

REU CUDY

State of West Virginia Department of Administration **Purchasing Division** 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

Pennsylvania State University

419 Forest Resources Building

University Park, PA 16802

Solicitation

NUMBER DNR214058

ADDRESS CORRESPONDENCE TO ATTENTION OF:

DEAN WINGERD 04-558-0468

P

DIVISION OF NATURAL RESOURCES PROCUREMENT OFFICE

324 4TH AVENUE SOUTH CHARLESTON, WV 25303-1228 304-558-3397

ENDOR

DATE PRINTED

02/19/2	2014							
BID OPENING DATE:	03/20/2	2014		BID	OPENING	TIME	1:3	0PM
LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UN	IT PRICE		

AMOUNT LINE THE WEST VIRGINIA PURCHASING DIVISION FOR THE AGENCY, WV DIVISION OF NATURAL RESOURCES, IS \$OLICITING BIDS TO PROVIDE A PH.D. STUDENT TO ANALYZE A MAJOR GENETIC PROJECT ON WHITE-TAILED DEER IN WEST VIRGINIA, PER THE ATTACHED SPECIFICATIONS. ATTACHMENTS INCLUDE: INSTRUCTIONS TO VENDORS SUBMITTING BIDS. . GENERAL TERMS AND CONDITIONS. . DNR214058 SPECIFICATIONS. CERTIFICATION AND SIGNATURE PAGE. . PURCHASING AFFIDAVIT. RESIDENT VENDOR PREFERENCE (RVP) FORM. d001 IS 956-70 ANALYZE GENETIC PROJECT ON WHITE-TAILED DEER THIS IS THE END OF REO DNR214058 ***** TOTAL: 03/20/14 10:19:02AM West Virginia Purchasing Division SIGNATURE *TELEPHONE* DATE TITLE FEIN ADDRESS CHANGES TO BE NOTED ABOVE

INSTRUCTIONS TO VENDORS SUBMITTING BIDS

- 1. REVIEW DOCUMENTS THOROUGHLY: The attached documents contain a solicitation for bids. Please read these instructions and all documents attached in their entirety. These instructions provide critical information about requirements that if overlooked could lead to disqualification of a Vendor's bid. All bids must be submitted in accordance with the provisions contained in these instructions and the Solicitation. Failure to do so may result in disqualification of Vendor's bid.
- 2. MANDATORY TERMS: The Solicitation may contain mandatory provisions identified by the use of the words "must," "will," and "shall." Failure to comply with a mandatory term in the Solicitation will result in bid disqualification.

3.	PREB	BID MEETING: The item identified below shall apply to this Solicitation.
	\checkmark	A pre-bid meeting will not be held prior to bid opening.
		A NON-MANDATORY PRE-BID meeting will be held at the following place and time:
		A MANDATORY PRE-BID meeting will be held at the following place and time:

All Vendors submitting a bid must attend the mandatory pre-bid meeting. Failure to attend the mandatory pre-bid meeting shall result in disqualification of the Vendor's bid. No one person attending the pre-bid meeting may represent more than one Vendor.

An attendance sheet provided at the pre-bid meeting shall serve as the official document verifying attendance. The State will not accept any other form of proof or documentation to verify attendance. Any person attending the pre-bid meeting on behalf of a Vendor must list on the attendance sheet his or her name and the name of the Vendor he or she is representing. Additionally, the person attending the pre-bid meeting should include the Vendor's E-Mail address, phone number, and Fax number on the attendance sheet. It is the Vendor's responsibility to locate the attendance sheet and provide the required information. Failure to complete the attendance sheet as required may result in disqualification of Vendor's bid.

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All Vendors should arrive prior to the starting time for the pre-bid. Vendors who arrive after the starting time but prior to the end of the pre-bid will be permitted to sign in, but are charged with knowing all matters discussed at the pre-bid.

Questions submitted at least five business days prior to a scheduled pre-bid will be discussed at the pre-bid meeting if possible. Any discussions or answers to questions at the pre-bid meeting are preliminary in nature and are non-binding. Official and binding answers to questions will be published in a written addendum to the Solicitation prior to bid opening.

4. VENDOR QUESTION DEADLINE: Vendors may submit questions relating to this Solicitation to the Purchasing Division. Questions must be submitted in writing. All questions must be submitted on or before the date listed below and to the address listed below in order to be considered. A written response will be published in a Solicitation addendum if a response is possible and appropriate. Non-written discussions, conversations, or questions and answers regarding this Solicitation are preliminary in nature and are non-binding.

Question Submission Deadline: March 7, 2014 at 5:00pm

Submit Questions to: Dean Wingerd

2019 Washington Street, East Charleston, WV 25305

Fax: 304-558-4115 Email: Dean.C.Wingerd@wv.gov

5. VERBAL COMMUNICATION: Any verbal communication between the Vendor and any State personnel is not binding, including that made at the mandatory pre-bid conference. Only information issued in writing and added to the Solicitation by an official written addendum by the Purchasing Division is binding.

6. BID SUBMISSION: All bids must be signed and delivered by the Vendor to the Purchasing Division at the address listed below on or before the date and time of the bid opening. Any bid received by the Purchasing Division staff is considered to be in the possession of the Purchasing Division and will not be returned for any reason. The Purchasing Division will not accept bids, modification of bids, or addendum acknowledgment forms via e-mail. Acceptable delivery methods include hand delivery, delivery by courier, or facsimile. The bid delivery address is:

Department of Administration, Purchasing Division 2019 Washington Street East Charleston, WV 25305-0130

The bid should contain the information listed below on the face of the envelope or the bid may not be considered: SEALED BID BUYER: SOLICITATION NO.: BID OPENING DATE: BID OPENING TIME: FAX NUMBER: In the event that Vendor is responding to a request for proposal, the Vendor shall submit one original technical and one original cost proposal plus _____ convenience copies of each to the Purchasing Division at the address shown above. Additionally, the Vendor should identify the bid type as either a technical or cost proposal on the face of each bid envelope submitted in response to a request for proposal as follows: BID TYPE: Technical Bids submitted in response to this Solicitation will be opened at the location 7. BID OPENING: identified below on the date and time listed below. Delivery of a bid after the bid opening date and time will result in bid disqualification. For purposes of this Solicitation, a bid is considered delivered when time stamped by the official Purchasing Division time clock. Bid Opening Date and Time: March 20, 2014 at 1:30pm Bid Opening Location: Department of Administration, Purchasing Division 2019 Washington Street East

8. ADDENDUM ACKNOWLEDGEMENT: Changes or revisions to this Solicitation will be made by an official written addendum issued by the Purchasing Division. Vendor should acknowledge receipt of all addenda issued with this Solicitation by completing an Addendum Acknowledgment Form, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

Charleston, WV 25305-0130

9. **BID FORMATTING:** Vendor should type or electronically enter the information onto its bid to prevent errors in the evaluation. Failure to type or electronically enter the information may result in bid disqualification.

