Contract Number 202928

MEMORANDUM OF AGREEMENT
Between
TEXAS PARKS & WILDLIFE DEPARTMENT
And
THE SOCIETY OF TYMPANUCHUS CUPIDO PINNATUS, LTD.

This Memorandum of Agreement is made and entered into by and between Texas Parks and Wildlife Department, hereinafter referred to as TPWD, and The Society of Tympanuchus Cupido Pinnatus, Ltd. (STCP), a non-profit, 501(c)(3) conservation organization, under the authority granted by Texas Parks and Wildlife Code, Section 11.017(a)(1)(C).

I.CONTRACTING PARTIES:

The Receiving Agency: Texas Parks and Wildlife Department (TPWD)

The Performing Entity: The Society of Tympanuchus Cupido Pinnatus, Ltd. (STCP)

II. STATEMENT OF SERVICES TO BE PERFORMED (WORK):

STCP shall conduct a project entitled, "**Evaluate the Release of Pen-reared Attwater's Prairie Chickens on Private Land in the Refugio-Goliad Prairie Texas, 2008-2010,**" as outlined in the attached proposal, Attachment A, attached hereto and incorporated herein for all purposes.

All publications arising from this research shall acknowledge TPWD, STCP, other cooperators, and Cooperative Endangered Species Fund (Section 6) or such fund as may supersede it in funding this project.

All data and analyses resulting from this project, and all information regarding the occurrences of Attwater's Prairie Chicken related to this project, becomes the property of TPWD and STCP, and will be presented to TPWD in an electronic format determined by TPWD upon request, and not later than due date of Final Report. TPWD agrees to refrain from publishing any results or analysis of this study for two (2) years after the termination date of contract, after which TPWD may publish after review by appropriate project personnel with no restriction.

With respect to such Intellectual Property (other than Intellectual Property for which TPWD or STCP already possesses equal or greater Intellectual Property Rights by virtue of this Agreement or otherwise), as is (i) incorporated in the Work, or (ii) produced by STCP or STCP's employees, subcontractors, or subcontractor's employees during the course of performing the Work, STPC hereby grants to TPWD a mutual, nonexclusive, perpetual, irrevocable, enterprise-wide license to use, copy, publish, and modify after review by STCP personnel , such Intellectual Property, and allow others to do so for TPWD or STCP purposes. STCP shall secure all necessary intellectual property licenses from third parties and warrants that the Work and the intended use of the Work will not infringe any property rights of any third party. STCP agrees to indemnify and hold harmless TPWD from damages arising from or related to any infringement of rights in intellectual property, and agrees to require its contractors to indemnify and hold harmless TPWD from damages arising from or related to any infringement of rights in intellectual property

Equipment and supplies purchased under this Agreement shall be used, managed, and disposed of in accordance with the Texas Uniform Grant Management Standards.

In accordance with 12.103 of the Texas Parks and Wildlife Code, STCP acknowledges that any work to be performed on private lands in Texas using these funds requires that grantees secure written permission from the private landowner(s) for the purposes of (i) access to the land, and (ii) use of data collected on that land. As such the Landowner Permission for Wildlife Research Form, Attachment B, is incorporated herein for all purposes.

STCP shall submit a Final Report, following guidelines provided by TPWD, on or before 1 November 2010. The Final Report shall then be forwarded to U. S. Fish and Wildlife Service (USFWS, Austin) by TPWD for review and comments. TPWD will send revisions requested by USFWS, Austin, to the Principal Investigator for STCP, who shall respond to TPWD in writing within sixty (60) days of receipt of revision request.

III. BASIS FOR CALCULATING REIMBURSABLE COSTS:

See Budget in Attachment A for details.

Funds must be directed to completing tasks outlined in Attachment A to qualify for reimbursement.

For payment purposes, the Performing Entity (entity receiving payment) shall submit to the Receiving Entity (agency making payment) an invoice with the Performing Entity's RTI (for funds transfer at the Treasury) or a Purchase Voucher (for deposit in local bank account). The Receiving Agency will enter payment information into USAS.

SEND VOUCHERS TO:

Dr. C. Craig Farquhar
Wildlife Division
Texas Parks and Wildlife Department
4200 Smith School Road
Austin, Texas 78744

Expenditures for travel and travel-related expenses will be reimbursed at the official rate authorized by the State of Texas.

