



November 2006

Help Plan Big Bend's Future

The National Park Service is developing an Exotic Animal Management Plan to guide protection of park resources from the impacts of non-native wildlife at Big Bend.

We have sent you this newsletter to:
-Inform you about the exotic animal management planning process and
-Solicit your views and suggestions regarding exotic animal issues for consideration in the new plan.

Federal regulation, Executive Orders and NPS Policies require National Parks to prevent impacts by exotic species to natural and cultural resources.

NPS Policies direct that exotic species..."will be managed – up to and including eradication – if

control is prudent and feasible and the exotic species interferes with natural processes and the perpetuation of natural features, native species or natural habitats.”

This planning process includes production of an environmental assessment that analyzes exotic animal management alternatives for their environmental and other effects.

Input from the public and other interested parties is critical to determining the appropriate course of action. We invite you to read this newsletter, attend a public scoping meeting, contact park staff with questions, and submit your comments.



Important Milestones

Scoping Comment Period
November 10 through
December 11, 2006

Public Scoping Open Houses

November 28, 2006
Alpine & Marathon, Texas

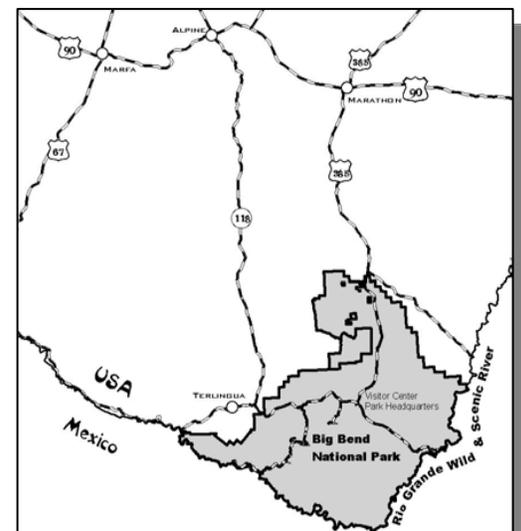
November 29, 2006
Study Butte, Texas

See details on back page

About the Park

Big Bend National Park nestles inside a bend of the Rio Grande as it flows through 118 miles of west Texas along the US/Mexico border. The park was established in 1944 and with 1,252 square miles is the largest Chihuahuan Desert protected area. Its 1,400 or more species of plants, 11 amphibians, 56 reptiles, 40 fish, 75 mammals and 450 bird species are all linked to striking and diverse geology. Many of these species are unique to the Chihuahuan Desert and some are unique to the park area. Adjacent public and private lands in Texas and Mexico share most of these species and their habitat. Visitors see changes in plants and animals as they travel from the river at 1,800' to Emory Peak at 7,800'. Aquatic and riparian habitats of the Rio Grande give way to sparse lowland desert, then to desert grasslands. Still higher, woodland habitats of pine, juniper, and oak dominate the cooler, more moist slopes and drainages of the Chisos Mountains.

The park also has a rich human history, from 12,000 years ago in the Paleo-Indian period to the historic period represented by Apache and Comanche groups. Since the 17th century, Spanish, Mexican, and American settlers farmed, ranched, and mined in the area. Historic buildings illustrate border life in the early 20th century. The National Park Service is charged with preserving this natural and cultural heritage and providing for its enjoyment by the public. Into this setting, protection of natural and cultural resources from damage by exotic species has become a management responsibility.



Exotic Animal Management Issues

The planning process must address important issues related to management of exotic animals at the park. Issues preliminarily identified include safety, soils, vegetation, wildlife, threatened and endangered species, water resources including wetlands, soundscapes, cultural resources, park neighbors, and the visitor experience. Some issues relate to effects of exotic animals upon park resources and the visitor experience, and others relate to potential control activity, including staff and visitor safety, and animal welfare and humane treatment. This phase of the planning process invites participants to provide perspectives on these issues and identify additional issues.