GENERAL TERMS AND CONDITIONS:

- 1. CONTRACTUAL AGREEMENT: Issuance of a Purchase Order signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.
- 2. **DEFINITIONS:** As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.
 - 2.1 "Agency" or "Agencies" means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.
 - 2.2 "Contract" means the binding agreement that is entered into between the State and the Vendor to provide the goods and services requested in the Solicitation.
 - 2.3 "Director" means the Director of the West Virginia Department of Administration, Purchasing Division.
 - 2.4 "Purchasing Division" means the West Virginia Department of Administration, Purchasing Division.
 - 2.5 "Purchase Order" means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the successful bidder and Contract holder.
 - **2.6 "Solicitation"** means the official solicitation published by the Purchasing Division and identified by number on the first page thereof.
 - 2.7 "State" means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.
 - 2.8 "Vendor" or "Vendors" means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

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3.		TRACT TERM; RENEWAL; EXTENSION: The term of this Contract shall be determined in dance with the category that has been identified as applicable to this Contract below:
	\checkmark	Term Contract
		Initial Contract Term: This Contract becomes effective on Upon Award
		and extends for a period of One (1) year(s).
		Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal must be submitted to the Purchasing Division Director thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Renewal of this Contract is limited to Two (2) successive one (1) year periods. Automatic renewal of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases. Attorney General approval may be required for vendor terms and conditions.
		Reasonable Time Extension: At the sole discretion of the Purchasing Division Director, and with approval from the Attorney General's office (Attorney General approval is as to form only), this Contract may be extended for a reasonable time after the initial Contract term or after any renewal term as may be necessary to obtain a new contract or renew this Contract. Any reasonable time extension shall not exceed twelve (12) months. Vendor may avoid a reasonable time extension by providing the Purchasing Division Director with written notice of Vendor's desire to terminate this Contract 30 days prior to the expiration of the then current term. During any reasonable time extension period, the Vendor may terminate this Contract for any reason upon giving the Purchasing Division Director 30 days written notice. Automatic extension of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases, but Attorney General approval may be required.
		Release Order Limitations: In the event that this contract permits release orders, a release order may only be issued during the time this Contract is in effect. Any release order issued within one year of the expiration of this Contract shall be effective for one year from the date the release order is issued. No release order may be extended beyond one year after this Contract has expired.

Fixed Period Contract: This Contract becomes effective upon Vendor's receipt of the notice to

proceed and must be completed within

		One Time Purchase: The term of this Contract shall run from the issuance of the Purchase Order until all of the goods contracted for have been delivered, but in no event shall this Contract extend for more than one fiscal year.
		Other: See attached.
4.	receivi	ICE TO PROCEED: Vendor shall begin performance of this Contract immediately upon ng notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the xecuted Purchase Order will be considered notice to proceed
5.		NTITIES: The quantities required under this Contract shall be determined in accordance with egory that has been identified as applicable to this Contract below.
		Open End Contract: Quantities listed in this Solicitation are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.
		Service: The scope of the service to be provided will be more clearly defined in the specifications included herewith.
	\checkmark	Combined Service and Goods: The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.
		One Time Purchase: This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

- 6. PRICING: The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification.
- 7. EMERGENCY PURCHASES: The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute of breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.
- 8. REQUIRED DOCUMENTS: All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.

	BID BOND: All Vendors shall furnish a bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.
	PERFORMANCE BOND: The apparent successful Vendor shall provide a performance bond in the amount of . The performance bond must be issued and received by the Purchasing Division prior to Contract award. On construction contracts, the performance bond must be 100% of the Contract value.
	LABOR/MATERIAL PAYMENT BOND: The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be issued and delivered to the Purchasing Division prior to Contract award.
certific or irre same labor/r	of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide ed checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, vocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and material payment bond will only be allowed for projects under \$100,000. Personal or business are not acceptable.
	MAINTENANCE BOND: The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.
\checkmark	WORKERS' COMPENSATION INSURANCE: The apparent successful Vendor shall have appropriate workers' compensation insurance and shall provide proof thereof upon request.
	INSURANCE: The apparent successful Vendor shall furnish proof of the following insurance prior to Contract award and shall list the state as a certificate holder:
	Commercial General Liability Insurance: or more.
	Builders Risk Insurance: builders risk – all risk insurance in an amount equal to 100% of the amount of the Contract.

The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether or not that insurance requirement is listed above.
LICENSE(S) / CERTIFICATIONS / PERMITS: In addition to anything required under the Section entitled Licensing, of the General Terms and Conditions, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits prior to Contract award, in a form acceptable to the Purchasing Division.

The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications prior to Contract award regardless of whether or not that requirement is listed above.

- 9. LITIGATION BOND: The Director reserves the right to require any Vendor that files a protest of an award to submit a litigation bond in the amount equal to one percent of the lowest bid submitted or \$5,000, whichever is greater. The entire amount of the bond shall be forfeited if the hearing officer determines that the protest was filed for frivolous or improper purpose, including but not limited to, the purpose of harassing, causing unnecessary delay, or needless expense for the Agency. All litigation bonds shall be made payable to the Purchasing Division. In lieu of a bond, the protester may submit a cashier's check or certified check payable to the Purchasing Division. Cashier's or certified checks will be deposited with and held by the State Treasurer's office. If it is determined that the protest has not been filed for frivolous or improper purpose, the bond or deposit shall be returned in its entirety.
- 10. ALTERNATES: Any model, brand, or specification listed herein establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the State at its sole discretion. Any Vendor bidding an alternate model or brand should clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the equality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Vendor's bid.
- 11. EXCEPTIONS AND CLARIFICATIONS: The Solicitation contains the specifications that shall form the basis of a contractual agreement. Vendor shall clearly mark any exceptions, clarifications, or

other proposed modifications in its bid. Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.

