Energy Efficient and Dark Sky Compliant Street Lighting

written by John Mueller | February 22, 2021 Over the past year we have been working on implementing better lighting at the Lodge which is more energy efficient and dark sky compliant. One of the projects we implemented was installing 28 new street light fixtures. This project was partially funded by a grant from <u>Michigan's Department of Environment, Great</u> Lakes, and Energy (EGLE) (project contact at EGLE: Jake Wilkinson).

The street lights that were replaced are around the parking lot of the Lodge, the streets lights along Golf Course Road (the entry road into the resort), the cabin road between Golf Course Road and the golf course, and the cabin road between Golf Course Road and the north side forest were . These were high pressure sodium light fixtures, and were not shielded.





Old Light Fixture

The high pressure sodium lighting used for the street lighting on the property was older technology. Since they had been installed, newer technology for street light fixtures have been developed that use less energy. We had an energy audit performed in 2018 / 2019 by <u>Michigan Energy Options</u> which highlighted the areas where we can be more energy efficient (audit performed via a grant provided by <u>WUPPDR</u>). One of the recommendations for improving our energy efficiency at the Lodge (ie. energy conservation measures) was to replace the high pressure sodium light fixtures and bulbs with LED street lights.

As well, these street light fixtures were casting light in unnecessary areas. In other words, the older light fixtures were contributing to light pollution. This unnecessary light was taking away from the natural darkness that the Keweenaw is known for and stargazers crave at the Lodge.

Street lights around the world are one of the highest contributors to light pollution. Thus, the street light project was on the top of our list for addressing our dark sky initiatives.

We started working on it in the summer of 2020, with a sample of one fixture installed in August 2020 to see how the fixture would look and work on the property (on Golf Course Road, near cabins 24 and 25). After feeling comfortable with the sample light we selected, we ordered the remaining 27 fixtures. Due to a backlog of the lights we did not receive this order of lights until late Fall 2020. As well, the electrical contractor, <u>Bay</u> <u>Electric</u> was backlogged with multiple projects. This led to the light being installed in January and February 2021.



Bay Electric installing new street lighting at the Lodge — in the Lodge Parking Lot



Bay Electric installing new street lighting at the Lodge — in the Lodge Parking Lot

The light fixtures that we selected were from <u>Truly Green</u> <u>Solutions</u>, a <u>Cobrahead RWL G2 model</u>.



Here are the before-and-after pictures for when the street lights were replaced with dark-sky compliant street lights in the Lodge parking lot and along the cabin road on property (via our <u>webcams</u> from our web site).



Hole 1 / Brockway Webcam, with the old street lights in place. This shows how much light was being cast across hole number 1.



Hole 1 / Brockway Webcam, with the Hole 1 street light replaced with Dark-Sky Compliant light fixtures (but the cabin road street lights not yet changed out)



Hole 1 / Brockway Webcam, with the Hole 1 street light and cabin road street lights replaced with Dark-Sky Compliant light fixture (note: even with more street lights working on the cabin road, there is less light pollution on the golf course)

Why are we so focused and intentional in our lighting at the Lodge? It is because of the benefits of the dark skies to human beings, wildlife, and our natural surroundings in the Keweenaw.

The benefits of dark skies are:

- Improve one's circadian clock (or rhythm) sleep patterns, hormone release, eating habits and digestion, and body temperature; for good health, we need sunshine as well as darkness [i.e. better circadian clock means a better sleep, which contributes to better overall health]
- Improving ecological integrity many plants, wildlife, and insects rely on darkness to forage, breed and navigate, thus dark skies help them survive. [e.g. many birds migrate at night, and the top of the Keweenaw is one of their byways]
- Ensuring the full enjoyment of a wilderness experience



More research on how light affects humans and wildlife can be found on the IDA's website at:

https://www.darksky.org/our-work/grassroots-advocacy/resou rces/research/

Watch the short film, <u>Losing the Dark (2013)</u>, about the changes of the darkness and watch the trailer of the <u>Saving the Dark</u> (2019) movie produced by <u>savingourstars.org</u>.



