

**FACTS FOR FARMERS**



# Productive Pastures Require Fertilizer

By **LLOYD B. MACLEOD**  
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Pasture fields that will support a large number of grazing animals must be properly fertilized and managed if a farmer expects to get maximum returns.

With hay crops we aim for two cuts, but with pastures we need production from early spring to late fall if possible. More than one management system (fertilization program) will be necessary to provide pasture over the entire growing season.

At a recent meeting of the P.E.I. Soils and Crops Committee it was decided that the fertilizer recommendations outlined below would be recommended to the Maritime Fertilizer Council for approval for 1967.

**EARLY GRAZING.**

In order to give your pasture acres to best advantage a small area should be set aside for early grazing and the remainder kept for the main pasture area. The early pasture should be fertilized early in the spring with 400-500 lbs. acre of 6-12-12 if it is a grass legume pasture or with 400-500 lbs. acre of 10-10-10 if it is a grass pasture.

At least some of the nitrogen applied should be in the nitrate form since it will be taken up and utilized more readily in the early spring while soil temperatures are low. The best way to guarantee early spring growth is to have the plants go into the winter well fed with the nutrients that are needed for early growth already stored in their roots or stems. This early pasture should carry your cattle for May after which they can go on to the main pasture areas. After the cattle are moved off the early pasture area fertilize it and allow it to regrow for mid to late summer grazing. Pastures will have to be managed or rotated so that one area is coming along as another is coming down. If necessary, supplementary pasture crops can be seeded for grazing during the late summer and fall period.

**MAIN PASTURE**

If the main pasture area is grass about 400-500 lbs. of 10-10-10 per acre should be applied in mid June followed by a high N, high K fertilizer such as 15-5-15 at 300-500 lbs. acre in early August. If there is 20 to 30 percent legumes in the pasture use a low nitrogen fertilizer such as 5-20-20 at 500-700 lbs. acre in mid June and apply supplementary nitrogen as required to maintain production (Ammonium Nitrate or equivalent at 150 to 300 lbs. acre). Nitrogen fertilization of grass pastures in June will level out the production over the growing season and will avoid having a high proportion of the total yield produced in the spring.

**LEGUME PASTURE**

If you have a legume pasture (over 50 per cent legume) use 0-20-20 fertilizer at 400-600 lbs. acre in the spring or early June followed by muriate of potash at 100-200 lbs. acre in late August.

If heavy applications of manure are applied to pastures the fertilizer requirements will be reduced accordingly. For example, 20 tons of manure per acre would supply 200 pounds of N (depending largely on the time it is applied) 60 pounds of P<sub>2</sub>O<sub>5</sub> and 200 pounds of K<sub>2</sub>O. If no nutrients had been lost from the manure that would be equivalent to a ton per acre of a 10-3-10 formula. If the manure is applied on the snow during the winter a large proportion of the N and some K may have been lost, and supplemental fertilization is needed. A larger proportion of the nutrients in manure will be absorbed by plants when the manure is applied in the spring or early fall.

**(MORE)**

**SOIL TESTING**

With pastures as with a hay or a potato crop the safest way to prescribe a fertilization program is to take a soil sample, have it analyzed and follow the recommendations. Remember if you want pastures that will continue to provide feed for your cows, then you must fertilize or feed these pastures to maintain a maximum production. Fertilizing pastures is much cheaper than buying supplementary hay or grain to provide energy for cows that are exercising on poor pastures.

**LET BACTERIA PRODUCE NITROGEN FOR YOU**

(This article taken from script of the 1966-Our Farm Business)

Certain bacteria enter legume root hairs and infect their roots producing round swellings called nodules. These bacteria take nitrogen gas from the air and turn it into a form available to the plants. If the bacteria are present plants grow rapidly, are dark green in color and produce good yields. If the bacteria are absent, plants are yellow, stunted and poor yielders. The presence of these bacteria may mean the difference between a good legume stand or a crop failure.

There are many forms of nitrogen fixing bacteria: one form works on alfalfa, another on sweet clover, another on trefoil and so on. The condition of the soil affects the life of these bacteria. Most do poorly in an acid soil, so they like a high pH. Such is the case with alfalfa, this of course, is one of the reasons you lime heavily for alfalfa production.

Is legume inoculation necessary with the high fertility levels being used today? The answer is yes! The carry over of nitrogen from one year to another is low. Is it possible to get high alfalfa yields with commercial nitrogen? This is possible but nitrogen fixing bacteria can add 150-200 pounds of nitrogen

to your soil and costs only a few cents per acre.

