

Candlewood Lake Authority

2025 Lake Steward Program Final Report



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*Funding Provided By: CT Department of Energy and Environmental Protection Aquatic
Invasive Species Grant Program*

Table of Contents

Results Summary 3

Program Introduction 9

Total Inspection Results 12

Previous Location of Boaters Results 16

Best Practice Implementation Results 19

Conclusions 24

Acknowledgments 26

Appendices 27

Results Summary

Launch	Pontoon	Bowrider	Fishing Boat	Wakeboard Boat	Enclosed Cabin	PWC	Small Craft	Total Boater Interactions
Lattins Cove	25	97	15	19	0	109	0	265
Squantz Cove	7	54	23	20	0	40	2	146
Brookfield	7	25	3	2	0	9	0	46
Danbury	35	68	2	11	0	57	0	173
New Fairfield	0	0	0	0	0	0	0	0
New Milford	6	33	5	4	0	18	1	67
Sherman	0	6	0	2	0	2	0	10
Total Vessels	80	283	48	58	0	235	3	707

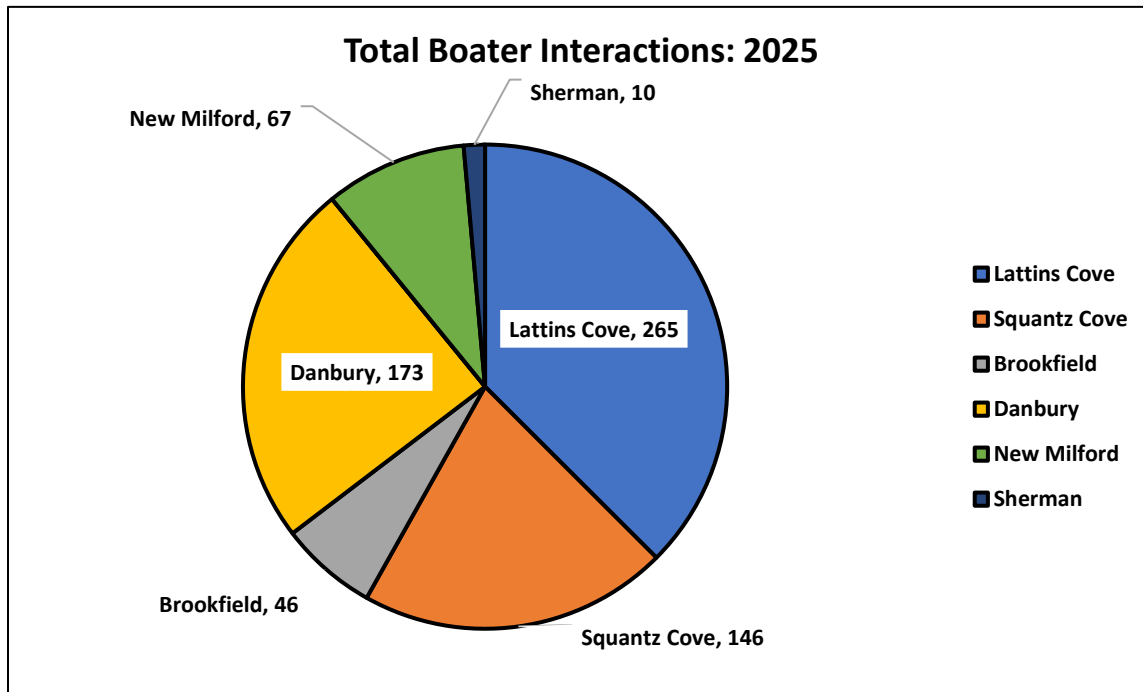
Table 1: Total Boater Interactions by Launch & Type of Vessel in 2025

In 2025 there were a total of **707 interactions** with boaters by Lake Stewards before entering Candlewood Lake. The majority of these interactions (265) were conducted at the public Lattin's Cove boat launch and were of bowrider type boats (283). The decision was made in 2022 to not man the launch at New Fairfield because New Fairfield due to extremely low usage by daily boaters. This year, stewards continued keeping diligent track of boaters who voluntarily declined an inspection at the launch. Of all 707 interactions **256 boaters accepted a thorough inspection**, leaving 451 boaters that declined an inspection (64%). However, we discovered part way through the season that some teams were not following their training and properly stopping boaters to ask for an inspection. They would simply mark the boat and registration while the boat passed by, never actually declining an inspection. If we remove those interactions from the total, there were in reality **550 full interactions** and still 256 thorough inspections – for a **declined inspection rate of 53%**, which is still much higher than we'd like. We suspect the following reasons for the increase in declined inspections:

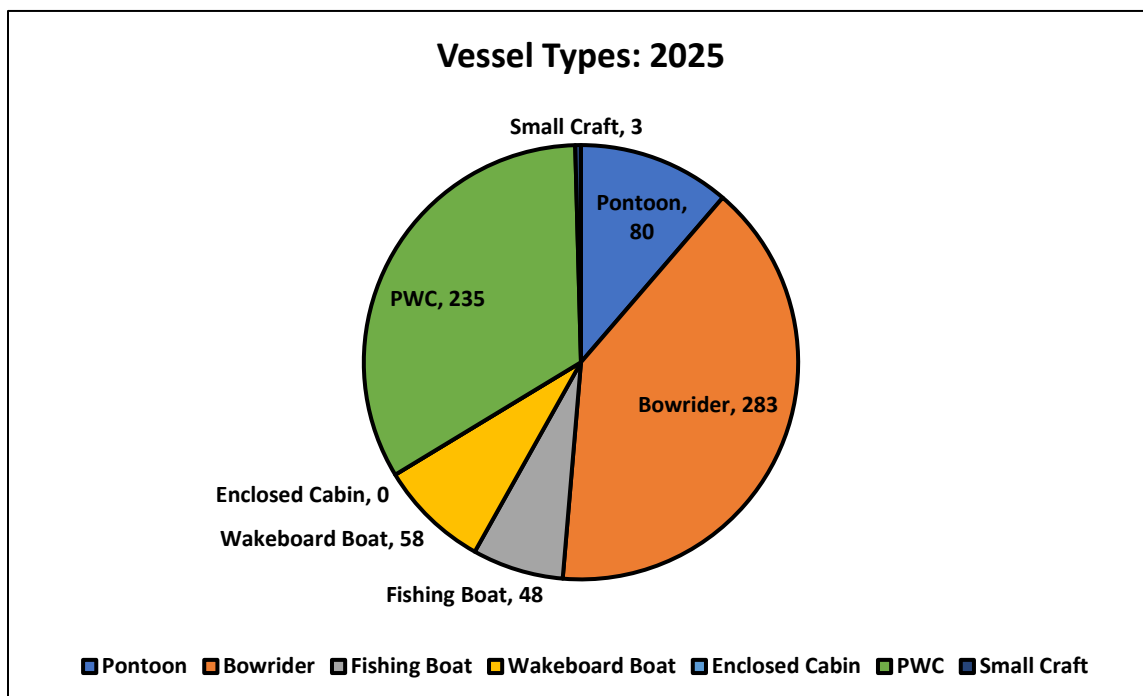
- 1) Stewards were not as active as they should have been in stopping boaters to properly offer an inspection. This will be addressed in training and through random "check ins" in years moving forward.
- 2) The steward manager was a new again this year, and the loss of institutional knowledge of the program with a new steward manager could impact how active steward teams are at offering inspections.
- 3) Boaters are getting used to the presence of stewards and know that the inspections are voluntary, meaning they are more willing to quickly drive by since they know an interaction is not required.

In future years, we will be randomly "checking in" on stewards more often and on a schedule to ensure proper effort is being displayed to offer inspections to every

passing boater. However, over the 5 years of the program there have been 3306 boater interactions and 2540 thorough inspections (77% acceptance).

