

# Let Them Eat Grass

**Innovative Extension Project Shows Consumers, Farmers How To Enjoy The Benefits Of 'Grass-Fed' Animal Products**

**Joanna Green  
Cornell University**

Are you a small-scale farmer looking for an enjoyable, environmentally sound, and profitable business idea? Maybe you should consider teaming up with consumers who are looking for a healthier and more delicious diet: a diet based on grass.

There is a new agricultural movement in the U.S. aimed at producing healthier, happier animals while meeting consumer's demand for food they feel good about. The grass-fed movement promotes livestock grazing as a more enjoyable and less stressful lifestyle for both farmers and farm animals. A growing number of consumers are turning to grass-fed meats, poultry, dairy products and eggs as a way to enjoy animal products without feeling guilty about the environment, animal welfare, or their own diet.

Joan Petzen, Agricultural Extension Issue Leader with Cornell Cooperative Extension Allegany/Cattaraugus Counties, thinks "grass-fed" is a great opportunity for small farmers in her western New York area.

"We've done a lot of work with grazing out here in the last few years," said Petzen. "We have very active pasture groups in Cattaraugus, Allegany and Chautauqua Counties."

Petzen credits her colleagues in Cooperative Extension, Natural Resource Conservation Service, Seneca Trail Resource Conservation and Development, and the New York Pasture Association (NYPA) with creating a strong partnership to support grazing. But until recently, she hadn't given much thought to the role consumers could play in supporting this kind of farming.

**Family-Friendly Farming**

All of that changed when Petzen heard about the work of Joel Salatin, a Virginia farmer and author who has pioneered small-scale grass-based farming systems.

Salatin's books include *Pastured Poultry Profit\$: Net \$23,000 in Six Months on 20 Acres*; *Salad Bar Beef: The Entrepreneur's Guide to Start and Succeed in a Farming Enterprise*; and *Family Friendly Farming: A Multi-Generational Home-Based Business Testament*.

His family's farm, Polyface, Inc. ("Farm of Many Faces") has been featured in *Smithsonian Magazine* and *National Geographic*.

"Joel is passionate about family-friendly farming," said Petzen. "He's inspiring and he has a lot of dirt-under-the-fingernail experience."

She first heard

about Salatin from a local pasture group member who suggested bringing him to western New York to generate interest in producing and marketing grass-fed livestock.

"I got excited about the possibilities," Petzen said. "I see all this land growing up in brush around us, and it really could be excellent pasture land."

Petzen set to work with a group of farmers and colleagues from Extension and NRCS to organize a series of workshops with Salatin. She applied for and received an "Innovative Small Farm Education Grant" from Cornell's Small Farms Program, which helped keep the workshops affordable for participants.

Workshop organizers recognized that it wasn't enough to get farmers interested in producing grass-fed products. They wanted to begin to develop a local demand for direct-marketed, grass-fed products. Organizers worked with Salatin to plan two workshops for consumers, and two for farmers.

"Eat Better Than You Ever Dreamed Possible" took place Oct. 10, 2002 in Fredonia, N.Y. and again on Oct. 11, in Allegany, N.Y., attracting more than 120 interested consumers.

Participants learned from Salatin about the health benefits of grass-fed meats, and were able to meet local producers like Keith Freeman and Jane Burlingame, who are already raising livestock using Salatin's methods. And they got a chance to network with like-minded consumers, nutritionists and farmers interested in building up a local grass-fed industry.

The farmer workshops "Farming For Profit, Pleasure, and Production," were conducted Oct. 11, 2002 in Randolph, N.Y., and again on Oct. 12 in Alfred, N.Y. One hundred and forty-five farmers attended the workshops. There they heard from Salatin not only about production issues like "letting the animals do the work" but also about the need to develop strong relationships with consumers who will seek out and support

local farmers.

"People were really inspired by what Salatin had to say!" says Petzen. "Folks in the consumer workshops were so excited to make connections with local farmers it was almost like a rally!" She says farmers had so many questions for Salatin that the speaker could hardly get out of the room.

As one indication that western New York farmers are serious about this new enterprise, Petzen points out that 95 of the 145 farmers participating in the workshops also purchased one of Salatin's books. "I think if farmers are willing to invest \$25 in one of these books, on top of the \$20 workshop fee, that shows some serious interest." Seventy-five percent of farmers at the workshops reported that they plan to do something with grass-fed livestock in the coming season.

Interest in grass-fed beef, pork and poultry is at an all-time high among New York's small-scale farmers. With growing numbers of consumers and restaurants looking for healthy, local products, pasture-based livestock farming offers a promising opportunity. Joan Petzen and her colleagues in Western New York think the potential is huge. "This kind of enterprise is something that's really needed in our area. I expect to see a lot more grass farming next year and in years to come."

For more information about grass-farming and other small farm topics, visit the Small Farms Program web site at: [www.smallfarms.cornell.edu](http://www.smallfarms.cornell.edu).

**Grass Farming Resources**

- [www.smallfarms.cornell.edu](http://www.smallfarms.cornell.edu)
- N.Y. Pasture Association. Contact Janice Brown at (716) 466-7680.
- Grass-Fed Animal Products: Good for Animals, People, and the Planet. <http://www.consciouschoice.com/food/grassfed1411.html>.
- Graze-NY: [www.grazeny.com](http://www.grazeny.com).
- Northeast Pasture Research and Extension Consortium: [www.umaine.edu/grazinguide](http://www.umaine.edu/grazinguide).

