

Ecological Farmers Association of Ontario

NEWSLETTER - *May 1989*

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The Ecological Farmers Association of Ontario

The Ecological Farmers Association of Ontario was established in 1979 with the purpose of:

- Helping members develop ecological farming methods which maintain and enhance the health of the soil, the crops, the livestock and the community.
- Providing opportunities for members to observe practical applications of ecological farming methods. These include soil tillage, greenmanures, covercrops, crop rotations, composting, soil erosion control, conservation practices, windbreaks, livestock management and marketing.
- Bringing those people together who are concerned about ecological agriculture to share experiences.
- Creating links between farmers and consumers to gain their understanding and to create markets for ecological farm products.

Activities

Conferences with speakers on subjects related to ecological agriculture; courses and workshops on ecological farming methods, farm tours, newsletters, farm consulting seed exchange and good fellowship.

MEMBERSHIP is \$15 per year, \$40 for three years. Send to Mathilde Andres, R.R. 1, TIVERTON, ONT. N0G 2T0.

ARTICLES, LETTERS AND OTHER SUBMISSIONS ARE WELCOME. These are subject to editing for length and style.

Directors

Lawrence Andres, R.R. 1, Tiverton, Ontario N0B 2T0
Bernhard Hack, R.R. 5, Kincardine, Ontario N2Z 2X6
Tony McQuail, R.R. 1, Lucknow, Ontario N0G 2H0
Ted Zettel, Chepstow, Ontario N0G 1K0
Phil Beard, 649 Josephine St., Wingham, Ontario N0G 2W0

Newsletter Editor

Mike Pembry, R.R. 1, Terra Cotta, Ontario L0P 1N0

COMING EVENTS

November 3 and 4 (Friday & Saturday)
Introduction to Ecological Farming Course
Omeme near Lindsay

November 18 (Saturday)
Fall Conference, Ethel

December 1 and 2 (Friday & Saturday)
Introduction to Ecological Agriculture
Foldens near London

FARM TOURS SUMMER 1989

Our farm tours have been one of the most popular activities the Ecological Farmers Association of Ontario. It's a chance for the people to see new ideas being put into practice and to discuss problems right in the field. It's a chance to mix with both experienced and newly converted organic farmers and to see the effects of the changeover on each of the farms. This year's tours includes a mixture of and recently converted ecological farmers and each one will be worth attending.

Tours start at 11:00 a.m., and you should bring a picnic lunch, unless you're on a severe diet. The entire family including children are always welcome on these tours which are both educational and social.

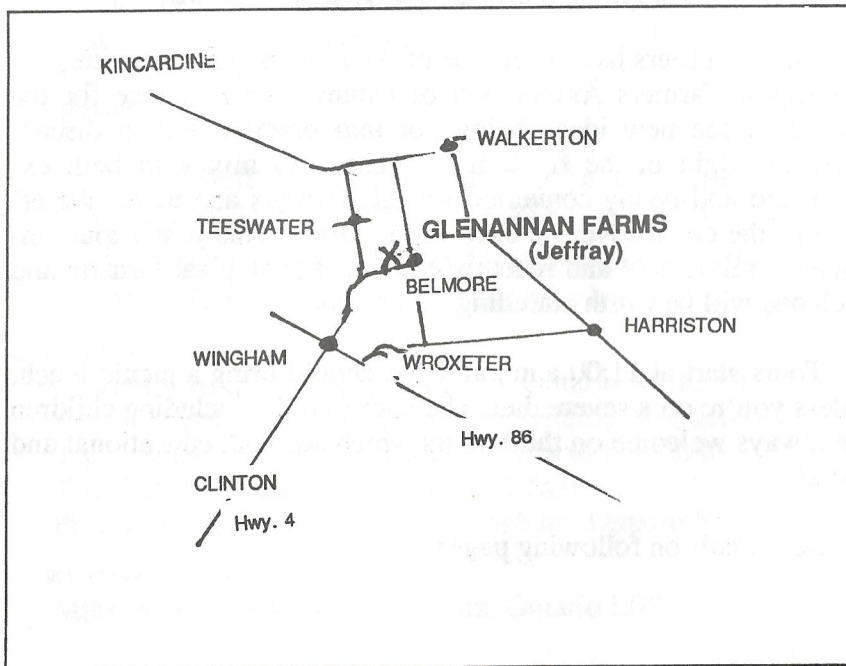
See details on following pages.

