

# NEWS AND ITEMS OF INTEREST TO HALTON FARMERS

(continued from last week)

## SOD CROPS AS SOIL BUILDERS

Hay and pasture as sod crops have not been fully appreciated. They have been the step-children in the crop family of America. They have not been properly grown, in the same sense as other farm crops. They have been left to themselves to grow on soils turned over to them because depleted fertility made cropping with grain, corn, etc., unprofitable.

In the Old World with its longer agricultural experience, the lands still in good production today are those occupied by sod crops for a large part of the time, where clean or summer cultivation has been reduced to the minimum.

Only now are we beginning to realize that through the more extensive use and proper management of hay and pasture crops, we have the most economical, effective and lasting means of increasing our food production, and at the same time maintaining the production of our soils. Sod crops range all the way from relatively pure stands of grass or legumes alone to various combinations and mixtures of both, but all have one characteristic in common—they can be made the best soil builders we have discovered to date.

The six main beneficial effects of sod crops that distinguish them as soil-building crops are, that while they occupy the land: (1) the soil is rested from all cultivation; (2) organic matter losses are reduced to a minimum; (3) the humus content commences to increase; (4) the population of desirable soil microbes increases rapidly; (5) physical condition improves as a crumb structure begins to develop; (6) losses of plant nutrients by erosion and leaching are reduced to a negligible amount.

When the sod crops consist of the legumes (alfalfa and clovers) or mixtures containing legumes, their subsequent beneficial effects on soil productivity reach a maximum.

Legumes are a superior source of soil organic matter because of their higher nitrogen content than the grasses, or any of the other crop residues. This is important from the standpoint of humus formation in the soil. We referred previously to the fact that more humus is produced eventually from material rich in nitrogen, than from material with a low content of nitrogen. The evidence indicates that more humus will be produced in the soil from the rotting of one ton of clover, roots or tops, than from one ton of straw or corn stalks. This is shown by experiments conducted by the experiment stations in Iowa, Ohio and Michigan.

To be fully effective as soil-builders, the roots of alfalfa and the clovers must be thoroughly mulched with the bacteria which make it possible for these plants to use nitrogen from the air, and hence add to the supply already in the soil. When seeding down to legumes, it is good economy to inoculate the seed with the proper microculture to insure that the root nodule bacteria will be present.

The greatest effect on physical condition of the soil is to be derived from the deeper tap rooted legumes, viz., alfalfa and sweet clover. Not only do these crops improve the structure of the top soil, but their deep root systems penetrate heavy compacted impervious subsoils, opening them up, and improving their structure, aeration, and natural drainage to depths of 16 to 18 inches. The shallower, more fibrous rooted legumes, and such as alsike, red clover and ladino, are exceedingly effective in improving the physical condition of the surface layer, but have little effect on the subsoil.

Grass sods of bluegrass, Orchard, Bromus and Timothy, are also effective mainly in the upper surface soil as far as adding organic matter and improving crumb structure are concerned. While sod crops, particularly legume sod crops, have tremendous potentials for increasing the organic matter content and improving the physical condition of the soil, they cannot accomplish this unless they are adequately supplied with nitrogen and mineral nutrients for their optimum growth. Soils that are acidic reaction and lacking lime should first be limed to assure that sufficient calcium (lime) is available for alfalfa and the clovers. We are apt to forget that legumes have a much higher mineral requirement than the grasses or other farm crops. If we grow these successfully the required minerals (especially lime, phosphorus and potash), must be in the soil in sufficient amounts, and readily available forms, at the time the sod crops are seeded down. The best insurance for this is to have the soil tested and apply agricultural limestone and phosphate-potash fertilizers as indicated to be required by the tests.

The evidence to date indicates that we need to apply much heavier applications of mineral fertilizers than we have been accustomed to for successful growth of the legume crops. Where grasses predominate, of course, the need for nitrogen fertilizer will be equally important in establishing a strong productive sod. Poor, thin sods neither produce more feed, nor protect or build-up the soil, for they become weed infested, killed out, and subject to erosion of the soil itself.

The capacity of sod crops to build-up soils may also be increased by top-dressing them with farmyard manure in addition to the initial dressing of mineral fertilizer. Manure, used in this way to stimulate the growth of the sod crop in the rotation, will probably give, ultimately, a greater return per ton applied than when applied directly and plowed under for a cultivated crop.

In the summing up, sod crops, in the form of well managed hay and pasture crops can be made real soil-builders by:

- (a) having the soil tested to determine its lime and fertilizer needs; (b) liming and fertilizing the soil as needed, to fit it for the seeding; (c) using a suitable mixture of seeds or legumes and grasses adapted to the soil, etc.; (d) keeping the sod crop down for a long period in the crop rotation; (e) feeding the sod by: (1) top-dressing with manure, as available; and (ii) top-dressing with suitable fertilizer, as needed; (f) harvesting the hay crop at the proper time; (g) grazing pasture only within the limit of its carrying capacity; (h) controlling weeds in the pasture by clipping at the proper intervals; (i) following the breaking-up of a sod and the growing of cultivated crops by putting the soil back into sod without delay.

