'HOPPER HARVESTING

by ELMER LAIRD*

(Condensed from PROBE, September, 1974)

On July 16, 1974 I phoned PROBE and told them that I was sending a telegram to The Hon. Sam Uskiw, Minister of Agriculture, Government of Manitoba, Winnipeg, Manitoba: I HAVE A GOOD CROP OF LARGE HEALTHY ORGANICALLY GROWN **GRASSHOPPERS** IN THREE HUNDRED ACRES OF WHEAT STOP PLEASE INFORM ME RE CUSTOM HARVESTERS OR HARVESTING EOUIPMENT **OPPOR-**AND MARKETING TUNITIES. With copies to The Hon. Eugene Whelan, Federal Minister of Agriculture, Ottawa; Japanese Embassy, Ottawa; the Hon. Jack Messer, Saskatchewan Minister of Agriculture, Regina, and to the press.

The reason for the wire was there were numerous press reports in the fall of 1973 about the development of equipment in Manitoba to harvest grasshoppers for the Japanese market, should the predicted infestation materialize in 1974. This is what happened.

I thought if the equipment had been developed in Manitoba it might already be in operation and the Minister of Agriculture would have the information. I knew that grasshoppers were considered a delicacy in Japan and reports had them valued at \$3.75 a pound, delivered frozen to Japan.

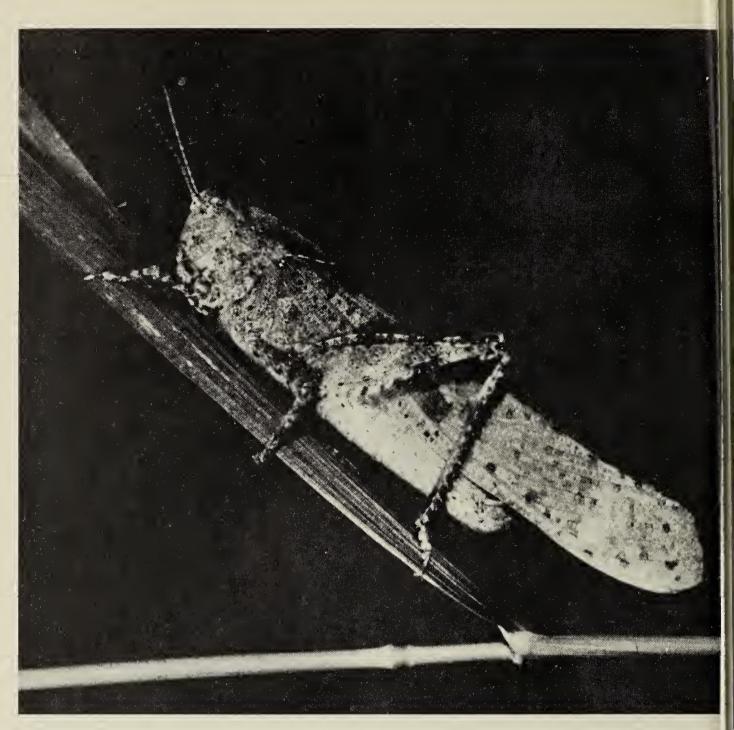
I sent copies to the federal and provincial ministers of agriculture

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because I thought they should be informed: harvesting grasshoppers might be an alternative to using poisonous spray in an attempt to eradicate them ...

At the time I sent the telegram I was really getting fed up with the experts in the provincial department agriculture who sit in air-conditioned offices and advise farmers to get out and spray. I don't believe they understand fully the biological implications of the admittedly poisonous chemicals in the recommended spray — either to the micro-organisms in the soil or to the farmer who uses it. I don't believe I can spray a grasshopper on the ground with poisonous chemicals without doing damage to myself. Yet farmers are really under pressure to use the recommended insecticides. There is a natural instinct to protect the crop and, more recently, the high price for farm products has changed the whole atmosphere into that of a poker game for high stakes where grasshoppers, high prices, insecticides and weather are the cards turned up while the farmers' health and the consumers' health are the hole cards that nobody sees until the game is over.

