



# Habitat<sup>®</sup> Aqua –

# Getting Mighty against Phragmites...

OVMA Phrag Day,  
March 17, 2025  
**Brad Hayhoe**

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# BASF Agenda

**1. What is Habitat<sup>®</sup> Aqua and Imazapyr**

**2. How does it work?**

**3. How to Use Habitat<sup>®</sup> Aqua?**

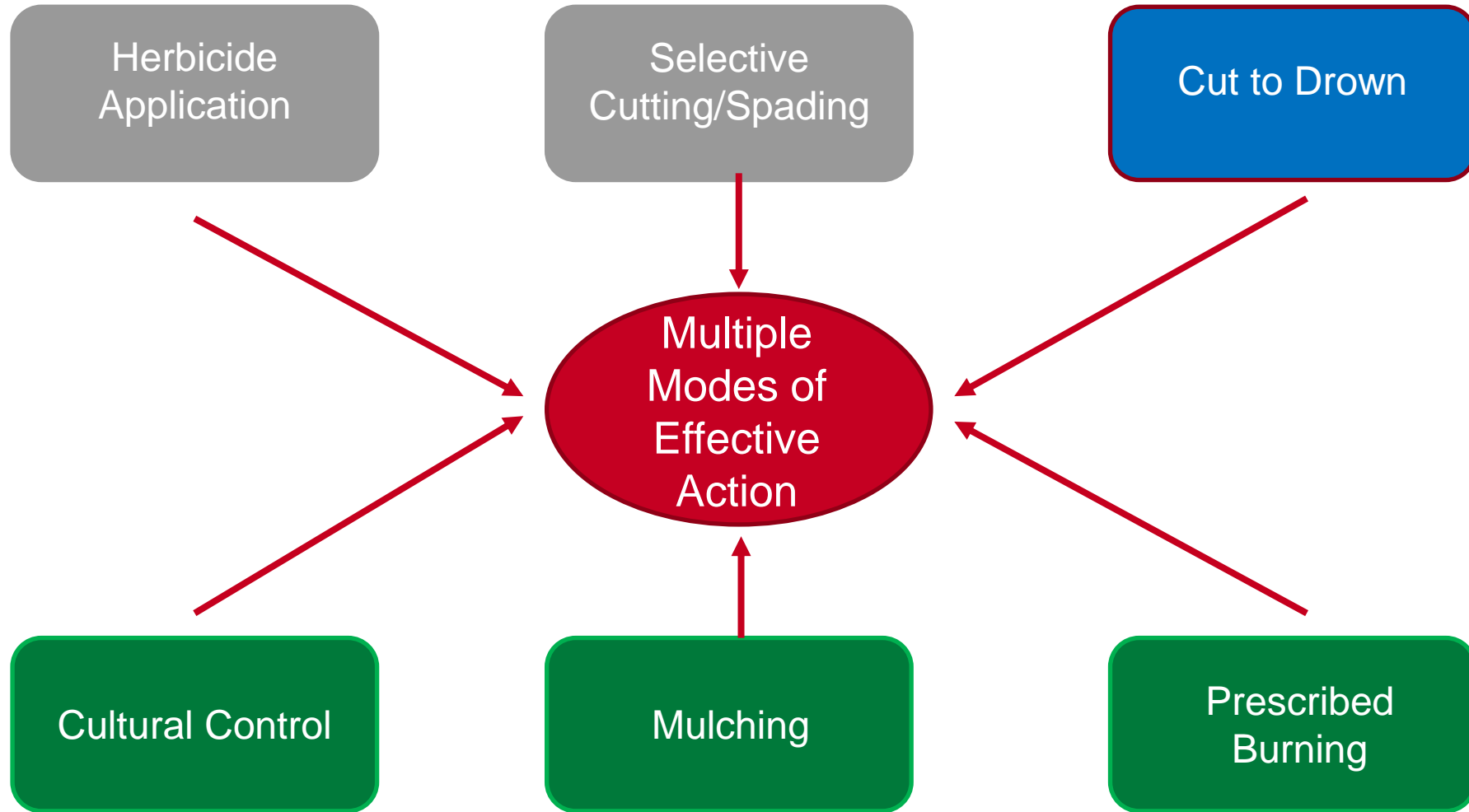
**4. How does Habitat<sup>®</sup> Aqua Perform?**



