Business Activities

Possible Roll Calls for Business Meetings

- How is running a farm like managing any other business? (ie. budgeting, hiring staff, meeting deadlines, complying by rules and regulations, working overtime, etc.)
- Name one expense involved with running a dairy operation.
- Name one thing you need to manage when you own a farm.
- What is one thing that a farmer needs to include in his or her farm budget?
- Name one trait of an ideal farm manager.
- Name something that a farmer might have a short-term loan for? A long term loan?
- What is one goal that a farmer could have for his or her farm? Is it a short term or long term goal?
- Name one activity you can use a computer for?
- What is one way a computer is used on a dairy farm?
- Name one dairy website that you like to visit (or would like to visit) on the internet.
- Name one career related to the agriculture industry (other than a farmer)
- Name one type of record that is kept about you. How is it used?
- Name one thing that farmers need to keep a record of.

Potential Speakers for Business Meetings

- Custom Heifer Raiser
- Succession Planning Advisor
- An accountant
- Dairy software dealer
- A farmer with an effective management strategy
- A farmer who uses computers for management on their farm
- Someone (other than a farmer) who works in the agri-food industry
- DHI representatives
- Breed representatives
- Provincial Dairy Specialists and Advisors
- Banker, Credit Union Representative, or other financial professional

Project or Take Home Activity Ideas

1. Create a budget for your weekly expenses and allowance at home
2. Explore the internet and find a dairy related website. Share your findings at the next meeting including – who is it for, what type of information do they have, is it easy to navigate and is it attractive to look at?
3. Find a business related article about agriculture and bring it to the next meeting to share with the other members.
4. On your farm or a neighbour's farm, find out how a record or records were used to make a decision and why

5. Explore the internet to find a website for a dairy farm. What does it tell you about the farm? Does it encourage you to buy breeding stock, semen or embryos from them? Report on your findings at the next meeting.
6. Explore the internet to find a dairy related website. Write a report about the site to present to your club at a future meeting or Achievement Program.
7. Job shadowing involves "shadowing" a person in a career you are interested in for a day. Work with your leader, who can help you find someone in an agricultural career that you can job shadow for a day. After the shadow, make a small report that can be presented at a club meeting or at another event.
8. Examine your herd's (or a friend's herd's) DHI milk test report. Determine the best and the poorest cows in the herd. Write a report based on the data and present it at the next club meeting.
9. Create a website layout for a farm. This could be designed on paper, or on a computer, using programs such as Microsoft FrontPage or Publisher.

Activity: Types of Records

Purpose: A session of show and tell that helps members become familiar with the different types of records that farmers keep

Age Group: All members

Time Allotted: 20 minutes

Preparation & Equipment: a variety of records, DHI reports, ear tags, breeding records or a breeding wheel, health records, etc.

Instructions:

- Divide the club into groups, keeping the different levels separate. Then, hand out an example of a record to each group. Give the junior members easier records, such as ear tags, and the senior members more difficult records, such as a DHI report.
- Explain that each group will have a few minutes to look over the record.
- They should try to answer the following questions.
    - What is this record?
    - How is this record used?
    - Why is it important?
- (Hint: Circulate among the groups to help out, if required.)
- Then, each group can explain to the rest of the club the answers they decided upon. Make sure that record-producing units, such as DHI, are explained.

Debrief: Why are there so many different types of records for a farmer to use? You can use all of these records to make decisions. Have you ever used a record to make **a** decision? What was the record and what kind of decision did you make?

Activity: Creating a Family Tree

Purpose: This exercise helps members understand the importance of keeping records, and the work it takes, by having them develop a family tree. Be sensitive to the fact that some members may be tracking an adopted family or guardian's family)

Age Group: All members

Time Allotted: 15 minutes

Preparation & Equipment: paper, pencils and markers

Instructions:

- Hand out paper and pencils and explain to members that they will create a family tree. This tree can start with their immediate family, then work up to aunts and uncles, cousins, grandparents, and so on. How many relatives can they remember? Can they remember birth dates? ... anniversaries? The more detail needed and the farther back they go in their families, the harder it is to remember. (Note: Younger members may not be able to remember as many relatives as older members. Make sure they know this is OK. The point of the activity is not to frustrate members but to help them realize that your memory is not the best place to record information.)

Debrief: Is trying to remember a lot of information by memory easy or difficult? How well do you think farmers could run a herd if they just tried to remember all their herd records? What should they do instead?

Activity: Improving Farm Management

Purpose: Members will learn how to use records to improve the management of a farm. They will evaluate a fictional farm's records by comparing them to the DHI Management Centre Benchmarks, and then figuring out ways to achieve the goals set out by the benchmarks.