<u>John Mueller</u> founder, golfer, runner, professor, entrepreneurship

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New Year's Eve Dinner Take and Go Box

written by John Mueller | February 22, 2021 Are you looking for a chef prepared New Year's Eve meal? We are offering a great option for December 31st.

Please place your orders by Wednesday, December 30th. To order call (906) 289-4403 ext. 3.

Pick up time is between 5-8pm on Dec 31st.

New Year's Eve Take and Go Box

Price: \$42.00 (\$32 for lodging guests)

Appetizer

Focaccia with roasted tomato, olive oil, feta, oregano and chopped parsley-sliced in small triangles

Main Course

Includes both entrees:

Shrimp and mussel lasagna with béchamel sauce

Ribeye Roast with choice of one sauce: Sour cream, horseradish or Mustard and thyme gravy with mushrooms

Served with:

Garlic smashed butter-parmesan roasted potatoes

Spicy warm salad of green beans & kale, finished with a touch of white wine and red pepper flakes.

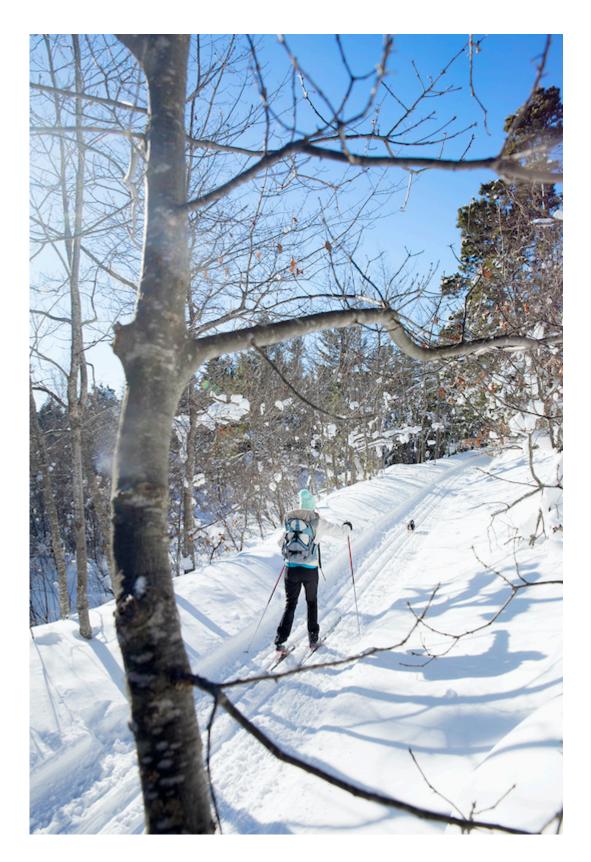
Dessert

Baba au rhum topped with Chantilly cream

(A small yeast cake saturated in syrup made with hard liquor, usually rum, and sometimes filled with whipped cream or pastry cream. Chantilly cream is a sweetened whipped cream with vanilla added some recipes use liqueurs in place of vanilla)

