

**MANAGEMENT OF FORESTS IN MAINE:
WHAT DO YOU THINK?**

BACKGROUND INFORMATION BOOKLET

PLEASE

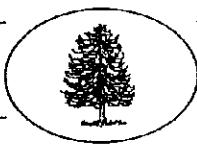
READ

THESE

PAGES

BEFORE YOU BEGIN THE SURVEY

BACKGROUND INFORMATION FOR THE SURVEY



INFORMATION ABOUT MAINE FORESTS

THE FORESTS OF MAINE

- Maine is the most heavily forested state in the nation with ninety percent of the state covered by forests (17 million acres).
- About three percent (0.5 million acres) of Maine's forest land is owned by the State of Maine, about one percent (0.1 million acres) is owned by the federal government and about ninety-six percent (16.9 million acres) is owned by private individuals and corporations.
- About 9.25 million acres (54%) of Maine's forest land is located in the North Woods.
- The North Woods are unorganized townships in western and northern Maine.
- About 3,400 acres of Maine's North Woods have been acquired by the state in the last five years.
- Maine's North Woods support over 20 commercial tree species.
- The North Woods contains about 3,400 ponds and lakes one acre or more in size, five major rivers, and 40 major streams.

SERVICES PROVIDED BY FORESTS

- Maine's forests provide habitat for many types of wildlife.
- Maine's forests supply most of the raw material for the state's wood product industries.
- Maine's forests provide jobs and economic prosperity to the citizens of the state.
- Maine's forests contribute to the quality of life and offer vast recreational opportunities.
- Wetlands, bogs and kettle holes in Maine's forests collect precipitation and surface water and carry these waters to underground aquifers that supply good quality drinking water.
- Forests use carbon dioxide and release oxygen.

FOREST MANAGEMENT ACTIVITIES

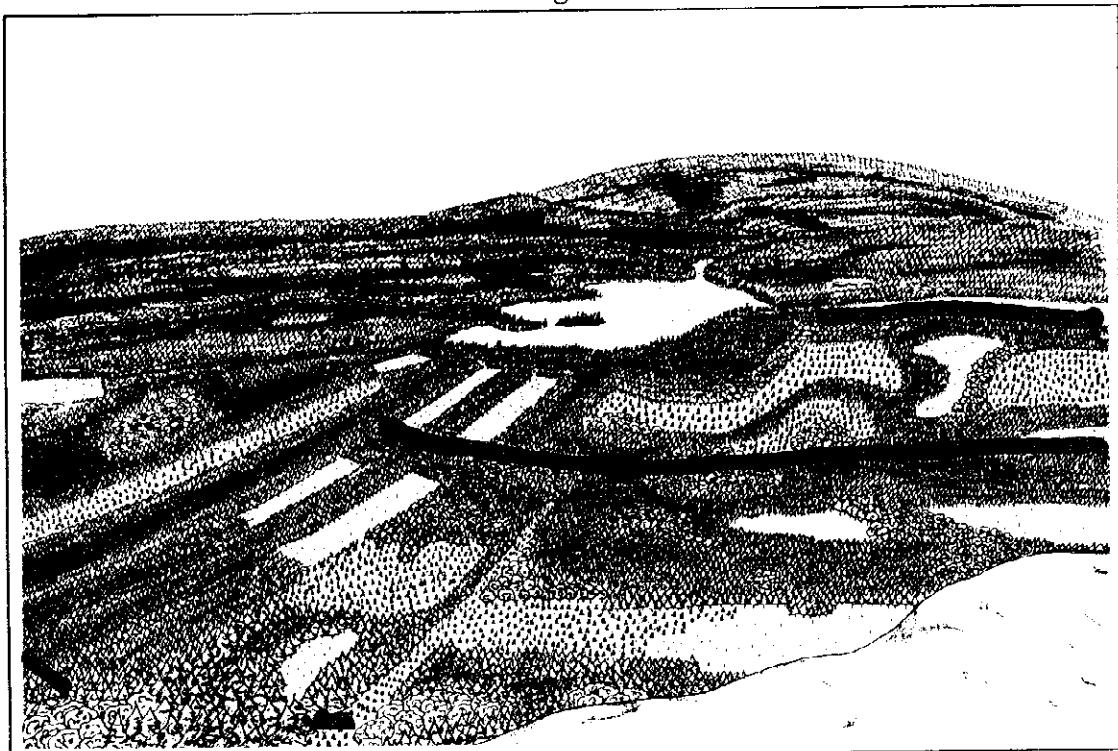
In this survey, you will be asked to carefully consider forest management activities for a piece of land in Maine's North Woods that would be owned by the State of Maine. Each forest management activity has several alternative options for you to consider. The rest of this Background Information Booklet describes the forest management activities you will be asked to consider. The forest management activities are:

- Roads
- Dead and Dying Trees
- Live Trees Standing after Harvesting
- Maximum Size of Harvest Openings
- Percentage of Forest Land Available for Timber Harvesting
- Watershed Protection
- Slash Disposal

Each forest management activity is described in greater detail on the following pages. It may be helpful to mark information you feel is important. These pages are meant to be informative. Please feel free to refer back to them while you are completing this survey.

