

Appendix Table 1.1-1. Summary data for river herring spawning runs for coastal rivers of New Hampshire, 2014–2018.

Year	River	River herring run		Temperature (°C)			Return (#'s)	Count method*
		Start	End	Min	Max	During peak of run		
2014	Cocheco River	4/23/14	6/19/14	8	21	15	29,968	H
	Exeter River	4/25/14	6/10/14	8	23	18	789	H
	Oyster River	5/2/14	6/23/14	8	23	16	4,227	H
	Lamprey River	4/30/14	6/11/14	7	21	16	84,868	H/E
	Taylor River	5/7/14	5/29/14	14	20	15	57	E
	Winnicut River	NOT MONITORED DAILY					0	V
2015	Cocheco River	4/29/15	6/17/15	10	24	21	64,456	H
	Exeter River	5/4/15	6/11/15	11	23	19	5,562	H
	Oyster River	5/5/15	6/18/15	11	24	24	1,803	H
	Lamprey River	5/1/15	6/15/15	11	24	19	69,843	H/E
	Taylor River	NOT MONITORED						
	Winnicut River	DAILY TIME COUNTS-NO FISH OBSERVED					0	V
2016	Cocheco River	4/19/16	6/14/16	9	21	16	99,241	H, E
	Exeter River	4/21/16	6/14/16	10	21	18	6,622	H
	Oyster River	5/7/16	6/16/16	10	21	19	863	H
	Lamprey River	4/24/16	6/14/16	9	21	15	92,364	H, E
2017	Cocheco River	4/18/17	6/22/17	9	22	13	28,926	H, E
	Exeter River	**	**	**	**	**	**	**
	Oyster River	4/29/17	6/16/17	10	22	18	4,492	H
	Lamprey River	4/19/17	6/13/17	10	20	19	35,920	H, E
2018	Cocheco River	4/23/18	6/15/18	9	19	15	24,743	H, E
	Exeter River	5/7/18	5/25/18	14	17	16	32	H
	Oyster River	4/23/18	6/5/18	9	19	16	5,716	H
	Lamprey River	4/25/18	6/6/18	11	19	16	50,884	H, E

\* - H = hand count; E = electronic counter; V = volunteer time counts

\*\* - No summary data due to sea lamprey inundation causing false fish counts

Appendix Table 1.1-2. River herring mean, minimum, and maximum length at age from scale samples taken at the Cocheco, Exeter, Oyster, and Lamprey River fish ladders during the spring spawning run in New Hampshire, 2014–2018.

			Age-3	Age-4	Age-5	Age-6	Age-7+	N
2014	Cocheco River	Mean	24.5	25.5	27.9	29.6	31.8	108
		Min	24.5	23.5	23.8	25.8	29.1	
		Max	24.5	27.9	30.8	32.9	34.6	
	Exeter River	Mean	24.6	26.0	27.8	29.3	31.7	103
		Min	24.2	24.0	24.4	25.2	31.0	
		Max	25.0	28.9	31.6	31.5	32.6	
	Oyster River	Mean	24.9	26.4	27.9	29.4	30.8	114
		Min	23.8	23.8	24.8	25.9	29.2	
		Max	26.5	31.1	31.5	31.8	32.8	
	Lamprey River	Mean	25.2	26.8	28.5	30.7	32.1	101
		Min	24.7	24.2	25.0	27.2	30.6	
		Max	25.8	29.6	31.4	33.6	34.2	
2015	Cocheco River	Mean	26.6	27.0	28.1	30.2	32.5	80
		Min	25.8	23.9	24.8	27.6	30.8	
		Max	27.2	31.0	31.0	32.1	34.2	
	Exeter River	Mean	26.5	27.1	28.5	30.0	32.8	104
		Min	26.5	24.2	24.8	27.1	32.8	
		Max	26.5	30.0	31.9	32.4	32.8	
	Oyster River	Mean	25.8	27.2	28.8	29.0	30.5	112
		Min	25.6	25.6	25.9	25.9	29.9	
		Max	25.9	31.1	31.6	31.4	31.0	
	Lamprey River	Mean	25.5	27.1	29.5	30.2	32.1	83
		Min	25.1	24.8	25.7	27.3	29.5	
		Max	25.8	31.1	32.6	32.2	34.1	
2016	Cocheco River	Mean	26.8	26.2	27.8	29.8	31.4	78
		Min	26.8	24.6	26.2	27.7	29.9	
		Max	26.8	28.2	30.3	31.7	33.0	
	Exeter River	Mean	-	25.4	27.5	29.1	31.5	103
		Min	-	22.9	23.8	25.9	30.8	
		Max	-	29.2	30.9	32.6	32.1	
	Oyster River	Mean	21.7	25.2	27.4	29.0	31.0	136
		Min	20.1	22.4	23.7	25.6	29.4	
		Max	23.4	28.3	30.4	31.2	32.7	
	Lamprey River	Mean	-	25.6	28.3	30.4	32.4	73
		Min	-	25.6	26.2	27.4	30.8	
		Max	-	25.6	31.9	33.7	34.7	

Appendix Table 1.1-2. (Continued).

