Farm Problems

Conducted by Prof. Henry G. Bell, Dept. of Chemistry, Ontario Agricultural College, Guelph

Question Box on Fall Wheat

1. Is there any profitable after-effect from fertilizers on wheat?

Ans. — Three years demonstration experimental tests conducted over the province by the Department of Chemistry, O.A.C., show an average increase of 11.1 bushels per acre in yield from the use of fertilizers. It is quite common to find from 200 to 375 lbs. of fertilizers used per acre on wheat. It is an established fact that the growing crop takes up only about 50% of the nitrogen and about 8 to 15% phosphoric acid applied in fertilizers. It is therefore apparent that much added plant food must remain in the soil for succeeding crops. Phosphoric acid not used by the wheat forms combinations with lime in sweet soils, and with iron and aluminum in sour soils. Potash likewise forms combinations with the soil and is lost in only minute quantities from soils to which it is applied.

Quotations from actual growers illustrate common experience.

"Where the phosphate and potash was applied last year a stand of red clover and timothy (following wheat) is much heavier. Valuing the whole field at 10, I would rate the crops on the different fertilized plots at 13 and 14."—W. C. B.—Galt.

"The demonstration field was seeded to clover and timothy. It is a good stand. You can plainly see where the fertilizer was sown." (in 1931).—G. deM., Woodstock

"Fertilized plots of last year were seeded to red clover. There is a marked difference where no fertilizer was used; not so thick and not so good a growth."—A. E. D., Tilbury.

"Early this spring the plots could be picked out of the field. The grass started to grow at least a week sooner than the rest of the field and had a much darker colour. Since the cattle were turned out they seem to prefer the plots that were fertilized, for there is usually some of them grazing there."—E. H., Milton.

Actual investigations by this department show the effects of fertilizer to continue for at least three years.

2. Is there danger of burning wheat when fertilizer is used?

Ans.—When a fertilizer is appliel through the grain drill attachment it is scattered through the soil at a depth at which the wheat seed is sown. The ordinary fertilizers sown at prevailing rates of 200 to 400 lbs. per acre certainly cannot injure the sprouting grain. At the rates quoted this would be about 2-3 oz. to 1 1-3 oz. per square yard, which would not provide enough fertilizer near the seed to injure it in any way. If double or triple strength fertilizer is used, however, greater care mus be taken in the distribution, since this stronger fertilizer falling near the seed may tend to draw the moisture out of the seed and thereby injure it. Of course, double strength fertilizer is sown in smaller amounts.

3. Will fertilizers prevent winter killing?

Ans.—Additional plant food either in manure or fertilizers gives added strength to any growing crop. Inasmuch as the fertilized crop has this additional strength it can more successfully resist bad growing conditions.

Winter killing is largely the result of a heaving of the plants out of the ground. This is due to freezing and thawing. If the wheat field is poorly drained the freezing of the water will usually heave the wheat and clover plants out of the ground, causing considerable winter killing. Necessarily, the addition of fertilizers will not prevent such action. Many wheat growers have expressed their opinion on the effect of fertilizrs in combating winter killing throughout the past two years. Out of 73 inquiries sent to wheat growers, 48 have reported that the fertilized wheat came through better than the unfertilized. The following are typical replies:

