

Honey Production Budget

University of New Hampshire Cooperative Extension
Spring 2020

Agricultural Business Management Team Contributors
Kenesha Reynolds, Michael Sciabarrasi and Seth Wilner

This workbook was developed to help bee keepers estimate the cost of producing honey for sale. An initial enterprise budget for 10 colonies is presented under the *Production Budget* worksheet. This worksheet includes a section, Modified Budget Estimate, which allows users to customize the information for their own operation using the initial budget assumptions. The other two worksheets, Operating Costs and Capital Costs, provide basic information for the production budget calculations.

The *Operating Costs* worksheet has two tables: 1) Operating Costs Selected for Production Budget and 2) Sample Operating Costs. The Sample Operating Costs table is simply a list of the typical operating (variable) costs associated with producing honey. Select those which are appropriate for your situation and enter them in the table titled, Operating Costs Selected for Production Budget. (Note the user may opt to enter operating costs not listed as samples.) User entered information in the blue shaded cells from this table will be transferred to the Production Budget worksheet.

The *Capital Costs* worksheet collects information on the capital investment or fixed asset costs for honey production. There's space for up to fourteen different fixed asset entries. In the blue shaded cells, enter a description, the initial cost, and useful life in years for each item. Each item's description along with annual depreciation charges and total interest costs are carried over to the Production Budget worksheet. The number of colonies is set at 10, annual interest charge for capital investments at 5%, and repairs as a percent of initial cost at 1.5%. All three may be changed at the user's discretion under the list of investments.

The *Production Budget* worksheet requires user entries in the blue shaded cells to complete estimates of receipts, costs and net returns for the honey enterprise. Keep in mind, the initial enterprise estimates are for an operation with 10 bee colonies. This can be modified in the Production Budget worksheet and/or changed under the supporting cost sheets.



Operating Costs Selected for Production Budget	Price	Units
Bees (replacement bees)	\$135.00	3 lbs
Spring nucleus colony	\$193.00	each
Parasite & disease control		
Varroa chemical control	\$15.00	2 doses
Other control	\$0.00	
Other control	\$0.00	
Other control	\$0.00	
Sugar		
Sugar	\$12.00	25 lb bag
Containers		
Glass jars (1 lb)	\$22.00	case of 24
Metal lids	\$4.25	case of 24
Labels		
Labels	\$17.00	250 labels
Paint	\$17.00	gallon
Food grade bucket w/spigot	\$20.00	5-gallon
Vehicle mileage charge	\$0.575	miles
Labor	\$14.00	hours
Shipping costs	\$0.00	
Advertising & selling expense	\$125.00	

Sample Operating Costs (Options)	Price	Units
Bees (replacement bees)	\$135.00	3 lbs
Spring nucleus colony	\$193.00	each
Over wintered nucleus colony	\$250.00	each
Queens (replacement)	\$35.00	each
Parasite & disease control options		
Varroa chemical control	\$15.00	2 doses
Varroa chemical control	\$115.00	25 doses
Formic Pro	\$16.00	2 doses
Formic Pro	\$153.00	30 doses
AP Oxalic Acid Kit	\$20.00	kit
Oxalic Acid	\$7.00	35 g
Oxalic Acid	\$38.00	350 g
Apivar Strips	\$37.00	10 pack
HopGuard2	\$50.00	12 treatments
Foulbrood Test	\$14.00	per test
Sugar		
Sugar	\$12.00	25 lb bag
Containers		
Plastic jars (1 lb)	\$26.00	case of 24
Glass jars (1 lb)	\$22.00	case of 24
Metal lids	\$4.25	case of 24
Labels		
Labels	\$17.00	250 labels
Paint	\$17.00	gallon
Food grade bucket w/spigot	\$20.00	5-gallon
Vehicle mileage charge (IRS rate)	\$0.575	miles
Labor	\$14.00	hours