2. LIQUIDATED DAMAGES: Vendor shall pay liquidated damages in the amount

for

This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy.

- 13. ACCEPTANCE/REJECTION: The State may accept or reject any bid in whole, or in part. Vendor's signature on its bid signifies acceptance of the terms and conditions contained in the Solicitation and Vendor agrees to be bound by the terms of the Contract, as reflected in the Purchase Order, upon receipt.
- 14. REGISTRATION: Prior to Contract award, the apparent successful Vendor must be properly registered with the West Virginia Purchasing Division and must have paid the \$125 fee if applicable.
- 15. COMMUNICATION LIMITATIONS: In accordance with West Virginia Code of State Rules §148-1-6.6, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.
- 16. FUNDING: This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available.
- 17. PAYMENT: Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and receptance of goods or services. The Vendor shall submit invoices, in arrears, to the Agency at the address on the face of the purchase order labeled "Invoice To." PSU cannot provide warranty of work
- 18. UNIT PRICE: Unit prices shall prevail in cases of a discrepancy in the Vendor's bid.
- 19. DELIVERY: All quotations are considered freight on board destination ("F.O.B. destination") unless alternate shipping terms are clearly identified in the bid. Vendor's listing of shipping terms that contradict the shipping terms expressly required by this Solicitation may result in bid disqualification.
- 20. INTEREST: Interest attributable to late payment will only be permitted if authorized by the West Virginia Code. Presently, there is no provision in the law for interest on late payments.
- 21. PREFERENCE: Vendor Preference may only be granted upon written request and only in accordance with the West Virginia Code § 5A-3-37 and the West Virginia Code of State Rules. A Resident Vendor Certification form has been attached hereto to allow Vendor to apply for the preference. Vendor's

failure to submit the Resident Vendor Certification form with its bid will result in denial of Vendor Preference. Vendor Preference does not apply to construction projects.

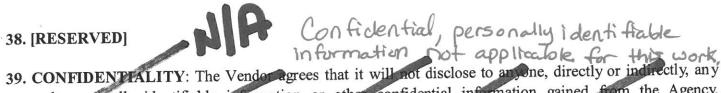
- 22. SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES: For any solicitations publicly advertised for bid on or after July 1, 2012, in accordance with West Virginia Code §5A-3-37(a)(7) and W. Va. CSR § 148-22-9, any non-resident vendor certified as a small, women-owned, or minority-owned business under W. Va. CSR § 148-22-9 shall be provided the same preference made available to any resident vendor. Any non-resident small, women-owned, or minority-owned business must identify itself as such in writing, must submit that writing to the Purchasing Division with its bid, and must be properly certified under W. Va. CSR § 148-22-9 prior to submission of its bid to receive the preferences made available to resident vendors. Preference for a non-resident small, women-owned, or minority owned business shall be applied in accordance with W. Va. CSR § 148-22-9.
- 23. TAXES: The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
- 24. CANCELLATION: The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-7.16.2.
- 25. WAIVER OF MINOR IRREGULARITIES: The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.6.

26. TIME: Time is of the essence with regard to all matters of time and performance in this Contract.

Request PA law or remain Silent

- 27. APPLICABLE LAW: This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code or West Virginia Code of State Rules is void and of no effect.
- 28. COMPLIANCE: Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendors acknowledge that they have reviewed, understand, and will comply with all applicable law.
- 29. PREVAILING WAGE: On any contract for the construction of a public improvement, Vendor and any subcontractors utilized by Vendor shall pay a rate or rates of wages which shall not be less than the fair minimum rate or rates of wages (prevailing wage), as established by the West Virginia Division of Labor under West Virginia Code §§ 21-5A-1 et seq. and available at http://www.sos.wv.gov/administrative-law/wagerates/Pages/default.aspx. Vendor shall be responsible for ensuring compliance with prevailing wage requirements and determining when prevailing wage

- requirements are applicable. The required contract provisions contained in West Virginia Code of State Rules § 42-7-3 are specifically incorporated herein by reference.
- 30. ARBITRATION: Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.
- 31. MODIFICATIONS: This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary, no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). No Change shall be implemented by the Vendor until such time as the Vendor receives an approved written change order from the Purchasing Division.
- 32. WAIVER: The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.
- 33. SUBSEQUENT FORMS: The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.
- 34. ASSIGNMENT: Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments. Notwithstanding the foregoing, Purchasing Division approval may or may not be required on certain agency delegated or exempt purchases.
- 35. WARRANTY: The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency, (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material work will conform to specs in bid.
- 36. STATE EMPLOYEES: State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.
- 37. BANKRUPTCY: In the event the Vendor files for bankruptcy protection, the State of West Virginia may deem this Contract null and void, and terminate this Contract without notice.



- such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing of the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in http://www.state.wv.us/admin/purchase/re-vacy/default.htm.
- 40. DISCLOSURE: Vendor's response to the Solicitation and the resulting Contract are considered public documents and will be disclosed to the public in accordance with the laws, rules, and policies governing the West Virginia Purchasing Division. Those laws include, but are not limited to, the Freedom of Information Act found in West Virginia Code § 29B-1-1 et seq.

