

Lake Champlain Boat Launch Steward Program: 2023 Season Results

For the
New York Citizens Advisory Committee (NYCAC) on Lake Champlain
Management
1/22/2024 Zoom Meeting

Presented by Lauren Jenness Kneen, Lake Champlain Basin Program



This LCBP-funded sail can be found out on the Lake as part of the Community Sailing Center in Burlington, VT.

Invasive Species

- Plants, animals, and pathogens that are nonnative to this region AND cause harm
- harm- economic, ecological, or human health
- can produce self-sustaining populations



Eurasian Watermilfoil - 1962

Outcompetes native plants, chokes shorelines and impacts waterfront property values. Makes it difficult to swim, fish or boat through their dense beds.



Zebra Mussel - 1993

Filter huge amounts of plankton making them unavailable for other species consumption. They cut the feet of swimmers, clog water intake pipes, foul boat motors, and encrust our historic ship wrecks.



Alewife - 2003

Are displacing native smelt population and interfering with lake trout and salmon reproduction. Alewife have become the dominant forage base in the Lake. They cause a severe thiamine (Vitamin B) deficiency.

Invasive Species Pathways

- Human Pathways

- Ballast
- Nurseries / Ornamentals
- Aquaria / Water Gardens
- Roadways / Watercraft
- Canals
- Bait buckets
- Clothing / Gear / Equipment / Vehicles
- Fill, mulch material
- Disturbance
- Firewood Transport
- Organisms in trade

