Protecting and Enhancing Shorelands for Wildlife

What is a shoreland area?

Shorelands, often called riparian areas, refer to naturally vegetated areas bordering a lake, pond, stream, or other wetland. By nature of their close proximity to the water, riparian areas play an important role in maintaining the health of the surrounding environment. Land that is within 100 feet of the water body is of particular importance. This is considered the minimum distance needed to minimally protect water quality and provide some, but not all, habitat for wildlife. In addition, vegetated shoreland areas stabilize shorelines, reduce flood waters, moderate water temperatures, and filter sediment and nutrients.

Why are shorelands important to wildlife?

Many species of wildlife travel between the water and adjacent shoreland areas to find food, nest sites, or to escape from predators. Thus, the water and upland areas are inseparable as habitats.

For example, turtles spend summers in the water feeding on aquatic organisms and loafing in the sun on floating logs. They leave the water to find suitable nest sites to lay their eggs and sometimes to search for food. Vegetated shoreland areas provide safe passage for the turtles to reach their destination.

Shoreland areas provide food:

- Trees, shrubs, and vines produce a variety of berries, seeds, and nuts. Common shoreland shrubs and vines such as highbush blueberry, dogwoods, viburnums, shadbush, chokeberries, grape vine, and Virginia creeper yield berries eaten by many songbirds and mammals. Oaks, hickories, and hornbeams produce nuts that are eaten by squirrels, deer, black bear, grouse, blue jays, wood ducks, and wild turkeys.

- A diversity of shoreland plants attract insects which are critical food for birds and their young. Insects, such as dragonflies, that feed among the vegetation along the water’s edge often lay their eggs in water producing aquatic larvae that are food for frogs, salamanders, snakes, turtles, herons, mink, and fish.
Shoreland areas shelter wildlife:

- Live trees and standing dead trees (snags) with cavities offer nest sites for wood ducks, mergansers, owls, woodpeckers, nuthatches, wrens, and bluebirds in shoreland areas. Squirrels, bats, fishers, porcupines, and gray foxes also use these cavities as resting areas. Kingfishers, swallows, ospreys, and hawks perch on and feed from the branches of snags that overhang water.

- Vegetation in shoreland areas provides safe cover for ground nesting mallards and black ducks. Warblers, flycatchers, blackbirds, and sparrows nest in the thick shrubby vegetation in shoreland areas. Wood, spotted, and Blanding’s turtles spend much of the summer on dry land not far from shorelands seeking shelter from predators and severe temperatures. Thick vegetation in the shoreland area is critical to their survival.

Shoreland areas support wildlife travel corridors:

- Many animals travel far and wide in search of food and mates. Moose, deer, black bear, mink, and otter are a few wildlife species that regularly use forested shoreland areas to get from one place to another. These often linear corridors of vegetation enable wildlife to travel across the landscape relatively undisturbed by humans. Shoreland areas are most beneficial as travel corridors when they’re connected to larger blocks of valuable wildlife habitat.

Are you a shoreland owner?

A landowner who is fortunate enough to enjoy a waterfront property also has the opportunity to help protect an important part of nature. Activities that occur within shoreland areas can affect water quality as well as the quality of habitat for wildlife. Fortunately, with a little planning, landowners can enjoy swimming, fishing, nature study, and boating as well as help maintain clean water and healthy surroundings for themselves and other creatures.

Getting started

If you are a shoreland owner and want to maintain, enhance, or restore a shoreland area there are some simple and rewarding steps that can get you started.

1. Look at where your property is in relation to your neighbors, your community, and the surrounding area. One way to begin this search is to use maps. Tax maps available at your town hall show the property boundaries of all landowners in your community. Aerial photos (available from Natural Resource Conservation Service—see additional help) and topographic maps (call 1-800-USA-MAPS for information) offer great perspectives on the lay of the land. Your local Conservation Commission may have additional maps of the town’s natural resources.

2. Discover what’s on your property. Survey the unique features of your land such as kinds of plants (trees, shrubs, flowers, and vines), sights and sounds of wildlife (woodpecker holes, tracks, nests, bird songs and frog calls), and historical features (stonewalls, wells, old foundations).
3. Create a sketch or map of your property noting the unique features you’ve discovered. Keep a regular journal of your observations and to track your activities.

