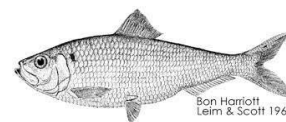


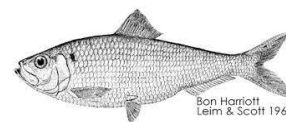
River Herring Lesson – 7th Grade
Teacher Answer Key with the Dam



TEACHER ANSWER KEY- Holmes Dam in Place in 2018 - 25% successful passage and 75% do not make it to the spawning pond

Fish Card Label	Fish #	Male or Female	Swim upstream beyond the dam?	How many 'trys' or 'attempts'?	Reach spawning pond?	Detected at antenna closest to ocean?	Notes
A	228000347652	M	Yes	9	Yes	Yes	This fish is detected in 2019
B	228000347577	M	Yes	5	Yes	Yes	This fish was not detected at antenna 9, but clearly swam past it because he was detected at antenna 10. This happens sometimes which is why field biologists always check their equipment every day if they can because sometimes problems happen
C	228000347593	F	Yes	4	Yes	Yes	
D	228000347892	F	Yes	3	Yes	Yes	This fish was not detected at antenna 8, but was detected at antenna 9 so that's how we know it continued to the spawning pond
E	228000347610	M	Yes	2	Yes	Yes	
F	228000347733	F	Yes	1	Yes	No	This fish may have been eaten by a predator before leaving the river
G	228000347590	F	Yes	1	Yes	Yes	
H	228000347739	M	Yes	1	Yes	No	
I	228000347964	F	No	5	No	Yes	This fish track is unique because it includes info about downstream movements
J	228000347821	F	No	1	No	Yes	
K	228000347943	M	No	1	No	Yes	
L	228000347504	M	No	4	No	Yes	This fish was detected exploring the dam spillway as a way to move upstream
M	228000347578	M	No	4	No	Yes	This fish was detected exploring the dam spillway as a way to move upstream
N	228000347662	F	No	2	No	Yes	This fish was detected exploring the dam spillway as a way to move upstream
O	228000347978	F	No	3	No	Yes	This fish was detected exploring the dam spillway as a way to move upstream
P	228000347842	F	No	1	No	Yes	This fish was detected exploring the dam spillway as a way to move upstream

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Fish Card Label	Fish #	Male or Female	Swim upstream beyond the dam?	How many 'trys' or 'attempts'?	Reach spawning pond?	Detected at antenna closest to ocean?	Notes
Q	228000347500	M	No	2	No	Yes	
R	228000347545	F	No	1	No	Yes	
S	228000347570	F	No	2	No	No	
T	228000347628	F	No	2	No	Yes	
U	228000347656	F	No	2	No	Yes	
V	228000347675	M	No	3	No	No	
W	228000347707	F	No	2	No	Yes	
X	228000347721	F	No	2	No	Yes	
Y	228000347820	M	No	6	No	Yes	
Z	228000347840	M	No	1	No	Yes	This fish is detected in 2019
ZA	228000347899	M	No	2	No	Yes	
ZB	228000347928	M	No	1	No	Yes	
ZC	228000347584	F	No	2	No	Yes	This fish is detected in 2019
ZD	228000347646	M	No	6	No	Yes	This fish is detected in 2019. This is a very short fish track that could be used for students who need a simplified lesson
ZE	228000347989	M	No	2	No	Yes	
ZF	228000347960	F	No	2	No	Yes	