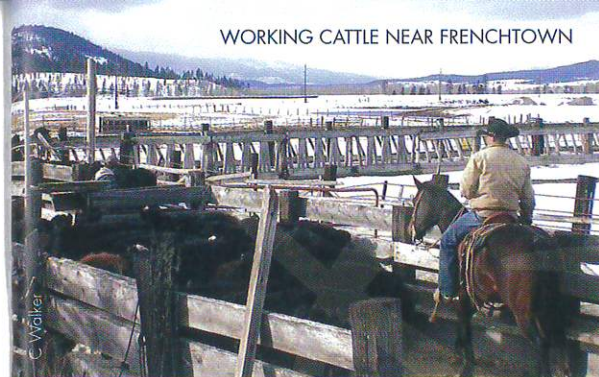




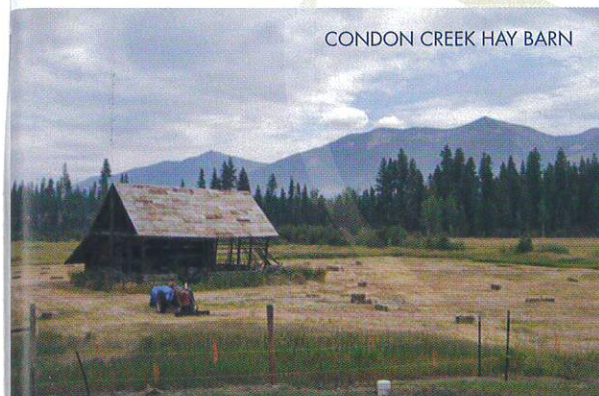
GOOD
NEIGHBOR
HANDBOOK

information for rural landowners in missoula county

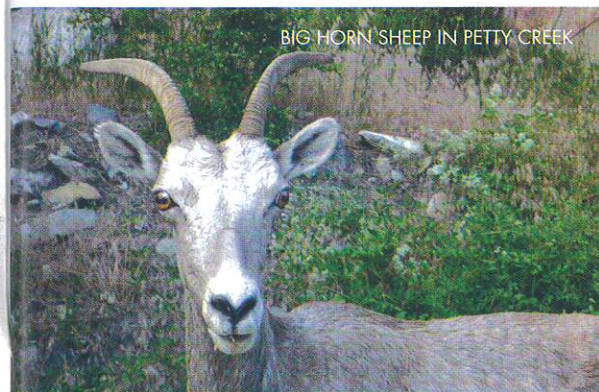
Welcome to Missoula County



WORKING CATTLE NEAR FRENCHTOWN



CONDON CREEK HAY BARN



BIG HORN SHEEP IN PETTY CREEK

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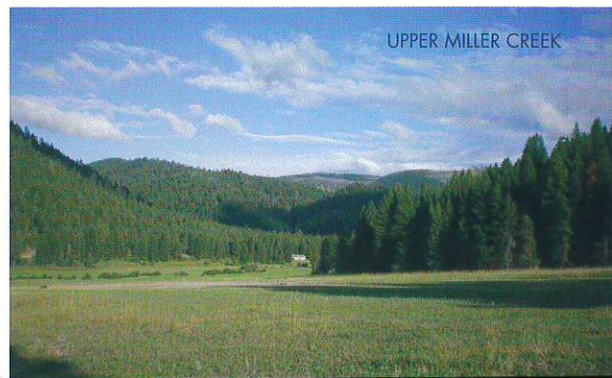
resources 28

COVER PHOTO - HAYFIELD NEAR EVARO - M RYAN

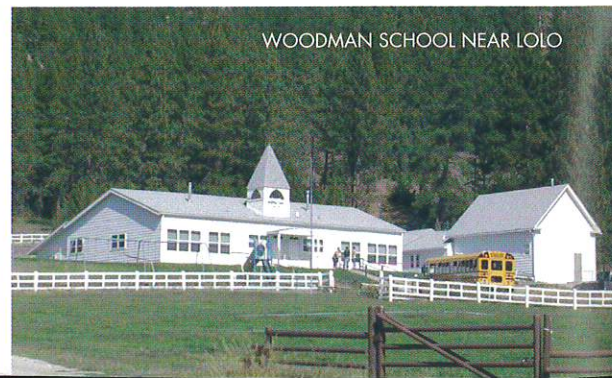
All photos courtesy of Rural Initiatives unless otherwise noted

This handbook was published by Missoula County Rural Initiatives with support from the Missoula County Weed District and Extension Office.

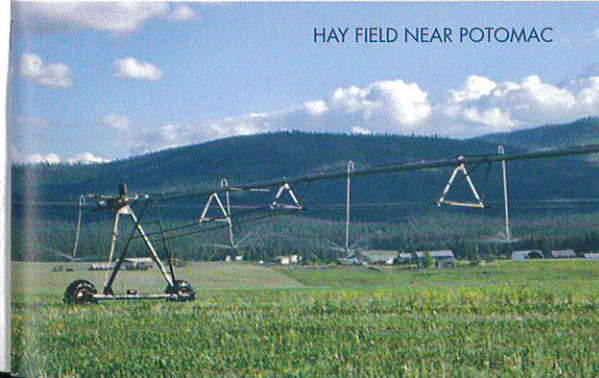
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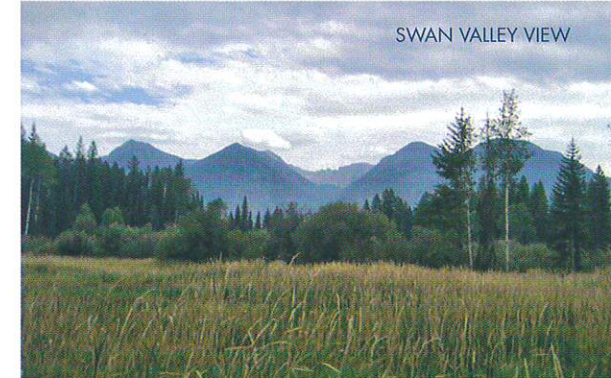
UPPER MILLER CREEK



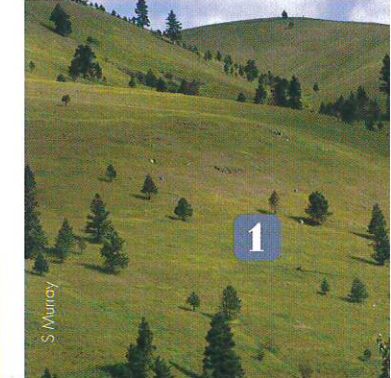
WOODMAN SCHOOL NEAR LOLO



HAY FIELD NEAR POTOMAC



SWAN VALLEY VIEW



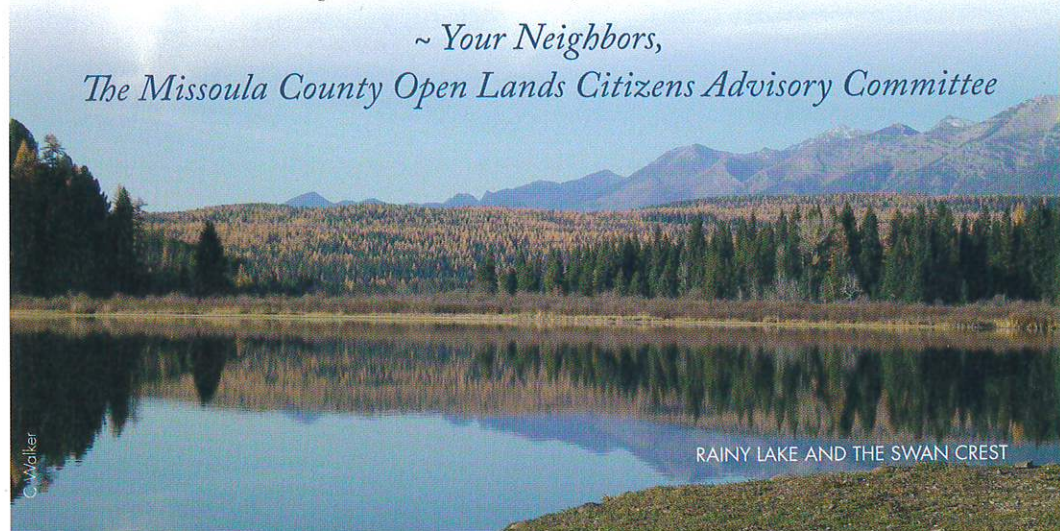
INTRODUCTION

Missoula County's rural areas are influenced by those who live here—from cattle ranchers to telecommuters; from remote forest dwellers to small town business owners; from small parcel owners to those with large acreages. Landowners are fortunate to have both the opportunity and responsibility to play an important role in the stewardship of our county's natural and rural resources. Living in rural areas has so many benefits—a chance to be away from busy city life, the opportunity to see and hear wildlife, the ability to work the land. Along with these opportunities comes a commitment to the land, wildlife, water, and each other. While landowner tasks can seem numerous—treating weeds, preparing for wildfire season, bear-proofing storage and garbage—the rewards are far greater. The results of landowners taking pride in these commitments are evident throughout Missoula County: productive working lands, strong communities, and pristine natural resources. Stewardship of the land is a way of life here.

