Table 5. Carcass concentrations of organic chemicals and lipid content in Rio Grande silvery minnow collected from 6 sites along the Middle Rio Grande, New Mexico, during 2006-2008, (Table 1, Figure 1) and grouped into river sections including the Upper Sites, Middle Sites, and Lower Sites, as well as all data combined.

[Organic chemical concentration data are mean ± 1 standard deviation with the number of fish composite samples and range of concentrations in parenthesis. Means within a row that have no upper case letters are not significantly different. Means within a row with upper case letters and sharing the same upper case letter are not significantly (P<0.05) different. "±", plus or minus; "MRG", Middle Rio Grande; "NM", New Mexico; Site 1. MRG at Bernalillo, NM; Site 2. MRG at Alameda, NM; Site 3. MRG at Los Padillas, NM; Site 4. MRG at Los Lunas, NM; Site 5. MRG at La Joya, NM; Site 6. MRG near San Antonio, NM; µg/kg, microgram per kilogram; wet weight; <, less than]

Organic Chemical (µg/kg wet weight)	Upper Sites (Site 1 & Site 2 combined)	Middle Sites (Site 3 & Site 4 combined)	Lower Sites (Site 5 & Site 6 combined)	All Sites Combined
Lipid (percent)	5.9 ± 1.3 (10; 4.1-7.7)	7.0 ± 1.7 (10; 5.0-10.8)	6.9 ± 1.1 (7; 5.6-8.0)	6.9 ± 1.4 (27; 4.1-10.8)
alpha chlordane	1.5 ± 0.9^{A} (4; 0.3-2.5)	7.1 ± 1.6^{B} (4; 5.7-9.4)	2.3 ± 1.3^{AB} (4; 0.4-3.2)	3.6 ± 2.9 (12; 0.3-9.4)
cis-nonachlor	0.7 ± 0.4^{A} (4; 0.2-1.2)	3.0 ± 0.6^{B} (4; 2.2-3.4)	1.1 ± 0.7^{AB} (4; 0.3-1.7)	1.6 ± 1.1 (12; 0.2-3.4)
dieldrin	0.5 ± 0.3^{A} (4; 0.1-0.9)	3.3 ± 0.8^{B} (4; 2.5-4.2)	1.5 ± 1.0^{AB} (4; 0.4-2.8)	1. 8 ± 1.4 (12; 0.1-4.2)
o,p'-DDE	0.3 ± 0.2 (4; 0.1-0.5)	0.5 ± 0.2 (4; 0.4-0.7)	0.4 ± 0.3 (4; 0.2-0.9)	0.4 ± 0.2 (12; 0.1-0.9)
p,p'-DDD	1.2 ± 0.5^{A} (4; 0.7-1.8)	2.4 ± 0.6^{A} (4; 1.8-3.0)	1.2 ± 0.4^{A} (4; 0.8-1.6)	1.6 ± 0.7 (12; 0.7-3.0)
