

**SUPPLEMENTAL INFORMATION**

**LIVING ON THE EDGE AND THE MANGROVE PARADOX:  
HERPETOFAUNAL DIVERSITY ACROSS THE COASTAL WETLANDS  
COMMUNITIES OF LOS PETENES, CAMPECHE, MEXICO**

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**TABLE S1.** Species list of amphibians and reptiles recorded in six plant communities of Los Petenes Biosphere Reserve, Campeche, Mexico. The table shows the number of individuals per species recorded in each plant community (*disturbed tropical forest* [FTF-h], *conserved tropical forest* [FTF-l], *short mangrove* [SM], *tropical forest peten* [EFP], *peten mangrove*[MP], *stripe mangrove* [ST]), the total number of individuals per species (n), microhabitat use categories (TE = terrestrial, AR = arboreal, RI = riparian, AN = anthropophilic, SAX = saxicolous, FO = fossorial), and conservation status according to NOM-059-SEMARNAT-2010 (NOM-59) and the IUCN Red List (LC = Least Concern, Pr = Special Protection, A = Threatened NA = Species not listed).

| Species  | Plant communities |       |    |     |        |    | n  | Microhabitat |    |        |    |             |    | NOM-59 | IUCN |  |
|--|-------------------|-------|----|-----|--------|----|----|--------------|----|--------|----|-------------|----|--------|------|--|
|  | FTF-h             | FTF-l | SM | EFP | M<br>P | ST |    | TE           | AR | R<br>I | AN | S<br>A<br>X | FO |        |      |  |
| Frogs  |                   |       |    |     |        |    |    |              |    |        |    |             |    |        |      |  |
| <i>Dendropsophus microcephalus</i><br>(Yellow Treefrog)      | 1                 | -     | -  | -   | -      | -  | 1  | X            | -  | -      | -  | -           | -  | NA     | LC   |  |
| <i>Leptodactylus fragilis</i><br>(Mexican White-Lipped Frog) | -                 | -     | 1  | -   | -      | -  | 1  | -            | X  | -      | -  | -           | -  | NA     | LC   |  |
| <i>Leptodactylus melanonotus</i><br>(Sabinal Frog)           | 4                 | 3     | 29 | 8   | 1      | -  | 45 | X            | X  | X      | -  | -           | -  | NA     | LC   |  |
| <i>Rana brownorum</i><br>(Brown's Leopard Frog)              | 2                 | 3     | 11 | -   | -      | -  | 16 | X            | X  | -      | -  | -           | -  | Pr     | LC   |  |
| <i>Scinax staufferi</i><br>(American Snouted Treefrog)       | 17                | 2     | 35 | -   | -      | -  | 54 | X            | -  | X      | X  | -           | -  | NA     | LC   |  |
| <i>Smilisca baudinii</i>                                     | 4                 | -     | 1  | 5   | 2      | -  | 12 | X            | X  | X      | -  | -           | -  | NA     | LC   |  |

(Common Mexican Treefrog)

*Trachycephalus vermiculatus*  
(Vermiculated Treefrog)

- - 2 - - - 2 - X - - - - NA LC

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Toads

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*Incilius valliceps*

(Gulf Coast Toad)

2 13 24 8 1 - 48 X X - - - - NA LC

*Rhinophrynus dorsalis*

(Mexican Burrowing Toad)

- - 1 - - - 1 X - - - - - Pr LC

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Lizards

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*Aspidoscelis angusticeps*

(Yucatan Whiptail)

- - 3 2 - - 5 X - - - - - NA LC

*Basiliscus vittatus*

(Brown Basilisk)

3 1 18 2 8 - 32 X X X - - - NA LC

*Coleonyx elegans*

(Yucatan Banded Gecko)

- - 2 3 - - 5 X - - - - - A LC

*Ctenosaura similis*

(Common Spiny-tailed Iguana)

- - 4 - 6 8 18 X X X X X - A LC

*Hemidactylus frenatus*

(Common House Gecko)

