## Fall 2022 BMLAA Newsletter

There were not enough submissions to publish a Fall 2022 newsletter. Below are the articles that were submitted.

# Responsible shore-land Lighting on Bad Medicine Lake- so what about light trespass ?

Jon L. Wanzek

Bad Medicine Lake is a gem. It is natural, has crystal clear water, and a heavily (mostly ) forested shoreline. The darkness of the pristine lakeshore woods is awesome.

Bad Medicine makes you feel like you are in the wilderness. It's not like other lakes, many( most ) lakes feel developed and tame. The reasons we all love Bad Medicine Lake: It's a sanctuary, it's an escape, its natural, it's quiet, it's peaceful, it's serene, it's magical and it's spiritual. Our lake also has darkness, which like the water and shoreline, needs protection.

So let's talk about responsible shore-land lighting and how to keep Bad Medicine Lake naturally dark and be a good neighbor on the lake.

Artificial lighting allows us to engage in nighttime activities that would be impossible or unsafe under normal nighttime conditions. Whether it's boating or simply sitting on the porch to read, our enjoyment of the night is enhanced by the use of artificial light. At the same time, our lake at night ,provides a quiet open dark space that gives us privacy , a wilderness feeling, and an opportunity to enjoy the heavens and the stars. Balancing the ability to see at night with the desire to preserve the pristine beauty of the night darkness is the goal of sensible Shoreland lighting.

Sensible shoreline lighting:

Sensible lighting can minimize the three most serious problems along our shoreline:

Glare: when we see a distant point of light across the water, when we see a light from the fixture itself rather than what the fixture is meant to illuminate, we observe glare. Poorly designed or poorly installed lighting can hamper vision and also especially spoil the natural darkness and mood of the lake.

Light trespass: glare is the most common cause of light trespass. Light trespass is a light fixture on one property that illuminates on an adjacent property. It is not a legal concept but a description of the nuisance effect of improperly aimed ights or visibility of the lights from someone else's property (especially across the water).

We've all seen light poles with automatic timers, and light fixtures and excessive outdoor lighting around cabins that spill over on adjacent property or causes illumination on the lake ( and is thus visible across the lake ) which is not necessary.

Poorly designed lighting Is visible a long way across the lake... Because the waterfront is unobstructed water reflects glare from Shoreline lights over the water which trespasses on properties nearby and also distant across the lake.

Sky Glow: much of our exterior lighting shines out on the lake and also shines upward causing sky glow.. we all enjoy the dark skies at Bad Medicine Lake and seeing the stars in the Milky Way. Let's all try to minimize sky glow.

Installing sensible Shoreland lighting can be especially challenging because of the ability of water to both reflect light and provide an unobstructed view from far away. Anybody that has seen the moon rise over the lake appreciates how reflective the water can be. Artificial light placed at or near the shoreline line is free to carry across the water for long distances.

While we all may have noticed glare from yard lights, cabin lights or unshielded lights across the lake, it's likely we've never ventured across the lake at night to see how our own cabin and its light the lake and cause light trespass.

Let's start by making our own cabin lighting sensible and unobtrusive, only then helping our neighbors "see the light".

Please consider the following tips:

Do not use lights on poles and do not keep them on unless absolutely necessary. Do not use lights on poles with an automatic sensor that are on every night turn off the pole light when you are done using it or preferably don't use it unless it's emergency or for safety.

Turn off outdoor lights on your cabin, lot and shoreline unless absolutely needed. Keep the floodlights around your cabin turned off unless absolutely needed.

Provide adequate lighting for the task but don't over light, choose lights that meet your needs without light in the entire area... Be sensible.

Glare is the most common lighting problem on the lake. Glare can be illuminated by shielding fixtures and aiming light fixtures away from the water and neighboring property. Proper fixture position is important. Even well shielded fixtures, when placed on tall poles can cast light on neighboring property and across the lake.

Use "full cut-off" lighting fixtures to minimize glare. Full cut -off means that no light is emitted above the horizontal. Full cut-off fixtures are more effective and actually increase safety since they produce very little of the glare that can dazzle the eye and reduce our ability to see into the shadow.

Retrofit or replace existing fixtures (outdoor or indoor) with shields to reduce glare.

Avoid dusk to dawn security yard lights! Yard lights on a pole with an automatic eye should be avoided.

Please consider turning off your lights on a pole and all exterior lights at night if not really needed. Only turn on exterior cabin lights when needed.

Shoreline lighting etiquette involves working with your neighbors. You may have considered this problem while others may not have thought about it at all.

The first easy step is education about Shoreland lighting and identifying all the sources of glare along the shoreline on Bad Medicine Lake.

If you're talking individually to a neighbor about a lighting problem, a careful explanation may be all that's needed.

Understand some of the facts about different lighting fixtures, energy savings, and the differences between good security light and a light that's just very bright. Most people like to be helpful and cooperative when approached in a friendly and cooperative manner.

Eliminating light glare and light trespass/pollution on Bad Medicine Lake is important. We all love Bad Medicine Lake for its natural darkness and untouched feel.

Please, let's all work together to keep the Bad Medicine shoreline and sky dark!

#### The North Country Trail around Bad Medicine Lake

Robert Becklund, President Laurentian Lakes Chapter

The North Country National Scenic Trail is a footpath stretching over 4,800 miles from central Vermont to central North Dakota. It is the longest of the eleven National Scenic Trails authorized by Congress and is administered by the National Parks Service.

Locally, the trail happens to run just to the North and West of Bad Medicine Lake.