p,p'-DDE	10.2 ± 2.9^{A} (4; 7.8-13.9)	20.8 ± 3.4^{B} (4; 17.4-24.6)	11.6 ± 2.4^{A} (4; 8.7-13.7)	14.2 ± 6.0 (12; 7.8-24.6)
p,p'-DDT	0.2 ± 0.06^{A} (4; 0.2-0.3)	0.7 ± 0.1^{B} (4; 0.7-0.8)	0.2 ± 0.1^{A} (4; 0.1-0.4)	0.4 ± 0.3 (12; 0.1-0.8)
DDT-total	12.5 ± 4.1^{A} (4; 8.8-17.1)	25.8 ± 4.5^{B} (4; 21.2-30.7)	14.4 ± 2.6^{A} (4; 11.5-17.4)	17.5 ± 7.0 (12; 8.8-30.7)
endosulfan I	1.1 ± 0.7^{A} (4; 0.4-1.7)	3.5 ± 0.8^{B} (4; 2.5-4.2)	1.6 ± 0.8^{AB} (4; 0.6-2.4)	2.1 ± 1.3 (12; 0.3-4.2)
endosulfan sulfate	1.3 ± 0.8^{A} (4; 0.4-2.4)	4.1 ± 0.6^{B} (4; 3.2-4.6)	1.7 ± 1.0^{AB} (4; 0.5-2.8)	2.4 ± 1.5 (12; 0.4-4.6)
gamma chlordane	0.8 ± 0.5^{A} (4; 0.1-1.2)	3.8 ± 1.1^{B} (4; 3.2-5.5)	1.1 ± 0.7^{AB} (4; 0.2-1.6)	1. 9 ± 1.6 (12; 0.1-5.5)
hexachlorobenzene	0.3 ± 0.2 (4; 0.1-0.6)	0.6 ± 0.2 (4; 0.4-0.8)	0.3 ± 0.1 (4; 0.1-0.4)	0.4 ± 0.2 (12; 0.1-0.8)
pentachlorobenezene	2.5 ± 0.2 (4; 2.2-2.6)	3.0 ± 0.2 (4; 2.7-3.2)	3.1 ± 0.5 (4; 2.5-3.8)	2.8 ± 0.4 (12; 2.2-3.8)
pentachloroanisole	0.2 ± 0.2 (4; 0.1-0.5)	0.8 ± 0.3 (4; 0.4-1.1)	0. 6 ± 0.5 (4; 0.3-1.4)	0.5 ± 0.4 (12; 0.1-1.4)
trans-nonachlor	2.1 ± 1.2^{A} (4; 0.4-3.4)	8.7 ± 1.5^{B} (4; 7.21-10.7)	2.8 ± 1.6^{AB} (4; 0.6-4.1)	4.5 ± 3.4 (12; 0.4-10.7)
BDE-100	4.3 ± 2.7^{A} (4; 1.0-6.8)	24.2 ± 15.6^{B} (4; 8.9-44.7)	9.4 ± 6.0^{AB} (3; 3.5-15.5)	12.9 ± 12.9 (11; 1-44.7)
BDE-154	1.2 ± 0.7^{A} (4; 0.4-1.9)	6.9 ± 4.3^{B} (4; 2.7-12.8)	2.7 ± 1.5^{AB} (3; 1.2-4.2)	3.7 ± 3.6 (11; 0.4-12.8)
BDE-206	0.5 ± 0.3 (4; 0.4-0.7)	0.3 ± 0.3 (4; 0.1-0.6)	0.2 ± 0.3 (3; 0.1-0.5)	0.5 ± 0.1 (11; 0.4-0.7)
BDE-28	1.5 ± 1.1 (4; 0.3-2.7)	4.5 ± 3.1 (4; 1.7-8.5)	2.1 ± 1.5 (3; 0.6-3.6)	2.8 ± 2.4 (11; 0.3-8.5)
BDE-47	31.8 ± 21.6^{A} (4; 6.0-50.6)	214 ± 140^{B} (4; 75.1-385)	74.7 ± 50.3^{AB} (3; 26.6-127)	110 ± 117 (11; 6.0-385)

