

11 inches → 400910-143 river was literally packed with fish  
with hardly breathing or swimming space between them.  
When the surface of the water was reflected by the moon or  
artificial light the water were alive as if a rain or shower  
was pelting the surface. This surface agitation was due  
to the fish gasping for air at the water surface. Would  
estimate that where the fish were heavily congregated they  
would average 20 per sq. yard. After experimenting con-  
cluded that they sense water vibration, when jumping on  
bank, for 500 feet while they sense earth vibrations at  
about 210 feet. That is, when I jumped on the surface  
of the ground on a bank 12' above the present entrenched  
river found the waters literally churning down river in a  
progressive wave. The reaction seemed almost instantaneous  
but presented the wave effect as the sound travelled along.  
When 210 feet from bank and jumped on ground received the  
same quick splash of the water as the fish left surface  
while the reaction both sound was effected almost instan-  
taneously found that they reacted entirely different with  
the light rays of a flash light. One could turn the light  
on the surface of the water and flash it about but the  
moment the light was withdrawn or turned off the fish reacted  
immediately creating a great splash & then silence. The  
reaction to this light being turned off was instigated by  
one impulse, every fish reacted at exactly the same split  
second, so to speak. The light had to be held for at  
least 2 1/2 seconds to good results. 5 seconds brought complete  
response by all the fish. Another interesting observation was  
the response to my shadow cast upon the water by the moon.  
As I walked along the bank the shadow would be lined  
with a splash created by the fish as the ~~fish~~ left the surface  
of the water. Splashes occurred every 5-12 feet as I walked  
along. Normal walking did not produce any effect upon  
the fish but a slight jump would send them to the bottom.  
A heron flying by created a splash where its shadow was  
cast upon the water by the moon. At one point where  
artesian well water entered the river found for just about  
5 second the fish to be jumping out of the water in a most  
interesting manner. As to just what the cause could be I do