

# The Wealth of Waterways

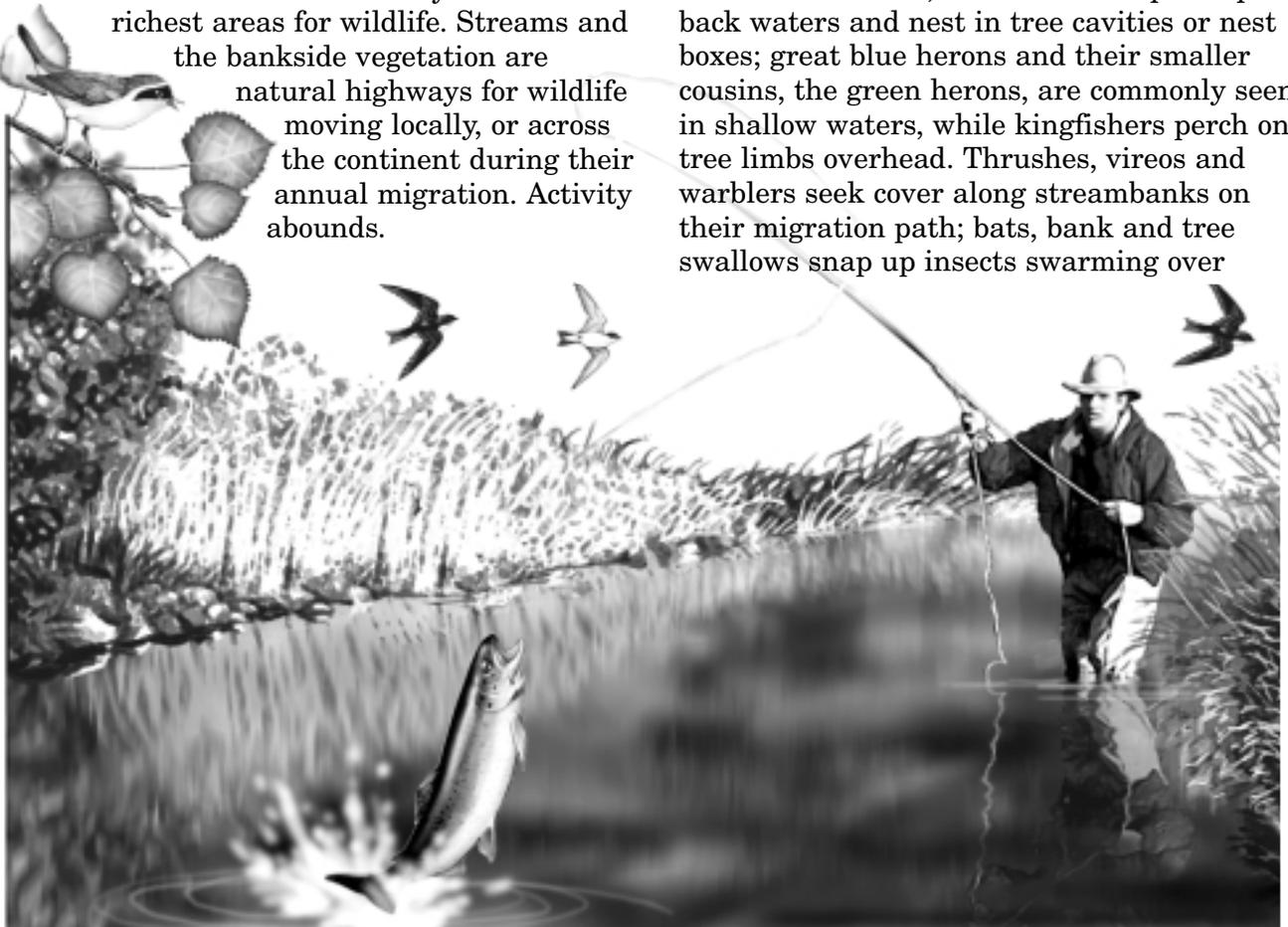
## *Managing Stream Corridors for Wildlife*



*When was the last time you went fishing along a streambank? Did you catch any fish or did you catch a shoe or pop can? Did you see any wildlife? Chances are the experience you had was directly related to the condition of the stream: whether it was clear or muddy or whether the streambank was covered with vegetation or badly eroded. This publication gives you some simple suggestions on how you can manage stream and river corridors on your property for a wealth of wildlife and a better environment.*

**T**he combination of trees, shrubs, grasses and water make waterways one of the richest areas for wildlife. Streams and the bankside vegetation are natural highways for wildlife moving locally, or across the continent during their annual migration. Activity abounds.

