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Sugar Bush Woodlot Management

Topics

Benefits of Maple Syrup Forest Management to Health

Why Sugarbush Management Planning

Silviculture & Operational Planning

Stand Improvement

Equipment

Benefits of Maple Syrup Production

PROMOTES FOREST HEALTH

PROVIDES GREAT ANNUAL REVENUES (COMPARED TO FUELWOOD OR SAWLOG HARVESTING)

HEALTHY AND ACTIVE LIFESTYLE FOR PRODUCERS

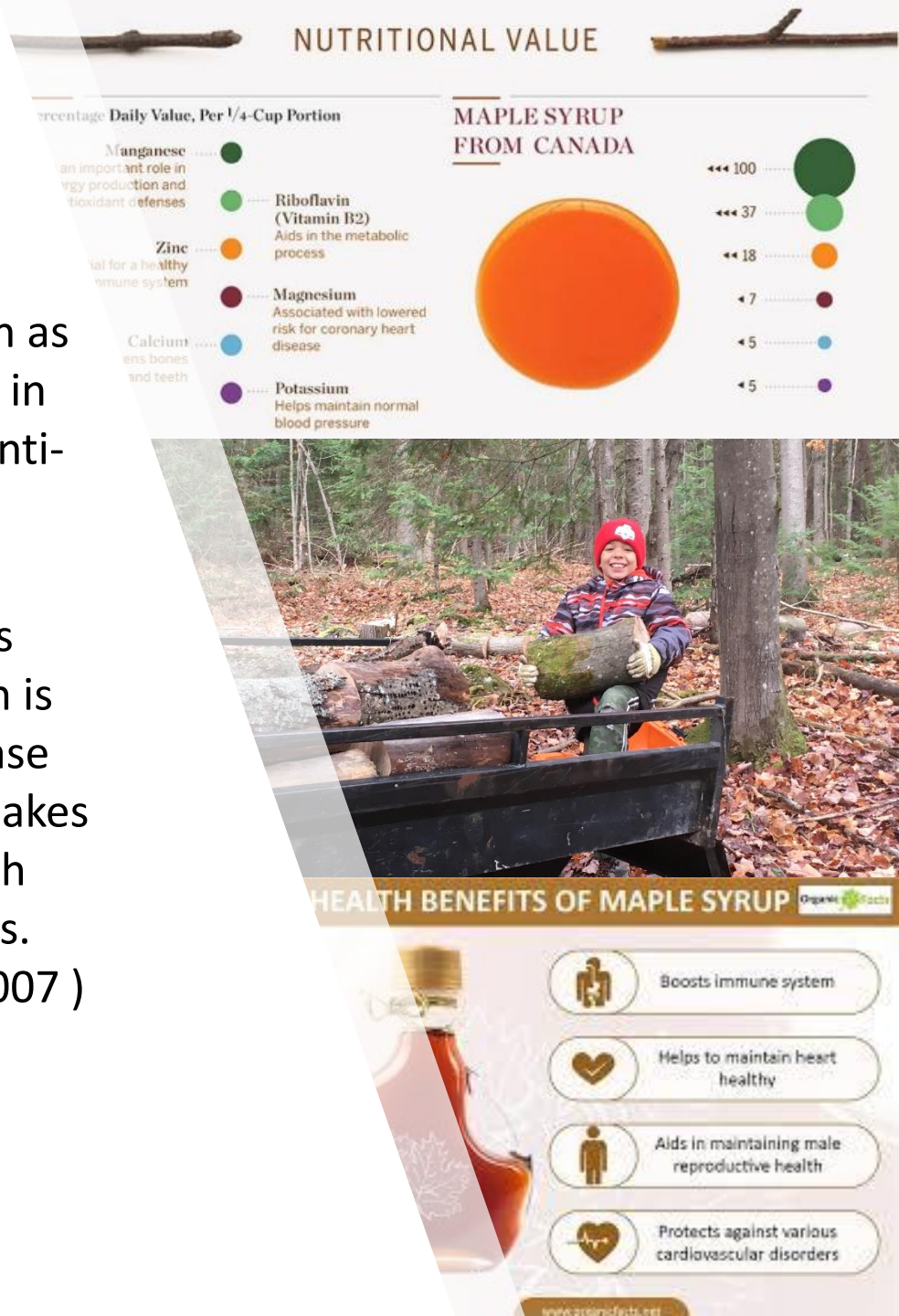
FAMILY AND FRIENDS ACTIVITY

CULTURAL AND TRADITIONAL AWARENESS

HEALTH BENEFITS OF MAPLE SYRUP

Health

- Maple syrup is known to have naturally occurring minerals, such as zinc, thiamine, and calcium. High in antioxidants with several being anti-cancer, anti-bacterial, and anti-diabetic properties.
- Maple syrup contains polyphones such as abscisic acid (ABA), which is thought to stimulate insulin release through pancreatic cells which makes the syrup beneficial for those with metabolic syndrome and diabetes. (Journal of Clinical Nutrition in 2007)
- Physical activity and mental wellbeing.
- Spirituality & connection



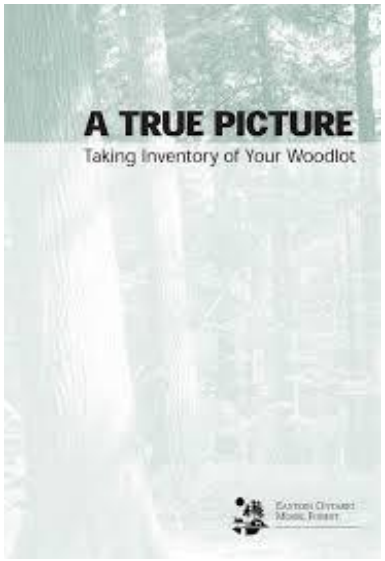
Why Sugarbush Management Planning

- Ability to set Goals, targets and strategies (commercial operation or community initiative)
- Business Planning to obtain capital for business start up
- Consultation to gain community support
- Mapping of high productive areas and improve potential areas
- Manage resources (people, time, money, energy)
- Preparation and adaptation to change (climate, invasive species,
- Health & Safety

Why Sugarbush Management Planning (cont'd)

- Planning Capacity Building, Business Planning BP, Silviculture, sugar bush improvement, Maple Syrup Production, Conflict Resolution
- Quality Control
- Diversity of forest products and revenues

Components of a Sugar Bush Plan



1. Property information

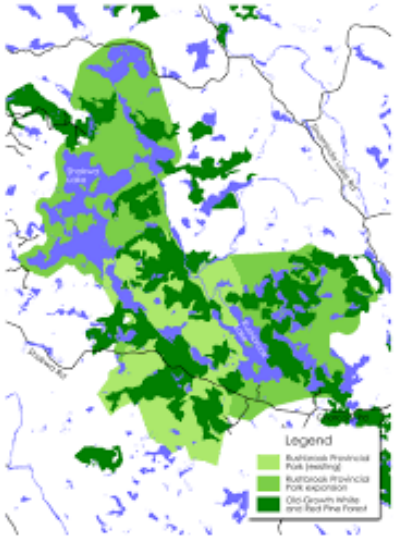
- This section simply provides a legal description (lot, concession, township, etc.) of the property, the acreage, and information (name, address, and telephone number) about the registered owner(s).

