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ABSTRACT

The series of programmed teaching guides for the enterprise analysis of selected enterprises was prepared by the participants in a Farm Management Education In-Service Workshop at North Dakota State University. The guide should be useful to teachers of adult Farm Management classes in helping to teach farmers to make a thorough analysis of the particular enterprise under study. Each of the 10 units is presented in a question and multiple answer format showing how to evaluate the enterprise and how to determine what changes should be made to increase its effectiveness. The following topics are covered by the workshop participants for enterprise analysis: alfalfa hay, corn, oats, sunflower production, wheat, beef breeding, dairy, feeder cattle, complete hog enterprise, and hog finishing enterprise. The guides are keyed to a textbook on Farm Business Analysis used in the North Dakota Farm Business Management Educational Program. (Author/EC)

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ED112162

A PROGRAMMED ENTERPRISE ANALYSIS TEACHING GUIDE  
FOR SELECTED FARM ENTERPRISES  
IN NORTH DAKOTA

Prepared as part of the  
FARM MANAGEMENT EDUCATION IN-SERVICE WORKSHOP

EPDA-001-75

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August, 1974

In cooperation with  
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## INTRODUCTION

This series of programmed teaching guides for the enterprise analysis of selected enterprises was prepared by the participants in the Farm Management Education In-Service Workshop offered by the Department of Agricultural Education at North Dakota State University in cooperation with the State Board for Vocational Education. The Workshop was held during the week of July 22 - 26, 1974 and was taught by Dr. Edgar Persons who is of the Department of Agricultural Education, University of Minnesota

This guide should be very useful to teachers of Adult Farm Management classes in helping to teach farmers to make a thorough analysis of the particular enterprise under study. The line and table number refer to the analysis report used in the North Dakota Farm Business Management Education Program and also used in Minnesota and several other states.

By Les Gullickson

Enterprise Analysis for Alfalfa Hay.

Refer to Enterprise Analysis Table 10 in your Farm Business Analysis.

Directions:

Read each question carefully. Based upon what you know about this enterprise on your farm, answer each question either yes or no. When you have completed the enterprise evaluation, make a list of the current practices you will consider changing, or new practices you will try in the coming year to increase the effectiveness of this enterprise.

I. Production

- A. Are you satisfied with returns over all listed costs?  
(See Line 24)

Yes \_\_\_\_\_ Stop! Go to another crop table.

No \_\_\_\_\_ Continue answering questions for alfalfa analysis.

- B. Are you satisfied with the per acre yield of your alfalfa crop?

Yes \_\_\_\_\_ Go to Marketing Section of alfalfa enterprise evaluation.

No \_\_\_\_\_ Continue answering questions.

- (1) Is the variety of alfalfa grown a recommended one for your area?

Yes \_\_\_\_\_ Continue answering questions.

No \_\_\_\_\_ Stop! According to Extension Service Circular R-571 recommended varieties for North Dakota are Ladak and Vernal. Continue.

- (2) Do you have trouble establishing a good stand of alfalfa?

Yes \_\_\_\_\_ Good stands are the result of good seeding practices. Go to Question a.

No \_\_\_\_\_ Stop! Go to Question 3.

(a) Was the alfalfa seed inoculated before planting?

Yes \_\_\_\_\_ Good! Go to b.

No \_\_\_\_\_ Rhizobia bacteria culture are available in seed stores. Go to b.

(b) Was a nurse crop of flax or oats seeded with alfalfa?

Yes \_\_\_\_\_ Remember, small grains used as a nurse crop should be seeded at 2/3 the normal rate. Go to c.

No \_\_\_\_\_ Alfalfa seeded without a nurse crop could develop a weed problem. Go to c.

(c) Was the seedbed weed free?

Yes \_\_\_\_\_ Good! Go to d.

No \_\_\_\_\_ A small alfalfa plant cannot compete with weeds for moisture and soil nutrients. Go to d.

(d) Was the depth of seed placement controlled?

Yes \_\_\_\_\_ Go to e.

No \_\_\_\_\_ Depth of seed placement is sometimes a problem where soil textures change. Go to e.

(e) Was the seedbed firm and well prepared?

Yes \_\_\_\_\_ Go to Question 3.

No \_\_\_\_\_ A properly prepared seedbed will result in a more uniform stand. Go to Question 3.

(3) Was fertilizer applied to your alfalfa hay crop?

Yes \_\_\_\_\_ A soil test from NDSU tells the proper application rate. Go to Question 4.

No \_\_\_\_\_ High production farms apply nine times as much fertilizer as low production farms.

(4) Are there some weeds in your alfalfa hay fields?

Yes \_\_\_\_\_ NDSU recommends weeds in alfalfa be sprayed with dalapon and/or 4-(2,4-DB). See Bulletin No. 448, NDSU.

No \_\_\_\_\_ Good! Cows do not like weeds. to to Question 5.

(5) Was your alfalfa harvested at the proper growth stage?

Yes \_\_\_\_\_ Research indicated alfalfa harvested at the proper time will yield higher and have best quality. (Refer to NDSU Extension Circular R-571). Go to Question 6.

No \_\_\_\_\_ Harvesting at improper growth stages could result in the following: reduced yield, limited root growth, increased winter killing, thinning of stands, grass and weed invasion, and diseases. Refer to NDSU Extension Circular R-571. Go to Question 6.

(6) Was your alfalfa hay grazed at anytime during the year?

Yes \_\_\_\_\_ Early spring grazing will reduce yields; fall grazing will hinder the plant from storing food reserves.

No \_\_\_\_\_

## II. Marketing

A. Are you satisfied with the value per ton? (Refer to Line 3) used in the enterprise analysis?

Yes \_\_\_\_\_ Good! Cash price tell the story.

No \_\_\_\_\_ Alfalfa hay marketed through livestock should reflect market prices at harvest time.

By Wayne Berry

## Enterprise Analysis for Corn

Refer to Enterprise Analysis Table 10 in your Farm Business Analysis.

### Directions:

Read each question carefully. Based upon what you know about this enterprise on your farm, answer each question either yes or no. When you have completed the enterprise evaluation, make a list of the current practices you will consider changing, or new practices you will try in the coming year to increase the effectiveness of this enterprise.

### I. Production

- A. Look at Line 24, Table 10. Are you satisfied with the overall performance of your corn enterprise?

Yes \_\_\_\_\_ Good! Continue to watch for price changes and remember that profit is the name of the game.

No \_\_\_\_\_ Go to Question II A.

### II. Seed

- A. Did you select seed of the PROPER MATURITY RANGE for your area?

Yes \_\_\_\_\_ Go to Question III-A.

No \_\_\_\_\_ Stop!  
 (a) Selecting a variety that will mature in the normal growing season is important.  
 (b) See NDSU Circular A-307, North Dakota Hybrid Corn Performance for the Proper Maturity for Your Area.

- B. Have the seed varieties you selected proven to be among the most productive for your area?

Yes \_\_\_\_\_ Good! Local test conditions often reveal varieties that out perform others.

No \_\_\_\_\_ Stop! Seeing is believing! Before you choose a variety make sure it is a proven performer for your area.



- C. Does your seed cost, Table 10, Line 10 compare favorably with farms similar to yours?

Yes \_\_\_\_\_ OK. Go to III-A.

No \_\_\_\_\_ Note! If you spent less it could reflect your seed is not up to par, however, if you spent more take a good look at your source of seed as someone may be taking advantage of your generosity.

### III. Seed Bed

- A. Did you prepare a seed bed similar to successful corn growers in your area?

Yes \_\_\_\_\_ Good! Experience has normally shown the most successful practices in a community.

No \_\_\_\_\_ Look into this! A good seedbed is necessary for good germination and growth.

- B. Did you have special circumstances this year that required your seed bed preparation to be different?

Yes \_\_\_\_\_ Make a note to visit with your instructor about this point. Go to IV.

No \_\_\_\_\_ Go to IV.

### IV. Date and Rate of Seeding

- A. Did you plant "early" based on spring planting conditions?

Yes \_\_\_\_\_ Good! Studies have shown that early planting helps insure higher yields. Go to IV-D.

No \_\_\_\_\_ Timeliness of practice may be as important as the practices themselves.

B. Have you planted early in most other years?

Yes \_\_\_\_\_ OK. Go to IV D.

No \_\_\_\_\_ Stop!.

1. Compare your corn enterprise to other crop enterprises (Table 10's) based on level of production, line 2, and profit levels, lines 24 and 29.
2. Make notes as to which of your crop enterprises are most efficient. How do you stack up on timeliness?

C. Is there any possible reorganization of your work schedule or equipment that would facilitate earlier planting?

Yes \_\_\_\_\_ Stop! Look at any plan based on your total farm business analysis, especially see Table 3, lines 17 and 18 and table 8.

1. Look at which is important to your business, crops or livestock.
2. Consider how you stack up as an over-all crops man. Go to IV D.

