

Preventing the spread of aquatic invasive species in New Hampshire for 19 years - one boat and boater at a time!



Aquatic Invasive Species Spread Prevention Program Annual Summary 2002-2020

The goal of the NH LAKES AIS Spread Prevention Program is to prevent the introduction and spread of invasive aquatic plants and animals in New Hampshire's lakes and ponds through public outreach.

Trained Lake Hosts are placed at boat launch sites to:

- Educate all visitors about aquatic invasive species and distribute education materials, and complete a brief survey on boating habits.
- Offer courtesy boat and trailer inspections of all vessels, arriving and departing from the ramp, and show boaters where to look for hitchhiking aquatic invasive plants and animals.
- Encourage boaters to self-inspect and use the "Clean, Drain & Dry" method each time they use their boat, trailer, and gear.
- Safely remove and dispose of all plant, animals, and other debris
- Collect samples of "hitchhiking" plants or animals removed from vessels, and send to the exotic species lab at the New Hampshire Department of Environmental Services (NHDES) for identification.

NH LAKES works with boat access site owners and local partners to upgrade sites with a variety of approaches, tools, and technologies to help boaters to take action to prevent the spread of invasive species.

Program Need: Aquatic invasive species infestations make recreation in and on lakes, ponds, and rivers dangerous and unpleasant. Invasive aquatic plants and animals spread by hitchhiking on boats, trailers, and recreational gear that has not been properly cleaned, drained, and dried. **Impacts of infestations are far reaching;** they disrupt the ecological balance, reduce shoreline property values, impact aesthetic and recreational uses, and are difficult and expensive to control once they infest a waterbody.

Funding Background: In 2002, NH LAKES received a two-year federal grant to design a comprehensive aquatic invasive plant education and prevention program to staff public boat ramps with trained educators. In 2003, a portion of New Hampshire boat registration fees went into a grant program to fund exotic plant prevention and research activities and a grant program administered by NHDES. Three-quarters of the NHDES grant is available to support annual education and prevention activities, such as the Lake Host program. In 2019, NH LAKES worked closely with Marine Patrol to advocate for a boat decal bill for visiting out-of-state boaters, to help increase the prevention and education fund, and increase the management of existing infestations. NH LAKES has deployed the first waterless watercraft cleaning unit in the Northeast, visiting public boat ramps throughout the state helping boaters prevent the spread of invasive species.







NH LAKES Aquatic Invasive Species Spread Prevent Program Summary 2002-2020 (as of 12/18/20)

Year	Groups	Paid Hosts	Volunteer Hosts	Lakes with Lake Hosts	Ramps Staffed	Inspections Conducted	Invasive Species Removed	Federal Funds	State Funds	Foundation & NH LAKES Funds	Local Funds	TOTAL
2002	38	102	59	37	45	15,878	9	\$260,100			\$37,155	\$297,255
2003	46	149	167	45	59	26,583	7	\$10,000	\$165,000		\$112,382	\$287,382
2004	51	190	216	50	61	31,629	17	\$85,300	\$150,000		\$151,238	\$386,538
2005	56	175	318	56	61	34,878	54	\$35,000	\$185,000		\$200,756	\$420,756
2006	57	204	353	56	66	34,860	54	\$117,000	\$185,000		\$183,179	\$485,179
2007	68	221	429	64	83	44,183	157	\$117,000	\$185,000		\$292,017	\$594,017
2008	70	240	470	70	88	55,924	224	\$89,206	\$161,000		\$334,061	\$584,267
2009	71	236	420	71	86	53,796	297	\$89,206	\$123,333	\$4,000	\$341,535	\$558,074
2010	74	230	517	74	90	64,661	268	\$0	\$133,367	\$22,000	\$393,273	\$548,640
2011	73	219	475	74	92	68,429	39	\$0	\$169,000	\$23,000	\$404,751	\$596,751
2012	77	238	500	78	100	77,261	137	\$0	\$200,000	\$14,500	\$486,455	\$700,955
2013	81	247	500	82	103	77,806	153	\$0	\$210,000	\$18,259	\$494,248	\$722,507
2014	80	258	500	82	102	83,663	58	\$0	\$230,000	\$22,500	\$503,170	\$755,670
2015	80	285	507	82	103	92,184	48	\$0	\$226,500	\$24,000	\$517,227	\$767,727
2016	82	264	545	83	104	89,960	28	\$0	\$252,000	\$24,000	\$526,251	\$802,251
2017	80	271	400	81	101	94,222	22	\$20,177	\$261,000	\$27,000	\$546,193	\$854,370
2018	80	301	431	80	97	86,813	26	\$5,845	\$254,000	\$13,913	\$594,440	\$868,198
2019	80	278	330	80	104	96,914	14	\$2,543	\$280,000	\$39,757	\$609,987	\$932,286
2020	75	283	315	75	94	132,199	23	\$0	\$280,000	\$18,043	\$643,162	\$941,205
					Total	1,261,843	1,635	831,377	3,650,200	250,972	7,371,480	12,104,028