Age Group: Senior Members

Time Allotted: 20 minutes

Preparation & Equipment: Copies of the "Improving Farm Management: worksheet on the following page, pens or pencils

Instructions:

- Hand out copies of the "Improving Farm Management" worksheet to members. The members are to compare the fictional farm information to the DHI Benchmarks, noting on the worksheet which percentile the farm falls into for each category. You can quickly discuss what each benchmark measures.
- Members can come up with ways to improve the herd's performance to attain a higher "score" against the benchmarks
- Once the groups are finished, each one can share its solutions for improving the fictional farm

Debrief: Discuss everyone's answers to the questions. Why are tools such as DHI's Management Centre Benchmarks important for farmers who are trying to improve the management of their farms? What kind of benchmarks or records do you use or keep in your own life? How and why are they useful to you?

Answers for Improving Farm Management Worksheet

Management Centre	Herd Average	DHI Percentile	Actions for improvement
Milk value per cow	$6,076	70th	• Improve herd genetics • Improve feeding program • Improve health program
Udder health	$4,374	40th	• Improve mastitis health plans • Maintain milking equipment • Follow proper milking procedures
Age at first calving	2.3	90th	• Improve calf feeding • Improve heat detection
Calving interval	13.7	60th	• Improve heat detection • Improve feeding
Longevity	44.2%	80th	• Improve herd health • Improve feeding • Improve genetics for type
Herd efficiency	81.6%	20th	• Decrease calving intervals

**Note: These numbers are based on 2007 data.*

Improving Farm Management Worksheet

Management Centre	Herd Average	DHI Percentile	Actions for improvement
Milk value per cow	$6,076		
Udder health	$4,374		
Age at first calving	2.3		
Calving interval	13.7		
Longevity	44.2%		
Herd efficiency	81.6%		

Activity: Reading a DHI Report

Purpose: For members to understand how to read a DHI report.

Age Group: All members

Time Allotted: 15 minutes

Preparation & Equipment: paper and pencils, sample DHI milk test report (the sample on the next page may be used or an actual report from someone's farm may be used)

Instructions:

- Divide members into small groups of two or three
- Ask the groups to answer the questions on their worksheet

Debrief: Explain that knowing how to read a DHI report provides information that you can use to improve many different aspects of your farm's management, from feeding to genetic improvement. Discuss answers to questions

Answers:

1. 1. Cindy 2. Francin 3. Gail
2. 1. Fresia 2. Geneva 3. Ashley
3. 1. Fresia 2. Geneva 3. Ashley
4. Emma (5.9% fat)
5. Ashley (2.7% protein)
6. Brandon and Geneva (6 calves each)
7. Cindy does not have a projected BCA because she is a fresh cow and this is her first test on this lactation. A projected BCA will appear on the next milk test report after she has had two tests.
8. Annette's record was flagged for questionable production because she increased her milk BCA significantly (up 26 BCA points) from what her lactation curve was projected at.
9. Cindy (432 DIM)
10. Brandon (504,000 SCC)

Sample DHI Milk Test Report and Discussion Questions

COW MANAGEMENT REPORT — *Cow Monitor*

NAME: C/O Dairy Barn, Ridgetown College | HERD NUMBER: ON 22310 | PAGE: 1 of 3 | TEST DATE: 07 Apr 2004 | SERVICE: P12

