Keep Lake Bomoseen Herbicide Free!

Please read and voice your concerns about the use of ProcellaCOR EC or similar herbicides in our lakes to the boards of the Lake Bomoseen Association & Lake Bomoseen Preservation Trust.

Why should we worry?

- There is **no long-term impact data** on ProcellaCOR EC. It was EPA registered in 2018 and has only been used 3 years in VT. It takes time for ecological & human health risks to be revealed. Think about DDT & Chlordane – chemicals also EPA registered, but now banned.

- **What the manufacturer's label says:**
  - Active ingredient: Florpyrauxifen-benzyl **2.7%** Other ingredients (we don't know): **97.3%!**
  - Herbicide treatment of aquatic weeds can result in **oxygen depletion** which may cause fish suffocation.
  - Repeated treatment leads to **resistant weed biotypes.**
  - **Do not compost** any treated plant material. **Do not allow livestock to drink** treated water. **Do not use it for irrigation**. If it targets only milfoil, why are there these restrictions?
  - It kills Coontail (a native plant found in 25% of Bomoseen's surveyed points). This has been confirmed in VT & the Midwest. Why are we killing native plants?

- **What the label doesn't say** about Florpyrauxifen-benzyl:
  - It **mimics plant auxins** that regulate growth**.** All plants could be impacted to some extent. There is **no way of knowing** how the rich plant life of Bomoseen (including several **listed as Uncommon/Vulnerable** on VT's 2022 Natural Heritage Inventory of native plants) would be affected. We'd be experimenting on our lake.
  - **It can persist** in the environment and in animals. Studies have found it and its breakdown chemicals in hen's eggs & organs; goat's livers & kidneys; blood & milk of maternal animals.
  - In the EPA report, benthic invertebrates (the base of aquatic food web prey) displayed **chronic toxicity effects** in sediment studies at all concentrations.
  - **We're told it's safe for wildlife, but…From the EPA toxicity assessment:**
    - **"*Neither reptiles nor amphibians are tested*."**
    - *"Only a few surrogate species for both freshwater fish and birds are used to represent all freshwater fish (2000+) and bird (680+) species in the U.S. For mammals, acute studies are usually limited to Norway rat or the house mouse."*
  - **There's no way to control application area.** Based on data from Midwestern lakes, ProcellaCOR EC can migrate out of the treatment area in levels high enough to kill milfoil and other plants hundreds of feet away.
- The Hubbardton end of the lake is an **Audubon designated Important Bird Area of continental importance**. This habitat (targeted for initial treatment) supports 166 species of birds, including several Threatened or Endangered species. They migrate & nest here, feeding on fish, frogs, invertebrates, tubers, & other aquatic vegetation.
- **Milfoil takes up phosphorous** as it grows. What will happen to phosphorous levels in Bomoseen if large swaths of milfoil are killed, decomposing in the lake rather than being removed through harvesting? Phosphorous increases plant growth and contributes to algae blooms & eutrophication. Bomoseen currently is a mesotrophic lake (clear, healthy, diverse).

Is there a need?

- **NO**! Estimates in 1996 & 2021 show only a 3% increase in milfoil over **a quarter century**.
- **No one knows the exact acreage or density of milfoil** in Bomoseen. A plant survey in 2021 by Solitude Lake Management sampled 355 single points on the lake. They were 80 -100 m apart. We don't know what is between these points, but the method assumed that if two adjacent points had milfoil, then all 80+ meters between also had milfoil. **This is a big assumption.**
- The survey found that milfoil was **"dense" at only 9% of the survey points**. At 72% percent of the points, milfoil was **"sparse" or less** (a handful or less on a tossed rake**). At half the points, another plant was denser than milfoil.**
- The survey found **34 other aquatic plant species in Bomoseen,** averaging about 6 species per point. There is no evidence of milfoil impeding native plants.
- **Anglers love the lake!** The sizes of the 1st - 4th place northern pike, bass, and trout have changed little in the 40+ years of the Lake Bomoseen Ice Fishing Derby. During this same time period, milfoil was discovered and spread through the lake. This suggests that the presence and density of milfoil is not impacting fishing, and that **fish utilize milfoil beds for habitat.**
- **VT Fish & Wildlife Dept**.: *"…when non-native aquatic plant species like Eurasian watermilfoil exist as part of a diverse plant community or grow in patches with areas of open water, they provide value as quality fish habitat without negatively impacting fish populations."*
- VT FWD supports **aquatic nuisance plant control through strategic non-chemical means** in small, localized areas – not widespread chemical removal of milfoil across large areas of a lake.
- **Other plant management strategies are available** and used both in Bomoseen and other lakes to control milfoil (combinations of barriers, suction, and strategic harvesting with skimmers).
- **ProcellaCOR EC is not a long-term solution for milfoil treatment eradication and doesn't even work on some lakes. It is not worth the risks.**

Who are we?

We are an informal group of people united by our love of Lake Bomoseen. We're angry that an herbicide permit application was submitted with little transparency or public input. Our goal is to preserve this rich, pristine ecosystem without untested, unnecessary chemicals that could jeopardize health & habitat.

For more info. & references, visit our Facebook page: Keep Lake Bomoseen Herbicide Free!

- Tell the Lake Bomoseen Association & Lake Bomoseen Preservation Trust boards to withdraw their herbicide application now!
- Let the VT Dept.of Environmental Conservation, your legislators, & Gov.Scott (802-828-3333) know that you don't want herbicides in our lakes & ponds!

The following entities have formally expressed their disapproval of herbicide treatment in Lake Bomoseen:

Castleton Selectboard
Fair Haven Selectboard
Hubbardton Selectboard
Shrewsbury Selectboard
Rutland Bass Club
Rutland County Audubon Society
VT Bass Nation
VT Bassmasters
VT Fish & Wildlife Dept.

And thousands of individuals who have signed our petitions! Thank you!

P.S. A victory for Lake George!
On 6/13 NY State Supreme Court Justice Robert J. Muller denied the Lake George Park Commission's planned use of a chemical herbicide—ProcellaCOR—to control Eurasian watermilfoil.