Bev and Brain Jeffray — June 4 (Sunday)

This farm is located at R.R. 2 Wingham, Ontario, phone 519-357-1796. Bev and Brian are in their second year of transition and have wheat and rye that will qualify for certification this year. They have 450 acres of which 300 are workable, and 140 of managed wood lot.

The livestock includes 40 Holstein milking cattle plus dry cows and replacements. They intend to eliminate any purchased concentrates by replacing them with pasture this year. By the time we tour their farm they'll have a good idea how this is working.

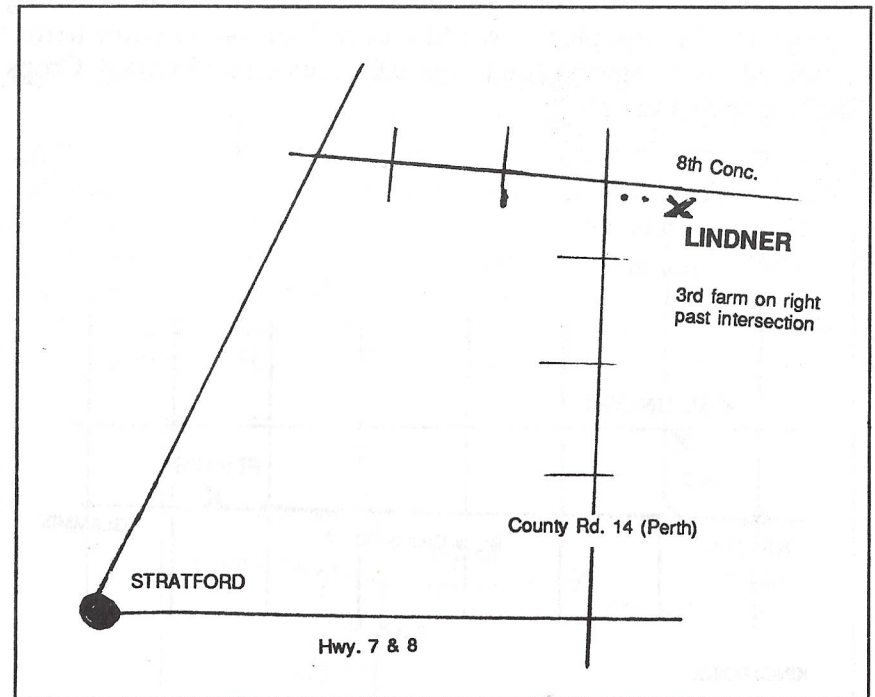
They also have a 120 breeding ewes of a Dorset and Suffolk cross, which they've had for the past eight years. They are using accelerated lambing without the use of drugs and chemicals to induce estrus. Intensive pasture management is practiced for cows and sheep and this has been an important part of the operation for the last five years. It's based on the New Zealand high tensile electric wire system by Gallagher.



Fred Linder — July 8 (Saturday)

Located at Stratford, Ontario, phone 519-656-2408. Fred Linder is in his fourth year of having OCIA Certification (Organic Crop Improvement Association), and he was also certified as Bio-dyn last year. (The Bio-dyn certification is a step towards being classified at Demeter) by the Biodynamic Association. This is Fred's seventh year of farming organically and he has a beef cow/calf herd as well as hogs and cash-crop operation. Crops include wheat, spelt, rye, oats, barley, and this year he is planting some flax. He has a hundred acres plus another 100 rented.

Fred hopes that we may have time after touring his farm to take a quick look at a farm across the road where the owner is growing alfalfa seed with the help of leafcutter bees. This should of great interest EFAO members as producing seed from alfalfa in this area has been quite tricky.

