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Fertilizers



FERTILIZER MARKETING REPORT

Report No. 1 July 1980

FARMER ATTITUDES TOWARD FERTILIZER AND FERTILIZER PURCHASING

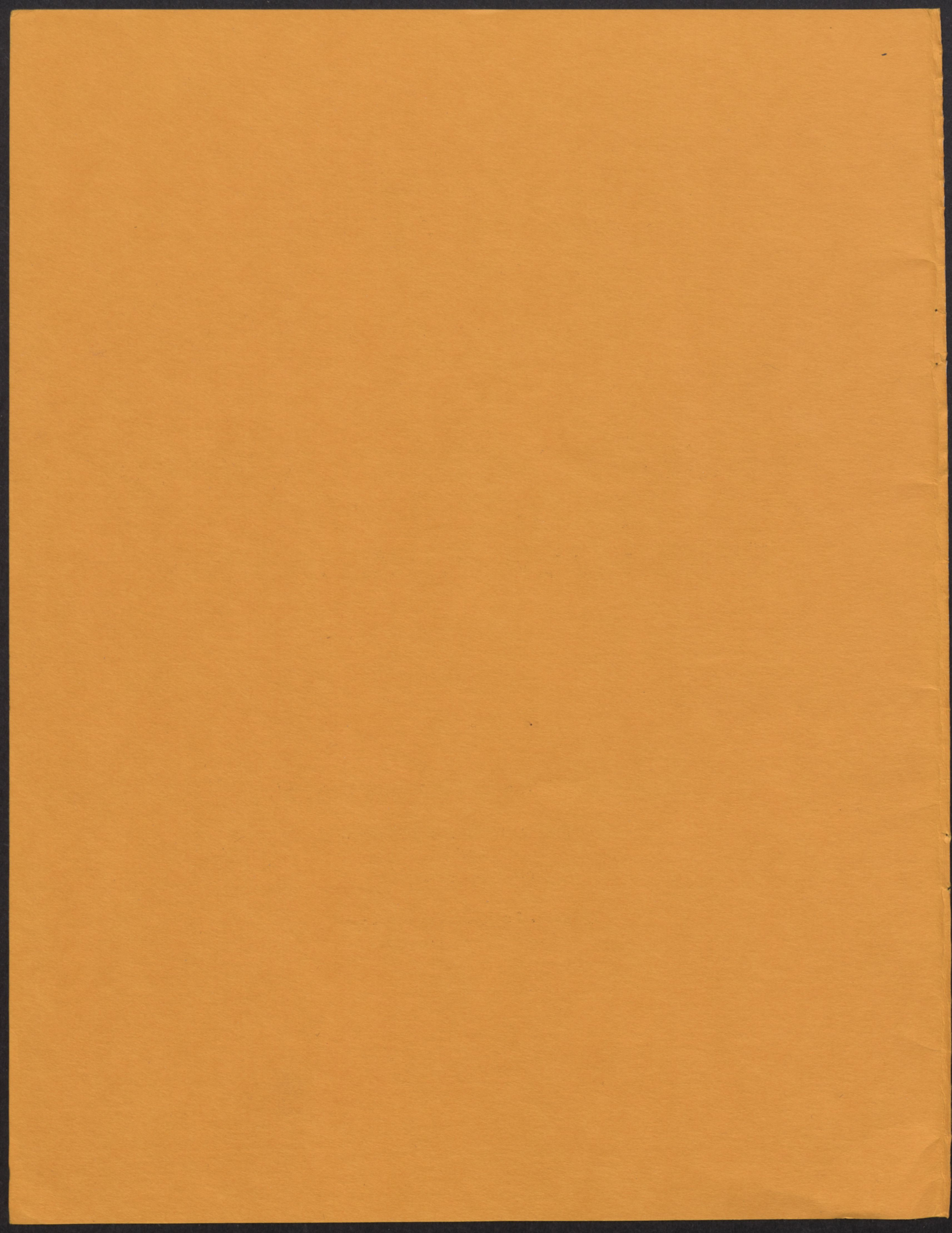
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FARMER ATTITUDES TOWARD FERTILIZER
AND FERTILIZER PURCHASING

by

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FOREWORD

This report is the first in a series of five dealing with fertilizer marketing in Ontario. The titles of all the reports in the series are:

- (1) Farmer Attitudes Toward Fertilizer and Fertilizer Purchasing.
- (2) Use Of Fertilizer Products and Services by Ontario Farmers.
- (3) Ontario Farmers' Behaviour and Preferences in Purchasing Fertilizers.
- (4) Importance - Performance Analysis For Fertilizer Dealers.
- (5) A Comparison of Fertilizer Purchasing and Use in Ontario and Indiana.

This report was made possible with the cooperation and assistance of many people and organizations. Major funding for the research was provided through the contract research funding of the Ontario Ministry of Agriculture and Food. In addition, generous contributions were received from the following Ontario fertilizer companies: C.I.L., Cyanamid Canada Inc., Genstar, W.G. Thompson and Sons, St. Clair Grain and Feed, Kent County Fertilizers, Burford Fertilizers, and King Grain Ltd.

June 1980

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Recent agricultural statistics estimate that Ontario farmers spend in excess of \$150 million annually on fertilizers for various crops. In terms of total farm operating expenses, the expenditure on fertilizer is exceeded only by wages, machinery, and purchased feeds. Thus the fertilizer purchase represents a major cost component for most Ontario farmers, and, as a result, has supported the development of an important industry to supply fertilizer products and services to farmers.

The objective of the research reported in this paper, and others in the series, is to develop information to assist fertilizer manufacturers and dealers develop effective marketing programs to serve the farm market. The study, therefore, focuses on the fertilizer product/service needs, buying behaviour, attitudes, and preferences of farmers, and the manner in which this information can be used to develop product, price, promotion, and distribution policies for manufacturers and dealers. In addition, attention is given to identifying and evaluating segments in the fertilizer market, and variations in marketing programs for each segment.

The objective of this report is to serve as an introduction to farmer fertilizer purchasing behaviour by presenting and discussing the results of a series of unstructured, depth interviews with Ontario farmers. The remaining reports in this series will concentrate on specific areas of buying behaviour by presenting the results of a large-scale survey of Ontario fertilizer purchasers.

2.0

METHODOLOGY

Buying behaviour can be a very complex activity to understand and analyze. As a result, it is useful to begin work in a new area using a fairly unstructured, flexible approach. This allows the researcher to gain insights into the variety of needs, behaviour, attitudes, and preferences of purchasers which can be useful in designing additional research as well as formulating marketing plans. Results of this kind of exploratory research, however, must be interpreted with care since they are normally based on a limited number of observations which are not necessarily representative of the entire market. Despite this limitation, the results are often very interesting and useful in achieving a better understanding of buyer behaviour.

