

# Guide for submitting photos for aquatic plant identification



While some aquatic vegetation is beneficial to farm ponds it can quickly become a nuisance to look at and fish in. Luckily, most aquatic vegetation problems can be resolved by following some simple steps. The most important step is proper identification. With a variety of aquatic vegetation in Kentucky there also comes a variety of treatment options. What works on one plant doesn't work on all of them; unfortunately, there isn't a catch-all treatment out there.

Kentucky Department of Fish and Wildlife Resources has fully trained fisheries biologists in areas spread across the state. They can help with proper identification of aquatic vegetation and get you on the right track for treatment and most of this can be done through email!

Proper identification starts with good pictures. This guide provides detailed information on how to take pictures which will provide the biologists with the best information to identify your pond's aquatic vegetation.

## **Items needed:**

- Garden rake or other tool to remove plant from water
- Sample of plant (or plants) to be identified
- Cell phone
- Item to judge scale and light-colored background
  - o Examples of an item for scale: coin, pencil, ruler
  - o Examples of backgrounds: plain white paper, palm of hand, concrete, top of cooler
- Email address of your district biologist

## Taking the photograph:

1. Using garden rake (or other method), remove plant (or plants) from the pond that needs to be identified.
2. Isolate each plant and rinse any mud or debris off the leaves and stems of the plant.
3. Place plant on a light-colored background with item used for scale.
4. Focus your cell phone camera on the plant itself (not the background).
5. Ensure proper lighting. Dark photos or shadows across the photo will distract from proper identification.
6. Keep camera close during photograph. You should be within 3 feet of the plant in question.
7. Please include multiple photographs of each plant needed for identification (photos should include leaves and flowering structures).
  - a. For submerged aquatic vegetation, better photos can be taken by submerging your plant sample in a shallow bowl of water.
  - b. If asking for help with emergent vegetation (example: water lilies, or cattails) a picture of the entire pond can be helpful in creating a plan to control the vegetation.
8. Submit photos to your district biologist via email (contact information can be found by searching for the county your pond is in at the following link: <https://app.fw.ky.gov/WebContact/default.aspx>)

## Examples and critiques of photographs:



Figure 1: Poor submission (Algae and an unidentified mixture of submersed vegetation)

Photograph lacks up close detail of the aquatic plant, only shows partial coverage and lacks scale. Photographer should pull out individual plants, zooming in on specific details.



Figure 2: Fair Submission (cattails)

If the goal was to provide the biologist an image of only this emergent plant, then it is successful. However, if there are underwater plants present, they are not visible, and the extent of the coverage is also not addressed in this photograph.

