grant this year to experiment with the brassica family, and used the funding to purchase turnip seed. They planted ten pounds of seed per acre on a six acre parcel as a fall crop, after harvesting Triticale on the same field. Part of their goal, beyond having a late season pasture crop, was to smother out old sod in the field with the turnips.

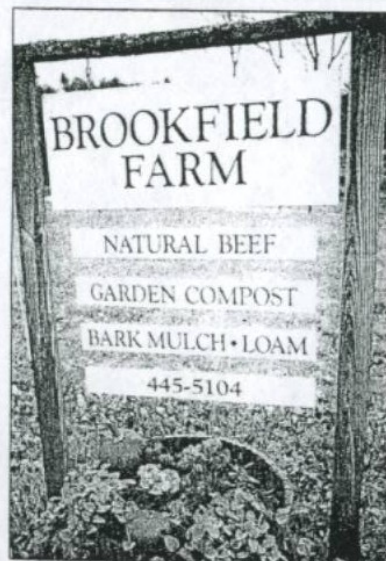
One surprise of their experiment was that the turnips tested at 26 percent crude protein, on a dry matter basis. In late October, the plants were still growing and they were told that they could expect to graze the field two or three times. Chris said he didn't know if this would be true with his beef cows, as he observed, "My cows are pull-

ling the plants right out of the ground, eating the roots and all."

The couple has 27 head of Black Angus, and a combination of purebred and crosses termed "Black Baldies". Their experience has been that the cross breeds gain better, are a little healthier, and that Black Baldies bring a premium price at sales. They used AI sires this year, and have cross bred with Hereford, Simmental and Shorthorns.

This is their fifth year in business, they now have 14 brood cows, and the rest are heifers and steers. To match the available land, the couple aims to build to a herd of 20 brood cows. They own 65 acres, with 20 acres in grass, and also farm some rented land, so manage about 120 acres with 80 acres in grazing in combination with hay. They sell round bales to other farmers as a side income.

One of their goals is to raise all their own feed. Last year they purchased three tons of grain, buying whole corn and feeding up to 20 pounds a



The Brookfield Farm is diversified, selling beef directly to customers and using their land to support the farm by selling fertile soil and compost to gardeners.

day to calves and the 18 to 24 month old animals that are heading for a sale. They would like to cut their purchase to no grain. They promote their beef as "grass raised", and move the animals in pastures that are six to eight acres every week to two weeks.

Chris worked for Dave Kennard for ten years before starting his own beef farm so was trained in use of pastures for raising sheep. Both Chris and Holly raised animals through the 4-H program as children. She attended North Carolina State and earned a degree in Animal Science and he studied Animal Husbandry at Cobleskill College in New York.

They moved to Walpole, VT from Walpole, Massachusetts five years ago with eight beef animals. Both have other jobs: Holly works for Hubbard Farms, a poultry farm in Walpole that strives to improve poultry genetics. Chris does mowing and plowing for the state highways, and also does some custom baling "on the side".

The Hubbard Farms shares its poultry manure with Walpole farms, and the Gowdys are the lucky recipient of some of those nutrients. They

have been striving to improve their land with the combination of composted chicken manure, their own beef cow manure, some of which they compost, and some added fertilizer. Chris said he applied about 50 pounds per acre of ammonium nitrate to some fields last year, and has applied three to five tons per acre of composted poultry manure on a 40 acre field, to improve fertility. He also sells compost, bark mulch and loam from the farm to local gardeners.

Marketing Outstrips Demand

The Gowdys are finding the demand for their meat exceeds their ability to supply it. They sell beef by the side and by cuts at their farm using their own federal inspection label and Sharon Beef for processing. Holly said, "We need to increase our herd size to keep up with demand." They calve in spring and fall, a schedule that helps them have animals for the Maine Beef Expo and to sell feeder calves in spring.

On the day of the pasture walk, the couple had set aside four calves to bring to the October 30 First Annual Northeast Club Calf Sale at UNH.

12th Annual Maine Beef Producers Conference to Focus on Forage

by Dottie Lober

BANGOR, ME—"Foraging into the Next Century" is the theme of the Maine Beef Producers Association's 12th annual conference scheduled at the Ramada Inn here December 4.