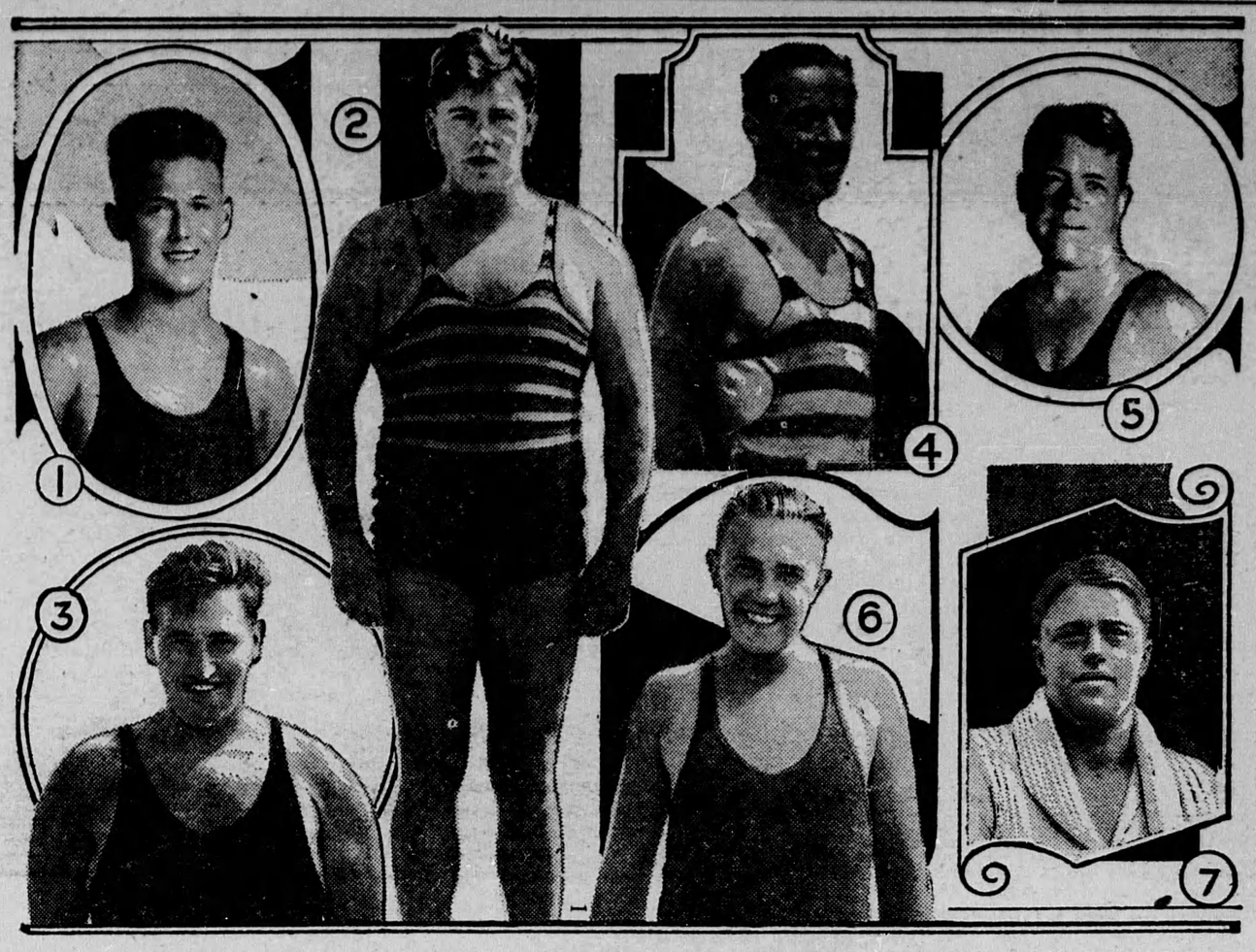
"Would say that all plots wintered well. The fertilized plots show stronger growth."—T. McK., Pt. Robinson.

"The fertilized wheat wintered in splendid shape but the plots undertilized are in poor shape and badly winter killed."—T. J. W., Lakefield.

"Where I sowed fertilizer the wheat did not kill at all, but where there was no fertilizer you can see right to a row where it winter killed."—O. B., Pt. Hope.

"The unfertilized wheat is very thin and short and has a bad colour. These cold, dry winds seem to do more damage to the unfertilized wheat."—T. L., Zurich.

"The sections of fertilized grain are growing as are the unfertilized, but the strength and thickness of stand and the degree of healthy green color of the grain is very pronounced in favour of the fertilized. As you cross the rows you can see at once when you are on the fertilized grain and when not."—W. E. N., Peterboro.



READY FOR THE WORLD'S CHAMPIONSHIP SWIMMING MARATHON AT THE CANADIAN NATIONAL EXHIBITION AUG. 31st

The seven men shown above should all finish within the money. No. 1 is Isadore Spondor, now of Toronto, but formerly of Port Colborne, who has been a colorful figure in previous years: No. 2—George Young, Toronto, winner last year and also winner of the famous Catalina Island swim in which he was the only contestant to finish; No. 3—Warren Anderson, a powerful fellow from Sydney, N.S.; No. 4—Gianni Gambi, holder of many Italian records and winner of the 3-mile Men's Invitation Swim last year; No. 5—George Blagden, Memphis, Tenn., who has made a good showing in former years; No. 6—Milton Potts of London, Ont., who is regarded as a strong contender; No. 7—Marvin Nelson of Fort Dodge, Iowa, winner in 1930, and holder of the record for the 15-mile course.

German Notes

Because little Willie let the porridge boil over 5,000 years ago, Prof. Johannes Gruess is now able to determine what the boy and his parents had for breakfast in the Stone Age. For on some pottery dating from that time, and found at Herkheim near Noerdlingen, traces of a certain kind of grain were discovered together with splinters of charcoal. From this has been deduced that the Stone Age people ground the corn, which they seem to have brought with them from Asia, and made porridge of it which was boiled in pots placed in a charcoal fire. Small causes oftimes have great effects, the Germans say. Little Willie certainly never dreamed that the porridge he let burn, and for which he no doubt received a spanking, would occupy bearded professors in the age of airplanes and television.

