United States Department of the Interior

FISH AND WILDLIFE SERVICE
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RECEIVED
JUL 11 2011
Attwater Prairie Chicken NWR

June 30, 2011

Terry Rossignol
U.S. Fish and Wildlife Service
P.O. Box 519
Eagle Lake, Texas 77434

Dear Mr. Rossignol:

Thank you for your May 31, 2011 letter requesting review and concurrence with the determinations in the Draft Comprehensive Conservation Plan and Environmental Assessment (CCP/EA) for the Attwater Prairie Chicken National Wildlife Refuge under Intra-Service Section 7 Consultation procedures. The Refuge's determination is that the implementation of the CCP may effect, but is not likely to adversely affect federally listed threatened or endangered species, specifically, Attwater's Prairie Chicken (APC) *Tympanuchus cupido attwateri*.

The Clear Lake Ecological Services Field Office has reviewed the CCP/EA and believes the impact on the APC will be discountable, insignificant, or wholly beneficial, and thus, the Service concurs with the Refuge's determination that the project may effect, but is not likely to adversely affect APCs. This concurrence is based on a review of the CCP/EA and the management practices described therein. Similarly, the CLESFO concurs with the Refuge's determinations regarding Houston toad *Bufo houstonensis* and Sprague's pipit *Anthus spragueii*.

These comments are provided in accordance with Section 7 of the Endangered Species Act (87 stat. 884 as amended; 16 U.S.C. 1531 et seq.). If the CCP changes substantially or additional information on the distribution of listed or proposed species becomes available, the project should be reanalyzed for effects not previously considered.

If you have any questions, or need additional information, please contact Staff Biologist Jeff Hill or me at 281/286-8282.

Sincerely,

Edith Erfling
Field Supervisor

Appendix F. INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM

Originating Person:
Terry Rossignol
Telephone Number:
(979) 234-3021
Date:
May 25, 2011

I. **Region:** Southwest

II. **Service Activity (Program):**
Refuges: Attwater Prairie Chicken National Wildlife Refuge (APC NWR)

III. **Pertinent Species and Habitat:**

A. **Listed species and/or their critical habitat within the action area:**

Attwater's prairie-chicken (*Tympanuchus cupido attwateri*) (APC)

Houston toad (*Bufo houstonensis*) - have not been documented on the Refuge since the 1980s

B. **Proposed species and/or proposed critical habitat within the action area:**
None

C. **Candidate species within the action area:**
Sprague's pipit (*Anthus spragueii*)

IV. **Geographic area or station name and action:**
The proposed action is to implement a Comprehensive Conservation Plan for Attwater Prairie Chicken NWR, Austin and Colorado Counties.

V. **Location:**

A. **Ecoregion Number and Name:**
Gulf Coast Prairies and Marshes Ecoregion

B. **County and State:**
Austin and Colorado Counties, Texas (Attwater Prairie Chicken NWR)

Galveston County, Goliad County, Texas (APC populations outside Refuge

boundaries)

C. **Section, township, and range (or latitude and longitude):**
29° 42' N 96°18'W

D. **Distance (miles) and direction to nearest town:**
Approximately 6.5 miles northeast of Eagle Lake, TX

E. **Species/habitat occurrence:** ***See Figure 3.4 in the Plan***
APC locations on the Refuge tend to vary on a daily basis; however, APCs are generally located in the central portion of the Refuge.

VI. **Description of proposed action (attach additional pages as needed):**
The proposed action is to implement the Comprehensive Conservation Plan for Attwater Prairie Chicken NWR over the next 15 years. The Plan will emphasize prairie restoration, and meet APC recovery objectives in support of the Attwater's Prairie-Chicken Recovery Plan.

The Plan is divided into a series of goals, objectives, and strategies that will be implemented throughout the 15-year term of this Plan. Specific goals associated with the CCP are: 1) provide quality grassland habitat to support Attwater's prairie-chicken and other grassland dependent species native to the Gulf coastal prairie ecosystem; 2) maintain and enhance healthy populations of wildlife, with the recovery of Attwater's prairie-chicken being the priority; 3) provide opportunities for visitors to enjoy and appreciate the Refuge, its fish and wildlife, and its management activities through compatible wildlife-dependent recreation programs; 4) provide high-quality, safe, environmentally responsible facilities to support Refuge operations and enhance visitor experiences.