Planners see the focus on forages as being of interest to more than beef producers and welcome those who raise other animals or run mixed operations.

"Forage is really important for a successful livestock operation," comments Deanna Potter of the University of Maine Cooperative Extension and coordinator of the event. "The northeast is a great place to raise forages, but they are something that we undervalue," she observes.

The conference, scheduled at the Ramada Inn, leads off with Dr. Thomas Field, associate professor, Department of Animal Sciences at Colorado State University, discussing, "Foraging into the Next Century."

Later in the day, Field will address "The Cattle-

Forage Connection."

Dr. Ed Charmley, researcher-in-charge of the Agriculture and Agri-Food Canada Crops and Livestock Research Centre at Nappan, Nova Scotia, will focus on "Recognizing Forage Potential".

In the afternoon Charmley will discuss, "Forage Systems Comparison".

Dr. Tim Griffin, sustainable agriculture specialist with the University of Maine Cooperative Extension, will speak on, "Forage Troubleshooting".

Also on the agenda is Aubrey Davis, director of the New England Agriculture Statistics Service, for an "Update on Cattle Statistics".

Conference doors open at 8 am for registration. The program will get underway at 8:45. Awards ceremony and "year in review" are scheduled at lunch.

For further information contact Dee Potter, (800) 287-1421 (in Maine) or (207) 834-3905 (from outside Maine).

The sales, sponsored by the New England Simmental Association and the Maine Angus Association, brought average prices of 70 cents a pound, and the Gowdys did not sell their calves at that price. Instead they planned to attend a November 6 sale at the University of Connecticut, and hope for better prices.

Selling meat directly to customers, by the cut and at the farm brings the best price for beef. They charge \$2.25 for a whole animal, \$2.50 for a side, and \$3.00 per pound by the quarter. Cuts are boxed in a 25 pound minimum and bring a range of \$2.00 for ground beef and \$4.00 for steaks, and it was suggested by their visitors on the pasture walk that the steaks could be priced higher.

The carcass traits are one criteria Chris and Holly use when selecting

bulls. They look at marbling, "cutability", milking ability, but said calving ease is their first priority. Raising beef on grass has begun to reveal certain advantages. In that research is showing the meat is higher in CLA's and Omega 3, and as consumers begin to understand this, it will become a marketing advantage.

Heidi Smith of NRCS in Walpole said another research study has shown grass fed animals will be less likely to have e. coli show up in their manure. Smith and UNH Extension Specialist Bruce Clement were on hand for the pasture walk to add their expertise to the discussion. Smith said a new statewide grazing coalition is forming this fall. Anyone who wants more information can contact her at (603) 756-2988, or email

(cont. on next pg.)



Chris and Holly Gowdy with their helpful dogs, Louis and Dirkum. The Gowdys experimented with turnips as a pasture feed this summer. photos by Sherry Russell



NEW ENGLAND BEEF NEWS

(cont. from prev. pg.)

heid.smith@nh.usda.gov.

The grant that paid for the turnip trial was a "Farmer Grower Grant" awarded by Sustainable Agriculture Research Education, or SARE. A new round of funds will be awarded in the spring, and anyone interested can contact Smith or Bruce Clement at (603) 352-4550.

Clement, who raises sheep himself, assisted with helping the Gowdys analyze their forage and soil tests, which were also paid for by the grant. Chris said seeing his hay analysis was also a surprise, as it was high in protein. The DHI Forage Testing Lab showed a Relative Feed Value of 111 for Triticale, with 100 being average. The "Mostly Mixed Grass" (MMG) silage had a Relative Feed Value of 102, with crude protein at 17.8 percent, and Total Digestive Nutrients of 64 percent.

The TDN for their Triticale was 64 %, and crude protein on a dry matter basis was 19.2 %. The Brassica Rape Turnips had 26.1 % crude protein on a dry matter basis and TDN of 76 %.

Chris said he planted Triticale with no till in the last week of April on six acres at the rate of 150 pounds per acre and put up 21 round bales eight weeks later. The year before the same six acres yielded 14 bales of regular grass, he noted. Before he planted the turnips, Chris said he went over the field twice with a disc harrow. "It was a run down field," Chris said, "and that's why I used this." Next year he wants to do the same on an 18 acre piece, and thinks he will save money by not having to use herbicides to break up old sod. Looking over his six acre field of turnips, Chris observed, "The grass is all gone, this is all I have left."

