Audubon Cooperative Sanctuary Program for Golf Courses

Golf Course:	Keweenaw Mountain Lodge Golf Course
Location:	Copper Harbor, MI
Date:	September 12, 2024
Categories Achieved: (*previously achieved)	Wildlife and Habitat Management Outreach and Education Environmental Case Study* Water Conservation* Environmental Planning*
Categories Pending:	Chemical Use Reduction & Safety
(Further information or implementation needed. Please see below)	Water Quality Management
Categories Remaining:	Chemical Use Reduction & Safety
(Applications not yet submitted)	Water Quality Management
Site Visit Completed:	Yes

Wildlife & Habitat Management (Approved)

Audubon International recognizes you for the following positive efforts in Wildlife Habitat Management:

- Providing exceptional habitat for a variety of wildlife
- Installing supplemental structures for avian species and bats (blue bird, wren, woodpeckers)
- Promoting vegetation that attracts and benefits pollinators
- Ensuring all introduced vegetation is native to the club's geographic location
- Allowing snag trees to stand and brush piles to accumulate to provide additional shelter and habitat for wildlife
- Installing signage and enforcing local rule to discourage patrons from searching for errand balls in environmentally sensitive areas

Recommendations for you to consider:

- Drilling holes in fallen trees to create insect hotels
- For Blue Bird boxes to be more successful, try installing boxes in open prairie areas (please reference attached Fact Sheet). In addition, consider repairing nesting box found on #4 as it looked severely weathered.
- Consider adding mallard
- Although we have no reason to believe that bait boxes are being used, we strongly encourage the club to remove all bait boxes as they have the ability to allow poison to enter the wildlife food chain (if applicable)
- Please reference the attached Technical Bulletin on Geese Deterrence

Outreach & Education (Approval)

Audubon International commends you for the following practices in the Outreach and Education focal area:

- Highlighting ACSP involvement and environmental initiatives via the property's webpage, posters, pamphlets and signage
- Participating in Audubon International's Monarchs In The Rough initiative
- Developing an Education Center where guests and community members can learn about the property's ecological features, environment and amenities
- Allowing Michigan Tech University conduct research at the property (invasive vegetation survey, snow mold study)
- Hosting annual photography competition (star gazing, wildlife)

Recommendations:

- Consider participating in our 2025 BioBlitz initiative. For more information please visit <u>https://auduboninternational.org/bioblitz/</u>
- Consider applying for environmental grants through The Fairways Foundation (www.thefairwaysfoundation.com)
- Consider repurposing downed trees and construct signage, tables, benches etc.
- Consider working with Laughing Whitefish Audubon Society and Boy Scout Troop 207 (Hancock, Michigan)
- While developing the club's Resource Advisory Group, we encourage you to invite any community members who champion environmental stewardship.

Chemical Use Reduction and Safety (Pended)

Audubon International commends you for the following positive practices employed for Chemical Use Reduction and Safety:

- Improving soil and turf health by using proper cultural practices including mowing, irrigation, fertilization, and compaction management
- Improving Best Management Practices and IPM program which has resulted in minimal pesticide and fertilizer inputs
- Maintaining scouting records to make more informed and education treatment and deterrent decisions
- Rotating pesticides so pests and diseases to do not build a tolerance
- Establishing a significant amount of acreage that requires minimal (if any) chemical inputs
- Investing in hybrid/electric maintenance equipment
- Applying products with a lower toxicity (Nurture Growth)

Recommendations:

- We encourage you to store a spill kit in the chemical storage unit
- Consider labelling the shelves/utility tubs used to store pesticides so products are easier to find
- Please ensure all permeable materials are removed from the chemical storage unit, as in the event of a spill they will become an extreme liability and will need to be deposed of appropriately (wood pallets, cardboard)
- Please ensure an eye wash station is installed and is in working order
- Calibrating chemical sprayer nozzles regularly to ensure uniform distribution
- Please ensure waste drums are stored with secondary containment (pallets)
- Ensure all flammables are stored in a secured, fireproof locker
- We encourage you to begin storing fuel tanks in containment bins and with safety bollards (<u>https://materialflow.com/p/fuel-tank-containment-with-</u> drain/?setCurrencyId=1&sku=Fuel%20Tank%20Containment%20with%20Drain)
- Consider using Cornell's EIQ to help determine what chemicals have lower impacts on the environment, if applicable (<u>https://cals.cornell.edu/new-york-state-integrated-pest-management/risk-</u> assessment/eiq/eiq-calculator)

- Consider establishing a vermicomposting program
- We acknowledge that Keweenaw Mountain Lodge Golf Course is quite remote, however, should goatscaping be possible, we encourage you to use such a practice to control invasive vegetation, particularly the thistle that was observed.

Items required for approval:

- 1. Evidence that pesticides are stored on an impermeable surface (i.e. utility bins/tubs, metal shelves)
- 2. Evidence that the practice of mixing and loading chemicals occurs over an impermeable surface (i.e. concrete slab or collapsible containment) Many of our members have had success with New Pig products.

Water Quality Management (Pended)

Audubon International commends you for the following efforts in Water Quality management:

- Implementing environmentally sensitive techniques around of all surface water
- Promoting vegetative buffers and raising mow height around the property's water features
- Manually removing unwanted debris and noxious weeds from the property's water features as opposed to applying aquatic herbicides
- Ensuring equipment wash water discharge does not pollute both surface and groundwater

Recommendations:

- If your fairways have drains, consider using drain covers during treatment events and subsequent irrigation and/or precipitation events. This will limit the effects of the "first flush" through the drainage system
- Should algae ever become burdensome, consider introducing small amounts of barely straw bales to help prevent new growth (15-25g per square meter)

Items required for approval:

1. Produce at least three rounds of water quality test results (6 total). We would like to see three tests sampled from the club's well or from the intake that draws from Lake Superior, and three tests sampled from where water exits the property into Aetna Creek. See the attached Technical Bulletin for water quality testing guidance.

Thank you for all your efforts. You have made great strides towards the designation of a Certified Audubon Cooperative Sanctuary.

If you have any questions or concerns, please do not hesitate to contact us at (518) 767-9051.