The results in the following section are taken from interviews conducted during March 1979 with nine Ontario farmers. Each interview was conducted on the farm and lasted approximately two hours. All the interviews were tape recorded to facilitate subsequent analysis.

The nine farmers were selected from names provided by fertilizer dealers in Kent, Oxford, and Wellington counties. The final group consisted of five cash crop farmers and four mixed farmers. In terms of size of purchase the group consisted of four farmers who purchased over 100 tonnes of fertilizer in the previous year, four who purchased between 50 and 100 tonnes, and one who purchased less than 50 tonnes.

3.0

RESULTS

The results of the depth interviews are discussed under the following general headings: (1) the fertilizer purchasing decision, (2) current and

future fertilizer product use, (3) soil testing, (4) current and future fertilizer use, (5) dealer services, (6) fertilizer pricing, (7) fertilizer dealers, (8) information sources, and (9) fertilizer salesmen. No attempt was made in the analysis to identify participants or to classify comments by size of purchase, type of farm, or geographical area. Instead, findings are reported for the entire group and reference made to differences among farmers only when warranted.

3.1 The Fertilizer Purchasing Decision

Each interview began with a discussion of the difficulty farmers have in making their fertilizer purchasing decision. The farmers seemed to agree that the fertilizer purchasing decision was not difficult compared with other farm input purchasing decisions such as herbicides. Some statements illustrating this point of view are quoted below:

Fertilizer purchasing is not especially difficult ... we grow the same crops every year ... same operations every year ... if we have something that works, we stick with that until we find something that's better than what we're accustomed to using.

Fertilizer purchasing is quite simple ... there are less 'varieties' compared to herbicides.

One farmer stated that his fertilizer purchasing decision was much less difficult now than it had been when he had started farming twenty-seven years ago:

I don't find purchasing fertilizer a difficult job now but when I started farming I knew nothing about what to feed plants ... I experimented ... my sons are taking over the farm and I don't think they'll have as hard a time deciding what fertilizer program to use as I did.

3.2 Current and Future Fertilizer Product Use

All of the farmers interviewed used dry bulk fertilizer (includes blends and materials such as ammonium nitrate and urea) and three of them, all large purchasers, used dry bulk fertilizers exclusively. One of the dry bulk users, a large purchase, cash crop farmer, purchases the basic materials separately and blends them himself. Another large purchase, cash crop farmer, is seriously considering adopting this program. In the former purchaser's words:

We buy our basic ingredients in dry bulk form and we have our own blender. The fertilizer blends through an auger and a baffled forty foot chute into a broadcast spreader. It's a 2:1 mix and a better blend than we get at the dealer.

Of the farmers who do not use dry bulk fertilizers exclusively, three of them use anhydrous ammonia (A.A.), while the other three use liquid nitrogen (L.N.).

Some of the factors these farmers considered when deciding which fertilizer products to use or not be use included cost, ease of handling, ease of application, product performance, convenience, product availability, and availability of application equipment. The following comments illustrate the range of criteria:

We use A.A. instead of L.N. because we have our own A.A. applicator. We've used urea but A.A. is cheaper. We're happy with the dry bulk.

We don't use A.A. because we don't think there is too much response from A.A. We use urea because it has a higher nitrogen content; it's quicker (for spreading) and cheaper than aeroprills per pound of nitrogen.

I use ammonium nitrate on winter wheat instead of urea because I'm not familiar with it.

The dealer service for handling dry bulk is good.

I like L.N. better than A.A. L.N. is the only thing we can put down where we want it for that time of year. L.N. is safer than A.A. ... a kid had his face burned using A.A. I know A.A. is cheaper but I've seen A.A. 'puffing out' of the soil too many times and there is no way of measuring what you're losing.

I feel L.N. is more expensive than dry bulk - takes more expensive equipment to handle them and there was a time when fertilizer was scarce (1973), and L.N. was next to impossible to get, but we got all the dry we needed.

L.N. is more expensive than A.A. but it's a convenience factor. We can get three things done at once ... disc, fertilizer and herbicides with L.N. mixed. Using L.N. saves me hiring one man and a \$50,000 tractor, plus a machine to apply it and that matters more than a \$3/acre difference, in price between A.A. and L.N.; therefore, actually it's a cheaper way to go.

When asked which fertilizer products they were planning to use in the future, most of the farmers thought they would continue using the products they are currently using. As one farmer said:

I'm not keen in changing equipment or trying other products. If there is a saving in a different method or product then I'm going to let someone else prove it first.

As one might expect, given the above information, none of the farmers were experiencing any problems with their products.

Though none of the farmers planned to change, two large purchasers did acknowledge the advantage of an alternative program using L.N. mixed with herbicide. One semi-retired farmer mentioned he would like to see a return to the pelleted fertilizers that were on the market a number of years

ago because he liked the idea of having a complete mix in each pellet.

During the discussion on fertilizer products, a few farmers brought up the topic of on-farm storage. Attitudes toward storage were mixed. Only one of the farmers stores his dry bulk fertilizers. This large purchase, cash crop farmer buys and stores his potash and phosphorous on his farm in wooden bins and blends them with his own blender. Another farmer, a large purchase, cash crop and livestock producer used to store his dry bulk blends on his farm but has since stopped doing so for the following reasons:

We used to store our dry bulk fertilizers but I don't like to store. When you're loading, it raises the fertilizer dust and it's hard on the steel (rust) in the storage shed; the floors stay sticky and there's some loss. We could save \$4-\$5/ton on paper by storing, but there are the hassles and waste so these savings are lost.

In contrast, another large purchase, cash crop farmer is planning to switch to an on-farm storage of dry bulk fertilizer. His reasons for doing so are:

I'm going to use storage because it saves another handling phase and it's cheaper. I own trucks and other equipment to handle it. I have the labour so I can pick it up off-season. By storing it on the farm, I might even consider blending our own analyses.

3.3 Soil Testing

A question area that was discussed at some length was soil testing. All of the farmers have their soil tested, but with varying frequency. Four of the farmers test their soils every year, while four others test them every two or three years. One farmer tests his soils, but not on a regular basis. All but two of the farmers sample their soil themselves. These two farmers have their fertilizer dealer send someone out to take the

samples and someone from the farm goes along with him because "they have more time and know the sampling technique but we know the problem areas". Though most of the farmers allowed others to take the soil samples, they seemed to agree as a group that:

A farmer knows his fields and he knows where the problem or potential problem spots are.