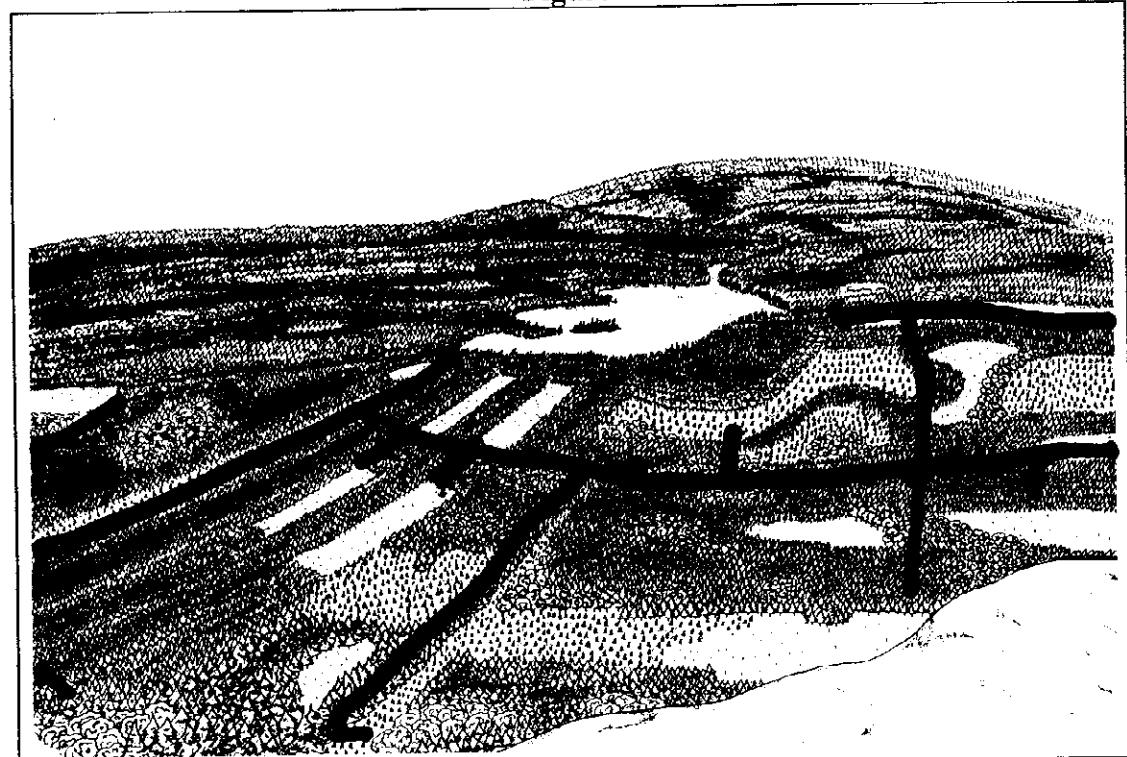
ROADS EXAMPLES

Figure 1



One road every mile.

Figure 2



One road every quarter mile.

ROADS

What does it mean?

Gravel roads are created in the forest to access harvest areas and to remove harvested timber.

Examples

Figure 1 on the top of the previous page shows one road every mile. Figure 2 shows one road every quarter mile.

What's going on in Maine?

Most forest land in Maine has one road every half mile.

