

# **CAMERON INTERSTATE PIPELINE EXPANSION PROJECT CALCASIEU AND BEAUREGARD PARISHES, LOUISIANA**

## **MIGRATORY BIRD CONSERVATION PLAN**

**Prepared for:**

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**September 2013**

**TBS Project Number 2012.0490**

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## Project Description

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Cameron Interstate Pipeline, LLC (Cameron) proposes to construct a pipeline that will transport gas from various interstate pipeline interconnections to the Cameron LNG Terminal to support the Cameron LNG Liquefaction Project. The proposed pipeline project may impact migratory bird habitat. The approximately 22-mile long proposed natural gas pipeline begins at an existing facility approximately 3,300 feet southeast of the intersection of W. Houston Road and Long Leaf Drive in Calcasieu Parish, Louisiana. The proposed pipeline travels northerly and terminates at an existing meter station approximately 1,400 feet southwest of the intersection of Parish Road 152 and Al Cormier Road in Beauregard Parish, Louisiana. A vicinity map outlining the proposed pipeline alignment is included in **Appendix A**.

The proposed Project falls under the jurisdiction of the Federal Energy Regulatory Commission (FERC), the lead federal agency for the Project. As part of its National Environmental Policy Act (NEPA), review of the Project, the FERC developed, and will be issuing, an Environmental Impact Statement that was developed specifically for the CIP Project. The FERC will require, as part of the EIS, that a Migratory Bird Conservation Plan, in consultation with the United States Fish and Wildlife Service (USFWS) be developed. Cameron has prepared this Migratory Bird Conservation Plan (MBCP) as directed by the FERC and USFWS. The plan specifically considers the effects of habitat fragmentation on migratory bird species, which also includes measures to prevent, minimize, and/or mitigate such impacts.

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## Regulatory Background and Federal Consultations

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The Migratory Bird Treaty Act (MBTA) (16 USC 703-711) sets forth protective measures for bird species by prohibiting the taking, killing, possession, transportation, and importation of migratory birds and their parts (including eggs, nests, feathers), except when specifically authorized by the Department of the Interior (DOI). In 2001, the Office of the President issued Executive Order 13186 that defines new policy for federal agencies in the furthering of the goals of the MBTA.

In 1998 an amendment to the Fish and Wildlife Conservation Act mandated that the USFWS “identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act of 1973.” This amendment culminated in the USFWS issuing the *Birds*

of *Conservation Concern 2008* to identify the migratory and non-game birds that should be afforded conservation priority. The *Birds of Conservation Concern 2008* separates the United States (U.S.) into 37 individual habitat regions. The Cameron Interstate Pipeline Expansion Project is located within the West Gulf Coastal Plain/Ouachitas, Region 25.

Mr. Brad Rieck, Deputy Field Supervisor for the Louisiana Ecological Services Office (LESO), prepared a letter (the Letter) to Ms. Kimberly Bose of FERC regarding the Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) for the planned Cameron Interstate Pipeline Expansion Project located in Calcasieu, and Beauregard Parishes in Louisiana. The USFWS reviewed the information provided comments in accordance with provisions of the National Environmental Policy Act (NEPA) of 1969 (83 Stat. 852; 42 U.S.C. 4321 et seq.), the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), the Migratory Bird Treaty Act (MBTA) (40 Stat. 755, as amended; 16 U.S.C. 703 et seq.), and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). In the letter, the USFWS requested that an MBCP be developed in conjunction with the EIS for the Cameron Interstate Pipeline Expansion Project to address potential impacts.

### **Birds of Conservation Concern**

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Bird Conservation Regions (BCRs) are the smallest of the geographic scales endorsed by the National American Bird Conservation Institute (NABCI) as basic units within which all bird conservation efforts should be planned and evaluated (US NABCI Committee 2000b, 2000c). Particular importance to the MBCP is the species listed by USFWS as Birds of Conservation Concern (BCC) that utilize the forest interior habitat, particularly for nesting. The project is located with BCR 25. The 29 species of conservation concern known to occur within BCR 25 is included in **Appendix B**.

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## **Impacts to Interior Nesting Species and Indirect Effects on Interior Nesting Species**

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The construction of the proposed project may result in limited unavoidable impacts to unfragmented forest tracts. The USFWS has requested that Cameron assess the potential for unavoidable impacts to the avian species listed in the MBTA that are known to nest within the interior of forests.

