CONNECTICUT WEEKLY DIADROMOUS FISH REPORT

Report Date: June 28, 2016



This is a report generated by the Connecticut Department of Environmental Protection/ Inland Fisheries Division- Diadromous Program. For more information, contact Steve Gephard, 860/447-4316. For more information about fish runs on the Connecticut River call the USFWS Hotline at 413/548-9628 or visit the USFWS website at <u>www.fws.gov/r5crc</u>. For more information about Atlantic salmon, visit the Connecticut River Salmon Association at <u>www.ctriversalmon.org</u>.

CONNECTICUT RIVER LOCATIONS

FISHWAY	ATLANTIC	AMER.		BLUEBACK	GIZZARD	STRIPED	SEA	SEA-RUN	AMER.
(RIVER)	<u>SALMON</u>	SHAD	<u>ALEWIFE</u>	<u>HERRING</u>	<u>SHAD</u>	BASS	LAMPREY	TROUT	EEL
Rainbow*	0	151	0	0	0	0	494	2	0
(Farmington)									
Leesville	0	-	-	0	-	-	0***	1	0
(Salmon)	0	24	202	0	07		10	2	0
StanChem*	0	36	303	0	87	-	13	3	0
(Mattabesset) Moulson Pond*	0	10	83	2 4 2 1	0	0	40	0	
(Eightmile)	0	10	83	3,421	0	0	40	0	-
(Eignimile) Mary Steube⁺ (Mill Brook)	-	-	406 - FIN	AL -	-	-	-	-	-
Rogers Lake+ (Mill Brook)	-	-	0 - FI	NAL	-	-	-	-	-
West Springfield (Westfield-MA)	2	5,898	0	0	0	0	449	0	1
Holyoke	3	384,577	0	137	597	602	35,249	SNS=43	19,797
(Connecticut- MA) Manhan River* (Manhan- MA)	0	0	0	0	0	0	57	0	0
(Mannan- MA) Turners Falls* (Connecticut- MA)	0	46,185	-	0	0	0	13,396	-	-
(Connecticut- MA) Vernon* (Connecticut- VT)	0	34,534	-	0	0	0	5,520	-	1
(Connecticut-VT) Bellows Falls* (Connecticut-VT)	0	0	-	0	0	0	6	-	0
(Connecticut-VT)	0	-	-	-	-	-	0	-	0
Other (all sites)	0								
TOTALS=	5	390,672	792	3,558	684	602	36,245	6	19,797
(last year's totals)	22	416,355	237	11,822	93	21	24,573	9	20,305

Fishways listed in gray font above are not yet opened for the season. In some cases, the fishways will be opened soon. In the case of the fishways on the Connecticut River, some fishways are not opened until significant numbers of fish pass through the fishway immediately downstream of them. If that never happens, the fishway may not be opened during the season.

*There is a video camera that records passage. There is a considerable lag between the date a tape is recorded and when staff is able to count fish from the tape, so these numbers will not represent up-to-date counts until after the end of spring season.*** Population estimates based on end-of-the-season nest surveys.- +There is an electronic fish counter at this fishway.

NOTE: All fish that pass through the Turners Falls, Vernon, Bellows Falls, and Wilder fishways had to first go through the Holyoke Fishlift where they were counted. Therefore those fish are not included in the totals at the bottom.

COMMENTS:

This time of year, the action shifts from the lower river in Connecticut to the upper river in northern Massachusetts and Vermont/New Hampshire. Many of the fishways in Connecticut have closed and the others will be closed soon. The Holyoke Dam Fishlift will continue to operate for the summer, particularly for sturgeon, and Turners Falls, Vernon, and Bellows Falls will remain open until the agencies have determined the upstream migration has ended and no fish are using the fishways. The video reviews are not up-to-date (e.g. Bellows Falls is only as of May 26) but staff will monitor the windows to determine activity. Due to the video review backlog, we don't expect final numbers for most of these fishways until later in the summer after these reports have ended for the year (next week will be our last report). The shad count at the Holyoke Fishlift is the ninth best count on record (since 1967) and continues the rebound that has been occurring the last six years. It is too early to tell how Turners Falls. One factor that slows down the review of video is the number of sea lamprey. The video review software only saves images to file for which movement is detected. So, if nothing is going past the window, the image is not saved to disk and that saves reviewer time. But when lots of sea lampreys are ascending the fishway, they have a tendency to latch onto the window (attracted by the light?) and rest there. The flow of the water moves their bodies and all of the images are saved to disk. So for every shad that passes by, a reviewer has to scroll through many minutes of lamprey "dancing" in the window.