CANWEST DHI 1-800-549-4373

Cow Name / Breed / Chain #	Test Day Data: Test Code	M kg	F kg %	P kg %	Lactation Information: Calv Date Calv Age yy mm	Lact #	Days in Milk	M kg	F kg %	P kg %	305 Day Actual or Proj *: M kg	F kg	P kg	BCA Deviation: M	F	P	Days Open Days Bred	Test Day SCC 000's/ml	Test Day Fat kg Test Day Prot kg	Chg in Prev Tst BCA Milk
Annette HO ♦ 0346	02	34.0	1.2 3.4	1.1 3.3	22 Jan 03 11	2	76	2233	81 3.6	70 3.2	* 7393	276	255	149 −66	151 −63	162 −55	76	31	1.17 1.13	26
Ashley HO ♦ 0000		42.0	.8 1.9	1.1 2.7	30 Jan 02 01	1	68	2428	66 2.7	66 2.7	* 10313	249	293	255 40	167 −47	229 12	68	15	.80 1.14	
Bandit HO ♦ 0365		31.0	.8 2.6	1.0 3.1	29 Dec 03 07	2	100	3683	125 3.4	114 3.1	* 8584	266	274	174 −41	146 −68	175 −42	92 8	414	.80 .97	−10
Brandon HO ♦ 0171		22.5	.9 3.9	.8 3.4	15 Jul 07 06	6	267	9849	388 3.9	327 3.3	* 10654	421	355	213 −2	229 15	223 6	136 131	504	.89 .77	0
Carolee HO ♦ 0321		Dry			22 Feb 06 03	4	288	7658	267 3.5	250 3.3	7658	267	250	142 −73	135 −79	150 −67	233 177			
Cindy HO ♦ 0268		54.5	2.0 3.7	1.6 3.0	12 Mar 05 11	4	26	1411	53 3.7	43 3.0							26	56	2.03 1.65	
Claire HO ♦ 0355		15.5	.6 3.6	.6 3.9	29 Jun 03 03	2	283	9787	327 3.3	321 3.3	* 10221	344	338	228 13	207 −7	235 18	66 217	238	.56 .60	−7
Dynasty HO ♦ 0037		36.5	1.3 3.6	1.2 3.3	01 Nov 03 01	2	158	6207	213 3.4	190 3.1	* 10236	364	329	218 3	208 −6	219 2	143 15	88	1.33 1.19	9
Electra HO ♦ 0000		35.5	1.0 2.9	1.2 3.3	04 Nov 02 00	1	155	5644	180 3.2	181 3.2	* 10155	317	336	251 36	210 −4	258 41	75 80	48	1.01 1.16	4
Emma HO ♦ 0357		25.0	1.5 5.9	1.0 4.1	30 Jul 03 03	2	252	7762	386 5.0	284 3.7	* 9006	462	338	204 −11	280 66	235 18	75 177	126	1.47 1.03	2
Fauna HO ♦ 0000		39.5	1.6 4.0	1.2 3.2	07 Feb 02 01	1	60	2220	98 4.4	65 2.9	* 10042	436	326	252 37	297 83	259 42	60	36	1.57 1.25	
Felicit HO ♦ 0366		19.0	.9 4.7	.7 3.6	10 Jul 03 01	2	272	7647	317 4.1	253 3.3	* 8217	345	275	189 −26	213 −1	195 −22	74 198	49	.89 .68	2
Francin HO ♦ 0375		52.5	1.8 3.4	1.5 2.8	01 Mar 03 05	2	37	1858	72 3.9	57 3.1	* 11938	435	357	253 38	251 37	240 23	37	42	1.81 1.45	
Fresia HO ♦ 0000		38.5	1.1 2.9	1.2 3.0	09 Dec 01 11	1	120	4744	168 3.5	141 3.0	* 10807	365	333	272 57	248 34	260 43	118 2	21	1.11 1.17	−8
Gail HO ♦ 0239		44.0	1.4 3.2	1.3 3.1	23 Jan 06 05	5	75	3176	119 3.8	97 3.0	* 10342	379	334	190 −25	190 −24	199 −18	75	156	1.42 1.35	−1
Garland HO ♦ 0241		24.0	.9 3.7	.9 3.6	16 Jun 05 10	4	296	10063	401 4.0	318 3.2	* 10308	411	327	205 −10	221 7	206 −11	103 193	109	.88 .87	0
Geneva HO ♦ 0070		35.5	1.3 3.6	1.2 3.5	31 Jan 08 11	6	432	19310	733 3.8	595 3.1	14422	543	427	267 52	276 62	256 39	425 7	305	1.29 1.23	

♦ = Herdbook Verified ■ = Publishable

'02' = Flagged – Questioned Production '03' = Disallowed – After Questioned '05' = Missing Data '07' = Manually Disallowed '08' = Disallowed – Unbalanced Production

RPT50020 v 1.15 53 1

Source: Sample report courtesy of Canwest DHI

Discussion questions for reading the sample DHI Report above:

1. The top three producers based on Milk kg under Test Day information
2. The top three producers based on Deviation from Current BCA under Lactation BCA
3. The top three producers based on Projected or Actual BCA under Lactation BCA
4. Which cow had the highest percentage of fat in her milk on test day?
5. Which cow had the lowest percentage of protein on test day?
6. Which cows have had the most calves?
7. Why does Cindy not have any projected BCA information?
8. Why has Annette been flagged for questionable production?
9. Who has been in milk the longest (most DIM)?
10. Which cow might you want to test for mastitis based on her Somatic Cell Count?

Activity: Who to Cull?