Cross-country Ski Trails this Winter

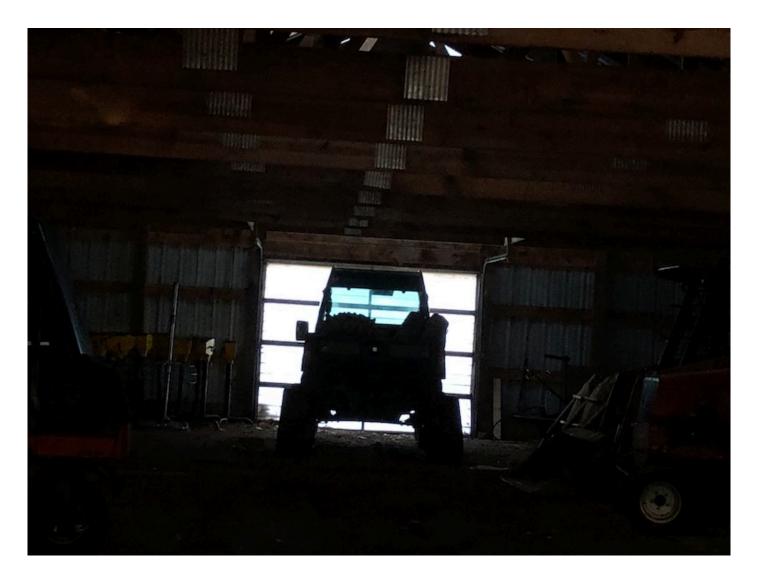
written by John Mueller | February 22, 2021 Adding to our snow-shoe activities during the winter, we will now be having <u>cross-country ski trails</u> at the Lodge this winter.



We have been walking the trails the past two months to review the trails that were built in 2007, and operated for several winters. These are trails that we have multi-purposes the past two summers for mountain biking and hiking, with some modifications. We spent the past several weeks walking the trails, trimming brush, and marking the trails.



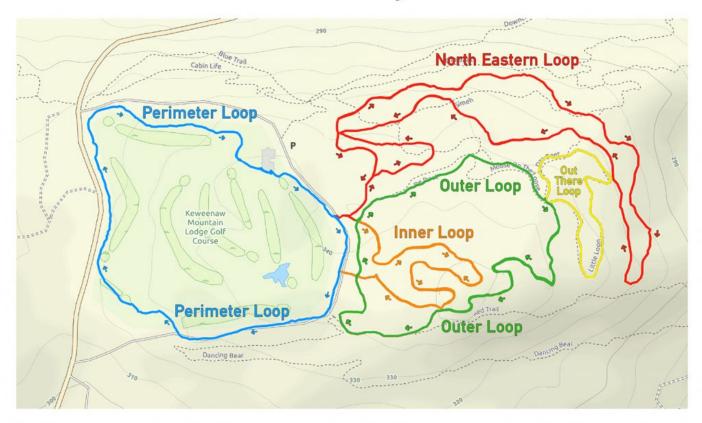
In addition, we have been purchasing grooming equipment (Ginzhu, roller, and leveler) and have chosen to pull the equipment with a John Deere Gator with tracks (a heated cab to help the groomers enjoy grooming the trails).



As a result, we will have 10-11km of trails which we plan to groom. These trails will be open to resort guests and the general public.

See the initial draft of the cross-country ski trail map below.

KML Cross Country Ski Trails



We will provide trail conditions via a page on our web site: <u>Winter Trail Conditions</u>.



October 2020: fun.joyous.adventuresome Team Member Pic

written by John Mueller | February 22, 2021

Each month we highlight a picture from the Lodge based upon our core values. Here is the October 2020 <u>fun.jouyous.adventuresome</u> team member picture of the month – actually several pics. This month the picture is of Nick Nifin and Amy Oestreich working on the trails to prepare for winter outdoor activities.

Amy and Nick in the elements clearing the trails [October 24, 2020]



This picture was taken during a break in the work on Sunday, October 24th, as the Nick, Amy, and Chris Guibert cleared debris from the trails that will be used during the winter time for cross-country skiing and snow shoeing activities. We want to make it safe and enjoyable, and fun and adventuresome. Here comes the winter. Embrace it!!

Golf Update for the KML, Summer 2020

This year has seen several changes with golf activities at the Lodge. With the focus on being a resort-oriented golf course that is an amenity for Lodge guests, along with being an amenity for the general public, the condition of the golf course improved (with the greens being in excellent shape), the Outdoor Activity Center (OAC, formerly called the Pro Shop) was staffed each day of the season, and we had more rounds played at the golf course than the previous year – This is all while providing a quality wilderness experience for our guests.