No \_\_\_\_\_ Go to IV D.

D. (Dryland Grain West) Was your plant population goal 12,000 to 14,000?

Yes \_\_\_\_\_ OK. Go to E.

No \_\_\_\_\_ This is the recommended rate, consider your plant population goal compared to research.

(Dryland Grain East) Was your plant population goal 14,000 to 18,000?

Yes \_\_\_\_\_ OK. Go to E.

No \_\_\_\_\_ This is recommended rate, consider your plant population goal compared to research findings.

(Irrigated Grain) Was your plant population goal a minimum of 18,000 to 20,000?

Yes \_\_\_\_\_ OK. Go to E.

No \_\_\_\_\_ This is recommended rate, consider your goal compared to research findings.

E. Did you make stand counts near harvest time to determine how close you came to meeting your plant population goal?

Yes \_\_\_\_\_ Good! If your actual stand did not meet your goal, remember that a rule of thumb is to drop 10 to 15 percent more seed than the desired harvest population to allow for normal stand losses.

No \_\_\_\_\_ Look out! You can't produce ears without stalks. There is within limits, a strong relationship between stand and yield.

V. Weed Control (See Table 10, line 9)

A. Was your weed control program completely effective?

Yes \_\_\_\_\_ OK. Go to VI.

No \_\_\_\_\_ This bears looking into as weed competition is very serious business.

1. Did you use a pre-emergence herbicide?

Yes \_\_\_\_\_ Good!

a. Is your chemical cost per acre comparable to the high profit farms in your group?

Yes \_\_\_\_\_ Right on!

No \_\_\_\_\_ Heads up. High cost may be an indicator of costs getting out of line; low costs may indicate poor control measures.

b. Was the chemical effective enough that you plan to use the same product next season?

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ Start now to investigate what chemical works best for your area.

No \_\_\_\_\_ When weeds are a serious problem, pre-emergence control is usually the most effective.

2. Did you make any post-emergence chemical weed control applications?

Yes \_\_\_\_\_ Remember that this is like trying to shut the barn door just in time to keep the horse from escaping. Timeliness is essential. Go to B.

No \_\_\_\_\_ Let's hope this means that your pre-plant and tillage operations were successful.

3. Did you use any mechanical weed control methods after seeding?

Yes \_\_\_\_\_ OK. Continue.

1. Did you harrow before and/or just after crop emergence?

Yes \_\_\_\_\_

No \_\_\_\_\_

2. Did you carry out a regular row cultivation?

Yes \_\_\_\_\_

No \_\_\_\_\_

No \_\_\_\_\_ Mechanical control may need to be combined with chemical control to lower costs and improve effectiveness.

B. In the past, have weeds generally caused you any yield problems with your corn crop?

Yes \_\_\_\_\_ Let's talk about it.

No \_\_\_\_\_ OK. Go to VI.

1. Do you have a whole farm systems approach to weed control?

Yes \_\_\_\_\_ Great - The only way to go. Go to VI.

No \_\_\_\_\_ This could be the key! Experience has shown that certain weeds are easier to control in some crops than in other crops, also the weed control program must be continuous to be successful.

## VI. Available Soil Nutrients

- A. Is your fertilizer cost for corn as shown on Table 10, Line 8 in line with the high profit group for your area?

Yes \_\_\_\_\_ OK. Go to VII.

No \_\_\_\_\_ Money Again, Let's Investigate further!

1. Were there special circumstances this year only that caused a decrease or increase in your fertilizer cost?

Yes \_\_\_\_\_ Make a note of this fact on your analysis report.

No. \_\_\_\_\_ Look Further!

2. Do you normally soil test on a regular schedule?

Yes \_\_\_\_\_ A good Practice. Go to VII.

No \_\_\_\_\_ Look Out! This is a very good tool for management of cost and production that more and more of your neighbors are using every year. Don't you think you should?

## VII. Rotations and Soil Moisture

- A. Have you had a problem finding a rotation for corn to do well on your farm?

Yes \_\_\_\_\_ Continue on to see what research points out. A-1.

1. NDSU research as reported in Extension Bulletin No. 14 "North Dakota Crop Rotations for Profit" has shown little or no difference in yield of corn after different crops.

2. Corn does not respond as well to fallow as small grains provided weeds are controlled.

a. Based on these research findings, could the problem in your rotation be something other than corn?

Yes \_\_\_\_\_ Start now to analyze your cropping alternatives.

No \_\_\_\_\_ This answer bears some close study.

No \_\_\_\_\_ Good! Good rotations have many advantages.

B. Do you plant corn on corn for two successive years?

Yes \_\_\_\_\_ If this was dryland corn, need more answers.

1. Is this two year succession a necessity due to carry-over from the chemicals you are using?

Yes \_\_\_\_\_ You might investigate other chemicals that are as effective but with less residual.

No \_\_\_\_\_ OK.

2. Have you detected any yield decrease from this practice?

Yes \_\_\_\_\_ Pay heed to the above advice about finding a different chemical.

No \_\_\_\_\_ Just Lucky! Look out for disease, insects, moisture depletion, etc., etc.

No \_\_\_\_\_ Corn is a heavy depleter of both moisture and soil nutrients.

## VIII. Harvesting and Storage

## A. Do you hire custom harvesting?

Yes \_\_\_\_\_ Then you need to consider alternatives to see if this is a sound practice.

1. Is your custom work hired costs, Table 10, line 12, plus cost of machinery ownership, operation and interest costs in line with your group averages?

Yes \_\_\_\_\_ OK. Go to B.

No \_\_\_\_\_ How come; is worth investigating with your instructor as dollars left in your bank account is the name of the game.

No \_\_\_\_\_ Go to B.

B. Did the varieties you raised reach a moisture level low enough to provide safe on the ear storage without artificial drying?

Yes \_\_\_\_\_ Good! This can make or break most corn growers.

No \_\_\_\_\_ Danger! Go back to II Seeding.

C. Look at lines 17 and 18 on your table 10 to see how your farm power and machinery costs stack up. Are your costs in line with average?

Yes \_\_\_\_\_ This is a good indicator of effective cost control. Watch the balance between ownership and operation costs.

No \_\_\_\_\_ Go back to Table 8, lines 8, 9, 10 and see how your investment compares. High costs may indicate over investment or repair costs or under utilization. Row costs may affect your timeliness.

## IX. Marketing

A. Look at Line 3, Table 10; did you market your product at an equal or better price assigned to the crop at harvest time?

Yes \_\_\_\_\_ Great! You must have product but then the difficult job is to turn it into the maximum dollars. End!

No \_\_\_\_\_ How come? Let's Look!

1. Were you forced to sell any product to meet the financial obligations?

Yes \_\_\_\_\_ Think about some cash flow planning.

No \_\_\_\_\_ OK. One more question.

2. Do you have adequate on farm storage?

Yes \_\_\_\_\_ Most years storage has made operators money.

No \_\_\_\_\_ Budget this out with your instructor in the next few months. End.



By Richard Roland

### Enterprise Analysis for Oats

Refer to Enterprise Analysis Table 10 in your Farm Business Analysis.

#### Directions:

Read each question carefully. Based upon what you know about this enterprise on your farm, answer each question either yes or no. When you have completed the enterprise evaluation, make a list of the current practices you will consider changing, or new practices you will try in the coming year to increase the effectiveness of this enterprise.

#### I.

Are you satisfied with your net return over listed costs on line 24, table 10?

Yes \_\_\_\_\_ Great! But keep an eye on further progress and trends.  
(Stop - go no further).

No \_\_\_\_\_ Profit is the name of the game. Let's take a look at yields. Question A.

A. Are your yields satisfactory as shown on line 2 of table 10?

Yes \_\_\_\_\_ Very good! (Let's look at price, Question B.)

No \_\_\_\_\_ It takes production to make a profit. Let's find the problem. Go to Question A-1.

1. Did you fertilize, green manure, or add manure to bring the fertility level up?

Yes \_\_\_\_\_ Great! But have you reached maximum return on fertilizer? Go on.

No \_\_\_\_\_ You need fertility to produce a yield. Go on.

a.) Did you soil test for N, P and K?

Yes \_\_\_\_\_ Good! Go on.

No \_\_\_\_\_ Knowing your soil needs is vital to sound fertilizer program. Ask your instructor for soil testing information or for a demonstration. Also refer to NDSU Extension Service Bulletin A-336, Soil Test for Profit.

b.) Was fertilizer applied according to a soil test?  
Refer to Line 8, Table 10.

Yes \_\_\_\_\_ You should be congratulated. Go on to A-2.

No \_\_\_\_\_ Proper fertilization doesn't cost, it pays.  
Go on.

c.) Did you follow the recommended rate?

Yes \_\_\_\_\_ Good! A check strip could prove out your  
return. Go on to A-2.

No \_\_\_\_\_ The recommended rate is designed to maximize  
profit. (Refer to NDSU Extension Service  
Bulletin No. S-F 2, Fertilizing Small Grains.  
Go on to A-2.

