



**NATURAL FARMERS ASSOCIATION
of ONTARIO**

OCTOBER 1983

Notes by the Editor

This issue of the newsletter will arrive in your homes later than planned. I hope you will excuse this delay but it is pretty hard to find time to do the typing and article-writing during the summer months. Time flies by helping along on the farm wherever it is needed or trying to save the vegetables in the garden from all those weeds. I am very grateful that for this issue numerous members contributed articles.

Mathilde Andres

Farm Meeting Report: The Filsinger Farm

The Natural Farmers Association met on July 16th, at the Alvin Filsinger farm, Ayton, Ont. for a farm tour. Alvin along with his son Paul and family operates 200 acres of which 100 acres is rented. He has several thousand apple trees, a beef herd and also a flock of hens which supply eggs for his store.

After brief words of welcome by our president, Lawrence Andres, he asked Alvin to be our tour guide. Before the tour Alvin gave some background information as to how he came to farm organically. He has travelled widely and learned much from books and other experts in this field. First he took the group through his health store which he built in 1964. Behind the store he has a walk-in freezer in which he can store large amounts of apple juice, meats, etc., and also a large walk-in cooler to keep milk, eggs, etc. In his large warehouse he has a forklift for handling his apples. He showed us the press they use for making apple juice and vinegar. He also has 2 large cold storage rooms plus a CO₂ (controlled atmosphere) storage room which keeps apples fresh as long as it stays sealed. We sampled some of his last years apples which had been in cold storage and they were delicious.

After this Alvin took us on a walk around his house showing us his strawberry patch and his grape vines of many varieties. We walked through part of his orchards while he explained some of the problems which he has with scab, etc. He uses non toxic materials in his sprays such as zinc, manganese, copper, sulphur, gypsum, liquid seaweed and diatomaceous earth as fungicides. He has also installed 10 insect electrocuting machines which kill codling moths and insects.

Paul then took us on a wagon tour through the orchards and to his rented farm where we saw a good crop of triticale, a field of alfalfa and barley plus a pasture field with the herd of cattle. He showed us a field where they intended to plant another thousand apple trees next spring.

After the tour we were served a delicious lunch which was enjoyed by everyone.

Mrs. Gascho

Farm Meeting Report: The Andres Bros. Farm and The Hack-Family Farm

On July 31st about 130 people gathered at our place around 11 a.m. We have a 300 acre dairy farm with 55 cows and about the same number of heifers and calves. We also keep some purebred Arabian horses. Most crops that are grown are used to feed our animals. The group walked through the empty barn, the 47 milking cows and older calves were on the pasture, and Lawrence explained the feeding. Haylage is fed outside in a manger, during milking the cows are fed high moisture corn and hay. The highest producers get some whole ground soybeans. Because the cows have free choice of haylage the dry cows together with the heifers are kept at another barn. We looked at the corn field that thanks to its good tilth did get through the drought well and people were surprised about how loose the soil was. Along the corn field

one could see part of the newly planted wind-break and the patch of carrots that will be fed to calves and horses. Our walk took us along some pastures and alfalfa fields to the tall-standing rye. This rye looked very good; it had been sowed after a greenmanure crop of buckwheat, the year before there had been corn. Rye, among other things, helps to get rid of twitchgrass. There was also a field of buckwheat and a 2 year old alfalfa field that had just been systematically tiled.

We then drove to the Hack-family farm where we were served a delicious lunch. Imagine, feeding 130 people! The Hacks grow a variety of crops on their 500 acre farm. Most crops are for human consumption but they also have a herd of 40 beef-cows with their calves. After lunch Bernhard Hack was talking about weeds. He explained that on a field where the fertility level is right and where fertility is achieved with a balanced fertilizer such as compost treated with biodynamic preparations, weeds will grow, but will never grow tall. On the tour over the fields we had the opportunity to see what Bernhard explained. One field of oats had received an application of compost that had been windrowed too wet and thus, had fermented under unaerobic conditions. Even though the oats looked good, weeds especially pigweeds, were higher than the oats. All the rest of the oats had received nothing of this compost but has had applications of two different biodynamic fieldsprays and there weeds had stayed very small. Everyone attending was glad that for the tour that covered part of the farm we could ride on wagons. We have seen good-looking stands of winter-wheat, winter-rye, flax, oats and alfalfa. Impressing was the newly established windbreak consisting of 5 rows of trees; poplars, maples, spruces and cedars. After the tour everyone interested could have a look at the bakery.