4. Develop some short and long term personal goals for you and your property. Long term planning is important to ensure that shoreland areas will be maintained into the future. Depending on the current condition of your shoreland property you may want to do one of the following:
   • maintain an existing shoreland area
   • restore an area that was deforested
   • enhance an area by planting trees, shrubs, vines, and other plants that have wildlife value.

What can be planted to enhance a shoreland area for wildlife?

Shorelands that have been deforested or that have minimal natural vegetation can be enhanced by supplemental planting. The table on page 4 should aid you in choosing the types of trees and shrubs to plant. See page 6 for other sources of information.

Before buying any plants, consider the soils and climate in your area. Check with local nurseries, your county UNH Cooperative Extension office, county Conservation Districts, and the State Forest Nursery for information on planting and for sources of plants.
### Recommended Plantings and Their Wildlife Value

#### Trees

**Balsam fir**
- seeds eaten by grouse, blue jays, chickadees, and nuthatches
- foliage provides excellent winter cover and nesting sites for mourning doves, blue jays, and robins
- deer, moose, and grouse feed on needles in winter

**White spruce**
- seeds eaten by woodpeckers, chickadees, red-breasted nuthatch, thrushes, purple finch
- used by mourning doves, woodpeckers, robins, kinglets, warblers, chipping sparrow, and finches as nest sites.
- needles and twigs eaten by deer and snowshoe hare in winter

**White pine**
- grouse and turkey feed on the needles
- seeds eaten by mourning doves, woodpeckers, chickadees, nuthatches, cedar waxwings, cardinals, finches, sparrows, crossbills, grosbeaks, chipmunks, squirrels
- used as nest sites by woodpeckers, nuthatches, cardinals, grackles, finches, sparrows
- large pines used by hawks, eagles, and owls as roost and nest sites

**Eastern hemlock**
- seeds eaten by chickadees, goldfinches, crossbills, pine siskins, red squirrels
- used as nest sites by mourning dove, blue jay, boreal chickadee, robin, wood thrush, warblers, crossbills
- dense hemlock excellent winter cover for grouse, turkey, deer
- bark is favorite food of porcupine

**Oak (red, white)**
- fruits (acorns) eaten by ducks, turkeys, grouse, woodpeckers, blue jays, crows, deer, bears, raccoons, squirrels, chipmunks
- deer feed on leaves and twigs

**Maple (red, sugar)**
- deer, moose, rabbit, and hare feed on twigs and bark
- good nest sites for robins, goldfinches, orioles, and grosbeaks
- seeds eaten by turkey, grouse, robin, cardinal, rose-breasted and evening grosbeaks, chipmunks, squirrels
Trees Continued

Shadbush

- June-August fruits eaten by grouse, woodpeckers, catbird, mockingbird, robin, thrushes, cedar waxwing, cardinal, Baltimore oriole, scarlet tanager, rose-breasted grosbeak, bear, chipmunk, squirrel

Birch (sweet, yellow, paper)

- buds eaten by grouse and goldfinches
- seeds eaten by ducks, turkey, blue jay, tufted titmouse, goldfinches, redpolls, pine siskins
- yellow-bellied sapsucker excavates nest cavities and probes for sap
- moose, hare, porcupine and beaver feed on twigs and bark

Shrubs

Alder (speckled, smooth)

- buds and seeds eaten by ruffed grouse; seeds eaten by redpolls, siskins, goldfinches
- provides nest sites and cover for willow and alder flycatchers, yellow warbler, red-winged blackbird, and woodcock

Dogwood (silky, gray, red-osier)

- fruits eaten by turkey, grouse, flicker, catbird, robin, wood thrush, bluebird, waxwings
- nest sites for catbirds and goldfinches
- buds eaten by grouse

Winterberry

- fruits persist into winter and eaten by flicker, crow, mockingbird, catbird, brown thrasher, robin, hermit thrush, cedar waxwing, red-winged blackbird

Elderberry and Blueberry

- fruits eaten by turkey, mourning dove, mockingbird, catbird, brown thrasher, robin, wood thrush, veery, bluebird, cedar waxwing, cardinal, rose-breasted grosbeak, bear, chipmunk, white-footed mouse

Viburnum (arrowwood, nannyberry, hobblebush, highbush cranberry)

- fruits eaten by robins, thrushes, bluebirds, cedar waxwings, vireos, chipmunks
- twigs and bark eaten by deer
Where to get additional help

There are a wealth of resources available to shoreland owners in New Hampshire. The best place to start is at the local level as this is the most accessible.