## NEWS AND ITEMS OF INTEREST: HALTON FARMERS TO STUDY CROP & SOIL CONDITIONS IN WESTERN ONTARIO

Potry-five Halton Farmers have signed up for the bus trip through Western Ontario on Monday and Tuesday next. The two day tour is sponsored by the Halton Crop Improvement Association, and the proposed programme includes the following farm visits:—The Shun farm near Kitchener, which is reported to be carrying 144 head of Jerseys on 144 acres of crop land plus 35 acres of rough pasture land. Grass silage is a specialty on this farm, which has four silos. The second stop is to be made at the soil erosion plots near New Hamburg, and thence on to the D. H. Hart and Alex Muir farms, near Woodstock, which are noted for good pastures, and soil building practices. Visits will also be made the first day at Weldwood farm, operated by "The Farmers' Advocate", near London, and the Lawrence Kerr farm, near Chatham.

The second day's itinerary will include visits to the Erieau and Rondeau marshes, which grow a wide variety of crops, and thence on to the Western Ontario Experimental Farm at Ridgeway. If time permits the Frank Silcox farm at Iona, which specializes in good Jerseys, pastures, and grass silage, will also be visited. We understand from Agricultural Representative J. E. Whitlock that no further applications can be accepted, as the demand has already exceeded bus accommodation.

## J. A. CARROLL TO TURN ON FLOODLIGHTS AT HALTON COMMUNITY PARK, JUNE 6th

The Committee in charge of the Grand Opening of the Halton Community Park at Lowville and the turning on of the newly-installed floodlights, report a programme which will long be remembered. Softball games between four crack teams will get underway at 2 p.m. on Monday, June 6th.

The finals in the tournament will be held in the evening under floodlights which incidentally are to be officially turned on in the afternoon by J. A. Carroll, Superintendent of Agricultural & Horticultural Societies of the Ontario Department of Agriculture, Toronto. Mr. Carroll is also well and favourably known to many, as the Secretary-Manager of the famous International Plowing Match.

house Farm Forum, with the cooperation of a number of Women's Institutes, are pooling their resources to provide refreshment for both the afternoon and evening.

## O.A.C. TO CELEBRATE 75th ANNIVERSARY

The seventy-fifth anniversary of the opening of the Ontario Agricultural College at Guelph is being celebrated this year. The month of June is always a busy month at the O.A.C., with almost innumerate gatherings holding annual field days, picnics, conventions, conferences, and the like. This year Canada and Ontario is being signally honoured by the International Federation of Agriculture Producers who are holding their annual convention at the O.A.C. This is indeed a momentous decision — open sessions to the general public are scheduled for June 9 and 10. It will also be of interest to our readers to learn that this important group is to pay a visit to Burlington district, noted for its fruit and vegetables, on Sunday afternoon, May 29th.

On June 7 and 8, Ontario Agricultural Representatives are meeting in Conference — then on Saturday, June 11th, Halton and Peel Holstein and Jersey breeders will pay their annual pilgrimage to the O.A.C. for their yearly field day. Farmers' week at the O.A.C. is next in line, namely the week of June 13th. This will be climaxed by Alumni Day on Saturday, June 18.

Even the humble scribe of this column hopes to celebrate the 34th anniversary of his entering the portals of the old gray limestone College on the Hill. Years roll by, but the memories of those four years with its association with fellow students from many parts of the world and with the Profs. grow brighter with the years.

These are but a few of the gatherings which will grace the important College of agricultural learning upon the hill near Guelph and from which so many agricultural leaders of the world have graduated.

In between these gatherings, Ontario's rural people will get off the hay crop which incidentally in most sections of the County is badly in need of some warm showers at the time of writing. Perhaps our three candidates for June 27th can do something about it — we can make no promises but it might have quite an effect on the rural vote.

## BAPTIST CHURCH HIGHLIGHTS

The pastor read the lesson from Ezekiel 11: 1-12 and the text was taken from Ezekiel 1: 1. The heavens were opened and I saw visions of God. Ezekiel was a priest as well as a prophet. He was one of the captives who were taken to Babylon. If we heard a man say this today we would wonder what was wrong. Men of vision are the leaders in the world today. It is the young people with a vision who really build a character worth while. The people without a vision are the drifters. Without a vision the people perish. There are people who do not pray, who never had any religious experience. We would not go to them for an opinion on religion any more than we would go to a blind person for an opinion on colour or to a deaf person for an opinion on sound. Men of the bible had visions. Ezekiel was in prison only in body. He was one of the freest souls in captivity. A right mind can never be in prison. Ezekiel told his people that they would suffer for their sin. They would not accept his warning but it came just as he said.

