

BRITISH Ministry of Agriculture, COLUMBIA Food and Fisheries Spring 2002 February 2002

# 5000 Free Run Layers—Lower Mainland

This information is a tool to project costs and returns for B.C. farm enterprises and is a general guide to plan individual farm operations.

This sample budget should be used as a guide only and should not be used for business analysis. Each farm should develop their own budget to reflect their production goals, costs and market prices.

Information regarding financial planning and other enterprise budgets may be downloaded from the internet at http://fbminet.ca/bc.

## **Key Factors Affecting Profit**

The quality of pullets reared is fundamental to profit during the laying cycle. High quality feed with an appropriate feeding program throughout the cycle are required to maximize production. Nutrient requirements vary with the age of the bird and are directly related to the rate of production, body weight, ambient temperature, disease, stress, age and feather cover. Free run birds are birds maintained in a house without cages and without access to the outside.

### **Key Success Factors**

#### Production

Quality

300 or 25 dozen eggs/ layer/cycle 77% Grade A Large, X Large, Jumbo 1.83 kg/dozen

(Feed conversion equals feed consumption in kilograms per layer divided by number of dozen eggs produced per layer).

Feed Conversion



## **Risk Factors & Strategies**

**Marketing**: The B.C. Egg Producers, historically known as the B.C. Egg Marketing Board controls all egg production in B.C. All producers must have sufficient quota, permit or a flock size exemption for all laying hens housed in their facilities. Producers can grade and market their own eggs or sell them directly to the local grading station. Producers can produce and sell eggs direct to a "consumer" at the producer's farm or place of residence. All eggs sold in the hotel, restaurant, institutional and retail trade must be graded. These grades can only be applied in a federally registered grading station.

Producers should research market access, distribution options, niche market potential, prices and demand for free run eggs prior to entering the business. Market information is limited, time is required for development.

**Production:** Risk factors include quality of pullets & feed; disease; sanitation; & egg handling. A high quality feed & sanitation program will reduce risks.

## Assumptions— 5000 Free Run Layers—Lower Mainland

The sample budget reflects standard practices in the Lower Mainland and does not represent any particular farm. The budget is based on interviews with producers, and BCMAFF specialists. Assumptions include:

- Flock size is 5000 birds.
- Age to sexual maturity (pullet to layer size): Pullets are raised for 19 weeks and transferred to laying •

		barn at 20 weeks.
•	Mortality:	1.0 to 2.0% (Note that if mortality is high, egg income shown in this
		budget will be markedly lower).
•	Layer Production Cycle:	52 weeks or 365 days.
•	Feed Conversion:	1.83 kg per dozen eggs
•	Total Feed Consumption:	45.625 kg per layer per year.
•	Feed Cost:	\$272.00 per tonne.
•	Feed Cost/layer/cycle:	\$12.41 per layer/cycle.
•	Egg Production:	25 dozen (or 300 eggs) per layer in one production cycle of 365 days.
•	Egg Grade & Percentage:	Jumbo 3.8%, X large 23%, Large 50.2%, Medium 16%, Small 2%,
		Pee wee 0.3%, B 0.2%, C 2.5%, Broken and Rejects 2%
•	Levy includes:	British Columbia Egg Marketing Board (12.8 cents/layer/week) and a
		10 cents/layer/week levy for TRLQ.

## **Sensitivity Analysis**

The profitability of the operation will be strongly influenced by prices and marketable yield. The table below illustrates the changes to contribution margin as prices and yield vary in the full production year.

	Feed Price (\$/tonne)	Contribution margin per layer*		Yield (dozen eggs/layer)*	Contribution margin per layer*			
Low	\$265.00	\$6.99	Low	23	\$3.22			
Average	\$270.00	\$6.76	Average	24	\$4.95			
Target	\$272.00	\$6.67	Target	25	\$6.67			
Ligh	\$280.00	\$6.31	High	26	\$8.40			
Ingi	\$280.00	\$0.51	*assuming the following % of production & price per grade					
*assuming feed c	onversion (kg/d	ozen) of 1.83	Jumbo	3.80%	\$1.91			
			X Large	23.00%	\$1.93			
			Large	50.20%	\$1.91			
			Medium	16.00%	\$1.37			
			Small	2.00%	\$1.01			
			Pee Wee	0.30%	\$0.25			
			В	0.20%	\$0.31			
			С	2.50%	\$0.33			
			Rejects & F	Broken <u>2.00%</u>	\$0.00			
Cash Flow Timing				100.00%	)			

## Cash Flow Timing

The table below indicates the monthly flow of income and direct expenses. A complete Projected Cash Flow should include indirect expenses, capital sales and purchases, loans and personal expenses.