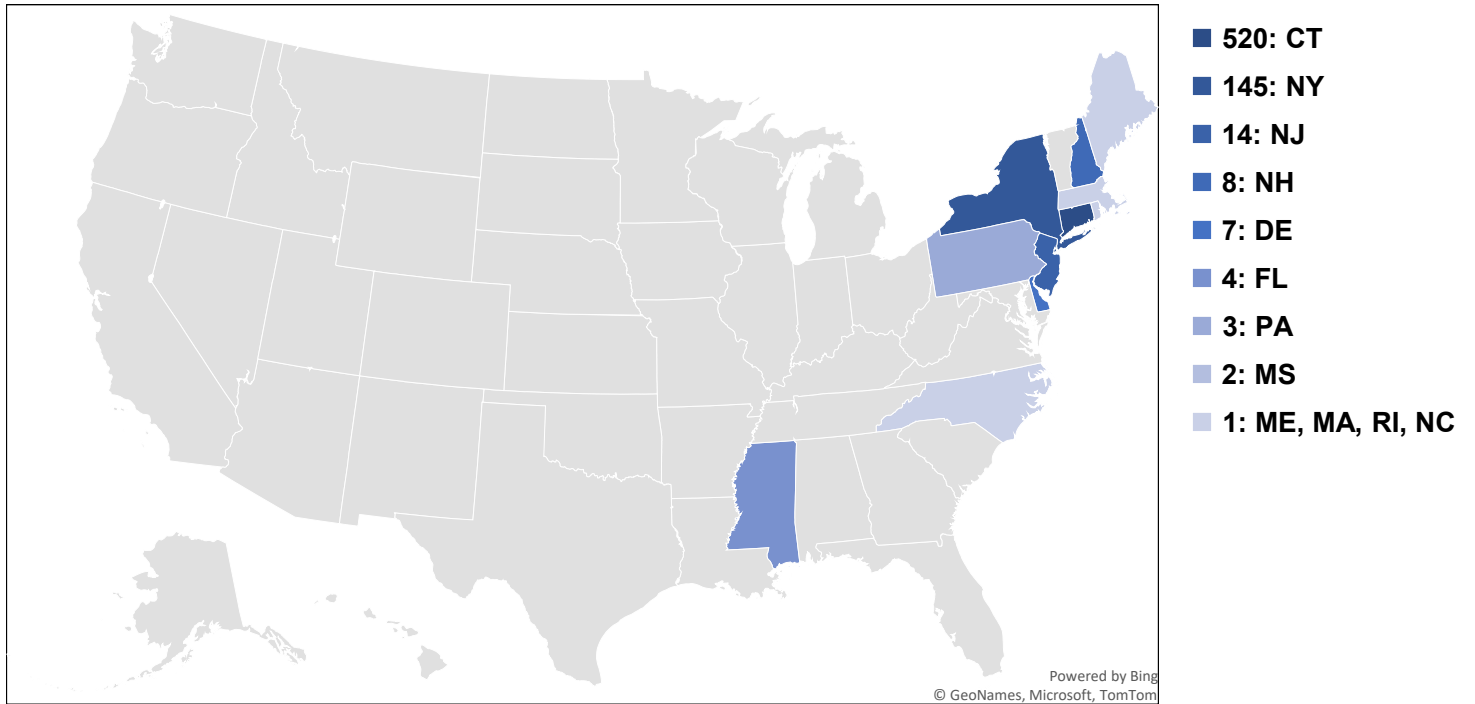


Graph 1: Total Boater Interactions by Launch in 2025



Graph 2: Total Vessels in Boater Interactions by Type in 2025

Registration State of Boats Entering Candlewood Lake



Map 1: Registration State of Boats Entering Candlewood Lake in 2025

	Lattins Cove	Squantz Cove	Brookfield	Danbury	New Milford	Sherman	Total
CT	175	77	44	152	61	11	520
NY	66	62	0	10	6	1	145
NJ	9	1	2	2	0	0	14
PA	3	0	0	0	0	0	3
FL	3	0	0	1	0	0	4
MS	1	1	0	0	0	0	2
DE	2	0	0	5	0	0	7
ME	0	0	0	1	0	0	1
MA	0	1	0	0	0	0	1
NH	4	3	0	1	0	0	8
RI	1	0	0	0	0	0	1
NC	0	1	0	0	0	0	1

Table 2: Registration State of Boats Entering Candlewood Lake by Launch in 2025

Previously Visited Lake	Boats
Candlewood	214
None	16
Lake Mahopac	3
Lillinonah	3
LI Sound	3
Zoar	2
Lake Hopatcong	2
Hartland Pond	2
Raquette	1
Oscawana	1
Lake Champlain	1
Scoville Reservoir	1

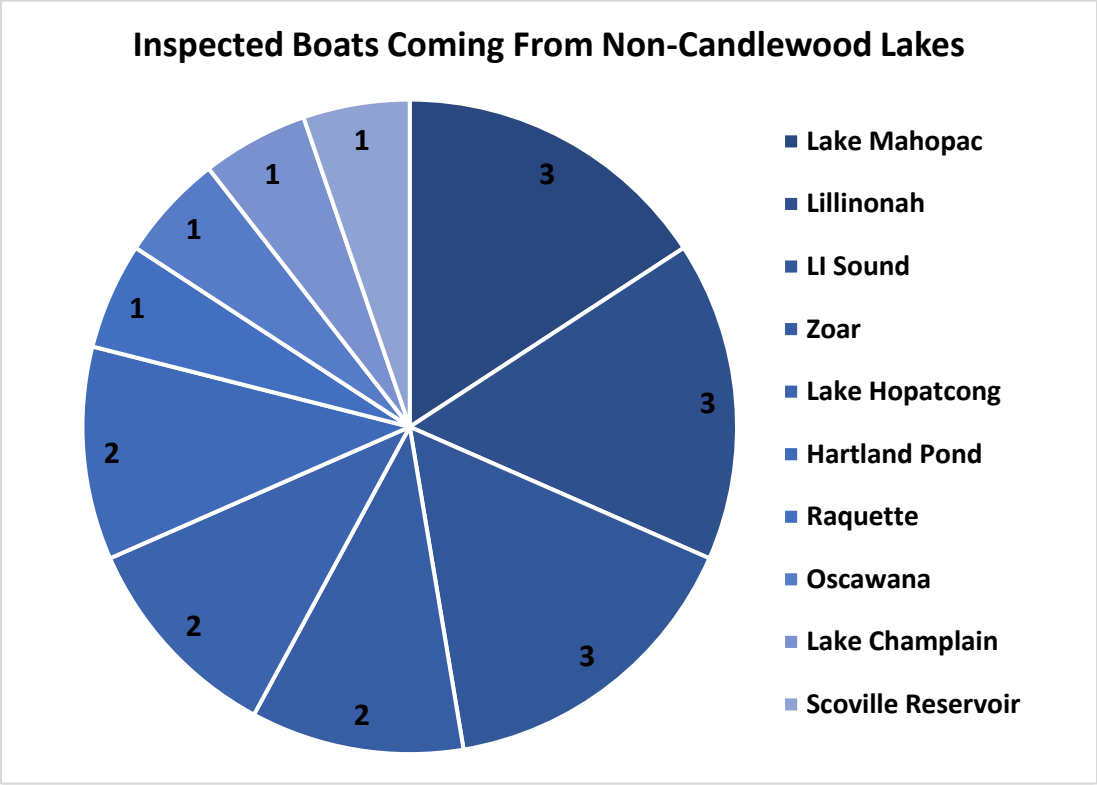
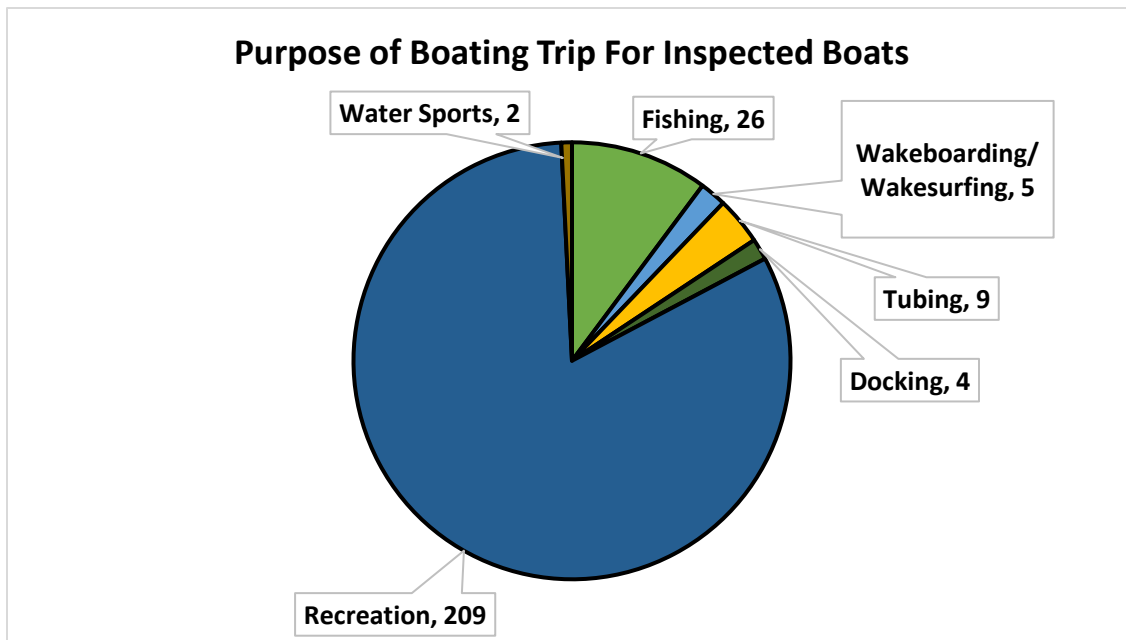