The farmers indicated that the main reasons for soil testing are to monitor existing nutrient levels in their soils and to help determine whether particular nutrients or pH levels need to be raised or lowered. Some of the farmers also pointed out that they take soil samples in problem spots in their fields to help investigate why a particular crop has not been growing or yielding as well as the rest of the field. The following comments illustrate these reasons:

We've been getting good barley and corn crops, but we feel we could get a much better alfalfa stand than we're getting, so we've decided to take soil tests to see what's lacking. We sample all our fields and if our nutrient levels are down in any fields, we'll bring them back up.

The main things we use soil tests for are to try to keep nutrients in balance and apply fertilizer depending on what the crop needs and enough to maintain levels if already high.

The pH is about the most important thing about the soil test results. The main reason for taking soil samples is to make sure the pH is O.K.

Most of the farmers stated that they use soil test results only as a guideline in deciding how much fertilizer to use. Their comments indicate

a feeling that the levels recommended are a bit low, particularly for nitrogen. As a result, they frequently up the level of nitrogen because they feel too little nitrogen could lead to a serious reduction in yields.

The following comments illustrate the above observations:

Soil testing is a guide but I don't live by it. We put on potash where they say we don't need it; I feel it pays us.

We use soil test results as a guideline but I make sure that I'm not under the recommendations so I put on at least what the soil tests recommend and not extravagantly more because I believe the recommendations are a bit low, and I don't want to take any chances.

Soil tests are an excellent guide. I'm more concerned with relative levels of P and K I maintain. N is something I have to add every time because P and K are highly residual. I use custom blends, based on soil tests. I buy basic ingredients and get them blended according to the recommended levels and this varies from field to field.

While most of the farmers expressed general satisfaction with soil test results, a few of them voiced a lack of confidence in the accuracy of some of the results, as illustrated by these quotes:

I think we need more lime. The soil tests didn't really show that. I don't always think soil samples show up. Maybe we don't do them right all the time.

I haven't had all that great of luck with soil tests. I don't think they're telling me what I think is there. They recommend to put on quite a bit less potash than I think should be put on.

Seems like there's places in the field that do funny things at funny times of the year and the causes of these problems don't always show up in soil tests.

Another farmer complained not about soil tests results, but rather about the length of time it takes to get the results. He would like to get the results back in a week.

3.4 Current and Future Fertilizer Use

A topic that surfaced quite frequently during the discussion of soil testing -- and not surprisingly so -- was current and future fertilizer use. The criteria the farmers use (besides soil test results) to help decide how much fertilizer to use includes: personal experience, crop prices in relation to fertilizer prices, results of experimenting with different rates, and usage of manure. The following quotes illustrate these criteria:

We don't use a great deal of fertilizer ... we determine how much to use mostly by looking at the leaves of the plant. We've been working this land for over 100 years ... I know the land ... I know what the crops will do.

Fertilizer programs depend somewhat on the price of what we are growing. When corn prices are down, you can't afford to put on more to get those last few bushels.

We have a lot of manure ... it guides the use of N and it guides us why we don't apply any N until the corn is up. We calculate how much fertilizer we're putting on via manure and then put on whatever fertilizer is still needed.

It's a problem getting the manure on right so we don't bother figuring out what we get on as far as actual nutrient levels are concerned.

Though most of the farmers indicated they are maintaining their current fertilizer levels, some said they may cut down a bit. The following comments illustrate these observations:

I used to be a scoop-shovel plant nutritionist. I once thought that if one bag of fertilizer was good, two would be better -- but I've gone through that thinking.

We used to go 20 percent over the recommended levels in the soil tests. Now we're down around the soil tests. I can vary N and get a response. I can never get a response from P and K ... from zero P and K to greater than the recommended levels in the soil tests. The crop may look different but there is no significant deviation in the yields in the fall so this convinced me that the soils are at a pretty high level so we cut back a bit.

I feel you need to build up the soil, but after the soil has been built up ... I think we've been over-applying so I think I'll cut down a bit.

We don't believe in going too high in fertility ... we're too apt to lose a crop in this area (North Wellington) so we can put \$50/\$60/acre fertilizer on and get nothing -- we've been yielding 90-95 bushels of corn per acre without too big of an investment.

We could probably skip a year or two on fertilizer and see not much difference in yields. You can double or take away and there's not much difference in yield, so we're just putting on enough to maintain the current levels.

We've been spreading up to a million gallons of liquid manure a year ... We don't need as much fertility ... we've been cutting back.

While most of the farmers said they will maintain or perhaps decrease their fertilizer usage, a few of them plan to increase their usage, particularly on their hay and/or pasture acreage. These farmers felt that increasing cattle prices warranted more attention to hay and pasture yields.

Other reasons for increasing fertilizer usage included expanding production of corn and soybeans and hope of higher yields.

3.5 Dealer Services

A significant part of each interview was devoted to the important area of dealer service. As expected, all the farmers agreed that good service was very important; therefore, an effort was made to determine exactly what "good service" meant to them. Results of this questioning indicated that "good service" is composed of several important elements:

1. Prompt and Reliable Delivery:

You call him up and order a load of fertilizer and he has it sitting there when you want it or when he says he'll have it ready. I don't want to spend a half a day sitting around at the dealer waiting for your fertilizer ... can't afford that.

Good service means a helluva lot to us because we're running 600 acres besides milking 45 cows, so when we're out in the field and we have 60 - 70 acres ready to sow, we don't want to be fooling around.

2. Prompt Repair of Faulty Application Equipment:

If you use A.A. and you break a tooth on your applicator, I can go to my dealer and he has replacements ... that's good service.

Once I used a spreader and its belt slipped. It left a trail of fertilizer down the field, but it didn't cost me anything. I called Burford up and they came right over, gave me another spreader, filled it up with fertilizer, and didn't charge me a thing for the wasted fertilizer. This is part of good service.

3. Application Equipment in Good Repair:

My dealer has first class equipment to put on my fertilizer so I know the operator won't break down in my field and get in my way ... get the job done and get out.

4. Proper Fertilizer Application:

Thompson's have pretty good custom application operators. They get on what we want and evenly. Probably do as good a job as I do myself.

Cyanamid's custom application equipment is good. The operator is good. We wouldn't get them to spread our fertilizer if the operator wasn't good.

5. Hours of Operation:

They work Sundays in planting time ... He'll phone up and ask if we're planting tomorrow. If we say yes, he asks how much fertilizer we need ... we tell him and he'll bring it out when we tell him what time the gravity box will be empty.

