

# **Managing Forests Under Climate Change**

The need to practice sustainable forestry

**Another workshop in the Course-in-a-Box  
series of workshops**

Developed by:

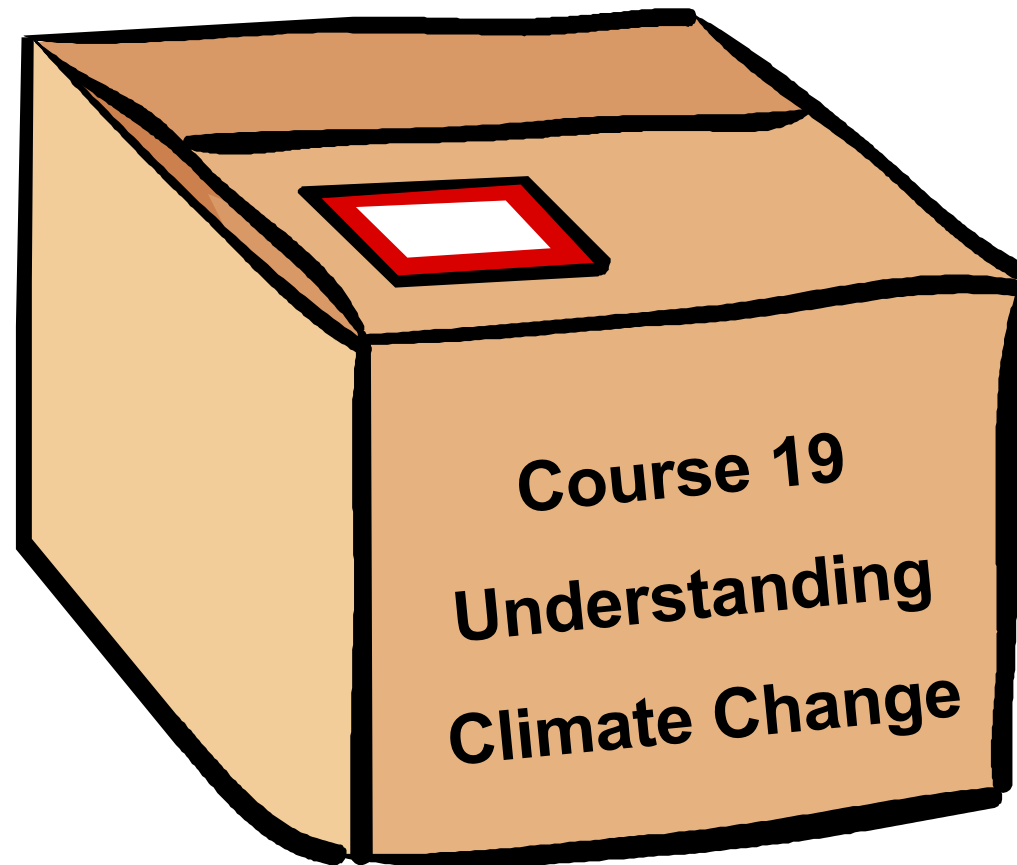
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Project Forester