The Performing Entity may make adjustments up to ten percent (10%) within cost categories without prior approval from TPWD, provided that the total reimbursable costs do not exceed total federal share costs.

IV. AGREEMENT AMOUNT:

The total amount of this Agreement shall not exceed: One Hundred Twenty Seven Thousand Four Hundred Dollars ($127,400.00)

This contract is subject to cancellation, without penalty, either in whole or in part, if funds are not appropriated by the Texas Legislature, or otherwise made available, to the Texas Parks and Wildlife Department.

V. PAYMENT FOR SERVICES:

Receiving Agency shall pay for services received from appropriation items or accounts of the Receiving Agency from which like expenditures would normally be paid, based upon vouchers drawn by the Receiving Agency payable to Performing Entity.

Payments for service performed shall be billed: Quarterly. Invoices shall include appropriate documentation for expenses incurred and details of work completed during the invoiced period as well as a summary of cost share, if Match is required.

The cost of materials and supplies should be charged at their actual prices. Proper documentation is required for reimbursement.

All invoices and reports must be received within 60 days of end of each fiscal year or termination of contract. Invoices not received within this time frame may not be paid.

$25,480.00, which is twenty percent (20 %) of FEDERAL SHARE, will be held by TPWD until receipt and acceptance of final report.

Budgeted monies not spent in a given fiscal year are eligible to be rolled over to the following fiscal year(s).

Any excess costs from one awarded TPWD contract cannot be submitted for reimbursement against another TPWD contract.

Reimbursements are conditioned on the Agreement activities being performed in compliance with the Agreement.

VI. CONTACT INFORMATION

TPWD PI Name & Contact Info

TPWD Contract Point of Contact
Tammy Dunham
Contract Specialist
Texas Parks & Wildlife Department
4200 Smith School Road
Austin, Texas 78744
512-389-4752 office
512-389-4677 fax
tammy.dunham@tpwd.state.tx.us

Vendor PI Name & Contact Info
John E. Toepfer, PhD
Principal Investigator
The Society of Tympanuchus Cupido Pinnatus, Ltd. (STCP)
3755 Jackson Ave.
Plover, WI 54467
(701) 866-0499
Email: jtoepfer@coredcs.com

Vendor Contract Point of Contact Info
Greg Septon
STCP Executive Director
P. O. Box 320487
Franklin, WI 53132
(414) 559-4278
Email: sharptailpoint@earthlink.net

VII. TERM OF AGREEMENT:

This Agreement is to begin April 1, 2009 or upon signature of both parties whichever is later , and shall terminate 28 February 2011.

An extension to this Agreement may be granted with prior written approval by TPWD.

VIII. MISCELLANEOUS PROVISIONS:

Termination: This Agreement is subject to cancellation, without penalty, either in whole or in part, if
1. Funds are not appropriated by the Texas Legislature, or otherwise made available, to TPWD;
2. Performing Entity fails to comply with the terms and conditions of this Agreement; or
3. Performing Entity fails to comply with the provisions of applicable state or federal laws or regulations.

Audit: Performing Entity understands that acceptance of funds under this Agreement acts as acceptance of the authority of the State Auditor's Office, TPWD or any successor agency, to conduct an audit or investigation in connection with those funds. Performing Entity further agrees to cooperate fully with the above parties in the conduct of the audit or investigation, including providing access to any

information the state auditor considers relevant to the investigation or audit. Performing Entity shall ensure that this clause concerning the authority to audit funds received indirectly by subcontractors through the Performing Entity and the requirement to cooperate is included in any subcontract it awards. In Agreements involving federal funds, the right to audit provision of the Agreement includes the right for the applicable federal agencies and the federal Office of Inspector General to audit.

Dispute Resolution: In accordance with Chapter 2261 of the Texas Government Code, the following Schedule of Remedies applies to this Agreement in the event of substandard performance or other failure to conform to the requirements of the Agreement or applicable law.

(a) Reject the substandard performance and request corrections without charge to TPWD.
(b) Issue a notice of substandard performance or other non-conforming act or omission.
(c) Request and receive the return of any over payments or inappropriate payments.
(d) Reject associated reimbursement requests and suspend payments, pending accepted revision of substandard performance or non-conformity. Note: Funds may be retained by TPWD for recovery of administrative costs or returned to funding source as authorized by agreements with the funding source and by state or federal law.
(e) Suspend all or part of the Agreement, pending accepted revision of substandard performance or non-conformity.
(f) Terminate the Agreement, and demand and receive return of all equipment purchased of contract funds, return of all unexpended funds, and repayment of expended funds.

