

# **A Selected Chronology of Events Related to the Endangered Species Act and the American Burying Beetle in Osage County Oklahoma.**

**Fred Storer, P.E. - August 6, 2015**

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## **January 1, 1970 – Environmental Policy Act**

The National Environmental Policy Act (NEPA) requires federal agencies to integrate environmental values into their decision making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions.

US EPA, <http://www.epa.gov/compliance/nepa/> 5.2.15

## **December 28, 1973 – Endangered Species Act**

Section 7 of the ESA requires Federal agencies to use their legal authorities to promote the conservation purposes of the ESA and to consult with the FWS and NMFS, as appropriate, to ensure that effects of actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of listed species. During consultation the “action” agency receives a “biological opinion” or concurrence letter addressing the proposed action.

Section 10 of the ESA may be used by landowners including private citizens, corporations, Tribes, States, and counties who want to develop property inhabited by listed species.

*The purpose of Section 10 is to exempt non-federal projects from an ESA section 9 enforcement.*

*It is entirely at the applicant’s discretion. It is very unlikely to be used for a small project.*

US EPA [http://www.fws.gov/endangered/esa-library/pdf/ESA\\_basics.pdf](http://www.fws.gov/endangered/esa-library/pdf/ESA_basics.pdf) 5.2.15

## **1980**

Notes on Beetle Distributions, with a Discussion of *Nicrophorus americanus* Olivier and Its Abundance in Collections (Coleoptera: Scarabaeidae, Lampyridae, and Silphidae)

Lloyd R. Davis, Jr., *The Coleopterists Bulletin*, Vol. 34, No. 2 (Jun., 1980), pp. 245-252

*Olivier, refers to French entomologist Guillaume Antoine Olivier (1756-1814).*

## **1982**

An ABB specimen reported by FWS in 1982, Sequoyah County, Oklahoma. (1991 publication)

U.S. Fish and Wildlife Service, 1991. American Burying Beetle (*Nicrophorus americanus*) Recovery Plan. Newton Corner, Massachusetts.

## **1982**

Records of ABB capture from 1951 through 1974 in are reported to have occurred in Arkansas, Illinois, Michigan, Missouri, Ontario and Tennessee.

Robert S. Anderson, On the Decreasing Abundance of *Nicrophorus Americanus* Olivier in Eastern North America, *The Coleopterists Bulletin*, 36(2):362-365. 1982

## **July 13, 1989**

FWS publishes a final rule declaring the American Burying Beetle to be endangered. Federal Register, Vol. 54, No. 133

## **1991**

FWS Recovery Plan: Two natural populations are reported, Block Island, RI and eastern Oklahoma. FWS reports one ABB specimen from Sequoyah County, OK in 1982. In 1991 ABB’s are reported in Cherokee, Muskogee, and Latimer Counties, OK.

*The plan was to protect and enhance (conduct research).*

U.S. Fish and Wildlife Service, 1991. American Burying Beetle (*Nicrophorus americanus*) Recovery Plan. Newton Corner, Massachusetts.

### **June 5, 1997**

Secretarial Order (No. 3206): American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act

Signed by Bruce Babbitt, Sec. of Interior, and William Daley, Sec. of Commerce (Clinton's second term).

".... strives to ensure that Indian tribes do not bear a disproportionate burden for the conservation of listed species, ..."

"Principle 3. (C) The Departments, as trustees, shall support tribal measures that preclude the need for conservation restriction."

*This may prove to be a useful policy statement. Although, we have no evidence that up to this time it has ever been considered vis-à-vis the ABB in Osage County.*

Endangered Species Act, Law, Policy, and Perspectives, Donald C. Baur and Wm. Robert Irvan, (Editors), Second Edition, 2010, devotes an entire chapter to this subject, "Indian Rights and the Endangered Species Act" by Mary Gray Holt.

The chapter describes in detail the circumstances leading to S.O. 3206.

Mary Gray Holt concludes: "Twelve years later (written 2009), the legal conflict between the traditional canons of Indian law and the Endangered Species Act remains unresolved. It seems quite likely that Secretarial Order No. 3206 successfully holds that conflict in an angle of repose."

### **August 2005**

The Corps of Engineers published an Environmental Assessment related to the disposal of federal land in Osage County originally acquired for the now defunct Candy Lake Project.

"Existing populations [ABB] are known to occur in six states: Nebraska, Rhode Island, Oklahoma, South Dakota, Kansas, and Arkansas." .... Although it is unlikely that American burying beetles are present at the Candy Lake project site, protocol-level surveys for the burying beetle were not conducted because negative results would not prove absence. Therefore, for the purposes of this EA, it is assumed that American burying beetles could occur, although rarely, at the project site." 3.5.1.2 Page 3-17 Candy Lake Land Transfer Project EA 3-18 U.S. Army Corps of Engineers, August 2005 Tulsa District  
*It is of interest that the Corps recognize that the ABB could be at the site but, looking for them and not finding them proves nothing. The Corps takes a "so what" position regarding the Beetle although the FWS recommends (letter included in appendix) that the Corps look for ABBs.*

### **June 5, 2007**

The Bureau of Land Management published a Finding of No Significant Impact/Decision Record, Finding of No Significant Impact (Based on EA-020-2007-106, May 25, 2007) or proposed federal oil and gas leases in Arkansas which included several counties of known ABB habit.