6. Availability of Particular Custom Application Equipment:

I hire most of my fertilizer spread and they use floatation equipment. I wouldn't want them to use anything else but floatation.

7. Prompt and Personal Assistance with Problems:

If you have a problem and you approach Burford about it, he'll try to answer your questions: and if he's stumped, he'll be back to you with an answer or not, but he'll be back.

The topic of application equipment (self-owned, dealer-supplied, or custom applied) formed part of the service discussion. Most farmers favoured doing their own application if time and equipment were available, but would

hire it done if their acreage was large or their time limited.

Although most farmers indicated they were quite satisfied with their dealer's service, a few service problems did exist, mainly in the area of application equipment or application services. These problems were generally the result of inexperienced help or poorly cared for equipment as illustrated by the following comments:

The application equipment could be more exacting, the gauges were not right on, so I don't know exactly what's going on. Need better metering device on the gravity bins. This seems to be a problem with the equipment used by the industry in general.

Generally not happy with the custom application service. The dealer has short-term help on the truck that doesn't know what they're doing. They don't know acreage, don't know machines well enough. Trouble with uneven spreading (too much behind the spreader and not enough to the sides). I had trouble with custom application operators driving too wide, not driving consistently across the field.

Dealer doesn't keep equipment in good enough repair. My biggest quarrel with them is with maintenance of their equipment and proper drivers. This is why we try to do it ourselves. Bought our own spreader. Spreaders coming on the yard with crap and corruption on the back just above the spinner on the deflector plate. Soon as that happens they will not do a proper job ... I have had both UCO and CIL custom apply my fertilizer. I can't specify a certain operator but UCO has a better driver than CIL. CIL has a new chap who's getting much better at it. CIL has a tradition of part-time help and I have no use for that ...

Biggest problem is not getting the weights right ... forget a batch when making up an analysis. Then you get too much of the one and not enough of the other and they tend to give you too much of the cheaper material and not enough of the expensive one ... It's a help problem.

Not all farmers were pleased with or favoured the extensive service offered by fertilizer dealers. Two felt such service added significantly and unnecessarily to the price. Both were large purchasers and both either stored and blended their own fertilizer or planned to do so. One remarked:

Service doesn't mean anything to me. I feel there's too much dependence by farmers on service from farm input companies. These services sure add to the price. I feel farmers could save a lot by just buying the basic products without the services.

When exploring the issue of services, the farmers were asked if differences existed in the services provided by the fertilizer dealers in their area. It is interesting to note that most of the farmers were unable to answer this question because they had dealt with only one dealer; however, those farmers who could compare different dealers' services either found no difference or noted differences in facilities and promptness as illustrated by the following comments:

Kent County Fertilizers and Thompsons are about the same. They pretty well split the business along this road.

Burford has overhead bins which can store 10 to 11 tons of fertilizer. Tell them we'll be in to pick up. Co-op doesn't have this overhead bin service, but I think they're building some. Co-op offered to deliver dry bulk with their conveyor truck, but we know they would be doing that at practically a loss to try to get some tonnage.

As previously mentioned, most of the farmers were satisfied with the services offered by their fertilizer dealer. However, one service not currently available which some farmers seemed very interested in was a crop management service. The farmers were divided on who should offer such a service. One large purchase, cash crop farmer favoured a private consultant as opposed to a fertilizer company representative or government man:

I think this crop management service is a good idea. It gets you to study yourself as well ... walk with him and watching the crops. He would be more objective than a fertilizer company representative, a government man doesn't have the same incentive. If you're on your own, you get paid ... it's your living, you have to be good ... you have to be good to get business.

Another large purchaser favoured a fertilizer company representative for the following reasons:

I would like to have a crop management service. You got to put the whole thing together to make a package. I think fertilizer companies could stand to benefit more than anyone if they could find a problem in my field. If their recommendations seemed sound I would buy any product from the fellow who could tell me what my problems are. They could afford to employ some real professionals ... have a district representative. For example, phone up Thompsons and they could contact a district representative and get him to come down to the farm the next day or two to look at a problem.

Both of these farmers wanted the manager to be there when the crop was growing.

In contrast to the above viewpoints was the comment made by a smaller cash crop farmer who favoured a government-sponsored program

because "I'd trust the government more. The company has something to sell". This farmer did agree that whoever offered the service should advise them, not dictate to them.

While the above farmers expressed an interest in a crop management service, other farmers felt such a service was already provided through government extension people or their fertilizer dealer. Some farmers felt that advice from a crop management service could prove more confusing than useful or be misleading. They preferred to call someone when a problem appeared rather than have a regular management service. When problems arose, they phoned Ridgetown College, the University of Guelph, or a private consultant if they could not handle it themselves. Though most farmers did not want fertilizer dealers to offer a crop management service, they did feel that fertilizer companies could provide more fertilizer research. As one farmer said:

Need more research on the effect of different climatic conditions on the release of nutrients in the soil to plants. Also need more research on irrigation. Someday land will be too expensive to depend on Mother Nature entirely ... fertilizer companies would be interested in that too. Hand feed the crops by metering fertilizer in the water system so whatever plant needs at particular stage of growth, you can give ... I think that will come.

3.6 Fertilizer Pricing

A major objective of the depth interviews was to investigate farmer attitudes toward fertilizer pricing with particular reference to its importance in the fertilizer purchase decision. Particular attention was paid to farmers' perceptions and attitudes of price variation in their areas, attitudes on the general level of fertilizer prices, and perceptions of the methods their

fertilizer dealer use in determining prices.

First, with respect to the importance of price in the overall purchase decision, the results of the interviews were quite clear: price was considered the most important criteria when purchasing fertilizer, but only in relationship to other factors such as dealer service, personnel, reliability, product availability, equipment consideration, Co-op membership, and dealer proximity. The following statements clearly illustrate farmer attitudes in this area:

Price isn't always the only factor to look at ... we used to store dry bulk fertilizer and save \$4 to \$5 a ton on paper ... but there are the hassles and waste. So these savings are lost. So our present system is good, so service is important.

If you had just price but nothing to put it on with, then that wouldn't be worth much; but the first thing I look at is price because everyone pretty well has the needed application equipment available.

Price is the first thing I look at ... closeness and product availability ... staff is important too, service is also important ... they're all pretty close.

Price is the first thing I look at, but if I buy from a cheaper source, I can't get it when I want it, then the next year I take that into consideration before going back to that same dealer.

Anderson's fertilizer prices are less than Thompson's but they're not selling any service. We want service and are willing to pay for it.