The golf course opened on June 1st this year (pushed back from May 19th), with the Outdoor Activity Center operating 8am – 6pm for the entire season. Golfers have been able to check in for their tee time at the Outdoor Activity Center, and make tee times online via our only tee time system (provided by Lightspeed Golf, formerly Chronogolf).

We managed the operations throughout the season so we could provide better customer service. With our first tee time each day being 8am, and our last tee time 6pm, we were able to staff the activity center with team members that could answer questions about the golf activities, as well as the <u>biking</u>, <u>hiking</u>, and <u>running</u> activities.

The <u>OAC staff</u> catered to our qualities in being a <u>historic</u> wilderness resort that focuses on providing an <u>outdoor</u> <u>experience</u>. We have incorporated being <u>fun</u>, joyous, and <u>adventuresome</u> by introducing alternative forms of golf to the Keweenaw (*e.g. FlingGolf*, *Speed Golf*, <u>Disc Golf</u>), we have

freshened up our merchandise offerings, and enhanced the experience for our customers overall.



Resort Golf Course

As part of being a resort-oriented golf course, we did not hold a tournament or have members this year. This allowed us to focus on our primary target market, which is the guests that stay at the resort.

It was wonderful to see people stay at the cabins, and have both their golf clubs and their bikes with them (<u>read more about the</u> <u>biking operations this summer</u>). They would ride in the morning, and play 9-holes in the afternoon. Or they would play golf one day, and ride and hike the next day. Having biking and hiking trail access from the property, and a golf course out their cabin door, has allowed Lodge guests to easily take advantage of what the Keweenaw and the Lodge have to offer without having to use their cars.

This year we did not hold golf tournaments. We did have one tournament planned this year, however, the organizers decided to hold the tournament at another golf course after we reiterated to them the COVID-19-related rules we had in place this season at the Lodge. When we made it clear to them that we were going to enforce these rules, they decided it was best for them to hold the tournament elsewhere (*it is wonderful that they were still able to be play the tournament this year in the Keweenaw as the tournament is for a good cause – education and broadening the minds of young people in the Keweenaw*).

Also as part of focusing on being a resort-oriented golf course, we did not offer golf memberships (actually, the past membership model was more of an annual season pass model). And this year was the last year we will have golf cart storage. This is a gradual phase-out of the services that do not pertain to operating a successful resort-oriented golf course.

These changes are focused on making the golf course better and to focus resources efficiently and effectively overall on the overall outdoor activities at the Lodge.

Number of Rounds

That said, we had more rounds this year than we had the previous year. Earlier this month we surpassed the number of rounds we did in 2019. This is even the case when we opened later this year — June 1st in 2020, vs May 22nd in 2019. In 2019, we did 2,900 rounds of golf, and we are now above that number in 2020. At the current rate, and with an October 15th season-end-date, we will be around 10% more in number rounds this year when compared to last year.

The most number of rounds we did in a day was 95, with our goal being to have 30-50 rounds per day. Having 30-50 rounds per day, and with 15-minute tee time intervals, we can provide a quality wilderness experience for golfers.

Online Tee Time Sheet

This season we moved to having the tee time sheet online. The online tee time application we implemented has been provided by Lightspeed / Chronogolf, and has allowed golfers to book tee times via our website, as well as make it easier for our staff to enter tee times.

Last Day of the Season

We plan to keep the golf course open until October 15th this season, depending on the weather. Last year that was also the plan, and we made it to October 11th before the weather indicated we should close for the season. We hope to make it to October 15th this year.

Outdoor Activity Center

This season we had the Outdoor Activity Center (OAC) open and staffed. The OAC building was formerly called the Pro Shop. We changed the name to reflect the multiple activities we now have in the building – the building is the hub for all the outdoor activities at the Lodge, including biking, hiking, and trail running during the summer.



Throughout the season we added merchandise in the OAC that included golf-related merchandise, which went along with the biking, hiking, and running KML-related merchandise. This included golf gloves (with the KML logo on the ball marker), two different types of ball marker (with one made out of copper by a local artisan), KML divot repair tool, golf shirts, golf windbreaker and hats, a KML logo golf ball, and more.