- Natural Pathways

- Wildlife
- Wind/Waterways



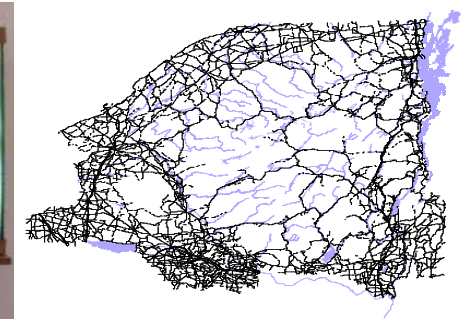
Ballast Water Discharge



Ornamental Plantings



Aquarium Release



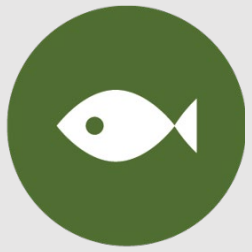
Roadway Corridors



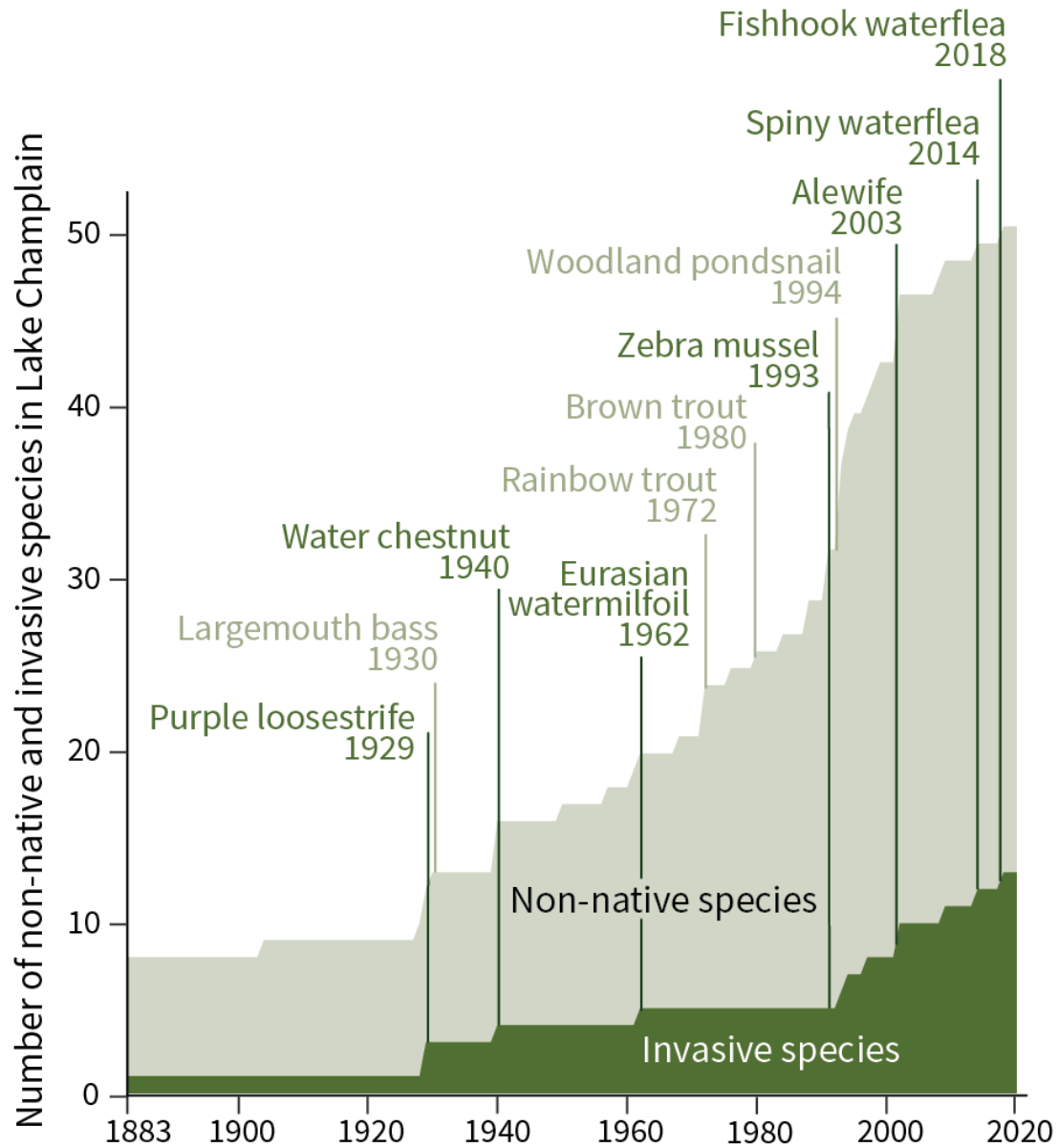
Disturbed Sites



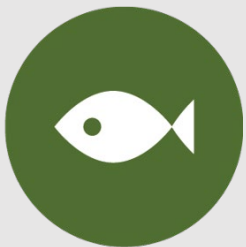
Watercraft Transport



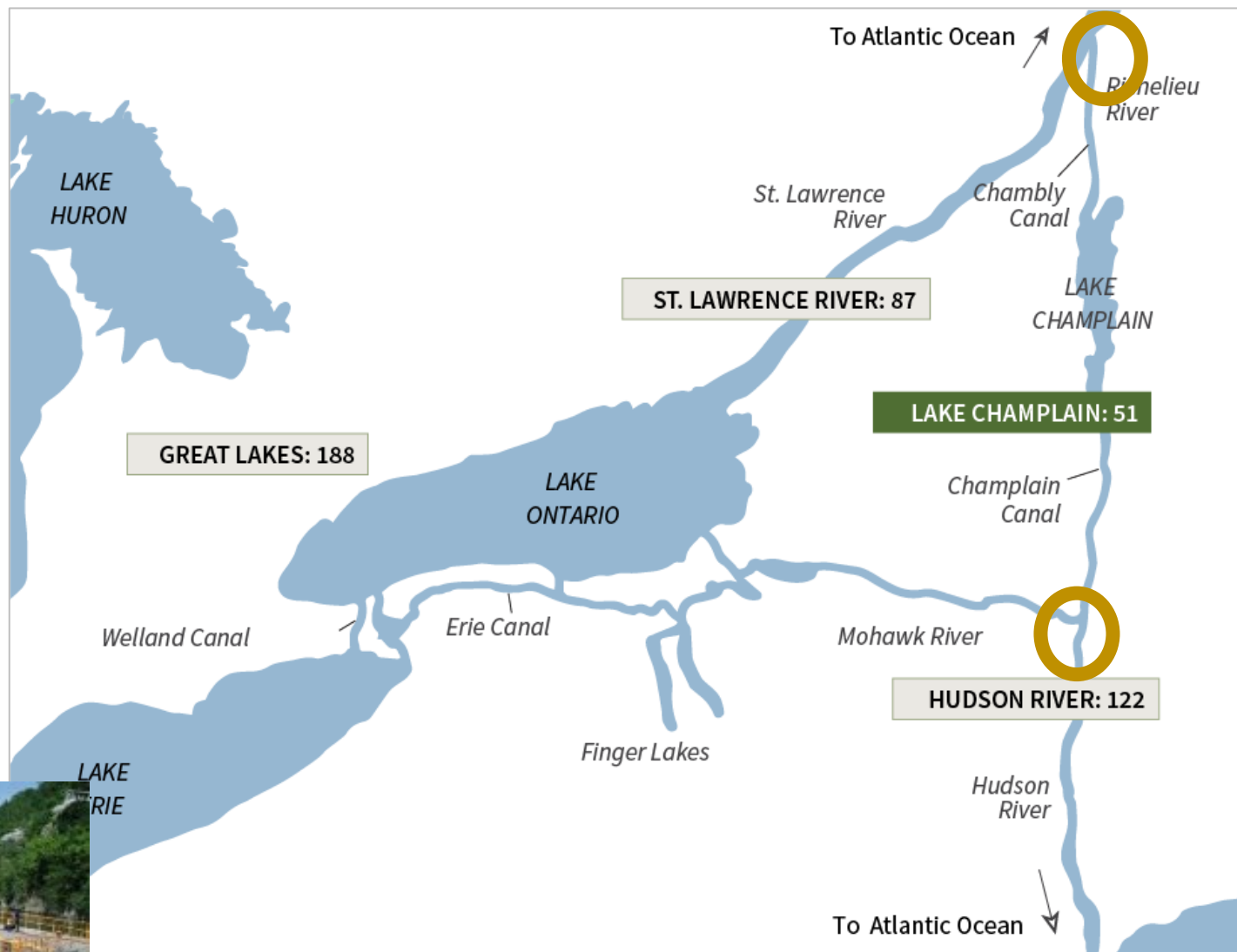
First
detection of
aquatic non-
native
and invasive
species
in Lake
Champlain



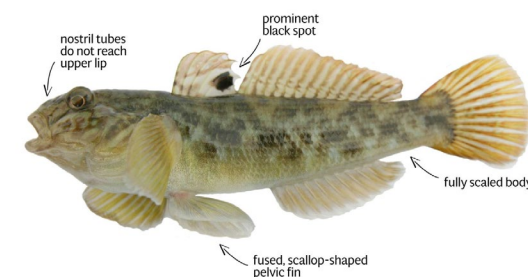
Fishhook waterflea



Non-native
species threats
to Lake
Champlain
Basin
from connected
waterways



As of Fall 2023, **round goby** has not been found in Lake Champlain, in the Champlain Canal north (upstream) of Lock 1 near Troy, NY in the Hudson River, or in the Richelieu River south (upstream) of the St. Ours Dam (close to the St. Lawrence River)



What does the science tell us?

Overland movement of small-craft boats is responsible for much of the ongoing spread of AIS to inland waters throughout North America

(Bossenbroek et al., 2001; Johnson et al., 2001; Leung et al., 2006)

Its Often unintentional (Johnson et al., 2001; Puth and Post, 2005)

Inadvertently carried in bilge water, live wells, bait buckets

Entrained on boat exteriors (entangled on propellers and trailers, attached to other entangled organisms) (Johnson et al., 2001)