2. Property management history

- The purpose of this section is to note what activities have taken place on the property (relevant to the management plan you are preparing). This may include past harvesting operations, change of objectives or ownership, planting projects, insect control, trail construction, etc.

3. Maps

- Good maps and/or aerial photographs of your property are essential. Depending on the size of the property you may require two sets of maps – one showing your property in relationship to the surrounding landscape and a map showing the detailed features of your property. As a minimum, for management purposes, the map(s) should include property boundaries, fencelines, survey posts, access roads, forest compartments (types of forest cover) and other natural and physical features such as swamps, creeks, ponds and lakes. On smaller properties you may be able to record all this information on one map.



4. Setting objectives

- Developing your objectives is a very important task. Before you undertake any management activities you need to have a clear idea of your objectives for your forest. To start, ask yourself what would you like from your forest? What might it produce? What do I want from it in the future?
- Prior to finalizing your objectives, you need to carefully review each one and ask yourself which objectives are obtainable. You need to consider your financial resources, level of knowledge, availability of time and the characteristics of your property when making this assessment. Remember, be realistic and set your objectives within your limits and that of your property.

5. Preparing an inventory

- The four main components of an inventory include forest cover (trees), physical features, wildlife and other vegetation. Preparing an inventory of your forest is a very important component of your plan. The better the inventory information that you have, the better decisions you can make. The amount of information collected will depend on your objectives and the activities you plan to undertake.

