



Connecticut River Basin Fishway Passage Counts

Report Date: 7/21/2021



This report is compiled by the U.S. Fish and Wildlife Service, CT River Fish and Wildlife Conservation Office using fishway count data provided by several agencies as well as power companies and is dependent in most cases on the review of video counts, that have an associated time lag for updates. Please visit <http://www.fws.gov/r5crc> for more information.

Fishway, River - State	Data as of:	American Shad	Alewife	Blueback Herring	Atlantic Salmon	American Eel	Sea Lamprey	Striped Bass	Gizzard Shad	Shortnose Sturgeon	Other/ comment
Rogers Lake-CT	final		2,507								
Mary Steube, Mill-CT	final		20,731								
Moulson Pond, Eightmile-CT	final		934	1,179							record # of ALE, been trucking
Leesville, Salmon-CT	open										
StanChem, Mattabeset-CT	final	2	5,198	598					19		prv record #, was 460
Rainbow, Farmington-CT	final	47			3	7	470				
W. Springfield, Westfield-MA	closed										video in review
Holyoke, Connecticut-MA	6/29	237,072		1,242		10,734	20,479	352	35	11	Closed 6/30 for repair work thru summer
Easthampton, Manhan-MA	open										
**Turners Falls-Gatehouse, Connecticut-MA	6/28	21,066		4			11,226				ladders closed 6/30 and 7/1
Vernon, Connecticut-VT	5/29	6,476				689	4,732				
Bellows Falls, Connecticut-VT	5/29	222					844				
Total to basin, only first barrier counts		237,121	26,863	3,019	3	10,741	20,949	352	54	11	
Last year totals		368,482	38,056	931	0	17,695	37,399	452	96	18	

** Spillway Fish Ladder - at the dam ### shad, ### sea lamprey; Cabot Station Ladder, base of canal, ### shad, ### sea lamprey, and ## blueback herring. Note that at Turners Falls Project (Dam/Canal) fish must use one of these two fishways first before having the opportunity to pass the final required ladder A - total collected from 3 eel ramp/traps at Holyoke in 2020

Rich Murray at Holyoke Gas and Electric replied back that they have been able to work on the fish lifts maintenance project that began on July 1. The high flows have resulted in very limited progress on planned Sea Lamprey nest surveys in all states. Some surveys were completed before the high flows by the State of CT, VTDFW, and the Ct River Conservancy working in partnership with the agencies and getting the public engaged as citizen scientists. On the next page I have included some figures using data from my office's river herring assessment work this spring. Darren and the interns have shifted to data summaries and the scale reading for spawning histories (N=1,000) for both Alewife and Blueback Herring that is now completed. The expectaton we were not having a "good year" for river herring is quantified in Figure 1. The 2020 Blueback Herring CPUE is in fact a significantly different catch rate than in 2019 (with 2020 no sampling from Covid). Mean size of female fish was the largest since 2013 and the males were the second highest, which will likely be explained by the the shift to "older" (>age5) fish in this season's run when Darren reads the otoliths This situation led to a greater proportion of females in our samples than we have ever seen before as well. I have attached a figure that shows additional data on the reproductive state of the females over the course of the run. The final figure 3, shows the observed shift in female fish size over the course of the run. One hypothesis is that larger fish have a swim performance advantage, covering greater distances faster, than smaller sized fish.