Clement said field trials in Michigan and Pennsylvania have shown that brassica is very cost effective. He said other varieties can also be used equally as well, with Rape, Tyfon and Kale being top choices. "If you plant in May, they will grow rapidly," Clement said. He pointed out that a field trial at Stonewall Farm in New Hampshire had shown that feeding turnips did not affect the



A beef cow drinks from a Rife Pasture Pump which draws water from a stream via a simple centrifugal action, much like a hand pump.

milk of dairy cows.

Chris noted, the turnips are 90 percent water and high in protein, so he feeds dry hay to go with it, as a stabilizer. His animals are fenced in with just one strand of electric wire, Chris said, and he has not had a problem with keeping them contained as long as they have good feed in their pasture. Their dog Louis,

a Border Collie, is like "one and a half people" in helping move the cattle, Chris said.

The couple led the group to a stream where they have fenced off the water and are using a Rife Pasture Pump during the warm months (the pump would freeze in winter). They purchased the pump this spring for \$361, and said it can

handle 30 head of full size animals. It works on a simple mechanical basis using centrifugal force, like a hand pump, with the action of cows pushing a lever to bring up water from the brook.

For pastures that do not border a brook Chris said he uses a 1,000 gallon water tank which he fills and trucks to the pastures. In the winter months, he brings all his animals to a pen alongside a pole barn, and in the summer he plants pumpkins in that pen, which is rich in nutrients.

The calves on this farm stay with their mothers for up to eight months, until the cow weans the calf herself. They vaccinate newborn calves with Calf Guard, to prevent upper respiratory diseases and parainfluenza.

They give annual boosters, and also vaccine prior to calving, and worm their animals twice a year.

For the future, the couple is considering moving toward organic beef, and will focus on improving their soil fertility with the use of crops, compost and some fertilizer. They put up 300 round bales this year, so have plenty of their own hay silage with extra to sell. They find raising beef on grass results in a better marbled meat, and their customers' demands are outstripping their ability to supply meat. With their foundation of knowledge, this couple is poised to experiment with new forages that will improve on what is already a good beef program at Brookfield Farm.

Beef Farmers Hold Annual Fall Sale

by Denise Russo Vermont Department of Agriculture

Four hundred and eighty three of Vermont's best beef cattle took center stage at noon on Saturday, October 16 at the Vermont Beef Producers Association's (VBPA) 8th Annual Fall Cattle Sale at Addison County Commission Sales in East Middlebury, VT. A record number of buyers paid prices equal to or, in some cases higher, than prices paid for similar cattle in Virginia the same week. "We calculate on receiving five to seven cents less than national prices to account for trucking," according to Roger Clapp, Deputy Commissioner for Agricultural Development. "These were good prices and the buyers were bidding on quality cattle."

Building on a successful spring sale, Vermont's hard working beef producers continue to make improvements in the quality of cattle, the set-up before the sale, and the flow of the sale itself. Only 25 head did not meet the sale requirements.

Any producer consigning non-conforming cattle is charged a \$25 fine per head. VBPA Director George Munson made some changes in the penning and co-mingling of

animals before the sale, moving all pens outside the sale barn and grouping all calves and yearlings in two different areas. Taking USDA Grader Corbett Wall's advice, all steers were sold first, followed by the heifers.

A beautiful pen of 40 uniform Angus steer calves weighing between 400 to 500 pounds brought 93 cents a pound, the high price of the day. On average, there was at least a six cent spread between Angus and Hereford cattle. The average price paid per animal was 78.51 cents per pound. Buyers from Maine to Nebraska bought cattle. The Vermont Beef Producers Association is holding its annual meeting on November 6, 1999 at the Town and Country Resort in Stowe, VT. For more information call Denise Russo at (802) 828-3829.