TPWD may avail itself of any remedy or sanction provided in this Agreement or in law to recover any losses arising from or caused by Performing Entity's substandard performance or any non-conformity with the Agreement or the law.

Performing Entity shall carry on the Agreement Activities and adhere to the progress schedule during all disputes or disagreements with TPWD unless ordered to stop the Agreement Activities. No Agreement Activities shall be delayed or postponed pending resolution of any disputes or disagreements.

Neither payment by TPWD nor any other act or omission other than an explicit written release constitutes a release of Performing Entity from liability for losses under this Agreement.

Other Law: Performing Entity shall give all notices and comply with all laws and regulations applicable to the Agreement and the grant of federal funds, including but not limited to 43 CFR 12, 2 CFR 215, 2 CFR 230, 40 CFR 34 (New Restrictions on Lobbying), OMB Circular A-133 and A-122, E.O.s 12549 and 12689, the National Environmental Policy Act, and Section 7 of the Endangered Species Act. As part of this Agreement, Performing Entity further agrees to comply with state and federal assurances attached hereto as Attachments C and D, respectively, and incorporated herein for all purposes.

Indemnification: PERFORMING ENTITY SHALL DEFEND, INDEMNIFY, AND HOLD HARMLESS THE STATE OF TEXAS, ITS OFFICERS, AND EMPLOYEES, AND TPWD, ITS OFFICERS, AND EMPLOYEES AND CONTRACTORS, FROM AND AGAINST ALL CLAIMS, ACTIONS, SUITS, DEMANDS, PROCEEDINGS, COSTS, DAMAGES, AND LIABILITIES, INCLUDING WITHOUT LIMITATION ATTORNEYS' FEES AND COURT COSTS, ARISING OUT OF, CONNECTED WITH, OR RESULTING FROM ANY ACTS OR OMISSIONS OF PERFORMING ENTITY OR ANY AGENT, EMPLOYEE, SUBCONTRACTOR, OR SUPPLIER OF PERFORMING ENTITY IN THE EXECUTION OR PERFORMANCE OF THIS AGREEMENT. PERFORMING ENTITY SHALL COORDINATE ITS DEFENSE WITH THE TEXAS ATTORNEY GENERAL AS REQUESTED BY TPWD.

Assignment: The Performing Entity shall not assign or subcontract the whole or any part of the Agreement without TPWD' prior written consent.

Entire Agreement; Modifications: The Agreement supersedes all prior agreements, written or oral, between Performing Entity and TPWD and will constitute the entire Agreement and understanding between the parties with respect to the subject matter hereof. The Agreement and each of its provisions will be binding upon the parties and may not be waived, modified, amended or altered except by a writing signed by TPWD and Performing Entity.

Venue and Governing Law: This Agreement shall be governed by the laws of the State of Texas. The proper place of venue for suit on or in respect of the Agreement shall be Travis County.

RECEIVING AGENCY	PERFORMING ENTITY
Ann Cantu for C Brenner	
TEXAS PARKS AND WILDLIFE DEPARTMENT	THE SOCIETY OF TYMPANUCHUS CUPIDO PINNATUS, LTD
By: Scott Boruff	By: Peter N. Nguyen
Scott Boruff	Authorized Signature
Deputy Executive Director of Operations	Tympanuchan
	Title
Date: 3-16-09	Date: March 9, 2009

Attachment A

Evaluate the Release of Pen-reared Attwater's Prairie Chickens on Private Land in the Refugio-Goliad Prairie Texas, 2008-2010

Principal Investigator: J. Toepfer (STCP)

Need:

The Attwater's prairie chicken (*Tympanuchus cupido attwateri*) (APC) has been a federally listed threatened/endangered species since 1967 (Morrow et al. 2004) and considered to be one of the most endangered birds in North America (Silvy et al. 1999). The APC population declined from 8,700 birds in 1937 to 1,584 in 1980 (Lawrence and Silvy 1980) and to just 56 in 1998 (Silvy et al. 1999). The APC range has contracted "94% from that used in 1980, but there are still sizeable land areas that appear to offer all the requisites to support APC. However populations have gone extinct in these areas." "The future of the APC is in the hands of the captive breeding program." (Silvy et al. 1999:154). The total APC population in the wild in summer 2007 consisted of just two small populations in Texas 80 miles apart. One is associated with the Texas City Prairie Preserve (TCPP) with 10-15 birds and another at the Attwater's Prairie Chicken National Wildlife Refuge (APCNWR) near Eagle Lake with 75-100 birds. These two "populations" have been supplemented and sustained by the annual release of APC raised at various facilities and zoos in Texas (Fossil Rim, Houston, San Antonio, Sea World, Caldwell and Abilene).

