

WOODLOT MANAGEMENT HOME STUDY

- a Brief Introduction to - INTEGRATED RESOURCE MANAGEMENT

What is Integrated Resource Management?

Integrated Resource Management (IRM) is a means of realizing many benefits from a forest or other natural area, and making sure the renewable benefits are there for future generations. It examines the relationship between various resource uses and the effect managing one resource has on other resources. With IRM, all resource values are considered when making decisions.

IRM does not necessarily mean more wood, more wildlife, or more money, but it does help keep these things in proper balance. By using this process, all objectives do not have to be met on all sections of your woodlot.

IRM involves four C's: compatibility, conflict, compromise, and consultation. It brings compatible ideas together and allows you to meet several goals at the same time, while minimizing conflicts. It sometimes requires compromises and consulting others that live near or use your property.

Potential activities and values from your woodland include:

- Recreation (e.g. hiking, biking, skiing)
- *Wildlife* habitat
- Forest products production
- *Intrinsic* or *existence values*
- *Non-timber forest products*
- *Biodiversity*
- Soil and water conservation
- Gravel extraction
- Christmas trees

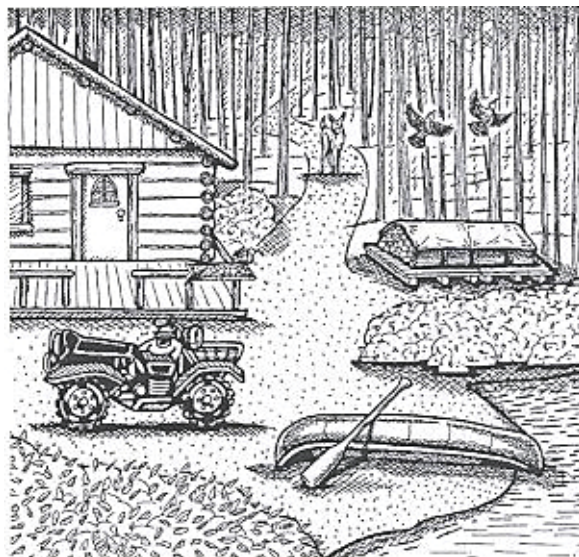


Illustration 1: Potential activities and values that can be obtained from your woodland

IRM in Six Basic Steps

1. Set Goals & Objectives

Goals are a list of things you are doing or would like to do on your land. For example, you may wish to improve your woodlot for personal recreation or make it accessible for community use. You may also wish to improve tree quality and value or increase wildlife habitat quality. Prepare a list that includes what you want to do with your land and what you are doing already. These goals can be grouped according to specific resource benefits such as: Timber, *wildlife*, *aesthetics*, or recreation.

2. Identify Resources

A key to practicing IRM effectively is getting to know your woodlot and working with what you have. Before walking through your woodlot, obtain some recent aerial photos to locate open water, non-forested areas, wetlands, and softwood and

hardwood cover types. Woodlot resources can include things like beaches, scenic locations for campsites or cabins, timber quantity and quality. Personal resources can include time, support, financial resources, expertise, and equipment. Which resource can you and your woodlot offer?

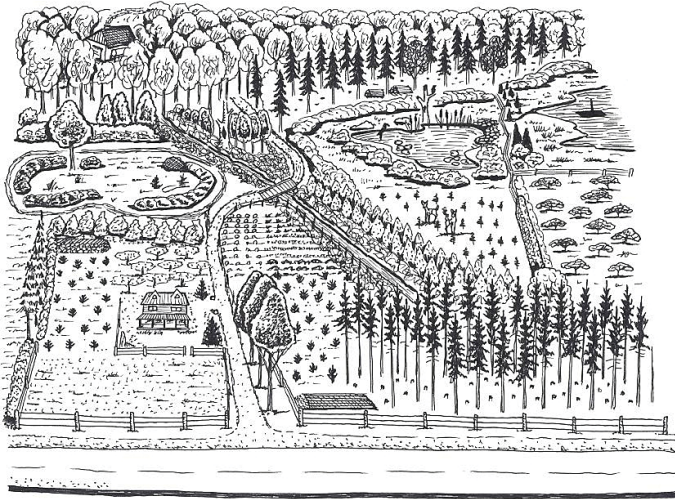


Illustration 2: Integrated resource management can involve a variety of activities and goals for a property

3. Set Priorities

Now that you have brain stormed, make the list more realistic. Compare your list of goals with your resources and choose realistic priorities.

To establish priorities, look for complementary and conflicting goals and objectives. The more goals an activity fulfills the more worthwhile the activity becomes. Conflicting goals require separate areas or considerable effort to achieve. Consider the resources you have to work with, complementary and conflicting goals, and neighbouring properties.

4. Work With Your Neighbours

Ecosystems do not stop at property boundaries. Thus, ecosystem management requires cooperation among landowners. If one person protects an area along a property line while the other clear-cuts to the edge, the opportunity for a significant wildlife corridor or recreation area will be lost.