			Age-3	Age-4	Age-5	Age-6	Age-7+	N
2017	Cocheco River	Mean	25.9	26.8	27.7	29.9	31.5	69
		Min	25.9	25.4	24.8	27.5	29.3	
		Max	25.9	28.6	30.2	31.8	32.6	
	Exeter River	Mean	25.6	25.2	27.2	27.6	-	44
		Min	24.5	22.8	25.8	26.7	-	
		Max	26.6	27.2	28.2	28.7	-	
	Oyster River	Mean	23.5	25.9	27.5	29.1	30.7	108
		Min	22.1	22.8	24.7	27.9	30.0	
		Max	25.9	28.1	29.6	30.6	31.6	
	Lamprey River	Mean	-	26.4	27.2	28.8	32.1	76
		Min	-	23.6	24.8	25.4	29.7	
		Max	-	28.3	29.7	32.0	34.8	
2018	Cocheco River	Mean	-	25.8	27.1	28.3	31.0	90
		Min	-	23.2	24.8	25.9	28.2	
		Max	-	27.8	29.7	32.3	33.3	
	Exeter River	Mean	-	27.7	27.7	28.7	31.5	26
		Min	-	26.4	25.9	28.4	31.5	
		Max	-	28.7	29.1	28.9	31.5	
	Oyster River	Mean	24.9	25.9	27.5	28.3	30.4	121
		Min	23.8	23.4	24.3	25.1	28.3	
		Max	25.6	28.9	29.8	30.9	32.3	
	Lamprey River	Mean	-	26.9	27.6	30.5	32.0	86
		Min	-	25.5	25.3	29.0	29.8	
		Max	-	28.8	29.9	32.1	34.6	
	Winnicut River	Mean	26.0	26.3	25.9	27.4	28.6	60
		Min	25.3	23.4	23.2	25.7	27.0	
		Max	26.9	28.9	29.3	29.5	30.1	

Appendix Table 1.1-3. Summary of river herring transfers from the Cocheco and Lamprey rivers in New Hampshire, 2014–2018.

	Date	# transferred	Source of river herring	Stocking location	Drainage system
2014	5/6/2014	1,900	Cocheco River	Pine Island Pond	Merrimack River
	5/8/2014	1,000	Cocheco River	Potanipo Lake	Merrimack River
	5/8/2014	3,000	Lamprey River	Nashua River	Merrimack River
	5/13/2014	2,600	Cocheco River	Winnisquam Lake	Merrimack River
	5/13/2014	1,100	Cocheco River	Merrimack River	Merrimack River
2015	5/7/2015	1,000	Cocheco River	Bow Lake	Cocheco River
	5/8/2015	500	Cocheco River	Potanipo Lake	Merrimack River
	5/8/2015	3,000	Cocheco River	Nashua River	Merrimack River
	5/8/2015	250	Lamprey River	Pawtuckaway Lake	Lamprey River
	5/11/2015	3,000	Cocheco River	Winnisquam Lake	Merrimack River
	5/12/2015	2,900	Lamprey River	Winnisquam Lake	Merrimack River
	5/14/2015	1,000	Lamprey River	Above Wadleigh Falls	Lamprey River
	5/14/2015	2,200	Lamprey River	Winnisquam Lake	Merrimack River
	5/15/2015	250	Lamprey River	Pawtuckaway Lake	Lamprey River
	5/18/2015	1,855	Lamprey River	Winnisquam Lake	Merrimack River
	5/22/2015	250	Lamprey River	Winnicut River	Winnicut River
2016	5/5/2016	1,000	Lamprey River	Pine Island Pond	Merrimack River
	5/9/2016	3,000	Cocheco River	Nashua River	Merrimack River
	5/9/2016	1,000	Cocheco River	Pine Island Pond	Merrimack River
	5/10/2016	3,000	Lamprey River	Winnisquam Lake	Merrimack River
	5/10/2016	1,000	Lamprey River	Pawtuckaway Lake	Lamprey River
	5/10/2016	1,000	Cocheco River	Potanipo Lake	Merrimack River
	5/10/2016	1,000	Cocheco River	Bow Lake	Cocheco River
	5/11/2016	1,600	Lamprey River	Winnisquam Lake	Merrimack River
	5/11/2016	1,000	Lamprey River	Potanipo Lake	Merrimack River
	5/12/2016	1,015	Cocheco River	Winnisquam Lake	Merrimack River
	5/14/2016	250	Lamprey River	Winnicut River	Winnicut River

Appendix Table 1.1-3. (Continued)

	Date	# transferred	Source of river herring	Stocking location	Drainage system
2017	5/2/2017	1,320	Lamprey River	Nashua River	Merrimack River
	5/9/2017	1,015	Lamprey River	Potanipo Lake	Merrimack River
	5/15/2017	1,000	Lamprey River	Potanipo Lake	Merrimack River
	5/18/2017	1,970	Lamprey River	Nashua River	Merrimack River
	5/19/2017	2,000	Lamprey River	Pine Island Pond	Merrimack River
	5/19/2017	1,000	Lamprey River	Pawtuckaway Lake	Lamprey River
	5/20/2017	2,000	Lamprey River	Winnisquam Lake	Merrimack River
	5/20/2017	250	Lamprey River	Winnicut River	Winnicut River
2018	5/7/2017	1,000	Lamprey River	Potanipo Lake	Merrimack River
	5/7/2017	1,000	Lamprey River	Nashua River	Merrimack River
	5/8/2017	1,100	Lamprey River	Pine Island Pond	Merrimack River
	5/8/2017	1,500	Lamprey River	Potanipo Lake	Merrimack River
	5/8/2017	1,000	Lamprey River	Pawtuckaway Lake	Merrimack River
	5/10/2017	250	Lamprey River	Winnicut River	Winnicut River