Frogs and salamanders laze in muddy banks and shallow water; wood ducks frequent quiet back waters and nest in tree cavities or nest boxes; great blue herons and their smaller cousins, the green herons, are commonly seen in shallow waters, while kingfishers perch on tree limbs overhead. Thrushes, vireos and warblers seek cover along streambanks on their migration path; bats, bank and tree swallows snap up insects swarming over



water; and pheasants winter in brush or cattails along stream edges. Wooded streams provide daytime cover for deer, raccoons, opossums, foxes, and other animals that travel across farm fields during the night. Beavers gnaw and topple trees, while river otters sport about on the banks.

Trees attract insects that wildlife feed on, shade the water, and supply enriching organic nutrients. Fallen trees serve as cover for fish, and basking areas for snakes and turtles. Waterways flanked by open fields and meadows provide excellent food, cover and nest sites for badgers, meadowlarks, horned larks, killdeer, grasshopper and vesper sparrows and marsh hawks.

Wisconsin has an abundance of waterways. From the cold, clear waters of the St. Croix to the heavily industrialized upper Fox River; from the lazy Mississippi and lower Wisconsin Rivers to countless swift, bubbling trout streams. Whether your land is adjacent to a small stream, large river, an agricultural ditch, or only sometimes has a stream flowing through it after snowmelt or following periods of heavy rain, you are fortunate. You are also in a good position to improve the stream for wildlife, prevent flood and streambank erosion, and curb the drainage of

fertilizer and other pollutants. Whatever your goals—wildlife, timber, water for cattle, or a combination, a stable streamside environment just makes good sense.

## ***Managing Stream Corridors for Wildlife***

### **☑ Keep streambanks green**

You can help provide adequate wildlife habitat, prevent erosion and keep stream quality high for you and your neighbors downstream by maintaining a buffer strip along rivers and streams. These buffers should be 100-200 feet wide. If the stream running through your property has a poor buffer strip or none at all, you can widen or re-establish it by replanting grasses, shrubs or trees. In southern Wisconsin, white ash, black walnut, silver maple, cottonwood, river birch, and red maple can be successfully grown from seedlings. In northern Wisconsin, alder, aspen, black ash, American elm, balsam fir and white spruce grow well. Black spruce and tamarack are found in boggy areas. As these trees age, many form cavities that provide homes for squirrels, raccoons, woodchucks, and other cavity dwelling wildlife. In areas of high beaver density, you may want to consider planting evergreens, though beaver have been known to girdle even some of these.



*Whether you own streamside property surrounded by woodlands or farm fields, a 100-200 foot buffer strip is essential to provide wildlife habitat, prevent siltation of the stream and to absorb chemical runoff.*



If you don't have the time or money to plant trees, then simply stop mowing, cultivating or logging the corridor and let nature take its course. This process takes longer, but requires the least amount of labor and cash. Aspen, silver maple, willow and elm will probably be the first to appear. Slower growers, such as hickories, oaks, and black walnuts may not take root for years. However, cottonwood, black ash, silver and red maple, willow, elm, and river birch have light seeds which germinate when they land on bare soil.

Maintaining strips of bare soil near existing trees may encourage seeding, however, first cut any undesirable trees and shrubs such as box elder, buckthorn, or Tartarian honeysuckle. Shrubs such as highbush cranberry, ninebark, silky, grey and red-osier dogwood, serviceberry, alder and hazelnut provide food, cover and nest sites for a variety of birds. If possible, it's a good idea to have a mixture of fast and slow growing trees. The fast growing trees will provide cavities much earlier. In later years, the slower growing, longer-lived trees will serve as replacements.