# Organic Agriculture Depends On Inorganic Nutrients

**Tom Bruulsema  
Adrian Johnston**

NORCROSS, Ga. — Organic agriculture is expanding and receiving increased public attention. The "USDA Organic" label came into effect on Oct. 21 of 2002. Organic food sales in North America total about 10 billion dollars annually — almost two percent of total food. This expansion raises a question: Are there sufficient nutrients for organic agriculture?

Organic standards require nutrients to be chiefly from organic sources, such as manures and composts, and preferably generated on-farm. The major certifying bodies exclude use of the synthetic and soluble forms of nitrogen and phosphorus fertilizers that transformed agriculture beginning in the 19th century. They differ on allowable forms of potassium fertilizers.

Sole reliance on nutrients generated on-farm limits productivity, even if all products remain on the farm. Soil reserves of plant-available phosphorus and potassium are finite. And only certain crops — legumes such as alfalfa, clovers, and soybeans — can contribute nitrogen to the system by fixing some or all of their needed nitrogen. There are organic farms that produce good yields per acre, but in order to do so sustainably, they have to bring in nutrients from off the farm. A recent study in the northeast Great Plains, for example, found crops produced organically to yield only 44 to 75 percent of those produced conventionally. The study concluded that low levels of phosphorus and sulfur in the soil not only limited yield, but also could limit nitrogen fixation by legumes.

As long as the percentage of the land area farmed organically remains small, supply of organic nutrients from neighboring farms won't be a problem. Composts, crop residues, and animal manures all contain nutrients derived in part from commercial fertilizer nutrients, either directly applied or applied in other places at some time in the past. And even after many years of transition to organic farming, soils still contain phosphorus and potassium built up by commercial fertilizer use. So or-

ganic farmers, too, benefit from North America's long history of applying commercial fertilizer nutrients.

Commercial fertilizers supply nutrients in the inorganic form — the form that plants actually absorb — to boost the growth of plants. Plants are the only original producers of the organic materials that structure and cover the soil and feed its organisms. So inorganic nutrients are vital to the biology and health of the soil ecosystem.

Across North America, crops currently remove about 77 percent of the nitrogen supplied in fertilizers, recoverable from manures, and fixed by legumes. The figure for phosphorus is about 95 percent. Some losses occur, but growers have made progress over the past two or three decades in reducing them. Soil potassium, however, is currently being depleted. Crops remove about 44 percent more K than is supplied in fertilizers and recoverable manure.

Part of the appeal of organic food is its perceived healthfulness and nutritional quality. Such qualities, however, are not related to the form — organic or inorganic — of nutrients applied, but do depend on the relative amounts applied. For example, it has long been known that nitrogen can boost carotene, but reduces vitamin C. Potassium boosts lycopene in tomatoes and isoflavones in soybeans. Applying the right rates of soluble inorganic nutrients contributes a lot toward the goal of producing healthy food.

Commercial fertilizer nutrients have played a large role in the success of today's farms — directly with those that apply them, and indirectly with the few that don't. All of agriculture should be oriented toward producing healthy food — not just a few on the fringe. (It is the inorganic nutrients taken up by plants that produce healthy food, regardless of the source). The Earth's large reserves of inorganic nutrients can help sustain an agriculture that produces abundant food that is as healthy and as environmentally benign as those who purchase "organic" want it to be.

## PERRY PIPE

Corrugated Metal & Plastic

**QUEST-PEX  
WATERLINE  
HYDRANTS**

Sewer & Drain  
PVC - Sch. 40

**Attn: Graziers:**  
Special on waterline pipe  
til end of Feb.

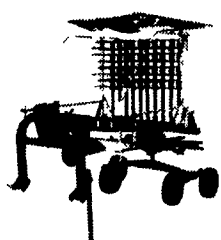
1" 160 psi .23 per ft. for 5000'  
1" 100 psi .16 per ft. for 5000'

*Other sizes available*

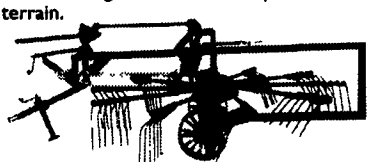
**(717) 582-2758**

### TOP HAY CROPS

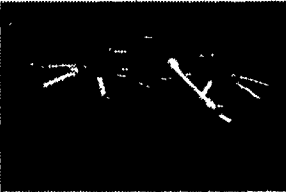
with I&J equipment



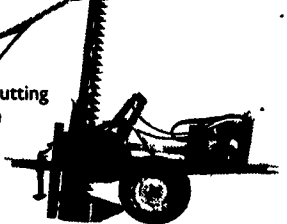
**3pt. Hitch Rotary Rake**  
in transport position.



**Rotary Rakes**  
Available in 3pt. or trailing, engine driven, PTO, or ground drive. Engineered to hold up on rugged terrain.




**Rotary Tedders**  
Available in 9' & 14' models. Both models have spring tines & tilt adjustment. Can be adapted for horse use.



**Mowers**

- Scissors action cutting
- 7' working width
- No plugging!

Call Us About All Our Tractor & Horse Drawn Equipment



**I&J Manufacturing**  
8302 Armb. Road, Cap. PA 17527 • 717-442-9461

**Ford Horses For Sale!**  
Stud Services Available