

Appendix A. A list of species, classification, composition and stable isotope values for samples used in our analysis of lipid effects on stable isotope analyses

Common name	Latin binomial	Location	Classification ¹	Percent Lipid ²	$\delta^{13}\text{C}_{\text{untreated}}$	$\delta^{13}\text{C}_{\text{extracted}}$	$\delta^{15}\text{N}_{\text{untreated}}$	$\delta^{15}\text{N}_{\text{extracted}}$	%C ³	%N ³	C:N ³	C:N _{extracted} ⁴	$\Delta^{13}\text{C}$	$\Delta^{15}\text{N}$	Notes
Common caiman	<i>Caiman crocodilus</i>	Cinaruco River, Venezuela	A	1.5	-27.6	-28.0	8.7	8.7	36.5	11.8	3.1	3.3	-0.4	0.0	
Dark Fishflies	<i>Nigronia spp</i>	Bigalow Brook, CT	A	12.1	-31.3	-30.1	5.5	5.8	49.2	10.7	4.6	3.6	1.2	0.4	
European sea bass	<i>Dicentrarchus labrax</i>	Backwater estuary, England	A	7.6	-16.7	-16.1	17.8	18.5			4.0		0.7	0.7	5
European sea bass	<i>D. labrax</i>	Backwater estuary, England	A	11.4	-16.5	-15.8	17.5	18.2			4.1		0.7	0.7	5
Freshwater mussel	<i>Unionid spp.</i>	Otisco Lake, NY	A	12.2	-30.7	-29.7	16.9	17.3	47.8	9.2	5.2	3.6	1.0	0.4	
Herbivorous copepod	<i>Diaptomus pribilofensis</i>	Toolik Lake, AL	A	14.6	-33.0	-31.8							1.2		6
Lake Trout	<i>Salvelinus namaycush</i>	Itigaknit lake, AL	A	5.6	-25.5	-25.4							0.1		6
Lake Trout	<i>S. namaycush</i>	Keuka Lake, NY	A	7.9	-26.1	-25.7	17.2	17.5	53.7	13.4	4.0	3.7	0.4	0.3	
Lake Trout	<i>S. namaycush</i>	Lake Erie, NY	A	32.3	-23.8	-20.4	17.3	17.6	64.2	9.4	6.9	3.7	3.4	0.4	
Lake Trout	<i>S. namaycush</i>	Lake Ontario, NY	A	24.3	-26.1	-22.3	17.6	18.1	57.8	8.9	6.5	3.6	3.8	0.5	
Lake Trout	<i>S. namaycush</i>	Lake Ontario, NY	A	25.1	-24.0	-21.3	18.0	18.5	57.8	10.0	5.8	3.7	2.7	0.5	
Lake Trout	<i>S. namaycush</i>	N-1 lake, AL	A	4.9	-27.5	-27.4							0.1		6
Lake Trout	<i>S. namaycush</i>	Toolik Lake, AL	A	5.4	-30.0	-29.8							0.2		6
Lake Trout	<i>S. namaycush</i>	Toolik Lake, AL	A	4.9	-30.2	-30.0							0.2		6
Lane Snapper	<i>Lutjanus synagris</i>	Jupiter Beach, Florida	A	2.4	-13.7	-13.4	11.3	11.9	37.3	12.0	3.1	3.1	0.3	0.6	
Northern Pike	<i>Esox lucius</i>	Clear Lake, NY	A	4.5	-25.4	-25.4	11.7	11.7	49.0	13.3	3.7	3.7	0.0	0.1	
Northern Pike	<i>E. lucius</i>	Lake Ontario, NY	A	1.9	-19.3	-19.4	15.6	16.0	46.1	14.9	3.1	3.2	-0.1	0.4	
Peacock bass	<i>Cichla temensis</i>	Cinaruco River, Venezuela	A	1.7	-28.4	-28.7	9.3	9.7	49.8	16.6	3.0	3.0	-0.3	0.4	
Piranha	<i>Serrasalmus manuelli</i>	Cinaruco River, Venezuela	A	10.4	-29.7	-28.7	9.9	9.9	48.1	10.9	4.4	4.0	1.0	-0.1	
Predatory copepod	<i>Heterocope septentrionalis</i>	Toolik Lake, AL	A	8.6	-33.8	-32.6							1.2		6
Redtail characid	<i>Chalceus macrolepidotus</i>	Cinaruco River, Venezuela	A	3.2	-25.9	-26.2	8.4	8.5	48.0	15.5	3.1	3.0	-0.3	0.1	
Sapuara	<i>Semaprochilodus kneri</i>	Cinaruco River, Venezuela	A	3.0	-32.5	-32.0	7.4	7.5	49.8	15.1	3.3	3.1	0.5	0.1	
Silver dollar	<i>Metynnis hypsauchen</i>	Cinaruco River, Venezuela	A	3.2	-22.1	-22.4	6.2	6.4	45.0	14.1	3.2	3.2	-0.3	0.2	