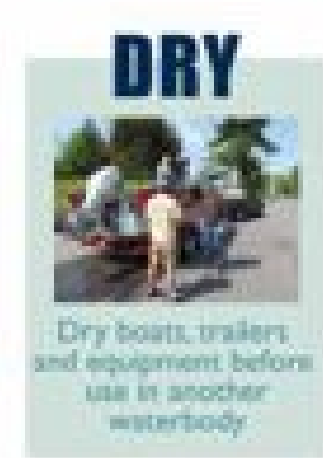
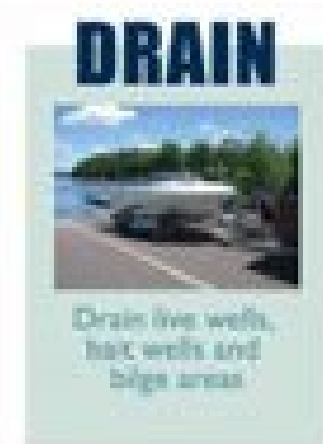
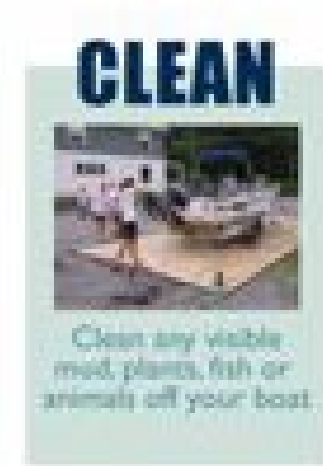
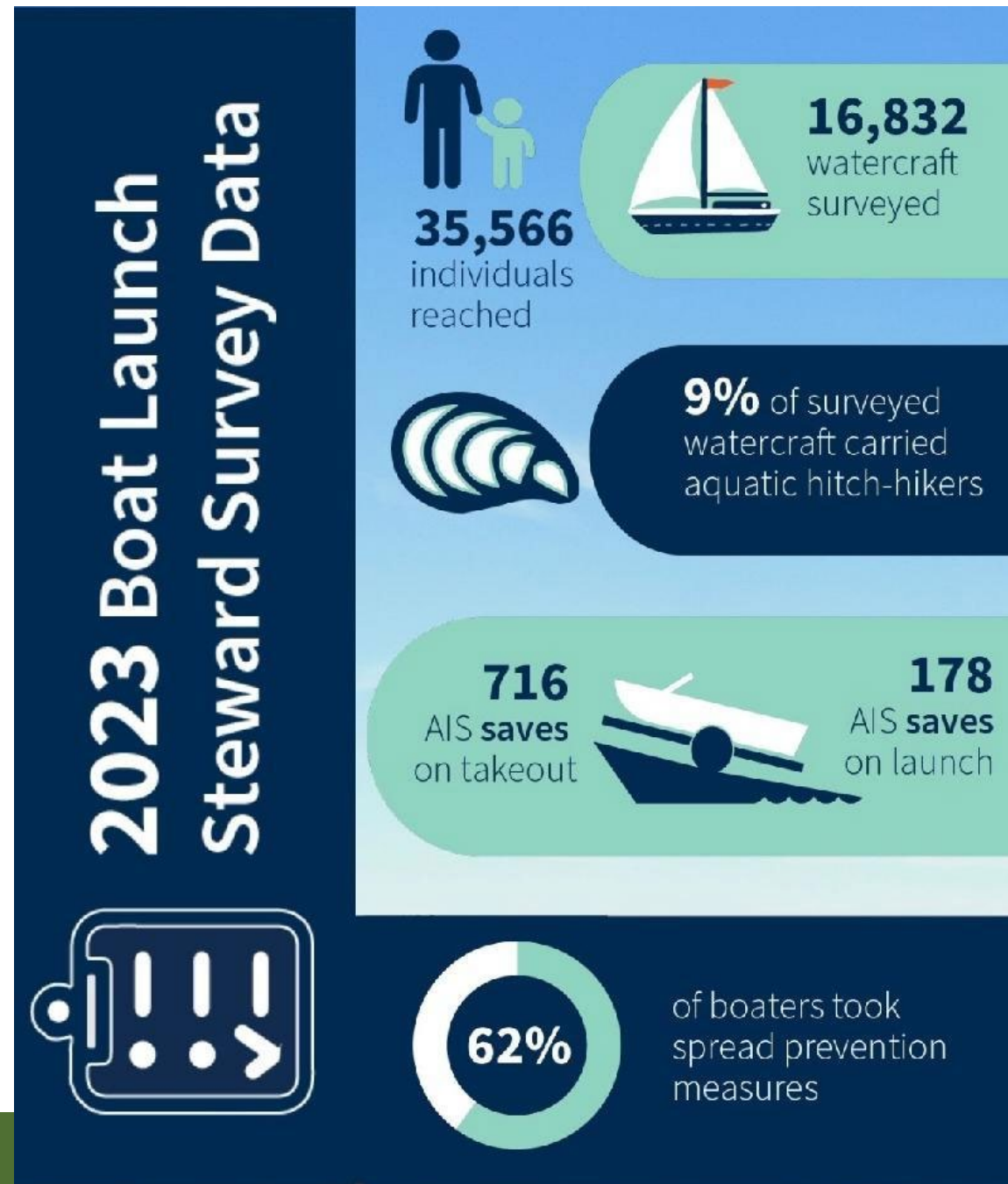