Table 5. Carcass concentrations of organic chemicals and lipid content in Rio Grande silvery minnow collected from 6 sites along the Middle Rio Grande, New Mexico, during 2006-2008, (Table 1, Figure 1) and grouped into river sections including the Upper Sites, Middle Sites, and Lower Sites, as well as all data combined.

[Organic chemical concentration data are mean ± 1 standard deviation with the number of fish composite samples and range of concentrations in parenthesis. Means within a row that have no upper case letters are not significantly different. Means within a row with upper case letters and sharing the same upper case letter are not significantly (P<0.05) different. "±", plus or minus; "MRG", Middle Rio Grande; "NM", New Mexico; Site 1. MRG at Bernalillo, NM; Site 2. MRG at Alameda, NM; Site 3. MRG at Los Padillas, NM; Site 4. MRG at Los Lunas, NM; Site 5. MRG at La Joya, NM; Site 6. MRG near San Antonio, NM; µg/kg, microgram per kilogram; wet weight; <, less than]

Organic Chemical (µg/kg wet weight)	Upper Sites (Site 1 & Site 2 combined)	Middle Sites (Site 3 & Site 4 combined)	Lower Sites (Site 5 & Site 6 combined)	All Sites Combined
BDE-49/71	1.3 ± 1.0 (4;0.1-2.1)	5.9 ± 4.7 (4; 2.0-12.5)	3.8 ± 2.8 (3; 1.0-6.5)	3.6 ± 3.6 (11; 0.1-12.5)
BDE-total	43.4 ± 26.9^{A} (4; 11.0-66.7)	265 ± 171^{B} (4; 94.6-477)	96.7 ± 63.3^{AB} (3; 35.7-162)	138 ± 142 (11; 11.0-477)
PCB-total	8.9 ± 2.4^{A} (4; 5.7-11.1)	26.9 ± 9.0^{B} (4; 16.2-38.2)	10.1 ± 4.3^{A} (4; 4.8-15.0)	15.3 ± 10.1 (12; 4.8-38.2)
PCB-1254	3.8 ± 1.1^{A} (4; 2.6-5.1)	13.8 ± 9.7^{B} (4; 4.9-26.7)	4.2 ± 1.2^{A} (4; 3.2-5.8)	7.3 ± 7.0 (12; 2.6-26.7)
PCB-1260	4.1 ± 3.5 (4; 0.8-7.8)	11.2 ± 6.4 (4; 3.8-19.3)	5.6 ± 4.3 (4; 0.1-10.5)	6.9 ± 5.4 (12; 0.1-19.3)
PCB-105	0.09 ± 0.03^{A} (4; 0.06-0.12)	0.32 ± 0.23^{A} (4; 0.11-0.63)	0.10 ± 0.04^{A} (4; 0.05-0.13)	0.17 ± 0.17 (12; 0.05-0.63)
PCB-129/138/163	0.67 ± 0.29^{A} (4; 0.26-0.89)	2.40 ± 0.90^{B} (4; 1.3-3.5)	0.88 ± 0.43^{A} (4; 0.35-1.36)	1.32 ± 0.97 (12; 0.27-3.5)
PCB-132	0.14 ± 0.07^{A} (4; 0.05-0.22)	0.57 ± 0.24^{B} (4; 0.31-0.88)	0.20 ± 0.09^{A} (4; 0.09-0.29)	0.31 ± 0.24 (12; 0.05-0.88)
PCB-141	0.12 ± 0.07^{A} (4; 0.05-0.22)	0.48 ± 0.14^{B} (4; 0.31-0.65)	0.17 ± 0.08^{A} (4; 0.06-0.25)	0.25 ± 0.19 (12; 0.05-0.65)
PCB-153/168	0.7 ± 0.4^{A} (4; 0.3-1.0)	2.3 ± 0.7^{B} (4; 1.4-3.1)	0.9 ± 0.5^{AB} (4; 0.4-1.4)	1.3 ± 0.9 (12; 0.3-3.1)
PCB-180/193	0.49 ± 0.34^{A} (4; 0.222-0.981)	2.11 ± 0.55^{B} (4; 1.4-2.66)	0.75 ± 0.47^{AB} (4; 0.18-1.32)	1.12 ± 0.85 (12; 0.18-2.66)
PCB-187	0.28 ± 0.17^{A} (4; 0.11-0.47)	0.94 ± 0.25^{B} (4; 0.66-1.24)	0.38 ± 0.23^{AB} (4; 0.11-0.67)	0.53 ± 0.37 (12; 0.11-1.24)
PCB-2	0.003 ± 0.0008^{ABC} (4; 0.003-0.005)	0.004 ± 0.0002^{AB} (4; 0.004-0.004)	0.003 ± 0.0003^{AC} (4; 0.002-0.003)	0.003 ± 0.001 (12; 0.002-0.005)
PCB-52	0.16 ± 0.03^{A} (4; 0.12-0.18)	0.38 ± 0.21^{B} (4; 0.23-0.69)	0.13 ± 0.03^{A} (4; 0.09-0.16)	0.22 ± 0.16 (12; 0.10-0.69)
PCB-83/99	0.14 ± 0.11 (4; 0.05-0.28)	0.43 ± 0.29 (4; 0.17-0.83)	0.14 ± 0.04 (4; 0.09-0.18)	0.24 ± 0.22 (12; 0.05-0.83)
PCB-190	<0.10 ± 0.0 (4; <0.10-<0.10)	0.17 ± 0.04 (4; 0.12-0.21)	0.06 ± 0.04 (4; <0.10-0.11)	0.09 ± 0.07 (12; <0.10-0.21)
n-decane	124 ± 107 (2; 47.9-199)	68 ± 2.5 (2; 66.0-69.5)	90 (1)	95 ± 60.3 (5; 47.9-199)
n-hexacosane	153 ± 89 (2; 90.7-216)	429 ± 165 (2; 312-545)	567 (1)	346 ± 207 (5; 90.7-567)
n-hexadecane	304 ± 46.7 (2; 271-337)	815 ± 48.8 (2; 780-849)	517 (1)	551 ± 258 (5; 271-849)
n-nonadecane	319 ± 141 (2; 219-419)	2747 ± 3639 (2; 173-5320)	825 (1)	1391 ± 2211 (5; 173-5320)
n-octadecane	3055 ± 431 (2; 2750-3360)	5855 ± 1506 (2; 4790-6920)	4660 (1)	4496 ± 1607 (5; 2750-6920)

Table 5. Carcass concentrations of organic chemicals and lipid content in Rio Grande silvery minnow collected from 6 sites along the Middle Rio Grande, New Mexico, during 2006-2008, (Table 1, Figure 1) and grouped into river sections including the Upper Sites, Middle Sites, and Lower Sites, as well as all data combined.

