A Comparative Analysis of the Diets of a Genus of Freshwater Turtles Across Africa

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Table S1. Diet composition (% of stomachs containing a given food item) of male and female Pelusios species in Nigeria. In the table, no. of individuals would indicate the number of turtles containing a given food type; N is the total number of individuals examined for each sex.

| Nigeria       | Pelusios castaneus | Pelusios niger |
|---------------|--------------------|---------------|
|               | males              | females       | males         | females       |
|               | no. individuals | % | no. individuals | % | no. individuals | % |
| N             | 211                | 178 | 162            | 148 |
| Fruits        | 16                 | 7.6 | 12             | 6.7 | 5              | 3.1 | 6              | 4.1 |
| seeds         | 14                 | 6.6 | 24             | 13  | 8              | 4.9 | 12             | 8.1 |
| Aquatic plants| 41                 | 21  | 38             | 14  | 21             | 0   | 22             | 9  |
| Algae         | 1                  | 0.5 | 0              | 0   | 3              | 1.9 | 2              | 1.4 |
| Annelida      | 14                 | 6.6 | 16             | 9.0 | 23             | 2   | 19             | 8  |
| Gastropoda    | 25                 | 8   | 27             | 2   | 16             | 9.9 | 22             | 9  |
| Bivalvia      | 3                  | 1.4 | 1              | 0.6 | 0              | 0   | 0              | 0.0 |
| Arachnida     | 6                  | 2.8 | 6              | 3.4 | 3              | 1.9 | 0              | 0.0 |
| Insecta       | 20                 | 9.5 | 13             | 7.3 | 11             | 6.8 | 11             | 7.4 |
| Crustacea     | 40                 | 66  | 46             | 8   | 40             | 62  | 7              | 24  |
| Fish          | 140                | 4   | 112            | 9   | 81             | 0   | 73             | 3   |
| Anura adults  | 13                 | 6.2 | 7              | 3.9 | 31             | 1   | 17             | 5   |
| Anura eggs    | 14                 | 6.6 | 14             | 7.9 | 9              | 5.6 | 10             | 6.8 |
| Anura tadpoles| 35                 | 6   | 61             | 3   | 17             | 5   | 20             | 5   |
| Reptiles      | 0                  | 0   | 0              | 0   | 3              | 1.9 | 0              | 0.0 |
| birds         | 0                  | 0   | 0              | 0   | 7              | 4.3 | 0              | 0.0 |
| small mammals | 0                  | 0   | 0              | 0   | 5              | 3.1 | 2              | 1.4 |
| Indeterminate | 0                  | 0   | 0              | 0   | 3              | 1.9 | 2              | 1.4 |
Table S2. Diet composition (% of stomachs containing a given food item) of male and female *Pelusios castaneus* in Benin. In the table, no. of individuals would indicate the number of turtles containing a given food type; N is the total number of individuals examined for each sex.

| Benin  | *Pelusios castaneus* |
|--------|----------------------|
|        | males                | females               |
|        | no. individuals | %   | no. individuals | %   |
| N      | 27                | 29            |
| seeds  | 1                 | 3.7          | 2             | 0.6 |
| Aquatic plants | 17          | 63.0       | 14            | 4.1 |
| Annelida | 4          | 14.8       | 3             | 0.9 |
| Insecta | 4                 | 14.8        | 3             | 0.9 |
| Crustacea | 3          | 11.1       | 3             | 0.9 |
| Fish   | 6                 | 22.2        | 8             | 2.3 |
| Anura adults | 3          | 11.1       | 0             | 0.0 |
| Indeterminate | 2        | 7.4        | 0             | 0.0 |
Table S3. Diet composition (% of stomachs containing a given food item) of male and female *Pelusios castaneus* in Togo. In the table, no. of individuals would indicate the number of turtles containing a given food type; N is the total number of individuals examined for each sex.

| Togo        | *Pelusios castaneus* |            |            |
|------------|----------------------|------------|------------|
|            | males                | females    |            |
|            | no. individuals %    | no. individuals % |    |
| Fruits     | 1 1.0                | 2 1.8      |            |
| seeds      | 16 15.5              | 16 14.0    |            |
| Aquatic plants | 30 29.1          | 21 18.4    |            |
| Algae      | 2 1.9                | 2 1.8      |            |
| Annelida   | 16 15.5              | 17 14.9    |            |
| Gastropoda | 8 7.8                | 11 9.6     |            |
| Arachnida  | 1 1.0                | 0 0.0      |            |
| Insecta    | 36 35.0              | 43 37.7    |            |
| Crustacea  | 7 6.8                | 7 6.1      |            |
| Fish       | 29 28.2              | 24 21.1    |            |
| Anura adults | 24 23.3          | 30 26.3    |            |
| Anura eggs | 8 7.8                | 5 4.4      |            |
| Anura tadpoles | 2 1.9            | 3 2.6      |            |
| Indeterminate | 2 1.9            | 1 0.9      |            |
Table S4. Diet composition (% of stomachs containing a given food item) of male and female *Pelusios adansonii* in South Sudan. In the table, no. of individuals would indicate the number of turtles containing a given food type; N is the total number of individuals examined for each sex.