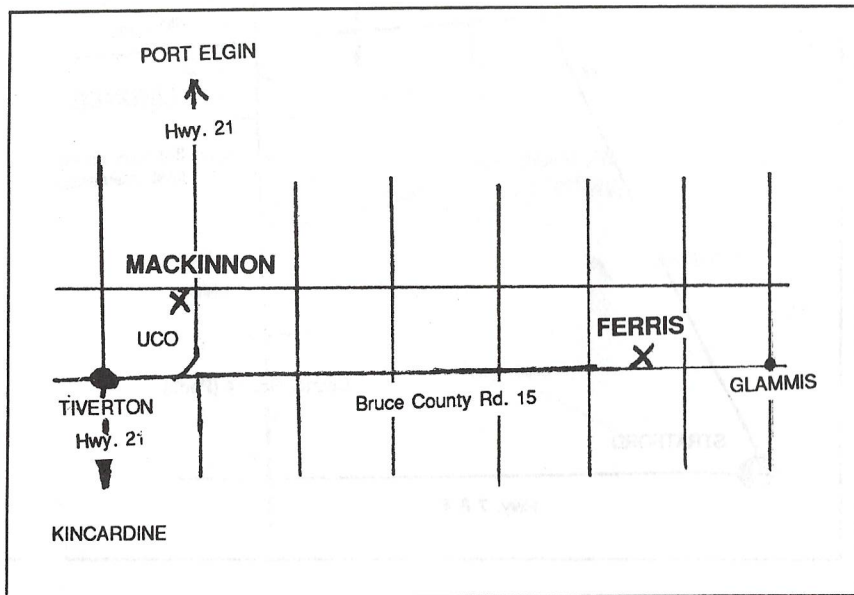


John McKinnon — July 30 (Saturday)

Tiverton area - Phone 519-368-5186. John and Sheryl McKinnon run a farrow to finish hog operation with 35 swine, marketing some 600 hogs per year. They also have three horses of the Canadian Horse Breed which they are using a foundation stock and they are also starting a new beef herd with three French Canadian cows. They have a 230 arable acres and the crops include spelt, rye, mixed grain, barley, soybeans, red clover (for seed), trefoil, and timothy for seed and hay. John is a certified under the OCIA program and also uses Bio-dynamic principles. He has a liquid manure tank with is aerated and a solid manure system too. This a good chance for operators to see just how this manure system works using organic principles.

Jim Ferris — July 30 (Saturday)

Near Glamis - Phone (519) 353-5662. Jim's farm will be visited on the same day as McKinnon and there we will see a mixed farming operation of sheep, pigs, cow/calf and cash-crops. The cow herd is purebred Charolais and Jim farms 200 acres plus 35 rented. Crops include spelt and oats.



EASTERN TOURS

Not the Far East, just in eastern Ontario. We have a growing membership in that part of the province and their tours will be well worth attending. The tours are both on July 16 in the Lindsay area.

Dave and Gordon Kea 705-426-9820

This is a dairy operation run by a father (Dave) and son team milking about 60 cows with a composite BCA of 157. They are farming 350 acres based on two owned farms and one rented. They have been farming organically for two and a half years and grow 100 acres of barley, 50 oats, 120 hay and about 35 of corn. They are just getting into fall rye and have used oil radish and clover plowdowns.

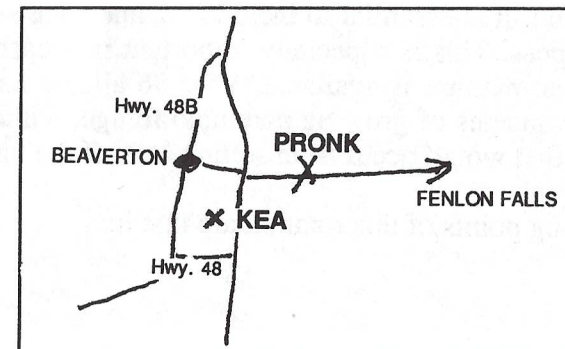
They are also making a gradual change to bio-dynamic farming methods. Composting has been practised for more than two years.

Go north on Hwy 12 from the junction of Hwy 48 & 12 to the first concession which is the second conc. of Thorah. Then left (west) and they are in the first farm.

Bert (father) and Murray Pronk (705)-426-7059

Another father and son dairy operation with 60-65 cows milking with 300 arable acres out of 400 acres total. A move away from corn has been made on this farm with a switch to more hay and small grains. This is the first year of this change and it appears to be going well. This is their third year farming organically and composting manure. Crops include hay, barley, oats and rye.