Naturally, we were very pleased that such a big crowd attended and we felt that this day had been a success.

Mathilde Andres

Flashbacks

Looking back at the past few months I actually feel that we had a good year. Our crops had to cope with extreme stress situations such as heavy downpours of rain in spring, followed by above average temperatures and drought. I think that this is the time when it really shows how you were treating your land! Observing various fields in the neighbourhood one could notice that crops grown after sod were not suffering half as much under the drought. But on the other side on continuous cropped soils, especially corn after corn, crops looked terrible. The soil was hard as concrete with deep wide open cracks; a typical sign of a low humus content caused by monoculture, continuous cropping, soil erosion, heavy equipment, etc., leading to a total destruction of the soil-structure. Looking at organically well cared fields we could notice the results of crop-rotation, greenmanuring, use of animal-manures and composts and very important too, a lot of devotion and care. This way well-maintained soils are always in the desired "good shape" like after plowing sod, because the use of above mentioned practises slows down the humus consumption and if done right organic matter content of the soil can even be built up during the cropping period. Also in a drought it shows quite clear that the use of salt-based mineral fertilizers makes it impossible for the plant to utilize the full water capacity of the soil. For its growth a plant can utilize soil water only as long as the concentration of salt in the soil is lower than the one present in the plant itself. When severe drought occurs the salt-concentration in the soil increases steadily until water absorption by the plant is no longer possible. (Remember what happens with all our roadside trees killed by the salt applied to the roads in winter.) In organic farming plants are able to resist a drought much longer because there is no case of excessive salt-concentration.

This year is our fifth here in Canada. Our farm also is in its fifth year after transition to the organic method and to me this is the time we can observe definite results of our efforts. During these five years many changes and experiences were made. The soil was getting more and more sensible, our livestock healthier and "friendlier" and at the same time productivity increased dramatically. The idea of a self-contained farm-organism is more and more understood and achieved. The results are astonishing! Soil activity was never so high, yields and crop-quality are steadily improving. The soil is a living organism that can either be understood and cared for or neglected and destroyed. If understood and wisely used it can be a source of indefinite knowledge and a reason worth living for if it is seen in relationship with plants, animals, humans and the cosmos.

Just today I was driving by a field which was in process to be ploughed. Weeks before the farmer was obviously applying Round-up to get rid of an abundance of perennial weeds, including quackgrass. The field has been cropped for years, the last two crops were winterwheat after barley. It just struck me that what this fellow was doing was nothing but paying a high price erasing a number of mistakes he had made throughout the last few years. He was never aware of doing anything wrong, not even when using harmful chemicals that are no solution to his problems, except a short term one, and that are threatening his environment. If you do not show a cigarette-smoker what the damage to his body really looks like, he will never stop smoking. The same thing applies to today's agriculture; we as a minority have to show people ways how to bring our soil back to health, able to produce healthy food that is not only stuffing stomachs but that is bringing humans back into a balance where they can distinguish good from evil, important from useless and where they can learn to see the real values in life. A sick soil can never produce healthy plants, therefore people will be unhealthy.

Lawrence Andres

At Entwalk

Well, this was the summer that lived up to the image of summer, hot, sunny and lots of it. It was the summer that my half acre of rye was great and the hundred pounds of seed potatoes did their darndest until the potato beetles devoured them; seemingly overnight. It was a terrific summer for fast weed growth and the kind of summer that showed the benefit of a good mulch. It was the kind of summer you write songs about and remember in your later years as a yardstick to measure all summers against. "Why I remember the summer of summer of 83..." It was also the summer that just didn't have enough hours in every day, and that's something that is a must if you are going to garden organically. Time!

Time is the main make or break element in your relationship to your garden. You need the time to become atuned. You must make time every day to be in the garden. You should take time to walk in, and get a feel for it, the garden routinely. The atunement of you and the garden is not only helpful in planning what should be hoed, cultivated, transplanted, harvested, fertilized etc... but it is healthful in that it slows you down and helps set your priorities. Atuning to this living, growing, moving world forges a link that helps us to harmonize ourselves with the universe. So the time spent walking through your garden is worthwhile. You can see and plan what needs to be done before things are out of hand. It takes far less time and energy to remove the weeds at 2" than when they get to be a foot high. An early morning walk through the garden is also beneficial to you as a tonic and a refresher that sets you off for the day.