Eastern Ontario Model Forest

# Managing Forests Under Climate Change

Another **Course-in-a-Box**



The need to practice **Good** forestry

## **Main Messages...**

1) Don't overreact

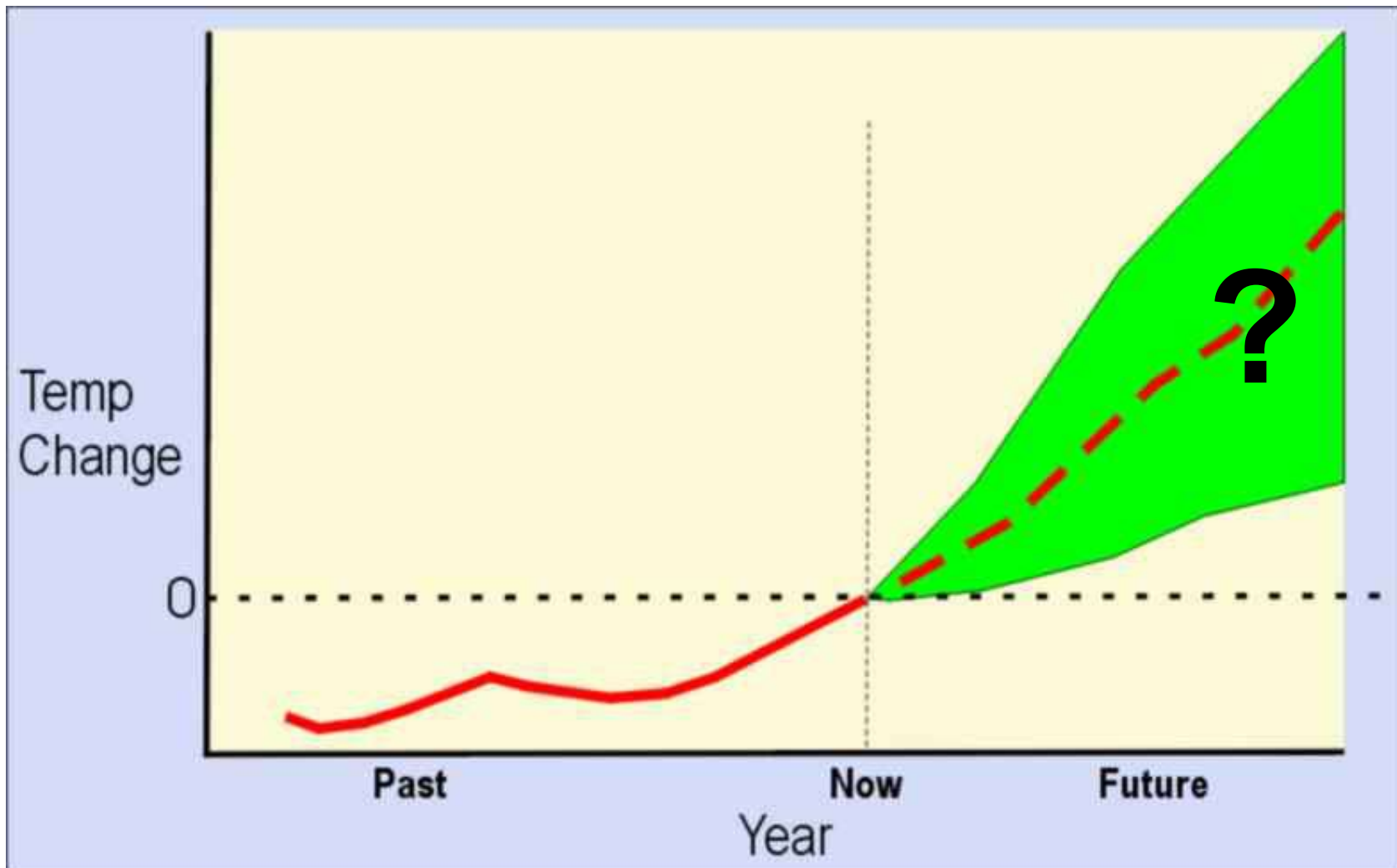
2) Consistent messages to clients

## **Message: Don't Overreact...**

- 1) Understand the topic, and the potential impacts
- 2) Know how it could affect your vision, goals and objectives
- 3) Know what to do about it... how to adapt to it

# Message: Don't Overreact...

- 1) Understand the topic, and the potential impacts



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## Impact on woodlots...

### Longer growing season

FFC – 2 extra weeks

### Shorter winters

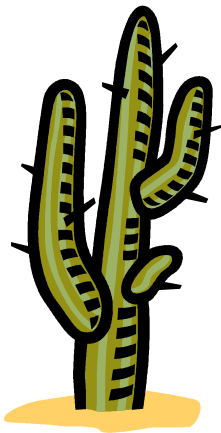
Syrup Producers – earlier first run

Winter harvest implications

“The times, they are a changing”

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## Precipitation Trends

- Expected to be drier
- Seasonal variation is important
  - ~20% in warmer months
  - ~10 to 20% in colder months
- More erratic precipitation



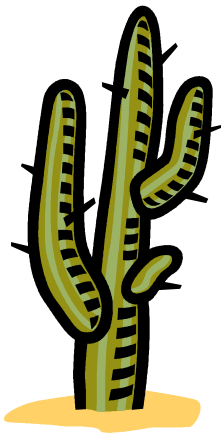
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## Woodlot implications...

