

## Chapter 01 - "Introduction to the Industry"

My name is Jonathan Clark. Within Canada's reforestation industry, I'm commonly just known as "Scooter." I've worked in the industry for a lot of years. I've planted for roughly fifteen different planting companies, I've been a crew leader at six companies, and I've been a camp supervisor more than thirty years, at four different companies. So hopefully, I can give you some good background perspective as I try to teach you about some of the tree planting information that you'll want to know as a prospective planter.



**Figure 1.01**

Jonathan "Scooter" Clark, the Author.

*Here's a photo of me standing on a giant cedar stump somewhere on the north end of Vancouver Island.*

*Photo Credit: Mike Ross.*

The point of the training and reference information in this book is to give you as much background about the Canadian reforestation industry as possible - training that you can start to absorb before you hit the field. Tree planting is a very unique industry. Tree planters usually get paid per tree planted, not by an hourly wage. Every minute that you spend planting, and every additional tree in the ground, puts more money in your bank account. Every piece of information that gives you a better understanding of the industry will ultimately help you become a better and faster planter, and again, that means more money for you. It's a big benefit for you to start learning this information *before* your season starts.

You may be reluctant to invest time into learning about planting before your first day of work. Making this effort before the season starts, rather than starting the learning process when you arrive on your first block, has been shown so far to increase the earnings of an average first-year planter by a few thousand dollars for the season. This is partly because you'll be a smarter and therefore a faster planter. Even more importantly, pre-season learning appears to significantly reduce attrition rates during the season. If you're going to quit, it's better for both you and your company if you make that decision well before you show up for work. Traditionally, perhaps over a quarter of new planters

have quit within their first four weeks on the job. That's terrible. If you quit after you start your job, you'll have cost yourself a lot of time, money, and frustration. Your company also loses because it has an empty seat in one of the trucks for the remainder of the season. Know in advance what you're getting yourself into. If you're going to be a successful planter, you need to be 100% certain that you won't quit once the season starts, and that means gaining a full understanding of what the job is all about long before you pack your bags.

This book covers basic training relating to a few dozen broad topics, plus several appendices of reference information. To be honest, the amount of information is somewhat overwhelming. A lot of this information is not even directly related to the actual process of planting a seedling. However, having a broad knowledge of the industry, and more specifically of why things are done the way they are, helps you to make faster and smarter decisions when you're planting. Going through all this information will take some time, but ultimately, it will mean a lot more money in your bank account.

Don't try to absorb everything at once. The first section of this book (eleven chapters) should be reviewed when you're trying to decide if tree planting is a good choice for you. This first section gives you a broad overview of the industry, and includes some tips about seeking employment. This section is the only one that matters when you're trying to decide if committing to a job as a tree planter is a wise personal decision. You should also spend a few additional evenings looking through photos, videos, and online forums, to enhance your understanding of the industry. I'll provide links to a number of such resources as you work your way through this book. One main resource to become familiar with is the website at [www.Replant.ca](http://www.Replant.ca)

The second section of the book (twelve chapters) teaches you useful field knowledge. I tell planters not to waste time reading all of this information if you're not going to start work for a few more months. You'll just forget this knowledge by the time you arrive at your first planting site. This entire section is very important, but save it for the week or so before you start your job, so it's fresh in your mind when you're learning to plant.

The third section of the book (seven chapters) focuses on general industry knowledge, with chapters about helicopters, coastal planting, logging/harvesting, and other silviculture work.

The final section of the book is just a reference section, with a planting dictionary and a collection of acronyms and abbreviations.

If you're not convinced about the effectiveness of reading/studying this information, read the analysis of the performance of first year planters in my own camp from 2012 onward. That analysis can be found within this post: [www.replant.ca/stepbystep](http://www.replant.ca/stepbystep)

Once a date has been established for the start of your season, you might be expected to arrive a couple days early. You and all the other first-time planters may meet somewhere for a full day of

classroom orientation. Your classroom guide will be a crew leader or experienced trainer. The following day, your group will probably head out early in the morning to pick up your planting gear and spend a day in the field, practicing the exact steps required to plant a tree properly.