2. Did you inspect your fields regularly during the growing season  
and are you satisfied that insects, disease, or weed problems  
did not reduce yield. (Refer to Line 9, Table 10 for cost of  
chemicals).

Yes \_\_\_\_\_ Good! You have a good understanding that management  
is also the day to day decisions. Go on to Question 3.

No \_\_\_\_\_ Regular field inspection is your cheapest investment.  
Next question.

a.) Are you satisfied there was little reduction of yield from  
diseases?

Yes \_\_\_\_\_ Good! Next question.

No \_\_\_\_\_ Preventing diseases by proper variety and  
rotation and controlling diseases by chemicals  
are sound practices. Refer to NDSU Extension  
Bulletin A-170 for varieties and NDSU Extension  
Bulletin A-533 for Crop Diseases and NDSU  
Bulletin PP-556 for Chemical Control of Cereal  
Leaf Diseases. Go on to next question.

- b. Are you satisfied there was very little reduction in yield from insects?

Yes \_\_\_\_\_ Good! Next question.

No \_\_\_\_\_ Rotations and chemicals are two good practices to consider. Refer to Extension Bulletin No. 14 Crop Rotations for Profit and Bulletin on Insect Control. Next question.

- c. Are you satisfied that weeds were not a major problem in your yield reduction?

Yes \_\_\_\_\_ Good! Go to Question 3.

No \_\_\_\_\_ Weed control is a combination of chemicals and cultural practices. Start now to set up a weed control program. Refer to Extension Bulletin SF 1, Chemical Weed Control. Go on to Question 3.

3. Are you satisfied that yield was not excessively reduced by improper harvest procedures?

Yes \_\_\_\_\_ Good! Go on to Question 4.

No \_\_\_\_\_ Let's look at some areas of possible loss. Next question.

- a. Do you regularly field inspect your combine for grain losses?

Yes \_\_\_\_\_ Good! Next question.

No \_\_\_\_\_ You could be losing your profit. Check your operation manual for correct setting. Then always check and recheck combine in the field. Go on to next question.

- b. Was the oats harvested before severe shelling occurred?

Yes \_\_\_\_\_ Good! Go on to Question 4.

No \_\_\_\_\_ Oats need to be swathed early to prevent shattering. Go on to Question 4.

4. Were you satisfied with the quality and variety of seed oats you used? Refer to Line 10 Table 10 for seed costs.
- Yes \_\_\_\_\_ Good! Go to Question 5.
- No \_\_\_\_\_ Certified seed of a late maturing variety doesn't cost, it pays. Go on.
- a. Did you select a late maturing variety?
- Yes \_\_\_\_\_ Good! Go on.
- No \_\_\_\_\_ The yield potential is in these types of varieties. Refer to your local Experiment Station Variety Trials. Go on.
- b. Was this seeded early?
- Yes \_\_\_\_\_ Good! Go on.
- No \_\_\_\_\_ Early seeding has proven to give higher yields. Go on.
- c. Was the seed certified?
- Yes \_\_\_\_\_ Good! Go on.
- No \_\_\_\_\_ You should try to renew your old seed every five years. Go on.
5. Were you satisfied with the stand after it emerged?
- Yes \_\_\_\_\_ Good! Go on to Question 6.
- No \_\_\_\_\_ Many factors affect stand count tests, look at some of them.
- a. Did you treat the seed for wireworms and seedling blights?
- Yes \_\_\_\_\_ Good! Go on.
- No \_\_\_\_\_ Seed treatment is a must. Refer to Bulletin No. E 1 88 Wireworm Control and PP 447 Seed Treatment, NDSU. Go on.

b. Was it seeded at a depth of from 2" - 3" in moisture?

Yes \_\_\_\_\_ Good! Go on.

No \_\_\_\_\_ For proper germination, seed has to be in soil that is moist; but too deep will cause thin stands. Go on.

c. Was it purity and germination tested?

Yes \_\_\_\_\_ Good! Go to Question 5.

No \_\_\_\_\_ You can't afford to plant weeds nor can you take a chance on germination. Go to Question 5.

d. If not used as a nurse crop, did you seed at least 2 - 2 1/2 bushels to the acre?

Yes \_\_\_\_\_ Good! Go to Question B.

No \_\_\_\_\_ What you seed is what you get. Go on to Question B.

B. Is the price per unit (bushels satisfactory in line 3 table 10?

Yes \_\_\_\_\_ Great! Now let's look at Question C.

No \_\_\_\_\_ Time well spent is time used in marketing! Go on to Question B-1.

1. Did you market it over a period of time?

Yes \_\_\_\_\_ Good! Go on.

No \_\_\_\_\_ To hit a better average price, spreading marketing is a common practice. Go on.

2. Do you have adequate storage to hold grain to prevent forced sales?

Yes \_\_\_\_\_ Good planning. Go on.

No \_\_\_\_\_ To be competitive, you need an edge. Take a look at your storage capacity. Go on.

3. Did you hedge by forward contracting or using the futures market?

Yes \_\_\_\_\_ OK but keep evaluating the worth of these tools.  
Go on to Question C.

No \_\_\_\_\_ These are tools to use in locking in a certain price range. But know how to use them first.  
Go on to Question C.

C. Are your total listed costs on Line 30 Table 10 in line with the averages?

Yes \_\_\_\_\_ Ok. Keep an eye on costs either too much or too little can affect total return. Stop here.

No \_\_\_\_\_ Costs take their toll in reducing net return. Let's look at one cost we haven't covered yet. Go on.

1. Refer to lines 17 and 18, Power and Machinery Costs and total these up. Are these in line with average farmers in the analysis?

Yes \_\_\_\_\_ OK. Go on.

No \_\_\_\_\_ Large new machinery can cause decreased returns if used on limited number of acres. Contact your instructor and talk about this. Go on.

2. Are your Power and Machinery Operation's Costs, Line 18, close enough to the average farm in the analysis to satisfy you?

Yes \_\_\_\_\_ OK. Stop. You're done.

No \_\_\_\_\_ Old machinery over used can cost more than updating equipment. Contact instructor and talk about this item. Stop. You're done.

By Robert J. Schaefer

### Enterprise Analysis for Sunflower Production

Refer to Enterprise Analysis Table 10 in your Farm Business Analysis.

#### Directions:

Read each question carefully. Based upon what you know about this enterprise on your farm, answer each question either yes or no. When you have completed the enterprise evaluation, make a list of the current practices you will consider changing, or new practices you will try in the coming year to increase the effectiveness of this enterprise.

#### I.

Are you satisfied with return over all listed costs on your sunflower crop? Table 10 Line 24.

Yes \_\_\_\_\_ Good, but keep watching the market and go to Question II.

No \_\_\_\_\_ Stop and answer Question III.

#### II.

Are you satisfied with the size of your sunflower crop in acres? Table 10 Line 1.

Yes \_\_\_\_\_ Stop! Keep up the good work.

No \_\_\_\_\_ The time is now to get better before you get bigger. Go on to Question III.

#### III.

Are you happy with your fertilizer costs? Table 10 Line 8.

Yes \_\_\_\_\_ Good. Go to Question IV.

No \_\_\_\_\_ Go to Question IV.

## IV.

A. Can you live with your total listed cost per acre?

Yes \_\_\_\_\_ OK. Go to Question IV-B.

No \_\_\_\_\_ Compare your listed costs with the average on Table 10 lines 8-21. Discuss the costs with the instructor. Go to the next question.

B. Are your yields as high as you would like them to be?

Yes \_\_\_\_\_ Table 10 Line 2. No problem then. Stop!

No \_\_\_\_\_ Yield is related to many factors, time of planting, seed selection, seed treatment, planting depth and rate, harvesting losses. Answer Question V.

## V. Seed Selection

A. Did you select a variety that is more tolerant to rust and verticillium wilt? Line 10 Page 10.

Yes \_\_\_\_\_ Go to Question V-B.

No \_\_\_\_\_ Stop! Oil seed varieties show more tolerance to rust and verticillium wilt than do confectionary types. See Extension Circular A538, NDSU, for recommended varieties. Go to Question B.

B. Did the seed have a germination rate of 95 percent or better?

Yes \_\_\_\_\_ Good! Go to the next question.

No \_\_\_\_\_ A germination test should be made because the seed could heat in the bin and kill the germ. Go to Question C.



C. Did you use cleaned seed for planting?

Yes \_\_\_\_\_ Very good! Go to the next question.

No \_\_\_\_\_ It is too easy to clean weed seed out of sunflowers to be planting weedy seed. Go to Question D.

D. Was seed treated with Captan at 1/2 oz./ 100 lbs. of seed for better stand? Table 10 Line 9.

Yes \_\_\_\_\_ Fine! Go to next question.

No \_\_\_\_\_ Stop! Seed that appears moldy should be treated to give you a better stand. For additional information see NDSU Circular A538. Go to Question E.