Table 3 & Graph 3: Previous Lake or Waterbody Visited before Candlewood. Boats re-entering Candlewood were by far the most common (84%) and were not included in the graph for ease of visualization.



Graph 4: Self-Reported Purpose of Trip from Boaters During Inspection in 2025

	Yes	No	% Yes
2022	487	70	87.43
2023	707	97	87.94
2024	139	122	53.26
2025	218	37	85.49

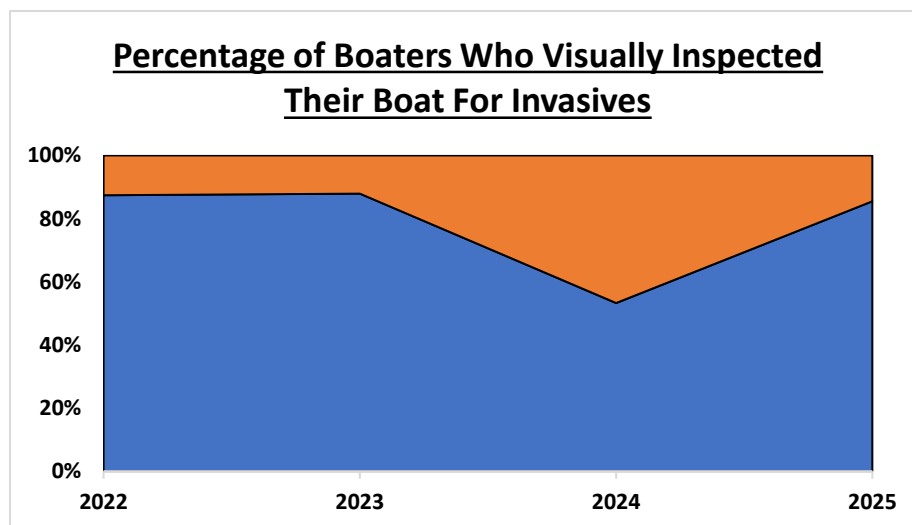


Table 5 & Graph 5: Percentage of Boaters who self-identified as having inspected their boat for invasives before leaving that day. This question was added in 2022.

	Yes	No	% Yes
2021	552	76	87.90
2022	457	97	82.49
2023	695	109	86.44
2024	204	57	78.16
2025	200	55	78.43

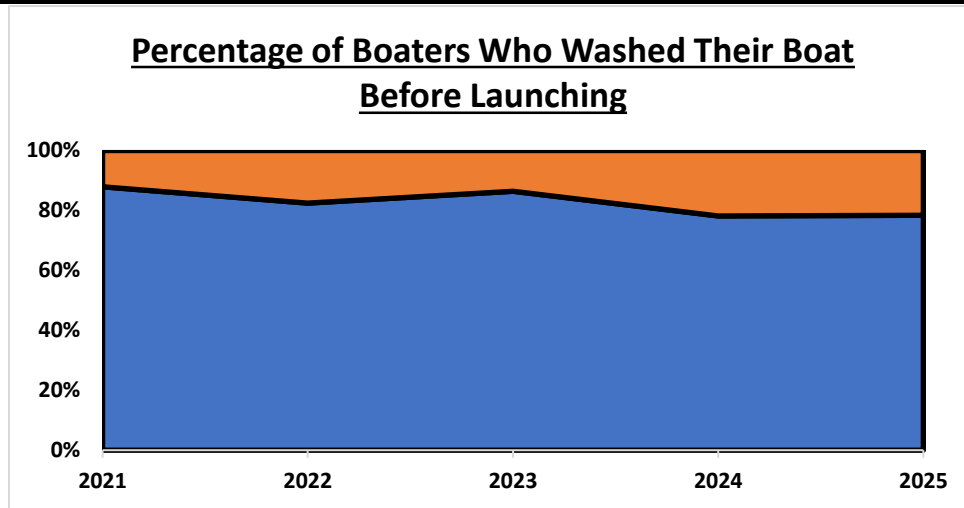


Table 6 & Graph 6: Percentage of Boaters who self-identified as having washed their boat before leaving that day.

	Yes	No	% Yes
2021	351	307	53.34
2022	291	268	52.06
2023	580	224	72.14
2024	140	119	54.05
2025	166	89	65.10

