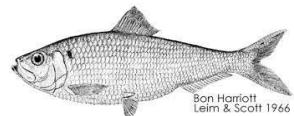


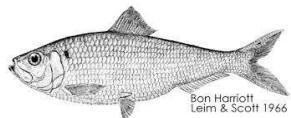
River Herring Lesson – 7th Grade
Teacher Answer Key with the Dam Removed



TEACHER ANSWER KEY - Holmes Dam Removed in 2019 - 92% successful passage and 8% do not make it to the spawning pond

Fish Card Label	Fish #	Male or Female	Swim upstream beyond where the dam was?	How many 'trys' or 'attempts'	Reach spawning pond?	Detected at antenna closest to ocean?	Notes
A	228000347652	M	yes	1	yes	yes	The fish was not detected at antenna 8 but was detected at antenna 9. This fish was tagged and detected in 2018
B	228000347840	M	yes	1	yes	no	This fish was tagged & detected in 2018
C	228000347584	F	yes	1	yes	yes	The fish was not detected at antenna 8 but was detected at antenna 9. This fish was tagged & detected in 2018
D	228000347646	M	yes	1	yes	yes	This fish was tagged & detected in 2018.
E	228000653692	F	no	1	no	no	This fish could have been eaten on way upstream
F	228000653549	F	no	2	no	no	This fish could have been eaten on way downstream
G	228000653676	F	no	1	no	no	This fish could have been eaten on way upstream
H	228000654021	F	yes	3	yes	yes	No detection at antennas 8 and 9 but was detected at antenna 6 twenty-seven days later so most probably made it to spawning pond.
I	228000653575	F	yes	2	no	no	Not detected at any other antennas. This fish could have been eaten.
J	228000653502	M	yes	1	no	no	Not detected at any other antennas. This fish could have been eaten.
K	228000653517	M	yes	1	yes	yes	Not detected at antennas 8 or 9, but detected at antenna 6, 23 days later so probably made it to the spawning pond.
L	228000653580	M	yes	1	yes	yes	Not detected at antennas 8 or 9, but detected at antenna 7 again, 21 days later so probably made it to the spawning pond.
M	228000653629	M	yes	1	yes	yes	Not detected at antennas 8 or 9, but detected at antenna 7 again, 22 days later so probably made it to the spawning pond.
N	228000653724	M	yes	1	yes	yes	Not detected at antennas 8 or 9, but detected at antenna 7 again, 21 days later so probably made it to the spawning pond.

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Teacher Answer Key with the Dam Removed



Fish Card Label	Fish #	Male or Female	Swim upstream beyond where the dam was?	How many 'trys' or 'attempts'	Reach spawning pond?	Detected at antenna closest to ocean?	Notes
O	228000654025	M	yes	1	yes	yes	Not detected at antennas 8 or 9, but detected at antenna 7 again, 36 days later so probably made it to the spawning pond.
P	228000654084	M	yes	1	yes	yes	Not detected at antennas 8 or 9, but detected at antenna 7 again, 28 days later so probably made it to the spawning pond.
Q	228999653585	Unknown	yes	1	no	no	7 was the last antenna this fish was detected at. This fish could have been eaten
R	228000654037	F	yes	1	yes	no	The fish was not detected at antenna 8 but was detected at antenna 9. This fish could have been eaten in the spawning pond. 9 was the last antenna it was detected at.
S	228000654070	F	yes	1	yes	yes	The fish was not detected at antenna 8 but was detected at antenna 9. Detected at 9 again 26 days later.
T	228000653550	F	yes	1	yes	yes	Not detected at antenna 8 or 9, but after being detected at 7, was detected at antenna 6, 22 days later
U	228000653554	F	yes	1	yes	yes	Not detected at antenna 8 or 9, but after being detected at 7, was detected at antenna 6, 27 days later
V	228000653579	F	yes	1	no	yes	Detected at antenna 7, but then immediately at antenna 6 and other downstream antennas
W	228000653600	F	yes	1	yes	yes	
X	228000653637	F	yes	1	yes	yes	
Y	228000653670	F	yes	1	yes	no	This fish was not detected at antennas 7 or 8, but we know it made it to the spawning pond because it was detected at antenna 9. It was not detected leaving the spawning pond.
Z	228000653712	F	yes	1	yes	yes	This fish was not detected at antenna 8, but was at antenna 9.
ZA	228000653761	F	yes	1	yes	no	This fish could have been eaten
ZB	228000653793	F	yes	1	yes	yes	
ZC	228000653799	F	yes	1	yes	yes	
ZD	228000653830	F	yes	1	yes	yes	This fish was not detected at antenna 7, but was detected at 8 and 9.