The EA covers 13 proposed lease tracks this statement is typical of those in ABB counties:

Page 24, EOI (Expression of Interest) 202, "This proposed lease is within five miles of the Ozark National Forest and the existing ABB BO (Biological Opinion) would require the applicant of any project where disturbance would total over 3 acres to conduct a trap and release program for American burying beetle utilizing accepted protocols outlined in the reasonable and prudent measures in the programmatic biological opinion written by the U.S. Fish and Wildlife Service, Conway Ecological Services Office and dated December 19, 2006.

*Note the use of a 3 acre threshold as a test for significance.*

## March 2008

### FWS 5-Year ABB Review

“A rank of 5c indicates that the listed taxon is a full species facing a high degree of threat and with a low recovery potential. The suffix “c” connotes conflict with construction or other development projects.” (Page 2)

“After 1991, the ABB was found to be distributed more broadly across eastern Oklahoma into western Arkansas and into large areas of central Nebraska.” (Page 4)

“Two large land areas near TNC Tallgrass Prairie are enrolled in the Bureau of Land Management’s program for maintaining wild horses taken from Federal land in the West. At least one more wild horse facility is proposed in this same general area. These facilities, depending on stocking rates, could be incompatible with habitat maintenance for small birds and mammals.” (Page 28)

*Small birds and mammals, are carrion sources for the ABB.*

“... red cedar encroachment reduces the numbers of most silpid species present and degrades the habitat for burying beetles by limiting their ability to forage for carrion. .... Expanding residential development and associated light population of the night-time sky is cause for concern ....” (Page 28)

“ ... vertebrate predators have the potential to compromise the persistence of ABB occurrences by impacting the carrion resources upon which the ABB depends. For example, feral cats on Block Island may be a potential predator of ring-necked pheasants which have become naturalized on the island and are believed to be a primary carrion source for the ABB on the island.” (Page 31)

*Fred Storer’s discussion with Block Island residents argues that Block Island has feral cats under control via a capture and sterilization program. Block Island has abundant bird populations which benefit the ABB as well as the absence of outdoor lighting and automotive traffic (roadkill/ABB/traffic interaction).*

“The ABB is capable of moving considerable distances across the landscape (e.g. 1 km per night) in search of carrion for both food and reproduction. This characteristic, along with the practical reality that they must be lured into traps to determine presence, makes it difficult to accurately define and delineate ABB essential habitat in need of protection. .... it is difficult to clearly distinguish between an area that constitutes ABB habitat in a nearby area that does not. Therefore, in many situations it is difficult to apply the protective provisions under sections 7 and 9 of the ESA, because the use of baited pitfall traps may successfully capture beetles in locations where it is simply transient or present only opportunistically due to the carrion provided in the trap. ... it is the species’ unique life history and ecology make the implementation of available protective measures to perpetuate the essential features of ABB habitat particularly challenging. ... **Simply put, the ecology of this species requires landscapelevel conservation rather than a perpetual attempt to protect specific ABB occurrences in response to smaller-scale project reviews.**” (Page 31) *Emphasis is ours.*

**“The plan’s interim objective of eliminating the risk of immediate extinction has been met. The reclassification objective is based on demonstrating that the risk of extinction is no longer probable, and the criteria for this objective focus on the re-establishment of a representative distribution of the species in all four geographic portions of its former range.”** (Page 34) *Emphasis is ours.*

*Reclassification objective is to change the status from Endangered to Threatened. Because the FWS sees the need as establishing the ABB in other parts of the ABB’s former range there is no value in supporting a Beetle Bank in Oklahoma and no value in mitigating minor habit loss from oil and gas activities (while habit loss from rural residences runs amuck).*

From 4.0 Recommendations for Future Actions;

“4.0 Develop conservation strategies that emphasize the protection of essential features of large

occupied habitats (minimally fragmented landscapes with abundant carrion species and **de-emphasize small scale, site specific project reviews.**" (Page 36) *Our emphasis.*

"5.0 Develop Programmatic Biological Opinions with Federal agencies where appropriate to address section 7 consultation regarding the ABB at the landscape level, rather than by individual projects. This will not only afford the ABB protection and minimization of take but can better aid in the long-term conservation of the ABB." (Page 36)

*We do not have information on Section 7 consultations between the BIA and the FWS.*

*These are "instructions" from the FWS to the FWS. The current "find a beetle, don't find a beetle, buy stock in a Beetle Bank" is not following the "instructions".*

"7.0 Seek opportunities to partner with the Natural Resource Conservation Service and large private landowners to enroll ABB habitat in the Conservation Reserve Program CRP program and utilize other USDA and USFWS programs to restore and enhance ABB habitat through native species management." (Page 36)

*FWS visited the Washington County USDA office on May 1, 2015 and it was apparent that the USDA NRCS programs in Washington County have no connection or knowledge of the ABB vis-a-via the ESA, NEPA, or the FWS.*

*We cannot reconcile the FWS/BIA ABB search and buy credits program with this document published in 2008.*

U.S. Fish and Wildlife Service, March 2008. American Burying Beetle (*Nicrophorus americanus*) 5-Year Review Summary and Evaluation. New England Field Office, Concord, New Hampshire.

## **2008**

"In 2008, the BLM and the U.S. Fish and Wildlife Service (FWS) developed a Consultation Agreement regarding operation of the BLM's wild horse use long-term holding facilities within American burying beetle habitat in Oklahoma."

Letter from Joan Guilfoyle, Chief, Wild Horse and Burro Division, Bureau of Land Management to Fred Storer, October 3, 2014.