Meg Modley launched the LCBP Lake Champlain Boat Launch Steward Program in 2007.

Training LCBP Stewards

with the Adirondack Watershed Institute







2023 Lake Champlain Boat Launch Steward Locations



In 2023:

5 stewards (Parker, Romany, Emma, Sylvie, and Mason)

staffed 4 NY launches

(Wilcox Dock, Point Au Roche State Park, Point Au Roche Public Launch, and Great Chazy Boat Launch).



2023 Lake Champlain Boat Launch Steward Location Summaries

Wilcox Dock

Wilcox Dock is located off of Cumberland Avenue in Plattsburgh, NY.

| Days at Launch | # surveys | # watercraft | # boaters | % of boaters taking spread prevention measures |
|----------------|-----------|--------------|-----------|--|
| 31 | 267 | 269 | 695 | 94.74 |

| Watercraft Type | Count |
|------------------------------|-------|
| Motorboat | 229 |
| Personal Watercraft (jetski) | 18 |
| Kayaks | 17 |
| Sailboats | 2 |
| Canoes | 1 |
| Rowboats | 1 |
| Stand-Up-Paddleboards | 1 |

| | |
|---|-----|
| # of watercraft groups surveyed for organisms | 269 |
| # of organisms detected | 3 |
| # of AIS detected | 2 |

| AIS | Count |
|---------------|-------|
| Zebra Mussels | 2 |

| Native Plants |
|---------------|
|---------------|

Elodea





2023 Lake Champlain Boat Launch Steward Location Summaries



Point Au Roche State Park

The boat launch site is located within the State Park in Middle Bay, Beekmantown, NY.

| Days at Launch | # surveys | # watercraft | # boaters | % boaters taking spread prevention measures |
|----------------|-----------|--------------|-----------|---|
| 22 | 196 | 189 | 446 | 42.70 |

| | |
|---|-----|
| # of watercraft groups surveyed for organisms | 185 |
| # of organisms detected | 12 |
| # of AIS detected | 5 |

| Watercraft type | Count |
|------------------------------|-------|
| Motorboat | 158 |
| Personal Watercraft (jetski) | 20 |
| Kayaks | 11 |

| AIS | Count |
|--|-------|
|  Eurasian watermilfoil | 4 |
|  Curly-leaf pondweed | 1 |