As Ezekiel prophesied to warn his people against disobedience to God so we must give forth the gospel of grace that men and women might be saved from sin. Only people with a vision of God will have a message that will save.

The evening subject was "The Dreadfulness of God. This may seem a strange way to talk about God. Most unbelievers dread to hear about God. Jacob had sinned against his brother and father. The first night on his trip to get away from home he had a dream. He saw the angels ascending and descending from earth to heaven. He said; The Lord is in this place and I knew it not. He was afraid and said: how dreadful is this place. In Malachi God says, my name is dreadful among the heathen. The prophet Joel tells of God's wrath against the disobedient people. In Matthew 24; 29, Jesus tells of the terrible experience that would come to unbelievers immediately after the tribulation of those days. God's name is dreadful among the heathen. God will not permit his name to be dragged down. The unbeliever will suffer in the attempt to overthrow God.

Malachi 4; 2. 3. But unto you that hear my name shall the sun of righteousness arise with healing in his wings; and ye shall tread down the wicked, for they shall be as ashes under the soles of your feet in the day that I shall do this, saith the Lord of Hosts.

The annual business meeting was held last Wednesday evening in the Sunday School room of the church. A goodly number enjoyed the supper prepared by the ladies, after which the business of the church was attended to.



The sod-turning ceremony for the McMaster Alumni Memorial Building took place on Saturday evening when members of the Alumni held their annual reunion at the University. Pictured above is the architect's sketch of the new building, which will be a Centre of both Alumni and student activities. It is expected that construction will be completed in time for next year's reunion.

## 7 CLEARING AUCTION SALE

LIVE STOCK, IMPLEMENTS, HAY, GRAIN, ETC. In the Township of Esqueving The undersigned has received instructions from

RAY McENERY to sell by auction at his farm Lot 32, Con. 9, Esqueving Twp., situated on the Esqueving-Erin Town Line, 6 miles south of Erin village, on

TUESDAY, MAY 31st, 1949 Commencing at 1 o'clock sharp the following:

HORSES & HARNESS — Brown mare, 5 years old, 1300 lbs., good in all harness; black mare, 6 years old, 1300 lbs. good in all harness; Chestnut mare 8 yrs. old, good in all harness; black mare, 14 years old, good in all harness; set of heavy team harness, breechings; set of team backband harness; collars; heavy set of horse blankets; set of single driving harness. PIGS — 8 thrifty chunks, about 100 lbs.; 2 fat pigs, about 180 lbs. SHEEP — 12 Oxford breeding ewes, with 20 lambs at foot.

HAY & GRAIN — 15 tons of good mixed hay; 250 bus. of heavy mixed grain; 75 bus. of Victoria oats; 6 bags of Irish "cobbler" potatoes; 150 bus. of good fall wheat.

SHORTHORN COWS — Grey cow, fresh in April, with calf at foot; red heifer, fresh in April, with calf at foot; red cow, fresh in Mar. with calf at foot; red cow, fresh with calf at foot; red heifer, due about time of sale; red cow, fresh in Feb., with calf at foot; roan cow, due in July; roan cow, milking well, bred Feb. 23; roan heifer, bred January 16; roan heifer, bred October 10.

The above cows are all hand milked. Registered Shorthorn bull, 3 yrs. old, bred by Harold Griffin, Acton, Ontario.

YOUNG CATTLE — Shorthorn heifer, ready to breed; steer, rising 2 years old; 3 steers and a heifer, 1 year old; 2 fall calves; 2 veal calves, almost ready for market; 2 young calves.

IMPLEMENTS — Frost and Wood binder, 9 ft. cut; Massey Harris grain drill; International mower, 6 ft. cut; Massey Harris No. 7 drop head hay loader; Buck rake, powered with a Dodge motor, a good one; International dump rake; Massey Harris hay tedder; Tudhope - Anderson manure spreader as good as new; 13 tooth cultivator; medium farm wagon, as good as new; wagon box with shelves; flat hay rack; bench sleighs, with flat rack; cutter; De Laval cream separator; rubber tired buggy; 3 Fleury walking plows; disc harrow; 6 section harrows; fanning mill; potato digger; Stone boat; Stewart electric stock clippers, as good as new; set of Renfrew 200 lb. scales; Shurtz electric fence; logging chains; hay fork; pulper; pulleys; scuffer; step ladder; all small articles; 50 fence posts, cedar; quantity of lumber; 30 rods of wire fence. —No reserve as the farm is sold. Terms: Cash with clerk day of sale.

Robert McENERY, Clerk. W.M. K. GIBSON, Auctioneer Phone Guelph 743W 5-35

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