Photo Credit: Great Lakes Phragmites Collaborative



# Phragmites Management Techniques



# Two Great Products – Two Different Use Sites

## Habitat® Aqua

### Pack Size

- 2 x 9.5L
  - ▶ 4.1 - 6.3 Ha for Phrag and Knotweeds;
  - ▶ 6.3 Ha for Flowering Rush;

### Surfactant Required

- Aquasurf® – 0.25% v/v

### Where to Purchase?

- Vesperis ([www.pestweb.ca](http://www.pestweb.ca)) – 800-888-4897

## Arsenal® Powerline

### Pack Size

- 2 x 9.5L
  - ▶ 4.1 - 6.3 Ha for Phrag

### Surfactant Required

- Non-ionic surfactant

### Where to Purchase?

- Vesperis ([www.pestweb.ca](http://www.pestweb.ca)) – 800-888-4897
- AdvantageVM ([www.advantagevm.ca](http://www.advantagevm.ca)) - Chad

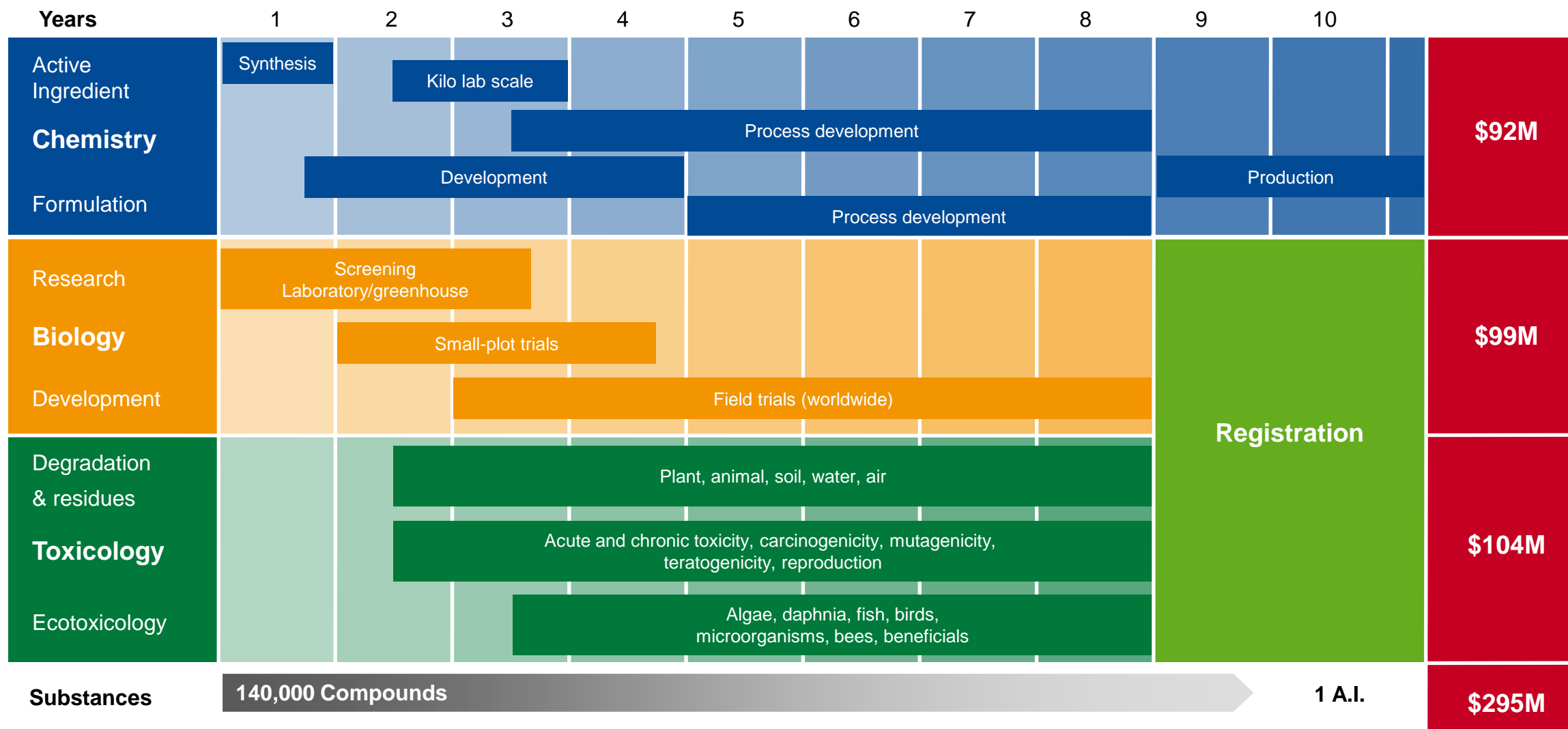
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**AQUASURF** is a trademark of Norac Concepts Inc.