E. Was seed treated for wireworms?

Yes \_\_\_\_\_ Good! Go to Question F.

No \_\_\_\_\_ You have had no problem? Keep checking the field. Go to Question F.

F. Was seed selected for early maturing or late maturing because of the planting date?

Yes \_\_\_\_\_ Good! You should have ripe seed to harvest. Go to Question G.

No \_\_\_\_\_ Then you should have had the sunflowers seeded by May 10-25. Check Circular A538 for planting dates and maturing dates. Go to Question G.

G. Your seed cost is too low compared to the average? Table 10 Line 10.

Yes \_\_\_\_\_ You used your own seed and no charge was made for it. Go to Question VI.

No \_\_\_\_\_ Too high and you used only part of the seed purchased and the crop was charged with the total cost? Go to Question VI.

## VI. Selecting of growing site.

A. Would you plant corn or small grain on the same ground?

Yes \_\_\_\_\_ Good. You made a good field choice. Go to Question B.

No \_\_\_\_\_ A sunflower grows quite well on a great variety of soils and likes soil that corn and small grains like. Sunflowers do not like heavy, low lying soils that are poorly drained and known to be slow in warming up in the spring. Go to Question B.

B. Did you have sunflowers on the same field in the past four years?

Yes \_\_\_\_\_ Downy mildew fungus lives in the soil for several years. Go to Question C.

No \_\_\_\_\_ Good. Go to Question C.

C. Have you controlled the wild sunflowers in the field and roadside in the past years? Table 10 line 9.

Yes \_\_\_\_\_ Very good. Go to Question D.

No \_\_\_\_\_ Rust overwinters on sunflower refuse and in the spring the spores germinate and infect wild and volunteer sunflowers, which in turn infect the sunflower crop. Go to Question D.

D. Does your neighbor control wild sunflowers?

Yes \_\_\_\_\_ OK. Answer Question E.

No \_\_\_\_\_ Do not plant sunflowers by his fields because of the disease problem. Go to Question E.

- E. Have you had wire worm problems in your sunflower fields?
- Yes \_\_\_\_\_ Have you used chemicals? Check Table 10 line 9.  
Go to Question F.
- No \_\_\_\_\_ Keep checking and go to Question F.
- F. Did you have soil drifting problems with this field?
- Yes \_\_\_\_\_ Stop! Sunflowers do not come up as fast as other crops and weeds and soil movement can be a problem. Go to Question G.
- No \_\_\_\_\_ OK. No need to plant in a protected area.
- G. Have you used Atrazine on this field in the past?
- Yes \_\_\_\_\_ Stop! Sunflowers are susceptible to Atrazine and should not be planted in this soil until you are sure there is no carry over. There could be carry over up to six years depending on the rate used. Go to Question H.
- No \_\_\_\_\_ Good. You should not have had any problems. Go to Question H.
- H. Did you take a soil test? Table 10 lines 11 and 12.
- Yes \_\_\_\_\_ Good. You should know what you are doing. Go to Question VII.
- No \_\_\_\_\_ Sunflowers yield best on fertile soil. Their requirement for fertilizer is the same as for small grains. Go to Question VII.

#### VII. Seed Bed Preparation

- A. Did you till the soil for a loose seedbed?
- Yes \_\_\_\_\_ Stop. Sunflowers like a firm and shallow seed bed. Go to Question B.
- No \_\_\_\_\_ OK. Go to Question B.

B. Did you use a post emergence herbicide to control weeds?  
Table 10 Line 9.

Yes \_\_\_\_\_ Did it work? Go to Question D.

No \_\_\_\_\_ You did not expect a weed problem you could not  
control by cultivation. Go to Question C.

C. Did you use a pre-emergence herbicide to control weeds in  
the row? Table 10 Line 9.

Yes \_\_\_\_\_ OK. Did you have good results? Did you apply  
the herbicide as recommended? Go to Question D.

No \_\_\_\_\_ Did you have a weed problem?

D. Was there ample moisture to activate the chemicals used on  
weed control?

Yes \_\_\_\_\_ OK. Have any plant damage? Go to Question VIII.

No \_\_\_\_\_ Do the best you can with cultivation. Go to  
Question VIII.

#### VIII. Planting

A. Did you place fertilizer in the row with the seed?

Yes \_\_\_\_\_ Did you get germination damage? Go to Question B.

No \_\_\_\_\_ Good. Answer Question B.

B. Were your sunflowers planted in the month of May?

Yes \_\_\_\_\_ OK, if you had a good seed bed. Go to Question C.

No \_\_\_\_\_ Did you then change to an earlier maturing variety?  
Go to Question C.

- C. Do you know the planting rate?
- Yes \_\_\_\_\_ Good. What was the rate you ended up with?
- No \_\_\_\_\_ Stop. Answer Question D.
- D. Do you overplant so you can harrow the field more than twice?
- Yes \_\_\_\_\_ Good. Go to Question E.
- No \_\_\_\_\_ An extra 1/4 lb. of seed should be planted for each harrowing over two. Go to Question E.
- E. Did you plant to a depth of 1 - 2 inches?
- Yes \_\_\_\_\_ OK. Did you have good moisture? Go to Question IX.
- No \_\_\_\_\_ You tried to plant in moisture. Go to Question IX.

IX. Field inspections---emergence to harvest.

- A. Did you get good emergence?
- Yes \_\_\_\_\_ OK. Answer Question B.
- No \_\_\_\_\_ Did you plant too deep? Was the seed bed too dry? Go to Question B.
- B. Do the seedlings look healthy?
- Yes \_\_\_\_\_ Good. You now have something to work with. Go to Question D.
- No \_\_\_\_\_ Is it due to crusted ground or frost after the plant reached the 4-6 leaf stage? Go to Question C.
- C. Did you observe any insect damage?
- Yes \_\_\_\_\_ Go to Question D.
- No \_\_\_\_\_ OK, but keep looking.

D. Did you use any insecticides to control the insects?  
Table 10 lines 9 and 2.

Yes \_\_\_\_\_ What do you think about the possibility that  
you could have killed the pollinating insects  
needed, like bees? Go to Question E.

No \_\_\_\_\_ OK. But what kind of insect damage did you  
have? Go to Question E.

E. Did you have any bird problems? Table 10 line 2.

Yes \_\_\_\_\_ Did you plant close to a body of water?  
Go to Question F.

No \_\_\_\_\_ Birds can be a real problem. Go to Question F.

F. Did the sunflowers have a good standability for harvest?

Yes \_\_\_\_\_ Good. This will reduce field losses greatly.  
Go to Question X.

No \_\_\_\_\_ Check for insect damage to stem, plus high winds,  
without some kind of wind breaks in the field.  
Go to Question X.

X. Did the harvest go OK?

Yes \_\_\_\_\_ Good. Nice to get the crop after it is ripe.  
Go to Question A.

No \_\_\_\_\_ Go to Question A.

A. You made a test run and checked moisture percent before  
combining?

Yes \_\_\_\_\_ Good. Go to Question B.

No \_\_\_\_\_ You should have. Go to Question B.

B. Did you set up the combine for sunflowers?

Yes \_\_\_\_\_ OK. How did it work? Go to Question C.

No \_\_\_\_\_ You should set the cylinder speed and concaves plus the proper reel and metal pans on the pickup. Go to Question C.

C. Can you live with the dockage you are getting?

Yes \_\_\_\_\_ Go to Question XI.

No \_\_\_\_\_ Are the sunflowers too wet to combine? Check settings on combine. Go to Question XI.

#### XI. Storage

A. Moisture content was less than 9 percent on all sunflowers put in storage?

Yes \_\_\_\_\_ Stop! You should have a very little storage problem, but check.

No \_\_\_\_\_ Are you looking for a fire? Go to Question B.

B. Sunflowers are easy to dry in a corn batch dryer?

Yes \_\_\_\_\_ But there is a fire hazard because of the very fine hairs and fibers from the seeds.

No \_\_\_\_\_ Stop and consult your instructor.

By Norris Fagerlund

### Enterprise Analysis for Wheat

Refer to Enterprise Analysis Table 10 in your Farm Business Analysis.

#### Directions:

Read each question carefully. Based upon what you know about this enterprise on your farm, answer each question either yes or no. When you have completed the enterprise evaluation, make a list of the current practices you will consider changing, or new practices you will try in the coming year to increase the effectiveness of this enterprise.

Are you satisfied with your return over all listed costs for wheat as listed on line 24 of your wheat analysis?

Yes \_\_\_\_\_ Good! Keep watching this enterprise.

No \_\_\_\_\_ The return over all costs is your best measure of profit on this crop. Go to Question I-1.

#### I. Production

1. Are you completely satisfied with your yields per acre?  
Line 2.

Yes \_\_\_\_\_ Good! Go to Question II-1.

No \_\_\_\_\_ Yield is the most important consideration in increasing income. Go to next question.