Golf Course Maintenance

We continued to execute our golf course maintenance strategy, where we work to make the greens excellent, the tees ok, and the fairways as they may be. We received wonderful compliments from people that understand where the golf course has come from, and where it is going. The golf course maintenance crew (Bill, Karl, Ron, and Martin) did a wonderful job with the greens, and continue to improve the tees and the fairways.



We were able to run our two pumps successfully this season, with the well pump on hole 6 pumping 60 gallons-per-minute, and the Lake Superior pump working at 50-60 gallons-per-minute. The well on hole-6 was replace last year and the Lake Superior pump hadn't run for two years. So it was great to get the Lake Superior pump working in late June. This helped us get 100-120 gallons-per-minute to help with the recovery of the pond after watering the golf course. The crew were reliable and enjoyed improving the course. That isn't easy when you have to get up early each day and get things ready before the first tee time.

Our golf course maintenance crew has done an exceptional job this season in keeping the course in great shape. We strive to have the greens in excellent shape, good tee-boxes, and finally decent fairways. We have gotten positive responses from players returning to play from the previous year. They state the "course has never been this good in the past". We continue to prepare for the upcoming winter in order to prevent snow mold and other casualties that could possibly harm the course in the future.

In preparation for next year, this past week we aerated and top dressed the greens as we had good weather.

Sanitizing the Carts, Pool Noodles

As part of adapting this year with the COVID-19 and executive order situation, we spent more time carefully sanitizing the carts before and after each use while also having pool noodles in the cups for the entire season. The pool noodles were 2inches above the cup, as we felt it was necessary to keep people from putting their hands in the cup. We kept with that setup for the entire season to ensure that golfers and our staff were kept safe and healthy, as we have people from all around the world visiting the resort and playing a round of golf. It would have been nice to hear the ball go in the cup this season, but we felt it was best to hear the hitting of the pool noodle to increase the probability of keeping guests and staff healthy and to ensure the resort could stay open the entire season.



FlingGolf

This season we offered guests a new style of golf that is a hybrid between lacrosse and golf: FlingGolf. At the beginning of the season we purchased an array of FlingSticks which golfers could rent. We saw foursomes have all FlingGolfers, and foursomes have a mix of traditional golfers and FlingGolfers. Not only was FlingGolf fun and family friendly, it allowed for a unique alternative to golf, broadening our golf options to guests. We received positive feedback from guests as well as staff on how enjoyable FlingGolf is at the Lodge.







Foot Golf

Another project we are working at the Lodge as is it relates to golf is Foot Golf. We had planned to provide Foot Golf as an option this season, but were not able to finish a design that would work on the golf course. With the hilly and challenging terrain of our course we feel Foot Golf is perfect to include at as another golf-related activity at the Lodge. Originating from the Netherlands, Foot Golf is a combination of soccer and golf. Players can play alongside other golfers allowing for the creation of a multi-use course.

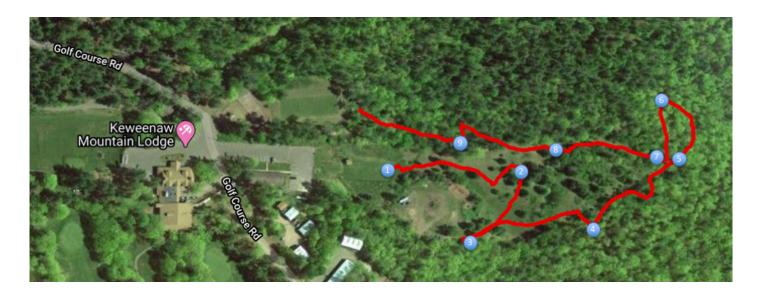


We continue to work on routing a Foot Golf course that will benefit golfers. We want all types of golfers to play without interruption from others, and of course to simply have fun playing a difference form of golf while staying at the Lodge.