The importance of price was magnified by two large purchase, cash crop farmers who had or were considering their own dry storage and blending facilities. To them, price was the only criteria as illustrated by their comments:

Personality of personnel at the dealer is not important ... proximity doesn't matter ... service doesn't mean anything as long as I can get the basic fertilizer products I need ... price is it.

When I buy on price, I can't ask for service as well without having it built into the price. If you can't buy or get the services you want, why not get fussy on price. Price is number one consideration and product availability is important. Practically everything else doesn't matter.

To gain some insight into the extent farmers priced fertilizer at different dealers, they were asked how many different fertilizer dealers they usually contacted to obtain price quotes before making their fertilizer purchases. It was somewhat surprising to learn that almost half of the farmers (two large purchasers and two smaller ones) did not get price quotes from any other dealers but their own. Two of the farmers contact at least two different dealers, while three large purchasers indicated they get price quotes from about four or five different dealers.

Though each farmer used unique pricing methods, they did fall into two general groups, shoppers and non-shoppers. The non-shoppers seemed to feel that their dealer's prices were competitive and "not out of line with competing dealers". They also tended to have a price freeze -- price rebate clause entered into their fertilizer contract. With this price protection, they felt there was no point in pricing other dealers.

Though they did not go around to different dealers, non-shoppers did have an idea of the "going price" from talking to their neighbours and would tell their dealer if his price was out of line. The following comment sums up the general feeling of the non-shoppers on the issue of price:

I don't shop around. I just contact Thompson. When you buy the volume that we buy, they know that they have to be competitive. You shouldn't have to be badgering them all the time about price. I don't have to check other prices because there's ten thousand other people checking it. It's only common sense. They have to be competitive. I wouldn't be very happy to find out that my neighbour paid \$30 a ton less for his fertilizer. If that happened I wouldn't be back next year. I don't trust that prices are competitive; I know it ... for the size of business and the volume they handle, they can buy at a reasonable price and, therefore, they can sell as reasonable as anybody.

One large purchaser, classified as a non-shopper, was unique. He was so big that two dealers regularly came to him to talk price. He had no need to wheel and deal; the dealers did it for him.

As a group, the shoppers were less trusting than the non-shoppers. They disliked dealers who were unwilling to "come up front with a price", and disliked the concept of rebate and freezing because they felt it "indicates there's a bit of wheeling and dealing going on behind the scenes". The following quote sums up the general attitude of the shoppers on these points:

I don't like the guys who say, 'I'll see what I can do on price and I'll meet anybody else's.' They're not willing to go out and set the price in the first place. They give you a ballpark price. They want to get all the margin. They want to use you to find out what's going on out there. They don't want to lose the business and yet they don't want to cut it close. I'd rather go with the first guy who gives me the best price. U.C.O. is one of the worst for saying 'We'll meet everybody else's price' but they won't come out with the good prices themselves. I'd rather deal with the guy who has the sharp price and keep him in business. I

phone up five guys and buy from the dealer with the lowest price and not go back to the first guy and ask him to meet it. Unfortunately, most farmers don't deal that way. They want to deal with a local chap and price everybody in the countryside and then get the local guy to come down to that price. I frown on price rebate-price freezing tactics because I think it indicates there's a bit of wheeling and dealing going on behind the scenes. The big company seems to be able to absorb these reductions.

During the course of the discussion, one farmer gave his opinion of the way fertilizer companies should set their prices:

The fertilizer price should be materials plus services. Now prices include services and then deduct. I want basic materials prices then add on services prices. The dealer usually has large enough margins they can include services, particularly for the smaller farmer, and the dealers come out ahead. Those who don't want services have to get the overall price down.

The shoppers all used basically the same techniques in their pricing: they would get several quotes and buy from the cheapest supplier. All asked for the "best price" from each dealer. These shoppers felt that fertilizer prices varied from dealer to dealer. They particularly noticed differences in prices quoted to large farmers and those quoted to small farmers as the following quote indicates:

Prices are quite close to use, but if you talk to other farmers around, there's a helluva difference. Talking to farmers who are the same size as we are and who deal with different dealers, they are paying prices that are within dollars of what we're paying. The smaller guy pays a helluva lot more than we do.

Non-shoppers, on the other hand, felt there was very little price variation in their area. When asked to explain the variation they perceived in price, a few of the shoppers thought having a good credit rating helped them to make better deals. Most of the farmers seem to agree that larger purchasers generally received better prices than smaller purchasers.

The question "Do you feel fertilizer is still a good value?" was discussed with the farmers. Most of the farmers felt that fertilizer is still a good value; however, a few of them expressed suspicion at the methods some of the fertilizer dealers used in establishing fertilizer prices. Their attitude is illustrated by the following comment:

Fertilizer is still a good value but dealers could do a better job of pricing. They're making excess profits. They are more efficient now but they are not passing any of the profits to the farmers ... the dealers are working with a higher profit margin.

In contrast to this attitude, other farmers expressed complete trust in their dealer's pricing method, as indicated by the following quote:

Without Thompsons making a profit, we won't make a profit. They have to make money for expansion and equipment. That's what we demand of them so then we have to pay for that. Thompsons have a rough idea what percentage increase is going to be or decrease. This information determines the timing of our fertilizer purchase. Not only do we depend on them for that, we hold them responsible for that too. They can't sell me fertilizer now and make me pay cash for it and pay interest on it and three months later, sell it to my neighbour for \$30 a ton less without interest on his money. That just doesn't work in business. They have to be on the button with their pricing too.

Not all farmers felt fertilizer was a good value, particularly when compared with crop prices:

Fertilizer prices are too high. Look at how fertilizer has gone up and look at the way corn prices have been. No relationship between the two. Value from the fertilizer has decreased. We're using less fertilizer than we used to because of the cost-price gap. Those last bushels of corn may be too dear if you have to buy them with fertilizer. If corn went to \$4-\$5 a bushel, the companies would sell a lot more fertilizer. The dealers probably sit together and see what price the traffic will bear. I don't think prices are really competitive. The prices are close together among dealers. I think they've been talking together.

Related to the issue of pricing was the timing of the fertilizer purchase. Most farmers in the group did not purchase their fertilizers early (during the winter months) with the exception of those who have L.N. storage facilities. These farmers purchased their L.N. in November or December and took delivery of it shortly thereafter in December or January. They felt that by purchasing early, they paid less for the following reason:

We purchase our L.N. in November-December and take delivery of it in January. The price of L.N. is much cheaper when you buy it in the fall. The suppliers do not have lots of storage for L.N. like they do for dry bulks, so you get better deals with L.N.

