

OUR BIRDS CALL THIS HOME



Yellow Warbler

A GUIDE TO LIVING WITH BIRDS ALONG MONTANA'S RIVERS AND STREAMS

There is something about that dawn chorus of bird songs on a summer morning, each one almost indistinguishable from the next, just a jumble of chirps, melodies, and rising and falling notes. And in the evening, as the birds quiet down, we know it's time to relax.

There's nowhere in Montana more alive with bird songs than along a stream thick with shrubs or trees. It is prime real estate for birds and wildlife, and for us. Birds—from drab sparrows to bright orioles, tiny hummingbirds to lanky herons—are the most abundant of all creatures along these riparian waterways.

This guide is designed to provide tools to allow landowners to better share this special place with the birds. **Montana Audubon**, together with our local Audubon Chapters, invites you to use these suggestions to help you meet the goals you have for your land while providing quality habitat for birds. Share your ideas with your neighbors, and let us know how we can help.



WHAT IS RIPARIAN HABITAT?

It is the zone of vegetation that occurs along streams, rivers, and standing water where there is moisture for plants to thrive. Along rivers and their tributaries, riparian habitat can range from cottonwood forests or stands of willows, to stringers of shrubs, to streamside sites with more vigorously-growing grasses and forbs.



THE IMPORTANCE OF RIPARIAN AREAS

Riparian habitat covers less than 3% of the landscape in our state; no wildlife habitat is more important to birds than streamside riparian areas. Of the more than 250 bird species breeding in Montana, just over 50% use riparian areas as their primary nesting habitat. Numerous others use these areas during the winter, and during both spring and fall migration birds use our riparian areas to rest and refuel during their long journeys.



Osprey with fish

WHAT DO BIRDS NEED?



Least Flycatcher in a delicately woven cup nest.

It's simple. Birds need food and water, places to nest and raise young, and security from predators. They need stop-over areas during migration and places to spend the winter. High-quality riparian areas provide all these features!

Food: Streamside areas are rich in a diverse array of food used by many types of birds: insects, seeds, berries, nectar, small mammals, fish, crustaceans, snakes--and even other birds and their eggs.

Nests: Birds near our rivers nest on the ground, in shrubs, in the tree canopy, and in holes in dead trees. Many songbirds set up territories around their nest and advertise by singing, "This space is taken."

Escape Cover: Riparian birds have many predators. Skunks, raccoons, cats, hawks, jays, and others lurk, hoping to make a bird into a tasty meal. Dense ground cover, shrubs, and tree canopies give birds a chance to hide from these predators throughout the year.

Stop-over and Winter Areas: During both spring and fall migration birds need cover to rest and areas rich with food and water. And we know a few hearty birds, like chickadees and nuthatches, live in these watersheds year-round.

