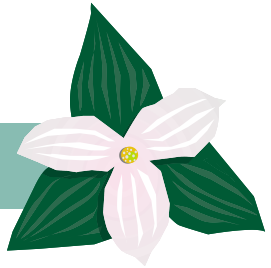
The Great Ice Storm of Eastern Ontario

How to Care for Your Ice Storm Damaged Trees

(residential, landscape and street trees)

Caring for Your Land Series of Workshops



January 2003

Presentation Objectives

- How we can help the trees?
- To answer the most commonly asked questions
- How to evaluate tree damage and then to take action?
- When to prune and how?
- Should I remove my damaged tree or keep it?
- Proper tree care to damaged trees

Ice Storm - 1998

- In five days (Monday to Friday), we received ± 77 millimeters of freezing rain.
- We lived through the worst natural disaster in the century.
- We watched and heard our trees crack, split and break. We watched them arch to the ground.

Crisis Situation – No Power

Roads Were Blocked

Trees Were Damaged

Damage To Trees

Poor Trees …

- What to do?
- When to do it?
- How to do it?

Visual Damages

- Bending
- Breakage
- Pole effect

Bending Damage

- Species affected were:
  - Birch
  - Poplar
  - Cedar
  - Young conifers
  - Shrubs

Young Pines Bending

Broken Branches

- Individual branches
- Partial crown damage to branches
- Severe damage

Broken Branches

Broken Branches

Pole Effect

- Most of the branches are damaged
- Main stem left intact
- Very common problem with poplars and basswood

Basswood Pole Effect

Internal Cracks

- Will suffer additional branch failure and breakage
- Unseen internal cracks

Damage Classification

- Light
  - Less then 15% crown damage
- Moderate
  - 15 to 50% crown damage
- Severe
  - Greater than 50% crown damage

Species Affected

- Light damage
  - Oaks, linden, conifers, Kentucky coffee tree
- Moderate damage
  - Elm, honey locust, red maple, sugar maple, ash, crab apple, blue beech
- Severe damage
  - Birch, poplar, willow, Manitoba maple, silver maple, Norway maple, hackberry, catalpa, lilac

Severe Damage

- does NOT necessarily mean or need removal

Light Damage

Moderate Damage

Severe Damage

Damage Assessment

- What work your tree needs
- Wait to get a better price

Hazardous Tree

- What is it?
- Possibility of causing injury to people
- Possibility of causing damage to property

A tree with high hazard is **dangerous** and potential a **liability.**

Assessing a Hazardous Tree

- Two main factors:
  - A) tree condition
    - Type and extent of damage
    - Size of wounds
    - Tree species
    - Age of tree
  - B) tree location
    - Backyard, front yard,
    - Close to sidewalk, street, house