The majority of the pipeline expansion route is collocated with the existing Cameron Interstate Pipeline right-of-way and two short segments are collocated with an existing powerline easement. Cameron has reviewed the non-collocated (not adjacent or parallel to existing cleared right-of-way) sections of the proposed project, as requested by the USFWS, to identify and assess any potential new forest fragmentation that may occur. Cameron has conducted a review of the proposed project alignment to identify the individual types of forest habitats that may be impacted by the proposed project. Pine plantation and mixed upland forest made up the two types of upland forest habitats observed within the proposed project right-of-way. The temporary construction right-of-way within the forested areas will be kept to a maximum of 125-feet in width. The permanent right-of-way within the forested areas will be maintained to approximately 25-feet in width, adjacent to the existing cleared right-of-way for a total right-of-way width of 50 feet.

Approximately 12,775 linear feet, 29 acres, of the proposed project right-of-way will be constructed using horizontal directional drilling installation methods. No clearing of land will take place within the areas horizontally directionally drilled; therefore no forest habitats will be impacted within these areas. The forested areas within the horizontally directionally drilled footprint were not included in this assessment. Additionally, the impacts to forested wetlands within the proposed project area were not included in this assessment, the wetland impacts will be mitigated through the United States Army Corp of Engineers' (USACE), in accordance with the USACE New Orleans District's mitigation guidelines.

The impacts to the forest habitat were calculated by using Geographical Information Software (GIS). The proposed project was overlaid 2012 aerial photography to estimate the amount of upland forested habitat that may impacted by the construction of the project. Additionally, biologists conducted terrestrial surveys during the summer of 2012 to field verify the information gathered from the aerial photographs. The anticipated temporary and permanent impacts to

upland forested habitats within the proposed project area are identified in **Table 1**.

**Table 1. Anticipated Temporary and Permanent Impacts to Upland Forests**

Forest Category	Temporary (acres)			Permanent (acres)			Total (acres)		
	Location	Affected	Ratio	Mitigation	Affected	Ratio	Mitigation	Affected	Mitigation
Mixed Upland Forest									
New <sup>1</sup>	4.47	0.75	3.35	0.92	2.00	1.84	5.39	5.19	
Adjacent <sup>2</sup>	9.26	0.50	4.63	1.13	1.00	1.13	10.39	5.76	
Sub-Total	<b>13.73</b>			<b>2.05</b>			<b>15.78</b>	<b>10.95</b>	
Pine Plantation									
New	0.79	0.00	0.00	9.77	0.50	4.89	10.56	4.89	
Adjacent	20.02	0.00	0.00	6.35	0.25	1.59	26.37	1.59	
Sub-Total	<b>20.81</b>			<b>16.12</b>			<b>36.93</b>	<b>6.47</b>	
<b>TOTAL</b>	<b>34.54</b>			<b>18.17</b>			<b>52.71</b>	<b>17.43</b>	

<sup>1)</sup> Areas greater than 500 feet from open land or structures  
<sup>2)</sup> Areas within 500 feet of existing right-of-ways, open land, or structures

The mixed upland hardwood forests were dominated by loblolly pines (*Pinus taeda*), sweetgum (*Liquidambar styraciflua*), water oak (*Quercus nigra*), laurel oak (*Quercus laurifolia*), and red oak (*Quercus falcate*). The understory flora consisted of yaupon holly (*Ilex vomitoria*), sweetgum, loblolly pine, water oak, wax myrtle, ironwood (*Carpinus caroliniana*), American holly (*Ilex opaca*), and farkleberry (*Vaccinium arboretum*). The herbaceous flora included indian sea-oats (*Chasmanthium latifolium*), poison ivy (*Toxicodendron radicans*), and greenbrier.

The pine plantations consisted of varying ages of loblolly pine, farmed for its timber resources. Common understory vegetation within the pine plantations consisted of wax myrtle (*Morella cerifera*), sweet gum, chinese tallow (*Triadica sebifera*), and greenbriar (*Smilax sp.*).

The impacts to the palustrine forested wetlands identified within the proposed project right-of-way will be mitigated separately, in accordance with the USACE issued permit. The palustrine forested wetlands within the proposed project area consisted of bottomland hardwood forests and wet pine plantations. Additional small areas of riparian corridors were located along small streams along the proposed pipeline right-of-way. **Table 2** depicts the amount of temporary and permanent impact forested wetlands within the proposed project area.