- - - - 31 45 76 X X X X - - NA LC

*Holcosus gaigeae*

(Rainbow Ameiva)

5 3 2 10 - 1 21 X - - - - - NA LC

*Marisora lineola*

(Mayan Skink)

2 2 4 - - 3 11 X X X - - - NA LC

*Anolis rodriguezii*

16 25 1 14 9 1 66 X X X - - - NA LC

|   |   |   |   |   |   |   |    |   |   |   |   |   |   |    |    |
|---|---|---|---|---|---|---|----|---|---|---|---|---|---|----|----|
| (Rodriguez's Anole)   |   |   |   |   |   |   |    |   |   |   |   |   |   |    |    |
| <i>Anolis ustus</i><br>(Yucatan Silky Anole)                        | 2 | - | 5 | 1 | - | 1 | 9  | X | X | - | X | - | - | NA | LC |
| <i>Sceloporus chrysostictus</i><br>(Yellow-spotted Spiny Lizard)    | 1 | 5 | 7 | - | - | 1 | 14 | X | X | - | - | X | - | NA | LC |
| <i>Sceloporus lundelli</i><br>(Lundell's Spiny Lizard)              | - | - | - | - | - | 4 | 4  | - | X | - | - | - | - | NA | LC |
| <i>Sphaerodactylus glaucus</i><br>(Central American Collared Gecko) | 3 | - | - | 3 | 1 | - | 7  | X | X | - | - | - | - | Pr | LC |
| Snakes  |   |   |   |   |   |   |    |   |   |   |   |   |   |    |    |
| <i>Coniophanes bipunctatus</i><br>(Two-spotted Snake)               | - | - | - | - | 1 | - | 1  | - | - | X | - | - | - | NA | LC |
| <i>Coniophanes imperialis</i><br>(Black-striped Snake)              | 1 | 1 | 3 | 2 | - | - | 7  | X | - | X | - | - | - | NA | LC |
| <i>Drymarchon melanurus</i><br>(Blacktail Cribo)                    | - | - | 1 | - | - | - | 1  | X | - | - | - | - | - | NA | LC |
| <i>Drymobius margaritiferus</i><br>(Speckled Racer)                 | 1 | - | 1 | 3 | - | - | 5  | X | X | X | - | - | - | NA | LC |
| <i>Leptodeira frenata</i><br>(Mayan Cat-eye Snake)                  | - | - | 3 | 2 | - | - | 5  | X | - | X | - | - | - | NA | LC |
| <i>Leptophis mexicanus</i><br>(Mexican Parrot Snake)                | - | - | - | 1 | 1 | - | 2  | - | X | - | - | - | - | NA | LC |
| <i>Ninia sebae</i><br>(Redback Coffee Snake)                        | - | - | - | 1 | - | - | 1  | X | - | - | - | - | - | NA | LC |

