

Musings of a Photographer And Naturalist on the Ecology Of The Tuxtlas Mountains

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Photos by David McCauley

Every time I visit The Tuxtlas I am impressed by the scenic beauty and diversity of the area. The Tuxtlas Mountains truly represent one of Mexico's natural treasures. In 1998 The Tuxtlas Mountains were designated by then-President Ernesto Zedillo as a special biosphere reserve.

While at first look all appears lush green, the reality is quite a different and disturbing story. The ravages of man are readily apparent in the Tuxtlas Mountains. Within the area of the Tux-

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tlas biosphere many threatened species of fauna exist such as: the ocelot, the jaguar, white-lipped peccaries, Baird's tapir, northern ghost bats, *ja-guarundi* and *tayra*. The Tuxtlas Mountains are a magnet for many nearctic and neotropic bird species. Endemic bird species and sub-species to be found in the Tuxtlas include Tuxtla quail dove, long-tailed saberwing (hummingbird), black-headed saltator and plain-breasted brushfinch. Three bird species—the king vulture, the harpy eagle, and the scarlet macaw—have already been extirpated from Los Tuxtlas.

As I see it, there are three basic threats to the ecology of The Tuxtlas.



Violaceous trogon (male) (*Trogon violaceus braccatus*).



Keel-billed toucan (*Ramphastos s. sulfuratus*).

DEFORESTATION

Deforestation is without a doubt the single largest threat to the ecology of the Tuxtlas. Ninety percent of the original rainforest has been cut and replaced by pasture for cattle grazing and/or sugar cane. (Most of this deforestation has occurred within the last 40 years.) Some studies estimate that with the current rate of deforestation the remaining rain forest could be diminished by 50 percent within the next 10 years. If this should occur the effects on the remaining fauna would be devastating, with the possibility of many species being eliminated completely.

UNREGULATED USE OF HERBICIDES AND INSECTICIDES

All along the roads in the region of the Tuxtlas, nailed to the tree trunks of the “living fences” are numerous placards advertising the newest herbicide/insecticide products. These products are being aggressively marketed with some ranchers discovering that herbicides are especially useful in clearing native vegetation from the land so that more pasture can be planted. While birding in the Tuxtlas last spring, I was able to witness the procedure. Approximately one hectare of native vegetation was sprayed with herbicide. After sev-



Passion flower (*Passiflora incarnata*).



Cattle grazing pasture in the Tuxtlas.



Burned area, an example of the destruction from pesticides.



Tree with parrot nest cavity. The opening cut with the machete shows how the young parrots are removed.



Crimson-collared tanager (*Phlogothraupis s. sanguinolenta*).

eral weeks when the vegetation was brown the dry vegetation was torched and the land was effectively cleared for planting of pasture grass (see photo on this page). While both herbicides and insecticides serve a purpose, they must be used responsibly. Herbicide and insecticide runoff are serious threats to wildlife species. Although it is hard to believe, DDT, banned in the 1970s in the United States, is still marketed and used in much of Latin America without restriction.

CAPTURE AND ILLEGAL SALE OF BIRDS AND REPTILES

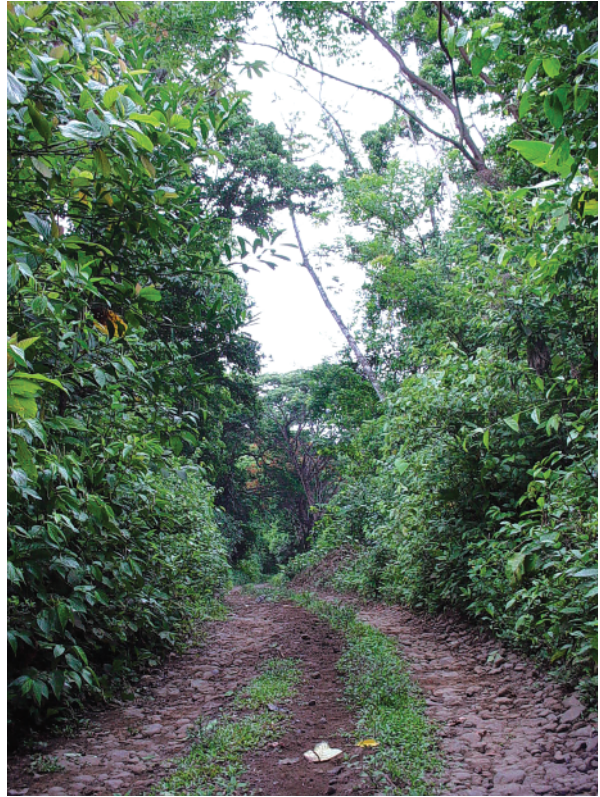
Unfortunately, the capture and illegal sale of birds and reptiles is still a part of the landscape of the special biosphere reserve of the Tuxtlas. The yel-

low-headed parrot *Amazona oratrix* is in danger of extinction based on its capture and sale for the pet trade. The photo on this page of a parrot's nest in a tree cavity that was robbed was taken just across the road from the UNAM biological station. Much work remains to be done in order to protect the illegal capture and sale of these exotic species.

SOLUTIONS

The need for immediate action in the Tuxtlas Biosphere to protect the forest remnants is paramount. A few possible solutions based on my observations are:

- Establish a "buffer zone" surrounding particularly the peaks of San Martin and Santa Marta. A



Vegetation in the Tuxtlas.



team of trained Tuxtlas Biosphere rangers could live in and actively patrol and protect the zones.

- Establish a program of dialogue and education with all residents and especially landowners of the Tuxtlas to make them realize the aforementioned threats and encourage them to respect the existing laws regarding water and habitat. Satellite map technology to monitor possible deforestation abuses is available and could be used on a monthly basis.
- Researchers and scientists have already spent many years studying the area but what is now urgently needed is that they step out from behind their desks and research projects and assume a leadership role implementing immediate

practical, prioritized solutions in conjunction with existing government agencies.