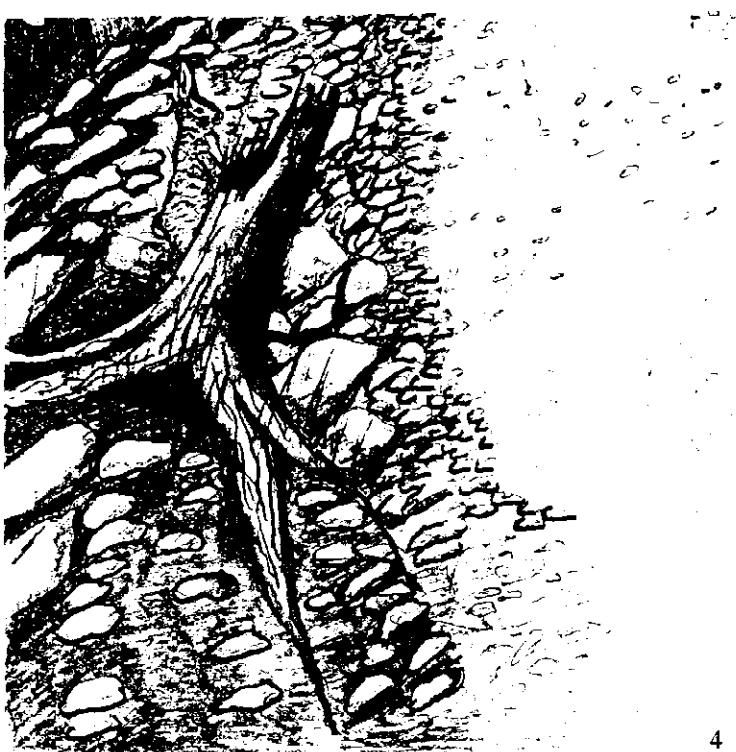
Alternative Perspectives

- Roads open the forest for recreation and other uses, making ponds, lakes, and rivers more accessible.
- Roads can contribute to the overuse of remote areas and disrupt wildlife.
- Roads allow harvestable trees to be removed from the forest.
- Roads that are poorly designed can create erosion and water quality problems.

Alternative Options

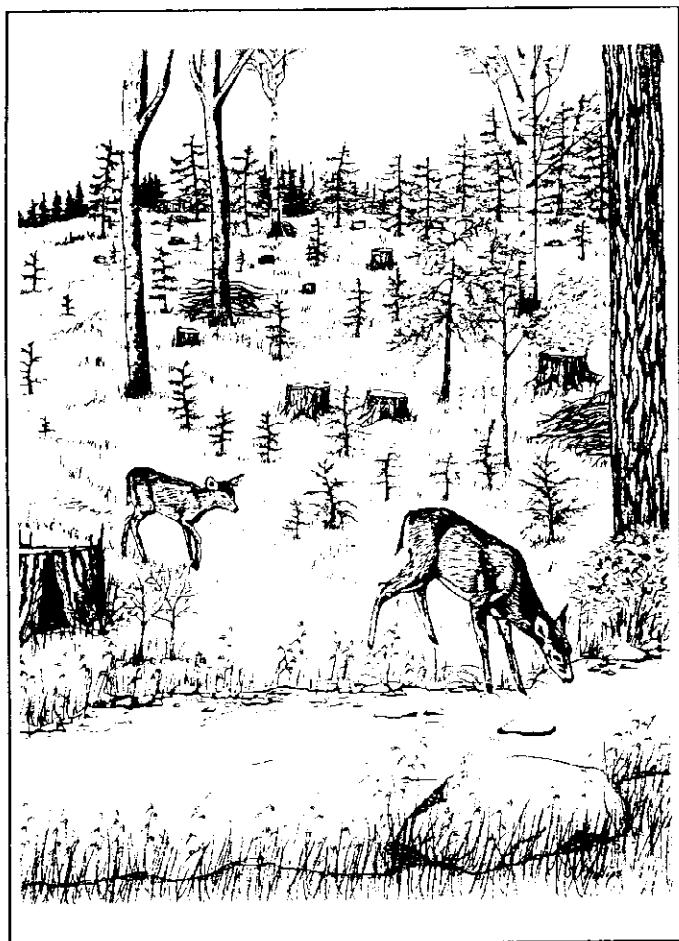
You will be asked to consider three options for the number of roads to be built on a specific piece of forest land in Maine's North Woods. The options are:

1. One road every mile.
2. One road every half mile.
3. One road every quarter mile.



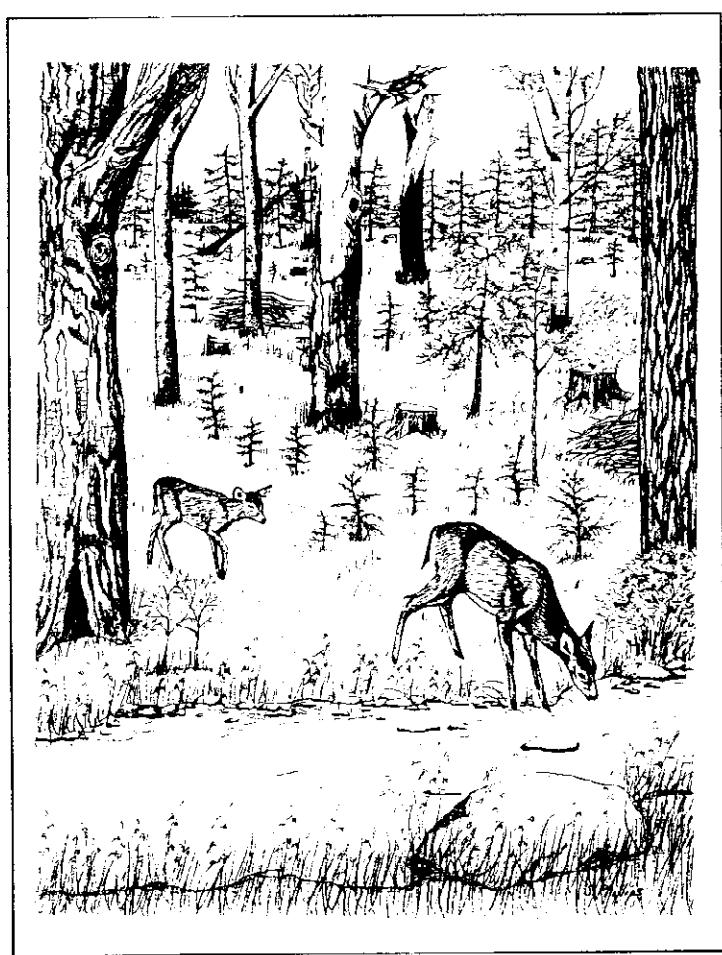
DEAD AND DYING TREES EXAMPLES

Figure 3



**All dead and dying trees removed
from a harvest area.**

Figure 4



Leave one dead or dying tree about every 66
feet after harvesting (10 trees per acre
after harvesting).