|  |           |           |            |           |           |           |            |           |           |           |          |          |          |          |          |
|--|-----------|-----------|------------|-----------|-----------|-----------|------------|-----------|-----------|-----------|----------|----------|----------|----------|----------|
| <i>Pseudoelephe flavirufa</i><br>(Yellow-Red Rat Snake)      | -         | -         | 1          | -         | 2         | -         | 3          | X         | X         | -         | -        | -        | -        | NA       | LC       |
| <i>Geophis sanniolus</i><br>(Pygmy Snail Sucker)             | -         | -         | -          | 1         | -         | -         | 1          | -         | X         | -         | -        | -        | -        | NA       | LC       |
| <i>Spilotes pullatus</i><br>(Chicken Snake)                  | -         | -         | -          | 1         | -         | -         | 1          | -         | X         | -         | -        | -        | -        | NA       | LC       |
| <i>Tantillita canula</i><br>(Yucatan Dwarf Short-tail Snake) | -         | 1         | -          | -         | -         | -         | 1          | -         | -         | -         | -        | -        | X        | NA       | LC       |
| Tortoises  |           |           |            |           |           |           |            |           |           |           |          |          |          |          |          |
| <i>Kinosternon cruentatum</i><br>(Red-Cheeked Mud Turtle)    | -         | -         | -          | 1         | -         | -         | 1          | -         | -         | X         | -        | -        | -        | NA       | LC       |
| <i>Rhinoclemmys areolata</i><br>(Furrowed Wood Turtle)       | -         | -         | -          | 1         | -         | -         | 1          | X         | -         | -         | -        | -        | -        | A        | LC       |
| Crocodiles   |           |           |            |           |           |           |            |           |           |           |          |          |          |          |          |
| <i>Crocodylus moreletii</i><br>(Morelet's Crocodile)         | -         | -         | 17         | 3         | 5         | 9         | 34         | -         | -         | X         | -        | -        | -        | Pr       | LC       |
| <b>Total number of individuals</b>                           | <b>64</b> | <b>59</b> | <b>176</b> | <b>72</b> | <b>68</b> | <b>73</b> | <b>512</b> | <b>-</b>  | <b>-</b>  | <b>-</b>  | <b>-</b> | <b>-</b> | <b>-</b> | <b>-</b> | <b>-</b> |
| <b>Number of species</b>                                     | <b>15</b> | <b>11</b> | <b>23</b>  | <b>20</b> | <b>12</b> | <b>15</b> | <b>-</b>   | <b>25</b> | <b>20</b> | <b>14</b> | <b>4</b> | <b>2</b> | <b>1</b> | <b>-</b> | <b>-</b> |

**Table S2.** Taxonomic list of the herpetofauna of the wetlands of the western portion of the municipality of Tenabo, Campeche, Mexico.

|          |            |                 |                       |                                    |  |
|----------|------------|-----------------|-----------------------|------------------------------------|--|
| CLASS    |            |                 |                       |                                    |  |
| AMPHIBIA |            |                 |                       |                                    |  |
|          | ORDER      |                 |                       |                                    |  |
|          | ANURA      |                 |                       |                                    |  |
|          |            | FAMILY          |                       |                                    |  |
|          |            | BUFONIDAE       |                       |                                    |  |
|          |            |                 | GENUS                 |                                    |  |
|          |            |                 | <i>Incilius</i>       |                                    |  |
|          |            |                 |                       | <i>Incilius valliceps</i>          |  |
|          |            |                 | GENUS                 |                                    |  |
|          |            |                 | <i>Rhinella</i>       |                                    |  |
|          |            |                 |                       | <i>Rhinella horribilis</i>         |  |
|          |            | FAMILY          |                       |                                    |  |
|          |            | HYLIDAE         |                       |                                    |  |
|          |            |                 | GENUS                 |                                    |  |
|          |            |                 | <i>Dendropsophus</i>  |                                    |  |
|          |            |                 |                       | <i>Dendropsophus microcephalus</i> |  |
|          |            |                 | GENUS                 |                                    |  |
|          |            |                 | <i>Trachycephalus</i> |                                    |  |
|          |            |                 |                       | <i>Trachycephalus vermiculatus</i> |  |
|          |            |                 | GENUS                 |                                    |  |
|          |            |                 | <i>Scinax</i>         |                                    |  |
|          |            |                 |                       | <i>Scinax staufferi</i>            |  |
|          |            |                 | GENUS                 |                                    |  |
|          |            |                 | <i>Smilisca</i>       |                                    |  |
|          |            |                 |                       | <i>Smilisca baudinii</i>           |  |
|          |            | FAMILY          |                       |                                    |  |
|          |            | LEPTODACTYLIDAE |                       |                                    |  |
|          |            |                 | GENUS                 |                                    |  |
|          |            |                 | <i>Leptodactylus</i>  |                                    |  |
|          |            |                 |                       | <i>Leptodactylus fragilis</i>      |  |
|          |            |                 |                       | <i>Leptodactylus melanonotus</i>   |  |
|          |            | FAMILY          |                       |                                    |  |
|          |            | RANIDAE         |                       |                                    |  |
|          |            |                 | GENUS                 |                                    |  |
|          |            |                 | <i>Lithobates</i>     |                                    |  |
|          |            |                 |                       | <i>Lithobates brownorum</i>        |  |
|          |            | FAMILY          |                       |                                    |  |
|          |            | RHINOPHRYNIDAE  |                       |                                    |  |
|          |            |                 | GENUS                 |                                    |  |
|          |            |                 | <i>Rhinophrynus</i>   |                                    |  |
|          |            |                 |                       | <i>Rhinophrynus dorsalis</i>       |  |
| CLASS    |            |                 |                       |                                    |  |
| REPTILIA |            |                 |                       |                                    |  |
|          | ORDER      |                 |                       |                                    |  |
|          | CROCODYLIA |                 |                       |                                    |  |
|          |            | FAMILY          |                       |                                    |  |
|          |            | CROCODYLIDAE    |                       |                                    |  |
|          |            |                 | GENUS                 |                                    |  |
|          |            |                 | <i>Crocodylus</i>     |                                    |  |
|          |            |                 |                       | <i>Crocodylus moreletii</i>        |  |