Disc Golf

In addition to the improved shape of the golf course, our maintenance staff has worked on maintaining the <u>Disc Golf</u> course on the opposite side of the property. In recent years, the disc

course was rarely maintained on a regular basis, which lead to the overgrowth of vegetation. This caused the course to not be as enjoyable to play. With the Disc Golf course better maintained, and providing Disc Golf rentals at the OAC this year, many of our lodging guests, as well as those who love to explore the area, have been able to enjoy the Disc Golf course multiple times.



Looking Forward: The 2021 Season

Looking forward to the next season, and implementing what we have learned the past two years, here are several changes will be making at the golf course:

- Promoting exercise / walking. New pull carts.
- Implementing the Foot Golf course
- Increasing the awareness and activity of Speed golf on the golf course
- New golf carts. We are working on making arrangements for the new fleet of golf carts, as our lease with our current cart fleet expires this season.
- No tournaments at the Lodge. The golf course is open to play by resort guest and the general public via tee times.
- No golf cart storage at the Lodge, and private carts will

not be allowed on the golf course in order to have a uniform fleet of carts at the Lodge.

- No alcohol on the golf course. Golf is an outdoor sport, and golfers at the Lodge are encouraged to focus on playing golf. Having an alcoholic drink at the Lodge is encouraged at the Lodge after the round (e.g. "19th hole").
- Greens fees will increase in 2021 as we continue to implement the plan of being a financially sustainable golf course and outdoor activity operation. As well, we will be simplifying the rates as they will be the same 7-days a week (the same green fee rate on the weekends / holidays and the weekdays).

	Regular Rates	Resort Rates *
Green Fees		
9 Holes	\$30	\$25
18 Holes	\$40	\$35

July 2020: fun.joyous.adventuresome Team Member Pic

written by John Mueller | February 22, 2021 Each month we highlight a picture from the Lodge based upon our core values. Here is the July 2020 <u>fun.jouyous.adventuresome</u> team member picture of the month. This month Mike Miller is caught smiling on a humid day, working with the maintenance team on the bike wash.

Working on the bike wash and work station: Mike Miller [July 23, 2020]



This picture was taken at the new bike wash, as the maintenance

team worked to get it ready before the weekend — as the Women's Clinic was taking place July 24-26. Other team members that worked on the bike wash were Hank Baron, Isaac Bennett, Matt Rastello, and Chris Guibert.





Food and Beverage Operations



Open on April 30th; Take-out Only

written by John Mueller | February 22, 2021

At 4pm today, Thursday, April 30th, we opened up the <u>food and</u> <u>beverage operations</u> for the 2020 season at the Lodge <u>as</u> <u>scheduled</u>. However, rather than being able to let people into the dining room, bar and cafe to enjoy the facility, we are only able to offer <u>take-out</u>.





We are only offering take-out for food at this time because of the executive orders and the health concern for staff and customers. Thus, there is no dine-in at this time. And as of tomorrow, we will have <u>our cabins open for lodging</u>, and cabin guests can have their food delivered to them.

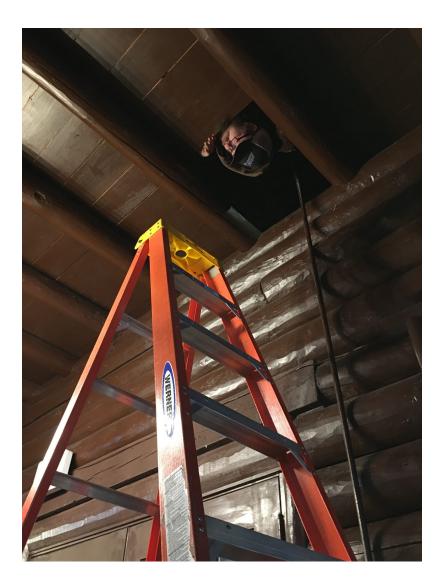
More information can be found on our web site in the Dining Services -> <u>Take-out Operations</u>.