If a Vendor considers any part of its bid to be exempt from public disclosure, Vendor must so indicate by specifically identifying the exempt information, identifying the exemption that applies, providing a detailed justification for the exemption, segregating the exempt information from the general bid information, and submitting the exempt information as part of its bid but in a segregated and clearly Failure to comply with the foregoing requirements will result in public disclosure identifiable format. of the Vendor's bid without further notice. A Vendor's act of marking all or nearly all of its bid as exempt is not sufficient to avoid disclosure and WILL NOT BE HONORED. Vendor's act of marking a bid or any part thereof as "confidential" or "proprietary" is not sufficient to avoid disclosure and WILL NOT BE HONORED. In addition, a legend or other statement indicating that all or substantially all of the bid is exempt from disclosure is not sufficient to avoid disclosure and WILL NOT BE HONORED. Vendor will be required to defend any claimed exemption for nondisclosure in the event of an administrative or judicial challenge to the State's nondisclosure. Vendor must indemnify the State for any costs incurred related to any exemptions claimed by Vendor. Any questions regarding the applicability of the various public records laws should be addressed to your own legal counsel prior to bid submission.

- Delete Does not apply to PSU as educ. inst.

 41. LICENSING: In secondance with West Virginia Code of State Rules §148-1-6.1.7, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of States Office, the West Virginia Tax Department West Virginia Insurance Commission, or any other state agency or political subdivision. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and a good standing with the above entities.
- 42. ANTITRUST In submitting a bid to signing a contract with accepting a Purchase Order from My gency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable relating to the particular commodities or services purchased or acquired

not applicable to educational

by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor

43. VENDOR CERTIFICATIONS: By signing its bid or entering into this Contract, Vendor certifies (1) that its bid was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid for the same material, supplies, equipment or services; (2) that its bid is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this RFQ in its entirety, understands the requirements, terms and conditions, and other information contained herein. Vendor's signature on its bid also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency.

The individual signing this bid on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

44. PURCHASING CARD ACCEPTANCE: The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, to process payment for goods and services. The Vendor must accept the State of West Virginia's Purchasing Card for payment of all orders under this Contract unless the box below is checked.



Vendor is not required to accept the State of West Virginia's Purchasing Card as payment for all goods and services. PSU not equipped to accept credit card pmts,

- 45. VENDOR RELATIONSHIP: The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms and returns pertinent to all of the foregoing. Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.
- 46. INDEMNIFICATION: The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency their officers, and employees from and against: (1) Any claims or losses for services rendered

by any subcontractor person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any fature of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not langed to, labor and wage and hour laws.

- 47. PURCHASING AFFIDAVIT: In accordance with West Virginia Code § 5A-3-10a, all Vendors are required to sign, notarize, and submit the Purchasing Affidavit stating that neither the Vendor nor a telated party owe a debt to the State in excess of \$1,000. The affidavit must be submitted prior to award, but should be submitted with the Vendor's bid. A copy of the Purchasing Affidavit is included herewith. Not applicable to PSU as an educational institution
- 48. ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE: This Contract may be utilized by and extends to other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts ("Other Government Entities"). This Contract shall be extended to the aforementioned Other Government Entities on the same prices, terms, and conditions as those offered and agreed to in this Contract. If the Vendor does not wish to extend the prices, terms, and conditions of its bid and subsequent contract to the Other Government Entities, the Vendor must clearly indicate such refusal in its bid. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.
- 49. CONFLICT OF INTEREST: Vendor, its officers or members or employees, shall not presently have or acquire any interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.
- **50. REPORTS:** Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:
 - Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

 Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing
 - of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at purchasing.requisitions@wv.gov.
- 51. BACKGROUND CHECK: In accordance with W. Va. Code § 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information

to submit to a fingerprint-based state and federal background inquiry through the state repository. The service provider is responsible for any costs associated with the fingerprint-based state and federal background inquiry.

After the contract for such services has been approved, but before any such employees are permitted to be on the grounds or in the buildings of the Capitol complex or have access to sensitive or critical information, the service provider shall submit a list of all persons who will be physically present and working at the Capitol complex to the Director of the Division of Protective Services for purposes of verifying compliance with this provision.

The State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check.

Service providers should contact the West Virginia Division of Protective Services by phone at (304)558-9911 for more information.

- 52. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS: Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:
 - a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
 - **b.** "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process.

The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:

- a. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or
- b. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products.

This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

REQUEST FOR QUOTATION DNR214058 – Ph.D. Student to analyze white tailed deer

SPECIFICATIONS

1. PURPOSE AND SCOPE: The West Virginia Purchasing Division is soliciting bids on behalf of West Virginia Division of Natural Resources, hereinafter referred to as DNR, to establish a contract for reporting, analyzing, writing, and publishing scientific results of a major genetic project dealing with Chronic Wasting Disease (CWD) in white-tailed deer in West Virginia.

The 2005 discovery of Chronic Wasting Disease (CWD) among white-tailed deer in Hampshire County West Virginia presents an unprecedented white-tailed deer management challenge to DNR. The disease does not cause an immediate wide spread die-off of white-tailed deer, but models indicate long-term damage to the white-tailed deer herd and human dimension surveys indicate adverse impacts to hunting recreation. Those that have tried to predict the outcome of the disease on deer populations have described the disease as a 30-50 year epizootic. Due to the uncertain ramifications that CWD may have on the state's white-tailed deer resource, and the protracted time during which these ramifications will occur, the DNR is seeking information on the population genetic structure of white-tailed deer. The resulting data will then be used to help plan and implement management strategies that may limit adverse impacts to both the resource and the associated recreation.

As part of an ongoing multi-year effort by the DNR to monitor the distribution and prevalence of CWD in Hampshire and Hardy counties, tissue samples were collected from hunter harvested white-tailed deer. Therefore, the DNR wishes to contract with a university to fund a Ph.D. student in wildlife management to undertake a project to examine the landscape scale gene flow of white-tailed deer in the eastern panhandle of West Virginia by analyzing DNA from the aforementioned geo-referenced archived white-tailed deer tissue samples collected from 2006 through 2013 and additional samples from surrounding counties and states if necessary. From all the archived tissue samples, a stratified subsample of a minimum of 800 individuals will be analyzed.