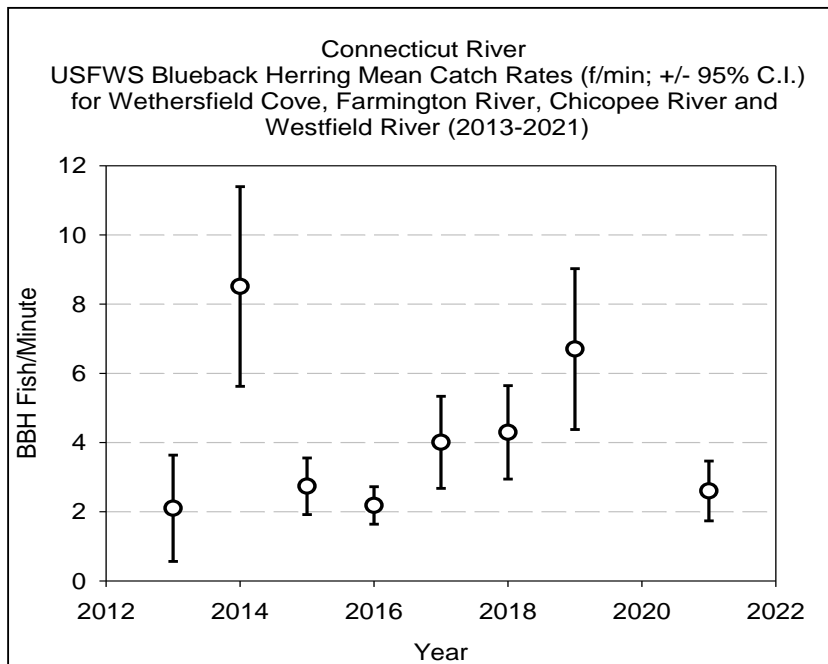


Figure 1. Annual mean relative abundance from the USFWS River Herring Assessment Program for Blueback Herring, with 95% confidence intervals.

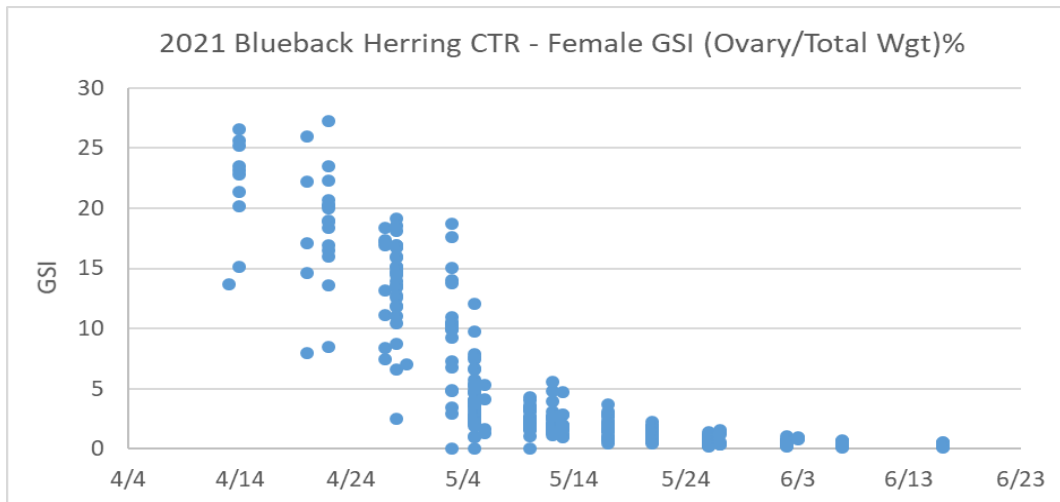


Figure 2. Plot of individual female BBH ovary weight as a percentage of total body weight, from lab processed fish in 2021.

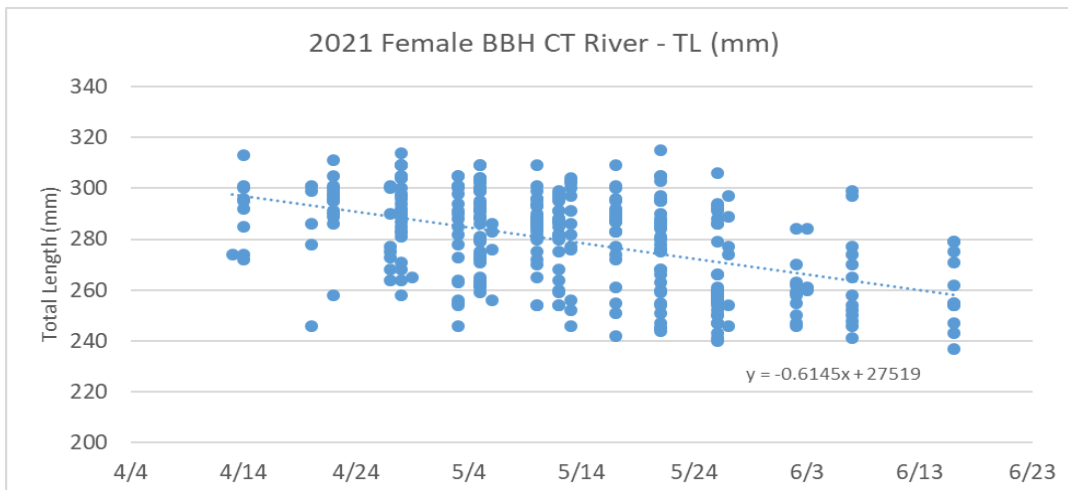


Figure 3. Plot of female BBH total lengths from weekly samples with the observed decrease in fish length over the period of the run in 2021.