In Missoula County, there are numerous resources available to help landowners navigate these hurdles and opportunities. This handbook is a compilation of resources, tips, technical information, and lessons learned from the experiences of those who live here. While not exhaustive in topics or ideas, this handbook points to some of the most pertinent landowner issues in Missoula County. We hope newcomers and long-time residents alike will find this handbook a helpful source of information and ideas. If you'd like to learn more, there are good resources listed throughout the handbook. Thanks for reading, and thanks for sharing with us in the rich landscape of Missoula County.

~ Your Neighbors,

The Missoula County Open Lands Citizens Advisory Committee



who is the open lands committee?

Seventeen landowners from rural areas around the county serve on the Open Lands Citizen Advisory Committee (OLC). The mission of the committee is to advise the Board of County Commissioners and to represent rural citizens of Missoula County in the protection and preservation of open space and the cultural, economic and social values of rural life for present and future generations.

Learn more about the OLC at www.co.missoula.mt.us/rural/OLC



WORKING LANDS: *Montana's Heritage*

Missoula County is home to a growing variety of land uses, but our working lands remain the heart and soul of our quality of life. Today, approximately 85% of Missoula County's private lands, and many acres of public lands are used for some kind of farming, ranching, or timber production (based on 2009 Montana Department of Revenue data). These working lands are important to our economy and our heritage. They also provide open space, wildlife habitat, local food, and other products and services for our region. As Missoula County's population grows, more residential homes neighbor working lands. As land use continues to diversify, it's helpful to understand a bit about how farms, ranches, and timberlands operate.

"I think that the old saying 'good fences make for good neighbors' is a very important one. The fence isn't to keep the neighbors out—rather it is how you help to protect their property and show them courtesy and consideration."

~HUGH SHEEHY, POTOMAC



HERDING CATTLE IN THE NINEMILE

what you can do:

- Farming and ranching is a day and night, year-round business, so you may see or hear your neighbors out working around the clock in certain seasons. Sometimes a farming, ranching or logging operation requires activities that can be loud, dusty, and smelly. It's helpful to learn a bit about your neighbors' operations and to be aware of their important seasonal activities.
- As with any neighbor, it is helpful to talk about shared property and resources, such as fences, access roads, creeks, and irrigation ditches. It is important to establish some agreements and understandings about fence maintenance, water rights, access road maintenance, and land management practices such as weed control or forest thinning for wildfire prevention.
- When farmers or ranchers are moving livestock or heavy equipment along rural roads, have patience. Driving too fast or too close to livestock can cause the animals stress and hinder the rancher's efforts to move them. Instead, slow down or stop and watch for the rancher to signal. Likewise, use caution and allow plenty of space when passing slow-moving equipment on the road.
- Timber harvest can be a year-round operation, continuing as long as roads are accessible to trucks and equipment to get into the harvest sites. Be aware of these vehicles when walking, driving, or riding on access roads. Harvesting timber can also mean long hours. You may hear chainsaws and equipment starting up before dawn on a logging project.
- You can buy a number of locally grown food and other products in Missoula County. This helps support the area's working lands. Missoula County's locally grown vegetables, beef, eggs, honey, and other products are of the highest quality and taste delicious. Look for summer farmers' markets where these foods and other products are sold. Or talk with neighboring farmers and ranchers about buying products directly from them. You can also find locally produced products like lumber, hay, and gravel.
- Neighbors can be the best resources for information on good land management practices. Share ideas among neighbors on how to keep land and water in the best condition possible and ask your neighbor what they do to deal with issues like weeds, erosion, timber management, and pasture management.

for new residents—

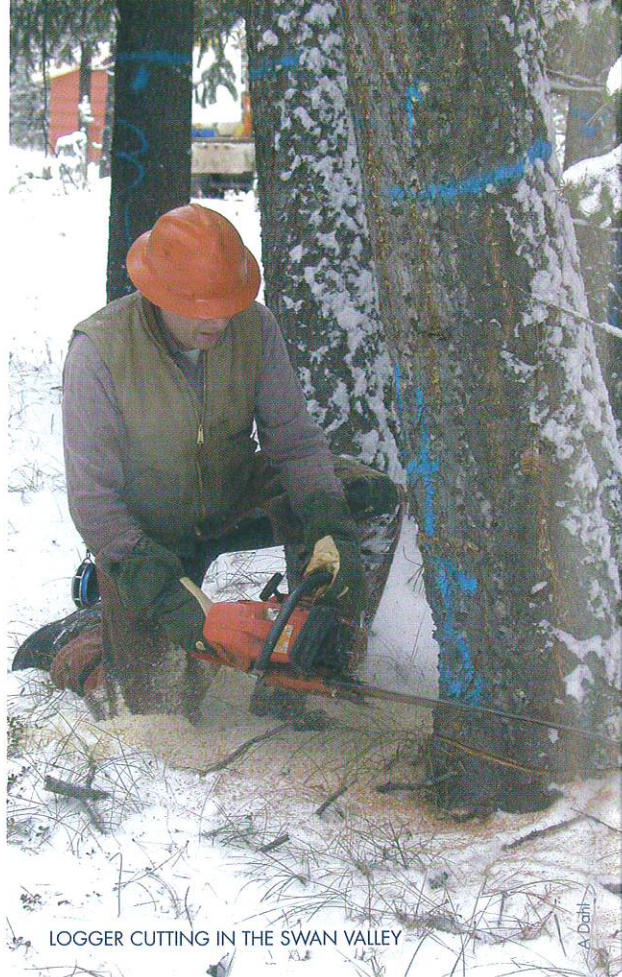
A Glance At Seasonal Farming, Ranching & Timber Harvest Activity:

WINTER—Many ranchers concentrate their calving season in January through May (though some may calve year round). You may see farmers and ranchers out at all hours of the day and night keeping close watch on mother cows and newborn calves during this critical time. Winter can be a good time to harvest timber in accessible places because snow covers the ground and protects sensitive soils from the disturbance of logging machinery.

SPRING—Farmers prepare land for planting as soon as frost leaves the ground. Throughout April and May, you'll see them working around the clock to plow, disk, pack, and plant the land. Ranchers will be moving cows and sheep to summer pastures, moving them in trailers or herding them by horseback or Off-Road-Vehicles (ORVs). You may encounter ranchers moving livestock down rural roads to new pastures.

SUMMER—Hay harvest can begin in June; other grains are harvested throughout the summer and into autumn. You'll see large farm machinery moving about the fields and traveling on rural roads, sometimes day and night. High elevation timber harvest may start on public and private lands as soon as access roads dry out. Pre-dawn timber harvest is especially common during fire season when using machinery in the hot part of the day creates wildfire risk.

FALL—Calves are usually weaned from their mothers' milk in October and November. You may hear mothers and calves mooing and bawling in protest during the first few days of weaning. Fall brings hunting season—bow and rifle. Wear orange and use caution when out on public lands and learn your area's hunting seasons and regulations.



LOGGER CUTTING IN THE SWAN VALLEY

to learn more:

- The Missoula Conservation District works with landowners to “help promote the wise use of our natural resources.” They have local information to help landowners solve land management issues like soil productivity, erosion, weeds, fencing, and forest management. Contact their Missoula office at (406) 829-3395 ext. 101 or www.missoulacd.org
- If you are looking for land to farm or ranch, or own land that you would like to see used for agriculture, learn about Land Link Montana, a farm and ranch matching service to connect the next generation of farmers and ranchers to land and resources. Contact their Missoula office at (406) 543-0502 or www.landlinkmontana.org
- The Farmland Information Center is a clearinghouse for information about farmland protection and stewardship. It is a partnership between the USDA Natural Resources Conservation Service and American Farmland Trust. www.farmlandinfo.org/montana
- Montana State University Extension Office offers a wide variety of information, workshops, and a number of helpful publications on various aspects of rural living, farming, ranching, and logging. Visit their website: <http://extn.msu.montana.edu/> or contact their Missoula office: (406) 258-4211 or www.missoulaeduplace.org
- The Montana Department of Agriculture has information on everything from farmers' markets to pest control; from bee keeping to irrigation. Visit their website: www.agr.mt.gov
- Information related to forestry and timber harvest can be found through Montana's Department of Natural Resources and Conservation. Contact their Missoula office (406) 542-4200 or www.dnrc.mt.gov

One of the most important things I've learned living on my ranch in Potomac is to never quit learning or think you've got it all figured out.

