



**Public Employees for Environmental Responsibility**

2000 P Street, NW • Suite 240 • Washington, D.C. 20036 • 202-265-PEER(7337) • fax: 202-265-4192  
e-mail: [info@peer.org](mailto:info@peer.org) • website: [www.peer.org](http://www.peer.org)

March 8, 2010

U.S. Fish and Wildlife Service  
Alex Hoar  
Endangered Species Permit Office  
300 Westgate Center Drive  
Hadley, MA 01035-9589

To: Alex Hoar, Fish and Wildlife Service Permit Coordinator, Region 5  
Cc: Marvin Moriarty, Regional Director for Fish and Wildlife Service Region 5  
Martin Miller, Chief of Threatened and Endangered Species Division in Region 5  
Jane Lyder, Deputy Assistant Secretary for Fish and Wildlife and Parks, Department of the Interior  
Jeremy Coleman, White Nose Syndrome Coordinator for Fish and Wildlife Service  
Shirl Dressler, Secretary Senior for Virginia Department of Game & Inland Fisheries  
From: Christine Erickson, Staff Attorney, Public Employees for Environmental Responsibility  
Re: Request to Revoke the Smithsonian National Zoological Park, Conservation and Research Center's Permit for the Creation of Permanent Captive Colony of Endangered Virginia Big Eared Bats, and for Transfer of the Remaining Bats to a Qualified Facility

Dear Mr. Hoar,

In late 2009, the US Fish and Wildlife Service (FWS) approved a permit allowing the Smithsonian's Conservation and Research Center (CRC) to capture and maintain a population of the endangered Virginia Big-Eared Bat (VBEB). While we support the Service's efforts to safeguard the VBEB population from the growing threat of white-nose syndrome, we would like to bring to your attention the distressing facts we have learned regarding the VBEB captivity program. As it now stands, we believe that the CRC's captivity program is in gross violation of both moral and legal standards of humane care. We also believe that the CRC has failed to comply with the "Plan for Controlled Holding, Propagation, and Reintroduction" for the VBEB.

I. The bats have not been maintained in compliance with Federal law 50 C.F.R. § 13.41

In November 2009, the CRC brought in the country's leading experts on insectivorous bats to assist them in ensuring the health and well-being of the captive VBEB population. Unfortunately, however, the experts' recommendations and teachings were ignored from the outset. The experts recorded and documented the ongoing violations and abuses in great detail throughout the first few weeks of the project, in both writing and photographs. The details were compiled into the final report by Singleton Consulting's lead expert in the VBEB project. The list of abuse, mismanagement, and negligence compiled in that report is long and detailed. Among the most egregious documented violations are:



- Improper handling of the bats, leading to broken fingers, open sores, skin infections, eye infections, bruised legs and testicles, anorexia, capture myopathy and death. The improper handling occurred despite the requirement that CRC employees receive qualified training before the project began, and continues despite the repeated objections of SC and Bat World Sanctuary consultants, and their attempts to properly educate CRC employees.<sup>1</sup>
- Prolonged exposure to excessive heat in an incubator has increased the rate of capture myopathy for at-risk bats. This is directly contrary to expert recommendations that bats at risk of capture myopathy are best served by cooling and fluid therapy.<sup>2</sup>
- Cage mesh is twice the recommended size, allowing wings and feet to become trapped in metal wire, causing entanglement, injury, self-mutilation, and death.<sup>3</sup>
- Improper feeding and nutrition: the bats have not had adequate access to a consistently placed water supply; have not been fed in a consistent manner; have been denied recommended supplements; been given food too large for them to adequately ingest; and fed in ways that make them dependent on human handlers, destroying eventual hopes of reintroduction into the wild. These problems have led to various health problems, reduced rates of recovery from those health problems, and caused poor adaptation to confinement.<sup>4</sup>
- Improper feeding and cleaning has led to severe skin lesions. In particular, hand-fed food has been allowed to dry and crust on the bat's skin, leading to severe ulcerative dermatitis.<sup>5</sup>
- An ongoing combination of lack of expertise and disregard for proper veterinary care:
  - The above mentioned lesions were treated with hydrogen peroxide, despite experts' repeated objections that peroxide was preventing proper healing, and recommendations that an oil-based ointment be used instead.<sup>6</sup>
  - SC's veterinary experts, those most qualified to treat the bats, were not permitted to perform subcutaneous injections. The task was left to CRC members with no prior experience with insectivorous bats. Improper injection techniques led to obvious pain and distress, with bats crying out on several occasions. On at least two occasions, the needles were seen puncturing the gloves of the CRC workers, causing blatant health risks for both humans and bats.<sup>7</sup>
  - Eyewash was selected to treat a bat with an eye infection, despite clear evidence from independent studies that ophthalmic ointment is preferred to eyewash in insectivorous bats. SC consultants were ignored when they presented this evidence. Further, the eyewash was applied in an excessive amount, causing distress, irritation, and pain.<sup>8</sup>
- A lack of proper social grouping and enrichment opportunities, despite clear recommendations of the expert consultants, and repeated promises on the part of CRC.<sup>9</sup>
  - As just one example, SC consultants repeatedly requested that bats be given access to natural prey such as crickets, in order to encourage natural foraging behavior. CRC supervisors instructed caretakers to offer crickets only once, after

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<sup>1</sup> Single Consulting Final Report (Final Report) page 8

<sup>2</sup> Final Report page 8

<sup>3</sup> Final Report page 4

<sup>4</sup> Final Report pages 6-7

<sup>5</sup> Final Report pages 9-10

<sup>6</sup> Final Report page 10

<sup>7</sup> Final Report page 11

<sup>8</sup> Final Report page 11

<sup>9</sup> Final Report pages 11-12



several requests had been made. The crickets provided were too small, and easily escaped from the enclosure, defeating the purpose of providing them at all.<sup>10</sup>

The list of violations continues; those presented here merely represent some of the most serious and fundamental of the problems. The pattern of activity shows a repeated and ongoing disregard for the welfare of the bats and the opinions and recommendations of the experts.

Given the facts at hand, CRC has clearly violated federal regulations at 50 C.F.R. § 13.41: “[a]ny live wildlife possessed under a permit must be maintained under humane and healthful conditions.” Given the illness, injury, and death of the captive VBEB population, the violation of the “healthful” requirement speaks for itself. Nearly 75% of CRC’s captive population has died within 3 months of the program’s start. According to the Smithsonian’s own press release<sup>11</sup>, only 11 out of the original population of 40 remain alive today. What remains of the captive VBEB population continues to suffer from avoidable health problems, and continues to be subject to improper treatment that further compounds both risk and suffering. Unless the remaining 11 bats are immediately transferred to a qualified facility, it is unlikely they will live beyond a few more weeks. Even under the most challenging conditions, no more than a 20% death rate is considered acceptable for captive insectivorous bats.

While “humane” is not explicitly defined in section 13, common parlance, dictionary sources<sup>12</sup>, and reference to any number of federal laws shows that the condition and treatment of CRC’s bats is far from humane. For instance, the immediately following section of federal regulations, 50 C.F.R. 14 (concerning the transportation of animals), explicitly addresses many of the abuses the bats were subjected to: exposure to dangerous temperature, improper nutrition, improper handling leading to stress and injury, and improper wire mesh size leading to the entanglement, injury, and mutilation of various body parts. Violation of any of these necessary and basic minimum animal care guidelines is inhumane and therefore illegal under the law of the United States. As detailed in SC’s reports and summarized above, CRC has violated each and every one of these humane standards. CRC has killed bats from exposure to temperatures too hot for their proper health and recovery from capture stress; they have handled the bats in ways that have caused repeated injury, and ignored expert advice on correcting their techniques; they have not provided the bats with proper food and nutrition in a consistent and healthy manner; and they have provided enclosure with improper mesh size, greatly increasing risk of entanglement, injury and mutilation.

