

Table 14 - HDT.RP: Vertical Difference in Current Velocity Gradients at Backflood Bar

Label	Date	Location		Device	Depth ft	Distance ft	Time min	Velocity ft/min	Text
		Place (Thoreau)							
G	Jul 30, 59	Above Dodds (30 rds above A)	Sunk bottle		75	40	1.88	tring the current there --there being a very faint chiefly side wind...a calm...My bottle foats about 75 feet in 40 minutes & then a very faint breeze beginning to drive it back --I can not wait to see when it will go a hundred.	
			Wood Chip	0			upstream	chip went pretty fast up stream	
			Sunk bottle	1			slowly down	went slowly down	
			Sunk bottle	3			fast down	went faster than when the box was sunk only 1 foot	
			Sunk bottle	7			slower than 7	water flowed faster down at 3 feet depth than at one there where it was about 7 feet deep	
			Weeds	bottom					weeds at bottom will all be slanted down
G	Aug 2, 59	Above Dodds (30 rds above A)	Board	0				Loose board moves faster than one with a sunk box but soon drifts diagonally across & lodges.	
			Sunk box	1.167	100	9	11.11	The box sunk 14 inches below the board floats 100 feet in 9 minutes	
			Sunk box	2.5	100	9.25	10.81	sunk 2 1/2 feet in 9 1/4 minutes	
			Sunk box	5.5	100	5.5	18.18	5 1/2 feet is not half way in 13 minutes or, allowing for its starting this time a little out of the wind & current-- say it is 20 minutes in going 100 feet.	

Notes.

1. Two vertical velocity gradients measured on backflood bar. See related comparision of velocities at different places.

Boatman reference, page 188-189