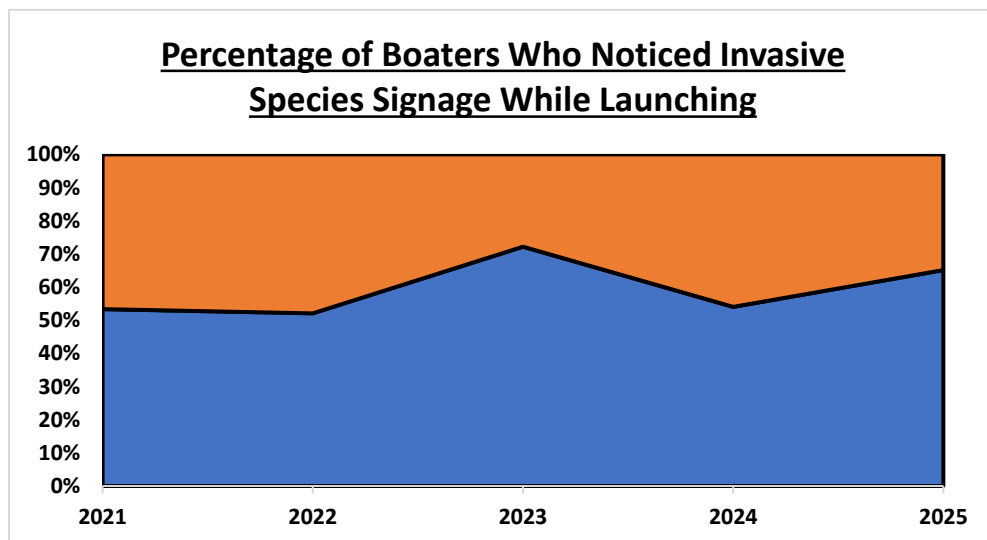
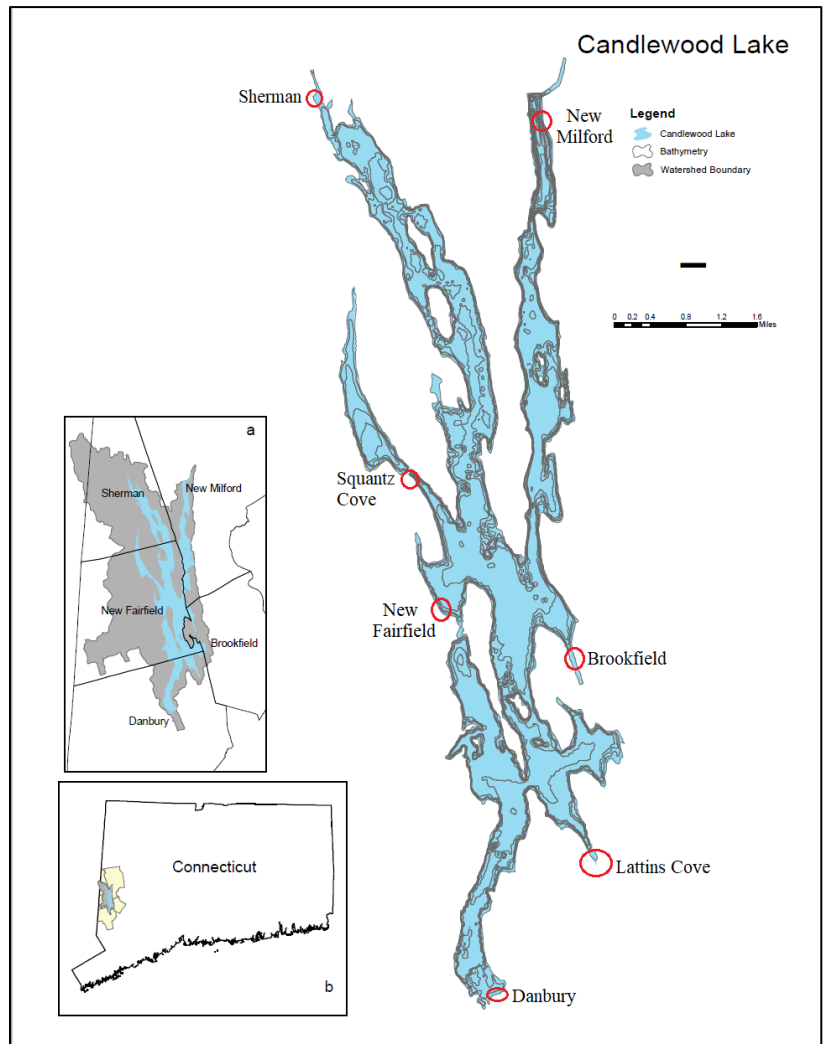


Table 7 & Graph 7: Percentage of Boaters who self-identified as having noticed Invasive Species Signage when Launching their Boats Previously.

Program Introduction

The Candlewood Lake Authority (CLA) “Lake Steward Program” started in 2021 with a mission to help prevent the introduction of aquatic invasive species to Candlewood Lake, as well as educate recreational boaters on invasive species prevention. To accomplish these goals, the CLA stations “Stewards” at the 7 public launches around Candlewood Lake on peak boating days during the summer to offer free voluntary boat and trailer inspections to boaters. Those 7 launches include 5 municipally managed launches that are reserved for residents of that town, as well as two public launches managed by the State of Connecticut Department of Energy and Environmental Protection (DEEP).



Map 2: Candlewood Lake with 7 Public Boat Launches Highlighted.

Historically, it has been relatively easy to launch on Candlewood Lake without a boat inspection for invasive species. The two main existing means of protection before the Lake Steward Program were educational signage at the ramps, and DEEP Boating Education Assistants (BEAs) who were tasked with conducting inspections at the two

state ramps, along with a host of other responsibilities. However, the signage can be difficult to notice along with all the other signage at the ramps, and when the BEAs get so busy with traffic control and other responsibilities they wouldn't have time to inspect every boat. CLA Stewards were meant to assist the BEAs by taking care of the inspection and invasive species education responsibilities on the busiest days, as well as add that layer of protection to the 5 municipal launches which generally just had signage. CLA Stewards would work in teams of 2, where one team member would conduct the inspection of the boat and trailer, while the other member would speak with the boater, educate them on what the program was, and collect anonymized data to help inform stakeholders about recreational patterns on the lake. Inspections and data collection were completely voluntary, and thus, not every boat entering the lake accepted



Photo 1: Two Lake Stewards Waiting for Boaters at Lattins Cove

an inspection, but the majority of boaters agreed to an inspection and data collection. Inspections involved a quick search of the hull, prop, and trailer, followed by asking the boater to empty their bilge, ballast, and live-well (if present). Stewards would feel the boat hull with their hands to search for small juvenile zebra mussels and other mollusk species.

Stewards were stationed at launches from roughly 8am-4pm, and would cover two different launches on Saturdays, Sundays, and holidays (Memorial Day, July 4th, and Labor Day). That would mean on any given day, two of the seven total launches would be covered. As the program progressed and we began to get an understanding of which ramps had the most activity, our efforts became more focused on the busiest ramps, while visiting most ramps semi-regularly to ensure our data was representative of the whole lake. Boater responses to the program have been generally positive, with most boaters agreeing to the inspections, and some, particularly locals, expressing their excitement about the program and their happiness to see steps being taken to protect Candlewood Lake. Stewards were trained both by CLA staff and volunteers, as well as attending a DEEP online training required for the BEAs. 2024 was the first year of the program where a very small majority declined/ignored inspection offers, due to a variety of factors discussed elsewhere in this report, and this trend continued in 2025. We plan to take steps in 2026 to hopefully begin remedying this concerning decline.

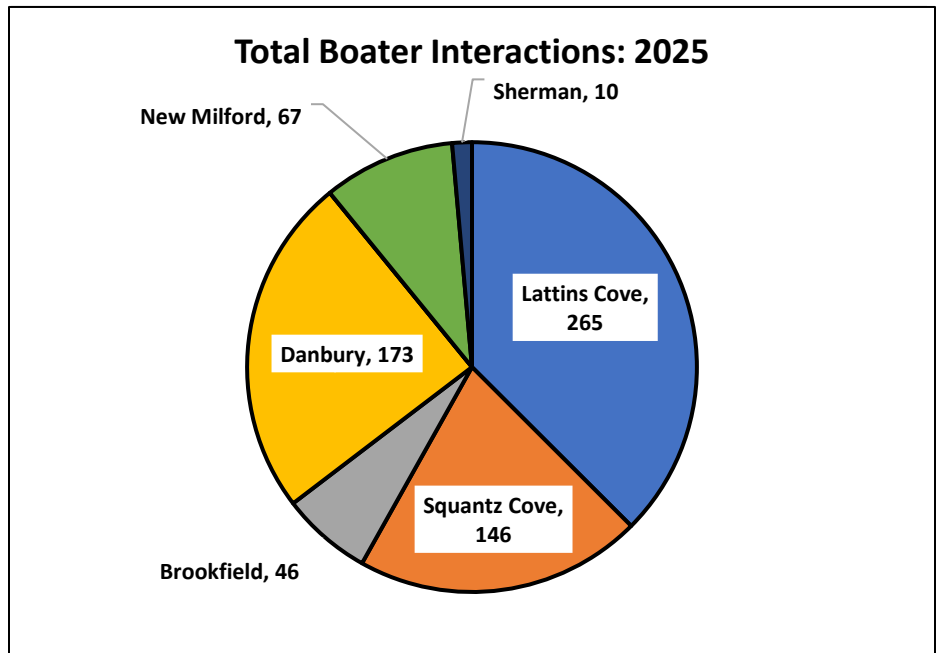
Funding for this program was provided by the CT DEEP's grant funding opportunity for the control of aquatic invasive species (AIS) and blue-green algae, funded through the boat registration stamp program in the state of CT.