Capital Costs	Description Detail	Initial Cost	Useful Life (yrs)	Annual Depreciation	Annual Interest
Hives (boxes and frames)		\$3,200.00	10	\$320.00	\$80.00
Hive wrap		\$300.00	10	\$30.00	\$7.50
Protective clothing	Full suit with English veil	\$200.00	5	\$40.00	\$5.00
Gloves		\$24.00	5	\$4.80	\$0.60
Smoker		\$33.00	10	\$3.30	\$0.83
Hive tools	2 @ \$13.00 each	\$26.00	10	\$2.60	\$0.65
Top feeder w/ plastic insert		\$240.00	10	\$24.00	\$6.00
Queen excluder	Metal 10 frame	\$7.50	10	\$0.75	\$0.19
Escape board		\$150.00	10	\$15.00	\$3.75
Maxant bottling tank	25 gallon capacity	\$1,500.00	10	\$150.00	\$37.50
3-in-1 Extractor/uncapper		\$1,800.00	10	\$180.00	\$45.00
Site costs	Facilities, fencing, upgrades	\$2,000.00	25	\$80.00	\$50.00
Other capital asset		\$0.00	0	\$0.00	\$0.00
Other capital asset		\$0.00	0	\$0.00	\$0.00

Related Capital Investment Assumptions			
Number of colonies	10	Annual interest rate for fixed assets	5.0%
		Repairs as percent of capital investment	1.5%

Initial Honey Production Budget							Modified Budget Estimate				
Number of Colonies = 10							Number of Colonies = 5				
Category	Units	Quantity	Price	Total*	Per Colony	Per Lb. of Honey	Quantity	Price	Total*	Per Colony	Per Lb. of Honey
Receipts											
Retail sale of honey	lbs	600.0	\$12.00	\$7,200	\$720.00	\$12.00	300.0	\$12.00	\$3,600	\$720.00	\$12.00
Pollination fees											
Spring	hive	0.0	\$85.00	\$0	\$0.00	\$0.00	0.0	\$85.00	\$0	\$0.00	\$0.00
Summer	hive	0.0	\$100.00	\$0	\$0.00	\$0.00	0.0	\$100.00	\$0	\$0.00	\$0.00
Wax	lbs	0.0	\$4.00	\$0	\$0.00	\$0.00	0.0	\$4.00	\$0	\$0.00	\$0.00
Other sales	annual	0.0	\$0.00	\$0	\$0.00	\$0.00	0.0	\$0.00	\$0	\$0.00	\$0.00
Total Annual Receipts				\$7,200	\$720.00	\$12.00			\$3,600	\$720.00	\$12.00
Operating (variable) Costs											
Bees (replacement bees)	3 lbs	2.0	\$135.00	\$270	\$27.00	\$0.45	1.0	\$135.00	\$135	\$27.00	\$0.45
Spring nucleus colony	each	2.0	\$193.00	\$386	\$38.60	\$0.64	1.0	\$193.00	\$193	\$38.60	\$0.64
Parasite & disease control											
Varroa chemical control	2 doses	10.0	\$15.00	\$150	\$15.00	\$0.25	5.0	\$15.00	\$75	\$15.00	\$0.25
Other control		0.0	\$0.00	\$0	\$0.00	\$0.00	0.0	\$0.00	\$0	\$0.00	\$0.00
Other control		0.0	\$0.00	\$0	\$0.00	\$0.00	0.0	\$0.00	\$0	\$0.00	\$0.00
Other control		0.0	\$0.00	\$0	\$0.00	\$0.00	0.0	\$0.00	\$0	\$0.00	\$0.00
Sugar	25 lb bag	20.0	\$12.00	\$240	\$24.00	\$0.40	10.0	\$12.00	\$120	\$24.00	\$0.40
Containers											
Glass jars (1 lb)	case of 24	25.0	\$22.00	\$550	\$55.00	\$0.92	12.5	\$22.00	\$275	\$55.00	\$0.92
Metal lids	case of 24	25.0	\$4.25	\$106	\$10.63	\$0.18	12.5	\$4.25	\$53	\$10.63	\$0.18
Labels	250 labels	2.4	\$17.00	\$41	\$4.08	\$0.07	1.2	\$17.00	\$20	\$4.08	\$0.07
Paint	gallon	2.0	\$17.00	\$34	\$3.40	\$0.06	1.0	\$17.00	\$17	\$3.40	\$0.06
Food grade bucket w/spigot	5-gallon	5.0	\$20.00	\$100	\$10.00	\$0.17	2.5	\$20.00	\$50	\$10.00	\$0.17
Vehicle mileage charge	miles	50.0	\$0.58	\$29	\$2.88	\$0.05	25.0	\$0.58	\$14	\$2.88	\$0.05
Labor	hours	300.0	\$14.00	\$4,200	\$420.00	\$7.00	150.0	\$14.00	\$2,100	\$420.00	\$7.00
Shipping costs		1.0	\$0.00	\$0	\$0.00	\$0.00	1.0	\$0.00	\$0	\$0.00	\$0.00
Advertising & selling expense		1.0	\$125.00	\$125	\$12.50	\$0.21	1.0	\$62.50	\$63	\$12.50	\$0.21
Total Annual Operating (variable) Costs				\$6,231	\$623.08	\$10.38			\$3,115	\$623.08	\$10.38