DEAD AND DYING TREES

What does it mean?

This forest management activity refers to trees that are still standing or partially standing, but are no longer part of the growing stock of trees. These trees are in the process of decaying.

Examples

Figure 3 on the top of the previous page shows a harvest opening where all the dead and dying trees have been removed from the harvest area. Figure 4 shows a harvest opening where one dead or dying tree is left about every 66 feet.

What's going on in Maine?

The standard practice, under OSHA (Occupational Safety and Health Administration) regulations, is to remove all dead trees and broken or rotten tree limbs in a harvest area before harvesting.

Alternative Options

You will be asked to consider three options for the removal of dead and dying trees from harvest areas on a specific piece of forest land in Maine's North Woods. The options are:

1. Remove all the dead and dying trees in harvest areas.
2. Leave one dead or dying tree about every 93 feet after harvesting (5 trees per acre).
3. Leave one dead or dying tree about every 66 feet after harvesting (10 trees per acre).

Alternative Perspectives

- Dead and dying trees in harvest areas pose a hazard to people who work and recreate in the forest.
- Hundreds of wildlife species in Maine use dead and dying trees for shelter and nesting such as the pileated woodpecker, raccoon, and spotted salamander.



LIVE TREE STANDING AFTER HARVESTING EXAMPLES

Figure 5



No live trees greater than 6 inches
thick left standing after harvesting

Figure 6



One tree at least 6 inches thick about every
10 feet left standing after harvesting (459 trees
per acre).

LIVE TREES STANDING AFTER HARVESTING

What does it mean?

This forest management activity refers to live trees left standing in a harvest opening after harvesting. These trees do not include the trees in the river, lake, pond, wetland and stream protection areas and do not include trees that separate harvest openings.

Examples

Figure 5 on the top of the previous page show a harvest opening where no live trees greater than 6 inches thick are left standing after harvesting. Figure 6 shows a harvest opening where one tree at least 6 inches thick is left standing about every 10 feet per acre after harvesting.

What's going on in Maine?

More than 153 softwood trees that are at least six inches thick are generally left standing on each acre after harvesting in Maine.

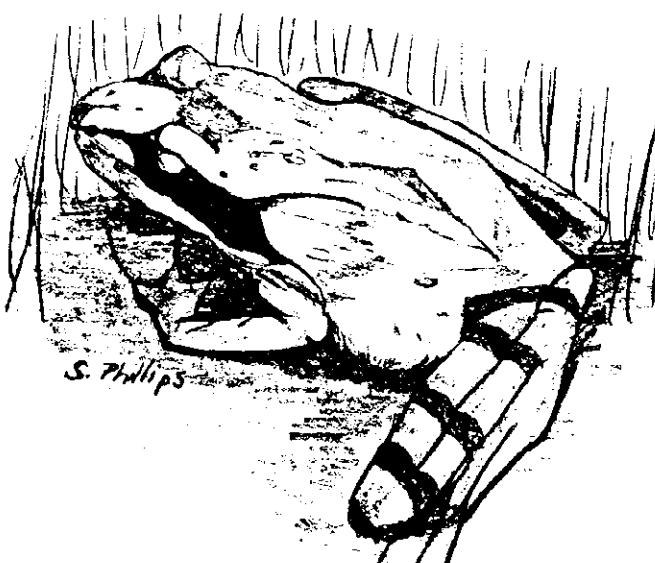
Alternative Perspectives

- Without live trees left in harvest openings, some wildlife may not find protection from the weather and predators such as salamanders, frogs, and toads.
- Mature live trees left in harvest openings are a revenue opportunity that is lost.
- In some areas live trees are needed in harvest openings to provide seeds to regenerate the forest.
- Isolated live trees left in harvest openings may be susceptible to lightning possibly leading to a forest fire.
- Live trees left in harvest openings provide food for some wildlife.
- In some areas it is important to remove most of the live trees to reduce shade so that seedling trees can grow.