Concern	Issues	Opportunity / Mitigation
Staff and Visitor Safety	While exotic species represent only a minor threat to human safety, management programs could include staff and visitor safety risks, including use of aircraft, motor vehicles and firearms.	NPS safety requirements dictate planning for safety and implementing actions safely.
Neighbors	Adjacent State of Texas & Mexican preserves and many private ranches remove exotics and prefer BBNP not be source for reinvasion. Some private landowners may see exotics as economic hunting and viewing benefit.	Management is most effective when in cooperation with neighbors.
Soils	Exotic species are known to cause significant impact by digging, rooting, feeding, trampling and trailing, increasing erosion and providing disturbance that fosters exotic plant invasion.	Reducing exotics would help protect soils, particularly important in sensitive habitats.
Vegetation	Most exotic vertebrate species are herbivores, and thus consume native vegetation. Additional effects may include trampling, loss of vegetation through erosion, potential for serious effects upon small, isolated, or rare plants and communities, and disturbance that fosters exotic plant invasion.	Vegetation communities and isolated, rare or sensitive vegetation would benefit from reduced harm by exotic animals.
Wildlife	Exotic animals may compete with native wildlife species for food, water and territory and create disease and/or hybridization risk. Risks increase in cases of rare, localized, or at-risk native species. Some visitors may enjoy viewing exotic species. Management methods may create concern regarding humane treatment of target species and animal welfare issues.	All exotic animals in BBNP do not represent a significant threat. Managing those that threaten natives can protect many at-risk species. NPS plans for strategies that maximize humane treatment.
Threatened & Endangered Species	T&E plant and animal species are often localized and highly vulnerable to direct and indirect harm by exotics. Management activities have potential for impact.	Protection of T & E species from exotics and management harm is high priority.
Water Resources / Wetlands	Water and wetland resources are extremely valuable in the Chihuahuan desert environment and are a critical resource for native species. Water also creates a focal point for exotics, which may cause water quality degradation, destabilize banks, and consume or trample aquatic and riparian vegetation.	Certain high-value springs and wetland areas can be priority protection and management zones due to their importance to native species.
Soundscapes	While exotic animals have little effect upon natural sounds enjoyed by park visitors and neighbors, monitoring and management activities that may include use of firearms, aircraft and motor vehicles are potential disturbance factors.	Management timing can avoid visitor-use periods and areas. Information can help visitors understand purposes.
Cultural Resources	Exotic animals have the potential to physically alter cultural resources through digging, rubbing, increased erosion and other direct and indirect impact. Management activities may have potential for effect.	Exotics management can protect archeological and historic features. Management actions can be planned to avoid disturbance.

Exotic Animal Management Alternatives

Internal scoping with inter-disciplinary groups of scientific and resource professionals from park staff, academia and other land management agencies and organizations from 2002 through 2005 evaluated risks represented by the 24 exotic animal species documented living in the park. Of these, five species were identified as 1) representing significant and immediate threats to native resources, 2) adequately understood, and 3) feasible to consider managing at a meaningful scale. These include Barbary sheep (aoudad), feral hog, nutria, bullfrog and elegant slider. We invite your perspective regarding these and other potential exotic animal threats to park resources.

Park staff and consultants identified three preliminary alternatives for meeting NPS responsibilities to protect park resources. We invite you to comment on any of the alternatives below or suggest others.

No Action

Under this alternative, park management would continue to collect incidental information on currently identified and any new exotic animals and their threats to park resources. No cohesive management strategy would be implemented to protect park resources. Populations of these species would continue to fluctuate or spread. The park would not meet legal and policy mandates to protect resources from damage by exotic animals.

Monitoring With Development of Control Thresholds

Under this alternative, the park would implement a rigorous study program designed to document and monitor exotic species impacts and their population dynamics. As a more thorough understanding of impacts and risk factors is developed, thresholds for control would be established and a control program would eventually commence. For example, if monitoring revealed intrusion of feral hogs beyond their present northerly location, and increasing impacts are documented in high-value areas such as the Chisos Mountains or spring habitats, a control program could be initiated to protect those areas. Continued research would assess the prevalence of Barbary sheep competition and disease transmission threats to desert bighorn before control would be considered. Indices for monitoring of nutria, bullfrog and red-eared slider impact or presence would be used to further evaluate the urgency of removal.

Adaptive Control with Monitoring

Under this alternative, tailored control programs for each high-priority exotic species would be pursued, commensurate with existing substantial threat assessments, distribution data and feasibility considerations for each. All programs would be dependent upon funding. Due to their high known threat to a broad range of resources, feral hog management would seek to reduce the population where they are presently found. Live trapping as conditions permit year-round, and professional ground and aerial hunting during low visitation seasons would be employed. Due to their risk to native bighorn sheep recovery, Barbary sheep removal would create an expanding buffer around bighorn populations. Removal would likely be professional aerial hunting during the summer low visitation season. Because it is not currently feasible to achieve control in the entirety of their riverine habitat, nutria and bullfrog management would proceed at an experimental level at the high-value Rio Grande Village wetland and beaver pond area, habitat of endangered Big Bend mosquitofish, and an up and downstream buffer zone. Since exotic elegant sliders, that threaten native Big Bend sliders with hybridization, occur primarily near river access points, their removal would be concentrated in those reaches. For all above species, continued monitoring of target and nearby areas would gauge program efficacy and provide feedback to adjust intensity, timing or location of efforts. Changes to populations of exotics not currently of concern, and invasion by new species would initiate risk analyses and potential inclusion among species to be managed.



Native Desert Bighorn



Native Big Bend Slider



Endangered Mosquitofish

Please Help by Participating:

Submit Comments via:

- The NPS Planning, Environmental, and Public Comment website:
<http://parkplanning.nps.gov/>
- Letter to:
Superintendent
Attn Exotic Animal Management
PO Box 129
Big Bend National Park, Texas 79834
- or fax: 432-477-1175



Attend a Public Open House

for Exotic Animal Management Planning, featuring displays, refreshments, and park representatives to answer questions.

Tuesday, November 28, 2006

Alpine, Texas

Espino Conference Center

Sul Ross State University

3 - 6 pm

Marathon, Texas

Ritchie Building

Multi-Use Room

7 - 9:30 pm

Wednesday, November 29, 2006

Study Butte, Texas

Community Center

6 - 9 pm