~DENNY IVERSON, POTOMAC

HEALTHY LANDSCAPES:

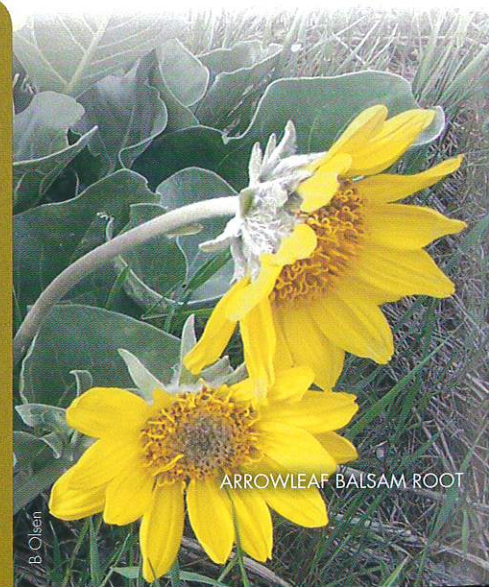
protecting native vegetation

Each landowner manages their property differently, utilizing a variety of techniques to accomplish different landscape goals. Unfortunately, weed control is a challenge that many rural landowners face. Encouraging healthy native vegetation and understanding weed control options will help landowners maintain the healthiest landscape possible, allowing them to enjoy their land to its full potential. Managing weeds on your property is also critical for the health of your neighbor's land, since weeds know no boundaries.

In Missoula County, weeds are more than just a nuisance. Noxious weeds are changing Montana's landscape and entire natural ecosystems at alarming rates. These introduced plants out-compete and displace native plants, diminish forage and habitat for wildlife, and threaten ecological health in the areas they invade. Weed seeds can be transported via hiking shoes, tires, boats, livestock, and pets and quickly establish themselves in new areas. Weeds can degrade pastures and croplands, alter soil fertility, diminish water supplies, and clog waterways. Weeds such as cheatgrass tend to grow quickly, and then dry up by mid to late summer, adding to fire risk during fire season. Fortunately many resources exist to help landowners with controlling weeds and encouraging healthy native vegetation across our Missoula County landscapes.

native plants & your land

Enhancing and restoring native vegetation on your property has many benefits, including playing an important role in controlling weeds. The best native plants for your property depend upon specific site conditions including soil type, sun exposure, and proximity to water. The Montana Native Plant Society has a broad array of information on native plant conservation and landscaping: www.mtnativeplants.org Visit Missoula County's MSU Extension Office (contact information on page 10) for detailed planting and landscaping information. Ask for plants and seeds at local nurseries.



ARROWLEAF BALSAM ROOT

what you can do:

- Join a cooperative Weed Management group if there is one in your area (ask Missoula County Weed District or look on their website listed on page 10). These groups help landowners coordinate weed control strategies and make weed control tools and research readily available and user-friendly.
- Develop a plan for encouraging the most beneficial vegetation for your land. Competitive vegetation is very helpful in keeping weeds from becoming established.
- Learn your area's noxious weeds. Knowing how to identify a weed and understanding a bit about its root system and spreading mechanism can help you spot new infestations and control or eliminate them quickly.
- Using an integrated approach to weed control will yield the best results. Employing multiple means of weed control—chemical, mechanical, biological—is the key to effectively managing a variety of weeds in a variety of situations.
- Once an area has been disturbed—by removing weeds, a construction project, a burn—replant native or other desired vegetation immediately. Bare ground is prone to rapid weed colonization unless other plants are established first.
- Make a habit of checking pack animals, pets, shoes and clothing, vehicle tires and undercarriage, watercraft, bicycles and other potential weed seed transporters before visiting new areas and upon returning home. Look for aquatic weed species as well. It just takes a few seeds inadvertently carried to a new location to start a new population of weeds.
- The best way to dispose of weed seeds is to bag both the seeds and other plant parts (which may contain seeds) and dispose of them at the landfill. Burning weed seeds is also effective.

what is a noxious weed?

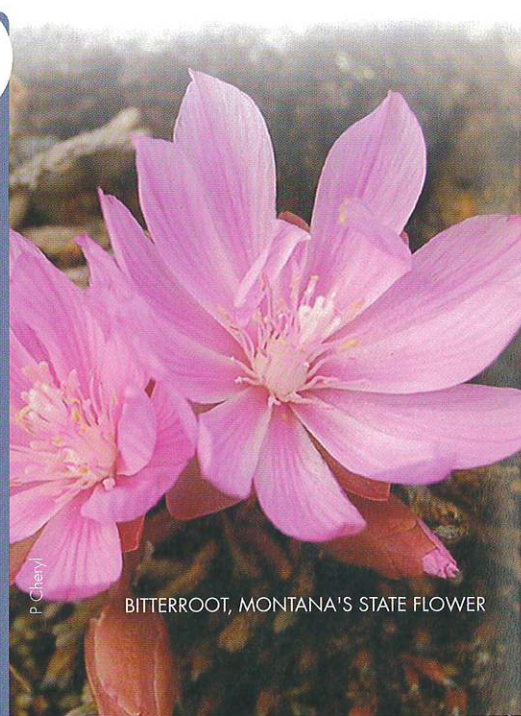
The Montana Department of Agriculture has classified 32 non-native plants as noxious weeds due to their potential ecological, economic, or social threat. Because of their aggressive growth and lack of natural enemies in North America, noxious weeds can be highly destructive and difficult to control. Montana State Law requires landowners to control noxious weeds on their land in order to help statewide efforts to control the spreading of such plants.

to learn more:

- Montana State University Extension Office offers a number of helpful publications on various aspects of weed control and vegetation management. These are listed on their website: www.extn.msu.montana.edu/publications.asp
- Missoula County Weed District offers weed identification workshops, landowner seminars, technical support, grants, and is a clearinghouse of weed information. Contact their Missoula office at (406) 258-4211 or www.missoulaeduplace.org
- Missoula County's MSU Extension Office has information on vegetation management, horticulture, livestock, plant and insect identification and other land management information. They also offer the national Master Gardener Program Program, a 14-week certification course. Contact them at (406) 758-4713 or www.missoulaplace.org
- Learn about Montana's Noxious Weed Program through the Montana Department of Agriculture: www.agr.mt.gov/weedpest/noxiousweeds.asp
- The Center for Invasive Plant Management is another good nationwide resource: www.weedcenter.org.

"There doesn't seem to be an easy or permanent solution for controlling weeds. After initially trying hand-pulling (to avoid herbicides) with limited success, I've used a combination of pulling and spraying with back-pack or tractor-tank sprayer. It took a huge effort over several years to get rid of about 95% of our weed population but since then fewer hours per year are needed to maintain reasonable control."