Total Inspection Results

Launch	Pontoon	Bowrider	Fishing Boat	Wakeboard Boat	Enclosed Cabin	PWC	Small Craft	Total Boater Interactions
Lattins Cove	25	97	15	19	0	109	0	265
Squantz Cove	7	54	23	20	0	40	2	146
Brookfield	7	25	3	2	0	9	0	46
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Total Vessels	80	283	48	58	0	235	3	707

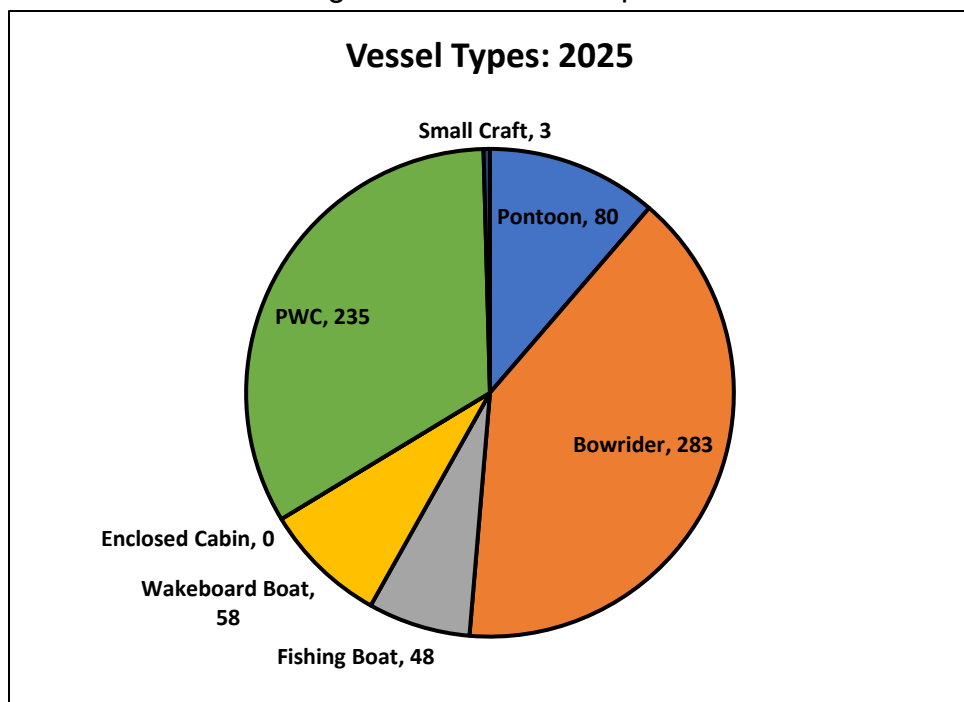
Table 1: Total Boater Interactions by Launch and Type of Vessel in 2025

The 2025 steward season stretched from June 1st, 2025 to September 1st. In that time, stewards had **707** boater interactions, conducted **256** thorough inspections, and did not find any invasive species on boats entering the lake. That is 256 boats and boaters that would likely have otherwise launched into Candlewood Lake without any consideration of the potential invasive species impact they would have had. However, we did have issues this year with stewards not properly stopping boaters to offer an inspection and instead entering the data as if the boater had declined that



Graph 1: Total Boater Interactions by Launch

inspection. That erroneous data has been removed from the total, meaning that there were actually 550 proper interactions with boaters. Unfortunately, this means that there were 157 boats which passed by stewards that did not have a sufficient inspection and may have had invasive species. In the future, we will be incorporating a more thorough “random check in” schedule. While we have checked in on stewards in the past to ensure they are following their training, that has historically been a responsibility of the steward manager. But more random drop-ins from the CLA will likely ensure better adherence to training for stewards who spend much of their time unobserved.



As shown in Graph 1, as in the past, the lion’s share of inspections were conducted at Lattins Cove, one of the DEEP managed launches, and the busiest on

Graph 2: Total Vessels by Type in Boater Interactions

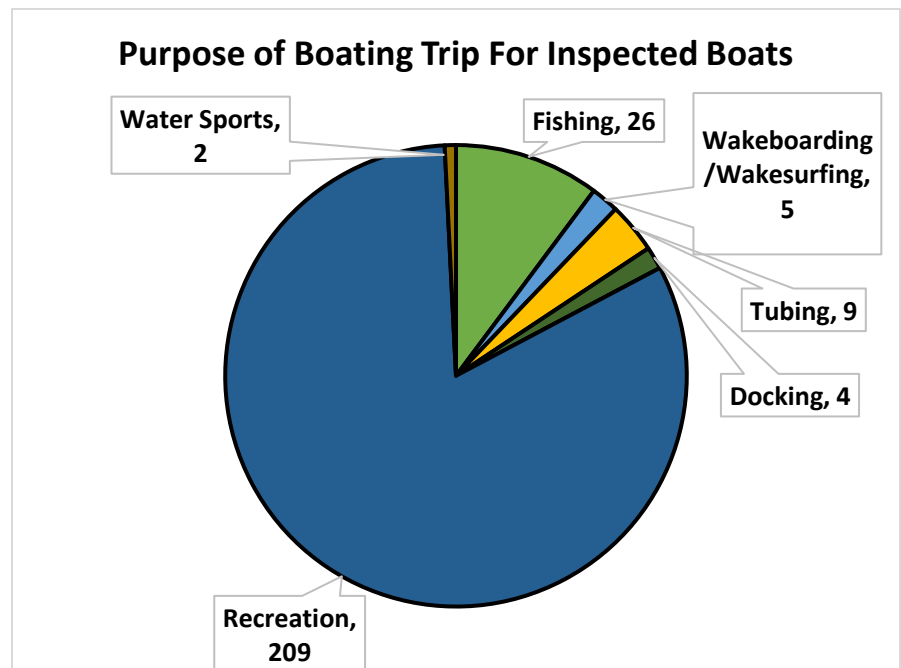
Candlewood Lake. Danbury’s

municipal launch was second in inspections. We can say pretty confidently based on this and past years’ experience that the ramp utilization on Candlewood generally goes Lattins, Danbury, and then Squantz Cove (if you do not include fishing tournaments which are not covered by Lake Stewards). The other 4 municipal town ramps were not

used at the same rate and had a higher use at the beginning of the boating season compared to the end.

As for the share of boat types launching in Candlewood Lake, shown in Graph 2, Bowriders were far and away the most common boat type, followed by Personal Watercraft (PWCs, or Jetskis), then pontoons and wakeboard boats. This year, the count of wakeboard boats has gone up significantly, indicating both proper classification by the stewards, as well as the growing interest in wakesurfing. Wakesurfing is becoming a more prominent activity on the lake and can cause user conflict – this is a trend we will be keeping an eye on. V-hull boats and wakesurfing boats present a unique problem for invasive species inspection, requiring inspectors to look even further beneath the hull to ensure there are no species stuck between the trailer and boat, as well as wakesurfing boats' large ballast requiring emptying away from the lake to prevent spread of invasives (as well as emptying before leaving) This is something our stewards were trained in and equipped with grabbers to help get plants out of difficult to reach places, and they emphasize not spreading Candlewood's invasives to other lakes.

