

To DNR,

July 2016

I currently work as an adjunct professor in the Department of Natural Sciences and the Continuing and Distance Learning Department at Concordia University Wisconsin. I teach courses in environmental science at the undergraduate and graduate levels, as well as ecology, physical science, and zoology (not currently teaching zoology). I also worked as the Naturalist at Kohler-Andrae over 20 years ago, so I am familiar with the habitats there.

I don't know that I have a lot to offer that is new, given all the input delivered previously.

- 1) The Quentin Carpenter report is very useful. He points out important weaknesses in the Stantec EIS.
- 2) The Endangered Resources Review lists species and communities that *may be present*, that are listed as either threatened or endangered. **Any endangered species would have to be detected by direct census.** It seems that even if they do locate an ES, they could apply for an Incidental Take Permit/Authorization from the DNR, and hence proceed with their plans. At any rate, have experts been brought in to do the appropriate censuses for all species listed in this report?
- 3) Obviously, the Kohler Environmental Impact Report from Stantec is biased in favor of construction. And what is the relevance to any environmental impact, really, of the included economic impact report?
- 4) In the Kohler Response to the DNR, they admit tree removal "may result in a permanent conversion to a non-forested type". This is another way of saying existing ecological communities may be permanently destroyed. I am a community ecologist by training, so I understand the ramifications of this. If rare communities are present, they will not survive. Also, a community is comprised of interactions between many species of flora and fauna, and vertical structure of a community is an important element of its integrity. The removal of trees (a vertical component) will create a patchwork of smaller, different communities. Sometimes habitat patches can actually increase species diversity (e.g., birds), however some rare species dependent on the previous, larger community structure, will disappear. And, given the nature of a golf course, movement between habitat patches will be limited to species with more mobility, especially birds, but probably will restrict plant, mammalian, reptilian, amphibian, and some insects. Some species require a minimum habitat size, so the creation of this patchwork of smaller communities will eliminate many of those species.
- 5) In the Kohler Draft EIS Public DNR response, they make some important points, and ask some questions that don't seem to have answers. The current plan suggests shared access for the state park and the proposed golf course. I don't see how this is going to work effectively utilizing the current small road and bridge. Traffic into the park backs up at certain peak times, and this combined with golf course access may well lead to congestion onto the main roads. You can foresee then a future request to expand and improve this road and bridge, which will have an impact on the adjoining wetlands. The DNR wisely asks what impact a large golf tournament would have on the site. Where will the vehicles be parked (Consider what happens at Whistling Straits during tournament times)? How will they accommodate the needs of thousands of

visitors, particularly in terms of sewage? And how will such high tournament traffic impact the surrounding habitats? If it takes a year or more for a golf course to fully recover from a major tournament, what peripheral impact can be expected?

I noted the important concerns of area residents, especially in regard to the impact on the local aquifers. That is highly relevant. I would add an additional concern—light pollution. Many animal species are nocturnal. What types of lighting installments are planned? Has any consideration been given to the impact on the nocturnal fauna, and the impact on the local residents if lighting is kept on 24/7?

I explored this land during my time as a state park naturalist and later with our children. At that time, access was allowed. It was clear this land had not been fully protected from disturbance. (I believe that is one of the reasons the land was later posted to prevent access.) Significant damage was done to the area by unthinking people, so don't deceive yourselves into thinking this is pristine habitat. Nonetheless, the forms of pollution listed above (water, light) can have a significant impact on not just the land in question, but on all the surrounding lands. This is well worth noting when making any case against the golf course. Point to the wider ramifications of any development of this nature.

I don't think I'll be at the meeting this evening. I am very eloquent with a pen in hand, but not so much as a speaker. I hope this is of some use to you, at least.

Vicki Hubert Menuge

B.S., Carroll College - Biology

M.S., University of Wisconsin-Madison - Zoology (Community Ecology)

Adjunct Professor, Dept. of Natural Sciences, Concordia University Wisconsin