DNA samples from the infected CWD area and a minimum of 4 additional references areas from other regions of the state were collected by WVDNR personnel from 2005–2013. Sample sizes for each fall range from approximately 650 to 1200. Tissue samples consist of ear notches taken from the edge of the pinna or, if the hunter did not want to disfigure the deer, a small piece of skin with hair from the sternum. All tissue samples were place in a 57 x 16.5mm tube with O-ring cap containing 95% ethanol. Each sample is geo-referenced to 1 square kilometer grid and the age, sex, estimation of physical condition via rump fat, and if appropriate number of antler points and greatest outside spread in inches was recorded for

REQUEST FOR QUOTATION DNR214058 – Ph.D. Student to analyze white tailed deer

each deer. Eighty five percent of the samples taken from hunter harvested deer are from male deer with the majority being 2.5 years of age and older.

- **2. DEFINITIONS:** The terms listed below shall have the meanings assigned to them below. Additional definitions can be found in section 2 of the General Terms and Conditions.
 - 2.1 "Contract Services" means reporting, analyzing, writing, and publishing scientific results of a major genetic project dealing with Chronic Wasting Disease (CWD) in white-tailed deer in West Virginia
 - 2.2 "Pricing Page" means the pages upon which Vendor should list its proposed price for the Contract Services. The Pricing Page is either included on the last page of this RFQ or attached hereto as Exhibit A.
 - **2.3** "RFQ" means the official request for quotation published by the Purchasing Division and identified as DNR214058.
 - **2.4** "CWD" means Chronic Wasting Disease.
 - 2.5 "Ph.D. STUDENT" means Doctor of Philosophy in Wildlife Management student.
 - 2.6 "DNA" means deoxyribonucleic acid which is a self-replicating material present in nearly all living organisms as the main constituent of chromosomes and it is the carrier of genetic information.
 - 2.7 "mtDNA" means mitochondrial DNA.
 - 2.8 "GIS" means geographic information system.
 - 2.9 "PRNP" means prion protein.
 - 2.10 "SNP" means single nucleotide polymorphism.
 - **2.11 "GenBank DATABASE"** is an open access, annotated collection of all publicly available nucleotide sequences and their protein translations.

LANDSCAPE GENETICS OF WHITE-TAILED DEER TO ASSESS POPULATION STRUCTURE FOR SURVEILLANCE OF CHRONIC WASTING DISEASE

Submitted by:

The Pennsylvania State University
College of Agricultural Sciences
Department of Ecosystem Science and Management

Principal Investigator
W. David Walter, Assistant Unit Leader
U.S. Geological Survey
Pennsylvania Cooperative Fish and Wildlife Research Unit

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Executive Summary

Chronic wasting disease (CWD) is a fatal, transmissible disease that affects both captive and free ranging cervids (Miller and Wild 2004, Miller and Conner 2005). The disease is endemic to southwestern Wyoming, north-central Colorado (Williams and Young 1980), and western Nebraska, USA but has been found in Wisconsin and more recently, West Virginia, Virginia, Maryland, and Pennsylvania. The infectious prions of CWD can be spread by animal-animal (direct) contact or animal-environment-animal (indirect) contact pathways further lending to difficulties in understanding this fatal disease of free-ranging cervids. The spatial distribution of CWD in free-ranging deer has been linked to female matriarchal groups, deer concentrations on winter range, urban development, and soil characteristics (Farnsworth et al. 2005, Miller and Conner 2005, Walter et al. 2011).

Deer behavior can facilitate disease spread, as dispersing males have been documented to move >100 km (Kelly et al. 2010) and philopatry in females can exacerbate direct transmission within matriarchal groups (Grear et al. 2010). Certain prion gene alleles are associated with reduced risk of CWD, though none of the prion genotypes characterized in deer are completely protective against infection (Kelly et al. 2008). Male dispersal distance was greater (Long et al. 2005) and genetic admixture was higher (Kelly et al. 2010) for deer in more open than forested landscapes indicating the potential for disease dynamics to differ regionally based on landscape configuration and composition. Using data collected over a broad geographic scale, we would be able to map with considerable detail the landscape genetics of deer. These data would allow us to deduce patterns of potential transmission pathways of CWD, predict admixture between infected and susceptible deer, and delineate potential management actions. To maximize the efficiency of surveillance efforts and to understand the population structure of white-tailed deer in the northeast, landscape genetics of deer in the region needs to be examined.

Research on surveillance strategies, that consider demographic and environmental factors, is lacking in most states CWD has not been found. Developing surveillance strategies to maximize efficiency of sampling white-tailed deer has been recommended (Walsh and Miller 2010, Rees et

al. 2011) but requires knowledge of deer behavior, movements, and spatial connectivity of populations. Landscape genetics can provide the necessary framework to understand landscape features, dispersal characteristics of deer, and transmission and spread of CWD through assessment of population structure throughout a region.

Section 3. Qualifications

3.1. A Ph.D. is offered in Ecosystem Science and Management in the College of Agricultural Sciences at Pennsylvania State University that includes (See Attachment A):

Wildlife and Fisheries Science Interdisciplinary Degree Program in Ecology

- **3.2.** Cassandra Miller-Butterworth, Assistant Professor of Biology, Pennsylvania State University-Beaver has a specialty in genetics and will serve on the student's committee.
- **3.3.** Summaries of and references from 5 studies dealing with natural barriers, genetic flow or microsatellite loci published in peer reviewed scientific journals include:
- 1. Miller-Butterworth, C.M., Vonhof, M., Rosenstern, J., Turner, G., Russell, A. 2014. Genetic structure of little brown bats (*Myotis lucifugus*) corresponds with spread of white-nose syndrome among hibernacula. Journal of Heredity doi:10.1093/jhered/esu012.

Abstract-Until recently, the little brown bat (Myotis lucifugus) was one of the most common bat species in North America. However, this species currently faces a significant threat from the emerging fungal disease white-nose syndrome (WNS). The aims of this study were to examine the population genetic structure of M. lucifugus hibernating colonies in Pennsylvania (PA) and West Virginia, and to determine whether that population structure may have influenced the pattern of spread of WNS. Samples were obtained from 198 individuals from both uninfected and recently-infected colonies located at the crest of the disease front. Both mitochondrial (636 bp of cytochrome oxidase I) and nuclear (8 microsatellites) loci were examined. Although no substructure was evident from nuclear DNA, female-mediated gene flow was restricted between hibernacula in western PA and the remaining colonies in eastern and central PA and West Virginia. This mitochondrial genetic structure mirrors topographical variation across the region: three hibernating colonies located on the western Appalachian plateau were significantly differentiated from colonies located in the central mountainous and eastern lowland regions, suggesting reduced gene flow between these clusters of colonies. Consistent with the hypothesis that WNS is transmitted primarily through bat-to-bat contact, these same three hibernating colonies in westernmost PA remained WNS-free for 1-2 years after the disease had swept through the rest of the state, suggesting that female migration patterns may influence the spread of WNS across the landscape.