Alternative Options

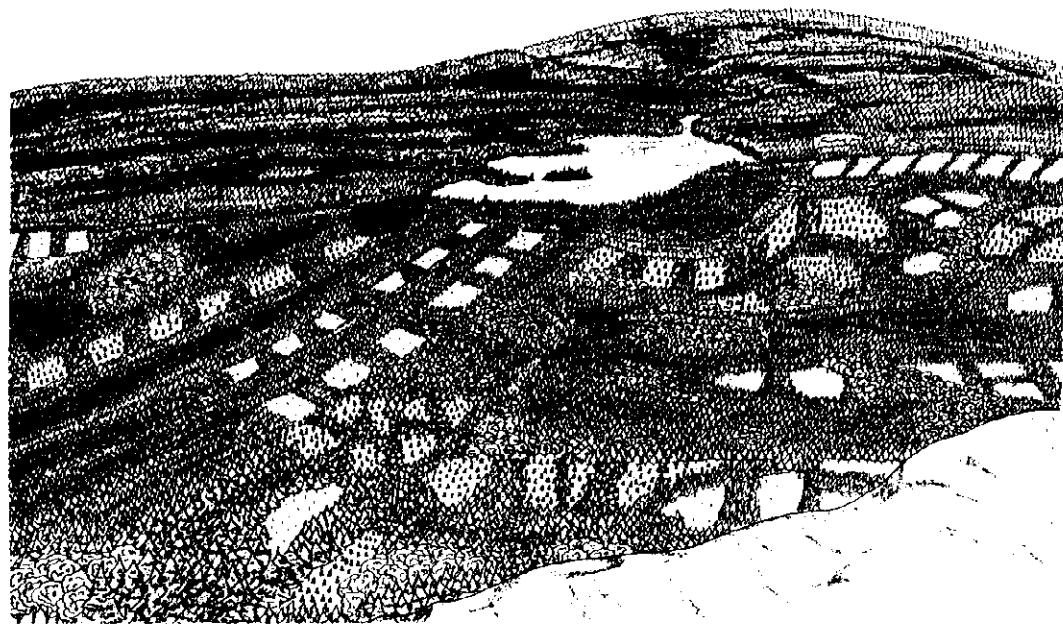
You will be asked to consider three options for the number of live trees standing in harvest openings after harvesting on a specific piece of forest land in Maine's North Woods. The options are:

1. No trees greater than 6 inches thick left standing in a harvest opening after harvesting.
2. One tree at least 6 inches thick about every 17 feet left standing after harvesting (153 trees per acre).
3. One tree at least 6 inches thick about every 10 feet left standing after harvesting (459 trees per acre).



MAXIMUM SIZE OF HARVEST OPENINGS EXAMPLES

Figure 7



A harvest opening less than 5 acres.

Figure 8



A harvest opening between 125 and 250 acres.

MAXIMUM SIZE OF HARVEST OPENINGS

What does it mean?

This forest management activity refers to how large an opening timber harvesting can create in the forest.

Examples

In Figure 7 on the top of the previous page the area contained in green shows a harvest opening that is less than five acres. In Figure 8, the area contained in green shows a harvest opening that is between 125 and 250 acres.

What's going on in Maine?

The size of harvest openings generally vary with the age and type of forest and with the objectives of the land owner in Maine.