Native Plants

Coontail, Eel grass, Elodea, Native pondweed





2023 Lake Champlain Boat Launch Steward Location Summaries

Point Au Roche Boat Launch

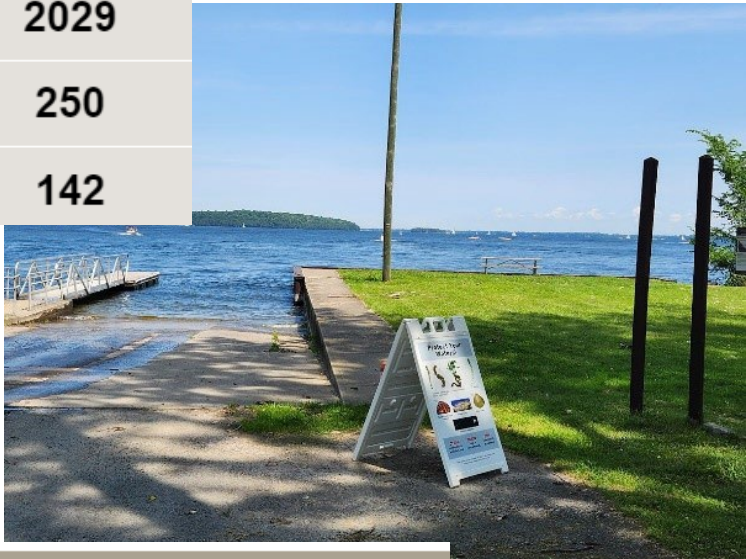
The boat launch site is located off of Breezy Point Lane in Point Au Roche, NY.

| Days at Launch | # surveys | # watercraft | # boaters | % boaters taking spread prevention measures |
|----------------|-----------|--------------|-----------|---|
| 63 | 2090 | 2065 | 4084 | 23.54 |

| Watercraft type | Count |
|------------------------------|-------|
| Motorboat | 1919 |
| Personal watercraft (jetski) | 126 |
| Kayaks | 11 |
| Canoes | 3 |
| Sailboats | 3 |
| Stand-Up-Paddleboard | 3 |

| | |
|---|------|
| # of watercraft groups surveyed for organisms | 2029 |
| # of organisms detected | 250 |
| # of AIS detected | 142 |

| AIS | Count |
|---------------------------------|-------|
| Eurasian Watermilfoil | 105 |
| Zebra mussel | 29 |
| Curly leaf pondweed | 16 |
| Variable leaf Milfoil | 2 |
| Hydrilla | 1 |
| Spiny/Fishhook <u>waterflea</u> | 1 |



| Native Plants |
|---|
| <u>Coontail</u> , Eel grass, Elodea, Native lily, Native milfoil species, Native naiad species, Native pondweed, Water crowfoot |



2023 Lake Champlain Boat Launch Steward Location Summaries




Great Chazy Boat Launch

The boat launch site is located off of Route 22 in Chazy, NY.

| Days at Launch | # surveys | # watercraft | # boaters | % boaters taking spread prevention measures |
|----------------|-----------|--------------|-----------|---|
| 42 | 754 | 786 | 1,594 | 41.11 |

| | |
|---|-----|
| # of watercraft groups surveyed for organisms | 730 |
| # of organisms detected | 41 |
| # of AIS detected | 12 |

| Watercraft type | Count |
|------------------------------|-------|
| Motorboat | 608 |
| Personal watercraft (Jetski) | 86 |
| Kayaks | 76 |
| Canoes | 11 |
| Stand-Up-Paddleboard | 4 |
| Docks | 1 |

| AIS | Count |
|---|-------|
|  Eurasian Watermilfoil | 8 |
|  Curly leaf pondweed | 4 |
|  Zebra Mussel | 2 |

| Native Plants |
|--|
| Coontail, Duckweed, Eel grass, Elodea, Native pondweed, Water marigold, Water crowfoot |