Damage to Vehicle

Damage to Home or Pedestrian

Hazardous to Hydro Wires

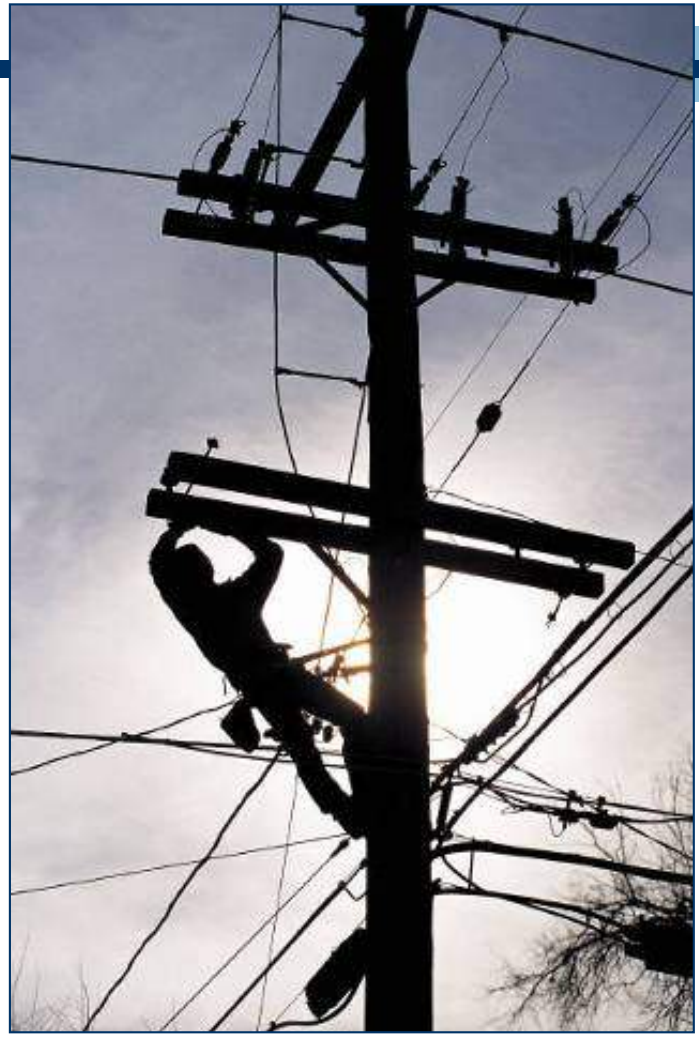
Evaluating Hazard

A Dangerous Tree

- If related to hydro, contact hydro people
- If it might fall on people, buildings, utilities …

  It requires

  immediate attention



Safety Concern

- Safety concern is when branches:
  - Are overhanging the roof or fence or street
  - Are cracked or split branches
  - Show signs of decay, rot or cavities
  - Have fungus fruiting bodies

Remove sooner than later

Caring For Your Damaged Trees

- Assess what you can do
- Seek professional help
- Pruning

What Can You Do?

- Basic clean up
- Collect information
- Prune damages small branches
- If needed, call landscape company to do the work
- Monitor during the growing season

Tree Crew Working

When do you Need Professionals?

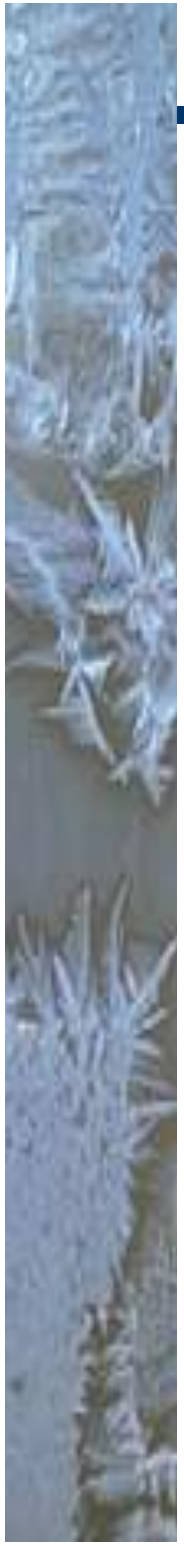
- When you have to work close to utilities
- When climbing is required
- When you are not capable of doing the work
- When you do not have the time
- When you do not have the tools
- It is a personal choice

Finding a Professional Tree Care Company

- Yellow pages
- Referral from friend, neighbours, co-workers
- Be cautious of door to door care salesperson

How to Hire

- Ask for references and verify
- Follow good business practices
- Get two or three quotes
- Check for liability insurance and verify
- Ask for affiliation with professional association bodies



Good tree work is

NOT INEXPENSIVE!

Pruning – When & How

- As soon as possible to prevent disease and insect problems
- Maple & birch: do not prune when the sap flows – early to mid-summer is good time
- Pruning tools should be sharp, rust free and clean

Elm Trees

- Winter is the right time to prune to prevent Dutch elm disease

How to Prune

- All damaged branches should be pruned
- Keep the main leader
- Don’t take more than 25% of the crown
- Keep the basic form of the tree species
- Do not use a chainsaw
- Do not work near power lines
- Wear protective gear
- Concentrate on your job

Tools Required for Pruning

- Hand pruner
  - Small twigs and branches up to 2 cm diameter
- Looper
  - Heavier branches up to 5 cm diameter
- Pole pruner
  - Remove small branches not reached by hand pruner
- Pruning saw
  - To remove large branches