Take the highway from Beaverton towards Fenlon Falls and go 4 miles east from Highway 12 at Beaverton stop lights to their farm gate.



PLANNING A ROTATION

- Part II -

by Ted Zettel

Farming ecologically means to a great extent, observing and imitating what we see in nature. Here, the many different species growing in any given area are evidence of the natural tendency toward diversity. In agriculture, companion planting is often not feasible, so we achieve diversity and its many benefits by means of crop rotation. General rules are that the rotation should allow for growing plowdown crops and should keep the soil covered as much as possible. Legumes should be used frequently enough to maintain nitrogen and a wide variation of plant types should be grown.

In the last newsletter I outlined a forage based rotation typical on cattle farms. Farms where little or no roughage can be fed to livestock present more of a challenge.

B: Rotation for Farms Without Cattle.

Year #1 - Winter wheat followed by oil radish.

Year #2 - Oats and peas underseeded with red clover.

Year #3 - Soybeans.

Year #4 - Winter eye followed by buckwheat.

Year #5 - Barley underseeded with red clover.

Year #6 - Red clover harvested for seed.

Since this rotation does not have the luxury of 3 or 4 years in hay or pasture, it is essential to include legumes like soybeans, red clover and peas. This is especially important in a cash crop situation where no manure is available. Year #6 allows for all the soil building advantages of growing perennial forage, without the large carbon loss that would occur from selling hay off the farm.

The strong points of this rotation are that it:

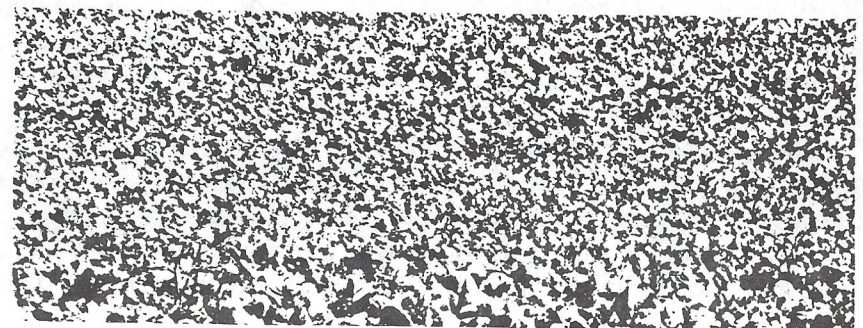
- 1) allows the ground to be covered over winter every year (depending on soil type and the need for fall plowing).
- 2) has blossoming plants in each year of the rotation.
- 3) is never more than 1 year without a legume.

Although the rotation is a fairly simple one, it still contains 9 plant species. Many others could also be used, depending on the circumstances of the individual farm. Canola, corn, spring wheat, flax, sunflowers and field vegetables are all possibilities. There are new cover crops and underseedings being used experimentally that may become popular in the future. Hairy vetch has the potential for fixing large amounts of N. Annual ryegrass could be a non-competitive underseeding for corn or soybeans. Winter peas are a possible leguminous post harvest cover crop.

There are many different workable rotations. Most long time ecological farmers will tell you that they have a basic rotational plan, but use it more as a guide than a strict rule. They will also say that they are still observing, learning, and trying to improve their management, a process that never ends!

Editor's note: we would like to hear your questions and comments on this and other articles.

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FODDER RAPE - A neglected crop

by Mike Pembry

I have a neighbour who raises sheep. For several years I marvelled how he could keep so many sheep on a small acreage. One of his main crops was fodder rape, a seldom used plant in Ontario. I asked him about the crop and found it to be similar, if not the same as a variety of kale we used to use in England for winter forage.

Purchasing seed was difficult, but I eventually tracked down Bishop's Seeds in Belleville and was able to buy some. My first attempt at growing this as a summer forage crop two years ago was a reasonable success, but my attempts to grow it in rows which I could cultivate were not so good. Blocking off some of the runs on the grass seed box of the grain drill made it difficult to calculate where you should drive on the return run. However, the rows which were cultivated showed some benefit from this.