## **April 26, 2009**

In a Tulsa World article Michael Overall reports on the Oklahoma Department of Transportation's efforts to accommodate the ABB.

"The Oklahoma Department of Transportation would hire consultants to look for more beetles, at a cost of \$2,500 for the first survey and \$1,000 more for each additional survey. Each mile of a road project would require a separate survey. If the surveys found beetles, the department would have to "trap and relocate" as many as possible — keeping the project on hold in the meantime. "It was both time-consuming and expensive," complains Julianne Hoagland, a biologist in the department. "And it was really doing absolutely nothing for the American burying beetle conservation. "To sidestep the need for the surveys, Hoagland spent most of 2007 negotiating a deal among her agency, the U.S. Fish and Wildlife Service and the Oklahoma chapter of The Nature Conservancy, which operates the Prairie Preserve. Now, instead of funding beetle surveys, the state Transportation Department deposits an equivalent sum of money into a "conservation bank\* [fund]." Hoagland says it could save the state potentially millions of dollars in the long run by keeping road projects on schedule."

Michael Overall, New Approach to Save Beetle Tried, Tulsa World, April 26, 2009

*\*In this context a "conservation bank" is a fund and not the same as a Conservation Bank preserve discussed below. The ODOT conservation fund was later abandoned, see below. One thousand dollars*

*per mile for a 300 ft. right-of-way is equal to \$27 per acre.*

## **May 20, 2009**

The Oklahoma FWS offices issues American Burying Beetle *Nicrophorus Americanus* Survey Guidance for Oklahoma.

This document is about how to conduct a survey.

## **2009**

FWA/ODOT/USFWS/TNC - Oklahoma: American Burying Beetle Conservation and Transportation Improvement Streamlining Initiative

“Past consultations for the ABB on individual projects were costly, time-consuming, and resulted in few conservation results for the species. This new programmatic initiative aims to provide proactive conservation for the ABB that would allow ODOT and FHWA to comply with the Endangered Species Act (ESA). In order to accomplish this goal, ODOT, FHWA, and the USFWS have partnered with The Nature Conservancy (TNC), a non-governmental organization, to develop an initiative that would satisfy FHWA's ESA Section 7 Consultation for the ABB as well as provide for the conservation of the species within Oklahoma. The key to this initiative is TNC's American Burying Beetle Conservation Fund. The ODOT contributes monies to the Fund, which is held by TNC and used by the USFWS to enhance the conservation of the ABB in advance of potential impacts to the species from transportation projects. Federal Highway Administration describes “Oklahoma: American Burying Beetle Conservation and Transportation Improvement Streamlining Initiative” on the FWA website. “ODOT places funds that would have been spent on surveys and trap and relocations for individual projects directly into the ABB Conservation Fund. Money in the Conservation Fund provides for ABB research, land acquisition, conservation easements, and other conservation measure determined by the USFWS as appropriate mitigation for future transportation projects. The result is more meaningful ABB conservation than what would have been provided by continuing individual project-specific procedures on transportation projects within the range of the ABB.” .... “For more information, contact Julianne Hoagland at [jhoagland@odot.org](mailto:jhoagland@odot.org)”

*This arrangement is similar to the BLM's for wild horse pasture. As of June 24, 2015 this was still posted on the FHWA website.*

<http://environment.fhwa.dot.gov/ecosystems/eei/ok09.asp> 5/3/2015

## **February 12, 2010**

The Journal of Insect Conservation accepts for publication: Using species distribution models to guide conservation at the state level: the endangered American burying beetle (*Nicrophorus americanus*) in Oklahoma by Crawford and Hoagland.

*This paper is linked to the discredited paper and the Tulsa FWS. See November 7, 2012 and February 6, 2014.*

Crawford, H.C. and Hoagland, Using species distribution models to guide conservation at the state level: the endangered American burying beetle (*Nicrophorus americanus*) in Oklahoma , Journal of Insect Conservation, February 27, 2010.

## **2010 End of Year**

The Nature Conservancy reports in Oklahoma year in review 2010:

“Developers now have the option to aid in the conservation of the ABB and mitigate for habitat lost due to their development actions by donating to the ABB Fund and consulting formally with the Service. The Oklahoma Department of Transportation has joined in the ABB Fund arrangement and provides for

longterm conservation to the ABB by making annual contributions to offset habitat loss from their highway and bridge improvement projects. The ABB Funds can be utilized by The Conservancy for land acquisition, conservation easements, habitat restoration and research in areas of ABB existence. In 2010, ABB funds were used to purchase several in-holdings at the Tallgrass Prairie Preserve and to support additional ABB research at that location. Research results will be used to guide conservation efforts in Oklahoma and elsewhere.”

<http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/oklahoma/oklahoma-2010-1.pdf>

### **September 23, 2011**

The Nebraska Field Office of the FWS writes to the FWS Endangered Species Act Lead, Keystone XL Project. The letter addresses the path of the proposed pipeline which includes eight counties in Oklahoma.