Tools

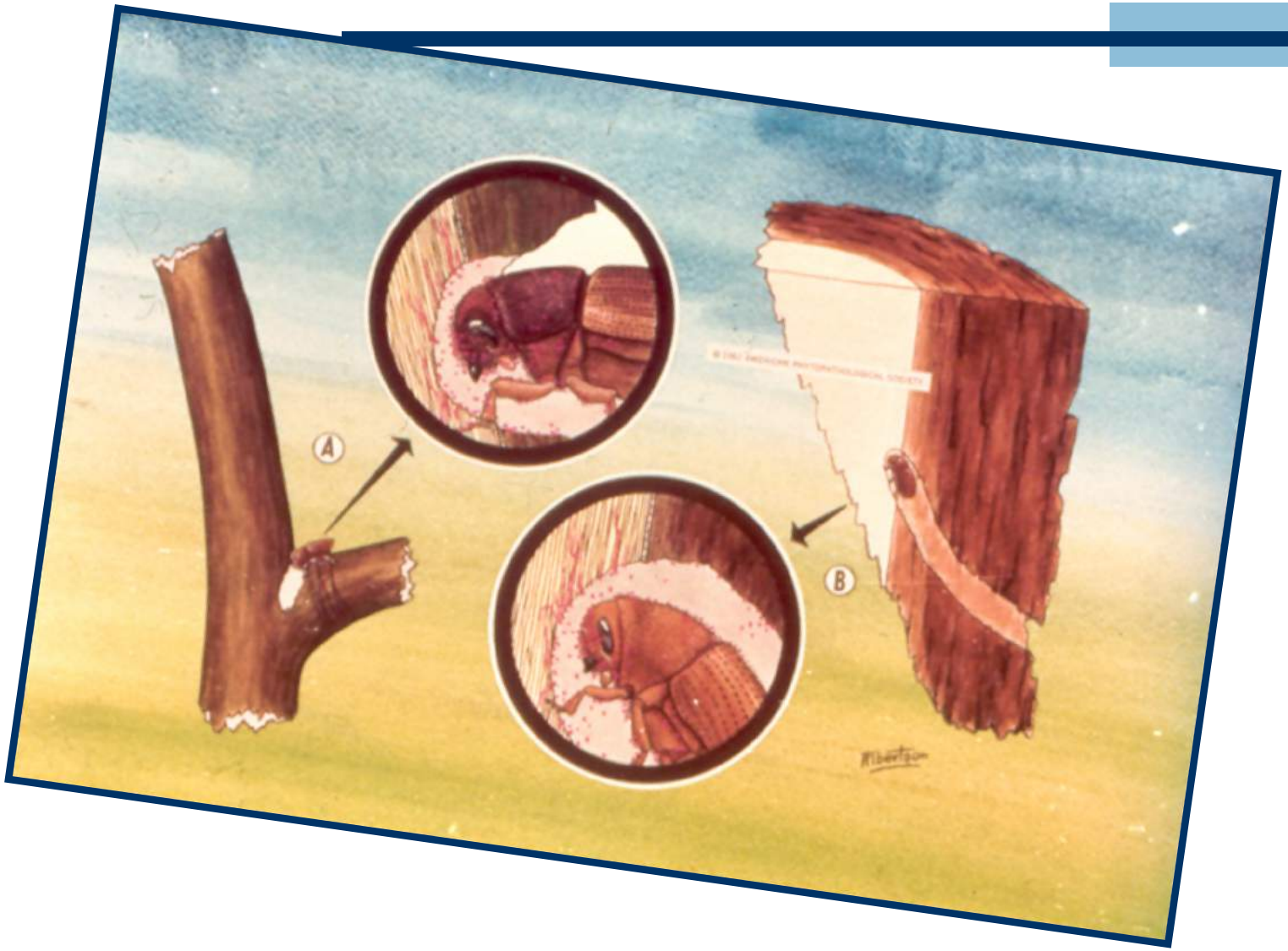
Pruning Techniques

- Use sharp tools in proper working condition
- Cut close to branch collar
- Cut parallel to the branch angle
- When cutting the main stem, cut at a 45 degree angle
- Do not leave stub
- Pruning cut should be clean and smooth

Removing Large Branches

- Make first cut on the underside of limb about 1.5 to 2 ft. out from the trunk
- Second cut should be made from the top ob the branch 2 inches farther out from first cut
- Third cut to remove the stub