When asked the purpose of their boating trip for



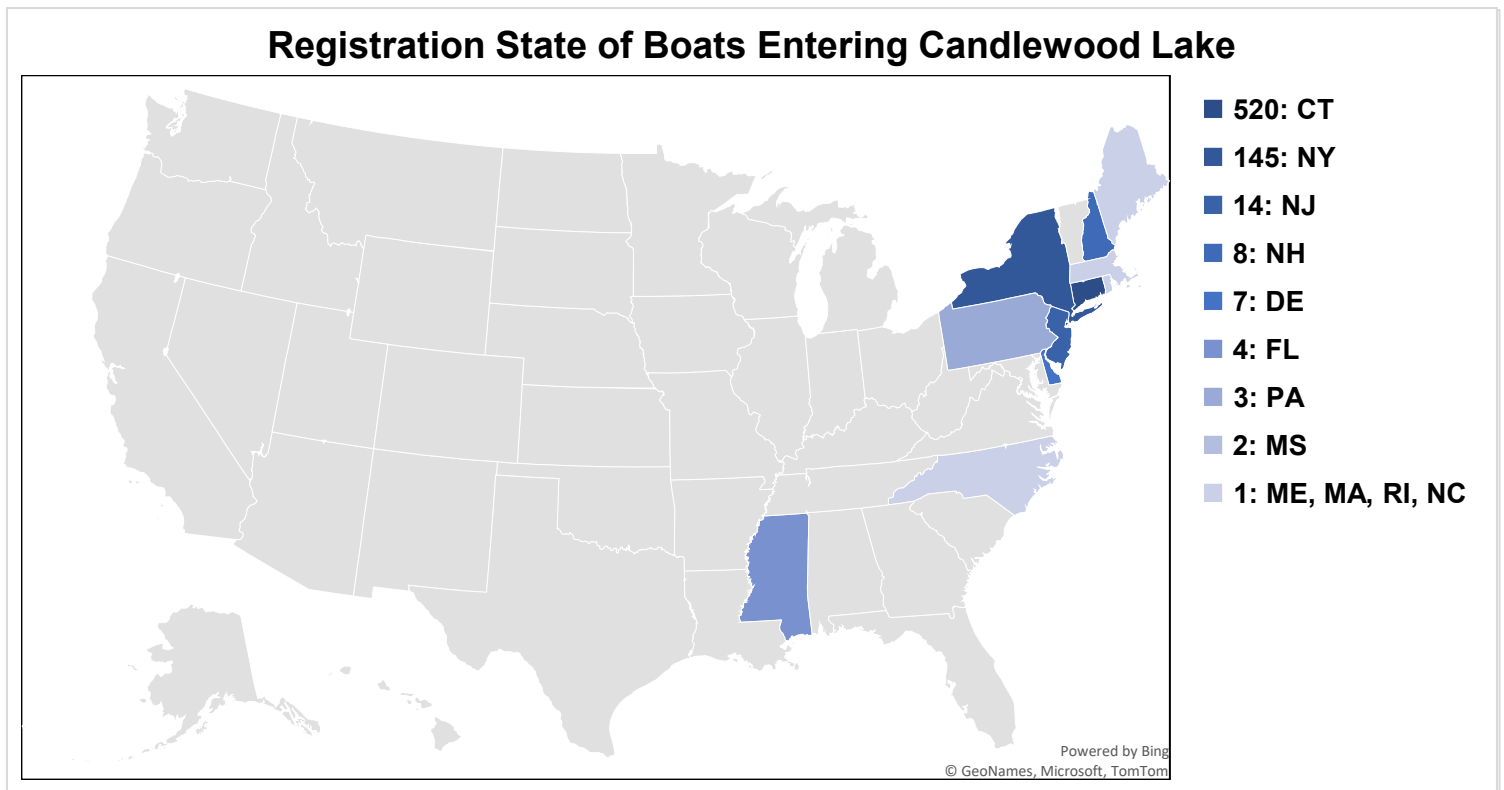
Graph 4: Stated Purpose of Boating Trip

the day, most boaters were general with their answer, saying things like “just for fun”, “recreation”, or “spend time with family.” Generally, most boaters visit Candlewood Lake to spend the day on the water and enjoy multiple different activities in one day, including: swimming, tubing, sunbathing, eating & drinking, and just driving the boat. There were a number of boaters who were visiting for the expressed purpose of fishing, but many of those boaters might also come to Candlewood Lake during tournaments, which our stewards were not stationed at (but DEEP employees are). This year is the second year we have more detailed information in this category, but we’d like for this to get even more specific. We may decide to add a question for wake boats to see if their primary planned activity is wakesurfing or not. In general, water sports can significantly increase congestion and traffic safety on the water. This year, 16 respondents highlighted water sports as their primary activity, but we suspect that this number is actually much higher, and people just choose “recreation” as it’s an easy answer. We will be workshopping how this question is asked this off-season. Ensuring safe towing at legal distances is becoming a point of emphasis for public safety on the water.

Previous Location of Boaters Results

One of our priorities in data collection was to determine where boaters were coming from when visiting Candlewood to help assess the level of risk associated with transient boat traffic. If, for instance, very few boaters were coming from other areas with invasive species that hadn't yet been introduced to Candlewood, then the level of risk of introduction would be lower than we thought. Or, if most boaters were coming from a few waterbodies with known invasive infestations, we could focus our inspection and education efforts on those species specifically.

First, in an effort to get an idea of where the boaters visiting Candlewood are from (and where their boat spends most of its time), we asked each boater which state the vessel was registered in. That information is contained in Map 1, as well as Table 2

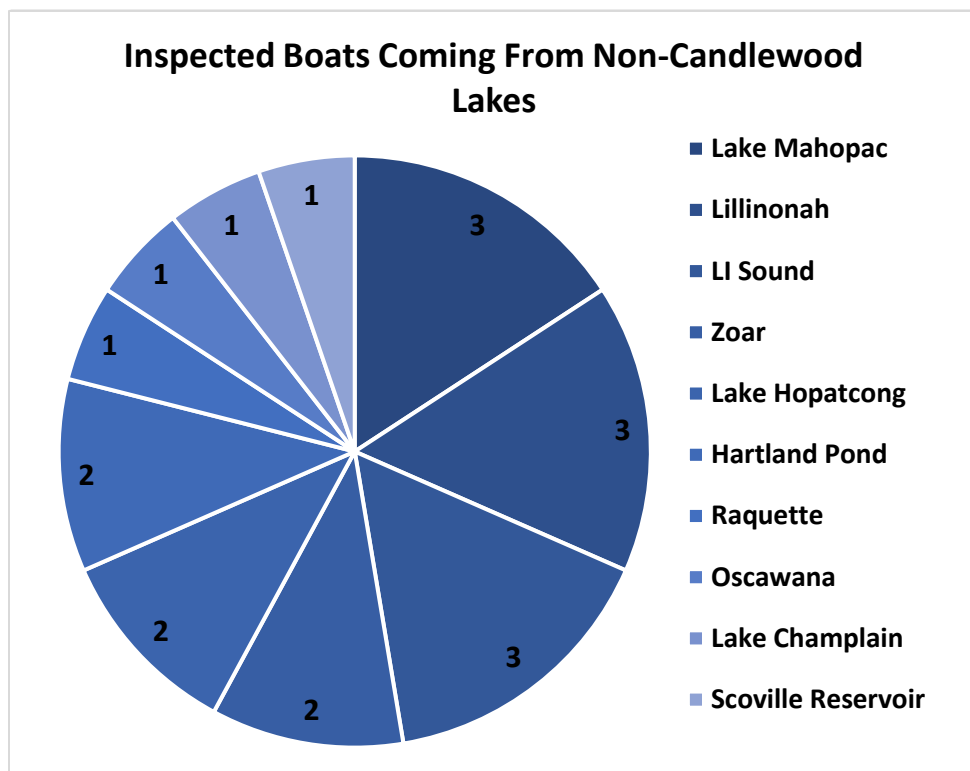


Map 1: Registration State of Boats Entering Candlewood Lake in 2025

in the “Results Summary” section of this report. In 2025, it remained true that the vast majority (74%) of boaters visiting Candlewood had registered their boats in Connecticut. That percentage has remained relatively consistent through all 4 years of the program. New York State, due to its proximity to the lake (including the very high population of southeastern New York) was second with 21% of the boaters. Every other state was relatively rare, comprising 5% of the total between all 10 of them. These results aren’t unexpected. Due to the public nature of the lake being open for visitors, and its closeness to the NY border, it makes sense that NY would be second most common registration state – and this percentage has remained consistent all four years of the steward program. It is worth noting that there are not necessarily new unique boaters every inspection, as boaters will often return to Candlewood many times throughout the course of the season. To try to understand the number of returning boaters, they were asked if they’d undergone a steward inspection before, which is discussed later in this report.