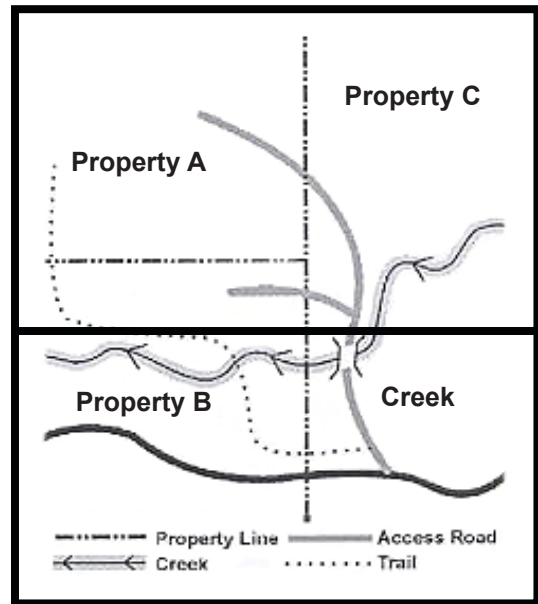


Illustration 3: Trails, streams, stands, and ecosystems do not stop at boundaries. Therefore, cooperation among neighbouring landowners is important.

5. Things to Consider for Your IRM Plan

The primary emphasis with IRM is on the condition in which the ecosystem is maintained. Activities that can help maintain healthy forest ecosystems include:

- Harvest weak or damaged trees while leaving enough *cavity trees*, *snags*, and *coarse woody debris* for wildlife. *
- Maintain *Special Management Zones* along watercourses. *
- Leave unharvested *wildlife clumps* and corridors of trees for wildlife habitat. *
- Encourage a mix of species to increase diversity on your woodlot and reduce the risk of damage from insects or disease.
- Space trees to make sure they have enough space to grow.
- Avoid making ruts, compacting soil or wounding trees.
- Be aware of insect populations.

- Ensure areas are regenerated.
- Identify ecologically sensitive areas or areas with high conservation value and leave them untouched.

**These are required under the Wildlife Habitat and Watercourses Protection Regulations which must be followed when forest harvesting takes place on any woodland in Nova Scotia. Please contact the DNR for more details.*

Depending on your objectives and the resources on your woodlot you may want to consider opportunities for the following:

- Recreation & Aesthetics
- Protect Areas
- Minerals & *Aggregates*
- Roads & Trails
- Community use
- Wildlife management
- Water quality
- *Certification*

6. Develop an IRM Plan

The following outline may guide you as you develop your plan:

1. Introduction

- Woodlot location
- Woodlot history
- Goals & Objectives

2. Woodlot Description

- Map
- Boundary line conditions
- Significant features
- Stand or ecosystem descriptions, including ecosystem health

3. Recommendations

- *Zoning*
- Schedule of activities
- Operating plan

4. Summary

- Sources of further information

- Record keeping information

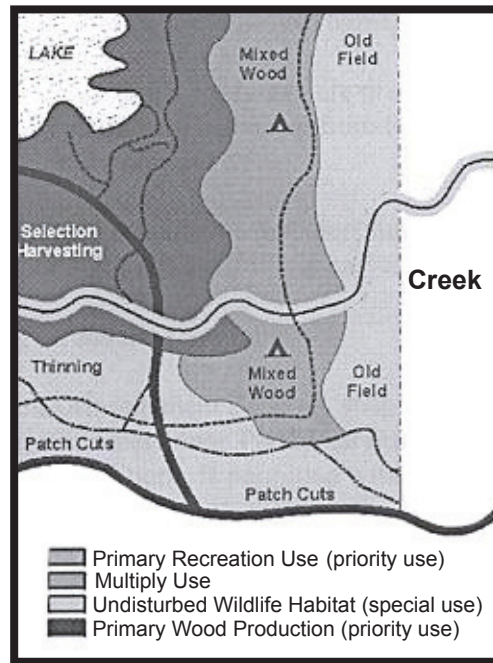


Illustration 4: Zoning may help establish priorities for your woodlot.

Glossary

Aggregates - A mass or body of rock particles, and/or mineral grains; or any hard materials such as sand, gravel, slag, or crushed stone.

Biodiversity - Also called biological diversity is the variety of plants, animals and other living organisms in all their forms and levels of organization; includes genes, species, and ecosystems as well as the processes that link them.

Cavity trees - Living or dead trees with natural or excavated holes or cavities.

Coarse woody debris - Remains of fallen trees on the forest floor.

Ecosystem - A complex system of living organisms.

Intrinsic/Existence value - A value in itself regardless of its usefulness to humans.

Non-timber forest products - Are products other than wood that are harvested from forests (e.g. mushrooms, berries)

Renewable resource - A resource that will grow back or replenish itself if it is harvested or used.

Snag - A standing dead tree.

Special Management Zone - A strip along each edge of a watercourse. Partial harvesting is permitted with the zone under certain conditions.

Wildlife - All wild mammals, birds, reptiles, amphibians, fishes, invertebrates, plants, fungi, algae, bacteria, and other organisms.

Wildlife clump - Areas of uncut trees left on a site after harvesting where wildlife can feed and find shelter.

Wildlife corridor - A continuous undisturbed area left after harvesting where wildlife can travel, feed, and find shelter. Usually connecting isolated patches of habitat along watercourses.

Zoning - Defining areas of similar use. There are three types of zones: 1. Multiple use (more than one use), 2. Special use (one use dominates), and 3. Priority use (one use has priority but others are not excluded).

For More Information

Please refer to the full length version of **Home Study Module 1A: Getting More From Your Woodlot: An Introduction to Integrated Resource Management**. This module, along with others in the Home Study series, are available free from:

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