2. Do you think higher production was possible on your farm under 1974 weather conditions?

Yes \_\_\_\_\_ Go to Question 3.

No \_\_\_\_\_ Good! Go to Question II.

3. Was soil sampled to determine fertilizer needs?

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ Soil testing should assist in more intelligent use of fertilizer. Soil test at least every three years.



4. If answer to No. 3 was yes, was fertilizer recommended?
- Yes \_\_\_\_\_
- No \_\_\_\_\_
5. Were fertilizer recommendations followed?
- Yes \_\_\_\_\_ Good!
- No \_\_\_\_\_ See Langdon Experiment Station Annual Report for results of their fertilizer experiments. Adjust recommendations for your yield goals.
6. Was emergence satisfactory?
- Yes \_\_\_\_\_ Good! Go to Question 13.
- No \_\_\_\_\_ The first step toward a good yield is to get grain out of the ground. Go to next question.
7. Was seed planted in moisture?
- Yes \_\_\_\_\_ Good!
- No \_\_\_\_\_ Shallow seed bed tillage followed by adequate furrow opener pressure will usually place seed in moisture.
8. Was seed planted shallow enough so that the coleoptile could emerge?
- Yes \_\_\_\_\_ Good!
- No \_\_\_\_\_ Some varieties have a coleoptile of only 2". Deeper seeding than 2" may cause poor emergence.
9. Did seed meet the germination standards?
- Yes \_\_\_\_\_ Good!
- No \_\_\_\_\_ Less than standard germination may be compensated for by a greater seeding rate per acre providing germination is known.

10. Was seed planted at least 1" deep in tractor tire tracks?
- Yes \_\_\_\_\_ Good!
- No \_\_\_\_\_ Use more pressure on furrow openers that operate in the tracks.
11. Did seed treatment include an insecticide for wireworm control?
- Yes \_\_\_\_\_ Good!
- No \_\_\_\_\_ Wireworms cause poor emergence in some areas. See NDSU Circular E 188 Wireworm Control.
12. Did seed treatment include a fungicide for control of root rots and smuts?
- Yes \_\_\_\_\_ Good!
- No \_\_\_\_\_ The value of root rot and smut control has been known for over 50 years. This is a small cost for the insurance provided.
13. Were you satisfied with weed control?
- Yes \_\_\_\_\_ Good!
- No \_\_\_\_\_ Top yields are impossible under weedy conditions. Two alternatives are good, well time tillage or herbicides.
14. Was chemical weed control used?
- Yes \_\_\_\_\_ Good!
- No \_\_\_\_\_ Research shows an average of 18 percent increased yield from broadleaved weed control.
15. In view of this year's performance and university recommendations, will you change varieties for next year?
- Yes \_\_\_\_\_
- No \_\_\_\_\_

16. Were you satisfied with the threshing operation?

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ Go to # 17.

17. Did you check combine losses during harvest?

Yes \_\_\_\_\_

No \_\_\_\_\_ Combine losses may exceed 2 - 3 bushels per acre if combine is not properly adjusted.

## II. Marketing

1. Are you satisfied with your wheat marketing?

Yes \_\_\_\_\_ Good! Go to Question III.

No \_\_\_\_\_ Management decisions on marketing are much more critical now than two years ago.

2. Did you sell all or most of your crop at one time?

Yes \_\_\_\_\_ There are so many factors affecting price changes that cannot be foreseen that it is impossible for even a grain export broker to determine the year's peak. It is better to sell on several price rises throughout the year. Go to Question 3.

No \_\_\_\_\_ Good! Go to Question # 3.

3. Did you have sufficient storage to prevent forced sales at harvest?

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ At least one year's grain storage is necessary to avoid price pressure at harvest.

4. Did you use forward contracting in your sales?

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ In the long run this may be the only way to take advantage of a price peak when box cars are in short supply.

5. Did you study several publications throughout the year to keep informed on market information?

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ While the statement in Question II-2 is considered good advice, the unformed person cannot compete with the informed. Good management decisions are more apt to be made if you have studied the markets.

### III. Allocated Costs

1. Are you satisfied with your farm power and machinery costs?

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ There should be a satisfactory balance between new enough machinery to get the job done well without large maintenance costs and not get over capitalized on machinery.

2. Do your farm power and machinery operation costs suggest an upgrading of machinery?

Yes \_\_\_\_\_

No \_\_\_\_\_

By Leonard Larshus

### Enterprise Analysis for Beef Breeding

Refer to Enterprise Analysis Table 15 A in your Farm Business Analysis.

#### Directions:

Read each question carefully. Based upon what you know about this enterprise on your farm, answer each question either yes or no. When you have completed the enterprise evaluation, make a list of the current practices you will consider changing, or new practices you will try in the coming year to increase the effectiveness of this enterprise.

#### I. Production

- A. Are you satisfied with the return over all listed costs as shown on Line 22.

Yes \_\_\_\_\_ Good! Since you have now met or exceeded your goals, go to another enterprise or to Question 1 to check on enterprise size.

No \_\_\_\_\_ Stop! Your return over all listed costs is your measure of profit. Go to Question 1.

1. Are you satisfied with the pounds of beef produced? Line 3.

Yes \_\_\_\_\_ Good! Heavy weaning weights are necessary for high production. Go to Question 2.

No \_\_\_\_\_ Stop! Consider expanding only if Question I-A was answered yes. Go to Question 2.

2. Have you inventoried your beef accurately to reflect weights and values? (See Line 4 for value of net increases).

Yes \_\_\_\_\_ Good! An accurate record is necessary before you can analyze the results of this enterprise. Go to Question B.

No \_\_\_\_\_ Stop! If you made errors in either the numbers, weights or values; adjust these before proceeding to Question B.

B. Is the enterprise large enough to satisfy your goals?

Yes \_\_\_\_\_ Good! Herd size along with individual cow production determines total production. Go to Question II-A.

No \_\_\_\_\_ Stop! Caution! Get better before getting bigger. Go to Question II-A.

## II. Feeding

A. Are you satisfied that you are doing as good a job of feeding as you can?

Yes \_\_\_\_\_ Good! But are you sure? Go to question III-A.

No \_\_\_\_\_ Stop! Feed represents 50-60 percent of the total costs of this enterprise. Go to Question A-1.

1. Are you feeding more roughages than required to winter the cows?

Yes \_\_\_\_\_ Roughages account for at least 50 percent of the feed cost. Any waste here will result in low return over listed costs. Go to Question A-2.

No \_\_\_\_\_ Not enough roughage can also result in low return because of lower production. The key is good balance between cow weight control and costs. Go to Question A-2.

2. Are you feeding enough roughage to meet the requirements of the herd?

Yes \_\_\_\_\_ Good! Go on to Question A-3.

No \_\_\_\_\_ As a general rule a cow requires 1 1/2 to 2 tons hay per year with adequate pasture. Go to Question A-3.

3. Are you satisfied that the quality of your roughages is as high as it could be?

Yes \_\_\_\_\_ Good! Much of the hay in North Dakota is not harvested to get maximum quality. Go to Question 4.

No \_\_\_\_\_ Time of cutting and condition after curing have a major influence on nutritional value of roughages. Go to Question 4.

4. Are you using adequate amounts of concentrates?

Yes \_\_\_\_\_ Good! Proper TDN level of beef ration is important to the production of strong healthy calves. Go to Question 5.

No \_\_\_\_\_ The amount of concentrates needed for a beef breeding herd depends a great deal on the quantity and quality of roughage and pasture. Go to Question 5.

5. Are you supplementing to provide adequate mineral, protein and vitamin levels in your ration?

Yes \_\_\_\_\_ Good! Salt and minerals should be available free choice at all times. Go to Question 6.

No \_\_\_\_\_ An analysis of your roughages may be needed to accurately determine how much supplements are needed. Go to Question 6.

6. Are you satisfied with your pasture management program?

Yes \_\_\_\_\_ Great! Pasture provides nearly all the feed for about six months of the year for North Dakota beef herds. Go to Question 7.

No \_\_\_\_\_ Stop! Consider what can be done to improve your pasture usage. Go to Question 6-a.

a.) Are you providing cool season grasses, such as crested wheat grass, for early spring grazing?

Yes \_\_\_\_\_ Good! This is a very good way of saving native grass for later use. Go to Question C.

No \_\_\_\_\_ This might be considered, but it will take cultivated land out of production of other crops. Go to Question b.

b.) Are you fertilizing a portion of native pasture to give earlier spring grass?

Yes \_\_\_\_\_ Good! This provides fair to good spring grazing without using cultivated land. Go to Question c.

No \_\_\_\_\_ You may want to consider this as an alternative. Go to Question c.

c.) Are you satisfied that you are using the correct stocking rate?

Yes \_\_\_\_\_ Great! Too heavy a stocking rate can result in lowered production while understocking results in high pasture charge per cow. Go to Question d.