The overall management of the Refuge will focus on protecting and restoring native habitats to meet APC life requirements, while enhancing opportunities for public use, environmental education, and interpretation to increase understanding and support for the Refuge and APC recovery efforts. For detailed descriptions of goals, objectives, and strategies for the Plan, please refer to Chapter 4 of the attached Draft Plan.

VII. **Determination of effects:**

A. **Explanation of effects of the action on species and critical habitats in items III. A, B, and C:**

Attwater's prairie-chicken
The Attwater Prairie Chicken NWR is the lead station designated for carrying out the

recovery of the Attwater's prairie-chicken. This responsibility encompasses recovery activities beyond the borders of APC NWR. Attwater's prairie-chicken currently occurs in the wild at only three locations - the Attwater Prairie Chicken NWR, the Texas City Prairie Preserve, and on private ranches in Goliad County, Texas. Approximately 110 birds were estimated at these locations as of March 2011. In addition, approximately 171 captive individuals were held at 6 breeding facilities in Texas as of October 2010.

Habitat and Wildlife Management

Restoration and maintenance of prairie habitat using management tools including planting and harvesting native prairie seed, exotic species management, prescribed fire, and grazing are expected to have beneficial impacts on APC recovery efforts. The Plan proposes to continue prairie maintenance activities on existing grasslands, restoration on areas of the Refuge that were cultivated prior to establishment and restoring two man-made impoundments to prairie habitat. These actions would have long-term beneficial impacts on APC (and other grassland-dependent species) by providing additional suitable habitat.

Prescribed fire would have long-term beneficial impacts on APC populations. The importance of prescribed fire in prairie-chicken management is well documented in the literature (e.g., Chamrad and Dodd 1972, Westemeier 1972, Lehmann 1965, Kessler 1978, Kobriger et al. 1988). Grassland communities within the Attwater's prairie-chicken coastal prairie ecosystem are fire climax, and quickly succeed to brushland and deciduous forest in the absence of fire (Lehmann 1965). Brush encroachment makes habitat less attractive to Attwater's prairie-chickens (Horkel 1979:iv). Fire also benefits prairie-chickens by removing accumulated mulch which may impede prairie-chicken movement, especially young broods. Recently burned areas also support increased insect populations which are important food sources for broods and adults as well (Chamrad and Dodd 1972). In addition, research suggests that rotation of smaller burns and associated grazing pressure would create the patchwork of burned and unburned prairie needed for breeding and nesting greater prairie-chickens (Bidwell et al. 2003, Patten, et. al., 2007). Prescribed fire also facilitates nutrient cycling and improves distribution of livestock and wildlife.

Grazing enhances APC habitat in a variety of ways including reducing litter accumulation, creation of cover openings, and creating short-grass cover in livestock concentration points suitable for APC courtship activities (Lehmann, 1941, Kessler 1978). Treating the Refuge for invasive species using a systematic approach would have long-term beneficial impacts on APC populations because this would reduce the amount of invasive species and brush that hinder prairie chicken movement and reduce perch locations for predatory raptors.

The consolidation of pastures and removal of fences would have beneficial impacts on APC by removing potential collision hazards, invasive species corridors, predator travel

corridors, and perch sites for raptors. Firebreaks located along fence lines also become barriers to water flow when soil accumulates along them.

Treatment of red imported fire ants (RIFA) would have beneficial impacts on APC populations and brood success by reducing the impacts of RIFA on insect communities and by reducing chick mortality. Perch deterrents placed on fence posts in core APC habitat and removal of small mammal predators would have beneficial impacts on APC populations by decreasing the overall predation-related mortality.

The Plan proposes to continue and potentially expand the use of food plots and incorporate the possibility to irrigate crops. This would have long-term beneficial impacts on APC populations. Expanding the use of food plots would allow for better access for APCs and facilitate flocking behaviors. Irrigating crops would reduce crop failure providing more food and shelter for APCs.

APC recovery efforts including captive bird releases, headstart brood boxes, and fitting of radio transmitters may have minor short-term adverse impacts due to stress caused by handling; however, major beneficial impacts to the overall recovery of the species should result from the information gained in conducting these activities.

Public Use

The Plan is proposing to realign the current auto-tour route. The auto-tour route will not be located in the current APC core use area (north of Coushatta Creek). As APC numbers increase and potentially occupy public use areas on the refuge, long-term visitor usage may cause some disturbance and degree of disturbance would depend on the time of year. The Refuge hosts an annual festival where guided van tours are provided to prairie chicken booming grounds. These tours and viewing are done from a distance so disturbance to prairie chickens is very limited. The Refuge is proposing to expand its opportunities for interpretation by possibly adding additional tours throughout the year. These tours will also be done at a safe distance to avoid disturbing APCs. The expansion of the public use program that the Plan proposes should have long-term beneficial impacts by increased public awareness of APC recovery.