Purpose: Members will practice making management decisions by learning to select an animal to cull from the herd

Age Group: All members

Time Allotted: 10 minutes

Preparation & Equipment: Copies of the chart on the next page, pencils

Instructions:

- Ask members to look at the data on each of the two cows in the chart and decide which one to cull and which one to keep

Debrief: Bertha is giving more milk that Sue, but Sue has been in milk for more days. As cows have been milking longer, the volume of their milk each day decreases. Sue is a big plus on the herd milk records for milk, fat and protein. Thus, Sue compares favourably to the other cows in the herd. Bertha has a negative BCA so she is the one who needs to be sold from the herd.

Alternate Activity: Members could be asked to look at an actual DHI test result (such as the "Sample DHI Test Results and Discussion Questions" worksheet) to decide which cows in an actual herd should be kept or culled. This would allow the activity to be more challenging for senior members.

Who to Cull?

Look at the chart below. One of the two cows needs to be culled from the herd to make room for a new high producing cow. Which one would you sell and which one would you keep?

						Deviation from Current BCA		
Cow	Age at Calving Y-M	Days in Milk	Milk kg	Fat %	Protein %	Milk	Fat	Protein
Sue	2-04	174	29.4	2.8	3.2	+42	+22	+38
Bertha	5-10	59	38.0	3.0	2.9	-11	-26	-20

Activity: Learning to Budget

Purpose: To teach the members the importance of budgeting and how to create a budget for themselves.

Age Group: Junior Members

Time Allotted: 60 minutes

Preparation & Equipment: paper and pencils

Instructions:

- Start out by asking members what they think a budget is and why it's important. Introduce the concepts of saving, income and expenses. Ask members what they think each of these terms mean.
- Ask members to create a budget for themselves. First, they must decide what they are budgeting for; for example, to buy a calf, to rent a video game, to buy a book. Then have them list all of their "Income" and "Expenses." For example, "income" may be an allowance, or money they get from doing odd jobs. "Expenses" may include school snacks or gifts. From this list, they can decide how much to budget for savings and for the "goal" they've decided to budget for.
- Now, as a group, get the members to create a budget for raising a 4-H calf. First, brainstorm with the group all of the costs a calf will incur; for example, cost of purchase, feed, vet bills, housing, equipment such as halters and feeding utensils, labour and so on. Work through how to figure out these costs with the members. The feed cost is fairly straightforward to figure out, while the housing cost may not be.

Debrief: Why is having a budget important? How does having a budget help you achieve goals? What are the reasons people create a budget?

Activity: Managing Employees

Purpose: To introduce members to the idea of managing people and to the characteristics of a good employee.

Age Group: Senior members

Time Allotted: 60 minutes

Preparation & Equipment: chart paper and markers, paper and pens

Instructions:

- Brainstorm why a farm may need to hire an employee
- Have members write down all the characteristics they think would make a good farm employee and why. Then, discuss what might go into an advertisement for a farm employee. Finally, have them write an advertisement for an employee. The situation is: A producer from a century farm with 80 milking cows needs a herdsperson. The farm milks three times daily and needs a person in charge of two milkings.
- Once the ads are done, have the members pair up and share them with each other.
- After members have "hired" an employee, they need to know how to handle everyday situations that may arise with that person. For this section, split the members into pairs and have them create a role play from one of the following scenarios:
    - the employee complains that he or she doesn't feel like the farmer is letting him or her know about things that are happening on the farm
    - your employee added milk to the bulk tank that may contain antibiotics
    - the employee and the manager have a disagreement about which bull to breed with a top cow
    - an employee complains that the manager doesn't appreciate the amount of work he or she does
    - the manager doesn't think the employee is doing enough work around the farm
    - an employee asks for a raise
- Once the members have developed their role plays, they can present them to the rest of the group. Discuss each of the situations and see how other people may have handled that situation differently and why.

Debrief: Why is knowing how to manage people important to the success of a farm? Is managing people an *easy* or difficult job? Why or why not? Do you have the opportunity to manage people? *(e.g.* team captain, babysitter, group leader) If so, describe the experience.