Components of a Sugar Bush Plan (cont'd)

6. Scheduling of activities

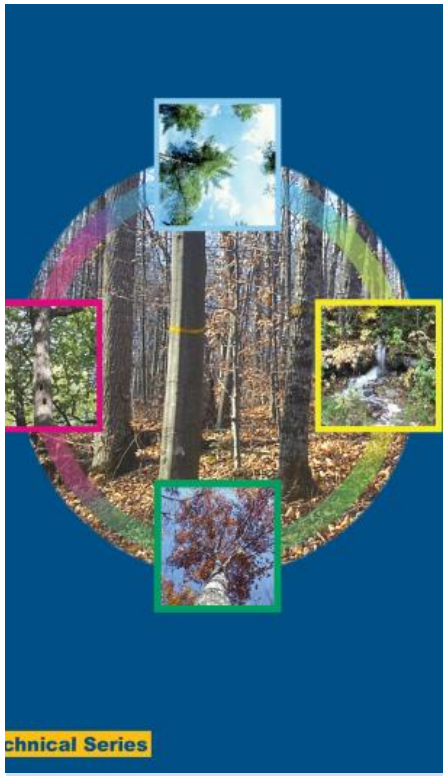
- In this section you need to identify the activities you are going to undertake in the next five or ten-year period. When preparing your schedule of activities you should always be able to answer:
- What – describe the activities to be undertaken;
- Why – what objectives will these activities help you to achieve;
- Where – list the forest compartment where the activities will take place and how many hectares will be treated; and
- When – what year and season will the work be undertaken.
- If you cannot answer all four of these questions about the activity you are planning, then you need to go back and check if you are being consistent with your management plan.

7. Record of activities

- A complete record of your management activities will be useful in the future:
- The information that you collect can be used later to update the property management history section of your management plan.
- It provides a link back to your objectives and it provides a measuring stick to see how successful the work you undertake today is in the future.
- Record details of costs associated with work completed, volumes and revenues generated from your forest, which is a requirement if you are operating as a business.

8. Review of Past Activities and Plan Update

- Forest management is a long-term project. We should (but don't often) go back and assess the success of the work we did five, ten or fifteen years ago. Record your activities and monitor their results to provide you with valuable information.
- Updating your plan will be required at some point in time. If you are planning your activities on a ten-year cycle then the plan should be reviewed and updated at that time. As a minimum, the review should include:
- An update of your inventory (i.e. in areas where you have undertaken commercial harvesting);
- A review of your objectives to ensure they are still relevant; and
- Preparation of a new schedule of management activities for the next ten years.



Silviculture and Operations Planning

- Tree Marking & Boundary marking
- Stand Improvement Harvesting
  - Locations and Timing
- Infrastructure locations
  - Buildings
  - Road/Trail layout
  - Lines (above and below ground)
- Logging Equipment

Diversity of forest products and revenue

- Softwood and hardwood sawlogs
- White birch: birch bark, birch sap & syrup, Chaga mushrooms
- Firewood
- NTFP: medicines, crafts, food

Equipment

- ATV: small footprint, very versatile and multipurpose , all season. Ability to maneuver around production trees.
  - Tracks systems are very valuable for winter conditions and deep snow.
  - Various attachments for logging: ATV Arch, wagons with crane and grapple
- Snow mobile: winter condition only
- Chainsaw, brushsaws, hand tools (axes, shovels etc.)
- Woodchipper
- Wood splitters

Equipment

- Tractors: more capable and versatile, multipurpose, all year
- Choose 4x4 over 2 wheel drive
- 20 – 50 HP will manage most conditions and run a variety of farm and forestry implements

Stand Improvement

- Main activity (on-going)
- Benefits include increased light and airflow to the forest floor to promote production crop species (sugar maple)
- Removing insect pest and diseased trees to prevent spread to healthy trees
- Promoting maple species and other higher value species (yellow birch, oak, softwoods)
- Managing habitat (flora & fauna) and species at risk
- Non timber forest products (NTFPs)
- Production of sawlogs, firewood and chips (additional revenue)

Stand Improvement

- Can be complete in summer, fall and winter.
- Avoid spring to reduce damage to residual trees and rutting & compaction to soils
- Health & Safety
  - PPE is a must
  - Chainsaw safety
  - First Aid

Questions

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