2. Chen, J., Rossiter, S., Flanders, J., Sun, Y., Hua, P., **Miller-Butterworth, C.**, Liu, X., Rajan, K., Zhang, S. 2010. Contrasting genetic structure in two co-distributed species of Old World fruit bat. *PLoS ONE*. 5(11): e13903.

Abstract-The fulvous fruit bat (Rousettus leschenaulti) and the greater short-nosed fruit bat (Cynopterus sphinx) are two abundant and widely co-distributed Old World fruit bats in Southeast and East Asia. The former species forms large colonies in caves while the latter roots in small groups in trees. To test whether these differences in social organization and roosting ecology are associated with contrasting patterns of gene flow, we used mtDNA and nuclear loci to characterize population genetic subdivision and phylogeographic histories in both species sampled from China, Vietnam and India. Our analyses from R. leschenaulti using both types of marker revealed little evidence of genetic structure across the study region. On the other hand, C. sphinx showed significant genetic mtDNA differentiation between the samples from India compared with China and Vietnam, as well as greater structuring of microsatellite genotypes within China. Demographic analyses indicated signatures of past rapid population expansion in both taxa, with more recent demographic growth in C. sphinx. Therefore, the relative genetic homogeneity in R. leschenaulti is unlikely to reflect past events. Instead we suggest that the absence of substructure in R. leschenaulti is a consequence of higher levels of gene flow among colonies, and that greater vagility in this species is an adaptation associated with cave roosting.

3. Wei, L., Flanders, J. R., Rossiter, S. J., Miller-Butterworth, C., Zhang, L. B., Zhang, S.Y. 2010. Phylogeography of the Japanese pipistrelle bat *Pipistrellus abramus* in China: the impact of ancient and recent events on population genetic structure. *Biological Journal of the Linnean Society*. 99(3): 582–594.

Abstract-The influence of Pleistocene climatic oscillations on shaping the genetic structure of Asian biota is poorly known. The Japanese pipistrelle bat occurs over a wide range in eastern Asia, from Siberia to Japan. To test the relative impact of ancient and more recent events on genetic structure in this species, we combined mitochondrial (cytochrome b) and microsatellite markers to reconstruct its phylogeographic and demographic history on continental China and its offshore islands, Hainan Island and the Zhoushan Archipelago. Our mitochondrial DNA tree recovered two divergent geographical clades, indicating multiple glacial refugia in the region. The first clade was mainly confined to Hainan Island, indicating that gene flow between this population and the continent has been restricted, despite being repeatedly connected to the mainland during repeated glacial episodes. By contrast, haplotypes sampled on the Zhoushan Archipelago were mixed with those from the mainland, suggesting a recent shared history of expansion. Although microsatellite allele frequencies showed clear discontinuities across the sampling range, supporting the current isolation of both Hainan Island and the Zhoushan Archipelago, we also found clear evidence of more recent back colonization, probably via post-glacial expansion or, in the latter case, occasional long distance dispersal. The results obtained highlight the importance of using multiple sets of markers for teasing apart the roles of ancient and more recent events on population genetic structure.

4. **Miller-Butterworth, C.M.**, Eick, G., Jacobs, D.S., Schoeman, M.C. and Harley, E.H. 2005. Genetic and phenotypic differences between South African Long-fingered Bats, with a global miniopterine phylogeny. Journal of Mammalogy. 86(6): 1121–1135.

Abstract-The Natal long-fingered bat (Miniopterus natalensis) and lesser long-fingered bat (M. fraterculus) are morphologically almost indistinguishable and occur sympatrically over much of their southern African range. This raises the possibility that they are sister taxa. We employed a multidisciplinary approach to examine their taxonomic relationship to one another and to other Miniopterus species, whose global phylogeny requires review. We examined echolocation, morphological, and dietary differences between M. natalensis and M. fraterculus, as well as both nuclear and mitochondrial DNA variation between them in the context of a phylogeny incorporating 13 Miniopterus species and subspecies. Despite similarities in their morphology and distribution, M. natalensis and M. fraterculus echolocate at peak frequencies separated by 12 kHz, and both nuclear and mitochondrial DNA markers confirm they are distinct species. Analysis of cytochrome-b (Cytb) sequences further indicates that M. fraterculus and M. natalensis are not sister taxa; M. fraterculus appears to be more closely related to the greater long-fingered bat (M. inflatus). Examination of the global taxonomy of Miniopterus confirms that Schreibers's long-fingered bat (M. schreibersii) forms a paraphyletic species complex. Furthermore, the miniopterine bats are divided into 2 geographically isolated monophyletic groups, one containing African and European species, and the other taxa from Australasia and Asia. I sequence divergence also suggests that M. natalensis is distinct from the European M. schreibersii. These results support the elevation of *M. natalensis* to full species rank.

5. **Miller-Butterworth, C.M.**, Jacobs, D.S. and Harley, E.H. 2003. Strong population substructure correlated with morphology & ecology in a migratory bat. Nature. 424: 187–191.

Abstract-Examining patterns of inter-population genetic diversity can provide valuable information about both historical and current evolutionary processes affecting a species. Population genetic studies of flying and migratory species such as bats and birds have traditionally shown minimal population substructure, characterized by high levels of gene flow between populations. In general, strongly substructured mammalian populations either are separated by non-traversable barriers or belong to terrestrial species with low dispersal abilities. Species with female philopatry (the tendency to remain in or consistently return to the natal territory) might show strong substructure when examined with maternally inherited mitochondrial DNA, but this substructure generally disappears when biparentally inherited markers are used, owing to male-mediated gene flow4. Malebiased dispersal is considered typical for mammals, and philopatry in both sexes is rare. Here we show strong population substructure in a migratory bat species, and philopatry in both sexes, as indicated by concordance of nuclear and mtDNA findings. Furthermore, the genetic structure correlates with local biomes and differentiation in wing morphology. There is therefore a close correlation of genetic and morphological differentiation in sympatric subspecific populations of this mammalian species.