- Dry sites are going to be drier
- Wet sites may be drier



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## More extreme weather events

- Ice - 1998
- Drought – 2001/02
- Wind - 2006



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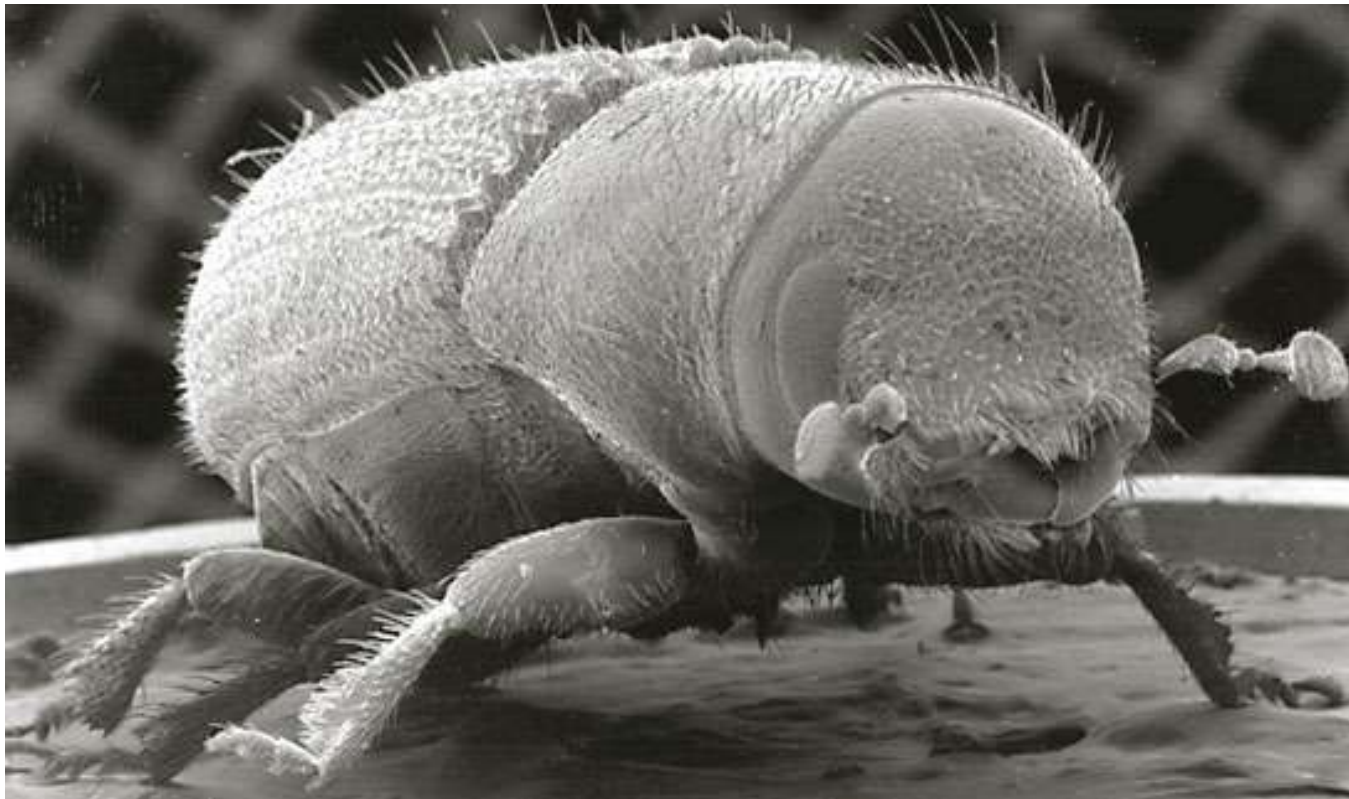


## May trigger other problems...

- More invasive species problems
- More native species problems

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**The insect that ate British Columbia**