“The construction and operation of the Keystone XL pipeline would likely cause mortality, harm, and harassment of ABBs in South Dakota, Nebraska and Oklahoma.” (Page 65)

“... because lost acres of high quality habitat are mitigated at a 3:1 or 2:1 ratio, the establishment and funding by Keystone of the ABB Habitat Conservation Trust as described in Appendix D is expected to more than offset the effects of the habitat loss, provided restoration of habitat temporarily lost is restored as stipulated in the Reclamation Performance Bond (Appendix E).” (Page 66)

*Appendices D and E were not attached to this copy. This did not include ABB conservation bank credits because it predates the establishment of the banks in Oklahoma, no other ABB banks exist.*

George, Michael D. to Gibson, K. Nicole, Transmittal of the U.S. Fish and Wildlife Service’s Biological Opinion on the Effects to Threatened and Endangered Species from the Issuance of a Presidential Permit to TransCanada Keystone Pipeline, LP (Keystone) by the U.S. Department of State for the proposed construction, connection, operation, and maintenance of the Keystone XL pipeline and associated facilities at the border of the United States for importation of crude oil from Canada, September 23, 2011, FWS-NE: 2010-377, 86 pages

### **September 2012**

In a subsequent publication FWS reported that it began working with the Muddy Boggy Conservation Bank in September 2012.

<http://www.fws.gov/southwest/docs/AMERICANBURYINGBEETLECONSERVATIONOK.pdf>

### **November 7, 2012**

Article, Using Spatial Models to Target Conservation Efforts for the Endangered American Burying Beetle, Luke A. Bell, Priscilla H. C. Crawford, Anita L. Barstow, Chris D. Tanner and Dixie L. Porter, accepted for publication by The Open Entomology Journal.

*This article is relevant in the March-April 2013 scientific misconduct issue.*

Bell et al, Using Spatial Models to Target Conservation Efforts for the Endangered American Burying Beetle, The Open Entomology Journal, 2013, 7, 1-8

### **December 31, 2012**

FWS Report of Osage County ABB survey results for 2012: 217 total samples, 28.6 % positive.

<http://www.fws.gov/southwest/es/oklahoma/Documents/ABB/Surveying%20final/ABB%20Location%20Data%202012.pdf>

### **June 1, 2012**

American burying beetle (ABB) *Nicrophorus americanus* is up dated by the Oklahoma FWS office. This document uses the 1.2 acre significance test. "Will your project disturb more than 1.2 acres and ABB is on your official species list? No-Your project will Not Likely Adversely Affect ABB. Document this determination on your species conclusion table and submit it with your project consultation package. Your project can move forward without further consideration of ABB."

*This is the important procedure which was later replaced with the ICP. (See below)*

## **December 31, 2013**

FWS Report of Osage County ABB survey results for 2013:

Year Total Samples % Positive

2012 217 28.6

2013 162 3.1

<http://www.fws.gov/southwest/es/oklahoma/Documents/ABB/Surveying%20final/ABB%20Location%20Data%202013.pdf>

## **August 1, 2012**

Jessica Jurzenski's PhD thesis on the ABB, University of Nebraska.

*A reflection of the quality work done in Nebraska on the ABB.*

## **March 2013**

American Burying Beetle, A Species Conservation Assessment for the Nebraska Legacy Project, Melissa J. Panella, Nebraska Game and Parks Commission.

*This publication includes recommendations which are reflected in Nebraska's practical practices.*

## **March 4, 2013**

OIPA, Brian Woodard, VP Regulatory Affairs, comments on the FWS's Notice of Intent to Prepare a Draft Impact Statement for a General Conservation Plan for the American Burying Beetle for Pipelines and Well Field Development in Oklahoma and Texas. (19 pages)

Regarding the Section 10 process: "Because the voluntary decision to pursue an ITP (Incidental Take Permit) lies with the prospective permittee, the **applicant** selects the desired coverage and scope of the conservation plan and permits. (Page 5) *Woodard is arguing that the FWS should be flexible with the strategy to be used for mitigation.*

"As CEQ (Council on Environmental Quality, the NEPA agency) has explained, "reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense ....."' (Page 11)

"The Service has indicated that it currently plans to authorize only one general method of mitigation under the GCP – habitat conservation in the form of mitigation banks and permittee-responsible mitigation. While we agree that those mitigation methods generally are effective, and OIPA supports their inclusion in the GCP, we have significant concerns that limiting the approved mitigation measures to only those two options will render mitigation infeasible." (Page 12) *The authors of this chronology would not go so far as to say "those mitigation methods generally are effective".*

"Our concerns with FWS limiting the approved mitigation measures to a banking credit program and permittee-responsible mitigation center on two principal issues: (1) the mitigation banking option would be cost-prohibitive; and (2) the permittee-responsible mitigation will be impracticable." (Page 12)

"In lieu fee mitigation – The option of in lieu fee mitigation (e.g. conservation funds) has been conspicuously absent from FWS's discussions of possible mitigation measures under the GCP. That oversight is particularly troubling to OIPA. FWS has long endorsed payment of in lieu fees as a proven

mitigation technique under the ESA, and continues to support conservation funds to protect numerous species in states across the country. The ABB and Oklahoma are no exception. In fact, the Service recently has supported at least two conservation funds and one conservation trust to address ABB impacts within the state, the latter of which it approved specifically to mitigate ABB impacts from a pipeline project. *See, e.g.,* The Nature Conservancy's ABB Conservation Fund; Okl. Dep't of Transp. ABB Conservation and Transportation Improvement Streamlining Initiative (available at <http://www.environment.fhwa.dot.gov/ecosystems/eci/ok09.asp> ); Conservation Trust Agreement for TransCanada Keystone Pipeline (2011)."