Initial Honey Production Budget							Modified Budget Estimate				
Number of Colonies = 10							Number of Colonies = 5				
Category	Units	Quantity	Price	Total*	Per Colony	Per Lb. of Honey	Quantity	Price	Total*	Per Colony	Per Lb. of Honey
Fixed Costs											
Depreciation											
Hives (boxes and frames)	annual			\$320	\$32.00	\$0.53			\$200	\$40.00	\$0.67
Hive wrap	annual			\$30	\$3.00	\$0.05			\$15	\$3.00	\$0.05
Protective clothing	annual			\$40	\$4.00	\$0.07			\$40	\$8.00	\$0.13
Gloves	annual			\$5	\$0.48	\$0.01			\$5	\$1.00	\$0.02
Smoker	annual			\$3	\$0.33	\$0.01			\$3	\$0.60	\$0.01
Hive tools	annual			\$3	\$0.26	\$0.00			\$1	\$0.26	\$0.00
Top feeder w/ plastic insert	annual			\$24	\$2.40	\$0.04			\$24	\$4.80	\$0.08
Queen excluder	annual			\$1	\$0.08	\$0.00			\$1	\$0.20	\$0.00
Escape board	annual			\$15	\$1.50	\$0.03			\$15	\$3.00	\$0.05
Maxant bottling tank	annual			\$150	\$15.00	\$0.25			\$150	\$30.00	\$0.50
3-in-1 Extractor/uncapper	annual			\$180	\$18.00	\$0.30			\$180	\$36.00	\$0.60
Site costs	annual			\$80	\$8.00	\$0.13			\$80	\$16.00	\$0.27
Other capital asset	annual			\$0	\$0.00	\$0.00			\$0	\$0.00	\$0.00
Other capital asset	annual			\$0	\$0.00	\$0.00			\$0	\$0.00	\$0.00
Interest charge on fixed assets	annual			\$237	\$23.70	\$0.40			\$200	\$40.00	\$0.67
Repairs	annual			\$142	\$14.22	\$0.24			\$100	\$20.00	\$0.33
Property taxes & insurance	annual			\$125	\$12.50	\$0.21			\$125	\$25.00	\$0.42
Fees, dues & registrations	annual			\$75	\$7.50	\$0.13			\$75	\$15.00	\$0.25
Marketing & administrative	annual			\$150	\$15.00	\$0.25			\$100	\$20.00	\$0.33
Total Annual Fixed Costs				\$1,580	\$157.97	\$2.63			\$1,314	\$262.86	\$4.38
Total Annual Costs				\$7,810	\$781.05	\$13.02			\$4,430	\$885.94	\$14.77
Annual Receipts less Annual Operating (variable) Costs				\$969	\$96.92	\$1.62			\$485	\$96.92	\$1.62
Annual Receipts less Total Annual Costs				(\$610)	(\$61.05)	(\$1.02)			(\$830)	(\$165.94)	(\$2.77)

* Please note that values in the total columns are rounded to the nearest whole dollar.