The North Country Trail Association (NCTA) is a membership organization of trail enthusiasts from 37 Chapters and Affiliates that work throughout their local communities to support the North Country National Scenic Trail. This trail-wide coalition of volunteers and partners helps to develop, maintain, protect and promote the North Country National Scenic Trail as the premier hiking path across the northern tier of the United States.

The Laurentian Lakes Chapter of the NCTA maintains over 60 miles of the trail through Becker and Clearwater Counties using only volunteers and donations. We currently have about 125 chapter members and a small subgroup of them maintain the trail using mowers, chainsaws, hedge clippers, pruners, snowblowers and the many hours of walking it takes to cover our section. We are always looking for more help so please consider offering some of your time. With a little coordination, you could host a family outing or social gathering as a trail maintenance event that could be great for everyone! We could help you make any day or time fit into your schedule whether it is one person or a group.

Our chapter is named after the Laurentian Divide, a north-south divide separating the waters of the northern midwestern United States from the waters of eastern and southern Canada either flowing north to the Hudson Bay or south to the Gulf of Mexico. The section of our trail from Tamarac to Long Lost Lake follows the divide.

The trail in our local area crosses the Hubbel Pond Wildlife Management Area, the Tamarac National Wildlife Refuge, Becker County Forest, the Greenwater Lake Scientific and Natural Area, the White Earth State Forest and Itasca State Park as it winds through the forest and prairie fields and around lakes, rivers and ponds. Historical points of interest include old railroad

beds used for logging, evidence of the first settlers, work of the Civilian Conservation Corps (CCC), life of the Ojibwa, the headwaters of the Mississippi River.

You can learn more about the trail and join the Laurentian Lakes Chapter at northcountrytrail.org. To volunteer for local trail work contact one of our Bad Medicine Lake area crew coordinators, Chuck Church and Jim Eisele, or email us at LLC@northcountrytrail.org.



#### Canoeing into Autumn Karl Altenburg

With the paddles pulled up and placed on our laps, the momentum imparted by the last stroke keeps us moving forward. Small drops of water slowly dripping into the bluegreen lake are the only sounds from our craft. Looking up we see the tall jack pines and the bent birches with their green and golden leaves just above the wave washed, rocky grey shoreline. The last light of summer reflects off the puffy white clouds and dances on ripples across Bad Medicine Lake.

I like canoeing. Before any other boats launch in the spring, and long after the other boats and docks are beached for autumn, my canoe remains ready to ply the water. It's simple and reliable. It's silent and slow. My go-to rescue craft for wayward beachballs and other summertime toys.

This 17-foot Grumman aluminum canoe was made in 1974. Red decal letters spell



out Camp Trowbridge on its sides. Although I bought it as an adult, its likely we met before at one of Concordia College's Language Villages held at Trowbridge in the 1970s. It is paired with set of Feather Brand paddles – a longer one for steering and the shorter one for power. Its nearly replicates the first boat my parents brought to Bad Medicine a half a century ago. At the time it seemed like a necessity for lake life – everyone had one.

Canoeing comes with cooperation – with my spouse, my children, or friends. Paddling together to explore the surface of Bad Medicine Lake is a great joy. With a draft of an only few inches, it glides in the shallows. There, I can see the lake bottom – the orange-red rocks, the waterlogged trees, and many small fish that seek safety in shallow water.

Canoeing is good exercise. It requires good balance and some strength. Learning how to enter a canoe was one of my first safe boating lessons taught by my parents and something I taught my children. I learned to canoe about the same time I learned to ride bike and it gave me the same sense of agency. My young friends and I were eager and excited to paddle the threequarters of a mile between my folk's cabin to Veronen's Resort. Sometimes it was a race, but most of time we went slow and hugged the shoreline. It was a chance to see nature and neighbors, watch beavers and an occasional garter snake swim by, hear the shrill of cicadas and loon calls, and feel the sun from above and below as its warmth bounced off the aluminum finish.

On this last summer evening of the year the lake was quiet. My son and I were packing up and putting away things for season. Just before we left, he humored his dad by going for a boat ride. No motor, no gas, no batteries. Just to two paddles and some shoulder muscles. Like the leaves that had started to fall, we mostly drifted and took in the beauty of Bad Medicine Lake. Turning back towards where we launched, we began accelerating. We hit the beach, the sound of sand scrapping the bottom of boat and our own light wake lapping the shore. Dragging the canoe back up into the tree line takes little effort from just one hand. I look forward to at least one more trip as the leaves change color. A few minutes on the lake makes a lifetime of memories.

### **SCUBA Diving in Bad Medicine**

Kurt Altenburg 30 September 2022



There is nothing that compares to exploring an alien world! SCUBA diving in Bad Medicine Lake has been my favorite pastime in the water since being certified in 2004. The underwater world right below most people's boats goes relatively untouched with small mouth bass waiting for you to expose crayfish, northerns hiding on the fringes of your vision, crayfish with their claws stretched out at you, and the occasional eelpout (if you are willing to go down to 45 feet or deeper). Fresh water diving is usually colder and murkier than diving in the ocean but, Bad Medicine has historically had some of the best water clarity in Minnesota with visibility greater than 30 feet. A special place for me under water is a large rock which is in about 16 feet of water. My dad put a large smiley face on top of this boulder years ago when I was a small child. It is still my first dive of every season to go down there, flip the rocks, and keep it going (see photo from 2019). This year the lake has been exceptionally warm, and the visibility has been reduced significantly to around 8 feet (see photo from 2022). I look forward to hearing the results of the next water quality report and have my fingers crossed the water clarity improves over the coming years.