**Table 2. Anticipated Forested Wetland Habitat Impacts**

Anticipated Impacts to Forested Wetlands			
Location	Acres of Forested Wetlands		
	Temporary	Permanent	Total
New	0	0	0
Adjacent	11.75	3.38	15.13
<b>Total</b>	<b>11.75</b>	<b>3.38</b>	<b>15.13</b>

The bottomland hardwood forests were dominated by water oak, laurel oak, black willow (*salix nigra*), sweetgum, ironwood, Bald cypress (*Taxodium distichum*), red maple, chinese tallow, and black gum (*Nyssa sylvatica*).

The dominant species observed within the pine plantation wetlands were dominated by loblolly pine, Chinese tallow, wax myrtle, and yaupon.

**Avoidance, Minimization, and Mitigation Strategies**

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Throughout the planning and design phase of the project, Cameron has considered the potential construction and operational impacts to migratory bird species and has taken steps to avoid or minimize such impacts, including those to interior nesting species, as identified in the preceding sections. Cameron conducted surveys to identify migratory bird rookeries and the presence of threatened and endangered migratory bird species and their designated critical habitat.

As discussed in the previous sections, there is the potential for impacts to migratory birds, listed in BCR 25, that are known to inhabit interior forest habitats. The proposed pipeline expansion alignment has been located adjacent to and/or overlapping the existing Cameron Interstate Pipeline. This will greatly reduce the amount of interior forest habitat lost due to the construction of the project.

Cameron will employ the necessary “best management practices” to minimize potential adverse impacts to migratory bird species and their habitat. The best management practices will include but are not limited to: utilizing the minimum right-of-way size needed to safely complete the project, allow the portions of the temporary workspaces not required to operate the pipeline to return to pre-project conditions, install erosion control structures, and replanting vegetation when applicable.

Portions of the construction phase of the proposed project may take place during the migratory bird nesting season. The USFWS designates the avian nesting season as March 31 to July 31. Cameron will coordinate with the USFWS to ensure that the necessary steps are taken to ensure that migratory birds are not adversely impacts during this designated nesting period.

As previously stated, horizontal direction drilling will be used to the install the pipeline through bottomland hardwood forest habitats and under large waterways. These sections of the proposed pipeline will be installed without any temporary or permanent adverse impacts to the surrounding vegetation or migratory birds.

The USFWS has requested that Cameron purchase 17.43 mitigation credits, at a rate of \$1,500 per credit, of interior upland forest habitat to mitigate for its anticipated upland forest impacts. In order to satisfy USFWS' request, Cameron is proposing to make a one-time payment of \$26,145 to The Conservation Fund, a USFWS approved conservation non-governmental organization (NGO). TCF will use the funds to purchase upland forest habitat or improve existing upland habitat within BCR 25. The in-lieu fee payment will satisfy the USFWS' mitigation request of 17.43 credits.

## **Conclusion**

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The construction of the proposed project is anticipated to temporarily or permanently adversely impact approximately 52.71 acres of mixed upland forest and upland pine plantation. "Best Management Practices", to minimize impacts to the forested areas, will be installed and implemented throughout the proposed project area in order to minimize the likelihood of impacts to migratory bird breeding and foraging habitat. The USFWS has determined that 17.43 credits of compensatory mitigation will be required to offset impacts to upland forest habitats. Cameron is proposing to make a one-time in-lieu fee payment of \$26,145 to TCF. TCF will utilize the in-lieu payment to acquire or improve existing interior upland forest habitat. Cameron's payment to TCF will satisfy the USFWS' request for 17.43 credits of mitigation.

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## References

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[http://acwc.sdp.sirsi.net/client/search/asset:asset?t:ac=\\$N/1012381](http://acwc.sdp.sirsi.net/client/search/asset:asset?t:ac=$N/1012381)

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“Bird Conservation Regions” (BCR)—ecological units developed by the North American Bird Conservation Initiative (NABCI). The list includes species that are protected under the MBTA (the recent list has been revised to also include non-MBTA-protected species) that represent the USFWS’ highest conservation priorities (USFWS 2008).