In the fall of 1987 I tried planting some in October hoping the small seedlings would come through the winter. In the spring it looked as though they had survived, but the green leaves started to fade with the spring frosts on land which had a poor snow cover and hardly anything grew when the warm weather arrived. For that late seeding (October) I was able to buy seed from the local Co-op.

In 1988 I decided to try this crop again, using it as a followup to pasture. The field was chisel plowed in early July after grazing. The chisel plowing was repeated across the field in mid-July and then disced both ways at the end of July before seeding (on a leaf day according to the bio-dynamic calendar). A fairly generous application of compost was applied between each discing.

Luck was with me. We had one of the few heavy rains the night after seeding. After three days of hot steamy weather the odd leaf could be seen poking through the surface. After five days the field took on that green tinge showing a good germination.

This time I had used every run of the seed drill set almost at the closed position. Still I used more seed than I had wanted at close to 10 pounds per acre. Five pounds per acre is the recommended rate.

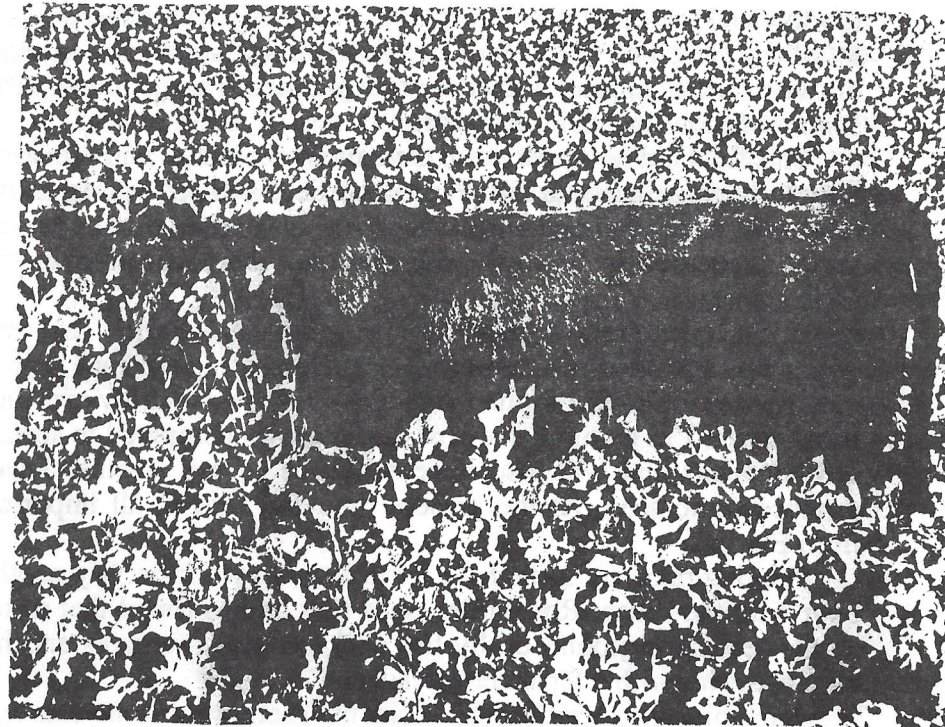
My idea at the time was to allow it to grow to about six inches high and then to move in with a cultivator and create rows. This

would allow another crack at any grass which had not been killed by the chisel plow. Any fodder rape which would be turned into the ground would act as green manure for the plants in the rows.

Due to the incredible growth of the rape plus lack of time I never did get into the field with the cultivator. However, four weeks after planting I had a crop about a foot high and growing vigorously.

I grazed it in about the eighth week although the sixth week would have been fine. By this time much of the field was covered with a three-foot growth of the fodder rape. I was hoping to leave it for late fall grazing, but I ran out of water on the rented farm and had to bring the cattle home. I was glad I grazed when I did because later wet weather would have led to soil damage.

(Continued on page 12)



Cow grazing belly-high fodder rape.

(Continued from page 11)

The cattle were controlled with an electric fence so that they cleaned up as they moved across the field. The fence did short out because of the height of the rape, but that didn't matter because they didn't try to graze past the wire until they had reached everything they could. By that time they had eaten any plants that were shorting it out.