Take the time. It's not so long. The rest of the day will wait and the benefits are enormous.

Dean Walker

Dean Walker and Valerie Bolton have an eleven acre farm marketing some organic vegetables including an acre of garlic.

Some Thoughts to the Fall and Winter Season

The growing season is coming to an end and we can direct our thoughts to the next year. Next year this year's drought will be causing a higher fertility of our soils. (Our grandfathers still knew these things). In order to prevent overfertilization and thus to prevent lodged grain, rapid growth of weeds and foliar diseases we have to keep this in mind.

Now is the time to direct our effort and care towards our source of fertility. Besides the planting of nitrogen-fixing plants (alfalfa, clovers, soybeans, whitebeans, etc.) manure is our best source of fertility. Very often manure is used in wrong ways resulting in damages instead of benefits. Manure should be carefully windrowed into piles and composted, this means the fermentation should take place under aerobic conditions. That's why the compost piles should not be too large, if they are, the manure ferments without air and turns sour. (This you can observe happening in many places) Sour manure brings more damage than benefits to our soil. It will lower the soil's PH-level and it will support the growth of weeds that like sour conditions. One almost has to develop a feeling for good compost. If compost piles are too loose the manure will become too hot and will mould. Thus, if one makes the piles with the manure-spreader one has to either unload without beaters or one has to tramp the pile down. Pure horse or sheep manure has a tendency to become too hot, so we have to compost it not in piles but flat (20' wide, 3' high). After having put that much care into our compost piles we could top it off with the use of the biodynamic compost preparations. Besides other good effects these preparations prevent nitrogen loss.

Plowing should not be done deeper than 6". Otherwise organic material will be buried too deeply and there, without any air, it will turn sour. This will have the same bad effects we discussed in relation to sour manure.

Now is also the time to spend thoughts on the farm's crop-rotation. The most important factors should be soil and animal health, the last one should be money. If money is the most important factor it will result in a lot of mistakes in relation to soil and animal health and thus, in the long run, will be an economical failure.

Strong winds are characteristic for this country. We are freezing when we are exposed to these winds and so are our plants. The pioneers had good reasons not to cut the trees along the farm boundaries, to let them stand as windbreaks. When soil-life is transforming organic matter into humus CO₂ is released which is used by the plants for their growth. CO₂ is a bit heavier than air thus it stays at the ground. But the strong winds carry it away and there is less CO₂ available to the plants. Seldom one realizes how beneficial falling leaves are for fertility. This effect is extending to about a 100 meters away from the trees. Thus, hedges and windbreaks too, need your attention if you want to turn your farm into a healthy, ecological unit that is able to develop full fertility out of its own resources.

Bernhard Hack
translated by Mathilde Andres

Oak Manor Farms and Milling

Oak Manor is a 400-acre organic farm in Oxford county. We grow over 20 different crops and are able to supply much of what we need from our own grain stocks. However, sometimes we must buy from other farmers whom we certify by field inspections and written affidavits.

Any farm which wishes to supply grain to us must be free of synthetic chemicals for a minimum of 3 years. This includes chemical fertilizers, herbicides, pesticides, chemically-treated fish wastes, etc. We strongly recommend these farmers to be on a program of crop rotation, and to be attempting composting, if they have access to manures.

Tomas Nimmo

ANIMAL HEALTH CORNER

Sun -- Soil -- Water

Greetings:

As you remember in our last article we talked about a specific herd that I had been to see and some of the observations that had been made, particularly those pertaining to blood profiles. As you remember we made several suggestions to the farmer and one of those was to check the water.

We took a water sample and found some very interesting things.