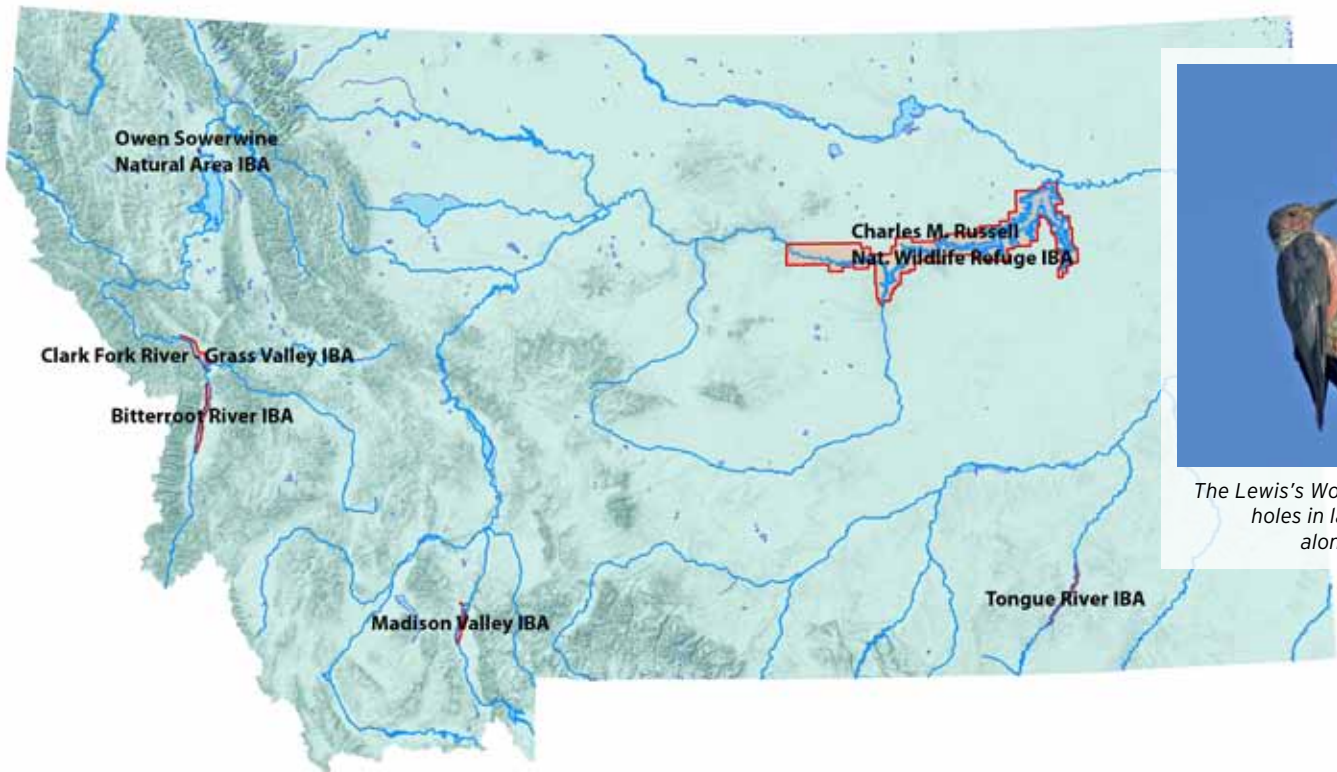


WHAT DO RIVERS NEED? ROOM TO ROAM

Most Montana rivers naturally meander, sweeping and snaking across the landscape. This meandering tends to create a pattern in which outside bends are dominated by cut banks (caused by natural erosion), and inside bends are dominated by gravel bars (where sediment is deposited). This process, powered by natural flooding regimes, creates a riparian corridor rich in vegetation, and therefore rich in birds and other wildlife.

Left: The Gallatin River overflowing its banks, 2009. Photo by Montana DNRC.

Right: Gravel and sand bars provide nesting habitat for shorebirds like this Spotted Sandpiper.



The Lewis's Woodpecker nests in holes in large cottonwoods along Montana rivers.

MONTANA'S RIVERINE IMPORTANT BIRD AREAS -- IBAS

Our river corridors provide outstanding habitat for birds. Consequently, portions of many of the rivers in Montana have been designated as Important Bird Areas (IBA). The IBA Program is a global initiative to identify, monitor, and protect a network of sites critical for the conservation of birds.

The IBA Program identifies areas that sustain healthy populations of birds and then focuses attention on these priority sites so that their values can be conserved. Voluntary, sound habitat management by private landowners is an important conservation tool within IBAs.

The guidelines contained in this publication were developed to support our IBA protection efforts.

In Montana, Audubon has identified IBAs along sections of the Bitterroot, Clark Fork, Flathead, Madison, Missouri and Tongue rivers, and efforts to delineate one or more IBAs along the Yellowstone River are underway.

These sites are particularly important because of the abundance and variety of riparian birds, including species of conservation concern like the Lewis's Woodpecker, Red-naped Sapsucker, Willow Flycatcher, and Red-eyed Vireo.

WHAT DO BIRD-FRIENDLY RIPARIAN AREAS LOOK LIKE?