(Reprints available upon request)

- **3.4.** W. David Walter, Assistant Unit Leader, Pennsylvania State University will serve as academic advisor and is a GIS specialist that has published numerous scientific manuscripts in peer reviewed GIS journals and has been using GIS in scientific research for over a decade.
 - 1. Walter, W.D., R. Smith, M. Vanderklok, and K.C. VerCauteren. 2014. Linking bovine tuberculosis on cattle farms to white-tailed deer and environmental variables using Bayesian hierarchical analysis. Plos ONE. 9(3): e90925.

Bovine tuberculosis is a bacterial disease caused by Mycobacterium bovis in livestock and wildlife with hosts that include Eurasian badgers (Meles meles), brushtail possum (Trichosurus vulpecula), and white-tailed deer (Odocoileus virginianus). Riskassessment efforts in Michigan have been initiated on farms to minimize interactions of cattle with wildlife hosts but research on M. bovis on cattle farms has not investigated the spatial context of disease epidemiology. To incorporate spatially explicit data, initial likelihood of infection probabilities for cattle farms tested for M. bovis, prevalence of M. bovis in white-tailed deer, deer density, and environmental variables for each farm were modeled in a Bayesian hierarchical framework. We used geo-referenced locations of 762 cattle farms that have been tested for M. bovis, white-tailed deer prevalence, and several environmental variables that may lead to long-term survival and viability of M. bovis on farms and surrounding habitats (i.e., soil type, habitat type). Bayesian hierarchical analyses identified deer prevalence and proportion of sandy soil within our sampling grid as the most supported model. Analysis of cattle farms tested for M. bovis identified that for every 1% increase in sandy soil resulted in an increase in odds of infection by 4%. Our analysis revealed that the influence of prevalence of M. bovis in white-tailed deer was still a concern even after considerable efforts to prevent cattle interactions with white-tailed deer through on-farm mitigation and reduction in the deer population. Cattle farms test positive for M. bovis annually in our study area suggesting that the potential for an environmental source either on farms or in the surrounding landscape may contributing to new or re-infections with M. bovis. Our research provides an initial assessment of potential environmental factors that could be incorporated into additional modeling efforts as more knowledge of deer herd factors and cattle farm prevalence is documented.

2. Walter, W.D., J.W. Fischer, M.A. Avery J.S. Humphrey, T.S. Daughtery, M.P. Milleson, and E.A. Tillman. 2012. Using three-dimensional flight patterns at airfields to identify hotspots for avian-aircraft collisions. Applied Geography 35:53–59.

In the United States, black vulture (*Coragyps atratus*) and turkey vulture (*Cathartes aura*) pose significant birdstrike risks to aircraft. Understanding flight behaviors of vultures in and around military and civilian airfields is necessary to alleviate these risks. Using satellite telemetry data collected from 11 black vultures and 7 turkey

vultures equipped with Global Positioning System backpack harness technology, we collected data on location and altitude near the Marine Corps Air Station (MCAS) in Beaufort, South Carolina from September 2006 to September 2008. We used military aircraft flight landing patterns to visualize a new concept, a flight altitude cone of depression (FACOD), which models a three-dimensional flight pattern over the airfield. We then identified areas in and around MCAS where vulture flight paths penetrated the FACOD and locations of vultures were proximate to flight approach routes that posed potential risk to aircraft for a birdstrike. Combining altitude of inflight locations of vultures or other species with three-dimensional flight patterns of aircraft provides a novel method for managers of military and domestic airfields to assess birdstrike risk and to focus corrective actions.

3. Walter, W.D., D.P. Walsh, M.L. Farnsworth, D.L. Winkelman, and M. W. Miller. 2011. Soil clay content underlies prion infection odds. Nature Communications 2:200.

Environmental factors — especially soil properties — have been suggested as potentially important in the transmission of infectious prion diseases. Because binding to montmorillonite (an aluminosilicate clay mineral) or clay-enriched soils had been shown to enhance experimental prion transmissibility, we hypothesized that prion transmission among mule deer might also be enhanced in ranges with relatively high soil clay content. In this study, we report apparent infl uences of soil clay content on the odds of prion infection in free-ranging deer. Analysis of data from prion-infected deer herds in northern Colorado, USA, revealed that a 1 % increase in the clay-sized particle content in soils within the approximate home range of an individual deer increased its odds of infection by up to 8.9 %. Our fi ndings suggest that soil clay content and related environmental properties deserve greater attention in assessing risks of prion disease outbreaks and prospects for their control in both natural and production settings.

4. Walter, W.D., J. Beringer, L.P. Hansen, J.W. Fischer, J.J. Millspaugh, and K.C. VerCauteren. 2011. Factors affecting space use overlap by white-tailed deer in an urban landscape. International Journal of Geographical Information Science 25(3):379–392.

Variation in the size and overlap of space use by white-tailed deer (*Odocoileus virginianus*) has broad implications for managing deer—human conflicts and disease spread and transmission in urban landscapes. Understanding which factors affect overlap of home range by various segments (i.e., age, sex) of an urban deer population has implications to direct contact between deer on disease epidemiology. We assessed size of home range and overlap of space use using the volume of intersection index (VI) for deer in an urban landscape by sex, age, season, and time of day. We found mean space use was larger for males than for females, for males ,3 years old than for males 3 years old, and during nocturnal hours compared with diurnal hours. We also identified larger space use by both sexes during the nongrowing than the growing season. Overlap of space use for female and male deer

in our urban landscape differed considerably depending on demographic (i.e., age) and environmental variables (i.e., time, season). For example, highest mean Vis occurred between 6-year-old females (mean = 0.51) and 5- and 6-year-old males (mean = 0.49); no mean VI was greater than 0.31 between females and males for any age combination. Variation in overlap of space use for urban deer provides new information for managing deer–human conflicts and direct transmission of disease between various segments of a deer population in an urban landscape.