No \_\_\_\_\_ The proper ratio varies for different areas. The Soil Conservation Service can give assistance in determining the optimum rate for your pasture. Go to Question d.

d.) Are you providing adequate fall grazing?

Yes \_\_\_\_\_ Good! This increases production and saves stored feeds for winter feeding. Go to Question III-A.

No \_\_\_\_\_ There are several alternatives to consider such as stubble fields, winter rye, etc. Go to Question III-A.

### III. Breeding Program

A. Are you satisfied with your percent calf crop as listed on Line 28?

Yes \_\_\_\_\_ Good! This is the first requirement to profitable production. Go to Question B.

No \_\_\_\_\_ Stop! There are several factors that might cause this. Go to Question A-1.



1. Are you using enough bulls for the number of cows in your herd?
  - Yes \_\_\_\_\_ Good! Go to Question 2.
  - No \_\_\_\_\_ The correct cow to bull ratio will depend on several factors, such as age of bulls and size of pasture. Normally 35 to 40 cows per bull is maximum, while 15 to 20 cows may be enough for a young bull. Go to Question 2.
  
2. Are you fertility testing your bulls?
  - Yes \_\_\_\_\_ Good! This helps prevent open cows or late calves. Go to Question 3.
  - No \_\_\_\_\_ The cost of wintering an open cow is about the same as keeping a pregnant cow. Go to Question 3.
  
3. Did you pregnancy test your cows?
  - Yes \_\_\_\_\_ Good! This helps assure you that each cow wintered will drop a calf. Go to Question IV-A.
  - No \_\_\_\_\_ Percent calf crop on Line 28 is determined on the bases of the number of cows and heifers exposed to the bull and wintered. Go to Question IV-A.

#### IV. Animal Health

- A. Are you satisfied that your percent death loss as listed on Line 27, is as low as it could be?
  - Yes \_\_\_\_\_ Great! Dead animals don't add to the returns, just to the costs. Go to Question B.
  - No \_\_\_\_\_ Stop! Certain management practices are associated with death loss. Go to Question A-1.
  
1. Are your calving facilities adequate for the calving dates you have selected?
  - Yes \_\_\_\_\_ Good! Go to Question 2.
  - No \_\_\_\_\_ Wet, cold calves can result in high loss to scours. Go to Question 2.

2. Are you able to watch the cows during calving season?

Yes \_\_\_\_\_ Good! Many losses are prevented by attending the cows. Go to Question 3.

No \_\_\_\_\_ The time spent watching the cow herd during calving may give you a higher return for your labor than other labor uses. Go to Question 3.

3. Are you satisfied with your veterinary expenses as listed on Line 19?

Yes \_\_\_\_\_ Good! Go to Question V-A.

No \_\_\_\_\_ If veterinary expense is too high it reduces return over all listed costs, but too low on expense may result in reduced production and increase death loss. Go to Question V-A.

#### V. Marketing

A. Are you satisfied with the price per cwt. as listed on Line 25?

Yes \_\_\_\_\_ Good! Selling for top price is the result of good management.

No \_\_\_\_\_ Perhaps other marketing channels should be explored.

By David Jones

### Enterprise Analysis for Dairy

Refer to Enterprise Analysis Table 12 in your Farm Business Analysis.

#### Directions:

Read each question carefully. Based upon what you know about this enterprise on your farm, answer each question either yes or no. When you have completed the enterprise evaluation, make a list of the current practices you will consider changing, or new practices you will try in the coming year to increase the effectiveness of this enterprise.

#### I. Production

- A. Are you satisfied with your returns over all listed costs as indicated on line 30 F?

Yes \_\_\_\_\_ Keep improving your herd. Go to Question B.

No \_\_\_\_\_ Returns are your best measure of profit. Go to Question B.

- B. Are you satisfied with your level of milk production in relation to others in the class? See Line 2.

Yes \_\_\_\_\_ Go to C and keep up the good work.

No \_\_\_\_\_ Go to C and determine what your problem might be.

- C. Are production and breeding stock carefully selected?

Yes \_\_\_\_\_ Go to D.

No \_\_\_\_\_ You must have good stock in order to receive good production and this is one area many dairymen can improve upon. Go to Question D.

- D. Do you keep all heifers for introduction into the dairy herd?

Yes \_\_\_\_\_ Go to E.

No \_\_\_\_\_ How can you be sure you have the best quality replacement if you don't give each a chance to prove her production capabilities? Go to Question E.

E. Do you select bulls for artificial insemination to improve your cow characteristics?

Yes \_\_\_\_\_ Go to II.

No \_\_\_\_\_ Why don't you? Go to F.

F. If you use your own bull, do you select him on the basis of dam pedigree?

Yes \_\_\_\_\_ It's good management to do so. Go to II.

No \_\_\_\_\_ The bull carries with him a good portion of the dam's milk production in the gene pool. Go to G.

G. Is your enterprise large enough to satisfy your family goals?

Yes \_\_\_\_\_ Stop!

No \_\_\_\_\_ Remember you should usually get better before you get bigger. If your answer to Question I-A was No, be especially careful in considering any expansion of this enterprise. Go to II.

## II. Feed

A. Is your return over feed cost high enough to rule out feed as a problem in your dairy enterprise? See Line 24.

Yes \_\_\_\_\_ That's good. Go to III.

No \_\_\_\_\_ 50 percent of the cost in milk production is attributed to feed cost. What your dairy animals are fed is very critical. Go to B.

B. Do you know the protein level of your feed?

Yes \_\_\_\_\_ This is one important area in feeding. Go to C.

No \_\_\_\_\_ Have your feed tested to see what kind of ration the dairy herd is receiving. Go to C.

C. Are the total feed costs on line 23 comparable to others in the class?

Yes \_\_\_\_\_ This is a good measure of how well you are doing. Go to III.

No \_\_\_\_\_ If your feed costs are less but still have good production you are doing just fine but should your feed costs be higher you should analyze your feeding program and take corrective measures. When purchasing feed shop around. Go to D.

D. Do you adjust the feeding of concentrates according to the cow's milk production?

Yes \_\_\_\_\_ You know good dairy management. Go to F.

No \_\_\_\_\_ Research has shown that good milkers require more protein and energy to continue their high production levels but poor producers can eat just as much protein as good milk producers, but produce body fat instead of milk. Go to F.

F. Are calves fed a high protein ration?

Yes \_\_\_\_\_ This is often overlooked by dairymen. Go to III.

No \_\_\_\_\_ Calves require about 20 percent protein ration in order to become good milk producers.

### III. Veterinary Expense

A. Do you maintain good herd health?

Yes \_\_\_\_\_ Go to IV.

No \_\_\_\_\_ Sick animals won't make you a living. If you want to stay in dairying you must have good sanitation, use proper sprays and disinfectants, and use vaccination when recommended. Go to IV.

## IV. Housing

- A. Are your building and fence costs per cow comparable to others in the class? See Line 30D.

Yes \_\_\_\_\_ This shows that your buildings are probably comparable to others in the class. Go to V.

No \_\_\_\_\_ If the costs are lower are your cows well protected in the winter? If the costs are considerably higher is your investment too large for the operation or are repair costs excessive.

## V. Machinery

- A. Are your power and machinery costs similar to others in the class? See Line 30 B.

Yes \_\_\_\_\_ This means that your equipment used for dairy is probably doing the job. Go to B.

No \_\_\_\_\_ If the costs are considerably lower you may be using the machines to their maximum capabilities and this is OK. If the costs are too high, you may be over mechanized and could reduce the size of equipment or do custom work or the machinery may be worn out. Remember, power and machine costs are assigned by formula. Go to B.

- B. Are livestock equipment costs on line 30C closely related to others in the area analysis or lower? Go to VI.

Yes \_\_\_\_\_ Your machinery is probably ok. Go to VI.

No \_\_\_\_\_ You should examine your ownership and operating costs for livestock equipment. High costs cut into profits; excessively low cost may indicate antiquated equipment or lack of adequate equipment to use labor efficiently. Go to VI.

## VI. Supplementary Management

- A. Is your price per hundred weight of milk sold similar to others in the class? See line 36.

Yes \_\_\_\_\_ Your milk marketing should be OK.

No \_\_\_\_\_ Consider selling your milk to another buyer and get those additional dollars or increase the grade and quality of your product. Go to B.

- B. Are the pounds of milk per pound of concentrate on line 37 lower than others in the class.

Yes \_\_\_\_\_ This indicates that your cows are being fed more high priced feed than might be necessary.

No \_\_\_\_\_ This should be no problem.

By Marvin Knell

## Enterprise Analysis for Feeder Cattle

Refer to Enterprise Analysis Table 15 B in your Farm Business Analysis.

## Directions:

Read each question carefully. Based upon what you know about this enterprise on your farm, answer each question either yes or no. When you have completed the enterprise evaluation, make a list of the current practices you will consider changing, or new practices you will try in the coming year to increase the effectiveness of this enterprise.