Lake Hosts (paid and volunteer) successfully find and remove aquatic invasive species

	Chinese Mystery	Common	Curly Leaf	Eurasian	European		Variable	Water	Zebra	
Year	Snail	Reed	Pondweed	Milfoil	Naiad	Fanwort	Milfoil	Chestnut	Mussels	TOTAL
2002				2			7			9
2002				2		3	2			7
2003			1	5		1	10			, 17
2004			1	7		1	43	3		54
2005				7		7	40	5		54
		1	1				-			
2007		1	1	4		65	86			157
2008				5		168	50	1		224
2009			4	4		240	48	1		297
2010			1	6	18	170	72	1		268
2011			1	9		12	17			39
2012			1	10		73	52	1		137
2013	3		2	6		51	90	1		153
2014	1		1	12	1	3	37	3		58
2015	6		3	3		5	31			48
2016	1			1		10	15	1		28
2017	1			1			18	1	1	22
2018	1			3		2	19	1		26
2019	1			6			5	2		14
2020	8			3	1	2	9			23
Total	22	1	15	96	20	813	651	16	1	1635



Invasive Species 'SAVES' by Waterbody

'Saves' – The following aquatic invasive species were removed before entering or leaving a waterbody as a result of the Lake Host Program during the year(s) indicated:

- Beaver Lake (Derry): Fanwort (2008, 2009), Variable milfoil (2008, 2011), Eurasian milfoil (2012)
- Bow Lake (Northwood): Variable milfoil (2003, 2005), Eurasianmilfoil (2005, 2009), Fanwort (2015), Milfoil species (2014)
- Canaan Lake (Canaan): Chinese mystery snail (2020)
- Clough Pond (Loudon): Variable milfoil (2005)
- **Connecticut River** (Hinsdale): Eurasian milfoil (2010), European naiad (2010)
- **Conway Lake** (Conway): Variable milfoil (2011, 2020), Eurasian milfoil (2014, 2019)
- Crescent Lake (Acworth): Eurasian milfoil (2003, 2012), Fanwort (2003), Variable milfoil (2020)
- **Crystal Lake** (Enfield): Water chestnut (2005), Eurasian milfoil (2010, 2019)
- **Deering Reservoir** (Deering): Eurasian milfoil (2013), Variable milfoil (2014, 2019)
- Dublin Lake (Dublin): Eurasian milfoil (2016)
- Eastman Lake (Grantham): Eurasian milfoil (2010, 2018)
- First Connecticut Lake (Pittsburg): Variable milfoil (2014)
- Gilmore Pond (Jaffrey): Water chestnut (2005), Fanwort (2016)
- Goose Pond (Canaan): Eurasian milfoil (2007), Variable milfoil (2009)
- Granite Lake (Nelson/Stoddard): Curly-leaf pondweed (2009, 2011), Eurasian milfoil (2011, 2013), Variable milfoil (2011
- Grafton Pond (Grafton): Eurasian milfoil (2019)
- Great East Lake (Wakefield): Eurasian milfoil (2006, 2008), Fanwort (2010, 2020), Variable milfoil (2007, 2008, 2009, 2010, 2013, 2018, 2020)

- Harrisville Pond (Harrisville): Chinese Mystery Snail (2019)
- **Highland Lake** (Stoddard): Eurasian milfoil (2005), Variable milfoil (2015)
- Island Pond (Stoddard): Variable milfoil (2013)
- Jenness Pond (Northwood): Variable milfoil (2005)
- Lake Francis (Pittsburg): Variable milfoil (2014)
- Lake Massabesic (Auburn): Fanwort (2013), Variable milfoil (2012, 2014)
- Lake Monomonac (Rindge): Eurasian milfoil (2004, 2017), Curly-leaf pondweed (2004), Variable milfoil (2004, 2005, 2006, 2007, 2008, 2014)
- Lake Opechee (Laconia): Water chestnut (2016, 2017)
- Lake Ossipee (Ossipee): Eurasian milfoil (2010), Variable milfoil (2009, 2011, 2012, 2016, 2020)
- Lake Potanipo (Brookline): Fanwort (2010), Variable milfoil (2010, 2011, 2012, 2017, 2018)
- Lake Sunapee (Sunapee): Eurasian milfoil (2005, 2006, 2007, 2008, 2009, 2015, 2020), Variable milfoil (2007), Fanwort (2016, 2020), Zebra mussel (2017)
- Lake Waukewan (Meredith): Eurasian milfoil (2003), Variable milfoil (2007, 2008), Water chestnut (2018)
- Lake Wentworth (Wolfeboro): Variable milfoil (2008)
- Lake Wicwas (Meredith): Variable milfoil (2010)
- Lake Winnipesaukee: Fanwort (2003, 2007), Variable milfoil (2004, 2007, 2008, 2009, 2010, 2011, 2012, 2014, 2015, 2016, 2017, 2018, 2019), Eurasian milfoil (2012)