These bacteria live in the soil for many years with some strains living longer than others. However, weather and soil conditions reduce the population of bacteria. So, even though you may have grown a particular legume on any particular field before, it is a good idea to add fresh bacteria at the time of seeding, by inoculating the seed with its correct strain of bacteria.

When you buy your seed, pick up a package of the inoculant as well.

**THE INOCULANT**

Inside the moisture proof package, we have an inoculant which contains in it literally billions of bacteria which are ready to go to work on legume plants. The inoculant is simply black peat in which the bacteria have been placed.

**COST**

The package of inoculant costs 65 cents at one of the local seed stores. Now for 65 cents we can inoculate the seed to go on three to five acres of legumes. This costs 20 cents per acre (depending on that species you are growing so the cost is very little and the time factor is nothing. The recommended rate of inoculation is on the package and if you want to overdo it on the first seeding put on three times as much—don't let it bother you you can't put on too much. This extra dose will pay—especially with trefoil and alfalfa.

**RETURNS**

Remember, if the seed is not inoculated it cannot fix nitrogen. Alfalfa for example, fixes about 150-200 pounds of nitrogen per year worth about \$15-\$20. per acre per year. Seed inoculation can mean the difference between a good stand of legumes and a poor stand so seed inoculation is a very critical thing and deserves any time and attention we can give it.

**APPLICATION**

Wet the seed slightly with water and sprinkle on the inoculation and mix well. Let the seed get slightly dry and plant immediately. This way you get fresh living bacteria on the seed at planting time. All in all, inoculation is a good investment. It will pay off on legumes going on fields for the first time and for a few cents is a good investment even where you have grown the crop before.

For further information, on forage crop fertilization contact either David Smith, P.E.I., Dept of Agriculture Charlottetown or Dr. L. MacLeod, Experimental Farm, Charlottetown, P.E.I.

**PLAN ROCKET SHOT**

TOKYO (AP) — Japan may put a satellite into orbit in September if all goes well. Tokyo University will make a test launch in July of a three-stage Lambda 3-H rocket from Tochura Space Centre in southern Kyushu.

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## Vancouver Residents Told Burn, Bury Or Store Garbage

VANCOUVER (CP) — Refuse laden Vancouverites are being advised to burn, bury, store or dump their garbage as a strike of outside workers enters its seventh day today with no end in sight.

One columnist goes so far as to advise householders to eat some of the food they usually throw in the garbage to ease the problem of overflowing cans.

With the city's estimated 120,000 garbage cans emptied for the fifth day Wednesday, the city and the Civic Employees Union (outside workers) appear far from settling the wage dispute which involves 1,500 men doing everything from garbage collection and street cleaning to park and civic golf-course maintenance.

The city is saving \$27,000 a day, in wages; three students are making money collecting garbage at 50 cents a can, the grass on closed golf courses is looking healthier every day and

City engineer Ray Martin said garbage will keep for weeks in sealed plastic bags. He said garbage can also be buried but he advised against burning because of the nauseating, acrid smoke.

The University of British Columbia student council said it cannot stop students from going into the garbage collection business but advised against it.

**CROC TAKES TRIP**

LUSAKA (AP) — Burglars in the Zambian trade fair in Ndola stole a live crocodile. "It is difficult to imagine why anybody would take the risk," said fair manager David Appleton. "I hope it will be returned in good condition."



### THE ELECTION ACT, 1963 NOTICE OF REVISAL SITTINGS County of KINGS

Take notice that the revision of the list of electors for the revisal district comprising polling divisions numbers 1 to 54 in the above County will be held on Wednesday the 18th day of May, 1966, between the hours of 11 a.m. to 5 p.m. in the afternoon, and 7 to 9 p.m. in the evening at Court House, Georgetown in the County of Kings.

Dated this 10th day of May, 1966.

**Wm. A. Reddin,**  
Revising Officer

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## Order No. 52 UNDER AUTHORITY OF SECTION 8 OF THE MILK PROTECTION ACT THE PRINCE EDWARD ISLAND MILK CONTROL BOARD BY ORDER NO. 52 PRESCRIBED AS FOLLOWS THAT FORMER ORDERS BE RESCINDED AND THE FOLLOWING PRICE STANDARDS BE SUBSTITUTED THEREFOR

Notice is hereby given to all milk and cream producers, distributors and consumers that beginning May 15, 1966 the price of milk and cream in the areas of Borden, Victoria, Crapaud, Tryon, St. Eleanors, Miscouche, Wellington, Richmond, Tyne Valley, Portage, Elerslie, O'Leary, Kensington, New Haven, Bonshaw, Charlottetown, Southport, Sherwood, Parkdale, North River, Cornwall, New Glasgow, New Lndon, Cavendish, Winsloe, Hunter River, North and South Rustico, Pownal, Bunbury, Vernon Bridge, Eldon, Pinette, Flat River, Wood Island, Wood Island Ferry shall be as follows:

PASTEURIZED MILK		HOMOGENIZED - PASTEURIZED	
Minimum fat 3.5%		Minimum fat 3.5%	
RETAIL WHOLESALE		RETAIL WHOLESALE	
Per Quart	.24c	Per Quart	.25c
Per Pint	.13c	Per Pint	.13c
Per 1/4 Pint	.08c	Per 1/4 Pint	.08c
TABLE CREAM		BLEND CREAM	
Minimum fat 18%		Minimum fat 8%	
RETAIL WHOLESALE		RETAIL WHOLESALE	
Per Quart	.88c	Per Quart	.48c
Per Pint	.44c	Per Pint	.25c
Per 1/4 Pint	.25c	Per 1/4 Pint	.13c
WHIPPING CREAM		UNPASTEURIZED MILK	
Minimum fat 32%		Minimum fat 3.5%	
RETAIL WHOLESALE		RETAIL WHOLESALE	
Per Quart	\$1.25	Per Quart	.23c
Per Pint	.65c	Per Pint	.12c
Per 1/4 Pint	.33c	Per 1/4 Pint	.06c
CHOCOLATE DRINK		SKIMMED MILK	
Minimum fat 2%		Minimum fat 17%	
RETAIL WHOLESALE		RETAIL WHOLESALE	
Per Quart	.28c	Per Quart	.17c
Per Pint	.14c		
Per 7 oz.	.08c		
Per 10 oz. paper	.10c		
STORES & RESTAURANTS		STORES & RESTAURANTS	
RETAIL		RETAIL	
Per Quart	.23c	Per 1/4 Gal.	.44c
Per Pint	.13c		

MONTAGUE and SOURIS	
PASTEURIZED MILK	
Minimum fat 2.5%	
RETAIL WHOLESALE	
Per Quart	.23c
Per Pint	.12c
Per 1/4 Pint	.07c
HOMOGENIZED - PASTEURIZED MILK	
Minimum fat 3.5%	
RETAIL WHOLESALE	
Per Quart	.24c
Per Pint	.13c
Per 1/4 Pint	.07c
TABLE CREAM	
Minimum fat 18%	
RETAIL WHOLESALE	
Per Quart	.85c
Per Pint	.43c
Per 1/4 Pint	.22c
CHOCOLATE DRINK	
Minimum fat 2%	
RETAIL WHOLESALE	
Per Quart	.25c
Per Pint	.13c
Per 7 oz.	.07c

ALBERTON	
PASTEURIZED MILK	
Minimum fat 3.5%	
RETAIL WHOLESALE	
Per Quart	.23c
Per Pint	.12c
Per 1/4 Pint	.07c
BLEND CREAM	
Minimum fat 8%	
RETAIL WHOLESALE	
Per Quart	.46c
Per Pint	.24c
Per 1/4 Pint	.12c
HOMOGENIZED - PASTEURIZED MILK	
Minimum fat 3.5%	
RETAIL WHOLESALE	
Per Quart	.24c
Per Pint	.13c
Per 1/4 Pint	.07c
WHIPPING CREAM	
Minimum fat 32%	
RETAIL WHOLESALE	
Per Quart	\$1.22
Per Pint	.63c
Per 1/4 Pint	.32c
CHOCOLATE DRINK	
Minimum fat 2%	
RETAIL WHOLESALE	
Per Quart	.25c
Per Pint	.13c
Per 1/4 Pint	.07c

PASTEURIZED - HOMOGENIZED MILK	
Minimum fat 3.5%	
In paper containers	
RETAIL	
Per Quart	.29c
Per Pint	.17c
WHOLESALE	
Per Quart	.28c
Per Pint	.16c
10 oz. non-returnable paper container	
PASTEURIZED - HOMOGENIZED	
Minimum fat 3.5%	
RETAIL WHOLESALE	
Per Quart	.29c
Per Pint	.17c
Per 1/4 Pint	.08c

PASTEURIZED MILK	
Minimum fat 3.5%	
RETAIL WHOLESALE	
Per Quart	.24c
Per Pint	.13c
Per 1/4 Pint	.08c
PASTEURIZED - HOMOGENIZED MILK	
Minimum fat 3.5%	
RETAIL WHOLESALE	
Per Quart	.25c
Per Pint	.13c
Per 1/4 Pint	.08c

**WALTER E. DARBY**  
(Chairman)

**E. W. ADAMS**  
(Secretary)

**ROLAND MacDONALD**  
(Member)

**ELMER WAUGH**  
(Member)

**HELEN A. LAWSON**  
(Member)

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