Good Pruning Cut

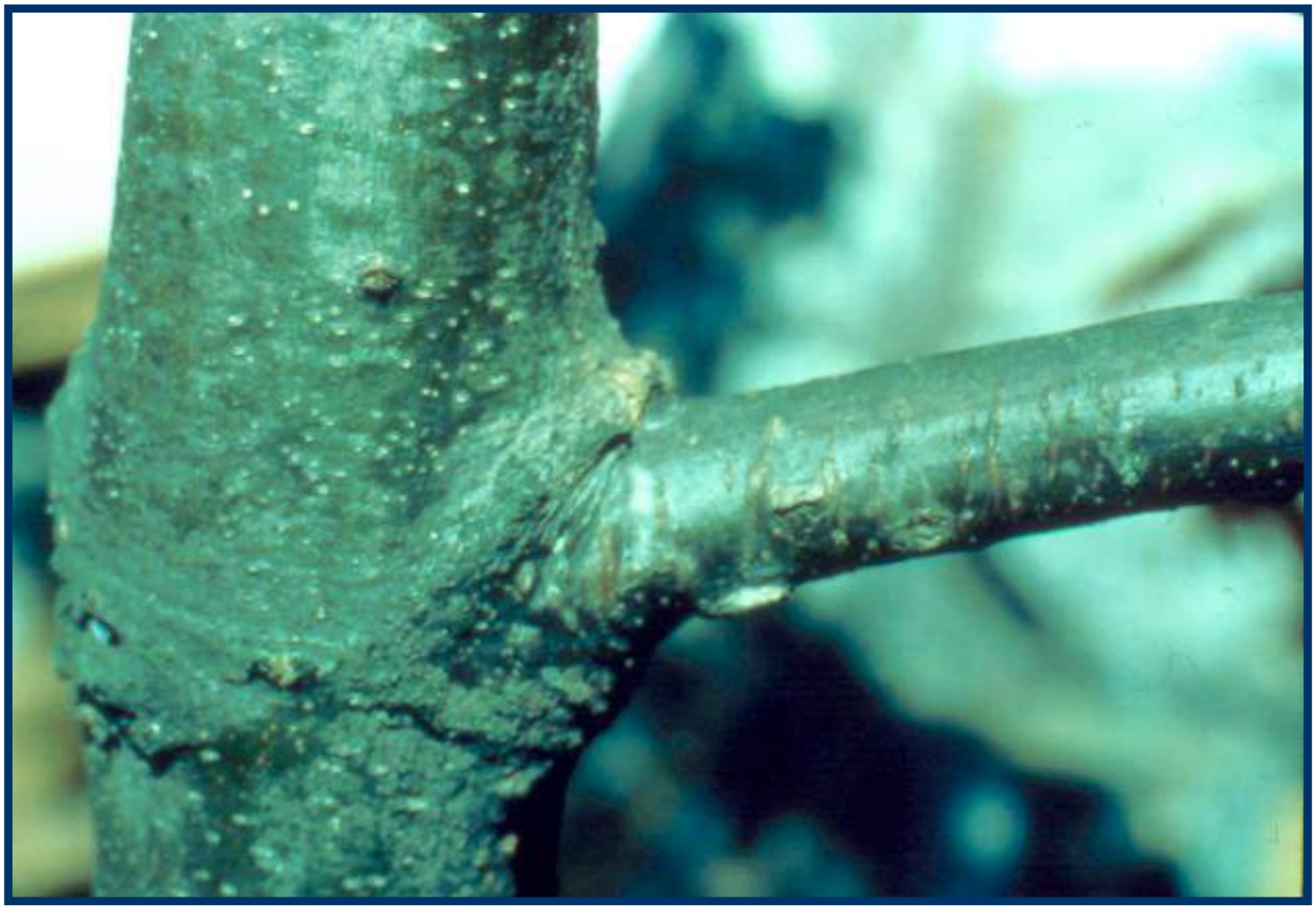


Branch Collar

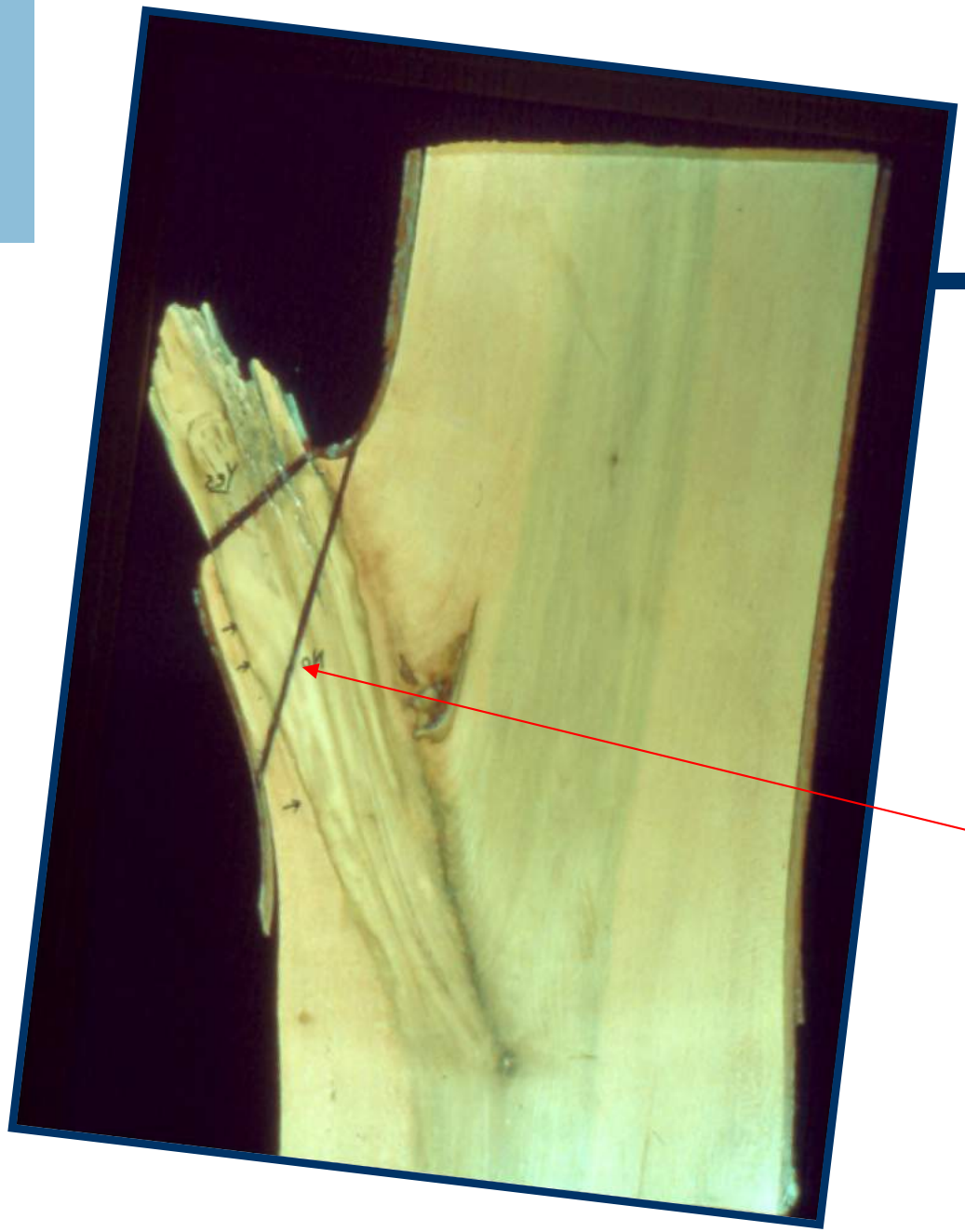
- Branch collar is trunk tissue that forms around the base of the branch between the main stem and the branch or a branch and a lateral.

Where to Prune?

Where to Prune?