| South Sudan | *Pelusios adansonii* |
|-------------|-----------------------|
|             | males                 | females               |
|             | no. individuals | %  | no. individuals | %  |
| N           | 122                  | 91           |
| Fruits      | 3                    | 2.5          | 0          | 0   |
| seeds       | 4                    | 3.3          | 3          | 3.3 |
| Aquatic plants | 40              | 32.8         | 34         | 37.4|
| Annelida    | 31                   | 25.4         | 12         | 13.2|
| Gastropoda  | 5                    | 4.1          | 9          | 9.9 |
| Arachnida   | 1                    | 0.8          | 0          | 0.0 |
| Insecta     | 40                   | 32.8         | 39         | 42.9|
| Crustacea   | 20                   | 16.4         | 13         | 14.3|
| Fish        | 21                   | 17.2         | 21         | 23.1|
| Anura adults | 14              | 11.5         | 8          | 8.8 |
| Anura eggs  | 1                    | 0.8          | 0          | 0.0 |
| Anura tadpoles | 1              | 0.8          | 3          | 3.3 |
| Reptiles    | 1                    | 0.8          | 0          | 0.0 |
| Indeterminate | 8               | 6.6          | 5          | 5.5 |
Table S5. Diet composition (% of stomachs containing a given food item) of male and female *Pelusios nanus* in Zambia. In the table, no. of individuals would indicate the number of turtles containing a given food type; N is the total number of individuals examined for each sex.

| Country | *Pelusios nanus* |  |
|---------|------------------|---|
|         | males            | females |
|         | no. individuals | %     | no. individuals | %     |
| N       | 30               | 39    |
| seeds   | 2 6.7            | 3 7.7  |
| Aquatic plants | 3 10.0         | 3 7.7  |
| Annelida | 3 10.0         | 9 23.1 |
| Gastropoda | 1 3.3         | 2 5.1  |
| Arachnida | 12 40.0        | 9 23.1 |
| Insecta | 25 83.3         | 22 56.4|
| Crustacea | 1 3.3         | 1 2.6  |
| Anura eggs | 3 10.0        | 0 0.0  |
| Anura tadpoles | 2 6.7      | 5 12.8 |
| Indeterminate | 2 6.7     | 2 5.1  |
Table S6. Diet composition (% of stomachs containing a given food item) of the three body size categories of *Pelusios castaneus* (all countries being pooled). In the table, total would indicate the total number of examined turtles containing a given food type; N is the total number of individuals examined for each size category.

|                | Total | <8cm | %  | 8-14cm | %  | >14cm | %  |
|----------------|-------|------|----|--------|----|-------|----|
| N              | 668   | 158  | %  | 389    | %  | 121   | %  |
| Fruits         | 0     | 0    |    | 24     | 6.2| 7     | 5.8|
| seeds          | 14    | 8.9  |    | 50     | 12.9| 9     | 7.4|
| Aquatic plants | 19    | 12.0 |    | 86     | 22.1| 56    | 46.3|
| Algae          | 1     | 0.6  |    | 2      | 0.5 | 2     | 1.7|
| Annelida       | 6     | 3.8  |    | 41     | 10.5| 23    | 19.0|
| Gastropoda     | 14    | 8.9  |    | 33     | 8.5 | 24    | 19.8|
| Bivalvia       | 0     | 0.0  |    | 2      | 0.5 | 2     | 1.7|
| Arachnida      | 9     | 5.7  |    | 4      | 1.0 | 0     | 0.0|
| Insecta        | 76    | 48.1 |    | 32     | 8.2 | 11    | 9.1|
| Crustacea      | 26    | 16.5 |    | 55     | 14.1| 25    | 20.7|
| Fish           | 23    | 14.6 |    | 226    | 58.1| 70    | 57.9|
| Anura adults   | 1     | 0.6  |    | 39     | 10.0| 37    | 30.6|
| Anura eggs     | 29    | 18.4 |    | 10     | 2.6 | 2     | 1.7|
| Anura tadpoles | 66    | 41.8 |    | 30     | 7.7 | 5     | 4.1|
| Indeterminate  | 7     | 4.4  |    | 3      | 0.8 | 0     | 0.0|
Table S7. Diet composition (% of stomachs containing a given food item) of the three body size categories of *Pelusios niger* (Nigeria). In the table, total would indicate the total number of examined turtles containing a given food type; N is the total number of individuals examined for each size category.