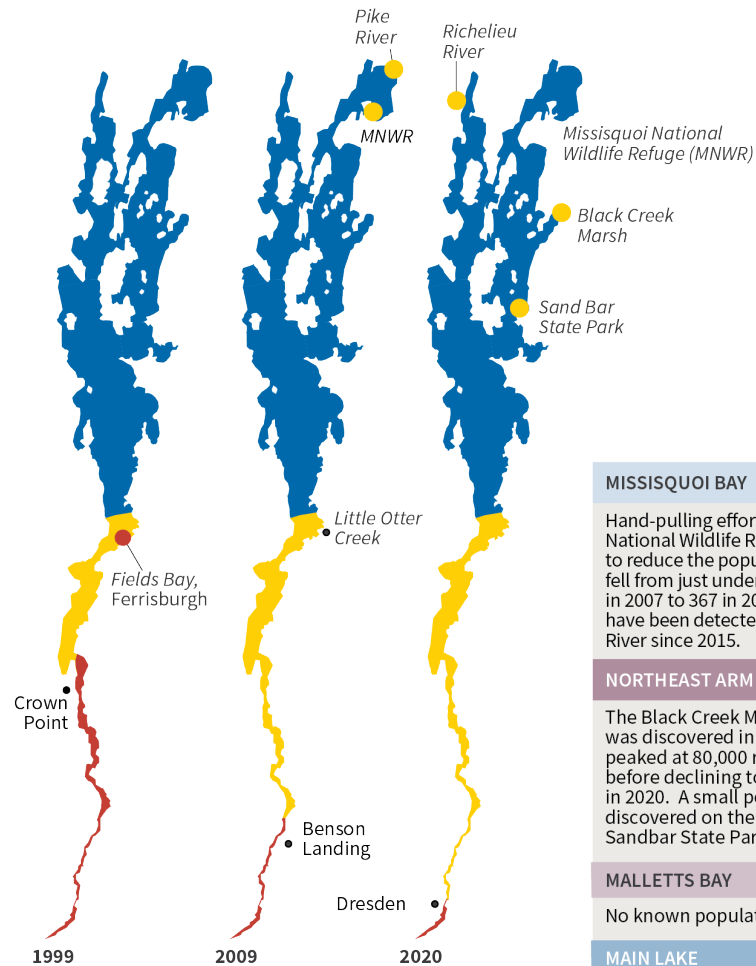
VT/QC Launch Summaries



| Launch | Days at Launch | # surveys | # watercraft | # boaters | boaters taking spread prevention measures | # of decons performed |
|-----------------------------------|----------------|-----------|--------------|-----------|---|-----------------------|
| Larrabees Point | 23 | 251 | 208 | 398 | 69.90 | |
| Converse Bay | 78 | 1,470 | 1,519 | 3,331 | 63.33 | 45 |
| Shelburne Bay | 82 | 1,518 | 1,671 | 3,225 | 72.69 | 85 |
| Perkins Pier | 20 | 151 | 162 | 314 | 83.89 | |
| Waterfront next to US Coast Guard | 2 | 24 | 24 | 62 | 58.30 | |
| Colchester Point | 20 | 303 | 363 | 589 | 62.05 | |
| Malletts Bay | 99 | 4,407 | 4,464 | 9,465 | 81.35 | 72 |
| John Guilmette | 93 | 3,124 | 3,109 | 6,667 | 38.96 | 121 |
| St. Albans Bay | 2 | 124 | 120 | 271 | 52.10 | |
| Larry Greene Access Area | 43 | 1,355 | 1,275 | 2,958 | 2.20 | |
| Venise-en-Quebec | 35 | 624 | 609 | 1,495 | 74.54 | |



Water chestnut coverage in Lake Champlain



| | |
|---|---|
| MISSISQUOI BAY | 👍 |
| Hand-pulling efforts in Missisquoi National Wildlife Refuge continue to reduce the population, which fell from just under 6,000 rosettes in 2007 to 367 in 2020. No rosettes have been detected in the Pike River since 2015. | |
| NORTHEAST ARM | 👎 |
| The Black Creek Marsh population was discovered in 2016 and peaked at 80,000 rosettes in 2019 before declining to 30,000 rosettes in 2020. A small population was discovered on the north side of Sandbar State Park in 2019. | |
| MALLETTS BAY | ~ |
| No known populations are present. | |
| MAIN LAKE | ~ |
| Monitoring is necessary between Little Otter Creek in Ferrisburgh, VT and Crown Point, NY. Control efforts continue for the Richelieu River populations. | |
| SOUTH LAKE | 👍 |
| Populations are mechanically harvested by VTDEC and NYSDEC in the red-shaded area, which has been steadily reduced over the past two decades. | |





What you
can do

We are now hiring for the 2024 season!



<https://www.lcbp.org/about-us/people/careers/>