April 2020: fun.joyous.adventuresome Team Member Pic

written by John Mueller | February 22, 2021 Each month we highlight a picture from the Lodge based upon our core values. Here is the April 2020 <u>fun.jouyous.adventuresome</u> team member picture of the month.

Where is Hank hiding? Hank Baron

[...a throw back: February 25, 2020]



This picture was taken by the guest services lead, Janee Artrip, in February as the team was looking for windows that separated the bar area and the newly restored porch (part of the officeto-porch conversion). She made the comment when posting the picture in our internal communication system (Slack): "Where is Hank hiding?"

The area that Hank is in in the picture is known to be where the golf pro lived when working during the summers at the Lodge in the early year.

We did find the missing window in the location that Hank is in in the picture. You can see the windows in the picture below.







March 2020: fun.joyous.adventuresome Team Member Pic

written by John Mueller | February 22, 2021



Each month we highlight a picture from the Lodge based upon our core values. Here is the March 2020 <u>fun.jouyous.adventuresome</u> team member picture of the month. There are actually 2 pictures this month, with 4 people in them

Maintenance crew fun: Eric Johnson, Hank Baron, Matt Rastello, and Paul Ketola

[March 28 & 29, 2020]





In March, we experienced the concept of social distancing. Staying 6 feet from one another was important.

In the first picture, Matt and Hank exhibit how we use radios on the property. Are Hank and Matt singing to each other or are they trying to figure out which roof to clear first for the roofing crew next week?

In the second picture, what are Eric and Paul measuring? Could it be associated with a distance of 6 feet? Or are we finishing up the flooring work to make the Lodge building stronger?

The facilities maintenance crew has been on property every day this winter, and continues to be strong. Keweenaw

Three special events in May have been dissolved

written by John Mueller | February 22, 2021 After calls yesterday with leads from Events, Food and Beverage, and Lodging, the decision was made to cancel the first three special events in May.

This entails "dissolving" the following special events:

- May 1-2: <u>Michigan Tech Graduation Guest Chef Weekend</u> with Ben Hunter
- May 8-10: Mother's Day Weekend Package, and Mother's Day Lunch
- May 16-17: Back 9 Endurance Run



These decisions were made due to the uncertainty with the State of Michigan's mandates that are being issued in association with the health concerns in the world at this time.

With the current situation, <u>Michigan Tech</u> decided to cancel their graduation commencement. Our first event in May, <u>a guest</u> <u>chef program with Ben Hunter</u>, was geared towards graduating Tech students and their families – to celebrate the graduation with a special feast. With graduation not taking place, we did not feel that we would be able to garner enough guests to warrant having the event (assuming we could hold the dine-in event based upon state mandates for restaurants).

For Mother's Day <u>weekend</u> and <u>lunch</u>, with the unknown surrounding the operations of restaurants, we didn't feel we could plan and execute well for a glorious Mother's Day Lunch in the current situation and environment.

For the <u>Back 9 Endurance Race</u>, we were having people traveling from various locations around the country to run the 12- and 24hour races at the Lodge. We did not want our enthusiastic runners to be put in a spot of not being able to cancel their flights if we were not able to hold the event due to state mandates. Thus, we decided to make the decision now to cancel the race rather than wait until we were closer to the date of the event.

We will now focus on having our first special event of the 2020 season on May 23rd, which is a wedding. This is also Memorial Day weekend.

We will still plan on opening the <u>Food and Beverage operations</u> on <u>April 30th</u>, and <u>Lodging on May 1st</u>.

The current mandate from the governor of Michigan indicates that lodging and restaurants are considered essential businesses. Thus, we are able to be open for operations. However, we will adjust how we can operate based upon if that mandate goes past our official opening date. For example, if we are not able to have dine-in services at that time because of a state mandate, we can figure out take-out operations to our guests in the cabins and others in the area of the Keweenaw. We take it stepby-step, and adjust accordingly.