A few purchased dry bulk fertilizers early for what they called "tax breaks"; however, they really were not certain that the "tax breaks" were really significant as indicated by the following comment:

I buy \$5,000-\$6,000 worth of fertilizer before New Year's for the tax break. I got into that mess and I would like to get out of it. You're deferring taxes one year all the time. Maybe it's worth it, maybe it isn't. Outside of a tax break, I would

rather wait until the last minute before I bought any fertilizer.

As mentioned earlier, only a few farmers purchased their fertilizers early. Some of those who did not purchase early had done so at one time, only to find prices went down in the spring, instead of up. Others had price freeze -- price rebate clauses in their contracts. Still others did not want to tie up their money in such an inventory investment. The following quote illustrates these reasons:

I'm not sure buying ahead all the time is such a good idea. When buying ahead you lose interest on money. Usually I can get written in a protection against price decline. If price drops lower than your purchase price, you get a rebate. Sometimes there are price wars between dealers. They predict price increases and grab off business and sometimes the increases don't come about. This has happened quite often before.

We've given up on the idea of prepaying. I don't like to lock myself in to one company early. I've seen price wars.

While discussing fertilizer pricing, some of the farmers brought up the payment terms and group buying. It is interesting to note that payment terms were of major importance only to large purchasers. Large purchasers were also the ones who discussed group buying. One had had success with the method when buying 28% L.N., but the other had not because of the varying analyses and services needed by group members.

3.7 Fertilizer Dealers

An important issue and one discussed at considerable length with all the farmers was the fertilizer dealer. Under this broad heading such issues as the extent of splitting business and farmer purchasing histories were

explored. Farmers were also asked for their attitudes toward dealer/company size, dealer organization (generalist versus specialist), and independent versus company-owned dealerships. These particular efforts were an attempt to reveal some of the characteristics farmers seek in a fertilizer dealer.

First, with respect to dealer loyalty, most of the farmers dealt with the same dealer for the past ten years. Only two of the farmers, both large purchase, cash crop farmers, move their business around depending on the price of fertilizer and split their fertilizer business between dealers for the same reason. As one of the farmers said:

My fertilizer supplier could change from one year to the other depending on price. I don't think farmers should become tied to one dealer -- dealer loyalty. I think farmers could save a lot more on their input costs if they shopped around more. He's selling himself out. If they shopped more, the dealers would have to be sharper and their buying practices would have to be sharper. The larger farmer works harder at shopping around. They have a larger investment so they try to save more. I don't want to be tied to any one fertilizer company because if a company representative gives me a good idea or solves a problem, I don't want to feel obligated to remain loyal to that company.

Another large purchase, cash crop and livestock farmer splits his business for reasons different than those given above. He feels his business is too large for one dealer to handle:

I split my A.A. business between the Co-op and Burford. I use 7 or 8 wagons, which is too much for either to handle alone. If they had to fill all of them along with the other trade, it would put quite a strain on them. I buy my dry bulk fertilizers from Burfords because they have the overhead bin service which works very well in our current system in the spring.

In contrast to the three large purchasers mentioned above, the other farmers expressed considerable dealer loyalty. They generally felt that service was more important than minor price differences as the following comments indicate:

If the price was the same or even if Cyanamid was \$1 a ton or so more, it would have to be \$5 or \$10 a ton more before we'd change from Cyanamid because I like their service. We don't split our business, we've always bought from Cyanamid.

Thompsons are pretty close usually. If there is a small spread in price, and I would have to go to Chatham, I wouldn't. If there is a big price spread, I bring it to Thompsons' attention and they usually match the price.

Service means more to me than saving a dollar a ton, so I'm not interested in switching very easy.

When asked if they planned to switch dealers within the next year or two, dealer loyal farmers said 'no'. When asked how they would choose another dealer, these same farmers gave product selection, personal treatment, and distance from farm as major criteria. These criteria are illustrated in the following comments:

Kent County Fertilizer would be my second choice. I think the manager is a nice honest fellow. I think they have as wide selection of fertilizers as Thompsons. Both are close. I think Kent County Fertilizer and Thompsons are pretty good matches.

We purchase our fertilizer from the Co-op instead of Master Feeds, even though Master Feed's products and services are basically the same, we prefer the Co-op because they're farmer owned. We're Co-op members and we think we get more personal treatment at the Co-op. Master is a privately owned company

and there seems to be a degree of distance between the farmer and dealer. I think the Co-op is working more for the farmer than Master. The Co-op is close, only four miles away. That's important in the Spring and in the Fall. We also sell our corn to them.

Co-op would be my second choice. Closeness is an important thing and they are about four miles away and Cyanamic is only two. If Cyanamid's services started to decline, I'd go to the Co-op. The Co-op's service would probably be good.

Most of the farmers had definite opinions in the areas of dealer/company size, independent versus company-owned dealerships, and "generalist" versus "specialist" dealerships. When asked about dealer/company size, farmers seemed to favour a larger company. Those who felt this way did so because they thought the larger companies offer better prices, selection, facilities, and services. However, some did express concern about losing the personal touch when dealing with large dealers. A few other farmers recognized that a company could become too big to help with individual problems. These farmers "liked to talk to the top guy who's calling the shots".

Those farmers who did not favour a larger dealer were indifferent as to size. Other factors, such as efficient operations and low prices, were more important to them than size. One farmer summed up this viewpoint in the following way:

I don't care what size or how a fertilizer supplier is set up as long as they have an efficient operation and they're shrewd in their buying.

Farmers were split in their attitudes toward specialist or generalist dealers. About half were indifferent while the other half favoured a generalist. The latter felt that a generalist offered more convenience and was more competitive as illustrated by the following comment:

It's convenient to have Thompsons deal in everything. Why should I deal with a dozen different places and products if I can get to know and understand and depend on one man for all those things. I know if I get good quality products and services in one area, I'm likely to get it in other product areas. If I have a problem, I know they'll do something about it no matter what it is. Another advantage of them being in all products lines is if they don't make quite enough money in fertilizer one year, they can subsidize if from another product area that did, and still stay competitive and stay in business in the fertilizer end of it.

Farmers were also split in their attitudes toward independent versus company-owned dealerships. Some favoured independent dealers, while others expressed indifference. Those who favoured independents felt they were more efficient and hated to see the large companies gain total control of the market. The following comments illustrate this viewpoint:

I like to see some independents around just to keep things honest.

I want to deal with an independent. It's his fertilizer and he knows what he wants to do or can do. I just can't deal very well with Co-op. They don't care too much if you leave them, but the small independent dealer is interested and keen to keep you as a customer. He'll give you the service because that's his only livelihood. I lean towards the independent because I know I'll get the best.