Activity: Managing Finances

Purpose: Members will learn advanced concepts of managing, such as developing financial statements, in this activity

Age Group: Senior members

Time Allotted: 60 minutes

Preparation & Equipment: chart paper and markers, paper and pens, copies of factsheet containing the Balance Sheet and Farm Income Statement examples (found on the following pages)

Instructions:

- First, have members brainstorm the things they think belong in a Financial Statement. Have a volunteer record these ideas on the chart paper. After the group is done brainstorming, try to put their ideas into categories, such as assets and liabilities, income and expenses.
- Make sure members have the examples of the financial statements. From these examples, they *can* create their own financial statements. They could be based on their current situation or a future situation, such as when they're in university or college.
- Once members have completed analyzing their financial situations, get them to find areas they can improve. For example, are they spending 50% of their income on clothes, and saving almost nothing? What's wrong with this?
- Now, members can put their financial knowledge to use by trying to convince a banker to loan them some money for a specific item such as a car, a bike, tuition, or a trip. They have to provide valid reasons, based on their finances, why they would make a good loan candidate.
- You can split up the members in pairs to carry out this activity, each of them taking turns playing the banker and the customer. The banker has to give valid reasons for accepting or turning down the loan application, and the customer has to give valid reasons for being a good loan candidate, as well as trying to get the best possible loan deal from the banker.

Debrief: How do financial statements and income statements help you manage your money? Why is being able to manage money important? What can you achieve by being a good money manager?

FACTSHEET: Example Farm Balance Sheets and Farm Income Statements

Source: Ontario Farm Management Analysis Project – Ontario Dairy Summary 2005

SUMMARY OF ONTARIO DAIRY FARMS

FARM INCOME STATEMENT

REVENUE	Avg 149 Farms	Low 50 Farms	High 50 Farms
Product sales-milk	385,159	292,564	553,688
Market & Feeder Livestock	3,027	3,146	3,319
Breeding stock	5,160	3,389	6,854
Cull stock	6,413	4,099	10,387
Other livestock	3,719	882	9,366
Crop sales	18,090	14,535	29,519
Custom work	2,381	1,147	4,783
Other Farm Revenue	7,765	4,830	13,197
TOTAL CASH REVENUE	$431,713	$324,582	$630,113
Change in Accounts Receivable	1,909	94	3,867
Changes in Inventory	5,078	-7,810	18,453
TOTAL FARM REVENUE	$316,986	$438,780	$651,833
EXPENSES			
VARIABLE EXPENSES			
Livestock -Purchased Livestock	3,686	4,980	5,397
Pur.Feed-Conc., Grain & Forage	38,988	53,360	78,825
Animal Health & Breeding	11,520	14,844	20,701
Other (Lvstk Statute, Barn Spplt)	10,470	12,832	18,909
Crop Inputs -Seed & Plants	7,887	7,675	9,869
Fertilizer & Lime	7,524	8,814	11,194
Pesticides & Other Chemicals	3,216	3,787	5,119
Containers And Twine	1,882	1,815	2,013
Other (Statute, Insurance Etc.)	757	1,249	2,173
Marketing & Transportation Costs	18,540	25,156	37,237
Custom Work, Equipment Rent	7,268	10,736	17,086
Hired Labour	36,082	36,341	50,018
Machinery & Equipment-Fuel & Oil	14,457	14,637	18,591
Machinery & Equipment-Repairs	15,887	17,862	23,131
Motor Vehicle Expenses	2,880	3,452	3,694
Building, Fence Repairs	7,754	8,850	12,549
Heating Fuel	676	1,368	2,808
Electricity & Telephone	11,174	12,053	14,508
Accounting, Office Expenses	3,785	4,706	7,397
Interest (Operating)	2,383	2,751	3,137
Other Cash Operating Expenses	4,828	5,788	8,323
Change in Payables	2,979	1,461	1,878
TOTAL VARIABLE EXPENSES	$214,283	$254,457	$352,655
CONTRIBUTION MARGIN	$102,763	$184,243	$298,978
FIXED EXPENSES			
Property Taxes,Fire & Liab. Ins	10,589	12,015	15,868
Lease & Rent Payments	5,991	4,576	4,766
Interest (Term)	36,742	33,458	45,355
Change in Interest Accurs	364	71	-153
Depreciation	44,530	45,897	55,363
TOTAL FIXED EXPENSES	88,226	96,017	120,999
TOTAL EXPENSES	302,429	350,474	473,654
-Less Personal Share of Expenses	-5,180	-19,107	-39,525
TOTAL FARM EXPENSES	$297,329	$331,307	$434,129
NET FARM INCOME	$19,637	$107,333	$217,584

SUMMARY OF ONTARIO DAIRY FARMS

FARM BALANCE SHEET

(Assets at Estimated Value)