The cattle were given enough each day so that they cleaned up most of the plants, but left enough to protect the soil surface from trampling feet and winter rains. They had free choice hay, but left it immediately they saw me moving the electric fence in the rape.

I planted another field last year in late August, again just before a rain. The field had been summer fallowed following hay and had quite a bit of twitch. This time I shut the drill down to its lowest point to achieve the five pounds per acre rate. I'm afraid this was too low and the catch wasn't as good, especially where there was a lot of dry twitch on the surface. I was also surprised by the amount of twitch which appeared after the rain and which came through the summer fallow on such a dry year.

This field did not grow more than about six inches and provided very little grazing in late fall. Part of the field was seed using co-op seed and part with seed from Speare's in Harriston. The co-op variety appeared to be more vigorous and taller growing in the early stages.

When I grazed it I decided to leave a couple of acres. This was where I had planted the Speare's seed. This spring the rape seems to have wintered well despite the fact that there was hardly ever any snow cover. I'm going to see how fast it grows compared to spring seeded plants and will also have a chance to see whether I can produce some seed. At the present time the seed is all imported from Europe.

Planting rates are something I still have to work on. My neighbour with the sheep, Roy Miller, says that he has found that some of the seeds are ground up by the drill at those low rates and he broadcasts his with a fertilizer spreader.

Something else I noticed by accident. There were some oats left in the seed drill and these lasted for the first two rounds round the field. The combination seemed to work well. The oats grew up

through the rape and neither seemed to suffer from the presence of the other. This year I'm planting a few oats with the rape plantings. The cattle love the combination too.

There's lots of room for experimentation with this crop, but for me I hope to use it regularly after tearing up pasture and hay with a chisel plow. It gives the grass a chance to rot down making the soil more workable for a grain crop. It provides a good smother crop which can use the nutrients from the pasture plowdown and it's another crop that can be harvested through livestock rather than through a machine. An added benefit from this is that you don't have to worry so much about having a smooth surface free of stones for machinery.

A word of caution. I have been told that this crop used to be more popular but had a bad reputation for causing bloat. Another farmer told me that he lost some cattle with red water disease when they were on fodder rape. I hope I don't run into these problems, but feeding free choice hay should help avoid these problems.

Another point is that although this crop can be grazed right through the fall even after heavy frosts the tramping of the cattle on the wet soil could be a problem. If fields are to be grazed that are wet, it may pay to wait and get some frost in the ground to avoid soil damage.

Note: If you've tried something different that either worked or didn't work please let us know — write Mike Pembry, R.R. 1, Terra Cotta, Ont. LOP 1N0.

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SWEEP STUDY RESULTS

The "Review of Farm-based Soil Conservation Research and Development" was prepared by Ecologistics Limited of Waterloo under the direction of Ecological Services for Planning Ltd., Guelph on behalf of Agriculture Canada. Among other things, the study showed that:

- The threat of erosion and soil degradation was the major reason for adopting conservation strategies.
- According to these innovators, conservation pays. Economic factors were the second most frequently cited reason for adopting conservation measures.
- Conservation farmers are relatively well-educated. Almost 70% of the respondents had some post-secondary education.
- Continuous corn is falling out of favor with conservation farmers. None of the respondents grows corn every year on any field. More than 40% use a three-year, corn-soy-winter wheat rotation.
- Cover crops are popular. About 85% of the farm innovators use cover crops to protect their soil from erosion while another crop becomes established.
- Conservation farmers are willing to take chances. Almost 70% describe themselves as "risk takers."
- Weed control is a top concern. Most farmers surveyed expressed dissatisfaction with the effectiveness of conventional herbicides used as part of a conservation farming program.
- Farmers find information on conservation farming methods difficult to obtain. The American farm press was named as the source of most relevant information.