**Always Read and Follow the label**

**PLEASE VISIT SITE FOR MORE DETAILS:  
WWW.BETTERVM.CA**

# Development of Products like Habitat Aqua



Significant time and money are invested to ensure products are safe and effective

# Habitat Aqua – Characteristics

## ■ Restricted Use Label

- May only be applied by Certified Aquatic Applicators
- Use must be authorized in accordance with the *Aquatic Invasive Species Regulations* & other required provincial authorizations

## ■ Active Ingredient and Mode of Action:

- Imazapyr (Group 2 AHAS/ALS Inhibitor) – well known a.i

## ■ Formulation:

- Specifically developed for over water use (Many years of development to register)
- 240 g/L SL (solution)

## ■ Use Rate for *Phragmites australis*:

- 3 – 4.68 L/ha
- 34 – 74% less active ingredient than glyphosate rates (on land only)

## ■ Aquasurf Non-Ionic Spray Adjuvant

- Specifically developed for over water use
- 0.25% v/v

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Photo Credit: Great Lakes Phragmites Collaborative

# Habitat Aqua – Benefits

- **Highly effective on Phragmites**
- **Plant specific target site**
  - Group 2 ALS Inhibitor – (AHAS/ALS enzyme is only present in plants)
    - Enzyme responsible for certain amino acid production for protein synthesis and cell growth
    - Rapid absorption & systemic translocation to growing points = rapid end of plant growth
    - Complete plant death slow (several weeks), plant using up stores of amino acids
- **Very safe toxicological profile**
  - Low toxicity to:
    - Mammals, Birds, Fish & Invertebrates
    - Does not bioaccumulate in organisms
  - Oral LD50 >5,000 mg/kg (safer than table salt - LD50 3,000 mg/kg)
- **Degradation Mechanisms**
  - In soil: Microbial metabolism
  - In water: Photodegradation – very Rapid: 0.5 – 5 day half life
- **No restrictions on recreational water use or livestock water use**



# Habitat Aqua – Watchouts

- **Non-selective herbicide**

- Activity on: Grass & Broadleaf weeds (incl aquatic), deciduous brush species, specimen trees
- Foliar & Root uptake

- Do not use treated water to irrigate crops (or apply to runoff areas for irrigation water – ditches or agricultural land)
- Do not apply directly to water, avoid fast moving water (transport outside of target area)
- Do not apply to water within 1km upstream of active potable water intake (unless intake shut off from application + 48 hours)

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# Habitat Aqua – Application for Phragmites Control

- **Target**
  - Apply after full leaf elongation (July-Aug)
  - Apply to green above water foliage only
  - Ensure thorough coverage while avoiding direct spray or runoff to water
- **Selective & calibrated application via:**
  - Low-volume directed application
    - Wick applications (not glove wiping)
  - Broadcast
    - Ground equipment
    - Watercraft
    - Aerial (helicopter only)
  - Water Volumes
    - 50 L/ha min (aerial only)
    - 100 – 550 L/ha (others)
  - Certified applicators are trained for accurate calibrated applications
- **Avoid wash-off of foliage for 1 hour after app.**
- **REI: Once foliage is dry**
- **Do not apply >1 / year**



Available from Rittenhouse



# Habitat Aqua – Key Takeaways

- Use of Habitat® Aqua is restricted to certified applicators in areas with proper authorization
- Habitat® Aqua translocates to growing points (including rhizomes & stolons)
- Habitat® Aqua is very safe to mammals, birds, fish & invertebrates
- Prior to use – Always Read and Follow Label
- *Phragmites* control can be achieved with a long-term strategy involving multiple management techniques including Habitat® Aqua



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# Performance of Habitat - Before



Durham Ontario, September 2021



# Performance of Habitat - After



100% control on 5 acre lake. Dead phrag cut on ice during winter.

**Durham Ontario, September 2022**

“The results were far better than I could have possibly expected. This product works fantastic and is well worth the expense”

**Customer – September 25, 2022**





# Chatham Ditches – May 2024 - After





We create chemistry