# Message: Don't Overreact...

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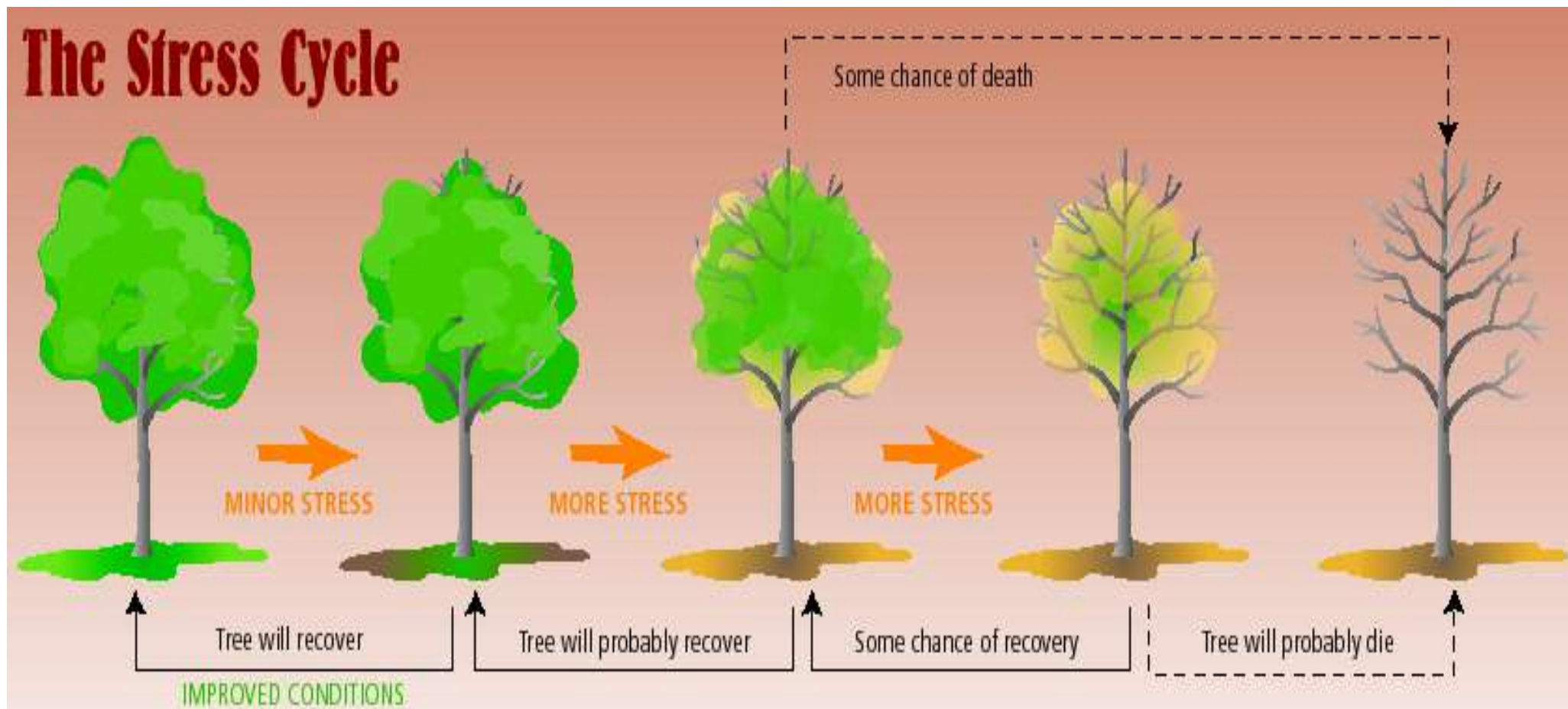