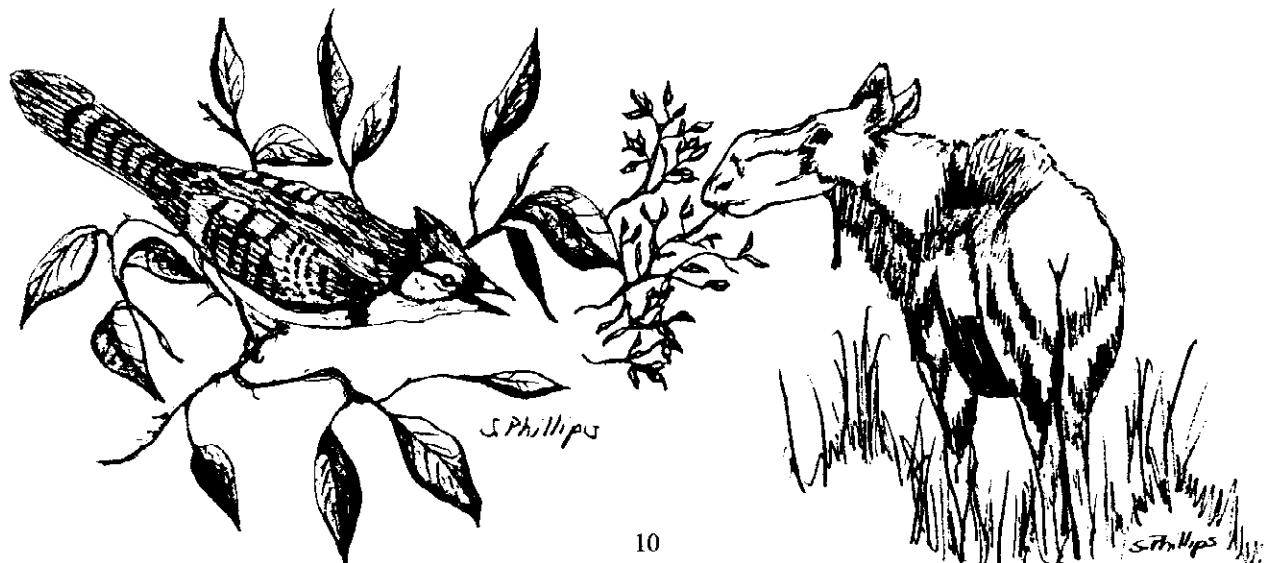
Alternative Perspectives

- Some wildlife benefit from large harvest openings such as moose, bluebird, and kestrel.
- Some wildlife benefit from small harvest openings such as deer, fox and partridge.
- Larger harvest openings provide larger forested areas for wildlife once the trees grow back.
- Smaller harvest openings can result in a checkerboard pattern that fragments wildlife habitat.

Alternative Options

You will be asked to consider four options for the maximum size of harvest openings on a specific piece of forest land in Maine's North Woods. The options are:

1. A maximum harvest opening less than 5 acres.
2. A maximum harvest opening between 5 and 35 acres.
3. A maximum harvest opening between 36 and 125 acres.
4. A maximum harvest opening between 125 and 250 acres.



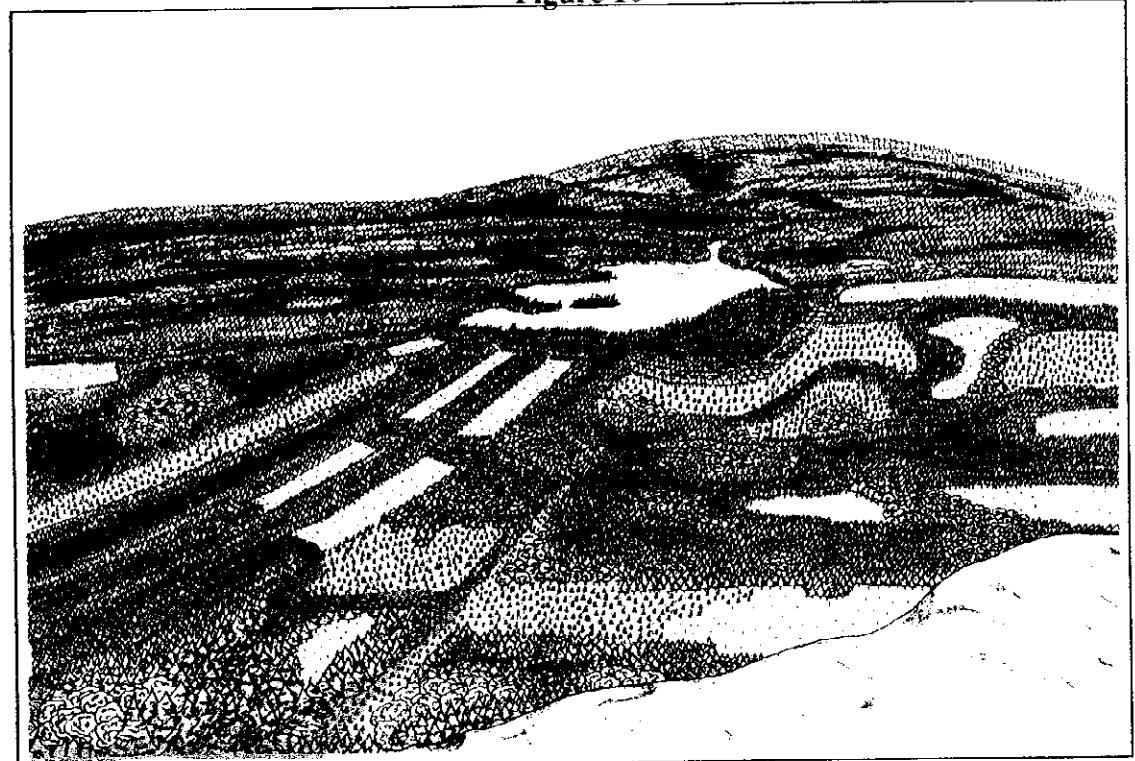
PERCENTAGE OF LAND AVAILABLE FOR TIMBER HARVESTING EXAMPLES

Figure 9



90% of the forest land for harvest and 10% set aside as a natural area.

Figure 10



10% of the forest land for harvest and 90% set aside as a natural area.

PERCENTAGE OF FOREST LAND AVAILABLE FOR TIMBER HARVESTING

What does it mean?

This forest management activity refers to the portion or share of the forest land that is available for timber harvesting. The remaining portion of the forest land is set aside as a natural area with no timber harvesting.

Examples

In Figure 9 on the top of the previous page the area contained in the green border shows 90% of the land as available for timber harvesting and 10% is set aside as a natural area. In Figure 10, the area contained in the green border shows 10% of the land as available for timber harvesting and 90% set aside as a natural area.