Vermont is known for its dairy cattle, but over 12,000 beef cattle populate the Green Mountain state. Beef cattle are smaller and lighter yet more heavily muscled than their more famous sibling, the dairy cow. A full grown Holstein cow, weighs 1400 pounds, while a full grown Angus cow weighs 1000 pounds. There are over 1000 beef cattle farms in Vermont. Windsor county boasts the highest number of both beef farms and beef cattle. Windsor county farmers raise over 2000 beef animals on 160 farms. Rutland county comes in at second place.

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Prices Up At Maine Feeder Cattle Marketing

by Chad Arms

RICHMOND—Once again Angus and Angus cross calves brought the highest prices at the Maine Beef Producers Association (MBPA) fall feeder cattle auction held at the D & S Corral, October 15. Overall the sale was very positive with seven buyers paying \$134,454 for 182,090 pounds of beef for an average of \$7.74 per lb, according to David Averill, State livestock specialist. This is up somewhat from last year's \$6.88 per lb. Twenty six producers pooled their cattle for the sale. A total of 344 head were weighed and sorted into 36 lots by Department of Agriculture personnel. Twelve buyers registered for the sale engaged in brisk bidding as all of the cattle were sold in 75 minutes under Auctioneer Dick Brown's gavel.

The Angus and Angus cross steers brought the top prices. A pen of 18 black steers averaging 439 lb. topped the sale at \$8.44 per lb, and another pen of 15 steers received \$8.33 per lb. The average for all 89 Angus and

Angus cross steer calves was \$8.80 per lb.

Reg Angus Tops Heifer Prices

The top heifer lot was a pen of ten Red Angus heifers receiving \$7.74 per lb. A lot of black heifers averaging 492 lb brought \$7.76 per lb while another group received \$7.75 per lb. Hereford calves sold much higher than last year. A pen of nine steers averaging 380 lb sold for \$7.75 per lb, about a 20 cent increase above last year. There were no straight bred exotics in the sale, but there were crosses of Simmental, Charolais, and Gelbvieh with Angus and Hereford head that also sold well.

According to Averill, the quality of sale animals keeps improving with more uniformity preferred by buyers. The preconditioning program adopted by MBPA also attracts the out-of-state buyer. About 60% of the cattle went to Iowa this year. A top volume buyer for the past seven years, Wythe Willey of Cedar Rapids, IA, commenting on the load of Angus steers he bought was "Find me a better group

of calves than that, you can't." Five in-state buyers representing all areas of the state were repeat buyers as well.

Much of the sale success goes to sale chairman Paul Randall of Pownal and his committee of volunteers bringing coral panels for pens and other setup tasks as well as helping with tear down.

A breakdown of sale results for some of the groups of calves with the average price per pound were as follows: 89 black steers—\$8.80, 12 red Angus steers—\$8.77, five Short-horn steers—\$8.77, 42 exotic cross steers—\$8.74, 68 red steers—\$8.70, 26 thin black steers—\$8.68, ten red Angus heifers—\$8.79, 70 black heifers—\$8.72, 14 red heifers—\$8.71, and seven yearling heifers—\$8.66.

MBPA Club Calf Show and Sale Great Success
Fryeburg Fair—The number of entries was up and prices were higher than last year for the sale and show, according to David Averill, State Livestock Specialist. Fifteen steers divided into three weight classes were judged

by Larry McCore, Aldemere Farm, Cary Gonyer, and Owls Hill Acres Farm were the three class winners in heavy, medium and light weight classes respectively. No champion or reserve champion were picked this year. The heifers were not shown, but paraded before the sale with commentary given on them.

Twenty two steers in the 1999 sale averaged \$1.04 per lb. The top price at \$1.80 per lb was received by Steve McGee, Gardiner, in the light weight class goes to Adie Qualey, Limerick, Cary Gonyer's winner in the medium weight class brought \$1.55 per lb, from Jessica Orr of Farmington. Norman Jack of Buckfield topped the light weight steers with \$1.50 per lb from Mallory Thurston, Rumford. Steve McGee sold a second calf for \$1.35 per lb to Jason McKennon and Norman Jack and Bill Coultts each sold a steer for \$1.30 per lb to round out the top prices for the day.

Three heifers were sold by the head averaging

\$416.67. Hillcrest Farm from New Hampshire offered a class winner from the open Hereford Show receiving \$510. Johnston Family Farm, Carmel, ME, received bids of \$440 and \$300 for two Simmental heifers.