



Connecticut River Basin Fishway Passage Counts

Report Date: 04/29/2022



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	4/21		88								
Mary Steube, Mill-CT	4/26		3,424								
Mill Pond, Falls -CT (NEW Fishway)	4/26		137								
Moulson Pond, Eightmile-CT	4/21		1								
Leesville, Salmon-CT	open										no counting
StanChem, Mattabesset-CT	4/21		low								image data in review
Rainbow, Farmington-CT	open										
W. Springfield, Westfield-MA	open										image data being gathered
Holyoke, Connecticut-MA	4/28	168									opened 4/6
Easthampton, Manhan-MA											
**Turners Falls- Gatehouse, Connecticut-MA	opened 4/29										Gatehouse visitor center opens 5/14
Vernon, Connecticut-VT											
Bellows Falls, Connecticut-VT											
Total to basin, only <u>first</u> barrier counts											
		168	3,425	0	0	0	0	0	0	0	
Last year totals		237,355	26,863	3,019	4	12,952	20,620	352	54	11	

**** Spillway Fish Ladder - at the dam # shad, # sea lamprey; Cabot Station Ladder, base of canal, # shad, and # sea lamprey. 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 (Gatehouse).**

A - total collected from 3 eel ramp/traps at Holyoke in 2021

Since the last report the water temps have persisted at seasonally low values. Sierra at Holyoke Fish Lift reported low daily American shad counts for the period 4/22 to 4/28 (31, 7, 19, 14, 64, 14, 15). Steve Leach for FirstLight Power has reported the Turners Falls fishways are all operational at this time. Kevin Job at CTDEEP continues to report low passage counts as he and his staff tend the many fishways in CT. I was able to email Pat Magee (RIDEM) and he noted low Alewife passage counts in their monitored runs. This week my office's River Herring Assessment Program sampled the lower Chicopee and Westfield rivers where we did observe shad and white suckers but not a single river herring. Sampling in Wethersfield Cove produced modest catch rates for blueback and yesterday on the Farmington River we were able to capture 160 fish, mostly blueback. However, the amount effort used translated to a relatively low catch rate. We did consistently observe striped bass associated with many of the schools of herring we intercepted. The CT River Conservancy has creel survey clerks out for angler surveys around Holyoke/Chicopee and worked with the agencies on that study plan. The predicted weather and river conditions should lead to more fish moving at passage facilities so I may try and get a report out on next Tuesday. Last week I mentioned some results from the Blueback Herring Movement and Migration Study undertaken with USGS Conte Lab and Ted Castro-Santos. I have attached some preliminary information on some results that may be of interest. We are hopeful that the array of receivers we deployed this spring are/will be detecting our "2yr" tags, for repeat spawners, that would have been restarted in March.