|                  | Total  | <8cm | %   | 8-14cm | %   | >14cm | %   |
|------------------|--------|------|-----|--------|-----|-------|-----|
| N                | 310    | 99   | 31  | 101    | 32  | 110   | 35  |
| Fruits           | 0      | 0    | 0   | 3      | 3   | 8     | 6.4 |
| seeds            | 0      | 0    | 0   | 6      | 6   | 14    | 12.7|
| Aquatic plants   | 10     | 1.0  | 23  | 22.8   | 23  | 20.9  |
| Algae            | 3      | 3.0  | 6   | 5.9    | 5   | 4.5   |
| Annelida         | 9      | 9.1  | 21  | 20.8   | 17  | 15.5  |
| Gastropoda       | 6      | 6.1  | 22  | 21.8   | 29  | 26.4  |
| Bivalvia         | 0      | 0.0  | 1   | 1.0    | 0   | 0.0   |
| Arachnida        | 3      | 3.0  | 0   | 0.0    | 0   | 0.0   |
| Insecta          | 23     | 23.2 | 17  | 16.8   | 7   | 6.4   |
| Crustacea        | 11     | 11.1 | 40  | 39.6   | 20  | 18.2  |
| Fish             | 24     | 24.2 | 77  | 76.2   | 92  | 83.6  |
| Anura adults     | 2      | 2.0  | 25  | 24.8   | 26  | 23.6  |
| Anura eggs       | 12     | 12.1 | 8   | 7.9    | 3   | 2.7   |
| Anura tadpoles   | 22     | 22.2 | 15  | 14.9   | 0   | 0.0   |
| Reptiles         | 0      | 0.0  | 2   | 2.0    | 2   | 1.8   |
| birds            | 0      | 0.0  | 4   | 4.0    | 8   | 7.3   |
| small mammals    | 0      | 0.0  | 2   | 2.0    | 12  | 10.9  |
| Indeterminate    | 3      | 3.0  | 3   | 3.0    | 3   | 2.7   |
Table S8. Diet composition (% of stomachs containing a given food item) of the three body size categories of *Pelusios adansonii* (South Sudan). In the table, total would indicate the total number of examined turtles containing a given food type; N is the total number of individuals examined for each size category.

| Food Type         | Total | <8cm | %  | 8-14cm | %  | >14cm | %  |
|-------------------|-------|------|----|--------|----|-------|----|
| N                 | 213   | 58   | %  | 122    | %  | 33    | %  |
| Fruits            | 0     | 0    | %  | 3      | 2.5| 0     | 0  |
| seeds             | 1     | 1.7  | %  | 5      | 4.1| 1     | 3.0|
| Aquatic plants    | 19    | 33   | %  | 33     | 27.0| 22    | 66.7|
| Annelida          | 4     | 6.9  | %  | 28     | 23.0| 11    | 33.3|
| Gastropoda        | 2     | 3.4  | %  | 8      | 6.6 | 4     | 12.1|
| Arachnida         | 1     | 1.7  | %  | 0      | 0.0 | 0     | 0  |
| Insecta           | 31    | 53   | %  | 28     | 23.0| 20    | 60.6|
| Crustacea         | 6     | 10   | %  | 19     | 15.6| 8     | 24.2|
| Fish              | 2     | 3.4  | %  | 20     | 16.4| 20    | 60.6|
| Anura adults      | 0     | 0    | %  | 3      | 2.5 | 19    | 57.6|
| Anura eggs        | 1     | 1.7  | %  | 0      | 0.0 | 0     | 0  |
| Anura tadpoles    | 4     | 6.9  | %  | 0      | 0.0 | 0     | 0  |
| Reptiles          | 0     | 0    | %  | 1      | 0.8 | 0     | 0  |
| Indeterminate     | 4     | 6.9  | %  | 8      | 6.6 | 1     | 3.0|
Table S9. Diet composition (% of stomachs containing a given food item) of the three body size categories of *Pelusios nanus* (Zambia). In the table, total would indicate the total number of examined turtles containing a given food type; N is the total number of individuals examined for each size category.

| body size categories | Total | <8cm | %  | 8-14cm | %  |
|----------------------|-------|------|----|--------|----|
| N                    | 69    | 31   | %  | 38     | %  |
| seeds                | 0     | 0    | 5  | 13.2   | 13.2|
| Aquatic plants       | 2     | 6.5  | 4  | 10.5   | 10.5|
| Algae                | 0     | 0.0  | 0  | 0.0    | 0.0 |
| Annelida             | 6     | 19.4 | 6  | 15.8   | 15.8|
| Gastropoda           | 1     | 3.2  | 2  | 5.3    | 5.3 |
| Arachnida            | 7     | 22.6 | 14 | 36.8   | 36.8|
| Insecta              | 29    | 93.5 | 18 | 47.4   | 47.4|
| Crustacea            | 1     | 3.2  | 1  | 2.6    | 2.6 |
| Anura eggs           | 1     | 3.2  | 2  | 5.3    | 5.3 |
| Anura tadpoles       | 4     | 12.9 | 3  | 7.9    | 7.9 |
| Indeterminate        | 2     | 6.5  | 2  | 5.3    | 5.3 |