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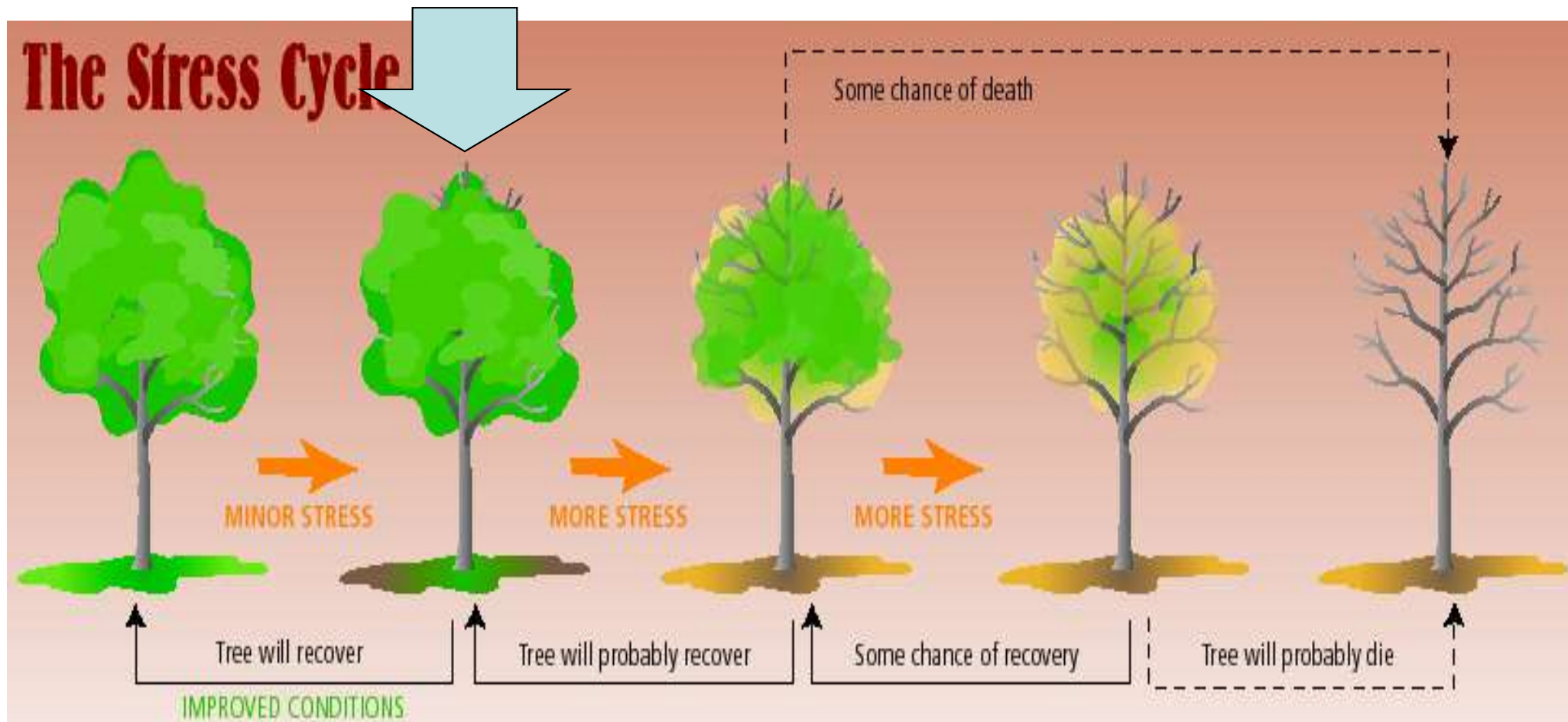