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EDITOR'S LETTERS

The Heritage Seed Program is a project of the Canadian Organic Growers. Its goal is to seek out and preserve heirloom varieties and endangered nonhybrid varieties of vegetables, fruits, herbs, grains, forages and flowers. The organization consists of a network of gardeners and farmers across the country who grow out the varieties, save seeds and make seeds available to other members. Another goal is to educate and involve the public in the preservation of the genetic diversity of our agricultural and horticultural heritage. If anyone is interested in more information, they can send a self-addressed stamped envelope to :

Heritage Seed Program
Heather Apple
R.R. 3
Uxbridge, Ontario
L0C 1K0

MEMBERSHIPS

The address label on the envelope which brought this newsletter to you is significant. If you are a paid member, the expiry date of your membership should be printed on the top of the label. If there is no number it means we do not have a record of payment for you which means that you may not receive future newsletters from us. The date printed there denotes the date at which your membership expires. For example showing 12/89 means you are paid up until December of this year. A date of 12/88 means your membership has expired and should be renewed.

Please give this your close attention and let us know if this expiry date is incorrect. If it is correct and it's expired please send us your cheque as soon as possible to Mathilde Andres, R.R. 1, Tiverton, Ont. N0B 2T0.

ACIDITY STUNTS FRUIT TREE GROWTH

ANOTHER PATCH JOB

Apple growers in B.C.'s Okanagan Valley are coping with stunted fruit trees and blistered bark because of a dramatic increase in the amount of acid in the region's soils.

Over the last 20 years, the sandy soils of the area have become as much as 1,000 times more acidic as a result of intensive farming practices necessary to compensate for the dry climate and poor quality soil.

Agriculture Canada is advising producers to apply lime to the soil in an attempt to return it to its natural state.

An increase in chemicals toxic to fruit trees - like manganese and aluminium - are causing stunted growth and bark measles, which blisters the tree's bark.

"Red Delicious apple growers are the hardest hit by this situation," says Dr. Gerry Neilsen, a scientist at the Summerland Research Station. "New trees can't grow because they can't get established."

The soil is losing nutrients vital to healthy plants such as magnesium, calcium and nitrogen. Studies have also shown that calcium and magnesium are leached out of the soil much faster than potassium, resulting in a chemical imbalance.

Fertilization and irrigation, the main causes of the high acidity level, are in wide use to compensate for poor soils and low rainfall.

For example, producers tend to use nitrogen fertilizers which contain ammonium, a substance that forms acid. Fertilizers that are not acid-forming aren't considered economical because they are more expensive and contain less nitrogen.

The department is suggesting that producers work lime into the soil except in areas where there are fragile tree roots.

Growers should take soil samples before they plant to determine the extend of the problem.

However, even with these measures it may be some time before producers notice any change.

"Acidity will decrease quickly on the surface where the lime is applied," Dr. Neilsen explains. "But major, long-term change won't occur until the lime penetrates to much greater depths such as 90 centimetres, which will take time."

It takes an estimated five years for lime applied to the surface to penetrate 10 centimetres.

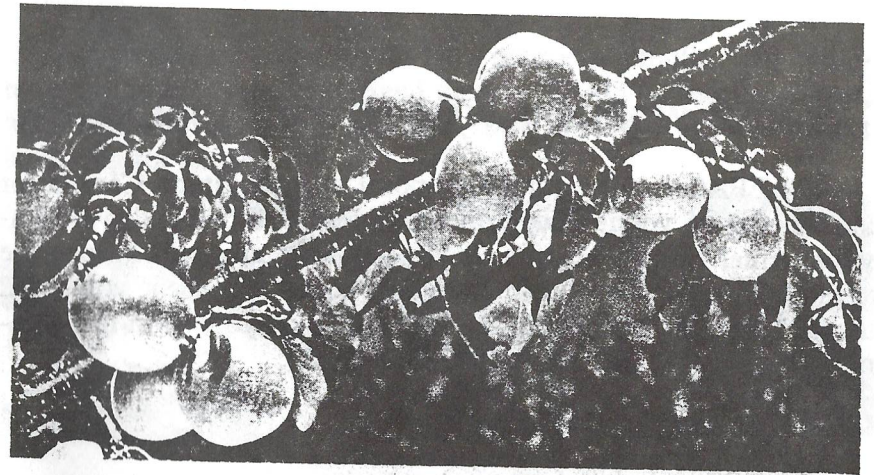
Research continues on methods to move the lime deeper into the soil without damaging trees. Dr. Neilsen adds that liming will have to be a continuous practice or the problem will return in three or four years.