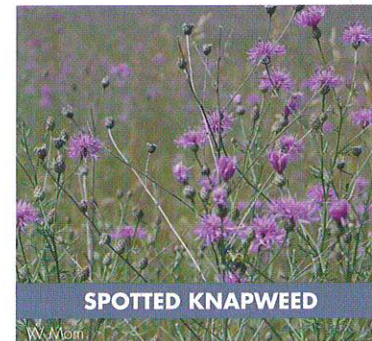
~JIM GOUAUX, NINEMILE



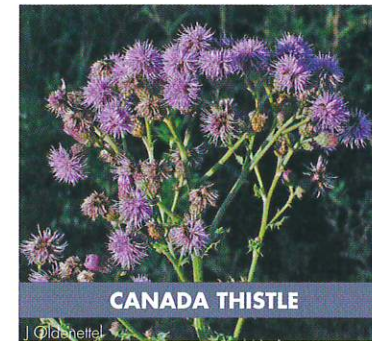
P. Cheryl

BITTERROOT, MONTANA'S STATE FLOWER

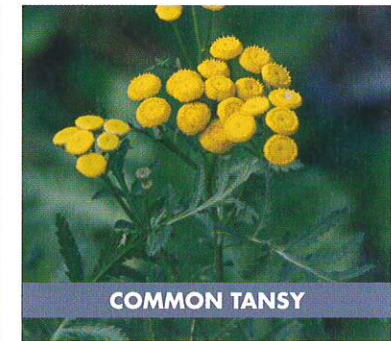
missoula county's most invasive weeds



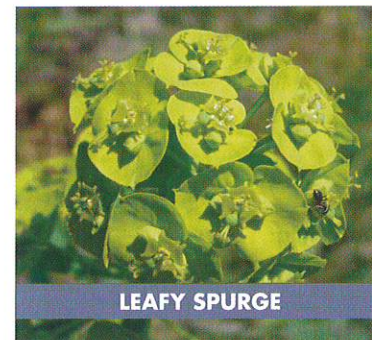
SPOTTED KNAPWEED



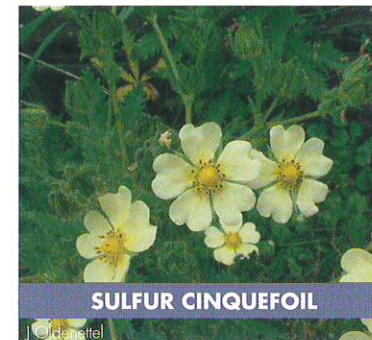
CANADA THISTLE



COMMON TANSY



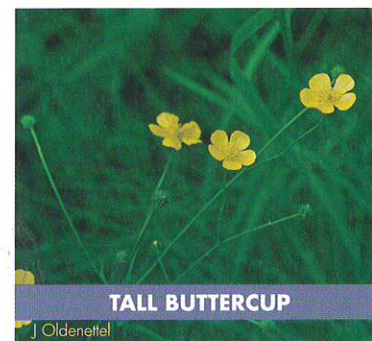
LEAFY SPURGE



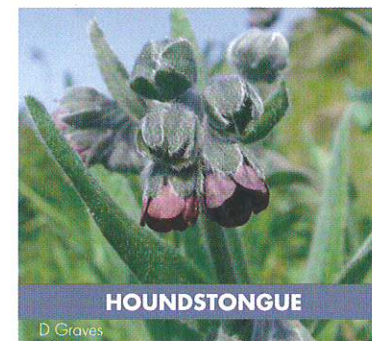
SULFUR CINQUEFOIL



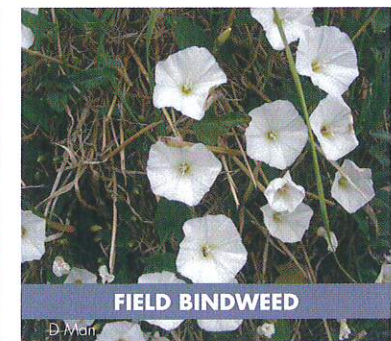
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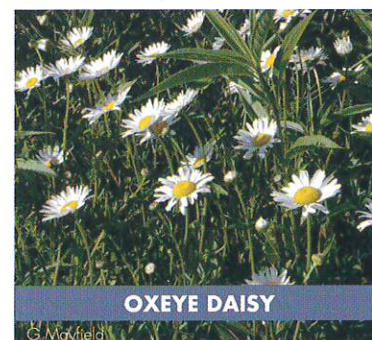
TALL BUTTERCUP



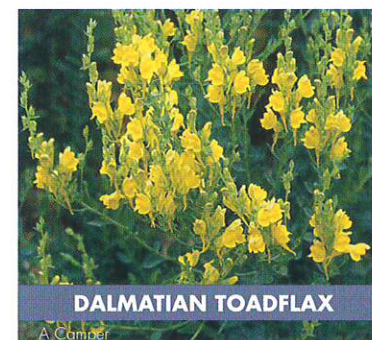
HOUNDSTONGUE



FIELD BINDWEED



OXEYE DAISY



DALMATIAN TOADFLAX

Additional photos, illustrations, and information on how to identify and manage weeds is available through the Missoula County Weed District:

www.missoulaeduplace.org/weeds.html

YOUR FOREST HOME

Missoula County encompasses thousands of acres of vibrant forests. These wooded lands provide wildlife habitat, supply timber products, offer prime recreation opportunities, and for some, are a place to call home. Living in or near the woods brings wonderful opportunities, as well as important responsibilities—perhaps the most important of which is understanding the role and risk of wildfire. Fire has always played a prominent role in the natural environment. Fire is a natural result of our summer thunderstorms, and plays an important role in thinning forests and clearing out undergrowth and diseased trees. When allowed to burn in undeveloped areas, wildfire plays a vital role in maintaining healthy forests.

Rural homes and properties can be particularly susceptible to wildfire damage because of their proximity to wildlands and distance from emergency response. The best defenses against wildfire damage are often landowner prevention and protection actions.

Many rural residents in Missoula County have created and maintained a defensible space around their home. There are numerous resources to help you plan your defensible space.

Our favorites:

- Living with Fire brochure: www.firesafemt.org
- Is Your Home Protected from Wildfire Disaster? www.firewise.org/resources
- Protecting and Landscaping Homes in the Wildland/Urban Interface, www.cnr.uidaho.edu/extforest/FireProtectBro.pdf

Missoula County residents have likely noticed an increase in red-needled beetle-killed trees over the years. In part because of drought and warmer average temperatures, mountain pine beetles have recently proliferated in western states, leaving behind acres of standing dead trees. These trees increase wildfire risk and severity, making it even more important that landowners are prepared and protected in the event of a fire. Early detection of beetle infestations on your own land can help control the spread of pine beetles. Consult your local MSU Extension forester for pine beetle detection & management information (contact information on page I4).

what is defensible space?

Defensible space is an area between your home and an oncoming fire where vegetation has been modified to reduce wildfire threat and intensity, providing firefighters a better opportunity to effectively defend your home. Thirty to 100 feet around the home is the recommended size for a defensible space.

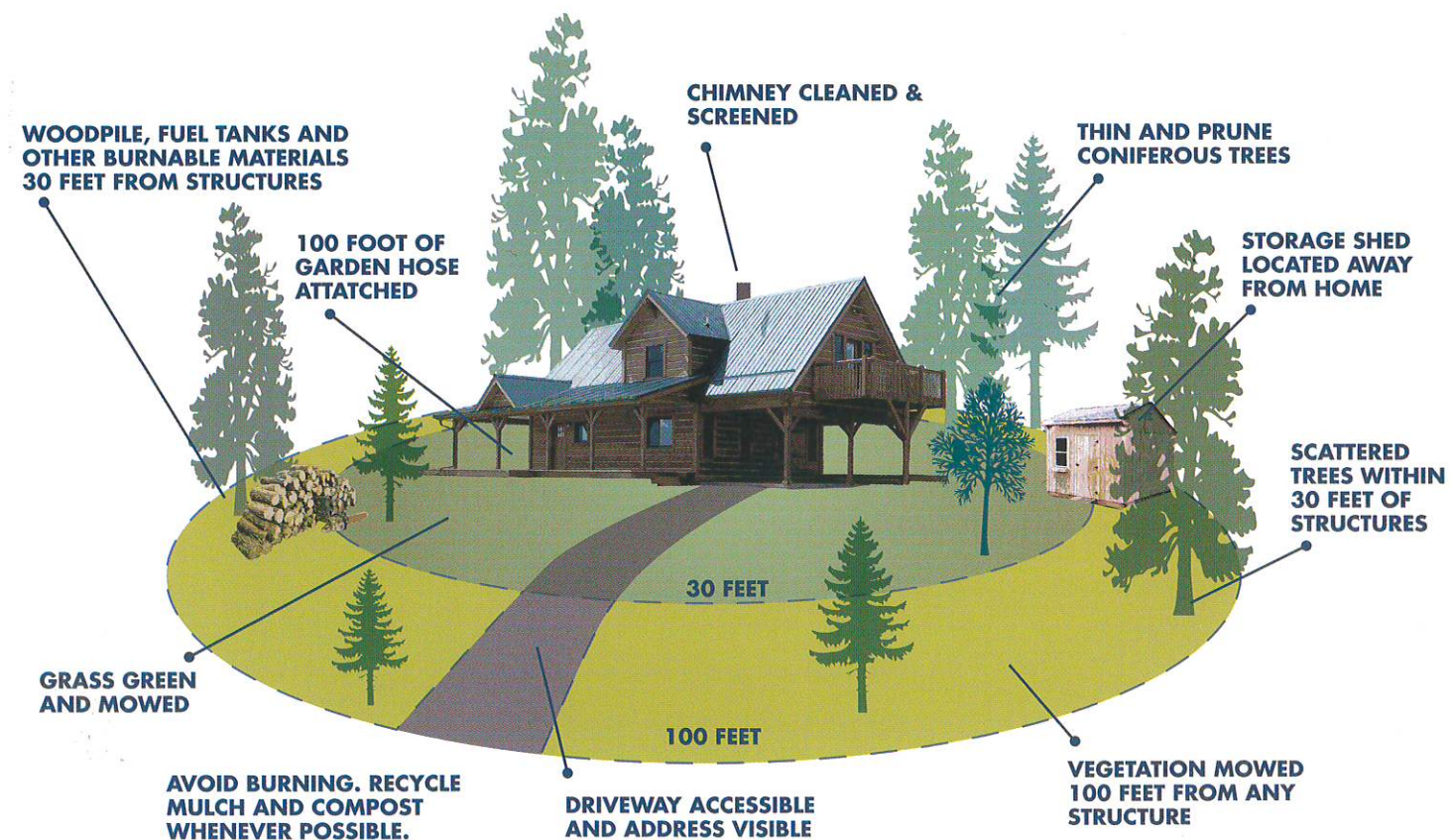


DIAGRAM ADAPTED FROM FIREWISE.ORG

I don't want to put any firefighter at risk protecting my property. Knowing this motivates me to do everything I can to maintain a fire safe zone around the house.