Brian Woodard, VP Regulatory Affairs, OIPA to Field Supervisor, Oklahoma Ecological Services Field Office, U.S. Fish and Wildlife Service, Notice of Intent to Prepare a Draft Environmental Impact Statement for a General Conservation Plan for the American Burying Beetle for Pipelines and Well Field Development in Oklahoma and Kansas, March 4, 2013.

### **April 25, 2013**

Oklahoma Ecological Services Field Office American Burying Beetle Carrion Removal Protocol is issued. Sub-title is "Using dogs to identify and remove carrion as a means to minimize the "take" of American burying beetle (ABB) using Dogs.

*This is potentially useful for removal of carrion ahead of construction during the active season.*

### **Prior to August 6, 2013**

The Oklahoma FWS removed the reference to 1.2 acres as a test of significance.

This is reported in FWS meeting notes, American Burying Beetle Science Review August 6-7, 2013.

### **February 6, 2014**

Article from Public Employees for Environmental Responsibility

"Managers within the U.S. Fish and Wildlife Service (FWS) overrode their scientific experts to adopt an inaccurate map based on a flawed model that significantly shrank the range of an endangered species, according to agency investigative reports released today by Public Employees for Environmental Responsibility (PEER). The managers not only retaliated against scientists who voiced objections but rushed into publication of bogus scientific journal article to cover their tracks."

"Based on complaints from FWS scientists, specially convened Scientific Integrity Review Panels found two "high-level" officials guilty of scientific misconduct. The panels found that Dixie Porter, supervisor of the FWS Oklahoma Ecological services field office in Tulsa, Oklahoma, and Luke Bell, FWS Branch Chief for Threatened and Endangered Species and Contaminants."

*The findings of the panel were made in March and April of 2013. Is this significant? We don't know, but, it did occur in the period of time that the mitigation and offset program was being developed.*

<http://www.peer.org/news/news-releases/2014/02/18/senior-officials-skewed-science-to-benefit-xlpipeline/> 9/22/2014

<http://www.eenews.net/stories/1059994174> 9/21/2014

[http://www.peer.org/assets/docs/doi/2\\_6\\_14\\_Supplemental\\_report\\_summary.pdf](http://www.peer.org/assets/docs/doi/2_6_14_Supplemental_report_summary.pdf) 5/2/2015

### **May 21, 2014**

FWS – Tulsa on establishing mitigation lands

"Mitigation and offset programs, including conservation banks, for federally listed species are proving effective at mitigating the effects of take of listed species, including effects from loss of species habitat in many states. ... The Service recommends offsetting the effects of taking through conservation (protection, preservation, and management) of ABB habit in perpetuity (referred to herein as "mitigation lands") to assist in recovery efforts of the ABB."



*The only reference to the 2008 5-Year FWS plan was to the historic range of the ABB. There is no acknowledgement that a conservation bank is counter to the 2008 5-Year plan.*

U.S. Fish and Wildlife Service, May 2014, American Burying Beetle Conservation Strategy For the Establishment, Management, and Operations of Mitigation Lands, Southwest Region

## **May 21, 2014**

FWS – Tulsa Publishes OIL AND GAS INDUSTRY CONSERVATION PLAN Associated with the Issuance of Endangered Species Act Section 10(a)(1)(B) Permits for the American Burying Beetle in Oklahoma

“COOPERATORS: U.S. Fish and Wildlife Service; Individual Oil and Gas project proponents engaged in exploration, development, extraction, or transport of crude oil, natural gas, and/or petroleum products; Oklahoma Independent Petroleum Association (OIPA) members.” (Page 2)

“FUNDING PLAN: Applicants are committed to full implementation of the ICP and will mitigate for all unavoidable impacts according to the Mitigation Strategy for the ABB and the anticipated impacts described in their Individual Project Package (IPP) application (Section 7.2.1). Funding assurances will be provided with their Individual Project Package application (Section 6.0).” (Page 2)

“Participation in the ICP and an application for take authorization is voluntary.” (Page 4)

“We developed this document in cooperation with the Oklahoma Independent Petroleum Association (OIPA), its members, and other interested oil and gas companies in an effort to best meet the current and anticipated needs of the industry and the Service’s statutory and regulatory requirements.” (Page 5)

“Mitigation Land Options

..... Project proponents should consult their Incidental Take Permit associated with their approved Habitat Conservation Plan or Incidental Take Statement .. for the correct type and number of credits to purchase. ... 2. Conservation Banks: Conservation banks are mitigation lands that are established by a party other than the project proponent, referred to as the Bank Sponsor. ... “ (Page 5) *(Although somewhat obtuse FWS is saying: if you want Take permit you will need to purchase credits.)*

“Permits issued under the ICP may

cover new construction for up to 24 months and operation and maintenance activities for up to 20 years after Permit issuance. Permit duration will not exceed 20 years. Therefore, take issued under this ICP may occur for a maximum of 22 years following ICP authorization.” (Page 8)

“The only alternative to the proposed incidental taking we considered is for project proponents to avoid any actions that could result in take of ABB within the species’ range. Under this alternative, some exploration, development, and transportation of crude oil, natural gas, and petroleum products would be curtailed within the range of the ABB (to avoid take of the species) and therefore would not meet the needs of project proponents. Complete avoidance of ABB habitat is not practical or feasible for most oil and gas industry activities within the Planning Area.” (Page 9)

“2.0 COVERED ACTIVITIES

2.1 Upstream Production

Upstream production, as defined by this ICP, includes activities associated with oil, natural gas, and other petroleum products and development of the infrastructure required to extract those resources. Covered activities associated with upstream production include:

Geophysical Exploration – also known as seismic exploration

Construction, operation, and maintenance of new and existing well field infrastructure and decommissioning of obsolete facilities, including:

Well pads

Drilling and completion activities

Wells

Gas flaring

Work and access roads

Electrical distribution lines (voltage must be 34.5 kilovolts (kV) or less)

Off-site impoundments

Communication towers

(Page 10)

#### “3.1.2.1 Areas Unfavorable for the ABB

While the ABB uses a wide variety of habitats, the Service currently believes that areas exhibiting the following characteristics are *unfavorable* for use by ABBs based on disturbance regime, vegetation structure, unsuitable soil conditions, and carrion availability:

1. Land that is tilled on a regular basis, planted in monoculture, and does not contain native vegetation.
2. Pastures or grasslands that have been maintained through frequent mowing, grazing, or herbicide application at a height of 20 cm (8 inches) or less.
3. Land that has already been developed and no longer exhibits surficial topsoil, leaf litter, or vegetation.
4. Urban areas with maintained lawns, paved surfaces, or roadways.
5. Stockpiled soil without vegetation.
6. Wetlands with standing water or saturated soils (defined as sites exhibiting hydric-soils, and vegetation typical of saturated soils, and/or wetland hydrology). “

(Page 24) *(This is a familiar statement of unfavorable habitat not unique to this document.)*

#### “3.1.5 Reasons for decline

The prevailing theory regarding the ABBs’ decline is that habitat fragmentation (USFWS 1991): (1) reduced the carrion prey base of the appropriate size for ABB reproduction, and (2) increased the vertebrate scavenger competition for this prey (Kozol 1995, Ratcliffe 1996, Amaral et al. 1997, Bedick et al. 1999).” (Page 27)

#### “3.1.6 Threats

The ABB Recovery Plan (USFWS 1991) and the 5-year Species Status Review (USFWS 2008a) identify potential threats to the ABB, including: disease/pathogens, pesticides, direct habitat loss and alteration, interspecific competition, loss of genetic diversity in isolated populations, increase in competition for prey, increase in edge habitat, decrease in abundance of prey, agricultural and grazing practices, and invasive species. (Page 27) *(Again, a familiar statement by FWS. No explanation is provided as how the mitigation under provided by this Conservation Plan will address the causes of decline.)*

“While the oil and gas activities covered under the ICP would likely cause take of ABBs in the form of mortality, harm, and harassment, some of these losses constitute a one-time or short duration pulse effect to the ABB populations in Oklahoma, so they will not affect ABB populations long-term. The restoration program would ensure that the acres disturbed by Projects will be either restored appropriately or mitigated at the rate for permanent impacts (1:1 or higher). In addition, protection of

ABB habitat in previously unprotected areas would improve the likelihood of survival and recovery of the species.” (Page 32) *(This seems to be a clear statement that this Conservation Plan is not need.)*

#### “3.3.2 ABB Habitat within the ICP Planning Area

Areas unsuitable for the ABB (areas where take is not expected to occur) included the land cover categories of Open Water, Developed Open Space, Developed Low Intensity, Developed Medium Intensity, Developed High Intensity, Barren Land, and Cultivated Crops.

Approximately 85.8 percent (19,612,333 acres; 7,936,830 hectares) of the Planning Area was considered ABB habitat according to NLCD data, and approximately 14.2 percent (3,245,830 acres; 1,313,541 hectares) was not considered ABB habitat.” (Page 33) *(This analysis fails to identify the portion of Hay/Pasture (4,694,828 acres) which are not suitable habit due the FWS criteria of 8 inches of grass height and issues with wild horse pasture and intense grazing of cattle. Presumably any activities on unsuitable land would not be ABB habitat and can be excluded from mitigation requirements.)*

#### “3.3.4 Total Impact Estimates within Planning Area

.... the Service anticipates that the overall percentage of range-wide ABB habitat that may be impacted by Covered Activities in this ICP is likely much smaller than 0.16 percent (the percentage of Oklahoma ABB habitat in that may be impacted by Covered Activities).” (Page 38)

#### “4.2.2.2 Offsite Habitat Mitigation through Mitigation Lands for Temporary, Permanent Cover Change, and Permanent Impacts”

Three options are presented for habitat mitigation, Individual-or Permittee-responsible for mitigation lands, Conservation Banks, or Third party mitigation lands. (Page 46)

#### “4.2.2.3 Mitigation Ratios

Mitigation ratios are established to provide appropriate mitigation for the type, duration, and location of project-related impacts and related take or effects of take. These mitigation ratios (Table 3) are set to provide progressively more mitigation for progressively more severe levels of adverse effects or take.” (Page 47)

Mitigation ratios vary from 1 to 0.25 (temporary impacts outside of conservation priority area) to 1 to 3 (permanent impacts).

### **Summer 2014**

The Nebraska Department of Roads in the Summer NDOR Environmental Bulletin provides mowing instructions for ABB habit. Instructions are to start mowing two weeks before ground disturbance at construction sites and keep grass length to less than 8 inches for the duration of work.

***This appears to be an extremely attractive solution. If a new pad, roads, etc. were mowed before the active season and kept mowed. The ABB would avoid the area. No ABB take would occur. Could it be that simple?***

<http://www.transportation.nebraska.gov/environment/e-bulletin/2014-Summer.pdf>

### **June 4, 2014**

Publication of American Burying Beetle by US FWS, Oklahoma. This is a 28 page survey of the status to the ABB.

