

Rock Creek Park  
Deer Management Plan and EIS Preparation

MINUTES – Draft  
Science Team – Meeting #4  
March 27, 2006 9 – 11 AM (Eastern Time)

Minutes Issue Date: April 26, 2006

Meeting Attendees: NPS – ROCR: Ken Ferebee

CUE: Scott Bates, Diane Pavcek, Sue Salmons, Jim Sherald

URS – Beth Kunkel, Rusty Schmidt

National Zoo – Bill McShea

L.B. - Nancy VanDyke

USDA – Kevin Sullivan

BRMD – Jenny Powers

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**1. Meeting Minutes Review**

No comments were made on the February meeting minutes.

**2. Reproductive Control**

- Three methods of Reproductive Control were discussed: Sterilization, Contraceptives and Contraceptives.
- Sterilization of males would not be as effective as females due to breeding behavior of deer.
- Sterilization of does is an invasive procedure requiring the surgical removal of ovaries, or through tubal ligation; procedures are surgical and require full anesthesia. Surgery must be conducted by a veterinarian.
- The National Zoo is close and has necessary surgical facilities. However transport of deer to facility would be additional stress on animal and require significant time for handling of animals.
- The other possibility would be to conduct the surgery in the field. This could result in complications due to higher incidence of infection. Another concern with field surgery would be the number of visitors and access to the park, which could attract potentially large crowds of on-lookers.
- If field surgery is required, a temporary or mobile field station could be set up to minimize on-lookers and potential for infection. A mortality rate of 15-20 percent is possible with field surgery.
- In Chicago, this procedure (field surgery) has been used on a few deer. Chicago converted a van/ambulance into a mobile field hospital.
  - The goals of the Chicago work was not known by anyone on ST. Details of the Chicago work should be investigated.

- Sterilization would likely affect breeding behavior with loss of production of reproductive hormones. Specific effects not well documented but would be expected to react similar to when GnRH contraceptive product is used which blocks hormone production.
- Park is roughly 3000 acres (4.7 sq miles) with density (2005) of 52 deer per sq mile. Sterilization would require capturing approximately 80-90 does. This could be possible in one year; estimate 2 to 5 surgeries conducted per day. The Science Team (ST) suggested that 90 does could be captured and treated in 3 months. May be able to get free vet service from non-profit groups.
- Costs could be high. May require hiring a vet for a while, so cost would include the cost of the surgical equipment and the vet's time. Full-time vet cost would be the largest portion of the cost though the team is hesitant to suggesting a specific cost. A good estimate is probably \$75,000, though a vet may come forward from a nonprofit organizations, that may donate his/her time to conduct the surgeries. The cost to capture the animal would be similar to the cost for other reproductive control option. \$100/ dose for the anesthesia. An estimate is probably well over a \$1,000 per deer for sterilization.
- Another concern is that there is some immigration by the deer into the park though it is not well documented.
- This procedure could be used as a population maintenance method, although not recommended by ST due to amount of handling of deer required and invasiveness to deer. Not an effective population reduction method – would need to be combined with a reduction method.
- Contraceptive research in white-tailed deer has been conducted using various drugs (agents).
- Kevin Sullivan could provide a cost details for reproductive control research project.
- The mortality at “\_\_\_\_\_” conducted by APHIS was just one deer due to an error by the users drugging the animal near rough terrain, which had nothing to do with the chemicals.
- Contraceptives are providing efficacy ratings of 86-100% with some drugs lasting 2-5 years, though this is still being tested. Gonacon is not approved for anything but a research to date, while Luprelide, is not known to being used in the East Coast at this time. Jenny Powers will look into Luprelide being used on the East Coast. The native PzP is still working on the development of adjuvants. SpayVac does not need a booster, but is not available on the market any longer.
- It was noted that only one study currently is being conducted for Leuprolide on a free-roaming population.
- The ST suggests that the park does not consider PzP at this time, but to focus on Luprelide and Gonacon. The makers of GnRH advocate use as an tool for maintenance and not as a population reduction method. To acquire approvals by the park to use Gonacon, the park would require a research study that is setup and conducted by the national wildlife research center. This study may need approvals by the DC Department of Health and potentially Maryland DNR if hunting outside park may occur during studies. Marking the animals would be required, which may be just ear tags. The animals could be manually managed, no anesthesia, if the contraceptive drug is administered quickly.
- A contragestive is an abortion drug that is applied after the doe is pregnant. Depending on timing, the drug could make the abortion tough if late into the pregnancy. This could be used in conjunction with other methods of contraceptives. The ST suggested that this alternative may not receive the political or social acceptance.