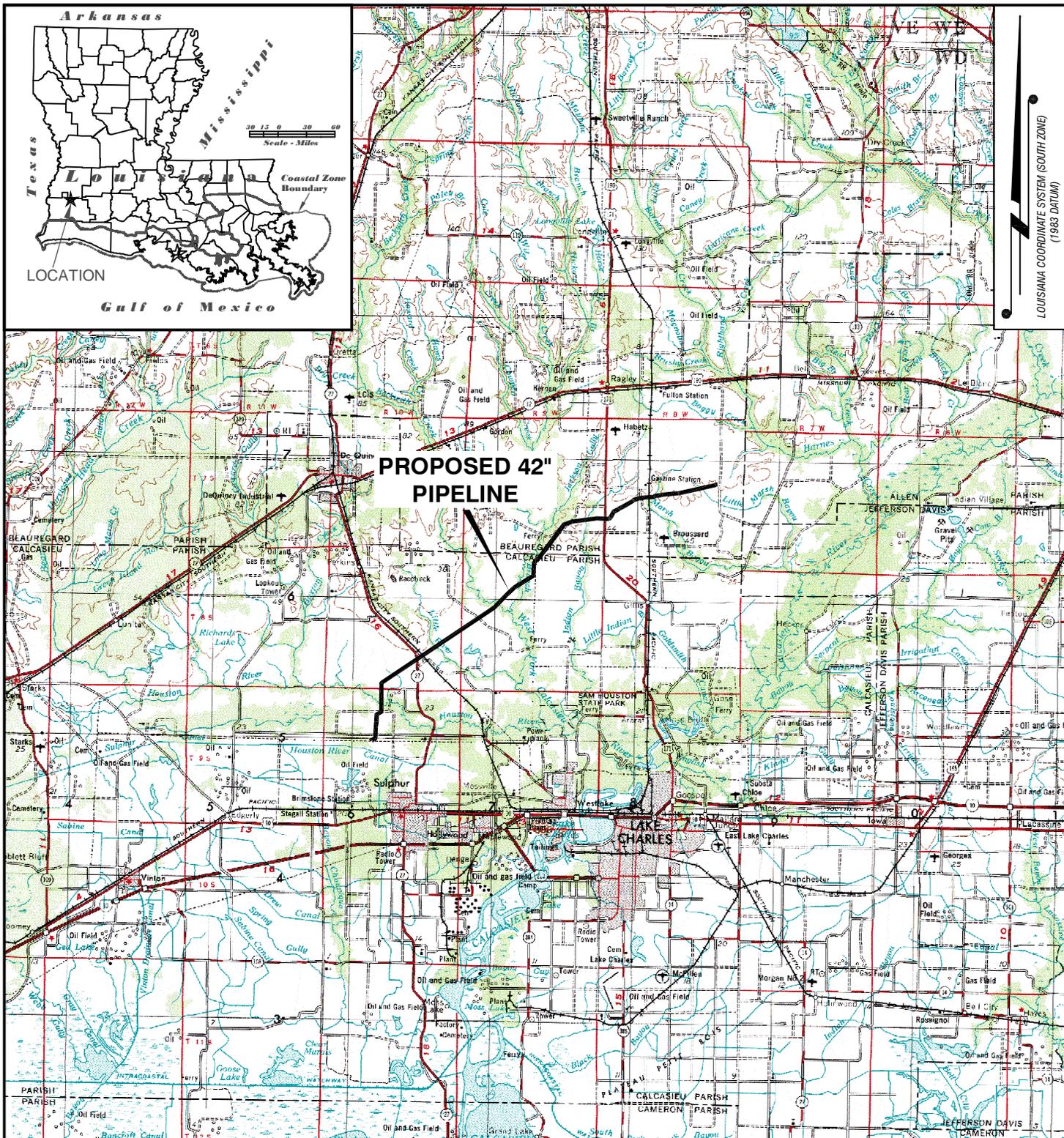
Louisiana Revised Statue T. 56 § 1901 – 07 2 Refer to EA (2010)

**APPENDIX A**

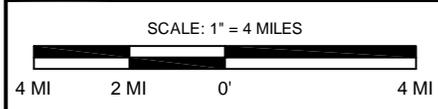
**VICINITY MAP**

**Cameron Interstate Pipeline Expansion Project  
Migratory Bird Conservation Plan**

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DRAWN BY:	EAA	APPROVED BY:	ZRL
DATE:	1/15/13	JOB NO.:	2012.0490
DRAWING NAME:	120490_VIC_REV3.DWG		
SHEET NO.:	1	OF	1
PROJECTION:	LOUISIANA SOUTH		
GEO. DATUM:	NAD83   VERT. DATUM: NAVD88		
GRID UNITS:	US SURVEY FEET		



**VICINITY MAP**

**CAMERON INTERSTATE PIPELINE**

PROPOSED 21 MILE 42" PIPELINE ROUTE  
T9S-R10W, T8S-R10W, T8S-R9W,  
T7S-R9W, AND T7S-R8W  
BEAUREGARD AND  
CALCASIEU PARISHES, LOUISIANA