FARM ASSETS	Low 50 Farms	Avg 149 Farms	High 50 Farms
Current Assets:			
Cash (On Hand And In Bank)	11,844	1,516	-13,413
Accounts Receivable	22,489	29,161	43,943
Market & Feeder Livestock	3,628	3,654	1,549
Home-Grown Crops	48,195	61,007	92,187
Purchased Feed & Supplies	3,022	4,344	6,348
Other Current Assets	0	0	0
_Total Current Assets	$87,178	$99,682	$130,614
Long Term Assets			
Breeding Livestock	109,667	118,658	152,483
Market Quota	1,222,697	1,605,752	2,277,459
Field Machinery	282,364	260,705	286,048
Barn Equipment	85,726	84,710	129,160
Farm Buildings	187,045	224,419	274,817
Land	385,749	497,755	802,309
Other Long Term Assets	12,876	32,537	49,044
_Total Long Term Assets	$2,266,124	$2,824,536	$3,971,308
TOTAL FARM ASSETS	$2,353,302	$2,924,218	$4,101,914
LIABILITIES			
Accounts Payable	19,705	18,528	26,653
Interest Arrears	364	156	100
Operating Credit	22,236	24,611	26,131
Current Portion Of Term Debt	35,200	41,771	39,247
_Total Current Liabilities	$77,505	$85,064	$92,131
Term Debt	370,203	504,285	679,608
TOTAL FARM LIABILITIES	$447,708	$589,349	$771,739
EQUITY IN FARM BUSINESS	$1,905,594	$2,334,869	$3,330,175

Activity: Budgeting for a Calf

Purpose: For members to learn and understand the costs involved with raising an animal

Age Group: All members (may expect senior members to take more costs into consideration such as housing)

Time Allotted: 20 minutes (or could be done as a take home activity)

Preparation & Equipment: Price of milk replacer or milk, price of grain fed to a calf, medication price, etc.

Instructions:

- Try figuring out how much it costs to raise a calf from the time it is born to three months of age. Make a list of what you need to spend money on. This could even include the cost of labour or the barn to raise the calf.
- During a meeting, pairing younger and older members may be beneficial. Older members may assist with any mathematical calculations and formulating a complete list.

Expense Item	Budget Amount	Actual Cost
	Total:	Total:

Helpful Hint: If a barn costs $10,000 to build, it is not fair to put in $10,000 for the barn cost to raise one calf. Instead, costs need to be spread out.

For example: The barn costs $10,000 and lasts 20 years.

$10,000 ÷ 20 = $500 per year

If the barn houses 50 calves per year,

$500 ÷ 50 = $10 per calf for the cost of its housing in a year

Debrief: Ask members to consider the cost they came up with. Did all members come up with the same costs? Make a combined list including the different ideas that members came up with individually. Remind members that this is the cost for one calf. If a farmer had more animals this cost would increase with each animal. Ask members to compare the cost of raising a calf to that of a pet they have at home.

Activity: Budgeting for Custom Raising Heifers

Purpose: For members to thoroughly investigate the costs of raising heifers.

Age Group: Senior members

Time Allotted: 30 minutes (may work well as a take home activity)

Preparation & Equipment: copies of the "Custom Raising Heifer Costs Worksheet" from the following page, pen or pencils; may wish to provide reference material that members can use to look up the costs of different supplies if doing this activity at a meeting.

Instructions:

- Members should be asked to complete the worksheet on the following page.

Debrief: How much would it cost to raise a heifer? How long do members think it would take for her to pay for herself? How would they figure that out for sure? Did everyone have the same values or different ones? What did different members do during different aspects of calf and heifer raising that affected their costs?

Custom Heifer Raising Costs Worksheet

Budget Items	Management Group					
	0-3 months	3-6 months	6-12 months	12-24 months	Total	Your Farm
Milk Replacer or Whole Milk	37 kg 155 kg				37 kg @ $___ 155 kg @ $___	$_____
Calf Starter	120kg				120 kg @ $___	$_____
Grain Mix		250 kg	350 kg	400 kg	1000 kg @ $_____	$_____
Hay or Equivalent	10 kg	150 kg	1100 kg	4240 kg	5500 kg @ $_____	$_____
Pasture						$_____
Total Feed Cost						$_____
Bedding (straw)	100 kg	150 kg	250 kg	500 kg	1000 kg @ $_____	$_____
Veterinary and Medication	$8.00	$4.00	$4.00	$4.00	$24.00	$_____
Breeding				$40.00	$40.00	$_____
Utilities	$4.00	$4.00	$8.00	$15.00	$31.00	$_____
Insurance: Livestock Buildings	 $0.50 $1.90	 $1.00 $0.60	 $2.00 $1.20	 $4.00 $2.40	 $7.50 $6.10	 $_____ $
Repairs	$9.60	$3.00	$6.00	$12.00	$30.60	$
Tractor Scraping	0.25 hours	0.25 hours	0.5 hours	1 hours	2 hours @ $_____	$_____
Miscellaneous	$5.00	$2.00	$4.00	$8.00	$19.00	$
Mortality	3%	1.0%	0.5%	0.5%	5.0%	$_____
Estimated Labour	8 hours	4 hours	5 hours	8 hours	25 hours	$_____
Proportional Cost of Heifer Raising:	11%	8%	21%	60%		

*Source: Mongeon, Rotenburg, Russeaux and Werry, "Considerations for Custom Raising Dairy Heifers" OMAFRA Factsheet, 1998.

