Before you EMBARK ON ANY RECREATION OR AESTHETIC DEVEL-OPMENT PROJECT, IT IS IMPORTANT TO **INVENTORY YOUR** PROPERTY FOR THE NATURAL FEATURES THAT WILL ENHANCE YOUR GOALS, AS WELL AS AREAS THAT ARE FAIRLY EASY TO DEVELOP AND MAINTAIN.

Programs and activities are available to all persons without regard to race, color, sex, disability, religion, age, sexual orientation, or national origin

This project is a collaboration of the Southern New England Forest Consortium, Inc., and the University of Rhode Island Cooperative Extension Home\*A\*Syst Program. Written by Holly K. Burdett<sup>2</sup>, Christopher Modisette, Alyson McCann and Brianne Neptin . Special thanks to all publication reviewers. Funding for this project was provided by the USDA Forest Service in cooperation with the Rhode Island Department of Environmental Management Division of Forest Environment and the USDA . Renewable Resources Extension Act, URI Cooperative Extension







### Where do I turn for more Information & help?

#### **RI DEM Division of Forest Environment** (401) 647-3367 • www.dem.ri.gov

- To talk with a state service forester.
- Obtain assistance with alternative forest uses & recreational development; a list of consulting foresters and licensed wood

## **RI DEM Sustainable Watersheds Office**

(401) 222-3434 • www.dem.ri.gov

• Information and publications on alternative forest products and site assessment.

## RI DEM Division of Fish and Wildlife

(401) 789-3094 • www.dem.ri.gov

- Information on hunting rules, regulations and safety education training.
- To talk with a state wildlife biologist.

#### **Rhode Island Forest Conservators** Organization (RIFCO)

(401) 568-3421 • www.rifco.org

• Educational programs and events, newsletter, Rhode Island Tree Farm Program, links to numerous publications and local, state, and federal forestry agencies and organizations.

#### **URI CE GreenShare Program & Plant Protection Clinic**

(401) 874-2900 • www.uri.edu/ce/ceec

- Factsheets on Insect and Animal Pests, Tree and Shrub Culture, Integrated Pest Management, available on-line at www.uri.edu/ce/factsheets; Sustainable Trees and Shrubs Manual, available on-line at www.uri.edu/ce/factsheets/sheets/ sustplant.html
- Information and assistance with plant insect and disease identification.

#### The Audubon Society of Rhode Island (401) 949-5454 • www.asri.org

• Information, publications and programs about birds and other wildlife, environmental conservation, education and advocacy.

# **USDA Natural Resources Conservation**

(401) 828-1300 • www.ri.nrcs.usda.gov

• Obtain the Soil *Survey Map of Rhode Island* and assistance with the identification of and information about the soils on your property; technical assistance with conservation planning and practices; and local conservation district contacts.

# **Rhode Island Tree Council**

(401) 647-9922

• Tree Stewards Training Program — education series on tree planting and care; urban and community forestry.

#### The RI Natural History Survey

(401) 874-5800 • www.uri.edu/ce/rinhs

• Information about invasive species, Rhode Island's ecology, biodiversity protection, and extensive links to many related organizations and publications.

#### The Rhode Island Wild Plant Society (401) 783-5895 • www.riwps.org

• List of native plants; official RI Invasive Species Council list of invasive plants; special programs, affiliations & newsletter.

#### USDA Forest Service, Northeastern Area, **State and Private Forestry**

www.na.fs.fed.us

Links to Durham, NH Field Office (603) 868-7600 • www.fs.fed.us/na/durham

• Information on Urban & Community Forestry; Forest Products Publications; Wildlife; On-line Library.

#### **Cornell Cooperative Extension, Department** of Natural Resources

(607) 255-2115

www.dnr.cornell.edu/ext/ext/index.htm publications:

www.dnr.cornell.edu/ext/ext/publications.htm

#### A Forest Landowner's Guide to Internet **Resources: States of the Northeast**

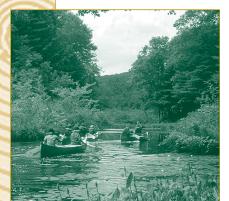
www.na.fs.fed.us/pubs/misc/ir/index.htm

• Publications and factsheets for: Recreation; Wildlife/Hunting; Economics of Forest Investments; Tree Identification/Species Info; Forest Health and Protection; Tree Planting/Regeneration; Forest Management Planning; Special Forest Products; Riparian Forest & Wetland Mgmt.; Biodiversity & Endangered Species; Glossaries of Forestry Terms.

#### **Other Recommended Resources:**

Clarke, Marion L., and James D. Mertes. Chapter 6: Recreation/Aesthetics and Environmental Enhancement, Florida's Forest Stewardship Program.

www.sfrc.ufl.edu/Extension/pubtxt/c1020f.htm While written for Florida, contains many basic principles for this topic.



