Risk Species In 12 ASA Mexican Airports Under Tropical, Arid, Semideciduous and Urban Conditions

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Risk species in 12 ASA Mexican airports under tropical, arid, semideciduous, wetlands and urban conditions.

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12 ASA-network airports
70% of the world biodiversity in 17 countries

Mexico represents at least 10% of world’s biodiversity (64,878 species)

- **1st reptiles** (989 species)
- **2nd mammals** (439 species)
- **11th birds** (> 1,100 species)
- **900 endemic species**
Law protected species within airports in Mexico

Regal-horned Lizard

Rail

Diamondback Rattlesnake

Yellow-lood Parrot

Jamaican Parakeet

Texas Tortoise

Red-tailed Hawk

Greater-earless Lizard

NOM – 059 – SEMARNAT – 2010

Wildlife Law by:
The Ministry of Environment and Natural Resources (SEMARNAT)
Vegetation in some Mexican airports

Native vegetation:

1. Deciduous forest
2. Evergreen forest
3. Mangroves
4. Semiarid vegetation (Bush)
5. Wetlands
Site conditions at some airports in Mexico

CTM. Tropical evergreen vegetation

CME. Tropical vegetation and urban conditions

PXN. Semideciduous vegetation

CEN. Arid vegetation
Wildlife found in some Mexican airports

Photographies in some Mexican airpots.
High Hazard species in 12 ASA Mexican airports

- Cattle Egret
- Turkey Vulture
- Black Vulture
- Crested Caracara
- White-tailed Kite
- Northern Harrier
- White-winged Dove
- Mourning Dove
- Great-tailed Grackle
- Coyote
- Dog
High Hazard species differ from each airport

Common Paureque  Cliff Swallow  Mexican Mud Turtle  Nilgai
Jackrabbit & Rabbit  Black Bird  Gray Fox  Rock Pigeon
Great Egret  Cane Toad  Barn Swallow  Tree Swallow
High Hazard: domestic animals within Mexican airports
Hazard species in 12 ASA Mexican airports

- Freshwater Slough
- Arid conditions
- Tropical evergreen conditions
- Semi deciduous
- Urban immersed

Legend:
- Low Hazard
- Medium Hazard
- High Hazard
- Very high Hazard
Birds migratory routes
Wildlife strikes registered in 12 Mexican airports

*High Hazard bird in USA

3 year period: 2008 - 2010
ASA’s five-pillar strategy

- Habitat Management
- Rescue & translocation
- Deterrence
- Lethal control
- Training
1. Habitat management

- Fruit and seed removal
- Sanitary carcass burial with caustic lime (inside and outside the airport)
- Empty nest removal
- Gap fill in the jet ways
- Net placement and incorporation of a concrete base on the perimeter fencing
2. Rescue and relocation of wildlife

- The Ministry of Environment and Natural Resources (SEMARNAT) does not allow to kill any wildlife
- ASA then requests a permit from SEMARNAT to relocate wildlife
3. Deterrence of wildlife

- Chasing and harassment of animals
- Audio repellents
- Visual repellents
4. Lethal control

- Eggs removal
- Nestlings sacrifice
- Domestic and introduced species sacrifice
- Animals deliver to the anti-rabies center
5. Airport and Government Agencies staff training

• ASA provides constant trainings for airport personnel
• ASA is in constant communication with the Aeronautical and Environmental Authorities
• ASA creates awareness on wildlife hazards even outside airport boundaries
5. Workshops for people
Federal, state, and local governmental agencies
Conclusions

- In Mexico the Ministry of Environment and Natural Resources does not carry-out wildlife hazard management services

- The high biodiversity and several species protected by Environmental Law impact the wildlife management strategies

- In Mexico we must take into consideration not only the wildlife but the social and economic conditions

- Our databases are recent, we need more information in order to be able to perform better analysis

- The airports with the most abundant hazardous species are those along bird migratory routes. Hence, the wildlife management programs must consider the Migratory Bird Treaty (USA-Canada-Mexico)

- Based on our experience in these 12 airports the best hazardous wildlife management must consider the use of different control methods simultaneously
Thank you for your attention!

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