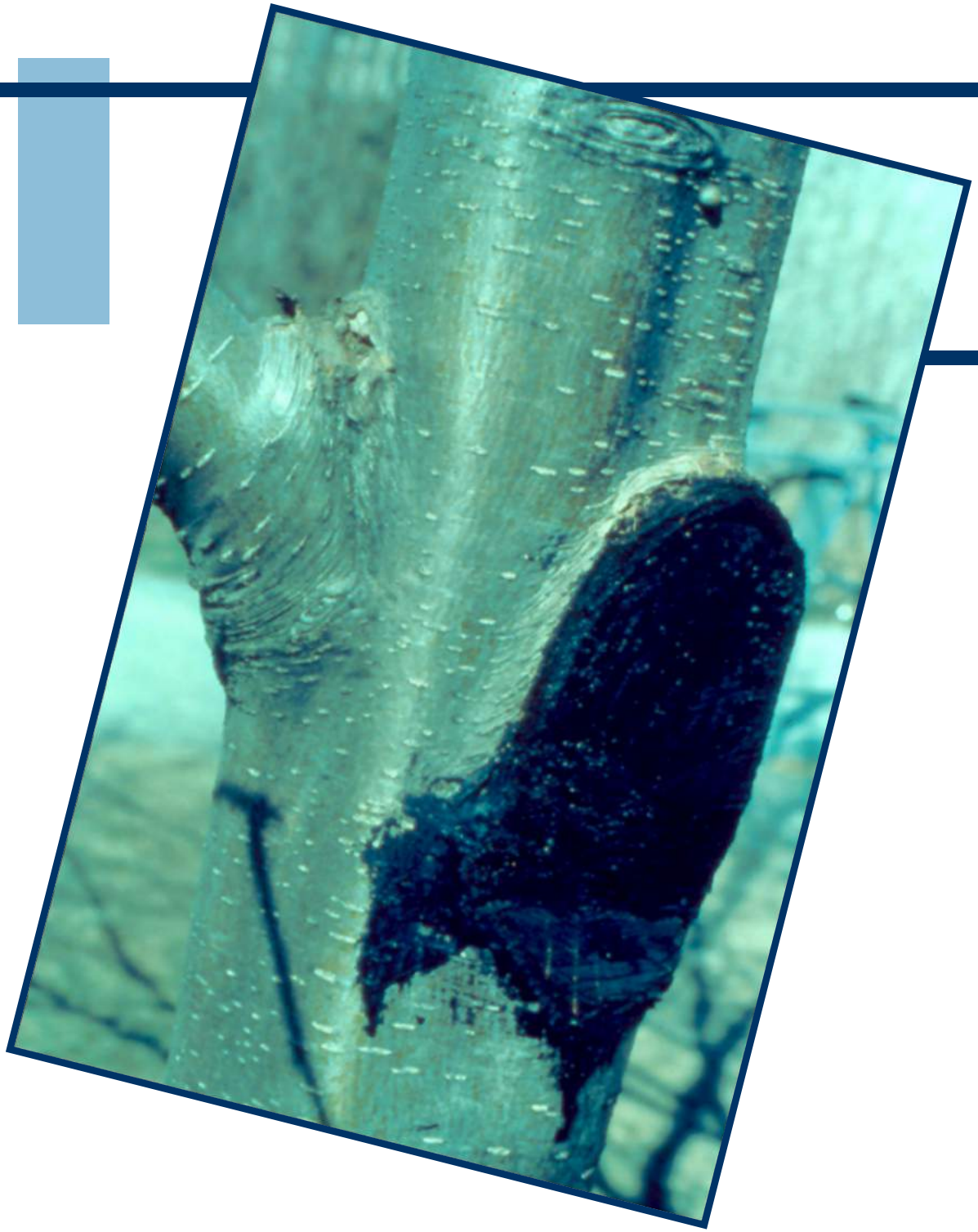


Where to Prune?



NO

Good Healing and Closure



Wound Dressing

Wound Dressing or Pruning Paint

- NOT necessary
- Does not prevent disease, insect damage or decay
- Strictly cosmetic
- May do more harm than good
- Does not promote callus formation

Conifer – Corrective Care

- If main leader is broken in a pine or spruce:
  - A new leader may be trained by selecting the strongest side shoot
    - Bend it upward carefully
    - Tie it securely to a stiff stake
- If a tall tree, call a professional

Conifer Care

Safety and the Chain Saw

- Use only if trained and experienced
- Wear proper gear
- When in doubt, get a professional

Tree Maintenance

Tree Maintenance

- Why is it important and necessary?
  - Maintain long term vigour and long term health
  - Should be ongoing, year after year
  - Protect your investment
  - Learn what to look for and how to monitor