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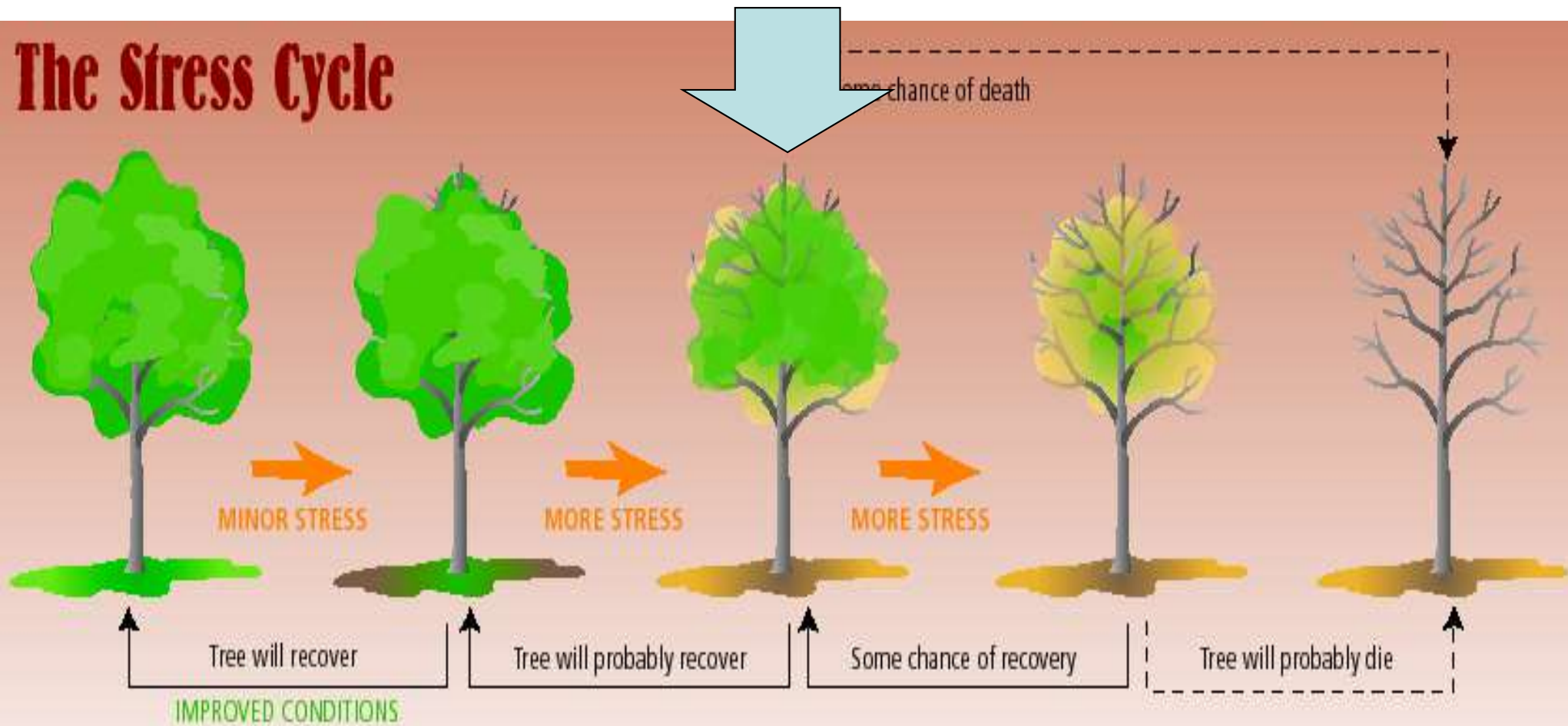




