



Movie 1. Representative video of swimming in *Carettochelys insculpta*.

Table S1. Sample sizes for kinematic analyses for each turtle from each species

Individual	<i>N</i>
<i>Apalone ferox</i>	
AF01	20
AF02	20
AF03	25
AF04	22
AF05	20
AF06	24
AF07	20
AF08	22
AF09	22
<i>Carettochelys insculpta</i>	
Flipper	22
Chiquita	17
<i>Caretta caretta</i>	
Log04	11
Log05	8
Log07	14
<i>Trachemys scripta</i>	
TS02	16
TS09	20
TS11	20
TS14	20
TS31	20
TS36	20
TS99	20

Data for *Trachemys scripta* were provided by Rivera and Blob (Rivera and Blob, 2010). Data for *Caretta caretta* were provided by Rivera et al. (Rivera, A. R. V. et al., 2011).