#### Ways to enhance SCENIC AREAS & WOODSCAPING FOR **AESTHETIC** PLANT DIVERSITY

- ➤ Create a colorful edge
- > Create a blended yard
- ➤ Create a woodland garden
- ➤ Create Scenic Views
- ➤ Reclaim disturbed areas
- > Create recreational opportunities

# Working for Recreation & Aesthetics

n important goal for many woodland owners is to enjoy their property for recreational activities, its beauty, and the sense of peace that it provides. Not only are the tranquility and exercise beneficial to you, but managing your woods for these activities will also benefit forest health and wildlife. Before you embark on any recreation or aesthetic development project, it is important to inventory your property for the natural features that will enhance your goals, as well as areas that are fairly easy to develop and maintain. Refer to factsheet Where Do I Begin? A Forest is More than a Bunch of Trees, and the Woodland Area Inventory Sheet to review your woodland features

When designing your woodland projects, expand upon the valuable land features that already exist. For example, if you want to create a secluded clearing for relaxation or to promote certain wildlife species, look for areas where the understory growth is naturally not as dense, or where some trees have recently died or blown down. If you are an avid cross-country skier and would like to develop some trails, look for areas that offer challenge such as natural knolls and depressions. The options are endless.

and resources.

You may decide to undertake a project for particular recreational purposes including:

- ➤ Enhancing ecological and wildlife
- ➤ Enhancing scenic areas and aesthetic plant diversity
- ➤ Reclaiming disturbed areas
- > Creating recreational opportunities

Many, if not all, of these options may be compatible through careful planning and forethought.

#### Enhancing ecological and wildlife habitat

You may decide to enhance your woodlands for wildlife habitat, resulting in:

- ➤ Creating a bird sanctuary to go birding
- ➤ Hunting and fishing
- ➤ Creating a "wildlife refuge" for viewing and photographing
- ➤ Sheltering rare and endangered species

Whether some of these wildlife species already exist on your property, or you are challenged with creating or enhancing habitat for them, it is important to remember that any activity or change you make on the land can impact the forest ecosystem. Refer to factsheets Working for Clean, Plentiful Water; Working for Wildlife Habitat; and Working for Biodiversity and Protection from Invasive Species for planning information, project ideas, tips for minimizing adverse impacts, contacts and resources.

Below are some project ideas to enhance aesthetics and recreational opportunities in your woodlands. Use the Record of Woodland Area Plans and Activities sheet to record actions you plan to take and develop a time frame for accomplishing activities. Refer to the list of contacts and resources listed at the end of this factsheet for specific information and assistance with these activities.

Some Examples of Native Plant Species Attractive to Hummingbirds and Butterflies

For Sunny Areas:
Pearly Everlasting
Butterflyweed
Asters
Northern Blazing Star
Turk's Cap Lily
Cardinal Flower
Wild Lupine
Mountain Mints
Goldenrods
Joe-Pye Weed

For Shaded Areas:
Jack-in-the-pulpit
Wild Columbine
True Solomon's Seal
Bloodroot
Trillium
Mountain Laurel
Spicebush
Arrowwood Viburnum
Highbush and Lowbush
Blueberry
Swamp-azalea

The list of plants included here was provided by Lisa Gould, Executive Director of the Rhode Island Natural History Survey and Coordinator of the Rhode Island Invasive Species Council

You can also refer to the URI Cooperative Extension GreenShare Sustainable Trees and Shrubs Manual available at (401) 874-2900 or On-line www.uri.edu/ce/factsheets/sheets/sustplant.html

Contact the Rhode Island Wild Plant Society at (401) 783-5895 or on-line www.riwps.org for an additional list of native plants and for a list of invasive plants to avoid.

# Enhancing scenic areas & woodscaping for aesthetic plant diversity

#### Create a colorful edge

Many people enjoy forests that are colorful year-round, and it may take surprisingly little effort to enhance year-round color in your woodlands. One project includes adding color to the edge between your woods and backyard. An edge is a place where two different natural areas join, such as where woodlands meet an open field, your yard, or a water body. A properly constructed edge not only supports a variety of wildlife, but also improves the overall aesthetic look of your property.

- ➤ Plant a variety of trees and flowers that fruit and blossom at different times of the year and in a variety of colors. Remember that soil type and available sunlight will affect which plants are most suitable. Take care not to introduce invasive species. Consult the URI CE GreenShare Sustainable Trees and Shrubs Manual and the Rhode Island Wild Plant Society for more information. See the end of this factsheet for contact information.
- ➤ Maintain a mix of deciduous hardwood trees and evergreen trees
- ➤ Create or maintain wavy edges with indentations to improve visual diversity
- ➤ Introduce irregularity to straight forest edges
- Establish or maintain irregular outlying clumps of trees to create a natural forest edge appearance.

#### Create a blended yard

Whether you realize it or not, your lawn is actually a man-made clearing in the forest. Another project includes working with the original design of your yard to create a sanctuary for yourself, promote various wildlife species, and maintain a more energy efficient home.