What's going on in Maine?

Eighty-four percent of land owned by the State of Maine (4% of the total forest land) is available for timber harvesting. Most privately owned land (95% of the total forest land) is available for timber harvesting.

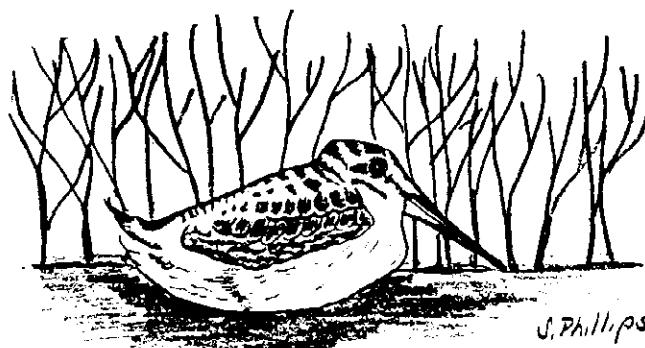
Alternative Perspectives

- Land available for timber harvesting provides state revenue and jobs.
- Land that is not available for timber harvesting is important for ecological research and wildlife habitat such as winter shelter for deer.
- In some areas, timber harvesting provides openings to view the scenic beauty of distant horizons.
- In other areas, timber harvesting diminishes the scenic beauty of the forest.
- Some wildlife do best in unharvested areas such as spruce grouse, goshawk, and pine martin.
- Some wildlife prefer to live mostly in harvested areas such as kestrels, bluebirds, and woodcock.
- Some wildlife use both unharvested and harvested areas such as red fox, moose and deer.

Alternative Options

You will be asked to consider five options for the percentage of forest land available for timber harvesting on a specific piece of forest land in Maine's North Woods. The options are:

1. 90% of the land available for harvest and 10% set aside as a natural area.
2. 80% of the land available for harvest and 20% set aside as a natural area.
3. 50% of the land available for harvest and 50% set aside as a natural area.
4. 20% of the land available for harvest and 80% set aside as a natural area.
5. 10% of the land available for harvest and 90% set aside as a natural area.



WATERSHED PROTECTION EXAMPLES

Figure 11



A 500 foot watershed protection zone.

Figure 12



A 75 foot watershed protection zone.

WATERSHED PROTECTION

What does it mean?

This forest management activity refers to forested zones that surround rivers, lakes, ponds, and wetlands greater than 10 acres and streams that drain areas greater than 50 square miles.

Examples

Figure 11 on the top of the previous page shows a 500 foot protection zone on both sides of a stream. Figure 12, shows a 75 foot protection zone on both sides of a stream.

What's going on in Maine?

The standard practice is to leave at least a 250 foot zone where most trees are not harvested for the protection of rivers, lakes, ponds, wetlands and streams. When a stream drains less than 50 square miles at least a 75 foot protection zone is left. On Maine's public forests a 330 foot protection is left.

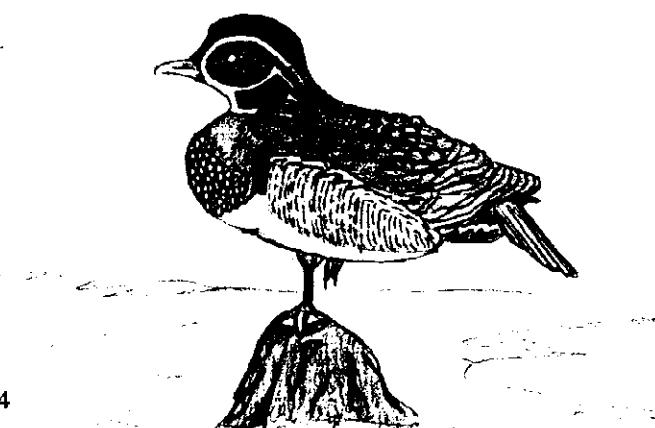
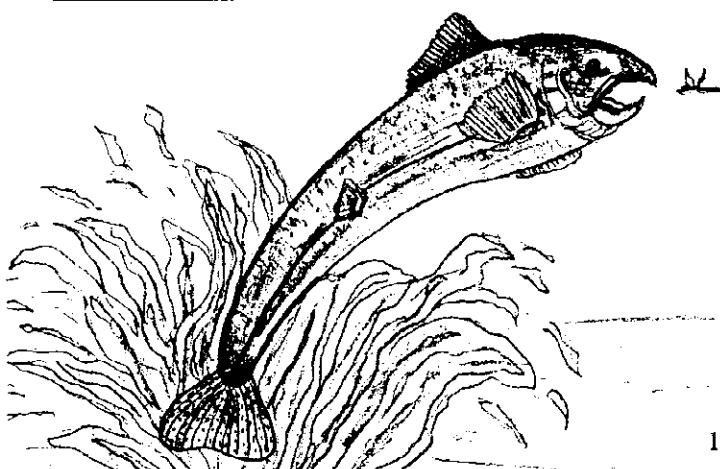
Alternative Options

You will be asked to consider three options for river, lake, pond, wetland and stream protection on a specific piece of forest land in Maine's North Woods. The options are:

Alternative Perspectives

- Protection zones help prevent erosion into any water near the harvest area.
- Trees left in a narrow protection zone are susceptible to blow downs.
- Protection zones maintain the scenic beauty of the forest from the water.
- Trees left in a large protection zone represent forgone revenue.
- Protection zones provide essential habitat for wildlife and help keep streams cold for brook trout.
- Maintenance of protection zones increase administrative cost thus reducing revenues from the forest.