Activity: Farms Have Computers Too!

Purpose: To help members understand that there are several ways computer technology is used on a dairy farm

Age Group: For junior members (could be led by a senior member)

Time Allotted: 5 minutes

Preparation & Equipment: Chart paper and markers or white board / chalk board.

Instructions:

- Ask members to brainstorm on the following questions. Write their answers on chart paper / a white board or black board.

Can you think of ways people use computers? They are tools that people often use to make their lives easier. Look at the list below and try to come up with some of the ways each person uses a computer:

Librarian _____

Teacher _____

House builder _____

Reporter _____

Police Officer _____

Milk Tester _____

Dairy Farmer _____

You _____

Debrief: Are there other ways that you did not write down? Remind members that not all computers have a monitor, printer and keypad – they are electronic devices located in many of the things you use every day!

Activity: Computer Uses on the Farm

Purpose: To help members understand that there are several ways computer technology is used on a dairy farm

Age Group: All members

Time Allotted: 10 minutes

Preparation & Equipment: Chart paper & markers or a white board / black board.

Instructions:

- Ask members to brainstorm all of the different ways computers can be used on a farm - write their answers on chart paper.
- Then, get them to put the ideas into categories, such as: health management, business, breeding, production, etc. The point is to get members to realize that running a farm can be made easier by using a computer.

Debrief: Why are computers so useful on a farm? Why is knowing how to use a computer important? Discuss how computers can be different from one another.

Activity: Dairy Software Demonstration

Purpose: To help members understand how software programs can help manage a dairy farm

Age Group: All members

Time Allotted: 30 minutes

Preparation & Equipment: A local software dealer would be a good guest speaker to demonstrate dairy software at the meeting. Alternatively, a willing dairy farmer who uses dairy software could demonstrate it. The local DHI field representative would be able to demonstrate a Dairy Comp software package. The meeting needs to be held somewhere with such software and a computer.

Instructions:

- Someone knowledgeable about the software could demonstrate how it works. The speaker can also explain why he or she chose this software and how it has helped with managing his or her own farm (if the demonstrator is a farmer). Then, give each member a chance to play with the software for a few minutes.

Debrief: Name one think you need to consider when buying software for a farm. What about for your own use?

Activity: Exploring the Web

Purpose: For members to learn about the dairy information that is available on the internet

Age Group: All members

Time Allotted: 15 minutes

Preparation & Equipment: need a facility that has a computer(s) that can be connected to the internet. Perhaps splitting members into small groups with this activity being a group rotation would work, so that a large number of members are not surrounding a single computer. Chart paper and markers are also useful.

Instructions:

- Ask members to find specific sites, such as DHI, breed associations, health organizations, etc. Then, ask members to find five dairy related sites. Once they've found the sites, they can record the website addresses on the chart paper so other members can look them up later. Make sure that members remain focused, searching for dairy related information.

Debrief: What are some of the benefits of finding information on the internet? Are there any drawbacks?

Activity: Dream Dairy Farm in a Techno World

Purpose: For members to consider the types of technology available for dairy farmers

Age Group: All ages

Time Allotted: 10 minutes

Preparation & Equipment: flipchart paper and markers

Instructions:

- Tell members that they have as many dollars as they need to start up a dairy farm. Ask them to list all of the technology that they would include in their dream dairy farms.

Debrief: Did everyone want the same types of technology? What did members like or not like about some innovations? Why is technology used on the dairy farm?

Activity: Is Bigger Always Better?

Source: *Manitoba Intermediate Dairy 4-H Manual*, Draft Printed 2000

Purpose: For members to consider what types of technologies would help make profits on the dairy farm

Age Group: All members

Time Allotted: 10 minutes (or could be done as a take home activity)

Preparation & Equipment: Chart paper explaining the three farm scenarios or copies outlining the scenarios, pencils, paper

Instructions:

- Read the three farm scenarios and rank them 1, 2 or 3. 1 is low tech and 3 is high tech. Then, put a big dollar sign ($) over the farm you think would show the greatest net profit (Net profit = gross profit – costs)

Debrief: Explain to the members that every dairy manager needs to decide what types of technologies would help make profits. Some dairy farms are quite "low tech" while others are "high tech". "High tech" operations can be profitable, or the costs involved may bring down farm profits. Besides cost, a farmer's personality, values, beliefs, need for status or tradition may affect whether the farm is high tech or low tech. What types of technology do the members think would increase profits? What ones would bring down profits?