~ANNE DAHL, SWAN VALLEY

what you can do:

- If you are building your home, consider nonflammable building materials such as metal roofing, rather than materials that are more prone to ignition and that burn rapidly. Also think about where on your property to site your home, keeping wildfire risk and an escape strategy in mind.
- Know the access options to your home and property. Ideally there is more than one access option, so that in the event of a wildfire in your area, there are multiple access and escape options for you and firefighters. Identify water sources near your home that firefighters could use to refill firefighting equipment—ponds, wells, reliable creeks or irrigation ditches are possibilities.
- A few ideas for defensible space around your home: rock gardens, well-spaced trees and native plants help prevent wildfire from spreading to your house. Creating defensible space does not mean removing all trees—carefully selected, well-spaced trees work well in combination with fire breaks such as driveways, walkways, rock gardens, lawns and irrigated areas.
- Understand the risk of mountain pine beetle infestations in your area and learn to recognize the early signs of infested trees. Some early intervention techniques can prevent or control spreading. Visit www.beetles.mt.gov for comprehensive information. Additional sources of pest information include: Montana Department of Natural Resources website: www.dnrc.mt.gov/forestry or the Missoula MSU Extension Forestry Office: (406) 243-2773 or www.cfc.umt.edu/extensionforestry
- Learn the burning regulations for your area. Since all fires except small cooking or recreational fires require a permit, call for permits before burning limbs, yard waste, and other debris. Burn permits are administered by Missoula City-County Health Department through local fire departments. Both can provide current local information on burning conditions. There is a list of Missoula County Fire departments and detailed information on burning safely on the Missoula County Fire Protection Association website: www.mcfpa.org or you can contact the Missoula City-County Health Department at (406) 258-4996.
- Talk with Rural Fire Departments and other community members about emergency plans for your area. Many areas in Missoula County have volunteer firefighters and community members who are active in planning for wildfire prevention and protection.
- Check with Missoula's MSU Extension Forestry Office for information on stewardship seminars and fuels-reduction cost-share programs: (406) 243-2773 or www.cfc.umt.edu/extensionforestry

important phone numbers:

- To report a house or building fire: **911**
- To report a wildfire: **911**
- To obtain a seasonal burn permit, call the fire district closest to you:

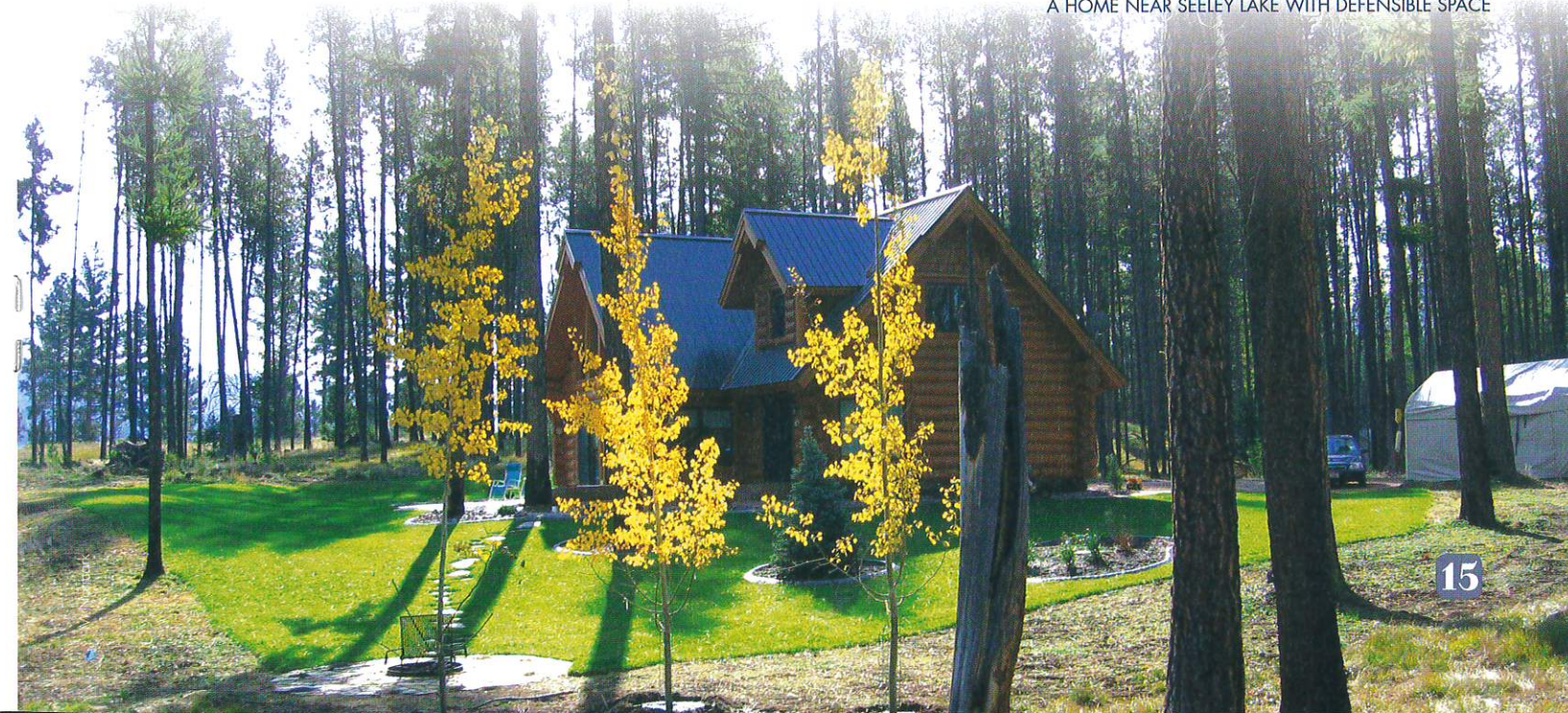
ARLEE: (406) 726-3230	GREENOUGH-POTOMAC: (406) 244-5796
CLINTON: (406) 825-6260	MISSOULA: (406) 549-6172
FLORENCE & LOLO: (406) 273-2357	SEELEY: (406) 677-2400
FRENCHTOWN: (406) 626-5791	SWAN: (406) 754-2301 (DNRC field office)
- To check current burn conditions and find out if burning is allowed on a given day, permit holders must call the outdoor burn hotline the morning of the planned burn:

SEELEY & SWAN: (406) 677-2899
OTHER AREAS OF MISSOULA COUNTY: (406) 258-4900

to learn more, or to become involved:

- National Firewise Communities Program: www.firewise.org
- Missoula Firesafe Council: www.firesafemt.org
- Missoula County Community Wildfire Protection Plan, Office of Emergency Services: www.co.missoula.mt.us/oes