- Local community - (Conservation Commission and Planning Board)
- UNH Cooperative Extension (County offices - see page 7)
- County Conservation Districts (page 7)
- Audubon Society of New Hampshire (603) 224-9909
- NH Dept. Of Environmental Services (Shoreland Protection Act) (603) 271-3503
- NH Division of Forests and Lands (Forestry Laws) (603) 271-3456
- NH Division of Forests and Lands (State Forest Nursery) (603) 271-3456
- US Fish and Wildlife Service (603) 225-1411
- Natural Resource Conservation Service (NRCS) (603) 868-7581

Additional References


Credits

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## UNH Cooperative Extension County Offices

**Belknap County**  
PO Box 368  
Laconia NH 03247  
524-1737 FAX: 524-2574

**Carroll County**  
PO Box 367  
Conway NH 03818  
447-5922 FAX: 447-1035

**Cheshire County**  
33 West Street  
Keene NH 03431-3355  
352-4550 FAX: 355-3026

**Coos County**  
RR 2 Box 242  
Lancaster NH 03584-9612  
788-4961 FAX: 788-3629

**Grafton County**  
RR 1 Box 65F  
N. Haverhill NH 03774-9708  
787-6944 FAX: 787-2009

**Hillsborough County**  
Milford Office  
468 Route 13, South  
Milford NH 03055  
673-2510 FAX: 673-0597

Goffstown Office  
329 Mast Road, Unit 3  
Goffstown, NH 03045-4518  
624-9481 FAX: 624-9469

**Merrimack County**  
327 Daniel Webster Highway  
Boscawen NH 03303  
225-5505 or 796-2151 FAX: 796-2271

**Rockingham County**  
113 North Road  
Brentwood NH 03833-6623  
679-5616 FAX: 679-8070

**Strafford County**  
259 County Farm Road Unit 5  
Dover NH 03820-6015  
749-4445 FAX: 743-3431

**Sullivan County**  
24 Main Street  
Newport NH 03773  
863-9200 FAX: 863-4730

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## Conservation District Offices and Natural Resources Conservation Service

**Belknap County Conservation District Office**  
Federal Building, 719 Main Street Room 203  
Laconia NH 03246-2772  
528-8713 FAX: 528-8783

**Carroll County Conservation District & NRCS**  
44 Main Street, PO Box 533  
Conway NH 03818-0533  
447-2771 FAX: 447-8945

**Cheshire County Conservation District & NRCS**  
Route 12 South, R 1 Box 315  
Walpole NH 03608-9744  
756-2988 FAX: 756-2978

**Coos County Conservation District & NRCS**  
RR 2 Box 235  
Lancaster NH 03584  
788-4651 FAX: 788-2538

**Grafton County Conservation District & NRCS**  
RFD 2 PO Box 148B  
Woodsville NH 03785-0229  
747-2001 FAX: 747-3477

**Hillsborough County Conservation District & NRCS**  
Chappell Professional Building, 468 Route 13 South  
Milford NH 03055-3422  
673-2409 FAX: 673-0597

**Merrimack County Conservation District & NRCS**  
10 Ferry Street Box 312  
Concord NH 03301-5081  
225-6401 FAX: 224-8260

**Rockingham/Strafford County NRCS**  
243 Calef Highway, Telly’s Plaza  
Epping NH 03042  
679-1587 FAX: 679-4658

**Rockingham County Conservation District**  
118 North Road  
Brentwood NH 03833-6619  
679-2790 FAX: 679-2860

**Strafford County Conservation District Office**  
259 County Farm Road Unit 3  
Dover NH 03820-6015  
749-3037 FAX: 743-3667

**Sullivan County Conservation District Office**  
24 Main Street  
Newport NH 03773-1500  
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