Invasive Species 'SAVES' by Waterbody

- Lake Winnisquam (Laconia): Variable milfoil (2008, 2015, 2016, 2017)
- Little Lake Sunapee (New London): Variable milfoil (2011), Curly-leaf pondweed (2015), Eurasian Milfoil (2020)
- Lovell Lake (Wakefield): Variable milfoil (2006, 2007, 2013, 2018)
- Merrymeeting Lake (New Durham): Variable milfoil (2007, 2010, 2012, 2013, 2014, 2015, 2018), Water Chestnut (2012)
- Mirror Lake (Tuftonboro): Chinese mystery snail (2014)
- Newfound Lake (Bristol): Curly-leaf pondweed (2015), Eurasian milfoil (2006, 2009, 2010, 2011, 2014, 2015), Fanwort (2003, 2006, 2013), Variable milfoil (2002, 2006, 2007, 2008, 2009, 2014, 2015), Water Chestnut (2009, 2010), Water naiad (2014)
- Northwood Lake (Northwood): Curly-leaf pondweed (2007), Eurasian milfoil (2007), Variable milfoil (2008, 2010, 2011, 2013, 2014, 2016, 2017)
- Nubanusit Lake (Nelson/Hancock): Curlyleaf pondweed (2009), Eurasian milfoil (2002, 2004), Variable milfoil (2007, 2008)
- Ottarnic Pond (Hudson): Chinese mystery snail (2015), Curly-leaf pondweed (2013), Fanwort (2005, 2006, 2007, 2008, 2012, 2013, 2014, 2015, 2016), Variable milfoil (2006, 2007, 2010, 2011, 2012, 2013, 2014, 2015, 2016)
- Pawtuckaway Lake (Nottingham): Common reed (2007), Curly leaf pondweed (2010, 2013, 2014), Eurasian milfoil (2009, 2010, 2011, 2012, 2014, 2015, 2018, 2019), Fanwort (2009, 2011), Variable milfoil (2007, 2008. 2009, 2010, 2012, 2013, 2014, 2015, 2016, 2017, 2018), Water chestnut (2008, 2014, 2019)
- Pleasant Lake (Deerfield): Eurasian milfoil (2011), Variable milfoil (2004, 2007, 2013, 2016)

- **Pleasant Pond** (Francestown): Curly-leaf pondweed (2009), Eurasian milfoil (2006), Variable milfoil (2011, 2013, 2014)
- **Pow Wow Pond** (Kingston): Chinese mystery snail (2013), Variable milfoil (2013, 2015)
- Robinson Pond (Hudson): Chinese mystery snail (2013, 2017, 2020), European naiad (2020), Fanwort (2004, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2016, 2018), Variable milfoil (2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2016, 2017, 2018), Eurasian milfoil (2012)
- Silver Lake (Madison): Variable milfoil (2002, 2004, 2006, 2018), Water chestnut (2019)
- Silver Lake (Harrisville): Variable milfoil (2018, 2020)
- Lake Skatutakee (Harrisville): Eurasian milfoil (2005)
- **Spofford Lake** (Chesterfield): Eurasian milfoil (2002, 2005, 2008, 2011, 2013), Variable milfoil (2011)
- **Squam Lake** (Holderness): Chinese mystery snail (2015), Curly-leaf pondweed (2009), Eurasian milfoil (2007), Fanwort (2013)
- Suncook Lake (Barnstead): Variable milfoil (2009, 2013)
- Swanzey Lake (Swanzey): Variable milfoil (2011), Eurasian milfoil (2012), Water chestnut (2014)
- Thorndike Pond (Jaffrey): Variable milfoil (2015)
- Webster Lake (Franklin): Eurasian milfoil (2011, 2012, 2014), Fanwort (2010), Variable milfoil (2009), Curly-leaf pondweed (2012), Chinese mystery snail (2018)