Houston toad

Although releases of captive-reared Houston toads occurred on APC NWR during the early to mid-1980s, no Houston toads have been documented on the Refuge in recent years. Therefore, it is unlikely that management actions proposed in this Plan would disturb Houston toads.

Sprague's pipit

Sprague's pipit winter on Attwater Prairie Chicken NWR. Sprague's pipit has very similar habitat requirements to the APC, requiring open grasslands with very little

shrub/tree cover. Management actions like prescribed fire and grazing to reduce woody species and management of grass composition and height are beneficial to Sprague's pipit conservation. Management actions proposed in the Plan and described in previous paragraphs for the recovery of Attwater's prairie chicken should also positively benefit Sprague's pipit.

Overall, no significant adverse impacts to Federally-listed T&E species are expected to occur due to the management direction proposed in the Comprehensive Conservation Plan.

B. Explanation of actions to be implemented to reduce adverse effects:
The Refuge does not allow public use in the APC core use area (north of Coushatta Creek) unless accompanied by staff during a special event or by request. The Refuge will conclude all prescribed fire activity by March 1. During the breeding season (February – April), Refuge personnel conduct most routine activities in APC core use area after 10:00 am to prevent disturbance to APCs. The Refuge continually re-evaluates all activities to minimize impacts to APCs.

VIII. Effect determination and response requested: [* = optional]

A. Listed species/designated critical habitat:

Determination	Response requested
no effect to species/critical habitat (species/unit: Houston Toad)	__X__ ***Concurrence**
may affect, but is not likely to adversely affect species/critical habitat (species/unit: Attwater's Prairie Chicken)	__X__ **Concurrence**
may affect, and is likely to adversely affect species/critical habitat (species/unit: none)	____ **Formal Consultation**

B. Proposed species/proposed critical habitat:

Determination	Response requested
no effect on proposed species/proposed critical habitat (species/unit: n/a)	____*Concurrence
is not likely to jeopardize proposed species/ adversely modify proposed critical habitat (species/unit: n/a)	____ Concurrence
is likely to jeopardize proposed species/ adversely modify proposed critical habitat (species/unit: n/a)	____Conference

C. Candidate species:

Determination	Response requested
no effect (species: none)	____*Concurrence
is not likely to jeopardize candidate species/ (species: Sprague's pipit)	_X_ Concurrence
is likely to jeopardize candidate species (species: none)	____Conference

Jeremy A Ponsgrow 5/25/2011

signature date

Refuge Manager, Attwater Prairie Chicken NWR

IX. Reviewing ESO Evaluation:

A. Concurrence ✓ Nonconcurrence _____

B. Formal consultation required _____

C. Conference required _____

D. Informal conference required _____

F. Remarks (attach additional pages as needed):

_____ 7-6-11

signature **date**

[Title/office of reviewing official]

X. Literature Cited

Bidwell, T, S. Fuhlendorf, S. Harmon, R. Horton, R. Manes, R. Rodgers, S. Sherrod, and D. Wolfe. 2003. Ecology and management of the greater prairie-chicken in Oklahoma. Okla. Coop. Ext. Serv., Stillwater, OK. 13pp.

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Horkel, J. D. 1979. Cover and space requirements of Attwater's prairiechicken (*Tympanuchus cupido attwateri*) in Refugio County, Texas. Ph.D. Thesis, Texas A&M Univ., College Station. 96 pp.

Kessler, W. B. 1978. Attwater's prairie chicken ecology in relation to agricultural and range management practices. Ph.D. Thesis, Texas A&M Univ., College Station. 158pp.

Kobriger, J. D., D. P. Vollink, M. E. McNeill, and K. F. Higgins. 1988. Prairie chicken populations of the Sheyenne Delta in North Dakota, 1969-1987. Pages 1-7 *in* A. J. Bjugstad, ed. Prairie chickens on the Sheyenne National Grasslands. U.S. For. Serv. Gen. Tech. Rep. RM-159. 73pp.

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Westemeier, R. L. 1972. Prescribed burning in grassland management for prairie chickens in Illinois. Proc. Tall Timbers Fire Ecol. Conf. 12:317-338.