## II. CRC failed to comply with the “Plan for Controlled Holding, Propagation, and Reintroduction” for the Virginia Big Eared Bat

The CRC also failed to comply with the conditions contained in the “Plan for Controlled Holding, Propagation, and Reintroduction (“the plan”)” which accompanied the permit application.

First, CRC clearly misrepresented itself by citing the training employees would receive from third-party experts on insectivorous bats, and by citing their intention to use third-party experts as consultants on the project. While it is true that CRC has nominally complied with such claims,

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<sup>10</sup> Final Report page 11

<sup>11</sup> Available at: <http://smithsonianscience.org/2010/03/captive-colony-of-virginia-big-eared-bats-providing-valuable-lessons-in-battle-against-deadly-white-nose-syndrome/>

<sup>12</sup> For instance, the Oxford English Dictionary’s relevant entry on humane is: “designed or calculated to inflict minimal pain.” Given the list of documented error, abuse, and neglect, and the complete disregard for expert advice on how to reduce physical injury and psychological stress, CRC’s current management of the VBEB program is anything but humane.

they have failed to comply with the substantive reasons for either. Their employees continue to make fatal errors despite the training they were initially given, and CRC has chosen to ignore the recommendations of their expert consultants. As the experts themselves reported, CRC seems to have opposed expert input from the outset:

... SC's on-site recommendations were met with resistance or outright hostility. Communication with the client was difficult or nonexistent during the three week period. SC was not introduced to the team of Primary Investigators who were responsible for making all decisions for the bat colony in a timely manner. Additionally, and most significantly, SC was not invited to any daily meetings or conferences to discuss colony progress or provide further recommendations to help the project succeed. In general, SC opinions were not solicited and SC recommendations for daily care, diet, feeding, cleaning, behavioral observations, handling and medical treatments were, for the most part, disregarded.<sup>13</sup>

More fundamentally, CRC has failed to comply with the details of its own plan:

- The plan specifically notes that VBEB are particularly susceptible to disturbances of their habitat.<sup>14</sup> Nevertheless, CRC has repeatedly made unnecessary intrusions and disturbances, including the repeated unnecessary moving, changing, and emptying of food and water trays.<sup>15</sup> Food and water trays were abruptly and unnecessarily switched with each other.<sup>16</sup> New water trays were inexplicably brought into the habitat during very odd late hours.<sup>17</sup>
- The plan specifically notes that feeding regimens should be developed that allow the bats to retain familiarity with natural foraging behaviors.<sup>18</sup> Despite following the initial recommendations of the plan regarding adaptation to meal and wax worms, CRC ignored this part of the plan's feeding recommendations, making no effort to provide additional food sources that match natural behavior. As noted above, SC consultants repeatedly insisted that the bats be given access to crickets, a natural prey, to allow them to engage in natural feeding behavior. CRC provided crickets on only one occasion, and on that occasion provided crickets so small that they quickly and easily escaped from the bat enclosure, providing the bats with no opportunity to actually feed off them.
- Appendix B of the plan specifically suggests using mealworms of medium size, and clearly notes that meal worms that are too large will be difficult for the bats to eat, and will be counterproductive to adaptation to captivity. Nevertheless, as noted above, SC's final report specifically documents that bats were given mealworms that were too large for them to ingest.
- Appendix B of the plan specifically states that temperatures should be kept near the upper range of acceptable requirement during the quarantine period. As documented in the final report, temperature inside the habitat fluctuated as much as 20 degrees in a matter of minutes.<sup>19</sup>

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<sup>13</sup> Final Report page 12

