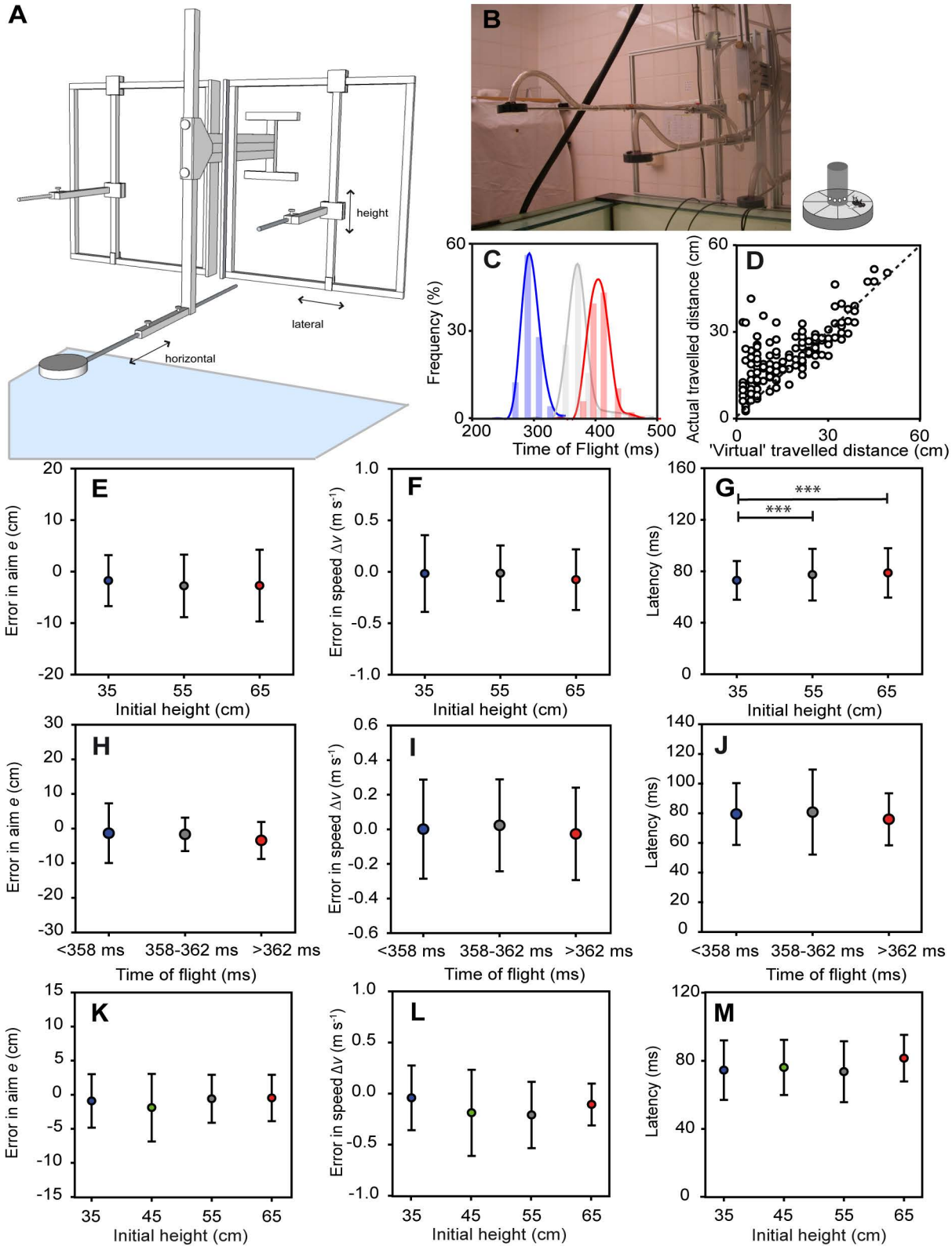

Fig. S1: Setup used initially to simultaneously present three platforms at different height levels.

(A) Arrangement to move each of three non-transparent platforms (only one shown) to the desired position. Each platform (polyvinyl chloride disks, diameter 50 mm, thickness 14 mm) was connected to a steel rod (length 80

cm) and its intended height above the water surface was either 35, 55 or 65 cm. Frame construction was rigidly fixed to wall of lab. (B) Side view of actual arrangement. Note flexible tubes (9/12 mm inner/outer diameter, 3 m long), each with eight air walves (3 mm diameter each, spaced equally around the tube and 1 mm above disk's surface; inset in B on the right) connected to each of the three platforms so that an airstream could send prey, located on the upper side of the platform, on a ballistic path. Control over the initial starting height of prey was insufficient, resulting in overlapping time of flight (C) and insufficient correlation between the calculated 'virtual' and the actual travelled distance when prey was dislodged from 55 cm initial height (linear regression: R^2=0.534, F=156.118, P<0.001). Most importantly, actual and calculated 'virtual' impact points differed significantly (Mann-Whitney: P<0.001, n=138) so that we could not determine a 'virtual' landing point as required in the analysis. The setup thus needed to be improved. However, an analysis of how accurate the starts made by the fish are suggests that the lack of precision in precisely setting the height levels and time of flight did not affect accuracy and latency: Neither errors in aim (E) nor errors in speed (F) made with respect to the actual later landing point differed significantly among height levels (Kruskal-Wallis, Dunn: P>0.05). Latency (G) increased – as in Figs. 2 and 7 – with an increasing starting height (Kruskal-Wallis: P<0.001). Analyses are based on n=294, 144 and 293 responses for h=35, 55, 65 cm and were carried out as in Figs. 5-7. (H-J) show an analysis of error in aim (H), error in speed (I) and latency (J) for starts made when prey took off from the expected platform in 55 cm height but in which time of flight overlapped with values found in the higher (i.e. > 362 ms; n=95) or lower (i.e. < 358 ms; n=28) height or did not overlap (i.e. 358-362 ms; n=21). All differences are not significant (Kruskal-Wallis: P>0.187). (K-M) In additional series of experiments we increased the number of positions and possible height levels. Horizontal displacement of the lateral disks could be either 15 or 20 cm and we added an additional height of 45 cm. Analysis as in E-G. Again, error in aim (K), error in speed (L) and latency (M) did not differ (Kruskal-Wallis: P>0.164, based on n=20, 43, 45, 23 responses for h=35, 45, 55 and 65 cm). Data show means and SDs.