Farm A _____	**Farm B** _____	**Farm C** _____
• 90 cows • Tie stall • Cows bred using artificial insemination • Embryo transfer used infrequently • Records submitted to university computer record service	• 120 cows • Double 6 herringbone parlour and freestalls • Automatic take-offs with computer read milk weights • Cows bred using artificial insemination • Embryo transfer used occasionally	• 50 cows • Stanchions • Bucket milkers • Cows bred by farm bull • Records kept by hand

Your Ranking: _____ _____ _____

What are the reasons you ranked the farms the way you did?

Which farming type most closely resembles the type of farm you would like to have?\

Activity: Farm Management Case Studies

Purpose: For members to apply their knowledge of farm business management and overall dairy knowledge to solve hypothetical problems

Age Group: Senior Members

Time Allotted: 15 minutes

Preparation & Equipment: Copies of the 3 case studies for members to look at, paper and pencils or pens

Instructions:

- Ask members to review the three case studies and suggest ways that each farmer could improve his/her style of dairy farm management and marketing. You may want to revisit this activity upon completion of the club to see if there are any more recommendations that you could give to these farmers.

Debrief: Explain to members that there are many different aspects of managing a dairy farm. It is hard to be good at everything! What can farmers do to help themselves be better managers or make better decisions? Who can they seek advice from?

Case Studies:

Case Study #1
Heronomous Q. Werty has been milking about 20 cows for about 40 years. His cows average 15 litres of milk per day, some give more and some give less. He usually fills his milk quota except in dry years and wet years when "there must be something wrong with the feed". All of Heronomus' cows calve in January, February and March and are bred out on pasture to Fred, the Hereford bull who also breeds his beef herd. When he has to cull a cow, Heronomus replaces her with a cow that he buys at the local livestock auction barn.

Case Study # 2
Amos Droop has been milking cows for 7 years since taking over the herd from his father. He uses the services of CanWest DHI to keep track of how much milk his cows are giving. His herd has a BCA of 155-122-164. He raises his own replacement heifers which usually calve when they are 28 to 34 months of age. He saves the best hay for the dairy herd because he knows that he will have to buy less protein if he feeds good hay. Amos culls his cows based on their health, age and temperament. He uses his own Holstein bull which he bought from a good local breeder because he has a hard time catching his cows in heat.

Case Study # 3
Winnie Frid runs a dairy farm with 120 cows in freestalls. She has been keeping track of milk production using CanWest DHI and regularly has the herd type classified. She uses this information, along with health records, to cull her cows and to decide which of her heifers to add to the milking herd. Winnie's current BCA is 201-205-210. She uses artificial insemination to breed her cows and often uses unproven sires. Heifers calve for the first time at 24 to 26 months of age.

Activity: Considering Succession Planning

Purpose: For members to consider the many aspects of managing and running a farm and how they would affect succession planning

Age Category: Senior Members

Time Allotted: Good take home activity for interested members to ponder. It also could be given to a group of senior members at a meeting. They could discuss for 10 minutes and debrief for another 5 to 10 minutes.

Preparation & Equipment: None

Instructions:

- Imagine that you are going to take over your family farm. Think of all of the aspects of the farm that you would have to consider if you were going to transfer labour, decision making and ownership. Would you be able to do this now or would you require more knowledge and training?

Debrief: Are there a lot of things to think about when taking over a farm? Are you planning to take over your family farm at some point? Taking over a farm requires a lot of planning. Is this a process that your family should take on its own? Who might your family consult when considering concession planning?

Activity: Careers in Agriculture

Purpose: To help members explore the different career options in the dairy industry, and agriculture in general.

Age Group: All ages

Time Allotted: 10 minutes

Preparation & Equipment: flipchart paper and markers

Instructions:

- Ask the club to follow the path of milk from the farm to the grocery store, thinking of all of the jobs involved along the way. Write down their suggestions.
- Encourage members to think outside the box at every step of the way and consider options that are not obvious (i.e. the dairy needs a cleaning person).

Debrief: The purpose of this activity is to show members that there are a lot of jobs involved in agriculture. You can remain involved with the industry without being a primary producer.