Page 17. “Land conversion to agriculture and development, logging, fire suppression, and intensive

domestic livestock grazing are the primary causes of habitat loss and fragmentation within eastern

Oklahoma today. For example, large areas of native grasslands have been converted to

introduced

grasses such as fescue and bermuda varieties to improve pastures for intensive cattle grazing operations.”

*There is no mention of the Oil and Gas ICP or Conservation Banks. Pasture improvement is supported by USDA NRCS. T*

### **July 15, 2014**

The Osage BIA Superintendent issues a letter notifying the lessees that beginning August 12, 2014 they will be required to prepare draft environmental assessments for all future proposed actions requiring BIA approval.

*This results in recognition that the BIA must complete ESA Section 7 consultation requirements for the ABB.*

### **August 2014**

The Oklahoma FWS office published ACTIONS WITH NO IMPACTS TO FEDERALLY-LISTED SPECIES OR OTHER FEDERAL TRUST RESOURCES (two pages).

“The U.S. Fish and Wildlife Service (Service) believes the following types of actions, individually and/or cumulatively, have no impacts on any federally-listed species, federally-designated critical habitat, or any other federal trust and wildlife resources in Oklahoma.”

The 13 dot point list contains such things as: a new home within a developed lot and/or related loans, resurfacing existing roads, replacement of utility poles in existing right-of-way provided the right-of-way maintained with grass less than 8 inches, and acquisition of land to be held in trust for Federally recognized Tribes.

*Of interest is what this list does not include (USDA NRCS ponds, REA power lines, new homes on rural lands supported by USDA Rural Development Loans, etc.) and the reason for its publication. It is directed to Federal agencies and activities with a federal nexus. Presumably, if an action is not on the list than an ESA section 7 consultation is suggested. While the ABB is not mentioned it is clearly the most obvious federally-listed species and directly impacted habitat impacts listed.*

The letter concludes: “This letter is your blanket approval for the above defined actions in Oklahoma from the Oklahoma Ecological Services Field Services of the U.S. Fish and Wildlife Service. These projects may proceed without first contacting the Service for approval. This blanket approval is valid until rescinded by the Service.”

### **August 12, 2014**

Hydration Engineering (Fred Storer) wrote Joan Guifoyle, Division Chief, Division of Wild Horse and Burros, BLM presenting this question: How does the BLM assure compliance with the National Environmental Policy Act and CEQ regulations related to the placement of wild horses and renewal of agreements to maintain wild horses within the Osage Nation?

### **August 29, 2014**

Senator Inhofe introduces legislation to delist the ABB. (American Burying Beetle Relief Act of 2014, S. 2678)

### **October 3, 2014**

Joan Guifoyle, Division Chief, Division of Wild Horse and Burros answered Fred Storer’s letter of August 12, 2014. In part:

“In 2008, the BLM and the U.S. Fish and Wildlife Service (FWS) developed a Consultation Agreement regarding operation of BLM’s wild horse long-term holding facilities within American burying beetle

habit in Oklahoma. The Agreement provides both the BLM and the FWS an opportunity to benefit from operational improvements while meeting collective obligations under the Endangered Species Act.”  
“As part of the conservation measures of the Agreement, the BLM provided a one-time payment of \$200,000, at the rate of \$1.00 per acre, for wild horse long-term holding facilities in American burying beetle habit in Oklahoma. The funds were transferred to the Oklahoma Chapter of the Nature Conservancy for the purposes of the American burying beetle conservation in the tallgrass-prairie habitats of Oklahoma.”

### **October 20, 2014**

ABBBCB, American Burying Beetle Conservation Bank, responded to an RFP from Hydration Engineering, PLLC quoting the cost of credits:

“1.) “The minimum number of credits we can provide”

We will provide credits down to the 0.25 credit as stipulated by USFWS in the ICP.

2.) “The cost for a block of 10 credits.”

ABBBCB will provide 10 Credits for a total cost of \$135,000 (\$13,500 per credit).

This block of credits represents a volume discount from the individual credit price of \$15,000 per credit, which would be used for single, or fractional, credits sales under your first question.”

Smith, Preston W. to Travis Keener, October 20, 2014 via. Email.

### **November 26, 2014**

Federal Register, Vol. 79, No. 228, Receipt of Six Incidental Take Permit Applications for Participation in the Oil and Gas Industry Conservation Plan for the American Burying Beetle.

This indicates pending sale of conservation bank credits to BP America Production, PetroQuest, MarkWest, LINN Operating, Bravo Arkoma, and Pantera Energy.

### **December 31, 2014**

FWS Report of Osage County ABB survey results for 2014:

Year Total Samples % Positive

2012 217 28.6

2013 162 3.1

2014 119 21.7

### **January 12, 2015**

The Norman Transcript reports that “Oklahoma Department of Transportation has purchased 700 beetle credits at a price of \$10,000 per credit, or \$7 million”.

*We contacted ODOT and were told that the department has set aside funds (over \$6 million) to purchase beetle credits. Some purchases having been made.*

Joy Hampton, Commissioner bugged by burden on funding, The Norman Transcript, January 12, 2015

### **January 20, 2015**

FWS announces a Chaparral Energy section 10 permit application under the Oil and Gas Industry Conservation Plan.