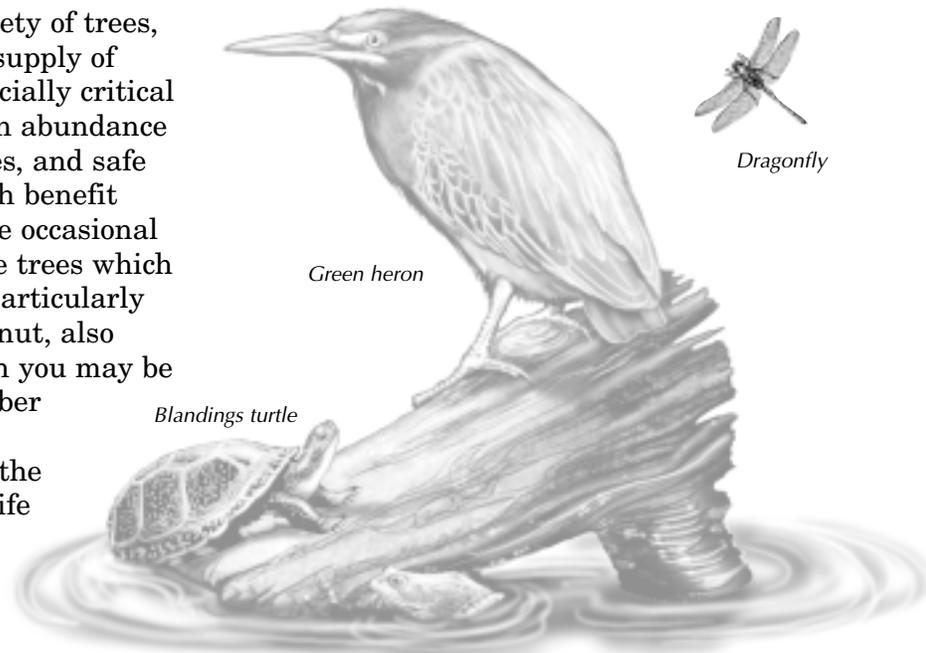
**✓ Harvest streamside timber with care**

Wooded streams, with their variety of trees, shrubs, tangled vines and vital supply of water, make these habitats especially critical to wildlife. Here, animals find an abundance of food, dens, roosts, nesting sites, and safe travel lanes. Trout and other fish benefit from the cool shade and from the occasional fallen tree. The same streamside trees which provide excellent wildlife food, particularly swamp white oak and black walnut, also represent high value trees which you may be tempted to harvest. Cutting timber along a stream, however, can seriously damage the quality of the stream and the benefits to wildlife unless special care is taken.

If you must harvest timber along a streamside, protect a strip of woods directly along the banks at least 100 to 200 feet wide. This strip will act as a buffer to trap soil, fertilizer and pesticides washing down from surrounding farm fields. Place logging roads and skid trails as far from the stream as possible to avoid altering the stream or causing erosion. Utilize selective harvest techniques to maintain a good mix of tree ages and heights and do not over-harvest, especially black walnut and oak, which are important sources of wildlife food. Leave at least one to six snags or den trees per acre for cavity-dwelling birds and mammals. Also, avoid removing trees that have fallen into the stream or appear ready to do so. When they eventually fall, they create excellent habitat for fish and loafing areas for ducks, turtles and amphibians. Remove trees only if they are causing problems in the stream.

**✓ Control livestock access**

Though it is tempting to use streams as watering holes for your livestock, repeated use destroys wildlife habitat, erodes streambanks and pollutes the water. You can simply and effectively solve this problem by erecting





*Properly controlling your livestock's access to streams will help maintain wildlife habitat as well as reduce erosion and water pollution.*

a fence along the streambank. This will keep your livestock from trampling and killing plants on the banks and prevent them from depositing manure directly into the stream. A variety of low-cost watering systems are available.

If you absolutely must water your livestock from a stream, then install a swing gate to concentrate their use to one area of the streambank. Choose a small stretch that does not have a steep embankment. You can prevent erosion by layering rocks along the stream floor and along cattle paths; this requires a DNR permit. Contact the DNR or Natural Resources Conservation Service office in your county for details, advice, and possible cost-sharing options. Many examples

exist across Wisconsin where fencing livestock out of streams and rivers has dramatically increased fish and wildlife populations as well as water quality.

When managed carefully, the stream coursing across your land can provide many benefits for years to come. So, please take care, but most of all—enjoy.



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