QUAINTNESS IN NAMES.

Curious names surround Berlin. There is a forest called "Heaven" and a old monastery christened "Paradise," a hamlet "Look-around" and a village "Since-when." A forest "Dance-hall" and a hamlet "Prettychimney." Some of the little hills must have been christened by a chef de cuisine. There are the "Bread Baking Oven Hills," the "Butter Hills"—and the 'Sauerkraut Hills." Hurrying people traveling by car or train will probably never find them, but the patient hiker discovers many such quaint places with surprise and amusement.

GUIDEBOOKS GO LITERARY.

What better guidebook could be written than a description of the country by its best authors? Convinced that there is no happier method of interpretation the Literarische Welt, a literary weekly, invited some of Germany's greatest writers to contribute. It styled its compilation of essays "a lesson in seeing deeper and better with the poet's aid." Thomas Mann, one of the world's best known writers, tells of a spot northeast of Munich where he spends much of his time. "It is not a forest, and not a park, it is a fairy garden," he writes. "The wilderness is penetrated by crisscross paths. Just strips of flattened grass or gravel ruts, obviously not artificially made but created by walking on them, without one's knowing who did it. That Bauschan (his dog) and I should meet a man on them is a bewildering exception and my companion halts full of astonishment on such occasions and merely lets out one deep 'whoof' which comes pretty close to expressing my own feelings toward such an incident." Ricarda Huch, one of Germany's prominent women writers, depicts one of those sturdy medieval German cities. "Of all towns in Wesphalia, Muenster is the noblest, indeed, in all of Germany none equals it in this respect." The armor walls and turrets it has cast off. But the 'home gown' the town now wears still shows resemblance to an armor; its cut is severe and its jewels do not force themselves on the visitor."

FREE RIDES TO MARKET.

By motorcar to market may be a common thing in motorized countries such as the United States, but it was a luxury in Germany until recently. And it might have remained so for quite a long time had not an enterprising market hall management evolved an ingenious idea. It sent out little letters to the housewives in the neighborhood informing them that private cars would be placed at their disposal to take them to the market. And now every morning happy housewives are riding in luxurious limousines to buy apples and pears. All of a sudden, the distance to market has become much too short. But the eagerness to buy has doubtless multiplied. And the kind and clever thought as well as the money invested in gasoline appears to be bearing rich fruit as sales of fruit and sausage increase.

TELEPHONE TECHNIQUE.

If a loud shout of "Xantippe, Ypsilon, Zacharias" issues from a telephone boot in Berlin, visitors need not be alarmed. For it will be neither a college yell nor an election catchphrase. It will be merely a humble telephone user following the printed instructions which tell him how to get his number—under difficulties. The use of "key words" for letters which are not readily understood over the telephone is a practice which endures in most countries. But the thoughtful Reichpost, which controls the telephone system in Germany, provides two sets. If one desires to speak to Miss C. Smith in a nearby city and the operator does not understand the name, one explain "C as in Caesar, S-amuel, M-arie, I-da, T-heodor, H-einrich." But if Miss Smith happens to live in another country so that a long distance call is required, a different series of key words is provided. For the benefit of the operator it is now spelled: "C as in Casablanca, S-antiago, M-adagascar, I-talia, T-ripoli, H-avana." But even then one may not get the right connection —not if the young lady's name happens to be Catherine. For the "rules of speech" in the telephone book only show one alternative. It's "K, as in Katharina."—The Christian Science Monitor.

Open Season For Partridge In Ontario is Promised

Fort William.—An open season for partridge in Ontario this Fall was promised by Hon. George H. Challies, Provincial Secretary and Minister of Game and Fisheries, at a meeting of the Thunder Bay Fish and Game Protective Association here. Mr. Challies said the dates and length of the season for shooting the birds, which have been under a protective act for some seasons, had yet to be decided.

The minister made another announcement of importance to the North when he stated he would recommend to the Cabinet Council the abolition of restrictions on fishing in the Nipigon River as applied to residents of the province, making it open to all, the same as other streams. At present a $10 license fee is charged for two weeks' privileges for aliens and $5 for residents.

Mr. Challies said that with the dorion rearing ponds in operation it would be no longer necessary to restrict the fishing in the Nipigon, which was the principal reason for the fee. He further stated that the Government would supplement work of the fish and game association in placing Hungarian partridge on the wild lands of the district. A number of parent birds were placed last Fall and excellent hatches are reported.

Swarm of Frogs Gives Illusion Road is Moving

Vancouver, Wash. — Hundreds of thousands of tiny frogs invaded Vancouver recently. Motorists on the Evergreen Highway said the frogs were so thick over some sections as to give the illusion that the road was in motion.