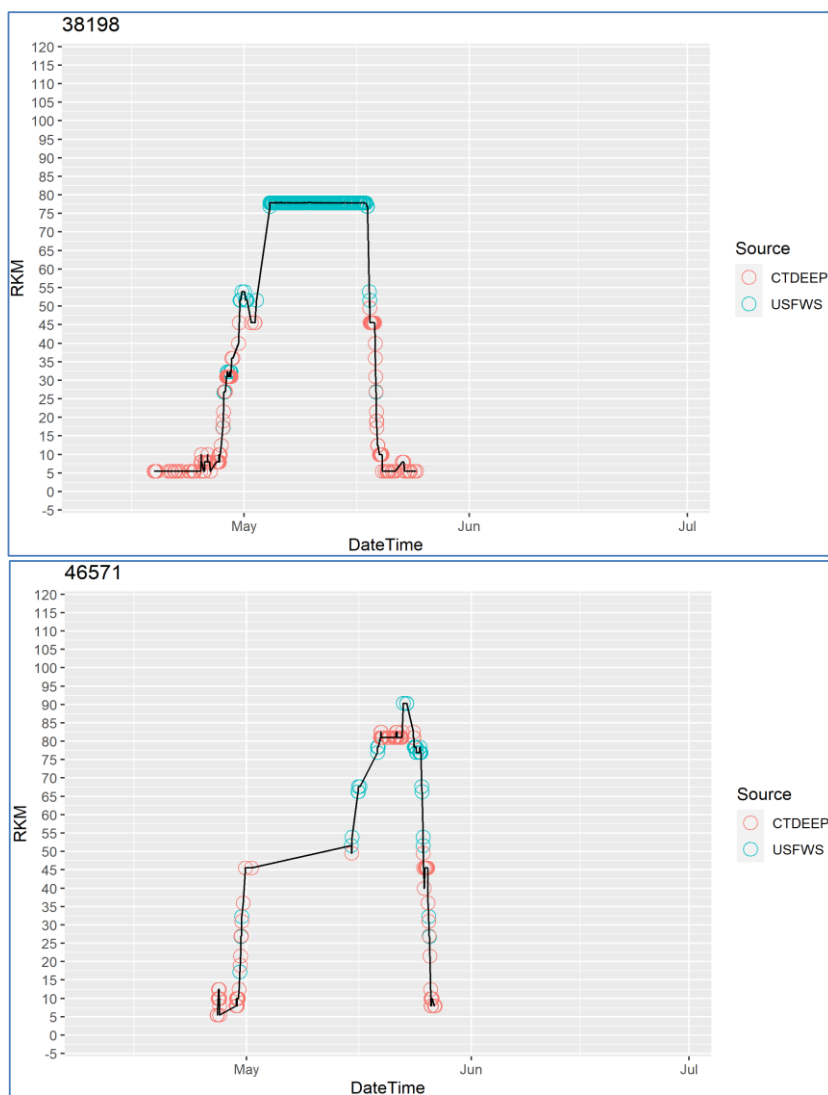


Figure 1. Examples of USGS/USFWS Blueback Herring Movement/Migration Study. Top panel tracks tag detections for a female Blueback Herring tagged on 4/18/21. That fish was shown to spend ~ 2 weeks in Wethersfield Cove (rkm 80). A high proportion of tagged fish utilized monitored coves and tributaries. Similar to other tagged fish that survived to outmigrate, the downstream, outmigration movements were rapid and direct. The bottom panel is a male Blueback Herring tagged on 4/26/21, whose most upstream extent of migration was briefly into the Farmington River. As noted in these panels, CT DEEP's acoustic receiver array for sturgeon research provided a substantial amount of data on our study's fish movements, that we greatly appreciate. Study partner Ted Castro-Santos (USGS Conte Lab) developed these "R" program plots that provided us with a great initial look at movements and timing for the 155 fish tagged in 2021.

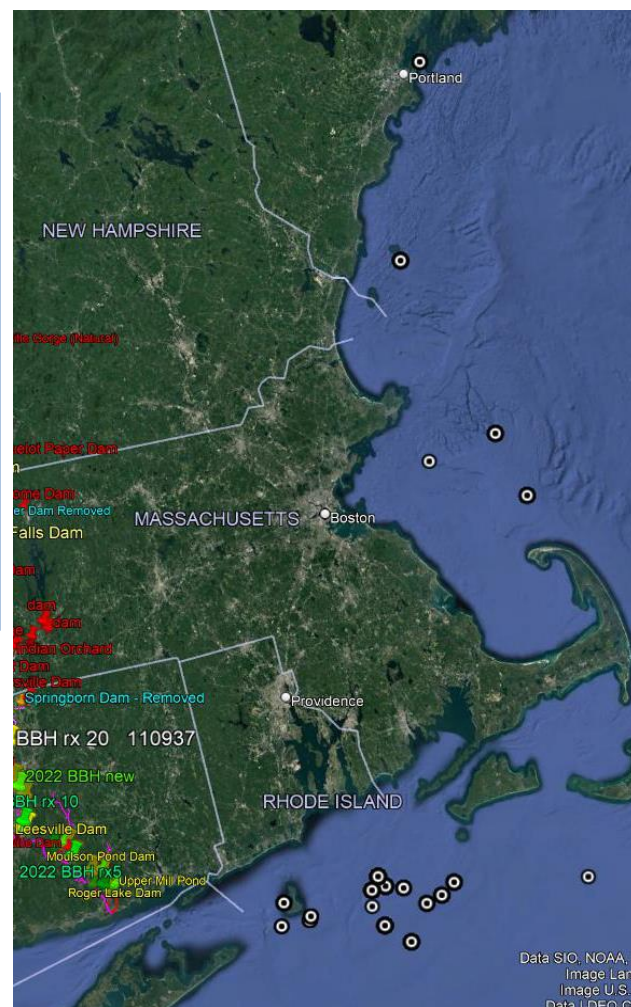


Figure 2. The recent data uploads (April) to the MATOS research network*, provided Ted and I with a total of 35 of our tagged bluebacks being detected in marine arrays (shown above in black circles), with 10 fish being detected at different arrays. Our study design is for "in-river movements" so tags were programmed for 45 days, then sleep mode, restart 300 d, for 2022 return detections. These tags represent detections limited by that fact. The "off Portland, ME" tags include as an example a fish tagged in mid-May, movements upriver with departure end of May, and detection in Maine on 6/24.

*<https://matos.asascience.com/>