

# THE AUTHORS

**Daniel Brisebois** started farming in 2000. He has worked both as an apprentice and field manager on different farms. Daniel has a B.Sc in Agricultural Engineering. He is on the steering committee of the Eastern Canadian Seed Growers Network and is Vice-President of Canadian Organic Growers.

**Frédéric Thériault** started as an apprentice in 2001, working up to crop manager of the same farm three years later. He has a B.Sc. in Plant Sciences with minors in Agricultural Economics and Ecological Agriculture, and has a M.Sc. in Agriculture and Environment. He taught Ecological Agriculture and Principles of Plant Sciences at McGill University. He is part of Équiterre's CSA steering committee.



*Ferme Coopérative Tourne-Sol*

*Frédéric Thériault and Daniel Brisebois*

Frédéric and Daniel are two of the founding members of la Ferme Coopérative Tourne-Sol in Les Cèdres, Quebec. Founded in the fall of 2004, Tourne-Sol now produces certified organic vegetables, flowers, seeds, seedlings and herbal teas on 12 acres rented from an organic grain farm. Tourne-Sol sells through a 250-share CSA, a farmers market, and an online seed catalogue.

Daniel and Frédéric are also active members of le “Réseau des Jeunes Maraîchers Écologiques” – a group of young Quebec farmers who meet regularly to share experience and resources.

# INTRODUCTION

**T**HIS BOOK TACKLES A BIG TOPIC – CROP PLANNING. What exactly is crop planning? Crop planning is a process for figuring out which crops you want to grow, when to plant them, and in what quantities. This is best done before you actually have to do it in the field.

The crop planning process described in this book was developed over a number of years on different farms where we have worked. It has served us well at Tourne-Sol cooperative farm. To make it relevant to other farmers, we spent a lot of time talking to several growers about how they plan their crops. Not everyone's crop planning processes were as mathematical and as detailed as ours. But the overarching principles were the same for all the successful farmers we spoke with: set objectives for the season, figure out roughly how much to grow, order the seeds, take some notes during the growing season, and use those notes to plan the following year.

This practical skills handbook presents a detailed 11-step crop planning approach. In steps 1 and 2, you will set financial goals for your crop plan and then determine how to meet them through your marketing outlets. In steps 3 to 8, you will develop the actual crop plan. Your crop plan will consist of a 3-ring binder containing a field planting schedule, field maps, greenhouse schedule, seed order and field operations calendar. In step 9, you will learn how to implement your crop plan and record what actually happens. In steps 10 and 11, you will analyse how your crop plan succeeded and start your planning for next year.

This process is useful for vegetable growers regardless of their level of experience or size of their operation. Its methods apply not only to commercial growers, but also to homesteaders. We recommend that newer growers pay close attention to steps 1 through 7. Experienced farmers who have already built a solid crop plan will gain most from step 4 and steps 8 through 11. These steps go beyond simple crop planning and look at how your crop plan fits into your long-term vision for your farm.

The book also presents the profiles of twelve vegetable growers from across the country. They showcase a range of operations from a small intensive acreage that works with walking tractors and hand tools to large farms that rely on cultivating tractors and sizeable workforces. They are all examples of how good crop planning helps a farm thrive.

The appendices at the end of the book contain important information. Appendix A presents three vegetable reference charts you'll need when completing most of the book's worksheets. Refer to them regularly. Appendix B outlines an additional step that needs to be taken the first year you crop plan but not in subsequent years. Have a look at appendix B before you jump into step 4. Other appendices contain complementary information, charts and references.

So put down your hoes and harvest knives, pick up your pens and calculators and let's get crop planning!

### **SOME THOUGHTS ABOUT MEASUREMENT**

The standard units of measurement in Canada are metric, but most growers we meet use imperial units. In fact, on our farm, we generally talk in terms of feet and inches.

All reference charts present data in both metric and imperial, and all formulae can be used with either. Worksheets, schedules and examples in the text are in imperial, but you will find the same charts with metric measurements in Appendix D. Whichever you use, it is important that you stay consistent through your planning.