BUILDINGS SIT BACK:

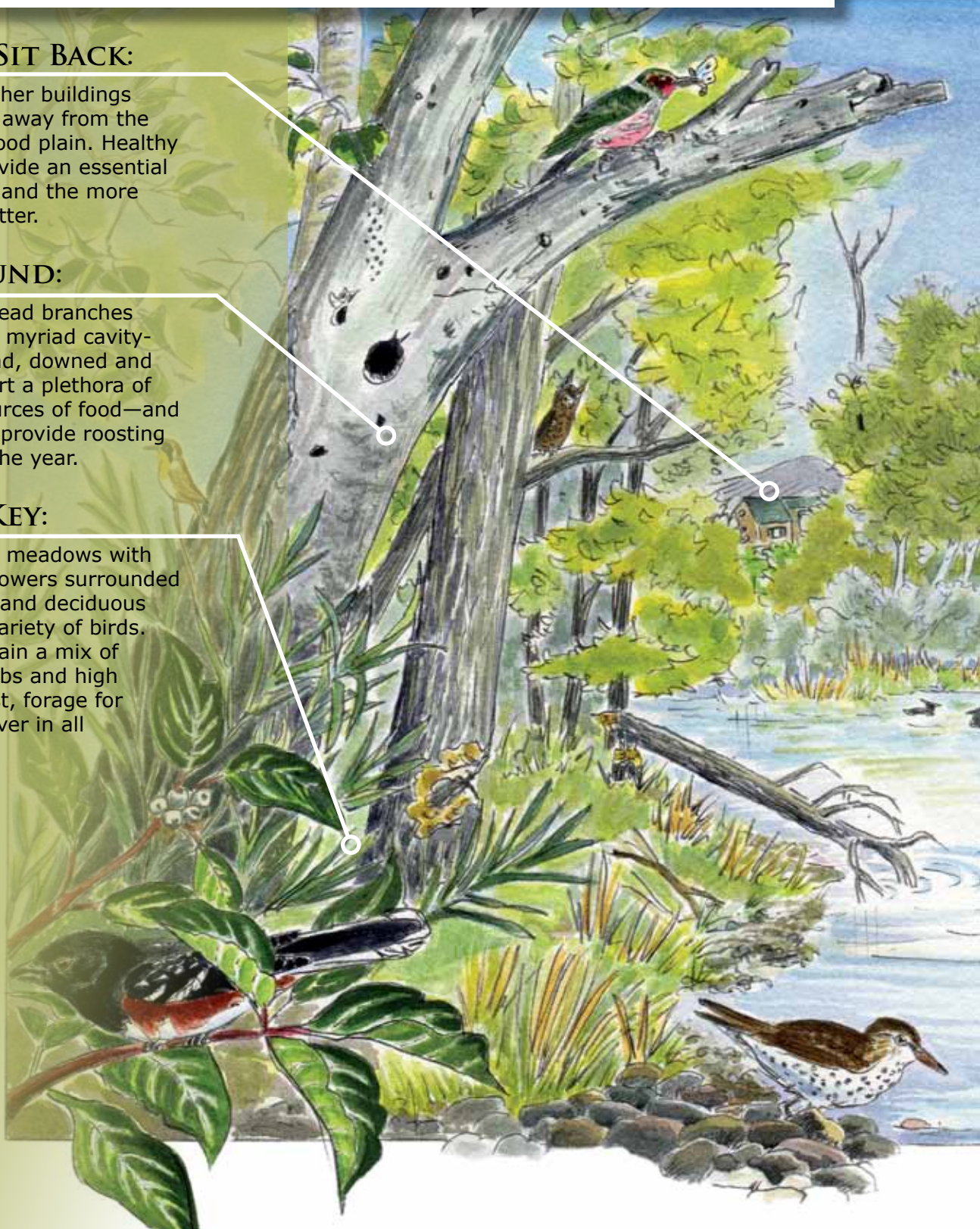
Our homes and other buildings should be located away from the river, out of the flood plain. Healthy riparian areas provide an essential vegetative buffer, and the more continuous the better.

SNAGS ABOUND:

Dying trees and dead branches are critical for our myriad cavity-nesting birds. Dead, downed and dying trees support a plethora of insects—great sources of food—and holes in the trees provide roosting sites throughout the year.

VARIETY IS KEY:

Newly established meadows with grasses and wildflowers surrounded by shrubby areas and deciduous forests attract a variety of birds. Older forests contain a mix of groundcover, shrubs and high canopy—birds nest, forage for food, and seek cover in all of these “layers.”





PATCHES ARE CONNECTED:

Corridors of trees and shrubs connecting wider riparian areas create connectivity, allowing birds and wildlife to disperse to new areas. Even narrow strips between neighbors will be used by birds like Song Sparrows and Spotted Towhees.