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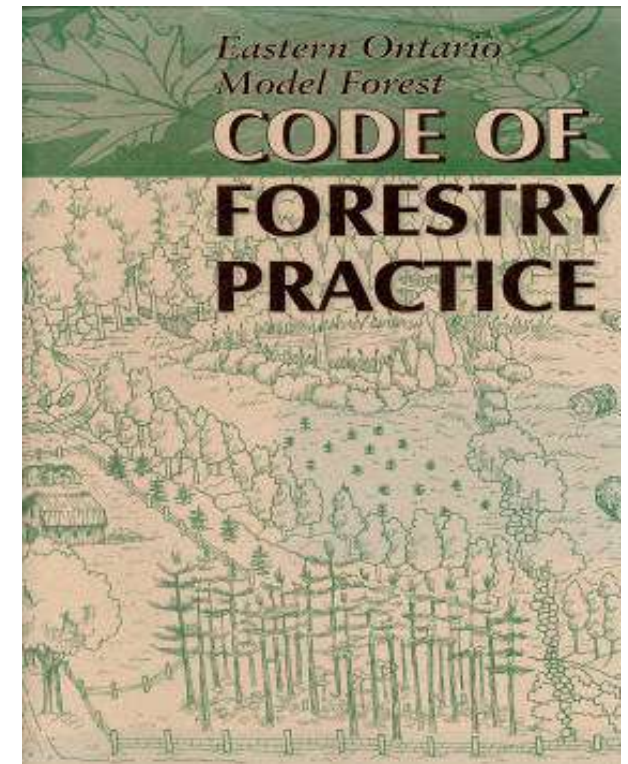
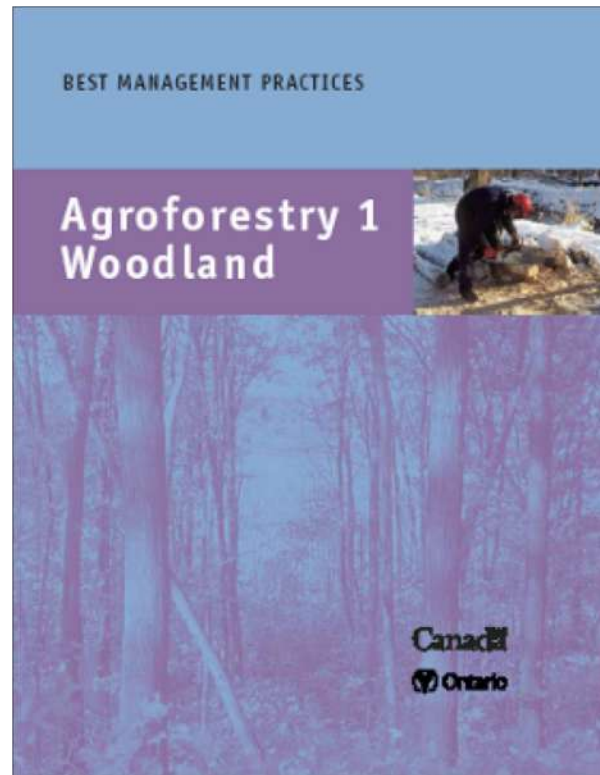
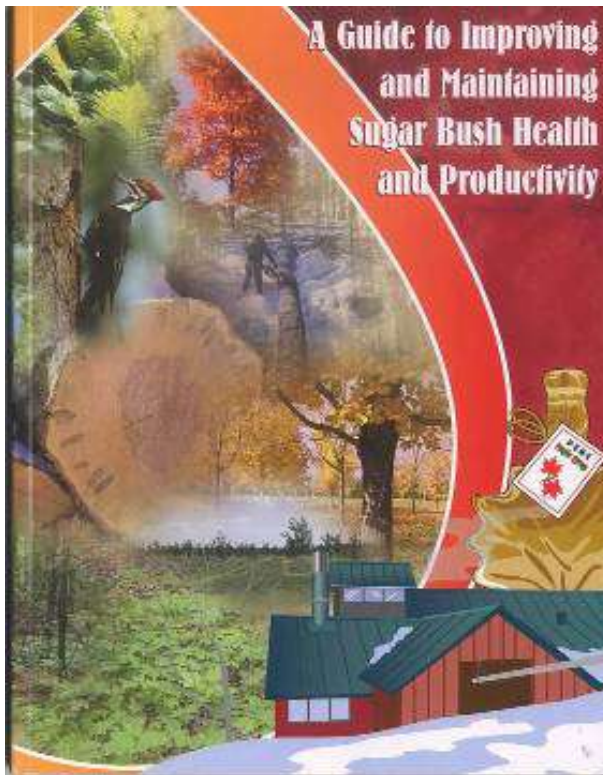
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## The Stress Cycle