Boaters were also asked what was the most recent lake or waterbody they visited before Candlewood to get an idea of the invasive species threat presented by the transient boating community. Again, the vast majority of boaters (84%) had previously been on Candlewood before their visit, presenting no invasive species threat to Candlewood’s ecosystem. Second to that are lakes Mahopac and Lillinonah (not including “None” which is people docking/entering the lake for the first time). Two years ago, Hydrilla was discovered in Lake Lillinonah, immediately making it a lake of primary concern for invasive species spread into Candlewood, and Lake Lillinonah is directly upstream of lake Zoar, which will likely contain hydrilla soon. Boaters from these lakes

present a very real risk of spreading invasive species of concern to Candlewood. While this year represents the highest percentage of boaters presenting no threat to Candlewood (“Candlewood”, and “None” answers), in total over the 5 years of the program **9% of boaters come from “High Risk” waterbodies**. This percentage would have been even higher before the program began, but since the introduction of zebra mussels in the Candlewood Ecosystem, the primary concern now are plant species, as well as Quagga Mussels.



Previously Visited Lake	Boats
Candlewood	214
None	16
Lake Mahopac	3
Lillinonah	3
LI Sound	3
Zoar	2
Lake Hopatcong	2
Hartland Pond	2
Raquette	1
Oscawana	1
Lake Champlain	1
Scoville Reservoir	1

Table 3 & Graph 3: Previous Lake or Waterbody Visited before Candlewood. Boats re-entering Candlewood were by far the most common (84%) and were not included in the graph for ease of visualization. “None” was also removed.

Best Practice Implementation Results

Our final priority in data collection was trying to assess what impact, if any, educational efforts have had on the Candlewood Boating Community. Namely, how often do people take steps to clean, drain, and dry their boats before launching, and what impact is the signage at the ramps having on that messaging? Finally, now that the steward program has been running for a couple of years, we can begin to decipher some potential trends in the data that could inform messaging at the ramps.

First, the stewards asked whether boaters had conducted a visual inspection of their boats before leaving that day. This question was not asked in 2021 but was added in 2022 to understand who is taking basic invasive species precautions. Most boaters responded that yes, they had inspected their boat before launching. Notably this

	Yes	No	% Yes
2022	487	70	87.43
2023	707	97	87.94
2024	139	122	53.26
2025	218	37	85.49

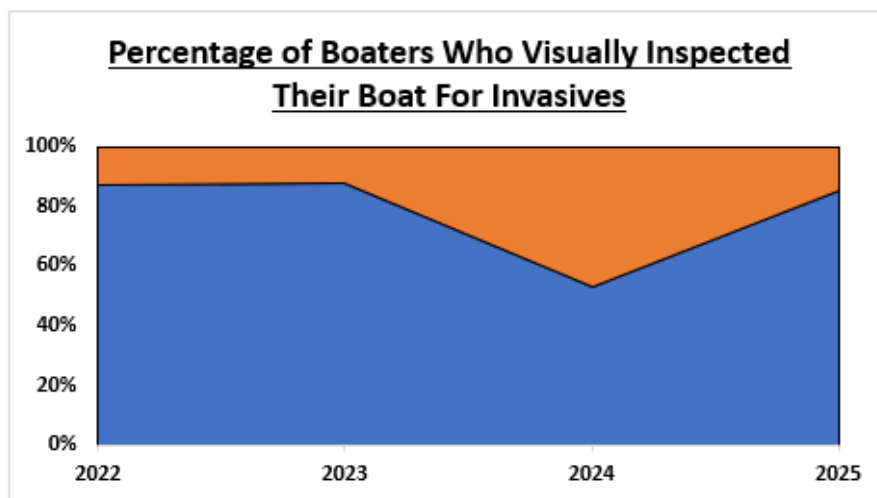


Table 5 & Graph 5: Percentage of Boaters who self-identified as having inspected their boat for invasives before leaving that day. This question was added in 2022.

decreased significantly in 2024, which is a little surprising as trends pointed to this either staying the same or improving over time. However, this number improved again in 2025 to the roughly 86% number we've seen in the past. Boaters were then asked whether they had actively washed and dried their boat before leaving that day. The expectation is that fewer people would wash compared to those who only inspected, as it indicates a more comprehensive invasive species prevention strategy. This question has been asked all five years.

The number of people who self-report washing their boat has always been surprisingly high to us, and while it has decreased relative to 2021, it has still remained high.

	Yes	No	% Yes
2021	552	76	87.90
2022	457	97	82.49
2023	695	109	86.44
2024	204	57	78.16
2025	200	55	78.43

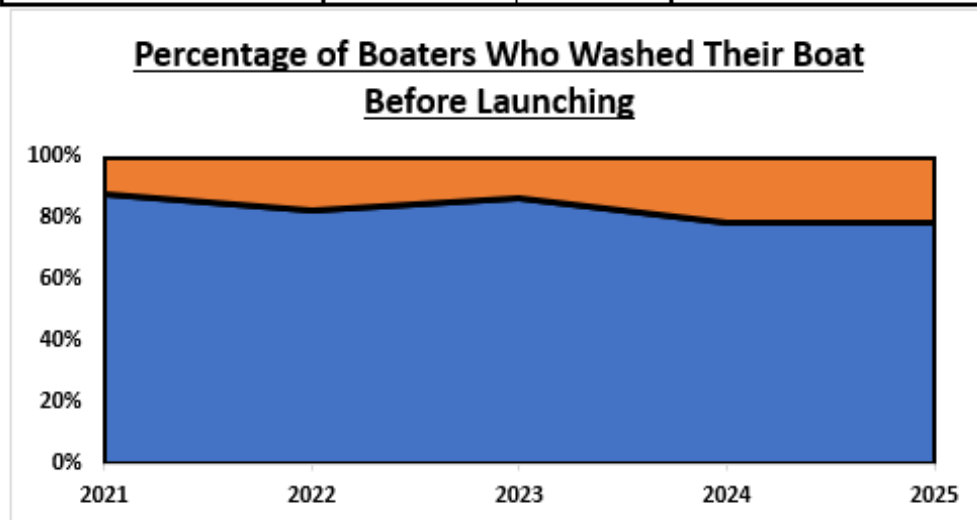


Table 6 & Graph 6: Percentage of Boaters who self-identified as having washed their boat before leaving that day.

Unfortunately, this might indicate some significant social desirability bias in the data, as boaters are self-reporting behavior they expect to be “correct” rather than answering truthfully. While the inspections were voluntary, and it was clear our stewards did not have any enforcement capabilities, it is almost certain that the share of boaters who did not inspect or wash and dry their boat is larger than the amount reflected in the graphs. This is likely true for both questions, including both inspections and washes. With all that said, we can still be encouraged by the fact that, 78% of boaters reported that they washed and dried their boat – meaning that at the very least they also understand that this is the best practice for protecting any lakes they visit. We plan to ask boaters if they would use a wash station at the ramp, should there be one when they arrive, starting in 2026.

	Yes	No	% Yes
2021	351	307	53.34
2022	291	268	52.06
2023	580	224	72.14
2024	140	119	54.05
2025	166	89	65.10