LARGER PATCHES ARE BETTER:

Fragmentation leads to increased predation of songbird eggs and young by other birds and mammals. Along our rivers, fragmentation also leads to increased "nest parasitism" by Brown-headed Cowbirds. Cowbirds lay their eggs in other birds' nests, letting the other birds raise the cowbird young, usually at considerable expense.

IT'S NATIVE:

Birds thrive best with native plants and the associated bugs that they attract. Native grasses, shrubs, and trees are worth planting and preserving!

IT WORKS FOR WILDLIFE:

What's good for birds can also be good for other wildlife species, including deer, moose, bats, a variety of fish, and frogs.



Drawing by Claire Emery

STRIVE TO PROVIDE THESE FEATURES AND YOUR FAVORITE BIRDS WILL HAVE WHAT THEY NEED ALL YEAR-ROUND.

HABITAT ENHANCEMENT AND BEST PRACTICES

Riparian areas are among the most threatened habitats in Montana because of their multiple values for grazing, agriculture, timber, recreation, mining, urbanization and residential development, and power sources. These varied uses are not always carried out in ways that are compatible with bird and wildlife conservation. Yet the more we understand how to mesh our own needs with those of wildlife, the richer our lives can be.

Consider following these “best practices” ~ adopting those that fit with the way you prefer to use your land.



Rufous Hummingbird on nest

RESIDENTIAL HOMES & DEVELOPMENT

Stay Back:

When we build near riparian and wetland areas, we can look for ways to lessen our impact. New housing developments should aim to clump housing into a small area and set back new houses from the edge of the stream or river, leaving the rest of the riparian corridor as “open space” to reduce fragmentation and human



Mountain Bluebird

disturbance. Scientific studies recommend that a 300 foot strip of native vegetation be maintained along our streams in order to best protect wildlife and water quality.

Keep It Native and Layered:

Key to healthy riparian habitat is to retain or plant native vegetation in landscaping. It is also important to include a natural “layering” of vegetation including the ground cover, shrubs, and tree layers, and to allow a little decay. The end result may be a less typical, well-groomed yard, but with a wider variety of birds. Native plants support more insects (i.e., bird food) and other pollinators. By providing the pollinators—insects, birds, and bats—with the specific nectar or pollen they need, you can also boast a healthier vegetable garden or crop field and contribute overall to healthier ecosystems. Additionally, native woody plants create snags. If non-natives like Russian olive replace cottonwoods, we can lose the birds that nest in tree cavities, like chickadees, bluebirds, owls, woodpeckers, and even some ducks.

Birds and Cats Don't Mix:

While bird feeding is popular, it can create hazards for birds by exposing them to cats and other predators. To minimize dangers, provide plenty of cover near feeders, clean feeders and birdbaths monthly, and remove your feeders if bird mortality is high or cats prowl the area. Our feline friends can be wonderful family members, but they can catch and kill an inordinate number of birds. If kept indoors, cats not only leave the birds alone, they live longer. However, if you have an adventurous outdoor cat that does catch birds, consider an inexpensive yet effective “cat bib” available from www.catgoods.com.



Are Nest Boxes Helpful?

Some people like to set up nest boxes to attract birds. When built, used, and maintained properly, and placed in areas with suitable cover and foraging habitat, nest boxes can provide suitable nesting sites for many birds. However, native trees that decay and provide natural nesting sites and insects are still essential to strong bird populations.



*Above: House Wren nesting in aspen tree
Cat Photo by Byron Chin, via Flickr*

GRAZING

Heavy grazing, whether by sheep, cattle, horses, or game animals, is a concern in riparian areas because of changes to the understory (see box, below). Livestock also trample stream banks, resulting in wider stream channels, deeper channel bottoms, and a lower water table. Fencing off streams with wildlife-friendly fencing and developing stock-watering areas away from streams are some of the best practices to help improve wildlife habitat.

It may not work for you to completely remove livestock from streamside areas, yet you may be able to manage grazing to protect riparian areas during crucial growing periods for plants. Timing is everything for nesting birds, and grazing only during the non-breeding season (mid-August – April in Montana) can alleviate considerable stress.