I'd rather deal with an independent first anytime. I'm an independent myself. I don't like too much control. I believe we have to have independents like Thompsons so they can compete with the Co-op and keep the Co-ops more or less on their toes. I wouldn't like them to have all the business in the area. They wouldn't be efficient anymore if they had no competition and you would be at their mercy. Everything else being equal, I'd go to the independent first.

3.8 Information Sources

Another primary objective of the farmer interviews was to explore what information sources are used for planning fertilizer programs. During the interviews, farmers were asked their opinions of the following sources:

- (1) Fertilizer dealers, (2) Publication 296, Field Crop Recommendations,
- (3) Farmer meetings, (4) Government Extension, (5) Personal experience,
- (6) soil tests, (7) Farm magazines, and (8) Other farmers.

Some farmers sought advice on their fertilizer program from their dealer. However, fertilizer dealers generally seemed to play a more important role when fertilizer related problems arose in the field than they did in planning the fertilizer program itself. The farmers who used the dealer as an information source wanted their dealer to "know what the other farmers are doing". They also wanted "a guy on staff who has some experience and is really interested in your program and shares information about what's going on in my area".

Those farmers who did not go to their dealer for information felt they were better equipped to plan the program themselves. These farmers were confident of their own ability to plan a suitable program and handle problems. Their view is summed up by the following comment:

I seek no advice from fertilizer dealers. I've got more skills in the area of crop management than they do. They're just in the business to move products. They don't have anybody on staff that is skilled enough to handle some of the problems. They instinctively say the problem is not enough fertilizer. Maybe they're right, maybe they're not.

Farmer meetings did not emerge as an important information source. The opinions that were expressed were contrasting: one farmer had found company-sponsored meetings useful; another thought government-sponsored meetings were more objective.

On the other hand, all of the farmers thought talking to other farmers was an important source of information as illustrated by the following comments:

We talk to the farmer who plants our corn. He talked us into switching from bagged to dry bulks. He uses 28% L.N. on his corn. He like it. We haven't decided to switch yet. So we talk to a farmer like him.

I base my fertilizer program on what I read, my experience, soil tests, and quite a bit on what other successful farmers are doing. It's always nice to know what good farmers are doing and it's reliable information.

The importance of this source is again illustrated by the case of one farmer who relied mainly on his own experience because of past failure of other information sources to solve a problem. Though he had little time for other sources of information, he valued highly the opinions of his peers:

I had a problem in my corn once but government or fertilizer company people couldn't put a finger on the problem any better than myself, so I don't entirely trust government people, fertilizer companies and soil tests. I go by my own experience mostly. We

experiment with different corn varieties and fertilizer application rates and keep in mind the results. The soil and crop improvement association of Oxford County was the best source of information for me when I started out. I compare notes with several farmers.

Besides the sources of information discussed above, other sources mentioned by the farmers were crop tours at the University of Guelph, trips to the U.S., fertilizer test plots, and company newsletters (especially Co-op and Master Feeds) which list fertilizer products and corresponding prices.

While discussing farm magazines, an attempt was made to explore farmer attitudes toward advertising agricultural products and to find out to what extent fertilizer dealers advertized. First of all, most farmers said they did read farm ads. Some of these farmers noticed there were fewer fertilizer ads than there were ads for seed corn and herbicides. When asked about the usefulness of these ads, the opinions were mixed. Generally speaking, farmers agreed that the ads brought products to their attention but doubted that the ads were useful in actually selling the product. In other words, the ads functioned mainly at the level of product awareness. One farmer expressed support for ads which featured personal testimony:

I learn more from an ad where they are interviewing an actual farmer and having him tell what he thinks. It's better than taking a company's own statement which you don't accept right off the bat. I want somebody (farmer) to say that this product done this for me. Have a local fellow you know. If you know the guy, then you know whether or not to believe him. Most effective advertising.

3.9 Fertilizer Salesmen

One of the more interesting topics discussed with the farmers was that of salesmen. As one might expect, all of the farmers had strong opinions regarding this subject, and disliked pushy high-pressure salesmen. They felt that salesmen should be knowledgeable about their product and be aware of what other farmers are using. Although some farmers thought salesmen were an unnecessary expense to the supplier, others lamented the trend toward fewer salesmen. The following comments taken from the interviews illustrate the full range of attitudes in this area:

Don't like pushy salesmen. If I'm busy I don't want them to bother me. When we talk with them, we talk prices and about the product. It's good to find out about the prices and different information about the product so you know what's going on when you end up buying fertilizer.

A salesman should be an expert in his field -- know his product as well as anyone. Should be able to answer any question related to it. Should know what other farmers are using.

A salesman should be honest with you. Admit problems with the product. I'd prefer salesmen who are retired farmers or have had on-farm experience. You can relate to him better than some young fellow who's come right out of the city.

Used to have a lot of salesmen contact me but now nobody comes around anymore for any commodity. I have to go after them and I don't like it. I almost have to beg them to sell me anything. I think there were too many in the past, but now it's going the other way. A salesman can perform a service -- feedback to the company. He has to be an honest fellow, knowledgeable, straight-forward. No high pressure.

No salesmen have contacted me but there used to be quite a few. I don't care if they don't have a salesman. I'll just phone up and get a price. Maybe they'd be more price competitive if they don't have to keep salesmen on the road. Salesmen are a service and I don't want to buy service.

4.0

SUMMARY

The objective of this report has been to present the results of a series of unstructured, depth interviews with Ontario farmers. Although results of this type of research must be interpreted with care, they can provide useful insights in to the nature of fertilizer purchasing behaviour. The most important points brought out in the interviews are the following.

(1) Farmers generally feel that the fertilizer purchasing decision is not as difficult as the purchasing decision for other inputs such as herbicides, seeds, and feeds.

(2) Some of the factors farmers take into account when deciding which fertilizer products to use are: cost, ease of handling and application, convenience, product performance, product availability, and the availability of application equipment.

(3) Farmers are reluctant to make changes in the type of fertilizer products they use.

(4) Farmers have mixed views about on-farm fertilizer storage. In some cases farmers perceive definite economic advantages associated with early purchasing and storage, whereas in other cases these economic advantages are thought to be outweighed by other problems.

(5) Most farmers view soil test results as guidelines to help determine the amount and types of fertilizer to use. Farmers frequently increase the amounts of fertilizer they use above soil test recommendations.

(6) Some of the criteria farmers use in deciding how much fertilizer to use include: personal experience, crop prices in relation to fertilizer prices, results of experiments with different rates, and use of manure.