ORDER  
TESTUDINES  
FAMILY  
CHELONIIDAE  
GENUS  
*Chelonia*  
*Chelonia mydas*  
FAMILY  
GEOEMYDIDAE  
GENUS  
*Rhinoclemmys*  
*Rhinoclemmys areolata*  
FAMILY  
KINOSTERNIDAE  
GENUS  
*Kinosternon*  
*Kinosternon scorpioides*

ORDER  
SQUAMATA  
SUBORDER  
SAURIA  
FAMILY  
EUBLEPHARIDAE  
GENUS  
*Coleonyx*  
*Coleonyx elegans*  
FAMILY  
GEKKONIDAE  
GENUS  
*Hemidactylus*  
*Hemidactylus frenatus*  
GENUS  
*Sphaerodactylus*  
*Sphaerodactylus glaucus*  
FAMILY  
CORYTOPHANIDAE  
GENUS  
*Basiliscus*  
*Basiliscus vittatus*  
FAMILY  
IGUANIDAE  
GENUS  
*Ctenosaura*  
*Ctenosaura similis*  
FAMILY  
PHRYNOSOMATIDAE  
GENUS  
*Sceloporus*  
*Sceloporus chrysostictus*  
*Sceloporus lundelli*  
FAMILY  
ANOLIDAE  
GENUS  
*Norops*  
*Norops rodriguezii*  
*Norops ustus*

FAMILY  
SCINCIDAE

GENUS  
*Marisora*  
*Marisora lineola*

FAMILY  
TEIIDAE

GENUS  
*Holcosus*  
*Holcosus gaigeae*

GENUS  
*Aspidoscelis*  
*Aspidoscelis angusticeps*

SUBORDER  
SERPENTES  
FAMILY  
COLUBRIDAE

GENUS  
*Conophis*  
*Conophis lineatus*

GENUS  
*Drymarchon*  
*Drymarchon melanurus*

GENUS  
*Drymobius*  
*Drymobius margaritiferus*

GENUS  
*Leptophis*  
*Leptophis mexicanus*

GENUS  
*Pseudoelaphe*  
*Pseudoelephe flavirufa*

GENUS  
*Spilotes*  
*Spilotes pullatus*

GENUS  
*Tantillita*  
*Tantillita canula*

FAMILY  
DIPSADIDAE

GENUS  
*Coniophanes*  
*Coniophanes imperialis*

GENUS  
*Coniophanes*  
*Coniophanes bipunctatus*

GENUS  
*Leptodeira*  
*Leptodeira frenata*

GENUS  
*Ninia*  
*Ninia sebae*

GENUS  
*Sibon*  
*Sibon sanniolus*