Photo credit: jrharrisphoto.com

FARMING

Farming and maintaining bird habitat are not mutually exclusive. Modified farming practices can benefit birds and other wildlife and help protect water quality. For example, consider leaving a buffer of uncultivated grasses, brush, and trees along all waterways. Where vegetation has been removed, establish woody and herbaceous vegetation through plantings and/or fencing to protect young plants from deer and livestock. Buffers have another benefit of stopping excess sediments, chemicals, and nutrients from entering the water. When tilling, consider retaining larger patches of riparian vegetation, instead of several smaller fragments.

Agricultural lands benefit from nearby natural areas; it's been shown that this proximity increases the numbers of helpful pollinators necessary for crop production.

DEALING WITH WEEDS AND OTHER "PESTS"

Tackling weeds before they reach the point of major infestation is worth the effort. However, pesticides and herbicides can harm bird populations, especially if used incorrectly. Pesticides can negatively affect birds for the very reason they were created—they kill insects. Loss of insect prey can be devastating, turning an area where many songbirds successfully raise young into one where few survive. Herbicides can cause a loss of nesting sites and declines in available food.

For these reasons, the following "best practices" help weed control be more wildlife friendly:

- Native plants, whether allowed to thrive or planted to enhance the area, can out-compete the weeds.
- Where pesticides are essential, they are best used as part of integrated pest management (IPM) systems. IPM involves closely monitoring pest populations (plants and animals) and using chemicals only when and where pests are likely to cause economically or ecologically important damage.
- When possible, apply chemicals by hand to specifically target weeds and other pests.
- If you need help with weed control information, our County Extension Offices can be of great service.

WHAT A DIFFERENCE A FENCE CAN MAKE!

This electric fence will keep domestic animals and ungulates from browsing on shrubs and trees, allowing the plants to flourish and spread. After a few years, the plants will be high enough to withstand browsing and the fence can be moved to another site. Eventually, these stands of shrubs and trees will be alive with the songs of warblers and sparrows. Further ideas for wildlife friendly fences are available via our website (*see back*).



Photo by Sherry Ritter



ONE LAST CRITTER TO CONSIDER — THE BEAVER!

Beavers can be friends or foes. These fascinating mammals have long played a role in maintaining healthy riparian habitat. Beavers cut down trees, but they also create suitable sites for new growth of trees and shrubs. Where beaver populations are stable, their dams help store water, buffer floods, raise water tables, and provide a diversity of habitats and vegetation. Biologists who have reintroduced beaver to degraded riparian areas report new growth of riparian vegetation, decreased sediment loads, and stabilized stream banks. Fortunately for us, most woody species that beaver eat re-sprout, so that over time, cottonwoods, willows, and aspen re-grow. However, we all hate to lose big, old cottonwoods, so where beaver have taken up residence, protecting large, favorite trees with wire mesh is a common solution.



Photo by Lindsey Krause

FINAL THOUGHTS

Thank you for considering new and varied ways to allow people and birds to coexist. We welcome your ideas and feedback. Give us a call or send an email. Share this guide with your neighbors and learn more via our websites.

FURTHER READING

We have recommendations for additional "how to" guides and success stories on our website. Learn more about such things as *Building Fences for Wildlife*, *The Science Behind Riparian Buffers*, or *Streambank Stabilization*. Full citations and links to on-line versions are at: www.mtaudubon.org/areas/riverine.html.



"Although my house is located several hundred feet away from the river, my binoculars are always at the ready to watch a heron, woodpecker, or hummingbird. I'm glad my neighbors also care about wildlife. Please join us in ensuring that birds can continue to call this exceptional habitat their home."

-- Sherry Ritter, Bitterroot River
IBA Committee Chair

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Pintler Audubon PO Box 432, Twin Bridges

Sacajawea Audubon www.sacajaweaaudubon.org

Upper Missouri Breaks Audubon PO Box 2362, Great Falls

Yellowstone Valley Audubon www.yvaudubon.org

All bird photos courtesy Bob Martinka unless noted.
Thank you Bob!

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ABOUT THIS GUIDE

This guide was first crafted by Sherry Ritter and Amy Cilimburg for the Bitterroot and Clark Fork watersheds and has been adapted here for a broader geographic scope. Montana Audubon is very appreciative of Sherry's efforts and those of all our Audubon Chapters.