I found the most difficult pressure to resist was from my neighbour farmers. Mine were very nice, but I felt an undercurrent that implied that anyone who didn't spray was not keeping up his responsibility — that his 'hoppers would likely move over to the neighbours' land and destroy their crops too.



Grasshopper

Robert E. Gehlert

The ridiculous part of the grasshopper situation is that we all know that only the weather can destroy grasshoppers; if it is wet and cold when the eggs are hatching, they'll die, or if it is damp and cold when they are ready to lay their eggs, they won't lay, or if they do, the eggs won't hatch. In fact the cool, wet weather we had during August was ideal for destroying grasshoppers ...

As a result of copies of my telegram being sent to the press, Coleen Slater-Smith, a reporter for the *Regina Leader Post*, went to work on it and discovered that a non-profit research foundation set up by 58 municipalities in the Brandon area in Manitoba was making a grasshopper harvester. She telephoned me and gave me the name of Mr. Bruce Danyluk, general manager of West-Man Regional Development Corporation, the firm making the harvester. She wrote an excellent article which appeared in the *Leader Post*, July 25.

I promptly phoned Mr. Danyluk who told me the equipment had not yet been tried out because no grasshoppers had yet hatched in the area. When I suggested that he bring the harvester to the Davidson area he told me that they did not have the funds to travel that distance but gave me to understand that, if we would pay towards the expenses, something might be done.

As chairman of the Back to the Farm Research Foundation. I set about getting some money and on July 28 invited Mr. Danyluk to bring his harvester to Davidson; the money (\$700) had been guaranteed by Frank Dietz of Loreburn and Don Robertson of Liberty, two progressively-minded directors of the National Farmers Union, and by Mr. Jim Hutch of Moose Jaw. Mr. Hutch is president of the brine shrimp industry of Chaplin which markets brine shrimp, a tropical fish food, all over the world. Mr. Hutch had already sent two samples of dried grasshoppers to Japan this summer and was then in process of collecting a 20-pound frozen sample.

Since our research foundation had only recently been set up and had no funds to draw on, we first applied to the Saskatchewan Crop Insurance Board, but were turned down after a sympathetic hearing. Next we tried the Saskatchewan Research Council with the same results, although Mr. Evans, chairman, put us in contact with Mr. Hutch who has quick-freezing facilities for the brine shrimp industry at Moose Jaw. Mr. Hutch had done a considerable amount of research into the freezing of grasshoppers and was prepared to freeze 9 tons of grasshoppers at a time. He told us that grasshoppers should not be kept more than 7 hours before processing, otherwise they would start to deteriorate. On delivery, they would be blanched for 2 minutes, then quick frozen and packed in bulk for shipment, Mr. Hutch said.

We waited for Mr. Danyluk's reply

with great expectations but on August 2 the Board of Directors of West-Man Regional Development Incorporated met and turned down our invitation; they said they didn't think their equipment was good enough to take that far from their home base. It was most unfortunate because by now cool, damp weather had set in and the equipment may not get tested for some time.

It was unfortunate that we, in Saskatchewan, didn't have a chance to try the equipment, even if it didn't work well enough, because someone might have seen it in action and thought up ways to improve it or adapt it, as so much farm machinery has been adapted for farm use here on the prairies. Then we might have had some equipment ready for the next grasshopper infestation, whether it be next year or 10 years hence. As it is, we will have to postpone the development of a sane and sensible system to cope with the grasshopper problem and to reduce the chemical madness that was rampant in rural Saskatchewan this season and which, incidentally, sent at least 100 farmers for medical treatment.

We might have had an opportunity to turn a high protein food (3 grasshoppers, medium large, are equivalent in protein to 1 egg) into a profitable export. And I am sure we could have destroyed enough grasshoppers to feed all the poultry in Canada for the next 2 years.

In my opinion, grasshopperharvesting's most important service could be prevention — it could prevent many of our farm women from becoming "chemical widows" and generations of yet unborn from suffering from the residue of dangerous chemicals in our food and in our environment.