(7) Although most farmers plan to maintain their current level of fertilizer use, some plan to increase or decrease their use of fertilizer. Reasons for decreasing fertilizer use include: cost, increased use of manure, high fertility levels, and difficulty in seeing any response to increased use. Reasons for increasing fertilizer use include high livestock prices and expanding production of corn and soybeans.

(8) Farmers define "good service" as consisting of: prompt and reliable delivery, prompt repair of faulty application equipment, having application equipment in good repair, good custom application service, staying open late at night and on Sundays and holidays during planting season, having specialized equipment available when needed, and providing prompt, personal assistance with problems.

(9) Farmers are generally satisfied with the quality of dealer services. The biggest problem they perceive is with the quality of dealer personnel, particularly the inexperienced people hired to apply fertilizer.

(10) Farmers perceive very little difference among dealers in the type and quality of services offered.

(11) There is considerable interest among farmers in the concept of a crop management service. Farmers differ, however, in their perception of who should offer this service. Some farmers feel this should be offered by

fertilizer company or dealers, whereas others prefer independent agronomists, and still others the government extension service.

(12) Price is generally considered to be the most important criteria when purchasing fertilizer, but only in relationship to other factors such as dealer services, dealership personnel, reliability, product availability, equipment considerations, Co-op membership and dealer proximity. Price is especially important to large purchasers.

(13) Some farmers are shoppers in the sense they compare more than one fertilizer dealer before making a purchasing decision, whereas other farmers do very little or no shopping. Those farmers who are shoppers obviously are very interested in making the best deal they can. Those farmers who are not shoppers feel they don't have to shop because so many other farmers are doing this already and dealers have to be competitive.

(14) There is some preference among farmers for dealers who will quote a firm price as opposed to dealers who want to match someone else's price.

(15) Those farmers who purchase early do so mainly because of price reductions and tax advantages. Reasons for not purchasing early include the possibility of price wars, rebate and freeze clauses in contracts, the dislike of tying up money in inventories, and the belief that no real savings are possible from early purchasing.

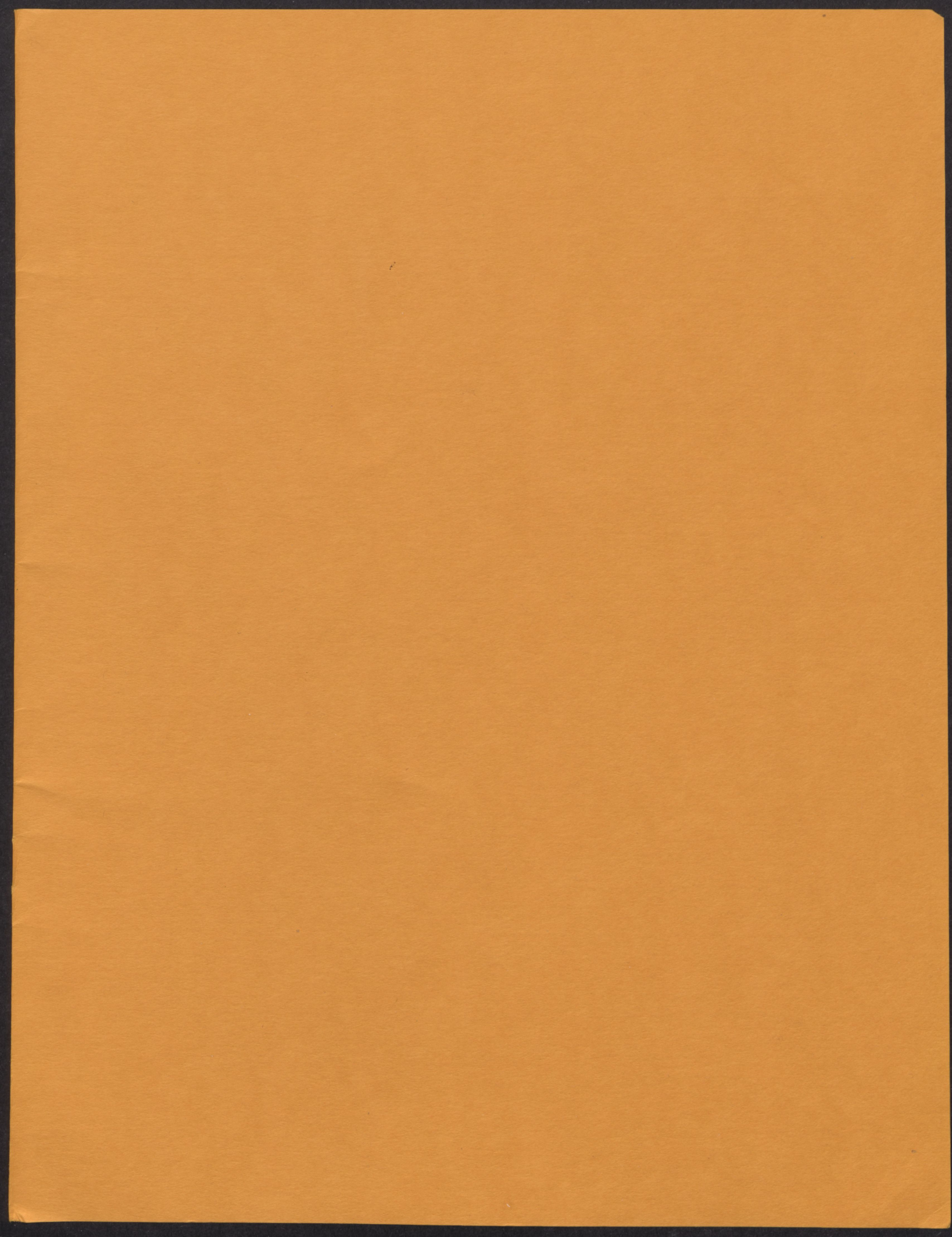
(16) The criteria farmers use most often in selecting a fertilizer dealer are: price, product selection, personal treatment, and distance from farm.

(17) After establishing a good working relationship with the fertilizer dealer, many farmers are reluctant to give this up and make a change on the basis of a small price difference.

(18) There is no clear-cut preference among farmers for large versus small dealers, independent versus company-owned dealers, for dealers with a narrow versus a broad product line.

(19) The most frequently used sources farmers use to obtain fertilizer information include: dealers, other farmers, extension agents, and government publications (Publication 296).

(20) Farmers differ in their attitude toward salesmen. Some farmers think salesmen provide a valuable service, whereas other farmers feel salesmen only add to the cost of the product.



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