When the invasion began thousands of frogs left the river and headed for Vancouver Barracks, where they covered lawns, sidewalks and roads. Some of the streets in the downtown section were reached and the migration extended two miles east. The frogs travel in waves or "herds."

The only explanation advanced is that river and water conditions this season are exceptionally favorable for spawning.

163 Centenarians Found in Dominion

Ottawa.—There are 163 centenarians in Canada, of whom 89 are women and 74 men, according to census figures issued recently. Fifty live in Ontario, 26 in Nova Scotia, 22 in Quebec, 15 in Manitoba, 15 in British Columbia, 12 in Saskatchewan, 10 in Alberta, 7 in Prince Edward Island, 7 in New Brunswick and none in the Yukon or the Northwest Territories.

Mail to be Delivered By Air to Far North

Edmonton, Alta.—What is believed to be the first step towar. the establishment of permanent post offices in the Northwest Territories is indicated in the last issue of the Post Office Bulletin, which announces the establishment of a mail service to the far north, including points on Great Bear Lake. At present the aviators plying between McMurray at the end of the railway and the non-post office points in the far north have been acting as mail carriers.

Under the new arrangement the nine different settlements on Great Bear Lake where the prospectors are now staking claims and mining radium pitchblende will receive mail regularly via the air route, as planes are operating almost daily to this point.

Non-Transparent Dress Is Edict for Teachers

Beauce Junction, Quebec — School teachers here must wear modest costumes of non-transparent material, buttoned to the neck with sleeves to the wrist and the skirt not higher than eight inches from the ground, decrees a resolution passed by Beauce Junction School Commission. The commission voted to continue the present salary rate for female school teachers of $225 per annum.

World Conference May Be Held Early January

Ottawa. — The Imperial Economic Conference an assured success, eyes of British economic experts gathered here are already turning to the World Economic Conference in London.

While no date is set it is expected that this will be convened as soon after the United States presidential election as is practical, late November at the earliest, but more likely immediately after the New Year. It is considered that what has been accomplished in Ottawa gives a distinct and timely lead to world economic cooperation.

Grass Strips to Check Fires And Pasture Cattle

Tallahassee, Fla. — Carpet grass is the newest weapon to be employed by the Florida Forest Service in forest-fire fighting. Plowed fire breaks, forty feet wide and four to six miles long, will be planted to carpet grass, which will be used as grazing for cattle and protection against the spread of fires.

These carpet grass strips also will bound and quarter a section of land.

THE FAMILY ALBUM—THE MORNING PAPER By GLUYAS WILLIAMS

300-Mile Sand Hills Found in C. Australia

Adelaide, S. Aus.—Sand hills like gigantic furrows, each 300 miles long, were among the discoveries made by Dr. Cecil T. Madigan in Central Australia, according to records recently presented to the South Australia branch of the Royal Geographical Society. Mr. Madigan in the course of his expeditions has added 20,000 square miles to the map of Australia, these records show.

The most notable of Mr. Madigan's expeditions was that undertaken in 1929 when he explored the great desert in the heart of the continent by airplane. The actual area of the desert is about 28,000 square miles—bigger than Tasmania or Ceylon—but nearly a quarter of it had been unexplored before Mr. Madigan's memorable flight, which was the most extensive yet made in the world outside the polar regions.

This area has been named the Simpson Desert in recognition of the great financial assistance given by the then president of the Royal Geographical Society of Australia, Mr. Alan A. Simpson. Up till now the expedition to Central Australia has not resulted in the discovery of anything of economic value, but interesting scientific finds have been made. On the return journey Mr. Madigan proved that "Lake" Eyre is mostly solid land, with a slight coating of salt, instead of a salt swamp as more cautious observers had imagined for more than half a century.

Glider Lands Itself As The Pilot Jumps

Wiesbaden.—Herr Pisse, a pilot of the flying school in Aachen, may become the first member of the Caterpillar Club to have made an escape from a glider plane. On a recent flight in his glider Cumulus he was seized by rising air currents and driven rapidly to an altitude of 6,000 feet, where the plane capsized. He fell out of the pilot's seat, but made a safe landing with a parachute.

Much to the amazement of the crowd watching the accident, the plane came circling down and made a perfect landing without anybody at the controls.

Spanish Women Pay Alimony

Madrid.—One of the most amusing aspects of the new Spanish divorce law is that women must pay alimony to their ex-husbands if the latter obtain the divorce. This presumes an equality of sexes which the new regime desires to attain but which certainly does not exist at present.

He—"Where did you learn to dive?"

She—"In divers places."