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
% Income	8	8	8	8	8	8	8	8	8	8	8	8
% Expense	8	8	8	8	8	8	8	8	8	8	8	8

Note: Income and expense percentages do not add to 100% due to rounding.

### Sample Enterprise Budget and Worksheet Free Run Layers—Lower Mainland (One cycle of 365 days per layer)

The sample enterprise budget provided should be viewed as a first approximation only. Use the column "Your Farm," to add, delete and adjust items to reflect your specific production situation.

Income	Yield	Price	Income per	Income per	Your
	(dozen eggs)	(per dozen)	layer	dozen eggs	Farm
Jumbo	0.95	\$1.91	\$1.81	\$0.07	
X Large	5.75	\$1.93	11.10	0.44	
Large	12.55	\$1.91	23.97	0.96	
Medium	4.00	\$1.37	5.48	0.22	
Small	0.50	\$1.01	0.51	0.02	
Pee wee	0.08	\$0.25	0.02	0.00	
В	0.05	\$0.31	0.02	0.00	
С	0.63	\$0.33	0.21	0.01	
Rejects and broken	0.50	\$0.00	0.00	0.00	
Total Income	25.00		\$43.11	\$1.72	
Direct Expense					
Layer Feed	\$272.00/tonne	0.045625	\$12.41	\$0.50	
		tonne/layer/year			
Pullets (Cost to raise pullets 19			4.55	0.18	
weeks to layer size includes vet/					
meds, labour, sawdust, prelay, pul-					
let grower, & chick)				_	
Levies	22.8	52 weeks	11.86	0.47	
	cents/week				
Utilities			1.60	0.06	
Vet & Medicine			0.20	0.01	
Catching & Moving			0.05	0.01	
Barn Cleaning & Sawdust			0.20	0.01	
Bldgs & Equip Repair & Maint			0.27	0.01	
Labour	.30 hours/	\$17 /hour	\$5.10	\$0.20	
	layer/year			_	
Spent Hen Disposal			0.20	0.01	
Total Direct Expenses			<u>\$36.44</u>	<b>\$1.46</b>	
<b>Contribution Margin</b>	(gross income less of	lirect expense)	<u>\$6.67</u>	\$0.27	

## **Calculation of Projected Net Income**

To assess net income, **indirect expenses** must be subtracted from income. Indirect expenses do not vary with the level of output and are typically associated with inputs used in more than one enterprise and must be allocated appropriately (prorated) between uses.

Projected Income		•			
Less Projected Direct Expenses		•			
= Projected Contribution Margin	=				
Less Projected Indirect Expenses					
Depreciation (e.g., buildings and equipment)		•			
Interest		•			
Other Indirect Expenses		•			
= Projected Net Income					

### 5000 Free Run Layers—Mainland

### **Building, Equipment & Quota**

#### **Replacement Costs**

Buildings	\$125,000
Equipment	70,000
Misc	22,000
Total	217,000
Quota (\$85.00/layer)*	\$425,000

\* Note: A producer will need to either enroll in the TRLQ program or purchase quota prior to production. Under the TRLQ program producers pay a levy of \$0.10 per layer/per week (see budget & assumptions). If a producer is not on the TRLQ program or does not have a flock size exemption (less than 99 birds) they are required to purchase quota before production starts (In this example 5000 layers x \$85/layer= \$425,000).

#### **Rules of Thumb**

Labour Estimate	29 Hours/week
Direct Expenses as a %	of income
(includes labour)	85%

### Labour Requirements

	Hours/bird	Wage rate	
1 person	0.30	\$17/hr	

### **For More Information**

#### References

- BCMAFF web site. http://www.agf.gov.bc.ca/
- BCMAFF Infobasket http://infobasket.gov.bc.ca.
- Specialty Egg Certification Regulation, B.C. Egg Marketing Board
- B.C. Organic Production Operation Policies and Farm Management, Version 3, Certified Organic Association of British Columbia
- British Columbia Certified Organic Guidebook, Certified Organic Associations of B.C.
- Missouri Alternatives Center. Agricultural Alternatives: Small-Scale Egg Production (Organic and Nonorganic) http://pubs.cas.psu.edu/FreePubs/pdfs/ua335.pdf
- Virginia Cooperative Extension: Layer Chicken Resources http://www.apsc.vt.edu/faculty/clauer/resource/ pspec/LayChick.html

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