- I. Are you satisfied with your return over all listed costs from your feeder cattle enterprise? (Line 21 F T 15 B).

Yes \_\_\_\_\_ Good! Keep watching this enterprise. Go to Question II.

No \_\_\_\_\_ The following questions may provide some clues.

## II. Size or Scope of Enterprise

- A. Do you think your enterprise is of sufficient size for optimum utilization of available manpower, equipment and facilities?

Yes \_\_\_\_\_ Go to Question III; if your answer to I was No. If your answer to Question I was also Yes, you are finished. Go to another enterprise.

No \_\_\_\_\_ Stop! You should consider expanding only if you have planned the consequences of expanding carefully and if the answer to Question I is Yes. Get better before bigger. Go to Question B.

- B. Does your net increase in value of animals equal or exceed the averages? (L 3 T 15 B)

Yes \_\_\_\_\_ Good! Go on to Question III.

No \_\_\_\_\_



## III. Feeding

- A. Are your returns over feed cost as high as they should be in comparison to average beef feeder enterprise?

Yes \_\_\_\_\_ Go to Question IV.

No \_\_\_\_\_ Stop! Since feed cost is the largest expense to this enterprise, returns over feed are important. Go to Question B.

- B. Are your concentrates costs higher than the average? (L 11 T 15A)

Yes \_\_\_\_\_ Stop! The reason must be determined. Concentrates are the most costly part of feed. Is your ration designed to produce beef at least cost?

No \_\_\_\_\_ Good! Go on to Question C.

- C. Are your roughages costs higher than the average? (L 12 T 15A)

Yes \_\_\_\_\_ Stop! Determine if this is due to feed waste or poor feed utilization. The most economical balance between roughage and grain will provide the highest profit.

No \_\_\_\_\_ Good! Go on to Question IV.

## IV. Veterinary Care - Preventive Care

- A. Are your veterinary expenses higher than the reported average? (L 18 T 15 B)

Yes \_\_\_\_\_ Stop! This is where good management techniques must be employed. See: Circular - AS302 - New Calves For Your Feedlot, NDSU Extension.

No \_\_\_\_\_ Good! Go on to Question V.

V. Production - Management

- A. Are your returns for \$100. feed fed as high as the averages?  
(L22 T15B)

Yes \_\_\_\_\_ Good! Keep watching this item. This is an indication of your management. Returns over feed costs must pay for all other costs and provide profit. Go to Question VI.

No \_\_\_\_\_ Stop! If you are going to make money in feeding cattle this one must be brought into line. Go to Question VII.

VII. Marketing

- A. Are you satisfied that the price you are receiving for your market animals reflect the top market price for quality of animal you are selling?

Yes \_\_\_\_\_ Good! You must be marketing your animals using the best method available. Go on to Question B.

No \_\_\_\_\_ Maybe you should receive the market place options available to you. Direct, public auction, terminal, commission or cooperative marketing. Are you sure you are selling the quality of cattle that command top market? Go on to Question B.

- B. Do you ever hold finished animals because of low market price - waiting for a higher price?

Yes \_\_\_\_\_ Stop! Past experiences indicate that you can not make money by feeding past finished weights. Feed needed for one pound gain increased by 60 percent when feeding past finished weights.

No \_\_\_\_\_ Wise decision.

Go on to next enterprise questionnaire.

By Ron Klein

### Enterprise Analysis for Complete Hog Enterprise

Refer to Enterprise Analysis Table 11 A in your Farm Business Analysis.

#### Directions:

Read each question carefully. Based upon what you know about this enterprise on your farm, answer each question either yes or no. When you have completed the enterprise evaluation, make a list of the current practices you will consider changing, or new practices you will try in the coming year to increase the effectiveness of this enterprise.

#### I.

Are you completely satisfied with your returns to this enterprise?  
Refer to Line 20 F return over all listed costs.

Yes \_\_\_\_\_ Good! Keep a watchful eye on this enterprise for effects of price change.

No \_\_\_\_\_ Profit is the name of the game. Better take a closer look! Go on to Part II.

#### II.

A. Is the enterprise large enough to satisfy your goals? Refer to Line 1 lbs. of hogs produced.

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ Get better before you get bigger.

B. Is your return for \$100. of feed fed better than the average?  
Refer to Line 22.

Yes \_\_\_\_\_ Good! Keep up the good work!

No \_\_\_\_\_ Stop! Take a closer look at your ration. Refer to Line 3 through 10. Also look at lines 25, 26, 27, number of hogs.

C. Are you getting a cwt. of pork on less lbs. of concentrate than the average? Refer to Line 8.

Yes \_\_\_\_\_ Great!

No \_\_\_\_\_ Stop! You will have to take a good look at Line 3 through 7 and death loss, line 27 and line 25, 26, Pigs born and pigs raised. All have an affect on feeding efficiency.

D. Are you making maximum use of home grown grains?

Yes \_\_\_\_\_ Good! Normally home grown grains have a slight price advantage over purchased grains.

No \_\_\_\_\_ Stop! Go back to Line 4 and 5. You should consider using home grown grains if they are available and are reasonable cost substitutes for other kinds of purchased feeds.

E. Are you feeding supplemental antibiotics along with your ration?

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ Stop! Refer to Line 17 if your veterinary expenses are high this may be the reason. Antibiotics help control disease and aid in promoting higher feeding efficiency.

F. Are balanced rations being fed during the different stages of growth?

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ Refer to a swine nutrient reference that shows balanced ration to be fed to the different size hogs.

G. Are you satisfied with the price received for market hogs sold? Refer to Lines 23 and 23A.

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ Go to the next question and take a better look.

- H. Are you raising modern meat type hogs which weigh between 200 and 230 lbs. when marketed? Refer to Line 28, 28A and Line 23.

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ Most packers prefer market hogs between 200 and 230 lbs.

- I. Is the largest net selling price being received? (Net selling price equal gross sale - shipping and marketing cost). Refer to Lines 28, 28 A and Line 18.

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ If you are receiving less per cwt. for top quality hogs than the average, you should look for a better market.

### III.

- A. Do you flush the sows before breeding? Refer to Lines 3 through 8.

Yes \_\_\_\_\_ Good! This will improve litter size and number.

No \_\_\_\_\_ This is a must to get large litter numbers that are healthy at birth.

- B. Are boars and sows in proper condition for breeding?

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ Sows and boars need proper exercise and a balanced ration for good breeding results.

- C. Are the boars limited to a reasonable number of sows serviced each day?

Yes \_\_\_\_\_ Good! Very important for settling sows.

No \_\_\_\_\_ Boars should be limited to 2 or 3 services a day for best settling results.

D. Are enough boars used to assure a large number of sows farrowing at the same time?

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ You should have a boar for about every 12 to 15 sows for best results.

E. Are the sows and boars given a balanced ration during the breeding and gestation period? Refer to Lines 4 through 7.

Yes \_\_\_\_\_ Good! Balanced rations mean healthy economical hogs.

No \_\_\_\_\_ Profit is a must - and only through proper nutrition can you get it. Litter size can be seriously affected by poor nutrition during gestation.

F. Is your farrowing facility clean and dry before, during, and following farrowing? See Line 20 C and 20 D.

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ This may be the cause of your high death loss and poor rate of gain. See Line 27. Buildings don't have to be new or high cost as long as they provide the proper environment.

G. Is clear, fresh water available to the litter and sow at all time?

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ Water is the cheapest nutrient you can use.

H. Are the sows and litter vaccinated for erysipelas at the correct time?

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ Vaccination is cheap and important to large, weaning numbers. See Line 26.

## IV.

A. Are you completely satisfied with the number of healthy live pigs born? Refer to Line 23.

Yes \_\_\_\_\_ Good! More pigs mean more profit.

No \_\_\_\_\_ Small litter mean small or no profit.

B. Are any abnormal pigs being born dead or alive?

Yes \_\_\_\_\_ If many pigs are abnormal check for balanced rations for sows and high inbreeding as possible causes or disease such as lepto.

No \_\_\_\_\_ Good!

C. Are the male pigs being castrated at the proper age?

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ Very important if you want to cut down death loss and minimize pigs being off feed.

D. Are the needle teeth clipped and iron shots given soon after birth? See Line 17.

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ Large eye teeth could cause injuries to the other pigs. Iron shots are essential for good health and weight gains.

E. Are the navel cords cut and disinfected at birth?

Yes \_\_\_\_\_ Good!

No \_\_\_\_\_ This will prevent death loss and poor health resulting in poor weight gains.

F. Are you satisfied with the number of pigs weaned?  
Refer to Line 26.

Yes \_\_\_\_\_ Good! Your weaning average should be better  
than the average if a profit is to be made.

No \_\_\_\_\_

G. Are you satisfied with your weaning weight age?

Yes \_\_\_\_\_ Good! Early weaning weight age is important  
to make a profit.

No \_\_\_\_\_ Stop! Check Line 4 through 7 make sure rations  
are balanced. Also check health. See Line 17.