<sup>14</sup> Plan page 14

<sup>15</sup> Final Report page 5

<sup>16</sup> *Id.*

<sup>17</sup> *Id.*

<sup>18</sup> Plan page 15

<sup>19</sup> Final Report page 5



- Appendix B of the plan specifically recommends certain nutritional supplements. These recommendations were repeated by expert consultants. As documented in the final report, CRC not only failed to provide those supplements, their use was specifically prohibited by staff.<sup>20</sup>
- Appendix B of the plan specifically notes that only a small team of caregivers should enter the habitat and interact with the bats to reduce stress. It further recommends that a single primary caregiver should be selected to minimize stress to the least possible level. As documented in the final report, bats were handled by at least six individuals in every observed feeding session. This unnecessary and harmful level of interaction caused significant stress and was counterproductive to the bats' health and adaptation to captivity.<sup>21</sup>

Finally, Appendix A, as drafted on November 20, 2009, includes a detailed and specific list of immediate recommendations for improving the captivity program, and reducing the unacceptable rate of injury, illness, and death that had been experienced up to that point.<sup>22</sup> Two weeks later, SC's final report complains of the exact same problems continuing to lead to unacceptable and avoidable levels of injury, illness, and death. The final report notes that every piece of abuse, neglect and mismanagement had been specifically and repeatedly brought to the attention of CRC managers. Despite the formal objections raised in Appendix A, CRC failed to correct even a single mistake in the subsequent two week period. This failure is a blatant disregard for expert advice, and an outright failure to safeguard the well-being of the captive bats. The only possible explanation for such a drastic failure is some combination of ignorance and incompetence.

Despite the ongoing threat to an endangered species, FWS has refused to release the CRC's application or the subsequently granted permit. However, given the stringent and detailed requirements involved in obtaining a permit to capture and hold an endangered species, it is inconceivable that CRC would have been granted that permit had it been candid about said knowledge and capabilities.

In its press release, CRC maintains that they followed the best advice of the experts. The facts show otherwise. Those same experts wrote independent reports stating that CRC ignored and avoided their advice at every turn once the program was implemented. The experts concern with CRC's mismanagement was so great that they eventually sought outside help to protect the safety of the bats. No fact could speak louder on CRC's internal reaction to the experts' pleas.

The CRC press release specifically states . . . "we were surprised to learn how sensitive this particular subspecies of bat is. Even the smallest change in environment or husbandry practices seemed to affect the ability of the bats to adapt to their new environment." Yet the facts show that they were warned of this problem in the expert reports. Further, the facts show that SC repeatedly critiqued several specific practices, including the number of people in the environment, the number of people handling the bats, and the stability in the manner and time in which the bats were fed. CRC simply ignored the problem.

In short, CRC has failed to comply with the permitted plan. In addition, CRC appears to have gone out of their way to avoid following the plan, ignoring their own experts' recommendations and opinions. The drafted plan and the trust in its implementation was a decisive factor both in

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<sup>20</sup> Final Report page 6

<sup>21</sup> Final Report page 5

<sup>22</sup> Appendix A: Immediate Recommendations, submitted to Warran Lynch November 20, 2009

granting CRC a permit, and in funding the program through a grant. Given CRC's subsequent disregard for its own procedures and experts, both the permit and the grant should be withdrawn.

### **Conclusion**

The documented history of CRC's VBEB captivity program is anything but the "healthful and humane" standard dictated in federal statutes. As such, the CRC program is in violation of United States law.

CRC ignored the drafted plans and procedures, as well as the expert advice it received from several bat experts. Given the seriousness of the situation, and the egregious nature of the ongoing violations, we respectfully request that CRC's permit be revoked, and the remaining bats be immediately transferred to a qualified sanctuary.

We look forward to your timely response. If you have any further questions or concerns, please feel free to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read 'C. Erickson', with a long horizontal flourish extending to the right.

Christine Erickson  
Staff Attorney  
Public Employees for Environmental Responsibility  
2000 P Street, NW, Suite 240  
Washington, D.C. 20036  
(202) 265-7337  
[cerickson@peer.org](mailto:cerickson@peer.org)