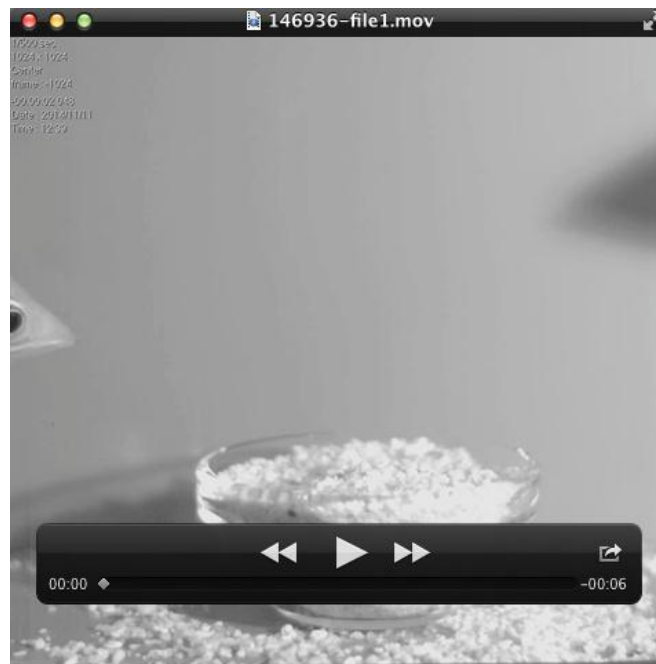


Supplemental Information

Supplemental Table 1. Means, standard deviations and number of measurements available for the five individual fish and the three different substrates.

	Fish 1	Fish 2	Fish 3	Fish 4	Fish 5	total
Body length	97.2	82.4	82.9	90.4	93.4	89.3
Mud						
Mean shot duration \pm SD	37.33 \pm 1.15	40 \pm NA	38 \pm 3.46	38.12 \pm 3.90	--	38.08 \pm 3.46
Total observations	3	1	3	17	0	24
Fine sand						
Mean shot duration \pm SD	38.55 \pm 2.84	36.67 \pm 8.08	--	36 \pm 4.65	--	36.94 \pm 4.49
Total observations	11	3	0	18	0	32
Coarse sand						
Mean shot duration \pm SD	35.4 \pm 3.89	31.33 \pm 3.06	26 \pm NA	37.82 \pm 3.63	30.92 \pm 4.44	34 \pm 4.96
Total observations	10	3	1	11	13	38
Total mean shot duration \pm SD	37.08 \pm 3.44	34.86 \pm 6.09	35 \pm 6.63	37.22 \pm 4.18	30.92 \pm 4.44	36.04 \pm 4.75 94



Supplemental Movie 1.

An archerfish uses a water jet to lift up a food particle that was buried in coarse-grained sand. Shown is 'fish 1' of the group. Video is slowed down by a factor 5.