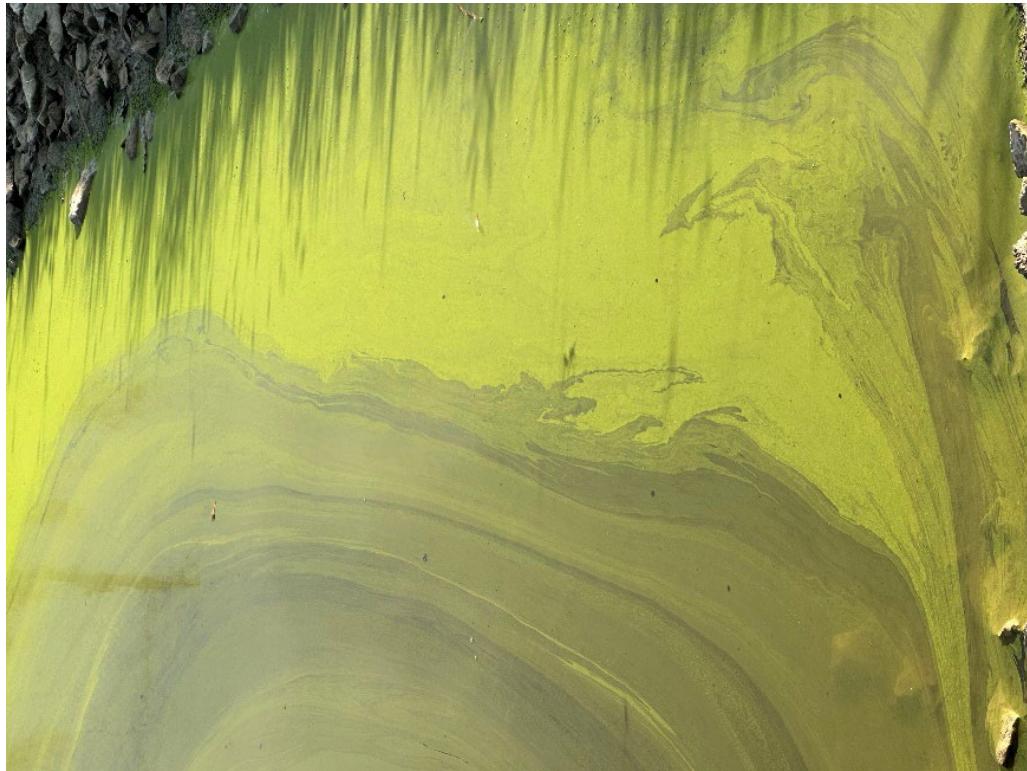


Figure 3: Fair Submission (Blue-Green Algae)

Similar to Figure 2, if the goal was to only show the algal bloom, they were successful, but the extent of the coverage of this aquatic vegetation has not been addressed.



Figure 4: Fair Submission (Spatterdock)

Photographer shows no detail of individual plants, no details of any identifying features, and no information on the extent of the vegetation coverage.

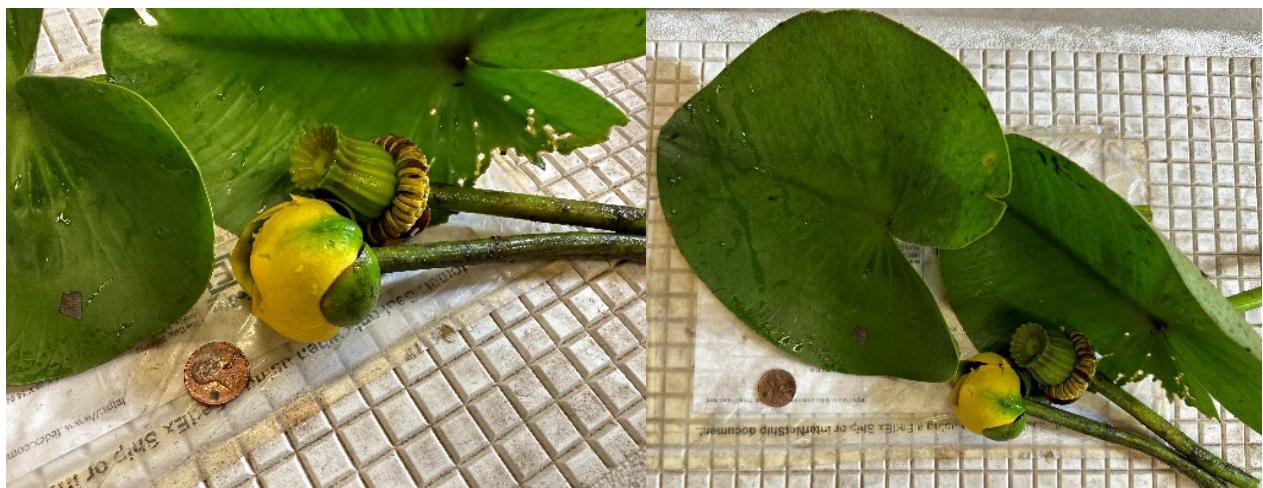


Figure 5: Good Submission (Spatterdock)

Photographer clearly shows flowering structure, scale, and details of the plant. However, the extent of coverage is not addressed in this single photograph.



Figure 6: Good Submission (Naiad Species)

Photographer provides details of the plant, scale, and uses a light background. The extent of the coverage is not provided in this image.



Figure 6: Excellent Submission (Hydrilla)

Photographer provides details of the plant, scale, and the extent of the coverage is demonstrated in the second image. With a detailed description accompanying the images a biologist should have no issue identifying the vegetation and providing guidance.