- Drop nets, box traps and darting are all potentially practical tools to capture deer within the park.
- The big difference in the sterilization method and contraceptives is that sterilization is a permanent method, while contraceptives at this time is not a permanent solution.
- To use either method of sterilization and contraception, these methods are recommended by the ST to be maintenance methods and should be combined with some kind of a reduction method. If this methods are used in conjunction with a reduction method, then the ST suggests that the reproductive control is initiated prior to the reduction to make it easier to capture and treat individuals.
- These methods are important to maintain within the EIS. Some people would want these methods identified and studied in comparison with other methods. Many of the public think that these methods are the answer and the public meeting is helpful to explain the issues to using these methods.
- The ST suggested that a specific drug or method should not be specified, rather to leave it open for new technology to be used as it becomes available.
- The ST was provided a summary of contraceptives in an earlier call and Kevin Sullivan's work was also provided earlier, so we have enough information at the moment to pull together a contraceptive/sterilization method for the EIS.

### 3. Fencing

- Fencing was touched on briefly earlier, which focused on what is being used at CATO. The ST concluded that fencing the entire park should be dismissed due to park access and other concerns. At CATO, the fencing alternative is to protect five to ten percent of the park from depredation and to promote forest regeneration. After a number of years of protection when the forest has regenerated, the fences would be moved to protect a new area.
- At ROCR, a logistical problem occurs with the number of areas that are "off-trail" or remote to fence. In ROCR, to protect 5% of the park, would be approximately 170 acres. The first 170 acres would not be too difficult, it is when the fences require relocation that it becomes difficult to keep the fences remote. The fences would require irregular shapes.
- Fences could be built along trails and roads, but becomes a visual intrusion and could create other human issues.
- In some of the small areas, fences could be put up but the same issues of trails, roads etc. occurs. Within some of the smaller parks, fencing and repellents would shift some of the habits of the deer, by pushing them into the neighborhoods or putting pressure into the neighborhoods. Relocation could become more intrusive in 10-15 years.
- Maintenance of the fences will be a larger concern at ROCR because the park is in a more urban setting and is broken into many smaller satellite areas.
- Ken will review the CATO document and provide an estimate of cost and labor for the parks area.
- A concern of the ST was that if the park's goal and objectives is to fence 5-10% of the park and using adaptive management, to determine if the objectives and goals are being met. A long-term experiment is conducted, meaning that it could be 20-30 years of protection to determine if the park is meeting objectives in fencing. More damage could be done prior to having the support that the park is or is not meeting its objectives.

- Ken determined for the park that building a fence and leaving it up is not realistic for the park.
- The ST determined that this would need to be in combination with another method, probably a non-lethal alternative. Also currently the ST does not have a measure on when the fences can be moved or removed or if they end up staying up permanently.
- Every square lot surrounding the park will be developed in the future. This fencing alternative may be OK for the main portion of the park, but is probably not appropriate for the small parcels.

#### **4. Distance Sampling**

- Current distance sampling protocol is only appropriate for the main portion of the park. Encounter rates is the most important outcome. The other aspect to this is that no monitoring is going on in the city itself or outside of the park.
- Brian Underwood, Bill and Scott conversed outside the call about using distance sampling to get an encounter rates instead of density. The actual count is useful, though the park may determine to look at the open plots to allow the park to survey on what is worth surveying.
- A potential to determine what is occurring outside of the park may be accomplished by monitoring the small portions of the park and potentially the city neighborhoods.
- The tributaries are being used as travel ways instead of home base by deer and are not really wild areas.
- The ST would like a general description of these tributary parks on how "wild" they are and what is the long-term management, so that they can be determined on how they fit the plan. Most of the tributaries are to protect the water quality within its waterways.

#### **Schedule**

Next Meeting is scheduled for April 28<sup>th</sup>, 2006 at 9 am Eastern. The same dial up number will be used.

Topics to be discussed will be direct reduction and associated topics, and it might be appropriate to see how the District will participate in a plan.