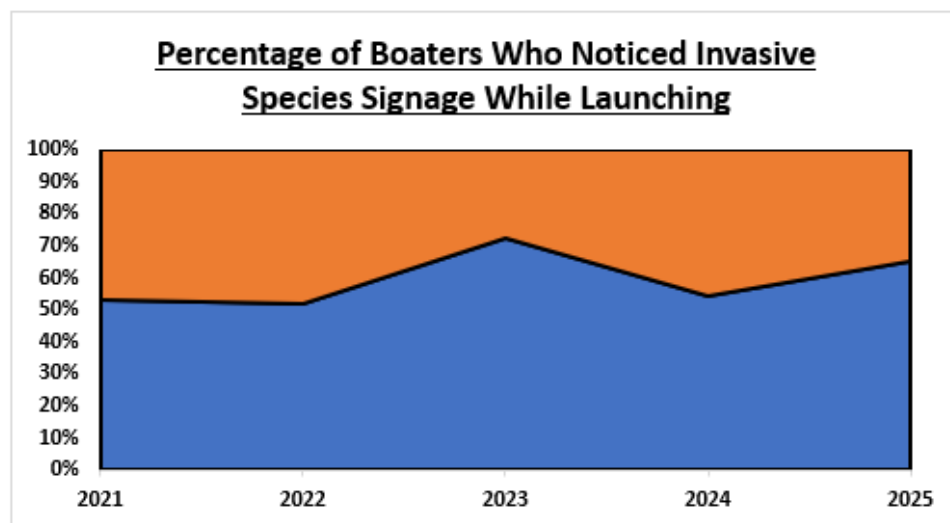
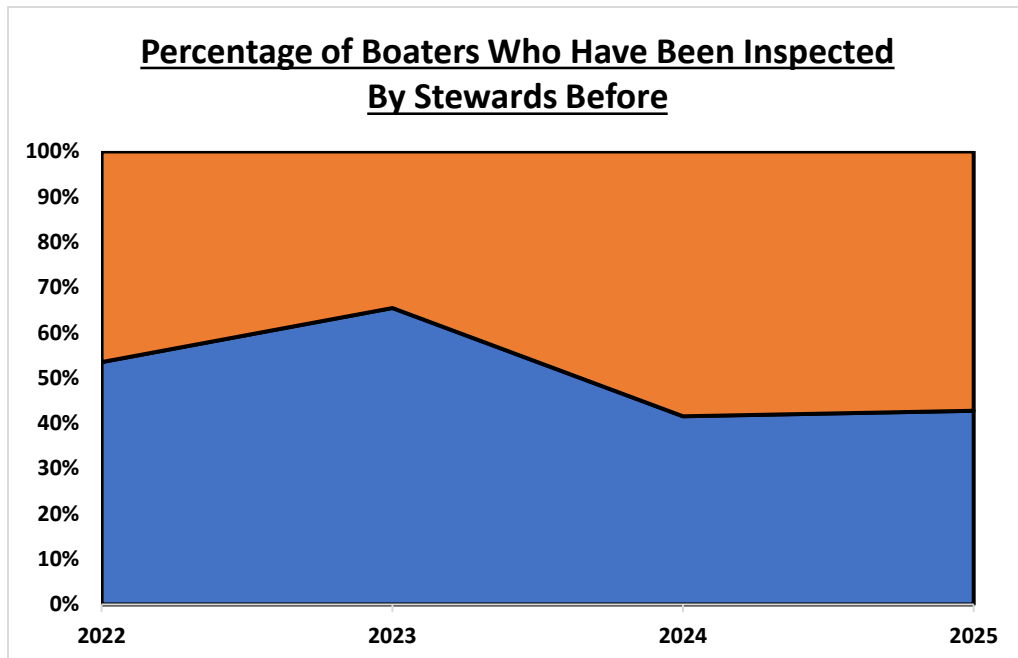


Table 7 & Graph 7: Percentage of Boaters who self-identified as having noticed Invasive Species Signage when Launching their Boats Previously.

Our stewards also asked boaters if they had noticed the invasive species signage at the boat launches before. Of all the best practices results, these are probably the most interesting. While our initial results were discouraging, indicating that in year one 47% of boaters reported never having even noticed educational signage before, the change over time is interesting. Following the 2022 season, new invasive species signage was installed at the ramps with a focus on being more visual and less wordy. Following this change, there was an initial spike in folks who noticed signage, while only one year later the reports returned to the numbers seen in 2021/22. This pretty clearly indicates novelty as a critical component for noticing education and could be a strong indication that messaging needs to be updated annually to continue to capture boaters' attention. While updating permanent signs annually isn't possible, augmenting signage with nearby messaging/new signage for stewards/BEAs could help get information across. In 2025, we saw another increase in folks noticing signage, so hopefully that is an indication that the new signs are indeed making a difference.

Finally, stewards asked whether boaters had been through a steward inspection before.

	Yes	No	% Yes
2022	299	260	53.49
2023	525	277	65.46
2024	108	152	41.54
2025	109	146	42.75



Graph 8: Percentage of boaters who reported having undergone a steward inspection before from 2022-2025.

This question was added in 2022 to try to understand how many boaters were new and how many were returning after a previous inspection. More than half of all the boaters both years were returning, and this percentage increased the following year. In 2024 we saw a relatively significant decrease, which continued in 2025, indicating that a healthy number of new boaters were coming to the lake. This could also be related to the higher number of declined inspections, as many of those folks might have been through a steward inspection already and felt they didn't need another knowing that it was voluntary.

Conclusions

We are remain very pleased with the continued results and progress of the CLA Lake Steward Program. Cumulatively, our program continued to succeed in three key areas: **inspecting 3306 boats that would have otherwise not been inspected**, reaching perhaps thousands of boaters with critical invasive species prevention messaging, and collecting new and informative data that informed this report and will continue to inform our management (both recreationally and public-safety wise) moving forward.

It is clear that the majority of boaters visiting Candlewood Lake enter through the two state launches, particularly Lattins Cove, and the Danbury municipal launch. Squantz Cove launch is generally more manageable for the DEEP BEAs than Lattins due to its traffic patterns and somewhat less convenient location. The majority of boaters are also returning to Candlewood from a past visit to Candlewood, and are registered in the state of Connecticut, with a healthy number having registered their vessel in New York. These percentages have remained very stable over five years, indicating consistency in the share of boaters from Connecticut vs. New York vs. other states. There were boaters visiting from waterbodies with invasive species of concern for Candlewood Lake: particularly Hydrilla and Water Chestnut. Both of these species were stopped and removed by stewards in 2023, but were not found in 2024 or 2025. The focus will continue to be on ensuring that more transient recreational boaters are given the invasive species information necessary to know not to transfer any species between lakes.

The amount of boaters self-reporting that they washed and dried their boats prior to launching in Candlewood is encouraging for past invasive species messaging, but might be indicative of response bias in the data. Signage at the launches historically did not have the impact we would like, indicating that perhaps different strategies (i.e. inspectors or more obvious signage) is required to get boaters' attention

The critical piece of learning in 2024 and 2025 is in regards specifically to boaters declining inspection. While there might be a few reasons for the increase in declined inspections, including but not limited to: new stewards/steward manager and boaters becoming used to stewards at the launches; significant emphasis will be placed on ensuring every boater has a chance to undergo an inspection before entering the lake. This will involve more oversight of steward teams by the CLA, as well as adjustments to training of both the stewards and steward manager.

We remain encouraged by the positive feedback received from the community regarding our stewards and this new program and feel as if this is another way for the CLA, municipalities, and DEEP to reach the boating community directly and make a positive impact. There have been a number of social media posts shared in local community pages celebrating the steward program and their positive impacts.

We look very forward to the future of the program, and want to thank the CT DEEP again, who's funding made this program possible. Together we hope to continue having a positive impact on the lake's ecosystem and continue to preserve Candlewood Lake for generations.

Acknowledgements

The below people and organizations made the Lake Steward Program Possible:

Our Lake Steward Manager: Ethan Rawding

Our Lake Stewards: Jack Deakin, Ari Lederfeind, Jack Banks, Olivia Brehmer, Derek Ross, Eric Rohm, Alondra Lenz, Teigan Robie, Matthew Viserto

Marie Nugent Personnel: Kathleen Nugent

DEEP Staff: Matthew Gocłowski, Joe Cassone, Gwendolynn Flynn, Peter Francis, Yolanda Cooley

CLA Staff: Mark Howarth, Dee Wright, Michael Gasperino

CLA Delegates: Will Meikle, Marianne Gaffey, Bill Lohan, and all of our delegates who helped make this project possible.

Everybody at the CT State Legislature, CT DEEP, and Connecticut Federation of Lakes employees and volunteers who made the AIS grant program possible.

All municipal Parks & Rec. department staff and volunteers; for working with us and our stewards throughout the year.

All municipal First Selectmen and Mayors who supported the program.

The entire Candlewood Lake Boating Community for welcoming our stewards and enjoying the program!

Thank You!

Appendix A:

All Raw Data Available from the Candlewood Lake Authority upon request

to science@candlewoodlakeauthority.org