A topic of great interest this year has been the lifting of more shortnose sturgeon (now 43) at Holyoke than ever before. We believe this is because improved entrance conditions at the spillway lift. However, we have been obligated to release them downstream of the dam (not upstream) due to policies by NOAA, the federal agency. The species is a federally-endangered species and subject to protection under the authority of NOAA. The relatively few sturgeon passed in previous years have been released downstream due to concerns that they would end up moving back downstream through the turbines where they would be killed due to the lack of suitable downstream passage facilities. After many years, there is now a new downstream passage facility designed for sturgeon and (silver) eels. However, it has yet to be tested and until a suitable testing plan is approved by NOAA, the sturgeon still cannot be passed upstream. At today's meeting of the Connecticut River Atlantic Salmon Commission (CRASC), we learned that NOAA was meeting today with Holyoke Gas & Electric on this topic and working on a plan. Dan Morris, Deputy Regional Administrator for NOAA and NOAA's commissioner to CRASC, reported that he was confident that a suitable plan would be in place soon and we might be releasing sturgeon above Holyoke by the end of August. In the past, we have seen sturgeon lifted at Holyoke in August and September so this is one reason why Holyoke will continue to operate.

Our staff have begun sea lamprey nest surveys on the Salmon River watershed to generate an estimate of the number of lamprey that entered that river this spring. We have counting capabilities at most other large tributaries so this is not necessary in other streams but we have no ability to count lamprey at Leesville.

With the end of June, the Citizen Science River Herring Monitoring program of the Connecticut River Watershed Council comes to an end. We had some great volunteers who provided valuable data on river herring runs in Connecticut River tributaries. We now have to compile the data and provide some analysis. Thanks to all of the dedicated volunteers who assisted us this year and to Alicia Charmut and the CRWC.



Blueback herring work their way up the Moulson Pond Fishway on the Eightmile River in Lyme.



Ehren Meisinger, a CRWC volunteer River Herring Monitor, takes the water temperature at Pine Brook near a parcel of the Conte National Fish and Wildlife Refuge.

OTHER LOCATIONS WITHIN CONNECTICUT

FISHWAY (RIVER)	AMER. <u>SHAD</u>	<u>ALEWIFE</u>	BLUEBACK <u>HERRING</u>	GIZZARD <u>SHAD</u>	STRIPED <u>BASS</u>	o SEA <u>LAMPREY</u>	SEA-RUN <u>TROUT</u>	AMER. <u>EEL</u>	
Greeneville*	2,669	1,456	115	121	11	0	0	7	
(Shetucket R., Nor		22	0	2	0	0	0	0	
Taftville* (Shetucket R., Nor	0 wich)	33	0	2	0	0	0	0	
Occum*	0	0	0	0	0	0	0	0	
(Shetucket R., Nor		•	-	·	•	•	•	·	
Tunnel*	7	39	0	0	0	0	0	0	
(Quinebaug R., Pres									
Kinneytown*	、3	5	0	11	0	44	0	0	
(Naugatuck R., Sey Hallville Pond*	mour)	15	0	1	FINAL	trout!	5	2	
(Poquetanuck Br. Pr	reston)	15	0	1	FINAL	mouti	5	2	
Trading Cove Brook** open/not counting								0	
(Trading Cove Brook, Montville)									
Jordan Brook '	** -	109	FINAL	0	-	0	0	0	
(Jordan Brook, Wa	-								
Latimers Brook		4,226	FINAL	-	-	-	-	-	
(Latimers Br., E.Lyr									
Brides Brook**		148,596	FINA	AL					
(Brides Brook, E.Ly			l	ETNIAL					
Branford Supply Pond Dam** 1,514 FINAL									
Lower Guilford (East River, Guilfor		4,82	20 ?	F	INAL -	0 0	-	-	
Haakonsen Fish (Quinnipiac R., Wal		1,246	114	44	0	119	2	2	
Hanover Pond I	Fishway*	10	0	0	-	13	-	1	
(Quinnipiac River, N	Neriden)								
Bunnells Pond* (Pegonnock R., Brid	-	4,113	0	16	0	2	1		
Wood Dam**	gepor 1)	1,666	2,951	0	-	FINAL -	_	-	
(Saugatuck R., Wes	stport)	1,000	_,/ 01	Ŭ					
Mianus River P (Mianus R., Greenw	ond* **	11,940	3,455	0	0	0	FINAL 0	-	

*Fish passage is video-recorded and counts are made off of tapes several days later so these data are always lagged a little behind. This report covers passage up to the following dates for these fishways:

Greeneville= 6/23 Taftville= 5/14 Occum= n.a. Tunnel= 6/7 Kinneytown= 6/23 Haakonsen= 6/15 Hallville= 6/9 Hanover= n.a. Bunnells= 6/20.

