

Supplementary material

Table S1. Summary of stable isotope compositions ($\delta^{13}\text{C}$ and $\delta^{15}\text{N}$, mean $\pm$ SD) for basal carbon sources and fish collected from the Daning River.

Taxa	Size (mm)	($\delta^{13}\text{C} \pm \text{SD}$)‰	($\delta^{15}\text{N} \pm \text{SD}$)‰	n
Basal sources				
Seston(downstream)		-25.13 ± 5.25	4.94 ± 2.81	18
Seston(upstream)		-15.74 ± 3.65	4.97 ± 1.30	7
Benthic algae(downstream)		-18.34 ± 2.59	5.67 ± 1.73	3
Benthic algae(upstream)		-22.75 ± 5.12	2.72 ± 2.82	8
C ₃ plants		-29.24 ± 2.57	3.71 ± 1.83	8
C ₄ plants		-13.73 ± 1.50	5.57 ± 3.70	12
Fish (downstream)				
Herbivores				
<i>Parabramis pekinensis</i>	149–280	-22.85 ± 2.20	8.64 ± 1.10	8
<i>Ctenopharyngodon idella</i>	131–282	-20.62 ± 2.84	6.49 ± 1.72	8
<i>Squaliobarbus curriculus</i>	220–260	-21.54 ± 1.17	8.50 ± 1.55	3
<i>Megalobrama amblycephala</i>	181–220	-23.41 ± 0.13	5.38 ± 0.12	2
<i>Spinibarbus sinensis</i>	195–318	-22.12 ± 1.65	8.09 ± 1.10	4
Planktivores				
<i>Hypophthalmichthys molitrix</i>	148–629	-26.24 ± 1.49	7.72 ± 1.63	11
<i>Aristichthys nobilis</i>	165–772	-25.62 ± 1.87	7.99 ± 2.16	9
<i>Neosalanx taihuensis</i>	100–113	-26.54 ± 2.49	12.31 ± 2.01	5
<i>Hyporhamphus intermedius</i>	176–187	-26.12 ± 0.12	8.92 ± 1.01	2
Benthivores				
<i>Silurus asotus</i>	170–220	-24.66 ± 0.41	11.81 ± 1.64	5
<i>Myxocyprinus asiaticus</i>	105–205	-21.53 ± 1.72	8.75 ± 0.98	5
<i>Pelteobagrus nitidus</i>	96–125	-24.06 ± 0.31	14.01 ± 0.41	4
<i>Pelteobagrus vachelli</i>	92–220	-23.96 ± 1.82	9.61 ± 1.28	8

<i>Coreius heterodon</i>	122–231	-25.27 ± 0.65	14.00 ± 3.00	4
Piscivores				
<i>Culter dabryi dabryi</i>	101–302	-22.53 ± 2.13	10.79 ± 0.52	9
<i>Siniperca kneri</i>	150–262	-23.23 ± 1.06	12.00 ± 1.26	10
<i>Elopichthys bambusa</i>	106–350	-23.82 ± 1.40	11.10 ± 1.02	7
<i>Culter mongolicus</i>	190–347	-23.29 ± 1.38	11.68 ± 1.39	5
<i>Culter alburnus</i>	223–490	-24.04 ± 1.17	11.50 ± 1.05	9
<i>Leiocassis longirostris</i>	112–210	-21.49 ± 0.46	8.82 ± 0.22	3
Omnivores				
<i>Hemiculter leucisculus</i>	100–182	-22.53 ± 2.26	8.18 ± 1.20	9
<i>Carassius auratus</i>	152–225	-20.08 ± 1.37	8.11 ± 0.86	9
<i>Cyprinus carpio</i>	97–256	-19.85 ± 1.67	7.65 ± 1.71	9
<i>Opsariichthys bidens</i>	110–140	-22.58 ± 0.41	11.35 ± 0.68	3
<i>Pseudobrama simoni</i>	95–150	-21.69 ± 1.78	8.29 ± 0.61	6
<i>Squalidus argentatus</i>	84–133	-23.12 ± 1.62	10.05 ± 1.46	10
<i>Hemiculter bleekeri</i>	95–105	-24.81 ± 3.61	9.53 ± 0.54	4
<i>Saurogobio dabryi</i>	99–135	-25.28 ± 1.71	11.11 ± 2.73	8
Fish (upstream)				
<i>Siniperca kneri</i>	78–80	-23.54 ± 0.05	7.67 ± 0.14	2
<i>Carassius auratus</i>	68–83	-23.16 ± 0.03	8.92 ± 0.72	3
<i>Cyprinus carpio</i>	125–258	-23.47 ± 0.57	7.02 ± 0.40	4
<i>Saurogobio dabryi</i>	98–142	-22.73 ± 1.69	6.43 ± 0.65	3
<i>Spinibarbus sinensis</i>	177	-23.23	10.81	1
<i>Trilophysa bleekeri</i>	77–92	-24.44 ± 0.68	7.51 ± 0.32	3
<i>Rhinogobius cliffordpopei</i>	92–115	-24.22 ± 0.84	7.49 ± 0.74	5
<i>Hemibarbus labeo</i>	87–176	-24.24 ± 0.57	5.40 ± 2.08	2
<i>Onychostoma macrolepis</i>	77–145	-22.27 ± 0.74	7.15 ± 1.22	3
<i>Glyptothorax fukiensis</i>	80–135	-24.16 ± 0.23	6.93 ± 0.60	6

<i>Paracobitis variegatus</i>	210–234	-23.02 ± 0.63	6.10 ± 1.18	2
<i>Acrossocheilus monticolus</i>	78–150	-22.77 ± 0.36	6.41 ± 0.56	2
<i>Zacco platypus</i>	140–180	-22.74 ± 0.48	7.85 ± 0.31	4
<i>Schizothorax prenanti</i>	98–125	-23.80 ± 1.03	5.27 ± 0.44	5
<i>Discogobio yunnanensis</i>	126	-25.31	2.25	1