Since 1995 a total of 1,164 pen-reared APC have been released from acclimation pens at APCNWR and TCPP (Mike Morrow, USFWS unpublished data). Survival of radio-marked, pen-reared APC from release (July/October) at APCNWR to the following breeding season (March) for the five year period 2001-2006 has been good at 41.0% (range 27-72%, n=524) and annual survival for yearling-adults has been 25% (n=56) (Mike Morrow, USFWS, unpublished data). This is in contrast to past releases of pen-reared prairie chickens in Wisconsin where annual survival was less than 0.5% (1 of 178) and 90% were dead within a month (Toepfer 1988). We also know that pen-reared APC at ten months of age can breed, nest, produce viable eggs and hatch young, yet they have not been able to raise young beyond 2 weeks at the APCNWR on their own. Young have been fledged only by putting a radio-marked released hen in a "brood" box for 2 weeks post hatch and providing the hen and chicks with insects. (Mike Morrow, USFWS, unpublished data). The reason(s) for this failure of the released pen-reared APC hens to raise chicks is not known at this time. Based on evidence collected so far, predation, disease and exposure do not seem to be major limiting factors in chick survival. Additional parallel research is currently being conducted to answer question including impacts of red imported fire ants (*Solenopsis invicta*) on insects as food for chicks (USFWS, Texas Agricultural Extension Service, TPWD), on the gut physiology of pen-reared and wild prairie chickens (USFWS, USGS, STCP, University Wisconsin-Madison) and genetics (STCP, University Michigan).

The Coastal Prairie Coalition of the Grazing Lands Conservation Initiative (GLCI) received a USFWS private stewardship grant in 2007 to conduct a two-year reintroduction and evaluation of pen-reared APC released on private land in Goliad County, Texas. The bulk of funds are for habitat and the grant was only partially funded. GLCI along with partners (TNC, USFWS, NRCS, and TPWD) have been working with private ranchers in Goliad and Refugio Counties to restore and improve large blocks of grassland habitat with the goal of reintroducing APC. The recent release of 37 pen-reared APC on private land under the USFWS private stewardship grant will ideally establish another population and hopefully answer some of our questions on factors influencing recruitment relative to chick survival. The first release was scheduled for August 2008 not 2007. However the availability of radio transmitters and surplus birds beyond the needs of APCNWR and TCPP from the captive rearing program pushed the first release to September 2007. The early start of the GLCI reintroduction project and a reduction in funds allocated to the GLCI private stewardship grant and the partnership will be limited to a 2008 release with no funding for any releases and evaluation 2009-2010. The number of surplus birds produced by the rearing facilities has equaled or exceeded 130 birds during 4 of the last 6 years. It is also possible that the number of birds released at TCCP will be reduced or eliminated making it reasonable to plan for the release of over 200 birds and as many as

100 on private lands in Goliad, County. The reduction in the stewardship grant, the likelihood of more APC for release (75-100) along with a need to compile and formally analyze existing data creates a need for additional support for personnel, travel and more radio transmitters to effectively conduct the reintroduction and evaluation.

Objective:

To evaluate using radio telemetry two years (2008-2010) of releases of pen-reared APC on private land in Goliad County Texas, and make recommendations regarding habitat management and future releases.