Poor Pruning

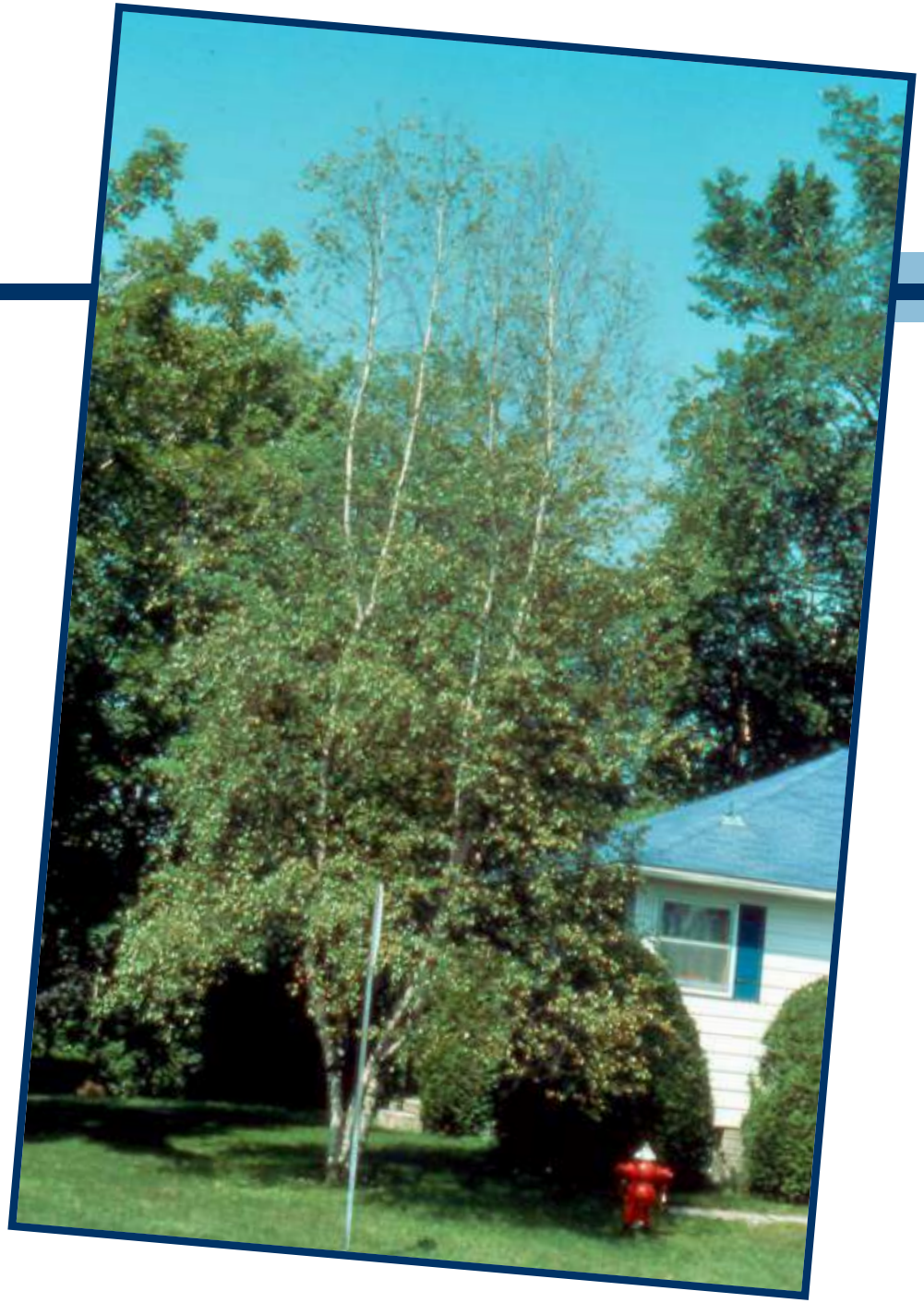
What to Expect in the Coming Season?

Sun Scald

Leaf Scorch

Ash Decline & Borer

Bronze Birch Borer



Verticillum Wilt and Stem Cankers

Damaged Tree

Fungus Growth

Nutrient Deficiencies

Nutrient Deficiencies

Summary

- Safety first
- Assess the damage
- Plan your work, don't "just do it"
- Attend immediately if hazardous
- Do not rush to remove a tree unless it is a high risk
- Use professionals when necessary
- Properly prune trees
- Be prepared to water and fertilize stressed trees
- Follow **Good Maintenance Practices** now & in the future.

Presentation Made Possible By:

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