**T. BAKER SMITH**  
SOLUTIONS START HERE  
107 Global Circle, Lafayette, LA 70503  
(337)735-2800 - tbsmith.com

REV. NO.:	--	REV. DATE:	--/--	REV. BY:	---
REVISION DESCRIPTION:					
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## **APPENDIX B**

### **Birds of Conservation Concern Region 25 List Cameron Interstate Pipeline Expansion Project Migratory Bird Conservation Plan**

**BCR 25 (West Gulf Coastal Plain/Ouachitas) BCC 2008 List**

<b>Common Name</b>	<b>Scientific Name</b>	<b>BCR</b>	<b>Preferred Breeding Habitat</b>
Least Bittern	<i>Lxobrychus exilis</i>	25	Dense, tall stands of vegetation
Little Blue Heron	<i>Egretta caerulea</i>	25	Freshwater and estuarine habitats
Swallow-tailed Kite	<i>Elanoides forficatus</i>	25	Nest in trees, usually near water
Bald Eagle	<i>Haliaeetus leucocephalus</i>	25	Nest in trees averaging 75 feet in height close to open water
American Kestrel	<i>Falco sparverius</i>	25	Nest in natural cavities (such as in trees) with closed tops and tight fitting entrances
Yellow Rail	<i>Coturnicops noveboracensis</i>	25	Wet meadows and shallow marshes
Solitary Sandpiper	<i>Tringa solitaria</i>	25	Abandoned tree nests in woodlands
Hudsonian Godwit	<i>Limosa haemastica</i>	25	On the ground in marshy area
Prairie Warbler	<i>Setophaga discolor</i>	25	Brushy areas and forest edges
Cerulean Warbler	<i>Setophaga cerulea</i>	25	Nests are cup-shaped, and are placed on a horizontal branch high in a hardwood tree
Prothonotary Warbler	<i>Protonotaria citrea</i>	25	Cavities in hardwood swamps
Worm-eating Warbler	<i>Helmitheros vermivorum</i>	25	Dense deciduous forests usually on wooded slopes
Swainson's Warbler	<i>Limnithlypis swainsonii</i>	25	Nests are constructed from moss, grass, and small leaves situated above ground in a tangle of tall reeds or vines in swamplands
Louisiana Waterthrush	<i>Parkesia motacilla</i>	25	Dense vegetation along the water's edge

**BCR 25 (West Gulf Coastal Plain/Ouachitas) BCC 2008 List**

Buff-breasted Sandpiper	<i>Tryngites subruficollis</i>	25	Nests on the ground in short grass habitats
Chuck-will's-widow	<i>Antrostomus carolinensis</i>	25	No nests built, lay eggs on top of dead leaves
Red-headed Woodpecker	<i>Melanerpes erthrocephalus</i>	25	Nests in cavities between 8 and 80 feet high
Loggerhead Shrike	<i>Lanius ludovicianus</i>	25	Nests in dense trees and shrubs
Brown-headed Nuthatch	<i>Sitta pusilla</i>	25	Nest in cavities near mature pines
Bewick's Wren	<i>Thryomanes bewickii</i>	25	Cup-shaped nest has a base of sticks, grasses, rootlets, leaves, moss, or other plant materials
Wood Thrush	<i>Hylocichla mustelina</i>	25	Deciduous and mixed forests where there are large trees, moderate understory, shade, and abundant leaf litter for foraging
Sprague's Pipit	<i>Anthus spragueii</i>	25	Ground nesting passerine and standing dead vegetation is used to build the canopy over the nest
Kentucky Warbler	<i>Geothlypis formosa</i>	25	Nest on the ground hidden at the base of a shrub or in a patch of weeds in an area of ample vegetation
Bachman's Sparrow	<i>Peucaea aestivalis</i>	25	Nest in shortleaf and loblolly pine plantation
Henslow's Sparrow	<i>Ammodramus henslowii</i>	25	Nest is a well-concealed open cup on or close to the ground in a grassy location; these birds often nest in small colonies
Smith's Longspur	<i>Calcarius pictus</i>	25	Nest in open grassy areas near the tree line

**BCR 25 (West Gulf Coastal Plain/Ouachitas) BCC 2008 List**

Painted Bunting	Passerina ciris	25	Nests in low, dense vegetation and is built by the females and woven into the surrounding vegetation
Orchard Oriole	Leterus spurius	25	Nest in semi-open areas with deciduous trees