

Critical swimming speed associated with body shape of Chinese sturgeon *Acipenser sinensis* under different rearing conditions

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U_{crit}
of pond-reared sturgeon was
 81.3 ± 3.2
cm
/s
(relative critical swimming speed,
 $U_{crit}' = 1.32 \pm 0.04$
SL
/s
), which was not significantly higher ($P > 0.05$) than that of the tank-reared cohort ($U_{crit}' = 76.2 \pm 1.9$ cm/s,
 $U_{crit}' = 1.40 \pm 0.03$
SL
/s). Rearing condition had some significant effects on 12 of morphological characters of the Chinese sturgeon at their early life stage ($P < 0.05$), but there was only a tendency to be difference between the body shape variations as defined by PC1 (body and caudal length, body depth and caudal filament length) from the principal component analysis (PCA) with 12 size-adjusted morphological characters of the two different cohorts ($P = 0.051$). There was a significant negative relationship between Lg (U_{crit}') and PC1 (x), which could be described by the equation as follows:
 $y = 1.897 - 0.002x$
(r