- Some possible projects could be habitat restoration (tree planting), community conservation education to establish a base for eco-tourism, and introducing new strains of pasture grasses to help local ranchers increase cattle production on existing pasture lands (thus helping to eliminate the continued deforestation).

The need for conservation is immediate. What happens in the next few years will define the future of the reserve. The Tuxtlas Mountains are a national treasure; what remains is worth protecting. **MM**



Ferruginous pygmy-owl (*Glaucidium brasilianum*).



Lineated woodpecker (*Dryocopus lineatus*).



Rufous-capped warbler (*Basileuterus rufifrons*).



Moctezuma oronpendola (*Psarocolius montezuma*).

THE TUXTLAS MOUNTAINS BASIC INFORMATION

The region of the Tuxtla Mountains is located 117 kilometers to the south of the port city of Veracruz.

- This coastal ecoregion comprises some 1,500 square miles (about the size of the state of Delaware) and is the northernmost rainforest of the American tropics.
- The Tuxtla Mountains include numerous inactive volcanic peaks, the largest being Santa Marta and San Martin; elevations range from sea level to 5,800 feet.
- The Tuxtla Mountains have an annual median rainfall of 185 inches with average temperatures of 70-79 degrees Fahrenheit.
- Habitats to be found within the Tuxtla Mountains region include cloud forest, tropical moist broadleaf forest, sub-tropical moist broadleaf forest, broadleaf forest, pine-oak forest, mangroves and dunes and coastal beaches.
- Tuxtla Mountains flora and fauna:
 - 940+ plant species
 - 80 varieties of mosses and ferns
 - 1,200+ insect species
 - 122 species of reptiles and amphibians
 - 500+ bird species
 - 115 mammal species
- In November 1998 the Tuxtla Mountains were designated a special biosphere reserve.



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Del 17 al 21 de mayo de 2004, México

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1. Podrán ser inscritas las producciones radiofónicas que hayan sido realizadas después del 1 de abril de 2002, conforme con las siguientes categorías:
 - Radioreportaje
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 - Radiorevista
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 - Radioarte
 - Programas musicalesAsimismo podrán participar, fuera de concurso:
 - Promocionales de identificación de las emisoras
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2. Por cada producción que se desee inscribir, deberá ser entregado o enviado un sobre que contenga lo siguiente:
 - a) Ficha de inscripción debidamente llenada a máquina o por computadora con el fin de incluir correctamente los datos en el catálogo de participantes.
 - b) Cuatro copias del programa en disco compacto.
 - c) Comprobante original de pago de la inscripción.
 - d) Para los programas cuyo idioma no sea el español, una copia del guion original y tres copias del guion traducido al español.
3. El sobre, las copias de los programas y los estuches de éstos deberán contener los siguientes datos en una etiqueta impresa a máquina de escribir o por computadora:
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 - Categoría en la que se inscribe
 - Duración del programa
 - País de origen

- Nombre del responsable, a quien en su caso se entregará el premio o reconocimiento, según corresponda
- Teléfono del responsable, incluyendo las claves de larga distancia internacional y regional
- Correo electrónico del responsable

4. El costo de la inscripción por programa es de 400 pesos mexicanos para producciones de hasta 30 minutos de duración, y de 500 pesos mexicanos para las obras de más de 30 minutos.

El pago por concepto de inscripción deberá hacerse mediante:

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5. El cierre de inscripciones es el 5 de marzo de 2004, a las 17:00 horas. El sobre deberá ser enviado o entregado en:

Radio Educación

- Ángel Urraza 622, Col. Del Valle, C.P. 03100, México, D. F.
6. Por razones aduanales, cada uno de los discos compactos provenientes del extranjero deberá ser declarado con el valor de un dólar al momento de ser empacado para su envío a través del servicio de mensajería especializada (DHL, UPS, FedEx, etcétera). Los gastos por envío, así como los seguros e impuestos, deberán ser cubiertos por el responsable.

Premiación

7. Se otorgarán los siguientes premios a los ganadores de cada una de las siete categorías del concurso en pesos mexicanos, o en dólares americanos al tipo de cambio vigente al momento de hacer la transacción

Primer lugar: 25,000 pesos
Segundo lugar: 20,000 pesos
Tercer lugar: 15,000 pesos

Los gastos por concepto de transferencias bancarias para el pago

de los premios serán por cuenta de los beneficiarios.

8. Los ganadores serán dados a conocer el viernes 21 de mayo de 2004 durante la ceremonia de premiación y clausura de la Quinta Bienal Internacional de Radio, la cual tendrá lugar en el Centro Nacional de las Artes.

Jurado

9. El jurado quedará integrado por destacados especialistas. Su fallo será inapelable.
10. El jurado se reserva el derecho de declarar desierto cualquiera de los premios establecidos.

Considerandos

11. La Bienal no es responsable por las condiciones en las que sean recibidos los materiales; tampoco si existen problemas en la reproducción de los programas.
12. Cada programa presentado sólo podrá ser inscrito en una categoría.
13. Las producciones enviadas a concurso no deberán incluir anuncios publicitarios.
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15. Las copias de los programas que no resulten ganadores estarán a disposición de sus responsables hasta el 4 de junio de 2004.
16. Los programas concursantes que no cumplan con alguno de los puntos descritos en esta convocatoria serán descalificados. En tal caso, no se devolverá el importe de la inscripción.
17. Cualquier caso no previsto en esta convocatoria será resuelto por los organizadores.
18. La inscripción a este Concurso implica la aceptación de todas las bases descritas anteriormente.

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