- ➤ If you have a relatively open lawn with few or no trees or shrubs, consider planting some. Strategically placed trees & shrubs can add shade to your yard and provide a wind barrier. In fact, well-placed trees can increase the energy efficiency of your home by reducing exposure to sun and wind.
- ➤ Consider planting shrubs or flowers

- that attract butterflies and hummingbirds. This will add to the sense of peace and tranquility you may desire for your yard.
- Enhance a secluded area in your backyard with a rustic bench and wild flowers to provide rest and relaxation – a place to "get away." Again, choose your plants wisely and avoid introducing invasive species. Consult the URI CE GreenShare Sustainable Trees and Shrubs Manual and the Rhode Island Wild Plant Society for more information. See the end of this factsheet for contact information.

#### Create a woodland garden

You can create various types of gardens to increase the diversity deeper within your woodlands. Two examples are wildflower and shade gardens. Both types of gardens add variation, enhance year-round color, and provide a splendid sanctuary.

#### Create Scenic Views

A woodland area without underbrush, layers of dead leaves, rotting logs, and fallen tree limbs may be pleasing to the eye, but is lacking in wildlife habitat value. Clearing the forest floor of dead trees and understory growth may also reduce forest health in the long term by removing nutrients that would have returned to the soil during the decay process. If you desire to create a parklike look and feel to your woodlands, here are some suggestions for maintaining some wildlife habitat value:

- ➤ Locate certain tree stands, such as birch trees, that are naturally given to visual enhancement when low-lying branches and dense understory growth are removed.
- ➤ Create certain patches or strips of park-like areas, such as birch tree stands or other designated areas that are connected to alternate patches or areas where dead trees and dense understory vegetation is left intact. Create paths to access these areas.
- ➤ If a woodland area is not large enough to allow for alternating patches of intensively landscaped areas, consider "thinning" the under story vegetation and leaving some dead trees and fallen logs.

#### Reclaiming disturbed areas

Improving "unsightly" areas may not only be an invigorating task, but one that also improves the economic value of your land. A parcel of land that is well cared for and pleasing to the eye is usually higher in value.

Seventy-five percent of Rhode Island was once cleared for agricultural production--much of which has reverted back to forest. Past land clearing, conservation, and pasture management practices coupled with eventual abandonment often allowed aggressive native species, such as green brier, or introduced, invasive species such as multifloral rose or autumn olive become established. Even natural disasters such as fire, insect & disease infestations, ice damage, windstorm blow-downs and hurricanes have left their mark.

The improvements needed to enhance the aesthetic look of these areas are similar to suggestions for improving forest health. Refer to the factsheet Working for Forest Resources and Health for tips and more information about pruning, hazard tree management, and crop tree management. If invasive species predominate, eradication efforts may be costly and labor intensive. However, starting in a small, yet strategic area may prove rewarding and inspire you to continue with this effort over the long term. Refer to factsheet Working for Biodiversity and Protection from Invasive Species for more information about invasive species.

You may wish to enlist the assistance of a professional landscaper, landscape architect, or licensed arborist in instances where past disturbance was significant and widespread--such as an old gravel pit.

## Creating recreational opportunities

Developing your property for recreational uses may require a significant input of time, labor and financial resources up front, but the benefits last for many years to come. If you desire to use your land for hunting, hiking, biking, horseback riding, riding snowmobiles, or cross country-skiing, the first step is to construct proper trails.

The level of planning and construction needed for these trails will depend on who the end users will be. If it is only you and your immediate family using them, the trails at a minimum need to be free of hazard trees or other potential safety concerns such as proximity to water bodies, steep slopes, or ledge cliffs. Otherwise, the trails can be as easy or as challenging to navigate as you wish.

If you plan on allowing limited public access (friends and neighbors), or full public access for a fee, then a lot of planning and design may be required to ensure widespread safety and navigability of the trails themselves, as well as adequate parking areas and access roads. It is recommended that you work with natural resource professionals such as the RI DEM Division of Forest Environment, the RI Audubon Society, the USDA Natural Resources Conservation Service and other similar groups and agencies for assistance with planning, construction and liability issues. Refer to factsheet Working for Alternative Forest Products for more information and contacts concerning recreational development.

In addition to safety, another big concern with trail and access road construction is protection from soil erosion and sedimentation during and after rainfall or snowmelt. This is especially important if the trail is located near a water resource. Refer to *Working for Clean Plentiful Water* for more information on soil erosion and stormwater runoff control. A few tips for trail construction are also provided below:

- ➤ Locate access roads and trails on the contour to take advantage of natural curves within the landscape. This can reduce construction labor and expense, as well as soil erosion and stormwater runoff.
- ➤ Establish or maintain perennial vegetation along trails and access roads to enhance wildlife habitat, visual quality, and erosion and stormwater runoff control.
- > Develop narrow paths within environmentally sensitive areas.
- ➤ On heavily used access roads apply low-cost mulching materials such as woodchips produced from your own tree removal. In areas that are steep or open to public access, crushed stone or other more expensive materials may be needed.

# RECREATIONAL OPPORTUNITIES

- ≻Hunting
- ➤ Hiking Trails
- ➤ Biking Trails
- ➤ Horseback Riding
- ➤ Riding Snowmobiles
- ➤ Cross-Country Skiing
- *>* Swimming
- ➤ Fishing
- ➤ Wildlife Observation