# Message: Don't Overreact...

2) Know how these potential impacts could affect your vision, goals and objectives... your organization



## **Message: Don't Overreact...**

2) Know how these potential impacts could affect your vision, goals and objectives... your organization



# **Message: Don't Overreact...**

3) Know what to do about it



**Be a good forest manager**

**Be aware of forest health trends**

**Don't promise miracles**



# Message: Don't Overreact...

3) Know what to do about it

## Good Forest Management leads to:

- achieving goals
- a healthy, productive and diverse forest



# Message: Don't Overreact...

3) Know what to do about it





# Message: Don't Overreact...

3) Know what to do about it    **Be a good forest manager**



## New Step

Have a mechanism in place to adapt a plan when things go wrong... or don't happen as planned ... or just need to be changed



# Message: Don't Overreact...

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# Message: Don't Overreact...

3) Know what to do about it

**Factors which  
influence how  
we manage ...**



## Goals

**Forest type**

**Age**

**Diameters**

**Special Features**

**Condition**

**Markets**

**Cost**

**Political wind**

**Volunteers & help**



# Message: Don't Overreact...

3) Know what to do about it

**Factors  
which  
influence  
how trees  
grow ...**



- 1. Climate**
- 2. Site**
- 3. Genetics**
- 4. Past Mgt Efforts**

# Message: Don't Overreact...

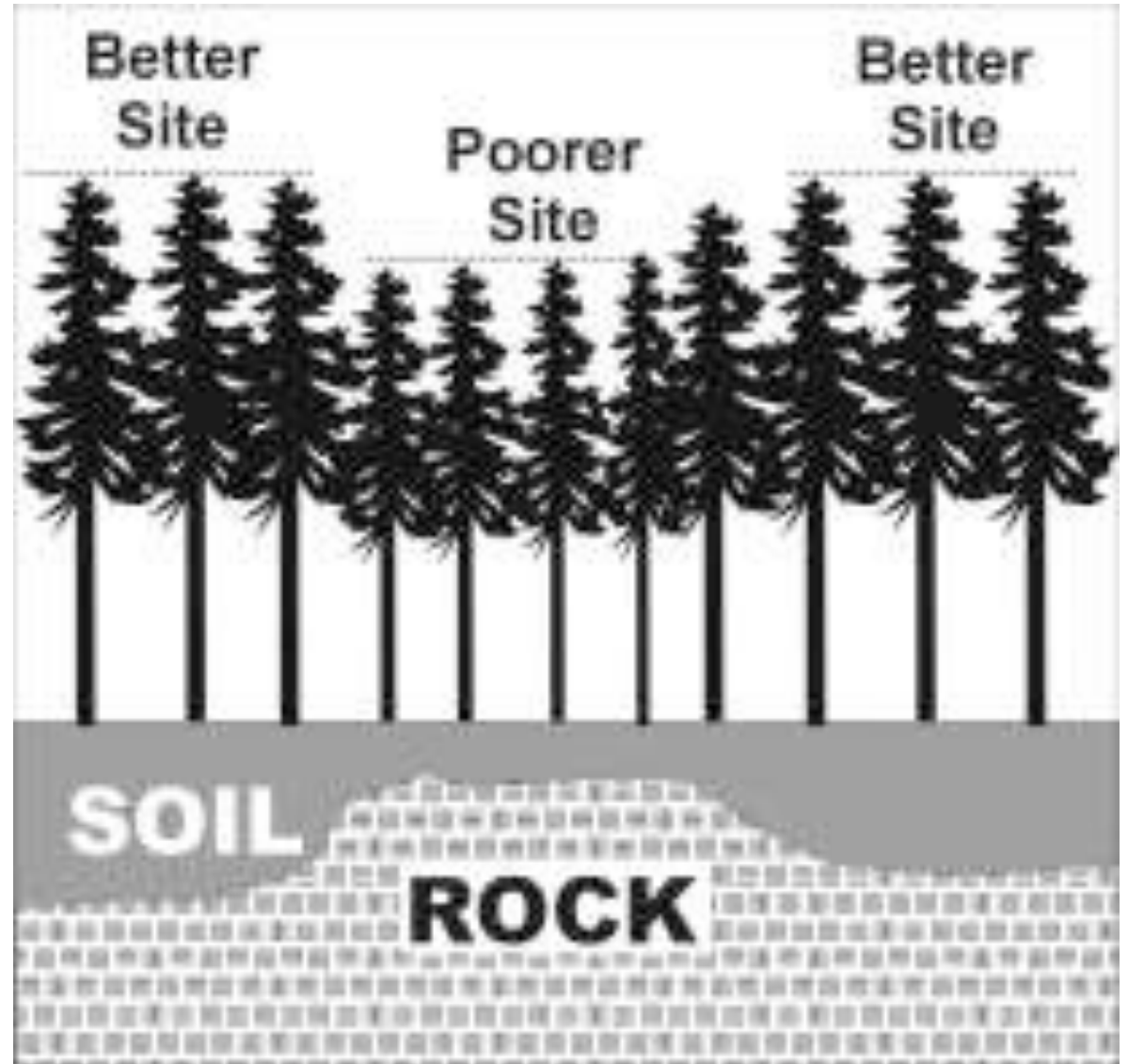
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## Site

Soil Depth  
and 'Quality'



Texture, Moisture  
Regime & Fertility



## **Message: Don't Overreact...**

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## **Increase the importance of 'Site' in the management equation**

*Just because it is a maple stand now does not necessarily mean that it is a good site for maple*

## **Message: Don't Overreact...**

3) Know what to do about it

## **When making management decisions...**

- **Recognize ...**
  - **The vulnerability of poorer sites**
  - **The potential of good sites**
- **Have management goals which are realistic**

# **Message: the need for a consistent message ...**

Emphasis...

More on improving health, less on improving  
bottom line

Means....

**Extension** - forms like this one

**Research** – people like Dan

**Advocacy** - forest health and good management

**Resources** – programs & opportunities

# Questions

**A changing climate is the perhaps strongest reason why we need to make sound management decisions which are grounded in science and driven by the need to protect the forest health continuum**