

## Dan Maxwell

March 8, 2016

TO: Fish Sticks file

SUBJECT: Fish Sticks #2 installation notes

---

I installed my second DNR "Fish-Stick" on February 20,21 & 22, 2016. It is directly adjacent to the east side of Fish-Stick #1 (about 70' east of the boat-lift's normal position).

- I emulated the assembly of Fish-Stick #1, but this one used 2 large jack-pines for the outer "wings" rather than oak trees. They are much longer than the oak trees used in #1, but the shoreline base is wider, so #2 extends into the lake about the same distance as #1 (~33').
- I added an additional young jack-pine (7" diameter at the base and about 30' long) near the shore. It has a full canopy of needles and will add a lot of structure near the shore. By the way, this additional jack-pine was selected because an icy patch on Wallin Drive through me right into this tree, snapping is off at the base, and causing \$9,500 in damages to my Jeep! I will thereby be complaining about it to anyone standing on my dock for the next 10 years...
- It took 24 man-hours to cut the trees, drag them to the site and assemble the structure. It would likely have only taken about 16 hours, but I had several mechanical issues.
- The portable winch and the winch on the ATV provided most of the power.
- It required a lot of hiking up and down the slope to the lake.
- There was only about 10" of snow on the ground, so I had a good sliding surface without having to struggle to get around. If the snow were much deeper, it would still be doable, but require more physical effort.
- Mid-day temperature was in the low to mid 40's every day, so the footing was wet & slippery.
- Even with the snow, the ground got pretty scratched up from the drag of the trees and a few saplings got snapped off.
- The ice was about 15" thick.
- The two, big, jack-pines (36" girth near the base means the tree is 60'+ tall) came from nearby my deck. They were always a little too close for comfort... The other trees were all jack-pines, too.
- The 1/8" canopy-cable was OK at 30'. 25' would be OK, but 30' offers more options for placement.
- The 3/16" shoreline-cables were OK at 25'each. Note that it was cumbersome to cut the 50' length in half, even with a bolt cutter.
- I posted another "DNR / Fish Sticks / February 2015" sign at the site (yes, I know it should say 2016, but I had an extra sign from last year, and a black sharpie). I also placed an official "DNR Healthy Lakes" metal sign I acquired from Pamela

Toshner. This will be useful in promoting the Fish Sticks concept and remembering to follow the long-term commitments of managing the site.

- Although I was able to do all of the installation of both #1 & #2 without anyone else's assistance, I am strongly inclined to recommend hiring a contractor for any future installations. Especially if we have several to build in one season. January is the ideal month. February is warming up too quickly these days.
- The next step is to get a photograph after it sinks to the bottom of the lake so that I have "before & after" photos. I will then process the grant-paperwork to learn how this whole effort plays out...
- Vicky Nelson is the DNR Water Mgt. Specialist who issued the permit (GP-NO-2015-66-00231). She needs to be updated about the project's progress, too.
- Note that the permit is valid through 2019, but the grant expires on June 30<sup>th</sup> of this year. Therefore, any new Fish-Sticks intended to be covered under a DNR grant will need an extension of the current grant, or a new grant. I have some research to do...