Here are a few conversions that will come in handy:

- 1 meter = 3.38 feet
- 1 ft = 0.3 m
- 1 acre = roughly 208 ft \* 208 ft = 43,560 sq ft
- 1 ha = 100 m \* 100 m = 10,000 m<sup>2</sup>
- 1 ha = 2.47 acres
- 1 kg = 2.2 lbs
- 1 lb = 0.454 kg

## MEET BRUCE AND HANNA

*Bruce and Hanna, a fictional couple, are embarking on a career growing vegetables. The 11 crop-planning steps in this handbook will follow their decision-making process as they flesh out their farm vision and crop plan.*

*Bruce and Hanna met while they were apprentices on a farm with a 200-share CSA and farmers' market stand. They enjoyed the experience and returned for the next two years to learn more. Now they feel confident they could start a farm and manage their own business.*

*After looking for a few months, they found 1.5 acres to rent, split on two adjacent lots. They then borrowed a small amount of money to buy equipment. For their first years, they will use their own personal vehicle, a hatchback, as their delivery vehicle and will charge their mileage to the farm business.*

### BRUCE AND HANNA'S INITIAL INFRASTRUCTURE INVESTMENT

ITEM	COST
Cold Room	\$ 1,800
Irrigation System	\$ 1,500
Walking Tractor with Rototiller	\$3,500
Seeder	\$ 200
Handtools	\$ 500
<b>Total</b>	<b>\$7,500</b>

All costs provided in the book are examples only and may not reflect yours.

# 1

# SET YOUR FINANCIAL GOALS

EFFECTIVE CROP PLANNING doesn't begin with crops, but with your pocket book. You have to know how much money you want or need to make in order to figure out how much to seed. Step 1 presents a three-part approach to holistic financial planning; it will guide you in your budget design and will offer a simplified approach for beginners. When you have completed this step, you should have a budget that shows your gross sales target, your salary target and a rough draft of your expenses for the upcoming year.

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## HOLISTIC FINANCIAL PLANNING

Allan Savory of the Center for Holistic Management<sup>1</sup> developed a three-part approach to holistic financial planning which we have simplified a little. He recommends to start by planning the **income**, then the **profit** and finally, the **expenses**. For us this will mean begin by planning your gross sales, then determine your retained earnings (salary) and finally plan the expenses.

Some profitable farms spend 25% of their gross sales on expenses, others spend 75%. It all depends on the size of their operation and on whether they hire help. Each case is unique. Be sure to set a gross sales target that suits your circumstances and that you can achieve with careful budgeting. Prioritize and limit expenses to save a larger portion of your gross sales for yourself. This process makes the difference between a profitable farm and one that loses money. After all, *one dollar saved is like two dollars earned*.

### PLAN YOUR FARM INCOME

How many dollars worth of vegetables can you produce and sell a year? That's the first question to ask yourself as you set your **gross sales target**. If you have been farming for a while, you can realistically estimate the vegetables you are able to grow and how much money you can make from them. If you are a new grower, this question might leave you perplexed. Your capacity to produce

1. Savory, Allan & Butterfield, Jody, 1999, *Holistic Management: A New Framework for Decision Making*. Island Press

depends on several things, but foremost on your vegetable growing experience.

Anne Weil, agronomist with Club Bio-Action in Quebec, has noticed that independent of scale, the gross income per hour of the top diversified vegetable growers in Quebec is relatively constant. They average \$18 per hour each person (owner or employee) works.

In general, a farm owner works about 2,000 hours in a year. This would produce \$36,000 of **gross** revenue (before expenses) and sets the upper limit you can expect to make if your farming system runs almost perfectly. One full-time beginner can likely produce \$5,000-\$10,000 of gross sales. Keep these numbers in mind as you determine a **gross sales target** for your farm.

### PLAN YOUR SALARY

How much money do you need to earn this year? What are your living and personal expenses? How much do you want to set aside in savings? Consider whether you will be earning off-farm income.

It's helpful to sketch a personal budget but personal expenses should not be mingled with business expenses. In the business numbers, your personal financial needs are all lumped into one line item—the **salary** or **retained earnings** line.

Choose the salary that you want to draw from your farming business next year. If several partners manage the farm, choose a total salary amount for all of the farmers. Remember, you won't get rich farming. You will enjoy a pleasant, simple lifestyle, not an extravagant one.

### PLAN YOUR EXPENSES

Subtract your retained earnings (salary) from your farm income (gross sales target). The amount that remains is what you have available to cover this year's expenses.

If you have records of expenses from previous years, start with those. Look at every expenditure category and the amounts spent. Determine how much you will need to spend this year. Try to reduce expenses where possible. Spend your money where it will give the best return and provide the greatest benefit for your farm system.

If you are starting up and don't have past numbers to work with, get sample budgets from other growers, farmer's organizations, or conferences. Make sure the numbers you use are from a similar-sized farm as the one you are planning. Or, to create your own budget, call suppliers for the prices of the inputs you'll need.