A HOME NEAR SEELEY LAKE WITH DEFENSIBLE SPACE

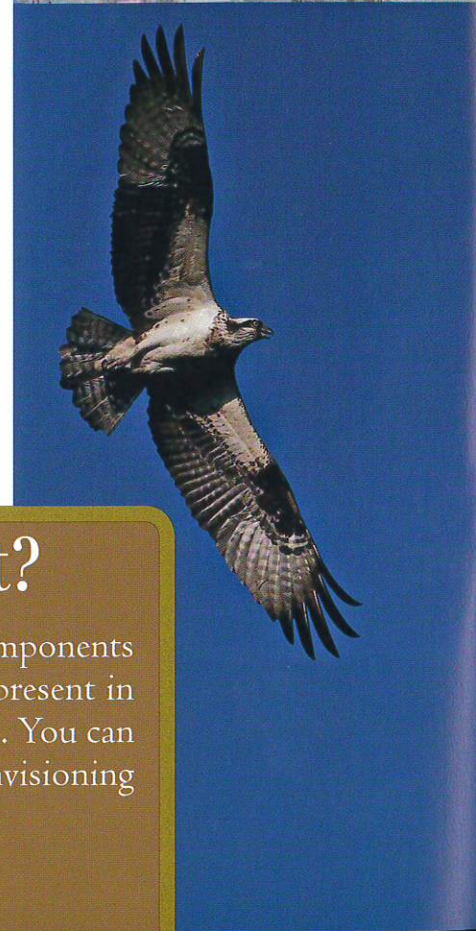


LIVING WITH WILDLIFE

Missoula County is situated in one of the premier mountain ecosystems of the world. The places we call home are part of the famous Crown of the Continent Ecosystem and the Yellowstone to Yukon region. Our rich landscapes are home to wildlife species like grizzly bears, bull trout, elk, and bald eagles. We share our lands with sensitive wildlife species that require healthy natural landscapes. However, as more and more land is developed, we lose, fragment, and alter wildlife habitat. We can help offset this loss by cultivating wildlife habitat on our rural lands.

Living near wildlife is a special treasure, though this positive coexistence with wildlife can turn problematic for both residents and wildlife if certain precautions are not taken. Animals are drawn to human food, garbage, gardens, and pet and livestock feed. If they get into these attractants, animals can suffer from deadly digestive problems or become conditioned to look for easy meals from humans rather than finding natural forage. Wild animals that get into your garbage once are likely to return again and again (and visit your neighbors as well), coming too close to humans and pets, and risking your safety—and theirs.

With a few key tips in mind, it is possible to preserve and enhance natural wildlife habitat on your land while also reducing opportunities for unnatural or troublesome interactions between humans and wildlife.



what is wildlife habitat?

Natural food, water, and cover make up the three basic components of wildlife habitat. For any species, if these three things are present in the quantity and quality it requires, wildlife habitat is present. You can look around your property with these three things in mind, envisioning prime habitat for fish, ungulates, birds, and other creatures.

what you can do:

- By leaving much of your land natural and undisturbed, you can preserve natural wildlife habitat. Snags, woody debris, wetlands, and native vegetation provide cover, nesting sites, and food sources for wildlife. With wildlife habitat in mind, you can enhance areas that have been disturbed by planting native trees, shrubs, and grasses. Of course you will need to balance encouraging this natural vegetation with landscaping for wildfire protection (refer to the section on wildfire prevention and protection, pages 12-15).
- Human food and garbage that is accessible to animals attracts wildlife unnaturally and invites problems. Store all food, garbage, bar-b-que grills, coolers, pet food, livestock feed, soaps, and other odiferous items indoors or in sealed, animal-proof containers to avoid trouble.
- Birds aren't the only ones who enjoy bird feeders—bears are known to get very creative about accessing bird seed in hanging feeders. If you have feeders, hang them at least ten feet from the ground and six feet away from trees. It works well to hang bird feeders from a rope tied between two trees with proper spacing below and to each side. Spilled birdseed can attract mice, which can in turn attract snakes and coyotes. Cleaning up spilled seed can help prevent these animals, as well as bears, from coming too close to your house.

BLACK BEAR TRYING UNSUCCESSFULLY TO GET INTO A BEAR PROOF DUMPSTER NEAR SEELEY LAKE



more of what you can do:

- If you deer-proof your garden and fruit trees with fencing, you will prevent unwelcome trampling and feeding on your vegetables, herbs, and fruit trees. Deer are even known to munch on landscaping plants. You can cover succulent landscaping plants with mesh fabric until they are well-established. Also consider covering vulnerable landscaping plants in winter, when natural deer forage is most scarce.
- If you fence your property for livestock or pets, consider using wildlife friendly fencing. Considerations include fence height, spacing between horizontal fence rungs, location of gates, and fence material (see next page for resources).
- Out of concern for both pets and wildlife, it is best to keep pets fenced, indoors or with you, especially at dawn, dusk, and nighttime. Predators can injure or kill pets; and pets—especially house cats—routinely injure or kill birds and small mammals. Deer or elk chased by dogs are unnecessarily stressed, especially in winter. Wildlife chased into fences can become tangled and stuck—often resulting in death. Wildlife chased into roadways endanger both animals and motorists. Montana State law prohibits dogs from chasing hoofed game animals and the pet owner can be held responsible.
- On rural roads be sure to slow down and use extra care, especially at dawn and dusk, to reduce chances of collisions with deer and other wildlife.
- Owl decoys, Mylar streamers or hawk silhouettes attached to the roof of your house help prevent birds from hitting large windows.
- To prevent unwanted nesting birds and bats in your home, you can box the eaves of your roof and secure attic vents with netting. If these animals have other undisturbed places to nest on your land, like in snags, cliffs, caves, or even old out-buildings, they will be encouraged to use this habitat instead of your home.

to learn more:

- Montana Fish Wildlife and Parks “Living with Wildlife” webpage contains landowner information specific to living with over 20 species of wildlife. Information on each species helps landowners key in on specific problems and solve them through understanding wildlife behavior. Visit www.fwp.mt.gov/wildthings/livingwildlife
- Montana Fish Wildlife and Parks produces a useful Landowner’s Guide to Wildlife Friendly Fences: www.fwp.mt.gov Another great fencing resource is Montana State University’s Extension Program’s collection of photos and illustrations of wildlife friendly fencing: www.msueextension.org/ruralliving/fencephotos.html
- Montana State University Extension Office maintains a wide variety of updated information on their website covering many aspects of rural living, including information specific to living with wildlife. Offices are located throughout the state. Visit www.msueextension.org
- The Living With Wildlife Foundation based in the Swan Valley has web information, publications, and outreach materials for living with wildlife, particularly bears. Visit www.lwwf.org

WOODY DRAWS AND NATIVE VEGETATION
OFFER IMPORTANT WILDLIFE HABITAT NEAR LOLO

WATER:

our vital resource

Western Montana is famous for its water: crystal clear mountain brooks, blue ribbon trout streams, scenic lakes, enormous meandering braided rivers, and high quality drinking water. Missoula County is home to the Clark Fork, Blackfoot, Swan, Clearwater, and Bitterroot Rivers, and the many streams, creeks, lakes, ponds, and wetlands that feed them. These waterways, and the riparian lands that surround them, supply our drinking and irrigation water. They support our productive fisheries and provide prime recreational opportunities. And even though riparian lands make up a relatively small portion of overall land area in Missoula County, biologists believe that 80% to 90% of our local plant and wildlife species rely on these lands for some aspect of their survival.

Landowners who have a stream or river running through their property, or who live near a lake or wetland, are extremely fortunate and share an important responsibility in influencing the health of this vital resource. By protecting, restoring or enhancing the water body's natural functions, landowners can encourage natural processes and see both short-term and long-term benefits of river health.

what is a riparian area?

“Riparian” simply refers to the land next to a river, lake, or wetland. These lands depend upon the presence of water and periodic flooding to sustain their natural plant and animal life. These lands absorb floodwaters like a sponge, slowly releasing water back into the river or into the groundwater below. Riparian soils filter rainwater and runoff, removing or reducing sediment and pollutants before returning water to the river. Protecting streams, rivers, lakes, and wetlands means protecting their associated riparian areas as well.



what you can do:

- Flooding and erosion are natural, inherent river processes, but the associated problems can be quite difficult for landowners to manage. Many riverfront property owners in Missoula County have experienced devastating property damage from a river flooding or changing course. If you have property along a stream or river, learn the floodplain and flood potential for your area. This information may be mapped, though be aware that mapped floodplain boundaries are approximate and can move over time.
- Check with the Missoula County floodplain administrator for information and regulations pertaining to your area : (406) 258-4841 or www.co.missoula.mt.us/floodplain. Generally, the most certain way to protect your home and out-buildings is to build these assets well back from the river, the floodplain and potential new river channels.
- Landowners working to solve or prevent stream bank erosion problems have numerous options that are more effective and less problematic than the bank-armor or rip-rap solutions typical of the past and now generally prohibited in Missoula County. Bank-armoring (piling rocks or other solid objects known as rip-rap along the eroding bank) ultimately transfers the river's erosive powers to neighbors downstream and on the opposite bank and may also yield only temporary erosion control. In many cases, stream and riparian restoration work can provide long term solutions to erosion problems, by encouraging the stream to meander and slow its flow. Technical assistance, restoration funding, and permits (required for any stream bed or stream bank project) are available through the Missoula Conservation District, contact information on page 23.
- Conserve water where possible. Throughout the arid west, water is in limited supply, and drought seasons can put extra strain on water supply. We can all do our part to conserve: consider landscaping with native plants that do not need much watering; think about limiting household use of water; and try capturing rain water from roofs to use for yard and garden watering.
- Keep water clean by storing and applying potential contaminants well away from the water. Pollutants such as car or machine oils and lawn fertilizer are best kept at least fifty to one hundred feet from the stream bank to protect water quality.
- Since natural riparian plants serve a wide variety of beneficial purposes, working most effectivity when as much of this vegetation is left as intact and undisturbed as possible. Season after season riparian plants are working hard to protect water quality, slow flood waters, provide wildlife habitat, and keep rivers healthy. Natural riparian vegetation provides the shade and woody debris important for fish habitat. These plants also provide habitat for insects that in turn support healthy fisheries.

healthy riparian areas

NATIVE PLANTS PROVIDE FOOD AND SHELTER FOR SONGBIRDS, INSECTS, AND WILDLIFE.