"The sandy soils and heavy irrigation make this area very susceptible to soil degradation. We will always have to watch soil quality closely."

Other research at the station indicates new problems may be ahead for Okanagan fruit growers. For example, soil samples taken from some local orchards show a substantial loss of organic matter, which contains nutrients important to high-quality soil. The problem is particularly serious in areas of prolonged herbicide use.

There was no suggestion in this release from Agriculture Canada, that a more permanent solution could be switching to ecological farming methods.

Editor



AG-CAN TASK FORCE

Agricultural Canada has set up a task force on sustainable agricultural. One of their first concerns is their economical viability of ecological methods. Anyone who would be willing to share their financial farm records with this task force should contact Ted Zettel for further information (519) 366-9982. There will be a generous fee for those willing to provide this cooperation. Safeguards will be in place to guard confidentiality.

This is good news but YOUR HELP IS URGENTLY REQUIRED. There are still many people who don't have much faith in the future of ecological agriculture and we have to demonstrate to the minister that, not only is the change possible and worthwhile, but that it's already working on many farms. Your letter to the minister would go a long way in helping them to decide whether to support this movement or not.

We're really lucky in that Don Mazankowski appears to be very much in favour of giving ecological agriculture a serious try. He appears very open minded and supportive. Send him a letter letting him know your thoughts. Tell him your experiences and why you think the change is needed. Even a short letter would help.

Write now to Hon. Don Mazankowski, Minister of Agriculture, Agriculture Canada, Ottawa Ont. K1A 0C5.

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YOUNG WORKERS WANTED AND AVAILABLE

The EFAO is submitting a proposal to Agricultural Canada for the training of young people in ecological methods under the Environmental Youth Program. If you know of anyone between the ages of 16 and 24 who is interested in being hired or if you could use one of these young people a week or so on your farm this summer please call Phil Beard at (519) 335-3557).

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THE STOCK MARKET

WANTED: 20 ft. Lely Weeder. Phone 519-393-6851.

FOR SALE: Seed Oats, not treated. Professional cleaned. Also 2000 wheat straw, square bales. Call (Ogle) 519-393-6851.

FOR SALE: One Edaphon liquid manure aeration system. Ideal for hog manure or liquid manure run-off from storage area. \$1,000.00 call Rick Zettler (519) 366-2301.

FOR SALE: Suffolk sheep, breeding stock. Organically managed for 10 years. OCIA certified, organic R.O.P test of 9 years. Top quality producers, excellent health record. Registered or grade. Also young registered Saanen milking goats. Gentle, hand milked, excellent milk production. 1989 kids available too. Meeting Place Organic Farm, Tony and Fran McQuail, R.R. 1, Locknow, Ont. NOG 2H0.

WANTED: British company is interested in contacting producers and manufacturers or organic products. They are specifically interested in obtaining supplies of organic fruit and vegetable juices. Anybody interested should contact: A.P. Moore, Suffolk Hall Foods, Newmarket Rd., Risby, NR. Bury St. Edmunds, Suffolk IP286RD, England.

Advertisements for farm-to-farm products, supplies and equipment are free to members. Send them to EFAO Newsletter Editor, Mike Pembry, R.R. 1, Terra Cotta, Ont. L0P 1N0. All ads subject to editing for length.



Membership Application

for

ECOLOGICAL FARMERS ASSOCIATION OF ONTARIO

(Please Print)

Name _____

Address _____

Postal Code _____ Phone () _____

Check the category which fits you best: Fulltime farmer

Part-time farmer Educator Media

Other (please specify) _____

Do you have a garden? (yes/no) _____

For Farmers only (optional questions)

No of Acres farmed _____

List of crops _____

Livestock (type and number) _____

Do you farm organically? (yes/no) _____

If yes, how many years? _____

If no, are you trying to move in that direction? _____

Membership is \$15 per year. Members receive four newsletters a year and can attend any workshops, meetings, and farm tours. Membership also entitles you to a free on-farm visit by one of the EFAO consultants. Mail this form with \$15 to: *Mathilde Andres, c/o Ambros Farms Inc., R.R. 1, Tiverton, ONT., N0G 2T0*