Expected Results and Benefits:

Hopefully this project will result in the reestablishment of a third free ranging population of APC on private grasslands in southern Texas. It will also fine tune release methodology and habitat management and with the anticipated expansion of the captive rearing flock it should result in the release of more and healthier APC. This will be an essential and critical step in the eventual recovery of the species. An annual report will be provided to all partners, cooperators and interested parties summarizing movements, survival, mortality factors, nest success and brood survival of radio-marked APC on private land. The information collected and analyzed as outlined in this proposal will be directly comparable with ongoing research and data collected on past and planned releases of pen-reared APC at APCNWR and TCCP. The research Fellow with STCP and TNC's technician (Aaron Pratt) will be using the results of this evaluation project for his Master of Science research project at Texas A & M, Kingsville under Professor Leonard Brennan This will result in a final report in the form of a MS thesis and publications which will summarize existing data from past releases and make recommendations for future APC releases and long-term recovery needs. Finally the recent release of APC on private land has already provided benefits and has been seen as a positive step by some locals. The result has been that several ranches surrounding the release area have now allowed project personnel access to their land to track radio-marked birds. One rancher adjacent to the release site has allowed TNC staff to remove brush to improve grassland cover. The future of the any APC recovery effort will depend upon the cooperation of private landowners and the development of enough grassland habitat on private land to sustain a viable population in the wild. As of 1 November 24 (64.9%) of the 37 radio-marked pen-reared APC released on private land in Goliad County August/September 2007 were alive.

Approach:

This project will be a cooperative effort between GLCI, TNC, USFWS, TPWD, NRCS, The Society of Tympanuchus Cupido Pinnatus, Ltd (STCP), captive breeding facilities and private landowners in Goliad County. This evaluation will use radio telemetry to primarily monitor the movements, survival, mortality factors and productivity of pen-reared APC released into the wild. The results will be compared with similar information collected from past and ongoing releases of pen-reared APC at the APC NWR and TCCP (Mike Morrow, USFWS unpublished data) and will be used to make recommendations regarding future releases of APC. Much of the release methodology has been taken directly from the protocol established in the Draft APC Recovery Plan (DAPCRP) so that direct comparisons can be made with information from releases at APCNWR and TCPP. The DAPCRP is a draft document and contains preliminary information currently being reviewed and should not be copied or cited without permission of the USFWS. Methodology for this project will be adjusted based on input from private landowners and recommendations from the APC Recovery Team, TNC, Texas Parks and Wildlife, USFWS and other interested parties.

All of the birds released will be pen-reared young of the year raised at the various facilities contracted by the USFWS. The number and sex ratio of the birds to be released on private land will depend upon the number of birds raised by the rearing facilities in excess of the needs of the captive rearing program and then for releases at APCNWR and TCCP. Ideally at least 50 birds (25 cocks, 25 hens) should be released for three

summers 2007-2009. However, since 2000 the number of birds produced for release into the wild by rearing facilities has increased. This means that more birds (75-100) are likely to be available for release on private land in 2008-2010.

Release procedures will follow those successfully conducted by the USFWS at the APCNWR (DAPCRP). This will involve releasing small groups of 8-12 week old pen-reared young of the year APC from acclimation pens (July/September). Prior to transfer of birds to release sites, birds will undergo a series of tests to ensure that all are healthy. At that time all birds will be banded and radio-marked and each bird will be individually color banded with leg bands (Hamerstrom and Matson 1964), weighed and measured. A drop of blood from each bird will be stored in lysis solution for future genetic analysis. All birds have to be examined for disease and parasites before release and at recapture. As a precautionary measure, each bird could be given a nematocide to reduce internal parasites (either an intramuscular injection of Ivermectin® or an oral dose of Panacur®). These drugs have been used to control parasites in Attwater's prairie chickens in the past at the APC NWR. Each bird will be dusted with 5% Sevin® to reduce ectoparasite loads prior to placement in the acclimation pens. Radio-marked birds that survive to the following year will have to be recaptured by night lighting and their radios replaced so they can be followed for another year. The radio packages used should run for 15 months. Radio-marked hens with broods will be circled at night to determine the number of chicks at 4-6 weeks of age. If necessary, chicks will be radioed with 4-6 gram transmitter packages that will last 90-180 day and will have colored tabs on the top of the bids so individuals can be identified to avoid recapture or to recapture in the case of radio failure. These radios will be replaced with the larger packages when the birds are 10-12 weeks of age (Toepfer 2003