NATIVE RIPARIAN PLANTS HAVE STRONG, DEEP ROOTS THAT PROTECT BANKS FROM EXCESSIVE EROSION.

FALLEN TREE LIMBS AND WOODY DEBRIS CREATE POOLS IMPORTANT FOR FISH HABITAT.



COONEY CREEK SWAN VALLEY

THE CREEK CAN FLOOD THESE RIPARIAN AREAS, RECHARGING GROUNDWATER AND ENCOURAGING NEW PLANT GROWTH.

Our ranch on the lower Clark Fork has two miles of river frontage. Fifteen years ago with the aid of a grant from Montana Fish, Wildlife and Parks, I fenced off the entire river riparian zone to exclude livestock grazing. The results have been most rewarding with new growth of cottonwood trees, aspen, willows, and chokecherries contributing to the stabilization of the river banks and providing habitat for birds and deer.

~JIM CUSKER, GRASS VALLEY

to learn more:

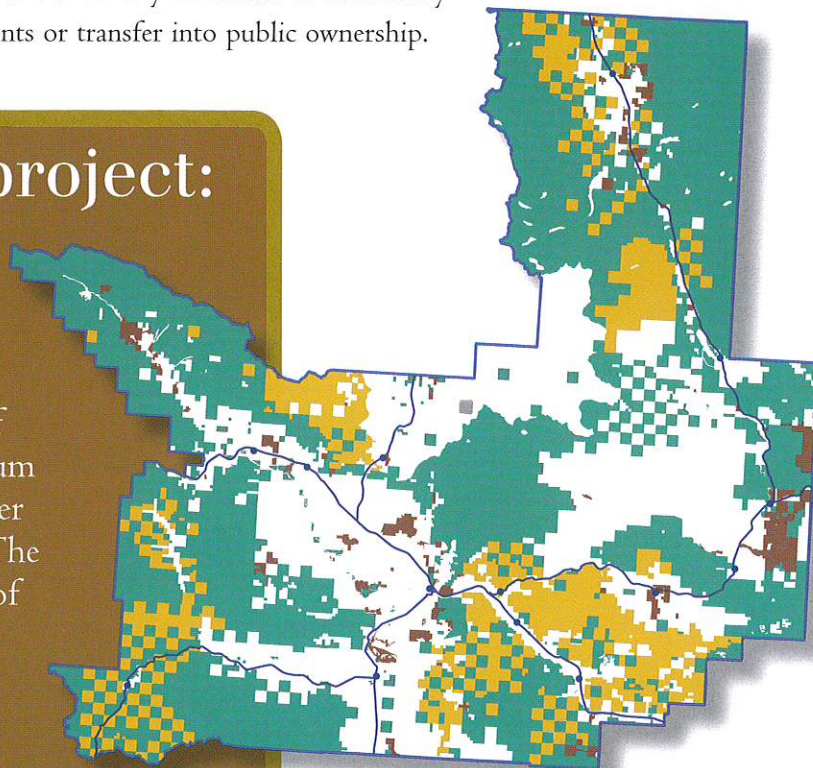
- The Missoula Conservation District regulates activity in or immediately adjacent to the streambed. Before you consider armoring the bank with rip-rap, building a bridge or dock or changing the streambed or banks in other ways, you must apply for a “310 permit.” The Conservation District also offers landowner consultations to help you solve and prevent stream-related problems. Contact their Missoula office at (406) 829-3395 or www.missoulacd.org
- The Montana Department of Environmental Quality (MT DEQ) and Montana Fish, Wildlife and Parks (MT FWP) both have information related to stream health. Landowner consultations and possible restoration grants are available to promote stream health on your property. Ask about MT FWP’s Future Fisheries Improvement Program at their Missoula office (406) 542-5500 or fwp.mt.gov/habitat. Learn more about water quality issues and grant opportunities from MT DEQ’s website: www.deq.state.mt.us/wqinfo/index.asp
- The Missoula County Office of Planning & Grants and Health Department provide permitting information related to home site and septic system planning. Check with them when planning to build: (406) 258-4642 or www.co.missoula.mt.us/opgweb
- The Missoula Water Quality District has countless ideas and resources for helping residents and landowners keep our waterways clean and healthy. Contact them to learn more about how to dispose of hazardous waste (paints, solvents, car oil, etc.), how to improve your property’s riparian area, or to volunteer on local restoration projects: (406) 258-4890 or www.co.missoula.mt.us/wq/
- Get involved or get information about local projects, issues, and opportunities with local watershed groups throughout the county: Lolo Watershed Group, Clearwater Resource Council, Swan Ecosystem Center, Blackfoot Challenge, Ninemile Working Group, Rattlesnake Creek Watershed Group, and others will have information specific to your area.

LAND CONSERVATION: *protecting the land in perpetuity*

Missoula County is full of special places. Our lands support vibrant communities, fertile soils, open grasslands, productive forests, abundant lakes and streams and diverse wildlife populations. Our working lands, recreation opportunities and healthy landscapes are a way of life here—a way of life worth perpetuating. Land conservation is important to Missoula County residents—from small-scale efforts by conscientious landowners to major landscape scale projects—all evident here throughout the last several decades. Many lands have been formally conserved through conservation easements or transfer into public ownership.

montana legacy project:

In 2008, The Nature Conservancy and the Trust for Public Land teamed up in an unprecedented land conservation project in which they purchased more than 310,000 acres of western Montana forest land from Plum Creek Timber Company, including over 230,000 acres in Missoula County. The land will eventually transfer to a mix of state, federal, and private owners, with goals of protecting fish and wildlife habitat, maintaining the land as productive working forests, and continuing to provide public access for a variety of outdoor recreation activities. For more information visit www.themontanalegacyproject.com



PUBLIC LANDS

CONSERVATION EASEMENTS

LEGACY LANDS

why conservation easements?

As many special places in Western Montana experience continuing population growth and increased development pressure, many landowners are thinking about the future of their land. Perhaps the most common way for a private landowner to formally protect their land is through conservation easement.

In 1976, the first conservation easement in Montana was signed. Since that time, nearly a million acres of private land in Montana have been protected by conservation easement, including more than 36,000 acres in Missoula County.

Conservation easements are a voluntary legal agreement between a landowner and a qualified organization to limit the uses of the land in order to protect its conservation values. By donating or selling a conservation easement, landowners voluntarily give up certain development rights, but continue to own and use the land, and have the right to sell it or pass it on to heirs. While this tool does not work for everyone, and there are several details to carefully consider before opting for an easement, many Missoula County landowners consider conservation easements to be an effective tool in protecting rural landscapes.

RANCH NEAR FRENCHTOWN CONSERVED IN PART THROUGH OPEN SPACE BOND PROJECT FUNDING

to learn more:

Any of the organizations listed below can describe their focus and services, and help you explore the best options for your land, your conservation goals, and your financial and estate planning. The conservation values you wish to protect and the development rights you want to retain will guide your discussion of easement options.