1. At least a 500 foot protection zone for rivers, lakes, ponds, wetlands and streams.
2. At least a 250 foot protection zone for rivers, lakes, ponds, wetlands and streams.
3. At least a 75 foot protection zone for rivers, lakes, ponds, wetlands and streams.



SLASH DISPOSAL EXAMPLES

Figure 13



Slash left on the ground in a harvest area where it falls.

Figure 14



All slash removed from a harvest area.

SLASH DISPOSAL

What does it mean?

Slash is bark, branches, tree tops, log sections, cull logs, uprooted stumps and broken trees left on the ground as a result of timber harvesting.

Examples

Figure 13 on the top of the previous page shows a harvest area with the slash left on the ground where it has fallen during harvesting. Figure 14 shows all of the slash removed from a harvest area.

What's going on in Maine?

There is no standard practice. The disposal of slash varies with the type of logging operation. In a manual operation, slash is left on the ground where it falls. A whole tree operation creates one large pile of slash by the road side. In a biomass operation, all the slash is removed from a harvest area to be used as wood fuel or chips for making paper.

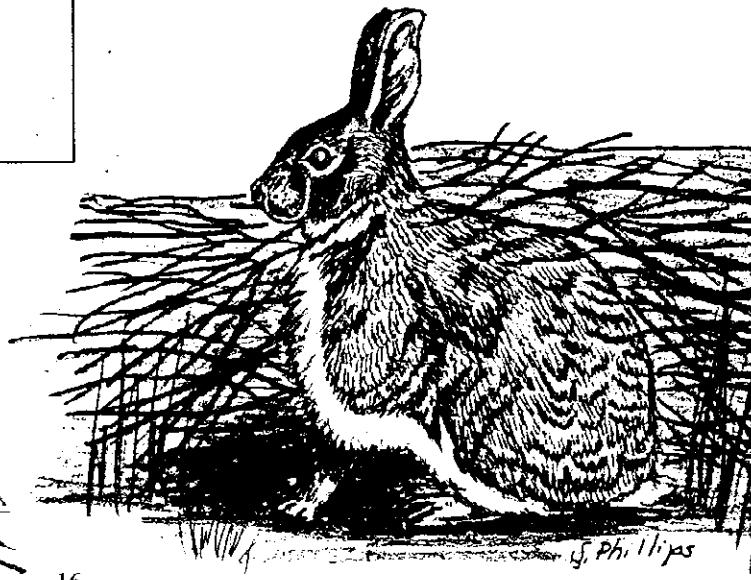
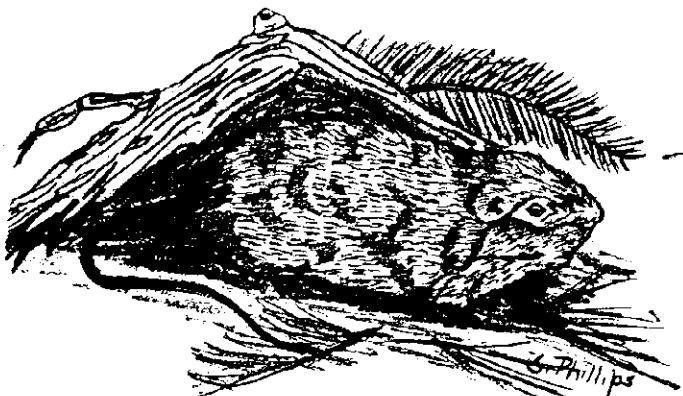
Alternative Options

You will be asked to consider four options for the disposal of slash on a specific piece of forest land in Maine's North Woods. The options are:

1. Leave slash on the ground in harvest areas where it falls.
2. Distribute slash along the skid trails.
3. Leave slash in one pile by the road.
4. Remove all slash from harvest area.

Alternative Perspectives

- Slash nourishes the soil as it decays.
- Slash diminishes the scenic beauty of the forest.
- Slash provides shelter for small mammals, birds, amphibians and insects.
- Slash is an obstacle and possible hazard to recreationalists and people who work in the forest.
- Slash tends to shield bare soil from erosion and frost heaving.
- However, slash can also hinder regeneration by blocking sunlight to the seedlings lying underneath.



**Please complete the Survey
and
Feel Free to refer back to
the information in this Booklet**