By Thomas A. Hanson

### Enterprise Analysis for Hog Finishing Enterprise

Refer to Enterprise Analysis Table 11 B in your Farm Business Analysis.

#### Directions:

Read each question carefully. Based upon what you know about this enterprise on your farm, answer each question either yes or no. When you have completed the enterprise evaluation, make a list of the current practices you will consider changing, or new practices you will try in the coming year to increase the effectiveness of this enterprise.

#### I.

Do you feel you reached your maximum net return on your swine feeding operation considering your available resources?

Yes \_\_\_\_\_ Good! Continue to watch this enterprise for the effects of price change!

No \_\_\_\_\_ Check line numbers 9, 14, 20, 21 E to determine where changes need to be made. Go to Question II.

#### II.

Do you feel you were able to obtain the best possible feeder pigs for your operation? (Check Line # 27)

Yes \_\_\_\_\_ That's good judgment!

No \_\_\_\_\_ Stop! Let's look at how you might do this. Go to # 1.

1. Did you buy feeder pigs from a reputable operator?

Yes \_\_\_\_\_ One of the first steps to high profits.

No \_\_\_\_\_ Buy from the seller with a reputation for supplying good pigs. Go to # 2.

2. Did you buy clean, disease free pigs?
- Yes \_\_\_\_\_ Healthy pigs always get off to a better start.
- No \_\_\_\_\_ Don't just look at the pig - look at where they come from. (See line 18, 26).  
Go on to Question 3.
3. Did your feeder pigs have the body conformation of a meat type hog with long bodies and full hams?
- Yes \_\_\_\_\_ You are off to a running start.
- No \_\_\_\_\_ Proper body conformation is what the buyer wants. (Refer to swine judging bulletin - County Agent) (Check line 24 and 25).  
Go to # 4.
4. Did you see to it that your pigs were vaccinated for disease?
- Yes \_\_\_\_\_ Healthy pigs are a must!
- No \_\_\_\_\_ Check with your veterinarian if you are in doubt as to the proper vaccination schedule for your area. If they have not been vaccinated, take care of it. See line # 18 to determine if your vet costs are high enough. Go to # 5.
5. Were your feeders started on a high protein, medicated feed?
- Yes \_\_\_\_\_ Getting them started right is important!
- No \_\_\_\_\_ Check line 4,5, 6, 7. Is your ration in line with average producers? A pig started wrong will never be efficient. Go on to # 6.

6. Were you careful about overstressing your pigs while getting them to your feed lot?

Yes \_\_\_\_\_ Great! Less stress - less slump!

No \_\_\_\_\_ Try to buy and pick up direct from the farm where you buy them. Haul in a clean truck or trailer. Haul when it is cool. Handle them at a minimum. Go to # 7.

7. Did you isolate these pigs from others on the farm for two weeks to watch for disease?

Yes \_\_\_\_\_ Prevention of disease is of utmost importance.

No \_\_\_\_\_ Diseases can really cut into profits. Check the percent death loss. Remember, however, hogs don't have to die from disease to cause serious losses in efficiency and profit. Also check vet costs. This figure doesn't really need to be low. Sometimes it is better to have a little higher vet bill and experience fewer diseases. Go to # 8.

8. Did you pay a reasonable price for these pigs in relation to the profit picture?

Yes \_\_\_\_\_ Profit is the name of the game?

No \_\_\_\_\_ Refer to # 26. Too high a price paid in relation to market butcher price cuts deeply into profits. Go to # III-1.

### III.

Do you feel your feeding methods made maximum use of your resources? Line 4,5,6,7,12.

Yes \_\_\_\_\_ Good management always pays!

No \_\_\_\_\_ Good forage pasture can cut feed costs, home grown feeds can furnish some feed cost advantages. Go to Question III-1.

1. Did you balance your rations with protein, vitamins and minerals? Line 6, 7, 11, 14, 23, 24.
 

Yes \_\_\_\_\_ Balanced nutrition keeps "balance in the checkbook".

No \_\_\_\_\_ Return per dollars worth of feed fed works in a sort of reverse way to what you might expect. You may think that saving money on supplements saves on feed cost yet if the ration is not balanced it may take substantially more feed to finish these hogs and reduce your profits. Go to Question 2.
  
2. Did you shop for your feed and supplements in order to attain the lowest price? Line 12.
 

Yes \_\_\_\_\_ A dollar saved is a dollar earned!

No \_\_\_\_\_ Sometimes a little shopping from different elevators and feed stores can result in some lower cost feeds that will do the job as well as regular market priced feeds. Go on to # 3.
  
3. Did you use a medicated supplement in earlier stages of growth to ward off sickness and promote growth? (Line 18, how are your vet costs? Line 24 - a low return can reflect poor gains due to illness.
 

Yes \_\_\_\_\_ Keep up the good work!

No \_\_\_\_\_ A reputable feed dealer or veterinarian can recommend a good medication program. Go to # 4.
  
4. Did you change the ration on your hogs at different weight ranges?
 

Yes \_\_\_\_\_ Proper rations save feed. Line # 9.

No \_\_\_\_\_ Stop! Hogs at 75 lbs. require a higher protein ration than at 175 lbs. If you keep your protein level at the 175 lbs. level, rates of gain on smaller hogs may be low. If you continue the protein level for 75 lbs. hogs on the 175 lbs. hog, expensive protein will be wasted. Go to # 5.

5. Did you test your feed? Line 9.

Yes \_\_\_\_\_ Great! You know what your feed is worth!

No \_\_\_\_\_ Not knowing what nutrients are in your feed you may fall short of the supplement needed or you may over supplement. In either case a shotgun approach to a balanced ration is not always profitable. Over feeding nutrients is expensive and wasteful. Underfeeding is expensive and it increases the cost of gains. Go on to # 6.

6. Did you supply plenty of fresh, clear water?

Yes \_\_\_\_\_ You are doing a good job!

No \_\_\_\_\_ Animals need a lot of water in small amounts several times during the day. Go to # IV.

#### IV.

Are your facilities adequate for a finishing operation?

Yes \_\_\_\_\_ Good facilities are important!

No \_\_\_\_\_ Investments in finishing facilities do not absolutely have to be expensive. Yet, adequate facilities are important. Line # 21 D. Go to IV-1.

1. Are your facilities kept clean and disinfected?

Yes \_\_\_\_\_ Disease control is a must. Check line # 18, 21 B, 21 C.

No \_\_\_\_\_ Unsanitary facilities are a risk to profits.

2. Are your facilities draft free in winter, cool in summer, well bedded and free of obstruction that may cause injury?

Yes \_\_\_\_\_ A good manager usually makes money!

No \_\_\_\_\_ Stress on animals due to poor facilities causes wasted feeds, damaged carcasses and in the case of overheating death can occur. Line # 30. Go to # V.

V.

Are you completely satisfied with your prices received on your hogs? Line # 24.

Yes \_\_\_\_\_ High prices are often reflected in high profit!

No \_\_\_\_\_ Stop here! Let's look at some of the possible reasons for unsatisfactory prices as compared to other hog producers.

1. Were your hogs marketed at or near 220 lbs.?

Yes \_\_\_\_\_ Good! Maximum profits are usually obtained at or near this net.

No \_\_\_\_\_ Refer to Line # 25. Packers like to have their hogs close to 220 lbs. with a range of 190 to 240 lbs. Underweight or overweight hogs are usually docked in price per lb. Go on to # 2.

2. Have you selected a market that provides you with maximum net selling price per animal?

Yes \_\_\_\_\_ A good market is a sign of success.

No \_\_\_\_\_ Some markets will average higher prices than others yet watch for marketing costs as well. Line 25, 19. Go to # 3.

3. Were your hogs the type of meat type animal desired by the packer? Line # 24, 25.

Yes \_\_\_\_\_ Meeting the demand with a high quality product gives more profit.

No \_\_\_\_\_ Maybe you should take a close look again at the source of feeder pigs you are using and your practices in feeding and marketing. Go to # 4.

4. Was your cost per lb. of gain reasonable?

Yes \_\_\_\_\_ Low costs per lb. of gain usually means higher profits.

No \_\_\_\_\_ Line 14, 20, 21 E divide 100 = cost/lb. of gain reflects returns for \$100. feed fed which indicates the cost of feed in relation to value of pork produced. Go to Question 5.

5. Were you satisfied with your gains per day? Check line # 32.

Yes \_\_\_\_\_ Efficiency in production is a key to profits!

No \_\_\_\_\_ Let's find out what it was. Divide lbs. grown by the days on feed. This factor is affected by many things like rations, facilities, stress factors, disease problems to mention a few. Go to # 6.

6. Do you feel you were paid well for your time with your finishing operation?

Yes \_\_\_\_\_ High profits make people happy!

No \_\_\_\_\_ Maybe you should get better before you get bigger. Go back and run a complete analysis and make sure you know where you are.