**These locations have an electronic fish counter and are used as index sites for river herring runs. The counter is checked daily Monday-Friday. Monday counts typically include all weekend passage. These counts are usually up-to-date but some may lag behind a day or two, occasionally.

+This location has a fish trap and fish are enumerated prior to release.

Counts in parentheses indicate numbers seen in a run that is now over and no further fish were counted during the past week. Typically used for alewife runs later in June.

COMMENTS:

This is the time of year when there is little to add from the shoreline. The river herring runs are over and we're closing fishways and setting up eel passes that have not yet been opened. Some of the fishways are often left open to allow downrunning fish to migrate back to sea. That is important in some locations because in dry weather, there is so little water going over the dams' spillways that it is impossible for fish to pass over the spillway. However, leaving the fishway open can also draw down the pond when the streamflows are low. Many of the ponds have homes around them and we are committed to not drawing down the ponds. So we manage the fishways on a case-by-case basis. At some locations, we close the fishway but take the top board out so some water will go down the fishway but the pond will not be drawn down. The Connecticut Intra-agency Drought Advisory Workgroup has issued a drought advisory. It is starting to look like another dry summer, like last year. Good for removing dams and building fishways (more on that next week) but not great for fish and streams.

You can see from the table above which fishways have been closed (gray font, and labeled with FINAL). Fishways to be closed this week include Greeneville, Moulson Pond, Hanover Pond, and Trading Cove. Partners that operate fishways: if you're not on this list, feel free to close. The Beardsley Zoo will continue to monitor the Bunnells Pond Fsiwhay for both adult and juvenile emigration for the next three weeks. Taftville and Tunnel fishways will be shutting down but the fish counts are way behind and First Light Power will continue to work to complete those video reviews and compile final count numbers, but they'll be submitted long after these reports have ended for the year. (Next week will be our last for 2016.) We are responsible for the Occum Fishway counts and since we knew Taftville counts were backlogged, we figured there was no rush on Occum counts. We are now working on Occum video review and maybe will have some numbers to report by next week. The Little River enters the Shetucket River between Taftville and Occum dams and a short distance up is the Versailles Pond Dam (pronounced Ver-SAILS; this is not France!). The Thames Valley Chapter of Trout Unlimited received grants from National Fish and Wildlife Foundation and International Paper to replace the rotting wooden baffles with aluminum baffles. The work has begun but probably won't be completed until later in the summer. New England Hydro is responsible for the video review at Hanover Pond Fishway and those counts were delayed by an inefficient video system and personnel change. Numbers are now starting to be reported (alewives, sea lampreys and eels going up) but the full season's count will not be completed by the end of these reports.

Last week the **Fish Passage 2016** conference was held in Amherst, MA. This is an international gathering of fish passage specialists (biologists, engineers, project managers, etc.) to discuss new innovations, case studies, and fish passage related research. Many of the names you read in this report during the season were there including government and NGO partners and all of our staff. I helped teach a course on dam removal and moderated a session and Brian Murphy of our Habitat Conservation and Enhancement program presented a paper on the many CTDOT culvert sliplining projects where he has intervened to ensure continued fish passage through the culverts. We were very fortunate to have had this world-class conference in our backyard and able to attend. Attending conferences like this increase our understanding of the complex issues of fish passage and help us with the many projects we do each year to get fish past barriers like dams and culverts.

<u>Glass eels</u>- Fishing Brook = 6,621 glass eels/275 elvers; Mill River Eel Trap= 80 glass eels/348 elvers; Greeneville Eel Lift= 18 glass eels/584 elvers, Lower Millpond (Old Lyme)= 177 glass (no report this week).

The two fishways which hosted streaming video are now closed and the cameras turned off: Bunnells Pond Fishway and Hallville Fishway

My weekly Diadromous Fish Radio show is live on iCRV (<u>www.iCRVradio.com</u>) at 8:00 am on Wednesday and re-played at 3:00 and 7:00 pm that day 8 am on Saturday. This week I'll be talking a bit about NASCO, the fish passage conference and providing updates on the fish runs. You can log in from anywhere. Two weeks ago, I listened in from Prague in the Czech Republic!



The Versailles Pond Fishway is a Denil fishway with rotting wooden baffles. TU received grants to replace the baffles with aluminum baffles to restore its operation and ensure the baffles won't need replacing in a long time.



CTDEEP Inland Fisheries Division staff at the Fish Passage 2016 conference in Amherst, MA. Left to Right: Dave Ellis, Bruce Williams, Brian Murphy, Tim Wildman, Steve Gephard.