Smallmouth bass	<i>Micropterus dolomieu</i>	Chautauqua Lake, NY	A	3.9	-21.1	-21.0	14.5	14.6	51.6	14.5	3.6	3.6	0.1	0.1
Smallmouth bass	<i>M. dolomieu</i>	Lake Ontario, NY	A	9.5	-20.8	-20.7	16.1	16.7	48.8	13.6	3.6	3.7	0.1	0.5
Stonefly	<i>Perlidae</i> spp.	Bigalow Brook, CT	A	6.3	-30.2	-30.1	6.0	6.5	45.6	11.4	4.0	3.7	0.1	0.5
Walleye	<i>Sander vitreus</i>	Lake Champlain, VT	A	8.4	-23.5	-22.8	16.0	16.0	53.7	12.9	4.2	3.7	0.7	0.0
Walleye	<i>S. vitreus</i>	Lake Champlain, VT	A	14.5	-24.5	-23.0	16.9	17.3	56.3	12.2	4.6	3.7	1.5	0.4
Walleye	<i>S. vitreus</i>	Lake Ontario, NY	A	7.7	-21.7	-21.2	16.3	16.6	49.4	13.4	3.7	3.5	0.5	0.3
White mullet	<i>Mugil curema</i>	Jupiter Beach, Florida	A	2.5	-17.1	-17.0	10.0	10.5	38.4	12.4	3.1	2.9	0.1	0.5
Antelope	<i>Antilocapra americana</i>	Commercial ⁷	T	3.7	-17.3	-17.7	9.1	9.2	46.8	14.6	3.2	3.2	-0.4	0.2
Beef	<i>Bos taurus</i>	Commercial ⁷	T	27.0	-15.0	-16.8	7.7	8.0	53.6	9.4	5.7	3.0	-1.8	0.3
Boar	<i>Aper silvestris</i>	Commercial ⁷	T	12.7	-15.7	-16.4	7.7	7.8	50.0	11.9	4.2	2.9	-0.7	0.1
Buffalo	<i>Bos bison</i>	Commercial ⁷	T	24.3	-16.7	-15.0	7.2	7.5	49.8	10.6	4.7	3.2	1.7	0.4
Chicken	<i>Gallus gallus</i>	Commercial ⁷	T	14.4	-16.5	-16.8	3.6	3.9	51.0	11.9	4.3	3.1	-0.3	0.3
Elk	<i>Cervus elaphus</i>	Commercial ⁷	T	3.6	-26.6	-26.6	7.3	7.6	44.8	13.2	3.4	3.5	0.0	0.3
Ground Turkey	<i>Meleagris gallopavo</i>	Commercial ⁷	T	11.8	-17.2	-17.4	5.4	5.6	49.4	13.4	3.7	4.0	-0.2	0.2
House mouse	<i>Mus musculus</i>	New Haven, CT	T	23.0	-23.3	-18.6	6.1	6.6	55.6	12.1	4.6	3.4	4.8	0.0
Neotropic cormorant	<i>Phalacrocorax olivaceus</i>	Cinaruco River, Venezuela	T	4.9	-29.0	-29.0	9.1	9.3	35.7	10.5	3.4	3.4	0.0	0.1
Ostrich	<i>Struthio camelus</i>	Commercial ⁷	T	11.3	-23.3	-23.0	7.2	7.3	48.6	13.0	3.7	3.5	0.4	0.2
Pheasant	<i>Phasianinae</i> spp	Commercial ⁷	T	3.1	-19.7	-19.2	4.5	4.5	44.6	13.9	3.2	3.0	0.5	0.0
Quail	<i>Coturnix</i> spp	Commercial ⁷	T	14.0	-18.5	-18.6	3.5	3.6	51.0	11.9	4.3	4.9	-0.2	0.1
Ringed kingfisher	<i>Megaceryle torquata</i>	Cinaruco River, Venezuela	T	5.0	-26.6	-26.2	9.7	9.9	38.3	11.3	3.4	3.4	0.5	0.2
Turkey breast	<i>Meleagris gallopavo</i>	Commercial ⁷	T	12.2	-18.6	-18.8	4.0	4.3	48.5	12.1	4.0	3.2	-0.1	0.3
Acorn	<i>Quercus alba</i>	New Haven, CT	P	10.0	-25.6	-24.2	1.4	2.4	54.8	0.9	63.2	42.0	1.4	1.0
Avocado	<i>Persea americana</i>	Commercial ⁷	P	48.4	-31.5	-28.4	3.5	3.8	64.5	0.7	93.0	28.0	3.1	0.3
Beach bean	<i>Canavalia</i> spp.	Exuma, Bahamas	P	2.0	-22.3	-22.1	4.2	4.3	42.8	5.4	7.9	8.5	0.3	0.1
Cashews	<i>Anacardium occidentale</i>	Commercial ⁷	P	40.9	-25.4	-22.4	2.0	1.7	62.1	3.4	18.3	6.4	3.0	-0.3
Coconut	<i>Cocos nucifera</i>	Commercial ⁷	P	50.7	-23.7	-21.1	3.2	3.4	54.4	4.3	12.6	12.6	2.6	0.2
Mango skin	<i>Bromus mango</i>	Commercial ⁷	P	1.4	-28.8	-28.7	3.6	3.9	42.5	0.52	81.2	77.2	0.1	0.3