These methods have been used by the author to successfully, trap, handle, measure, radio mark and translocate several thousand GPC in Wisconsin, Minnesota, Nebraska, Kansas, Illinois and South Dakota (Toepfer 2003). These same procedures have been used successfully to recapture, change radios, measure and collect blood samples from APC released at APCNWR and TCCP. There has been only one (0.3%) trapping and handling mortality of a night lighted APC so far out of 354 individuals recaptured (Mike Morrow, unpublished data). Radio-marked birds will be monitored daily and general telemetry techniques, habitat use and analysis will follow those used on radio-marked GPC by Toepfer (2003), Toepfer (1988) and Toepfer and Eng (1988) and on APC by the TNC and the USFWS at TCCP and APCNWR. Radio-marked birds released on private land will be located at least once per day and several times a week at night for the first 90 days post release August/October and then the surviving radio-marked birds will be located weekly to monitor survival and general movements November/February. Radio-marked birds will again be monitored daily March/July to monitor movement, survival and reproductive success of surviving radio-marked birds. The nests of hens will be enclosed with a predator exclusion fence similar to those used successfully at APCNWR and TCPP to increase nesting success (Morrow et al. 2003). In addition, a sample of 25-35 young of the year wild greater prairie chickens will be radio-marked in Minnesota in August and September to serve as a control with the pen-reared birds to compare general movements, survival and mortality factors.

Location:

Papalote Land and Cattle Company
Goliad County
Texas
USA

The release area will be the Papalote Land and Cattle Company located in Goliad County near Goliad Texas. This ranch supports about 4,000 acres of coastal prairie habitat and is surrounded by about 60,000 acres of unbroken coastal prairie. The other release areas will be the APCNWR and possibly the TCPP. Information on survival and movements past and present from these area(s) will be used for comparison purposes. ****

Project Personnel:

John E. Toepfer, PhD
Principal Investigator
The Society of Tympanuchus Cupido Pinnatus, Ltd. (STCP)
3755 Jackson Ave.
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(701) 866-0499
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Aaron C. Pratt: STCP Research Fellow and TNC Technician
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Wade Harrell, PhD
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Victoria, TX 77905
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Email: wharrell@tnc.org

Mike Morrow, PhD/Terry Rossignol
USFWS
Attwater's Prairie Chicken NWR
Eagle Lake, TX
(979) 234-6746 Ext 19
Email: mike_morrow@fws.gov

ETHICAL TREATMENT ANIMALS: Radio packages will consist of a contoured tuned loop glued and sown to a herculite bib after Armstrup (1980). The total package will weigh at most 17 grams (1.5-2.4% of body weight) and function for two years. These packages have been used successfully on several thousand GPC (Toepfer 2003) and hundreds of lesser and Attwater's prairie chickens. Examination of hundreds of recaptured birds to date indicate no skin or physical damage and occasionally minor feather modification has been observed on a few individuals when recaptured after a year or more. Individual wild GPC have worn such transmitters for over six years. Transmitters with long whip antennas that increase range will not be used because they hit the wings of prairie grouse as they fly. There has been only one (0.3%) trapping and handling mortality of a night lighted APC so far out of 354 individuals recaptured (Mike Morrow, unpublished data).

LANDOWNER PERMISSION: Landowner permission has and will be secured before any activities are conducted on private lands. TNC, GLCI and USFWS personnel have been actively involved in encouraging landowners to sign Safe Harbor agreements that limit federal regulatory liability of landowners if APC become established on their property. These agreements have reduced the concerns of many landowner concerns about future APC releases.

BUDGET:

Description	Federal	Match	Total
Year One			
PERSONNEL			
John Toepfer, STCP Researcher, Project PI ($50/hours)	$6,000.00	$8,000.00	$14,000.00
Technician(s) STCP to be named ($12/hour)	$20,000.00		$20,000.00
TRAVEL (Primarily for radio telemetry)	$8,000.00	$2,500.00	$10,500.00
EQUIPMENT (Telemetry Receivers, Antennas etc.)	$2,000.00	$5,500.00	$7,500.00
SUPPLIES (100 Adult Radio transmitters, 50 chick radios, 100 battery replacements	$29,750.00	$9,500.00	$39,250.00
CONTRACTUAL (Airplane rental)	$1,500.00		$1,500.00
OTHER	$1,000.00		$1,000.00
FRINGE BENEFITS			
INDIRECT CHARGES (12%)	$8,190.00		$8,190.00
TOTAL PROJECT COST (YEAR ONE)	$76,440.00	$25,500.00	$101,940.00
Year Two			
PERSONNEL			
John Toepfer, STCP Researcher, Project PI ($50/hours)	$6,000.00	$3,000.00	$9,000.00
Technician(s) STCP to be named ($12/hour)	$22,000.00		$22,000.00
TRAVEL (Primarily for radio telemetry)	$11,000.00	$2,000.00	$13,000.00
EQUIPMENT (Telemetry Receivers, Antennas etc.)	$3,000.00	$5,500.00	$8,500.00
SUPPLIES	$1,000.00	$6,500.00	$7,500.00
CONTRACTUAL (Airplane rental)	$1,500.00		$1,500.00
OTHER	$1,000.00		$1,000.00
INDIRECT CHARGES (15%)	$5,460.00		$5,460.00
TOTAL PROJECT COST (YEAR TWO)	$50,960.00	$17,000.00	$67,960.00
GRAND TOTAL	**$127,400.00**	**$42,500.00**	**$169,900.00**

