

## Watery Jewels of the Seeley – Swan by Scott Tomson

Many of you probably read Jay Kolbe's recent article about the "Crown of the Continent" and the significant place the Seeley – Swan holds in this unique region. Continuing with this theme, I'd like to focus on some of the most prominent jewels in our piece of the crown, the numerous lakes of this area.

Those of you not new to this neck of the woods are probably like me in that you sometimes take a lot of the wonderful things here for granted. I don't mean this in a bad way, just throwing it out there as food for thought. Our autumn, with elk bugling in the hills and electric yellow larch and freshly snow capped peaks reflected in one of our many lakes, is probably the time when I "snap out of it" and am most aware of what a special place we live in.

Take our lakes for example, and the myriad of choices we have when it comes to places to fish, swim, boat, or simply hang out by the water and enjoy the view. For me it sometimes gets confusing. Do I want to canoe up Lindberg Lake, hike into Crystal and maybe even continue on and do the bushwhack to High Park in the rugged Missions? Or would I rather drive the scenic Clearwater Loop and hike in to Clearwater Lake to see if the big cutthroats are rising? Or maybe just go the easy route and launch a boat at Lake Alva, fish for a while and then listen to the loons once the lake quiets down for the evening. Those are just a few of the choices we have - the possibilities are endless.

So now that I've suggested that some of us might take the great beauty and opportunities that surround us for granted, I am going to offer a solution. For me it seems that knowing about a place helps me appreciate it more. My intent in the following paragraphs is to set the stage and to include some interesting facts on lakes in the Seeley-Swan.

On the Clearwater drainage side, most of you are probably familiar with the "Chain of Lakes" which, starting at the north end include Summit, Rainy, Alva, Inez, Seeley and Salmon. Summit Lake is fed by Bertha Creek so it may not really be a part of "the Chain" but I include it due to its position in the chain. The rest of these lakes are directly fed by the Clearwater River and were created by glacial terminal moraines during the last ice age. These types of lakes are also referred to as *paternoster* due to their resemblance to a chain of rosary beads. By definition, a *paternoster lake* is one of a series of glacial lakes, connected by a single stream or a braided stream system.

In addition to the Chain of Lakes, which are all visible from Highway 83, are several other lesser known and less visible lakes including: Beaver, Clearwater, Colt, Marshall, Hidden, Placid, Harper's, Tote, and Big Sky. To the best of my knowledge, all of these lakes are natural, being the products of glacial processes. Several lakes including Inez, Summit and Placid have been enhanced by man made dams. In regard to depths, which I am always curious about, Seeley is the deepest at 125 feet. The rest of the bigger lakes are all in the 70 -100 foot range for maximum depth.

The Swan River watershed has its share of watery jewels as well. These are just not as visible from the highway, with the exception of 10 mile long Swan Lake at the north end of the Swan valley. The next 2 largest lakes on the Swan side are Lindberg and Holland which are 815 and 413 acres respectively. Although the east side of the valley has several nice smaller lakes such as Pierce, Rumble and Vann, the lakes of the Missions are more numerous and probably better known. Some of the most frequented are Gray Wolf, Crystal, Glacier, Turquoise, Upper and Lower Cold and Jim Lakes. Sorry but I need to keep

some of the smaller ones with great fishing a secret! I did not find info on depths for many of the higher lakes but according to MTFWP data, Lindbergh, Holland and Swan Lake are 121, 156 and 125 feet respectively.

While thinking about fishing, I decided it might be interesting to look into what species are present in some of our lakes. An excellent resource for this kind of information is the MTFWP Fisheries Information System which you can access on the web. Here I learned that as many as 9 species of native fish and 8 species of non-natives may occur here. Native species include the federally listed bull trout and the westslope cutthroat trout, which is a species of special concern in Montana. In addition there are 3 species of suckers, brook stickleback, mountain whitefish, northern pike minnow (a.k.a. squawfish) and peamouth. The non-natives include brook, brown and rainbow trout, kokanee salmon, large mouth bass, northern pike, pumpkinseed and yellow perch.

In general, the lakes in the Clearwater drainage have a more diverse assemblage of fish. This is due in part, to the presence of more introduced, non-native species. However, some of this is also due to a greater diversity of native species in the Clearwater. To understand why the Clearwater has more native fish species than the Swan, I called Shane Hendrickson, fisheries biologist with the Lolo National Forest. Shane suggested that the more diverse array of native fish in the Clearwater is due to generally higher water temperatures (as opposed to lakes like Lindbergh and Holland), associated increases in productivity and closer proximity to a major river system (Blackfoot).

Shane also reported that one unique aspect of the Clearwater Valley is that we have bull trout populations which are fluvial, adfluvial and resident. In layperson's terms this means that there are some bull trout that live major rivers and run up to spawn in smaller tributaries (fluvial), some that live in lakes and spawn in adjacent tributaries (adfluvial), and some which are resident meaning they live year-round and spawn in the smaller tributaries.

According to Shane and his counterpart fisheries biologists at Montana Fish, Wildlife and Parks, Morrell Creek is one of the most important bull trout spawning tributaries in this system. Anecdotal information also suggests that Deer Creek, Inez Creek and the East and West Forks of the Clearwater are also important.

Being a terrestrial wildlifer rather than a fish guy, I need to mention at least a little about the importance of these lakes to wildlife. I'm sure many of you are aware that the federally listed bald eagle is a full time resident of the Seeley – Swan and that these birds depend on our lakes and streams for nesting and foraging. I know of bald eagle nests on Seeley, Placid, and Salmon lakes and I'm sure there are a few others associated with our lakes that I am not aware of. Likewise, ospreys are directly linked to our water bodies and nest on several of the larger lakes in the Seeley – Swan. Being more dependant on fish than the opportunist bald eagle, the ospreys all pack it up and head south in the early fall while some eagles stay here year-round.

You can't talk about lakes in this area without mentioning loons. Anyone who recreates on the larger lakes in the Clearwater has undoubtedly seen and/or heard these magnificent birds. Each year a loon ranger, hired by the Montana Loon Society in cooperation with MTFWP and the Forest Service, monitors loons on our lakes and does public outreach to ensure loons are undisturbed during the nesting period. Due in part to these efforts, loons successfully reproduce on Rainy, Alva, Seeley and Placid nearly every year. This year was a first in that we documented successful reproduction on Summit Lake.

Finally, I need to mention how important our lakes are to the survival of another common but less studied species, *Homo sapiens*. Many of us living in these valleys rely on the lakes as a source of drinking water, and water for our lawns, gardens and other everyday needs. Seeley Lake is the water source for anyone on “city water” in our area and residents along Inez, Seeley, Placid, Holland and Lindbergh lakes use water directly from these lakes for their domestic purposes. I know from casual conversations with folks associated with the water district and with other professional contacts that the water quality in our lakes is declining. This is particularly true for Seeley Lake. Certainly this is something for all of us to be aware of so that we can do what we can to maintain this valuable resource for years to come.

Well, this only scratches the surface in regard to covering the reasons why the lakes of the Seeley-Swan are so special. Hopefully I have succeeded in providing you all with some interesting information while at the same time shedding additional light on the fact that we truly do live in an incredible place. Thanks for your interest!

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