**Figure 1.02**  
Rookie Training.

*Here are several first-year planters with shiny new bags on their first day of field training. You can see many more photos of tree planters in action at [instagram.com/replant.ca](https://www.instagram.com/replant.ca)*

After your classroom training day and your field training day, you'll probably meet the rest of your camp. Everybody will go to the camp location together, you'll sign your employment contracts, and you'll officially start work the following day.

Throughout this book, I'll frequently be referring to reforestation in British Columbia, but at other times I'll refer to Canadian reforestation as a whole. Be aware that this book has a fairly heavy focus on reforestation training focused on the province of British Columbia. However, many of BC's reforestation workers come from other provinces, and many tree planters work in multiple provinces within any given calendar year. Planters who work in Alberta, Ontario and other provinces will obviously learn a great deal of information by reading this book! Don't think that if you're going to work in Ontario, this book won't be relevant. It's extremely relevant.

BC's reforestation industry is the most organized within Canada, and various aspects of the industry in BC serve as a model for practices in other provinces. So even though this training series was developed in British Columbia, for BC planters, most portions are applicable across the entire country. Just remember that a lot of the BC provincial regulations don't apply when you're working in other provinces. There is a chapter in this book that talks specifically about what to expect when planting in Alberta, Ontario, Quebec, and other provinces. That chapter covers things such as what kind of ground/prep to expect in those provinces, prices, lodging/camps, camp costs, government regulation, labour laws, when and where planting takes place, contact information for planting companies, and more.

## Getting the Most Out of This Edition

This book can't teach you to plant. You still need to get out and do the physical activity of tree planting. The more you plant, the better, because practice makes you a better planter. The value of this book is that it will give you a lot of background knowledge that you'll learn over time anyway.

Armed with this knowledge, you'll be better able to focus your attention on the physical process of learning to plant. A focused and motivated planter will quickly become a faster and better planter.

I'll likely use quite a few terms throughout this book that don't make sense to a first-year planter. A full-fledged dictionary of planting terms includes hundreds of words and definitions, and you can find a reforestation-oriented dictionary at the back of this book, or online at [www.replant.ca/dictionary](http://www.replant.ca/dictionary)

I'm going to refer to the term "silviculture" quite often. Silviculture is the branch of forestry that deals with establishing, caring for, and reproducing stands of trees for a variety of forest uses including wildlife habitat, timber production, and outdoor recreation.

A great documentary to watch is a 27-minute short called "Do It With Joy," featuring footage from Brinkman planters in the early/mid 1970's. This film was produced by Nicholas Kendall, and is distributed by the National Film Board of Canada. You can find it on Vimeo at the following link: [vimeo.com/7990821](https://vimeo.com/7990821)

You'll note that there is a link at the end of each chapter to additional online resources. I've often added several relevant videos on each of these pages. These links also contain all of the photos that are found within this book, in case you want to look at the photos in greater detail. If you're reading the greyscale version of this book, you'll get to see the photos in full colour. In addition, there are a few hundred extra photos in the online links that I didn't include in the book for various reasons (including limited space). Some of those extra online photos are [allegedly] royalty-free photos that I didn't feel comfortable publishing in a print edition, but which should be Ok for online publishing. Some of the online training resource pages also contain related web links and additional information that I couldn't fit into this edition.

## A History of BC's Tree Planting Industry

If you aren't going to plant in BC, you can skip the rest of this chapter. In fact, even if you are planning to plant in BC, you can skip this brief history if you want. This short section won't help you plant better. I just want to share some historical background. The section after this one talks about the modern industry in BC.

Trees have been planted in Canada for more than a century, but it has only been in the past couple of decades that planting started to take place on anything resembling today's scale. In the early 1900's, reforestation efforts were minimal. The forests seemed to stretch endlessly, and widespread professional opinion seemed to be that tree planting was largely uneconomic.