Literature Cited:

Amstrup, S. C. 1980. A radio-collar for game birds. Journal Wildlife Management 44:214.

Hamerstrom, F. N., Jr., and O. E. Mattson. 1964. A numbered metal color-band for game birds. Journal Wildlife Management. 29:536-542.

Lawarence, J. S. and N. J. Silvy. 1987. Movements and mortality of Attwater's prairie chickens. Journal World Pheasant Association 12:57-65.

Lehmann, V. W. 1941. Attwater's prairie chicken: its life history and management. U. S. Fish and Wildlife Service, North American Fauna 57.

Morrow, M. E., T. A. Rossinignol, and J. E. Toepfer. 2003. Increasing prairie chicken nest success with predator deterrent fences. Abstract Proceedings 24th National Prairie Grouse Technical Council Conference, Siren Wisconsin.

Morrow, M. E. and T. A. Rossignol and N. J. Silvy. 2004. Federal listing of prairie grouse lessons: lessons from the Attwater's prairie chicken. Wildlife Society Bulletin. 32:112

Silvy, N. J., M. J. Peterson and R. R. Lopez. 2004. The cause of the decline of pinnated grouse: the Texas example. Wildlife Society Bulletin 32:16-21.

Toepfer, J. E. 2003. Prairie chickens grasslands: 2000 and beyond. Society Tympanuchus Cupido Pinnatus, Ltd. Elm Grove, Wisconsin. 69pp.

Toepfer, J. E., R. L. Eng, and R. K. Anderson. 1990. Translocating prairie grouse - what have we learned? North American Wildlife and Natural Resources Conference 55: 569-579.

Toepfer, J. E. 1988. The ecology of the greater prairie chicken as related to reintroductions. Dissertation. Montana State University, Bozeman. 536pp.

Toepfer, J. E. and R. L. Eng. 1988. Winter ecology of the greater prairie chicken on the Sheyenne National Grasslands, North Dakota. Pages 32-48 in A. J. Bjugstad, editor Prairie Chickens on the Sheyenne National Grasslands. U. S. Department of Agriculture Forest Service General Technical Report RM-159. Fort Collins, Colorado

ATTACHMENT B

TEXAS PARKS & WILDLIFE

LANDOWNER PERMISSION FOR WILDLIFE RESEARCH

(Pursuant to Section 12.103 of the Texas Parks and Wildlife Code)

1. **Use of Information:** I hereby grant approval for Texas Parks and Wildlife Department employees to enter property I own or manage to conduct scientific investigations and research on wildlife and to record and use (such as in analyses) site-specific information from the property. This may include placing that information onto a topographic map and entering the information into a Department database. Thus, the information could be viewed by the public.

_____ _____

(Landowner or authorized agent) (Date)

2. **Reporting of Information:** I hereby grant approval for Texas Parks and Wildlife Department employees to report (such as in publications or technical reports) the above approved information in a manner that permits identification of the location of the specific parcel of property I own or manage.

_____ _____

(Landowner or authorized agent) (Date)

3. **Other Conditions**: List any other conditions that apply to this approval.

_____

_____

4. **Name and Address:**

_____

(Name of Landowner or Authorized Agent)

_____

(Address)

_____

(City, State, Zip)

5. **Optional:**

_____

(Name of Ranch or Tract)

_____

(County) (Acreage)

_____ _____ _____

(Home Phone) (Office Phone) (FAX)

Texas Parks and Wildlife Department maintains the information collected through this form. With few exceptions, you are entitled to be informed about the information we collect. Under Sections 552.021 and 553.023 of the Texas Government Code, you are also entitled to receive and review the information. Under Section 559.004, you are also entitled to have this information corrected. For assistance call 512-389-4978.