

## Jewels of the Crown: Our “Wet” Jewels

By Carolyn Mehl

When we talk about the amazing natural resources of the Clearwater Valley, our discussions often focus on the wildlife, forests, lakes, and streams. These resources are in fact amazing but we should acknowledge one more “Jewel” in our crown – our amazing wetlands! In most areas of the country, finding a wetland that has not been degraded by draining, dredging, filling, sedimentation, exotic weeds, or pollutants, is rare indeed. Thankfully, in the Clearwater Valley, finding a wetland that is in a degraded condition is the rarity. The quality and diversity of our many wetlands should be another source of pride for the many individuals who have worked and lived in this valley for so many years, while protecting our natural resources.

So what are wetlands anyway and why are they important? The generic term "wetland" is often used to describe different types of sites where the soil is wet for some period of time each year but not necessarily permanently wet. These sites are further characterized by distinctive soils and moisture loving vegetation. Many wetlands occur in areas where surface water collects or where underground water discharges to the surface, making the area wet for extended periods of time. Some common wetlands you might recognize in the Clearwater Valley include sloughs, wet meadows, seeps, and springs. The moist margins around our lakes, ponds and rivers are also considered wetlands. While the forests, lakes, and streams provide incredible wildlife habitat and recreational opportunities, the wetlands do as well but they also have a “job”. They provide a diversity of functions that are frequently underappreciated until the wetland has been degraded. In fact, different wetland types will often have different “jobs” that they perform, making it important to maintain a diversity of wetland types in a region. Some of these functions include acting like a sponge to reduce the speed of surface runoff and stream flows from snowmelt and rain events. They help filter sediments while also capturing nutrients and chemicals before they reach our lakes, streams, and groundwater. Their vegetation has particularly tough root systems that bind soil, thereby helping to reduce shoreline erosion along streams and lakes from wave action or flooding. They absorb water during the wet season and gradually release it during dry periods.

A wetlands job is not necessarily glamorous but the quality of our surface waters and groundwater would not be the same without them. But many of you who have spent much time recreating in this valley are probably thinking - the “job” is very interesting but surely she is going to talk about the wildlife. Of course! It is impossible to talk about wetlands and not discuss the wildlife that benefit from them. Wetlands represent the most diverse habitat in this valley when it comes to wildlife. Most of the species occurring here will spend some portion of the year in wetland habitat. Whether it is grizzlies, black bear, elk, deer, eagles, osprey, songbirds, woodpeckers, sandhill cranes, bobcat or lynx, they will spend time feeding, hunting, nesting, drinking, or loafing in wetland habitat. Then there are those species that are dependent upon or associated with wetlands for most of the year. They include waterfowl such as ducks, geese, loons, and swans; amphibians; many bird species including warblers and ruffed grouse; beavers; mink; moose; and many others. Many fish species are dependent on wetlands for spawning or production of small fish and insects for food. What is it about wetlands that make them so special to wildlife? Because of the additional moisture they provide, they are often very productive and frequently have the highest diversity of plant species relative to drier sites. Aspen, cottonwoods, and many shrubs including willows, dogwoods, and alders are all associated with wetlands. Most sedges, rushes, and cattails are also dependent on the water present in wetlands. Frequently, the rarest plants

in a region will be associated with wetland plant communities. In addition to mosquitoes, wetlands often have a high diversity of insect production that includes dragonflies, flies, butterflies, moths, etc. Many songbirds are attracted to wetlands, particularly during nesting season, for the high energy and virtual smorgasbord of insect species. For this reason, wetlands are particularly popular with the bird watching enthusiasts. In many parts of the country, studies have noted that a decline in dragonfly numbers and species diversity usually signifies an equivalent decline in wetland amounts and quality across a region. In this valley, the diversity of dragonfly species has not yet been surveyed but as an interesting experiment next summer take note of the many different types of dragonflies that you see as a testament to the quality of our wetlands.

Yet for all the value wetlands provide, they are frequently the most vulnerable to our shortsightedness. We clear them, drain them, dredge them, and fill them on a regular basis. On the shores of our lakes and streams, we clear the very vegetation that protects our water quality and prevents shoreline erosion. We build roads that cutoff the water source to a wetland or increase sedimentation rates beyond what the wetland can reasonably filter. We apply chemicals to our roads, driveways, and lawns that runoff in the next rainstorm and kill wetland vegetation. Wetlands are also extremely vulnerable to exotic weeds. We have been fortunate so far in that most of our wetlands are still dominated by native vegetation. As with everything that is special, it will take a lot of dedication and recognition of their values to keep them that way. Maintaining our extraordinary wetlands will be no different. Sometimes it is easy to say that we have so much in this valley it won't hurt anything to lose a few of our jewels. But I doubt the wildlife, particularly the dragonflies, would agree.....

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