The first plantations in British Columbia were established in about 1930, and it wasn't until 1941 that the cumulative planting totals surpassed ten million trees. In a 1956 royal commission report,

Gordon Sloan found that the seven million trees planted on the coast in 1955 were totally inadequate. Furthermore, almost all of the trees planted were a single species, Douglas Fir. He suggested an annual planting program of 38.4 million seedlings to meet then-current reforestation needs, as well as to reclaim the backlog NSR (not sufficiently restocked) land on the coast. However, Sloan's recommended program never took place, and by the mid-1960's, planting had increased to only about eighteen million trees annually for the entire province.

In 1965, a more specific target was adopted. It was estimated that one third of the acreage logged would require planting, which at that time implied a need for seventy-five million seedlings annually. The rallying cry became "75 by 75", referring to a target of seventy-five million seedlings to be planted annually by 1975. While this would theoretically take care of current reforestation, it didn't address the NSR backlog.

The industry grew, then came close to the target with 62 million seedlings planted in 1975. In the meantime, however, the goal posts had changed. More area was being harvested annually, and the backlog was still present. In his 1976 Royal Commission report, Dr. Peter Pearse noted, "Professional foresters have expressed much concern in recent years about the backlog of unstocked lands." He reported the total NSR in the province to be 3.9 million hectares, of which about ten percent was estimated to be backlog NSR on good and medium sites. Pearse did not propose a specific program, other than to state that, "... provisions must be made to ensure the establishment of new crops on lands denuded by logging or fire."

The first program to include funds to specifically tackle the backlog NSR was a \$50 million joint federal/provincial funding agreement that ran from 1979 to 1984. However, because there was insufficient funding for basic silviculture, the NSR backlog continued to grow as additions outpaced reductions. By 1980, the environmental movement was gaining momentum, and the reforestation issue was becoming commonly reported in the news media. In 1980, there were at least ten major articles related to this matter in the Vancouver and Toronto newspapers. However, public concern seemed to diminish when the severe recession of the early 1980's took control of the headlines. The fact that the backlog continued to grow was confirmed in a 1984 Forest and Range Resource Analysis carried out by the Ministry of Forests.

By the end of the decade, public concern returned to a very high level. In a 1989 poll, 82% of British Columbians responded that too few trees were being planted. In a 1991 poll, sixteen percent of those sampled on an 'unaided' basis stated reforestation to be the forest management issue of greatest concern, second only to the issue of clear-cutting. While not necessarily a critical issue on which the election was decided, reforestation was a key topic in the election platforms during the 1991 provincial election. Subsequent to that, the industry soon saw significant growth in reforestation efforts.

Public opinion began to change. Poll results in 1994 indicated that only seven percent of British Columbians felt reforestation to be the most important environmental issue in the province at the

time. Clearly, there have been dramatic changes in public opinion regarding reforestation over the years. Of course, problems with Mountain Pine Beetle infestations in recent years have caused renewed concern about the health of BC's forests. Although critics of tree planting have found numerous problems with reforestation practices, such as inappropriate monoculture stocking and inappropriate species selection, the regulations and practices of planting continue to evolve as forest administrators and scientists gather new information about what works and what doesn't. The processes of growing trees in nurseries, planting the seedlings, and following up with proper post-planting maintenance have constantly evolved and improved. Of course, this sometimes makes our job as planters more challenging. On a positive note, the matter of inadequate reforestation in British Columbia seems to be less of an issue than it was a few decades ago.

Thanks to the British Columbia Ministry of Forests for information about the history of tree planting in British Columbia. Source: [www.for.gov.bc.ca/hfp/publications/00134/pi003.htm](http://www.for.gov.bc.ca/hfp/publications/00134/pi003.htm)

## The Modern BC Tree Planting Industry

Most of you who go planting in BC will start your careers at larger companies that are predominantly based in the northern part of BC - from Williams Lake up to Prince George, and west towards Houston and Smithers. There are more than a dozen large and medium-sized planting companies in this part of the province, and probably 80-90% of the first-year planters in BC are employed by this group of companies. The size of these companies ranges from maybe fifty to three hundred planters apiece. Most of them use bush camps to accommodate planters. Although they're based in northern BC, they also do a bit of work further south, and sometimes even work to the east and into Alberta.