Maple seeds	<i>Quercus alba</i>	New Haven, CT	P	5.0	-31.0	-30.7	2.3	2.5	48.0	0.5	24.0	23.7	0.3	0.2
Marine macroalgae	<i>Batopora oerstedii</i>	Andros Island, Bahamas	P	1.6	-16.4	-16.0	4.7	4.7	33.8	1.5	22.6	23.0	0.4	0.0
Marine macroalgae	<i>Halimeda incrassata</i>	Andros Island, Bahamas	P	0.5	-6.4	-6.3	-5.4	-5.7	16.9	0.8	20.8	19.2	0.05	-0.3
Marine seagrass	<i>Thalassia testudinum</i>	Andros Island, Bahamas	P	2.7	-11.3	-11.1	1.9	1.9	35.3	1.9	18.2	18.0	0.2	0.1
Oak leaves	<i>Quercus alba</i>	New Haven, CT	P	3.3	-28.7	-28.3	2.6	2.6	48.5	1.9	25.0	26.9	0.4	0.0
Peanut	<i>Arachis hypogaea</i>	Commercial ⁷	P	36.5	-25.9	-23.7	0.6	0.5	60.9	4.4	13.9	5.0	2.2	-0.2
Pine nuts	<i>Pinus cembroides</i>	Commercial ⁷	P	21.7	-24.5	-21.5	0.4	0.3	70.0	2.7	26.4	5.5	3.1	-0.1
Pistachio	<i>Pistacia vera</i>	Commercial ⁷	P	37.3	-29.2	-24.9	2.3	2.8	63.7	7.4	8.6	5.6	4.3	0.5
Red mangrove leaves	<i>Rhizophora mangle</i>	Andros Island, Bahamas	P	5.4	-27.0	-26.2	-4.0	-4.1	44.1	0.5	84.7	54.0	0.7	-0.1
Seagrape	<i>Coccoloba uvifera</i>	Exuma, Bahamas	P	2.2	-29.5	-29.3	5.9	6.4	46.6	0.8	58.7	60.6	0.1	0.5
Snap pea pods	<i>Pisum sativum</i>	Commercial ⁷	P	1.9	-25.3	-25.2	1.1	1.1	41.2	3.9	10.6	10.8	0.1	-0.1
Snap peas	<i>P. sativum</i>	Commercial ⁷	P	3.0	-25.4	-25.1	2.1	2.2	43.1	4.4	9.9	9.5	0.3	0.1
Sunflower seeds	<i>Helianthus annuus</i>	Commercial ⁷	P	11.0	-26.6	-26.1	5.9	6.3	49.1	3.0	16.5	13.1	0.5	0.4

¹ Each sample was classified as an aquatic animal (A), terrestrial animal (T) or plant (P).

² Percent lipid by dry mass

³ Carbon and nitrogen content, and C:N ratio prior to lipid extraction

⁴ C:N ratio after extraction

⁵ Data from Sweeting et al. (2006)

⁶ Data from Kling et al. (1992)

⁷ Commercial samples were purchased from the local supermarket. All commercial samples were food grade and minimally processed (e.g., we did not buy dry roasted nuts)