[Organic chemical concentration data are mean ± 1 standard deviation with the number of fish composite samples and range of concentrations in parenthesis. Means within a row that have no upper case letters are not significantly different. Means within a row with upper case letters and sharing the same upper case letter are not significantly (P<0.05) different. "±", plus or minus; "MRG", Middle Rio Grande; "NM", New Mexico; Site 1. MRG at Bernalillo, NM; Site 2. MRG at Alameda, NM; Site 3. MRG at Los Padillas, NM; Site 4. MRG at Los Lunas, NM; Site 5. MRG at La Joya, NM; Site 6. MRG near San Antonio, NM; µg/kg, microgram per kilogram; wet weight; <, less than]

Organic Chemical (µg/kg wet weight)	Upper Sites (Site 1 & Site 2 combined)	Middle Sites (Site 3 & Site 4 combined)	Lower Sites (Site 5 & Site 6 combined)	All Sites Combined
n-pentacosane	779 ± 639 (2; 327-1230)	640 ± 291 (2; 434-846)	353 (1)	638 ± 392 (5; 327-1230)
n-pentadecane	4380 ± 1739 (2; 3150-5610)	8945 ± 3189 (2; 6690-11200)	2870 (1)	5904 ± 3374 (5; 2870-11200)
n-tetracosane	387 ± 248 (2; 211-562)	79 ± 16 (2; 67.1-90.2)	134 (1)	213 ± 203 (5; 67.1-562)
n-tridecane	251 ± 117 (2; 168-333)	745 ± 237 (2; 577-912)	1090 (1)	616 ± 385 (5; 168-1090)
n-undecane	9271 ± 13052 (2; 41-18500)	83 ± 15 (2; 73-93)	91 (1)	3760 ± 8240 (5; 41-18500)
phytane	190 ± 21 (2; 175-204)	395 ± 47 (2; 362-428)	278 (1)	289 ± 106 (5; 175-428)
pristane	184 ± 73 (2; 132-235)	280 ± 40 (2; 251-308)	210 (1)	227 ± 64 (5; 132-308)
acenaphthalene	0. 5 ± 0.1 (2; 0.4-0.5)	1.2 ± 0.2 (2; 1-1.3)	0.7 (1)	0.8 ± 0.4 (5; 0.4-1.3)
acenaphthene	0.2 ± 0 (2; 0.2-0.2)	0.7 ± 0 (2; 0.7-0.7)	0.5 (1)	0.5 ± 0.3 (5; 0.2-0.7)
anthracene	0.3 ± 0 (2; 0.3-0.3)	0.5 ± 0.1 (2; 0.4-0.5)	0.3 (1)	0.4 ± 0.1 (5; 0.3-0.5)
chrysene	0.5 ± 0 (2; 0.5-0.5)	0.7 ± 0.3 (2; 0.5-0.9)	0.2 (1)	0.5 ± 0.2 (5; 0.2-0.9)
fluoranthene	1.4 ± 0.6 (2; 1.0-1.8)	2 ± 1.1 (2; 1.2-2.8)	0.5 (1)	1.5 ± 0.9 (5; 0.5-2.8)
fluorene	1.4 ± 0.2 (2; 1.2-1.5)	2.1 ± 0.2 (2; 1.9-2.2)	1.4 (1)	1.6 ± 0.4 (5; 1.2-2.2)
naphthalene	13.5 ± 0.6 (2; 13.0-13.9)	15.1 ± 0.42 (2; 14.8-15.4)	17.3 (1)	14.9 ± 1.6 (5; 13.0-17.3)
C1-naphthalenes	5.9 ± 1.3 (2; 5.0-6.8)	6.0 ± 0 (2; 6.0-6.0)	3.8 (1)	5.5 ± 1.2 (5; 3.8-6.8)
C2-naphthalenes	3.0 ± 1.0 (2; 2.3-3.7)	3.7 ± 0.14 (2; 3.6-3.8)	2.7 (1)	3.2 ± 0.7 (5; 2.3-3.8)
C3-naphthalenes	1.0 ± 0.01 (2; 1.0-1.0)	2.8 ± 0.21 (2; 2.6-2.9)	1.0 (1)	1.7 ± 1.0 (5; 1.0-2.9)
phenanthrene	3.8 ± 1.3 (2; 2.9-4.7)	4.7 ± 0.4 (2; 4.4-5)	1.9 (1)	3.8 ± 1.3 (5; 1.9-5)
pyrene	0.7 ± 0.1 (2; 0.6-0.8)	1.3 ± 0.8 (2; 0.7-1.8)	0.2 (1)	0.8 ± 0.6 (5; 0.2-1.8)