Ecological Farmers Association of Ontario

Research Protocol 2016

Pastured Livestock: Organic pasture amendments

Farmer-Researcher: Tony McQuail, Meeting Place Organic Farm, Huron County

Research Question: *Do organic-compliant amendments increase quality of rotationally grazed pastures (biomass, species composition)?*

Farmer-researchers will:

- Take photos throughout the project
- Keep in contact with EFAO with updates and questions
- Establish and conduct experiment as outlined in Protocol below
- Complete farmer-led research program training and surveys
- Maintain current membership in EFAO

EFAO will:

- Monitor progress of project
- Conduct training program
- Help set up Research Protocol, write and publish Protocol
- Help analyze data, write and publish Research Report
- Provide $500 payment to farmer at conclusion of project
- Reimburse one night's hotel stay for the Farmer-led Research Meeting in Kingston, November 29-30

Research Protocol & Data Collection

- In late spring/early summer (June), apply pasture amendments using GPS technology to mark passes
- Maintain management records, such as grazing and mowing
- Sample biomass in spring 2017 according to randomized paces; dry, weigh and record biomass

Experimental Design - continued on Page 2

With support from:

Ontario Trillium Foundation / Fondation Trillium de l'Ontario

An agency of the Government of Ontario
Un organisme du gouvernement de l'Ontario

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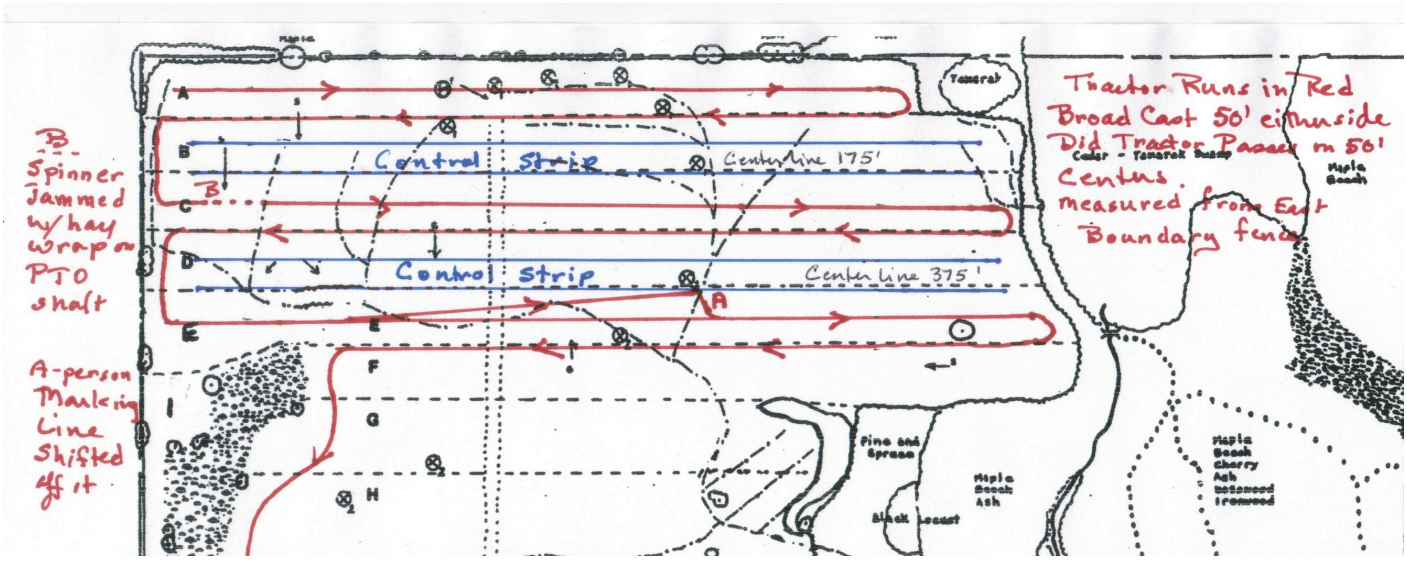
Experimental Design

Amendments:
1 tonne Sulphate of potash (SOP)
300 lb Zn sulphate
200 lb Copper sulphate
55 lb Boron



Biomass sampling; due to drought in 2016, sampling will occur in the 2017 growing season

Tony McQuail, Pasture Amendment Experiment, 2016
Coordinates for randomized sampling in fertilized and unfertilized pasture plots
First # is coordinate for paces along the 100 ft side; second # is coordinate for paces along the 150 ft side

	Plot A		Plot B		Plot C		Plot D	
Plot rep	Fertilized	Unfertilized	Fertilized	Unfertilized	Fertilized	Unfertilized	Fertilized	Unfertilized
1	3, 135	40, 122	43, 52	25, 38	81, 107	52, 7	51, 6	60, 118
2	96, 150	76, 14	19, 114	63, 88	99, 48	96, 16	88, 81	80, 37
3	40, 21	84, 20	100, 30	30, 52	35, 144	72, 87	5, 94	17, 29
4	29, 62	30, 94	69, 75	10, 25	42, 42	44, 120	84, 119	35, 143
5	73, 117	68, 139	75, 32	87, 32	32, 146	9, 60	39, 1	39, 55

Coordinates for 5 replicates are included; 3 reps minimum, bagged, dried and weighed separately. Remember to only weigh biomass (tare bag weight or take biomass out of bag to
Pre-labeling bags really helps
For example
A1-F For Plot A, rep 1, fertilized
A1-C For Plot A, rep 1, unfertilized (control)