There are also several dozen companies based in southern BC, and on Vancouver Island. The majority of these companies are smaller, often ranging from only ten to fifty employees. Because they're smaller, they don't hire a lot of first-year planters. Most of them don't run camp-based operations, and instead, work out of motels or AirBnB's, or in some cases, they only hire local planters who actually live in the areas where the work is done. The work done by the southern and coastal companies is usually more technically demanding, both in terms of the difficulty of the blocks, and in terms of quality expectations. Prices per tree are usually significantly higher than in the north, but this is balanced out by the fact that the work is more difficult, so planters can plant far fewer trees in a day.

Remember this: higher prices don't necessarily translate into higher earnings! To understand your earnings potential, you must also take the difficulty of the block into context with the tree prices. Seeing a tree price on paper doesn't do any good until you set foot into your piece and see how fast the land is. There should be a correlation between the tree price and the difficulty of the land. A lower price may mean faster/easier ground, which means more trees. Of course, when assessing any specific given "difficulty" for a block, a higher tree price is always better. But as you move from

block to block, the tree price may vary somewhat depending on the difficulty of each individual block.

When it comes to evaluating tree prices, I don't care if my tree price is lower than somewhere else, if it means that my daily earnings are going to be higher. I would rather plant 3510 trees at 14 cents (\$491.40) than plant 1890 trees at 21 cents (\$396.90). Some crusty vets complain about fast ground, because they don't like having to bend over too many times, but I'm out there to work. If I can plant easier land at a lower price but make more money at the end of the day, that's my personal preference. Not everyone feels that way, but the point is that the daily earnings should matter more than the tree price.

The same sort of logic applies when considering your total earnings for the season. Would you rather work 47 planting days making \$503 per day (\$23,641 for the season) or 74 days making \$419 per day (\$31,006 for the season)? Here's where you have to think about your non-planting life. Personally, I'd always gravitate toward the greatest earnings, ie. the longer season. But for some planters, it's a valid choice to go for the higher daily average in a shorter season then take the month of July off, even though their full-season earnings may be a lot lower. This debate is important because a lot of southern companies have higher prices, but tougher land with shorter seasons. There's a lot that you need to evaluate before making a decision about where to work.

Living expenses are significantly higher when working out of motels, because you need to pay for your share of the motel room, and also provide for your own food. Due to the fact that the work done by southern and coastal companies is more technically demanding, most of them only hire planters with several seasons of prior planting experience.



**Figure 1.03**  
Easy Ground.

*Here's an example of some easy ground. It's flat, with very little slash to climb over. The planter probably only has to plant one or two species on this block.*



**Figure 1.04**

**Difficult Ground.**

*Here's an example of some technically challenging ground. There's a lot of large slash to climb around, and the block is steep. The planters may also have to consider microsite requirements for the four or five species that they're carrying, and they may also have to plant fertilizer packs with the trees.*

British Columbia has an industry association called the “Western Forestry Contractors’ Association.” Most people just refer to them as the WFCFA. The WFCFA is not a decision-making organization. Its role is information sharing, communications, and advisory. Members include planting contractors, wildfire suppression companies, silviculture surveying firms, forestry consultants, and independent foresters. Replant is even an honorary member. Not every planting company is a member of the WFCFA, but most of the reputable ones are. The struggle that the WFCFA perpetually faces is trying to bring together a diverse and divergent group of companies with very different opinions. But remember, this diversity is one of the greatest strengths of the planting industry.

BC has a working group called the Silviculture Advisory Committee (the SAC). The role of the SAC is quite broad, and often involves research and projects that various members believe need emphasis within the industry.

BC has an organization called BC Forest Safety (formerly known as the Forest Safety Council). The role of this organization is to focus specifically on communications and information sharing relating to the health and safety of forest workers. You can learn more at: [www.bcforestsafesafe.org](http://www.bcforestsafesafe.org)

For annual commentary about the current state of BC’s tree planting industry, read this link: [www.replant.ca/stateoftheindustry](http://www.replant.ca/stateoftheindustry)

For more photo and video resources associated with this chapter of the book, including historical photos and videos of early logging and early tree planting, visit: [www.replant.ca/training/introduction](http://www.replant.ca/training/introduction)

We have a lot of ground to cover, so let’s move right on to the next section ...