1. P.H. 7.85 - the best water should have a slightly negative P.H. of 6 to 6.5. This slightly acid condition of the water also aids in the ability of water in a negative or acid state to attract trapped body proteins (positives).
2. CALCIUM HARDNESS 42 P.P.M. (parts per million). This figure tells us the amount of calcium in the water. Calcium and hardness are usually tied together to some degree. This figure is a quite reasonable amount. When you soften water you simply replace a calcium ion with a sodium ion. TOTAL HARDNESS 50 P.P.M. This figure is a clear indication of the amount of soap, detergent etc. you will have to use to clean efficiently. It also is an indicator of just how many inorganic solids there are in your water and the effect it will have on the ability of the kidneys to function properly in terms of toxicity removal.
3. SULPHATES: 12 P.P.M. Any level of sulphates over 50 P.P.M. spells trouble for the livestock producer. Sulphates tend to create liver problems in that copper and cobalt are not utilized by the liver. The higher the level the more tendency toward scouring and reproductive problems. If your water smells like rotten eggs you are probably blessed with this problem.
4. SODIUM AND CLORIDE: 5 P.P.M. This is a very low and acceptable level. We have uncovered at Windsor 400 P.P.M. sodium and 400 P.P.M. chloride. This also is very hard on the kidneys because the filtering system must not become plugged by

these two substances or trapped body proteins result and then bacterial infections result, trying to eat or burn up this unwanted and unneeded protein waste.

5. NITRATE: .2 P.P.M. Acceptable level up to 10 P.P.M. Nitrates are one of the most least understood ingredients in the water. They are the result of modern man's belief that nitrogen from coal tar derivatives is wonderful. In fact it is so wonderful that we are now starting to reap all the benefits of this great theory. Many areas are now finding tremendous amounts of nitrates in their water. Only this summer we have had levels at three farms dangerously high. Levels of 66 P.P.M., 80 P.P.M. and 110 P.P.M. were found. Nitrates of course tend to suppress the hemoglobin levels, which in turn lowers the oxygen supply to the body. This lowering of oxygen leads to very rapid systemic infections such as E-coli where the animal flares up rapidly and becomes very sick. In dairy cows somatic cell counts flare up very high as the cows immune system tries to cope with this terrible stress. Many of these nitrates convert to nitrites and together the two can cause cancer. This of course is nothing more than the absence of oxygen within the cell being replaced by fermented sugars.

(1)

HEAVY METALS

6. IRON: .22 P.P.M. This level is borderline. Acceptable according to gov't is .1. We know that on hog operations high iron levels cause real kidney disorders which gives us our rhinitis problems and also those black streaks down the eyes as the body tries to eliminate toxic waste.
7. LEAD: .4 P.P.M. Accepted gov't levels .05 P.P.M. As you can see this higher level taken into the body over a long period of time can have severe effects on the body. Lead is part of the uranium disintegration series and is no. 8 or 9 in turns of being carcinogenic or cancer causing. Lead also leads to kidney malfunction, liver relapse etc.
8. CADMIUM: Acceptable levels .01 P.P.M. In this particular sample we found only .026 P.P.M. slightly over accepted levels. Cadmium however

is much more dangerous than we have been led to believe. Cadmium is also found in higher levels when water travels through or sits in black plastic pipe. It along with lead from exhausts and cadmium off tires is causing very severe nerve and hypertension (high blood pressure) in humans. Cadmium replaces zinc in the body (kidney, arteries, liver) and seems to tie up certain enzyme systems requiring zinc. This is why the food we produce has much more to do with our nations health than any medical Doctor. Levels of cadmium in our fish in our lakes and streams is also on quite an alarming increase.

9. COPPER: .1 P.P.M. acceptable and .2 found. Copper in inorganic form accumulated over a period of time can be stored in the liver and special areas of the brain. In humans it is called Wilson's disease. This problem unfortunately can damage genes and if two parents have the recessive gene the child or animal will have the disease.

10. ZINC: .025 P.P.M. As I mentioned back at the cadmium article zinc is probably one of the most important trace elements we need. This primarily for getting rid of cadmium deposits plus stimulating the immune system of the body. Today most foods due to processing are woefully low in zinc. Most vitamin and mineral premixes today are far too low in zinc.

11. MERCURY: 1.2 P.P.M. The government does not even have acceptable levels for this deadly metal which is 8th on the uranium disintegration series. This substance can cause a variety of problems - predominately being stiffness and swelling of joints. Kelp meal seems to be one of the ingredients best suited to detoxify the system of this heavy metal as well as lead and cadmium.

As you can see we have barely started to cover the ramifications associated with this wonderful clear sparkling substance called water. With our testing unit in place and operational we have taken many samples of water across Ontario and have found a great many problems in water. The Ministry of the Environment says we do not know what we are doing but I believe they are not telling us the truth because they do not know how to cleanse and

purify the water that contains all these severe problems.

