## **Additional File 5**

**Figure 3**  $\delta^{15}$ N and  $\delta^{13}$ C relationships of loricariid plus astroblepid consumers in (A) Shaapan creek, Marañon (Amazon) drainage, northern Peru; (B) Peixoto river, Tapajós (Amazon) drainage, Brazil; (C) upper Siasme creek, Marañon (Amazon) drainage, northern Peru; and (D) Bununi creek, Rupununi (Essequibo) drainage, Guyana. Sample sizes in parentheses.



**Figure 4**  $\delta^{15}$ N and  $\delta^{13}$ C relationships of loricariid consumers in (A) the Utcubamba river, Marañon (Amazon) drainage, northern Peru; (B) Casiquiare canal, Negro (Amazon) drainage, southern Venezuela; and (C) Takutu river, Branco (Amazon) drainage, Guyana. Sample sizes in parentheses.



**Figure 5**  $\delta^{15}$ N and  $\delta^{13}$ C relationships of loricariid plus astroblepid consumers in (A) the Huancabamba river, and (B) lower Siasme creek, both Marañon (Amazon) drainages in northern Peru. Sample sizes in parentheses.



**Figure 6**  $\delta^{15}$ N and  $\delta^{13}$ C relationships of loricariid plus astroblepid consumers in (A) Almendro creek, and (B) the Nieva river, both Marañon (Amazon) drainages in northern Peru. Sample sizes in parentheses.



Essequibo 13 12 0  $\delta^{15}N$ 11  $\Delta$  Harttia platystoma (10) 10 Hypoptopoma guianense (2) Hypostomus hemiurus (13) Limatulichthys griseus (1) 9 Lithoxus lithoides (2) Pseudancistrus nigrescens (14) Spatuloricaria sp. (4) 8 • -30 -24 -34 -33 -32 -31 -29 -28 -27 -26 -25 δ<sup>13</sup>C Jamanxim 13 12  $\Delta \Delta$ 0<sup>15</sup>N Ô Hypostomus cf. emarginatus (2) 10 0 **O** *Hypostomus* sp. (1) Baryancistrus sp. 'B&W' (3) Panaque armbrusteri (3) 9 ▲ Hemiancistrus snethlegeae (4) ٠ Pseudoloricaria sp. (3)  $\Lambda$  Hopliancistrus tricornis (3) Scobinancistrus cf. pariolispos (2)  $\overline{\diamond}$  Hypostomus (Cochli.) aff. cochliodon (1)  $\overline{\bullet}$  Spatuloricaria sp. (3) 8 -34 -29 -33 -32 -31 -30 -28 -27 -26 -25 -24  $\delta^{13}C$ 

**Figure 7**  $\delta^{15}$ N and  $\delta^{13}$ C relationships of loricariid consumers in the (A) Essequibo river, Guyana, and (B) the Jamanxim river, Tapajos (Amazon) drainage, Brazil. Sample sizes in parentheses.



**Figure 8**  $\delta^{15}$ N and  $\delta^{13}$ C relationships of loricariid consumers in the Orinoco river main channel, (A) below and (B) above the mouth of the Ventuari river. Sample sizes in parentheses.

**Figure 9**  $\delta^{15}$ N and  $\delta^{13}$ C relationships of loricariid consumers in (A) the Rupununi river, Essequibo drainage, Guyana; and (B) the Curuá river, Xingu drainage, Brazil. Sample sizes in parentheses.



**Figure 10**  $\delta^{15}$ N and  $\delta^{13}$ C relationships of loricariid consumers in (A) the Ventuari river, Orinoco drainage, southern Venezuela; and (B) the Marañon river, Amazon drainage, northern Peru. Sample sizes in parentheses.