Each conservation easement-holding organization has different criteria which are used for evaluating potential easements. Generally, their interest is in maintaining conservation values such as significant fish and wildlife habitat, scenic open spaces, large tracts of agricultural and timberlands, and lands along significant recreational corridors. The amount of acreage needed to qualify for an easement varies with each organization.

organizations facilitating easements in missoula county:

BITTER ROOT LAND TRUST	(406) 375-0956	www.bitterrootlandtrust.org
FIVE VALLEYS LAND TRUST	(406) 549-0755	www.fvlt.org
MONTANA FISH, WILDLIFE & PARKS	(406) 444-3939	fwp.state.mt.us
MONTANA LAND RELIANCE	(406) 443-7027	www.mtlandreliance.org
THE NATURE CONSERVANCY	(406) 543-6681	www.nature.org/montana
THE ROCKY MOUNTAIN ELK FOUNDATION	(800) 225-5355	www.rmef.org
U.S. FISH & WILDLIFE SERVICE	(406) 727-7400	www.fws.gov/mountain-prairie
VITAL GROUND FOUNDATION	(406) 549-8650	www.vitalground.org

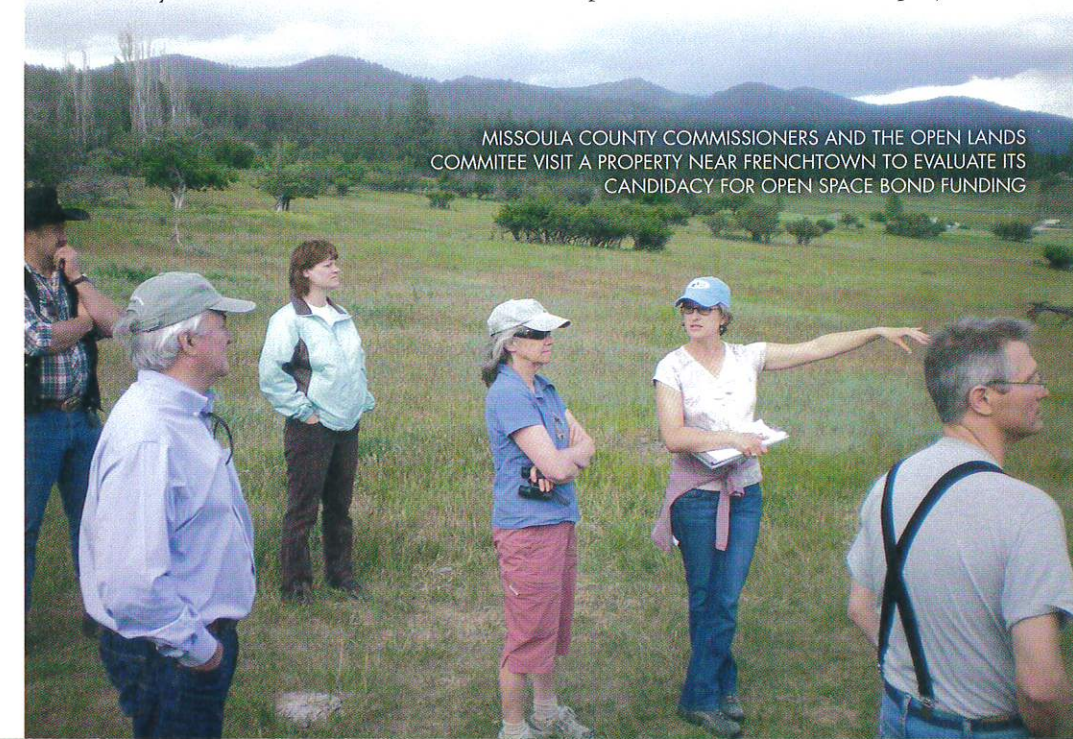
For centralized information on land trusts in Montana, check out the Montana Association of Land Trusts at (406) 490-1659 or www.montanalandtrusts.org; or the Land Trust Alliance at (406) 549-2750 www.landtrustalliance.org

preserving open space in missoula county:

In November 2006, Missoula County voters approved a \$10 million bond for the purpose of helping landowners voluntarily preserve open space in Missoula County, with half allocated to the County and half allocated to the City of Missoula for use in the urban area. So far nearly a million dollars have been used to help place over 5,000 acres of private land in rural Missoula County under conservation easement.

The bond funds help protect Missoula County's rich natural resources and quality of life by supporting projects that:

- Protect the water quality of rivers, lakes and streams
- Protect wildlife habitat
- Conserve working ranches, farms and forests
- Provide access along rivers and streams
- Manage for growth
- Provide open space and scenic landscapes
- Provide recreational and commuter trails and wildlife corridors
- Pay costs associated with initial clean-up and weed control in the project area

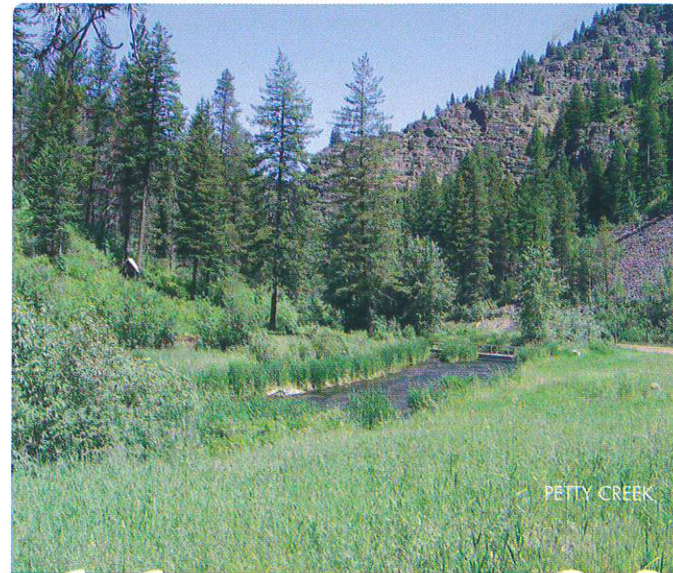


MISSOULA COUNTY COMMISSIONERS AND THE OPEN LANDS COMMITTEE VISIT A PROPERTY NEAR FRENCHTOWN TO EVALUATE ITS CANDIDACY FOR OPEN SPACE BOND FUNDING

ADDITIONAL RESOURCES

Topics of importance for rural landowners are many, and this handbook is limited to just a few of the most pertinent and common landowner issues in Missoula County. We hope you'll seek more information on other subjects that are important to you, and share what you learn with others in your community. Here are a few resources for other items that may be of interest to Missoula County landowners:

- A good resource for information on hunting, fishing, recreation, and access to public lands is Montana Fish, Wildlife and Parks. Contact their Missoula office at (406) 542-5500 or visit their website: www.fwp.mt.gov Missoula County encompasses parts of the Lolo National Forest, the Flathead National Forest, the Bitterroot National Forest, and Bureau of Land Management lands. Contact the U.S. Forest Service Northern Region Office in Missoula at (406) 329-3750 or www.fs.fed.us/r1 Contact the regional BLM field office in Missoula at 329-3914
- For information on rural roads, road maintenance, and dust control visit the county's public works webpage: www.co.missoula.mt.us/road or the county's air quality page: www.co.missoula.mt.us/airquality or call Public Works at (406) 258-4753
- For landowners building new homes, first contact the county's Building Department at (406) 258-4753 or www.co.missoula.mt.us/building



PETTY CREEK

“

I feel it is a privilege to live in the Petty Creek area. I try to repay this privilege by respecting the history, the people, the wildlife, and the open lands that are all part of these beautiful valleys and mountains.

~DOUG MCCOY, PETTY CREEK

- For information, permits, and technical assistance regarding wells and septic systems, contact the county's Environmental Health Department at (406) 258-4755 or visit their website at www.co.missoula.mt.us/Envhealth
- For information on purchasing or selling property in Missoula County, contact the Missoula Organization of Realtors at (406) 728-0560 or www.missoularealestate.com
- Missoula County Rural Initiatives Department works to protect the cultural, historic, economic, and natural resources of the County through land-use planning and resource protection. The office supports the Open Lands Committee with their efforts to preserve and protect farming, ranching, timber lands and economic diversity in rural portions of the County. Rural Initiatives also supports six local Community Councils who meet monthly to discuss issues of local importance. Learn more at www.co.missoula.mt.us/rural or call (406) 258-3432. Please visit Rural Initiatives at 317 Woody Street next to the County Courthouse in downtown Missoula.

NORTH BITTERROOT RANCH



K. Hughes



thanks for reading

~ Your Neighbors,

The Missoula County Open Lands Citizens Advisory Committee

We welcome your ideas, suggestions, and comments.
Join us at one of our monthly meetings or contact us through

MISSOULA COUNTY RURAL INITIATIVES:

317 Woody Street
Missoula, Montana 59802

www.co.missoula.mt.us/rural

phone: (406) 258-3432

This handbook is endorsed by the Missoula County Board of Commissioners

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