Federal Register Volume 80, Number 12 (Tuesday, January 20, 2015)][[Notices]][Pages 2724-2725]

### **February 25, 2015**

BLM Solicitation for New Off-Range Pastures for Wild Horses for new pasture space with a minimum capacity of 100 head in twelve states, including Oklahoma. Proposals are due April 22, 2015

*We found no indication of responsibilities regarding the ABB/NEPA/ESA. We assume that ABB responsibilities remain transparent to the lessor and are managed by the BLM.*

[http://www.blm.gov/wo/st/en/prog/whbprogram/2015\\_off\\_range\\_solicitation.html](http://www.blm.gov/wo/st/en/prog/whbprogram/2015_off_range_solicitation.html)

### **March 24, 2015**

Oklahoma FWS publishes American Burying Beetle Impact Assessment for Project Reviews.

This document contains a step-wise process for project impact analysis.

Page 12. "For projects that cannot avoid take of the ABB, the Service recommends mitigating the effects of the take through conservation (protection, preservation, and management) of occupied ABB habitat in perpetuity (referred to as "mitigation lands") to assist in recovery efforts for the ABB (Appendix B).

The Service strongly encourages habitat offsets to Federal agencies conducting formal Section 7 consultations, and the Service requires them of private entities developing HCPs (pursuant to section 10(a)(1)(B) of the ESA.)"

### **March 26, 2015**

Oklahoma FWS office issues Final Biological Opinion for Oklahoma Department of Transportation's Transportation System Improvement Projects for year 2015-2024.

*This requires the purchase of conservation credits for ABB habit loss.*

### **March 2015**

South Dakota Department of Transportation reports "regarding Reasonable and Prudent Measures (RPMs) were also set in place for projects affecting the American burying beetle:

1) Avoidance or Minimizing Habitat Disturbance (Ground-disturbing Activities) in Riparian and Grassland Habitats, 2) Training, 3) Reporting, 4) Including Current or New Scientific Information."

Compliance Report for 2014: Biological Opinion for Stream-Crossing Projects Administered/Funded by the South Dakota Department of Transportation and the Federal Highway Administration, By: Office of Project Development, South Dakota Department of Transportation, March 2015, Submitted to: United States Fish and Wildlife Service, Mountain-Prairie Region 6, South Dakota Ecological Services Office, Pierre, SD

*Included to illustrate the contrast between the Oklahoma and South Dakota Departments of Transportation.*

### **April 22, 2015**

Due date for New Off-Range Pastures for Wild Horses, BLM

[http://www.blm.gov/wo/st/en/prog/whbprogram/2015\\_off\\_range\\_solicitation.html](http://www.blm.gov/wo/st/en/prog/whbprogram/2015_off_range_solicitation.html)

*We do not know if this is covered by the \$200,000 payment to The Nature Conservancy.*

### **May 18, 2015**

Letter from Hydration Engineering to Lisa Mensah, Under Secretary for Rural Development, USDA requesting information on how the USDA addresses ABB habitat loss related to rural development programs.

### **May 21, 2015**

Letter from Hydration Engineering to Mike Helvey, Manager, Obstruction Evaluation Group, FAA regarding the Osage wind farms and ESA Section 7.

### **June 3, 2015**

Letter from Hydration Engineering to Sec. Jewell regarding ABB/Osage/ESA.

### **June 19, 2015**

USDA NRCS replied to Fred Storer's letter of May 18, 2015 stating in part:

"NRCS does not pursue mitigation either onsite or offsite as a means of offsetting incidental

adverse effects upon a listed species of (for?) a given project supported by an NRCS-administered program. Further, through the environmental evaluation process, when NRCS concludes that an action under NRCS control “may affect” a federally listed species or designated critical habitat, an ESA section 7 consultation is initiated with the appropriate service (USFWS or NOAA). All conservation measures included in the resulting Biological opinion are incorporated into the NRCS conservation plan and contract with the producer.”

The letter then refers us to the “State resource conservationist” in Stillwater. Fred Storer talked by phone to Steve Glasgow of USDA NRCS the week of July 17. Mr. Glasgow was very candid describing section 7 consultations in progress. Mr. Glasgow said NRCS has developed an interim guidance document that follows the FWS Oil and Gas Industry Conservation Plan.

*Any mitigation costs are paid by the project beneficiary, no conservation credits have been purchased to date.*

### **July 15, 2015**

Road Island Governor Gina Raimondo signs legislation naming the American Burying Beetle the state insect.

### **July 31, 2015**

Mr. Brandon McBride, Administrator, Rural Utilities Service replied to Fred Storer’s letter of May 18, 2015 to the Under Secretary for Rural Development. Mr. McBride’s letter in part: “The USFWS accepts several forms of mitigation, including conservation credits based on the amount of habitat that will be impacted. Normally, a biological assessment is prepared by the applicant’s consultant for the ABB and RUS submits the document with its determination to the USFWS. The USFWS reviews the findings and issues a Biological Opinion with mitigation measures to minimize the impacts to the species. These measures include a determination of how much habitat will be impacted and how many conservation credits will be needed to be purchased. The consultation process normally takes approximately 4 months.”

Mr. McBride said they had “only done a limited number of formal consultations”.

*Reading between the lines Rural Development anticipates the need for conservation credits but has not yet caused a purchase to be made through their section 7 consultations. Presumably, like NRCS the beneficiary of the federal action, for example, a REA or rural water district, would pay for any required conservation bank credits. It appears that USDA is playing catch up and conservation bank credits are around the corner. We expect that secondary impacts will be ignored, that is mitigation applied only to the right-of-way for the power line and not the rural home that is enabled by the power line.*