The last time to the best of my knowledge government wrote anything about water was a publication in June, 1970 entitled "Guidelines and Criteria for Water Quality Management in Ontario". The government has two levels for water contamination, one acceptable and one desirable. For anyone that has read Acres U.S.A. August issue you can see we have definitely found some answers to the water problem.

Remember there are more bacteria on you and in you than there are people on the face of the earth. Healthy people and healthy animals don't get sick unless the immune system is weak or the body has committed transgressions which allow bad bacteria to take over. ANTIBIOTICS stop the body from purifying itself and only drive the original problem deeper into the body, to resurface later or something more severe. How sad that veterinarians have never been taught cause and effect relationships.

Until next time when we will discuss sunlight, radiation and your animal's health, may we all have an abundance of health and happiness.

(1) THE TRACE ELEMENTS AND MAN by Henry A. Schroeder, M.D.

Murray Bast

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Apprenticeship - Program on Organic Farms

Throughout the last few years the interest in organic farming increased considerably. Farming has always been different from other trades, but on the ecological farm the connections between humans, animals and plants are reunderstood

and the great responsibility of the humans, being the determining link in the farm-organism, is going to be a task, a way of life. I have a few ideas on how to set up such an apprenticeship-program as it had been established years ago in Switzerland. Basically we would look at a whole years term of practical farm experience, along with theoretical lessons including the course "Introduction into organic farming" and at the end of a 2-3 year term there would be a final examination. Of course, the success of such a program is depending heavily on the goodwill of us farmers, because unexperienced help could mean extra work. But teaching is different from everyday chores. It would mean to give people a chance to participate in the thriving towards a healthier environment, the improvement and preserving of our soil that is the source of new life.

Farmers interested in this program, please contact me anytime.

Lawrence Andres

Pre-Announcements

"Introductory Course into Organic Farming"

We are planning to hold a course about the basic principles and practises of organic farming sometime this winter. It will include topics like crop-rotation, manure composting, greenmanuring, intercropping, erosion control, weed control, livestock feeding and care, etc., and the consideration of cosmic forces on the growth of plants.

Interested people, please contact me as soon as possible.

1st Annual Organic Growers Fall Conference will be held in Ethel on Saturday, Nov. 19/83. Details will be announced on a flyer soon.

Lawrence Andres

The Herbgarden

RHUBARB collect roots in fall. They are either used as tea or as a powder and help against constipation. Take 1/4 - 1/2 gram of powder 3-4 times a day or as a tea use 6-10 grams in 1/4 litre of water. It is very useful for small children with chronical digestion problems. (3-4 times/day 1/8 - 1/4 gram).

BLOSSOMS FROM MIXED HAY FIELDS are collected while they are blooming and dried. Put boiling water over 3-5 handfuls of blossoms and let them stand for 10-15 min. This liquid can then be used to make wet bandages or can be added to the bathwater. It helps against any kind of rashes and eczemas. Added to the bath it also helps against frostbites and frozen limbs. Strong colds and chronic coughs can be cured by inhaling the steam.

Recipe

Soybean Casserole (Taken from "Soybean Cuisine" produced by Ontario soybean-growers marketing board)

| | |
|--------------------------------------|--------------------------|
| 1/4 lb. bacon strips | 3 tbsp. soya sauce |
| 1/2 cup chopped onion | 2 tbsp. molasses |
| 10 oz. tomato soup | 2 tbsp. brown sugar |
| 14 oz. pineapple tidbits, drained | 1 tbsp. tabasco sauce |
| 4 cups cooked soybeans | salt and pepper to taste |

Fry bacon until tender, add onions and saute for 2 min. In a greased casserole combine tomato soup, pineapple tidbits, soybeans, soya sauce, molasses, brown sugar, tabasco sauce, salt and pepper. Mix well. Stir in bacon and onion. Cover and bake for 1-1½ hours at 300 degrees F. Serves 6-8.

To cook dried soybeans soak them overnight in cold water and then cook them in the pressure cooker for 20 minutes at 15 lbs. pressure.

Mathilde Andres

Advertisements

Oak Manor Farms Retail Mill Outlet

Over 60 organically-grown whole grain products, plus organic sprouting seeds, kelp meal, fish fertilizers, greensand, chickens, and many others. Free price list on request. Mail order available.

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