5. Walter, W.D., K.C. VerCauteren, H. Campa, III, W.R. Clark, J.W. Fischer, S.E. Hygnstrom, N.E. Mathews, C.K. Nielsen, E.M. Schauber, T.R. Van Deelen, and S.R. Winterstein. 2009. Regional assessment on influence of landscape configuration and connectivity on range size of white-tailed deer. Landscape Ecology. 24(10): 1405–1420.

Variation in the size of home range of white-tailed deer (Odocoileus virginianus) has broad implications for managing populations, agricultural damage, and disease spread and transmission. Size of home range of deer also varies seasonally because plant phenology dictates the vegetation types that are used as foraging or resting sites. Knowledge of the landscape configuration and connectivity that contributes to variation in size of home range of deer for the region is needed to fully understand differences and similarities of deer ecology throughout the Midwest. We developed a research team from four Midwestern states to investigate how size of home range of deer in agro-forested landscapes is influenced by variations in landscape characteristics that provide essential habitat components. We found that for resident female deer, annual size of home range in Illinois (mean = 0.99 km2), Michigan (mean = 1.34 km2), Nebraska (mean = 1.20 km2), and Wisconsin (mean = 1.47 km2) did not differ across the region (F3,175 = 0.42, P = 0.737), but differences between agricultural growing and nongrowing periods were apparent. Variables influencing size of home range included: distance to forests, roads, and urban development from the centroid of deer home range, and percent of crop as well as four landscape pattern indices (contrast-weighted edge density, mean nearest neighbor, area-weighted mean shape index, and patch size coefficient of variation). We also identified differences in model selection for four landscapes created hierarchically to reflect levels of landscape connectivity determined from perceived ability of deer to traverse the landscape. Connectivity of selected forested regions within agro-forested ecosystems across the Midwest plays a greater role in understanding the size of home ranges than traditional definitions of deer habitat conditions and landscape configuration.

(Reprints available upon request)

Section 4. Mandatory Requirements:

4.1.1. Genetic neighborhoods based on relatedness between individuals.

Fifteen microsatellite loci and the control region of the mitochondrial DNA will be selected from commercially-available markers determined to be highly accurate for parentage assignment in captive and free-ranging white-tailed deer (*Odocoileus virginianus*; (DeYoung et al. 2003). These microsatellite loci may include: OarFCB193, OarFCB304, OBCAM, OhD, OhN, OhP, OvA, OvH, P, P-2011, Q, R, RT05, RT07, RT09, RT13, RT20, RT23, RT24, RT27, SBTD04, SBTD05, SBTD06, SBTD07, Srcrsp-10, T159S, T7.

Maternal lineage will be identified from mitochondrial DNA using Cervus 3.0 that employs a multi-step process to first stimulate the distribution of log-likelihood values for mother-offspring pairs using allele frequency data from genetics samples and also to determine statistical confidence of parentage from sampled white-tailed deer.

4.1.2. Genetic neighborhoods based on relatedness between individuals.

Genetic neighborhoods based on relatedness between individuals will be determined by microsatellite markers selected in Section 4.1.1 and are currently being validated for use in white-tailed deer populations in the study region. These markers, in addition to laboratory procedures were described in Anderson et al. (2002) and DeYoung et al. (2003). Pairwise FST's (population differentiation) will be determined among the study sites and deviations from Hardy-Weinberg Equilibrium will be examined. We will infer population structure using Bayesian clustering methods to assign individuals to genetic clusters implemented in STRUCTURE ver. 2.3.1 (Pritchard et al. 2000).

4.1.3. Dispersal patterns of male white-tailed deer.

F_{ST} values will be computed among study sites to determine dispersal patterns in male white-tailed deer in program Arlequin. Mantel tests will be used to examine correlations with geographic distance in kilometer using isolation by Distance with significance based on 100 random permutations. Isolation by distance will be examined on 2–3 spatial scales depending on separation of genetic samples provided by WV DNR.

4.1.3. Barriers to white-tailed deer dispersal.

Bayesian clustering methods will be used to infer populations that estimates the natural logarithm of the probability that individual genotypes belong to a give cluster. Genetic breaks in the landscape will be identified by overlaying these clusters (hereafter referred to as genetic clusters) on the National Land Cover Database of 2006 that was created from Landsat 7 imagery from the Multi-Resolution Land Characteristics Consortium in ArcMap 10.x (ArcMap; Environmental Systems Research Institute, Redlands, CA, USA). Additional GIS layers that have been documented as genetic barriers to deer dispersal include major highways, rivers, elevation (digital elevation models) will also be included in GIS analysis.

4.1.4. Relationship between genetic diversity at the PRNP gene and CWD prevalence.

To efficiently determine the PRNP genotype, we will use a single nucleotide polymorphism (SNP) assay for rapid and cost-effective genotyping of the polymorphism of interest at the

95th, 96th, and 115th codon (based on previously published sequence with Genbank (O'Rourke et al. 2004, Robinson et al. 2012). Reactions will be performed at the Pennsylvania State University Population Genetics Laboratory. After amplification, genotypes will be read on a plate reader and will be scored using the Bioconductor statistical package for R (http://www.bioconductor.org/). For additional quality assurance measures, we will use microsatellite data to ensure that results could not be confounded by shifts in population structure between age groups. We will use a Moran's I test to verify that patterns of PRNP genotypes were not confounded by spatial structure performed in GeoDa ver. 0.9.5 (Anselin et al. 2005).

4.1.5. Long-term storage of genetic data.

Long-term storage of genotypes and sequence data will be entered into the GenBank database for future use by the study completion date of 31 July 2017.

4.1.6. Original research.

The Ph.D. student will conduct original research and hypotheses in relation to use of genetic analysis to assist management of deer populations infected with chronic wasting disease. The original research will be provided in the form of a proposal that will be supplied to the Cervid Project Leader by 31 August 2015.

4.2 Performance Schedule

- 4.2.1 August 2014 Ph.D. Student begins classes.
 - **4.2.1.1** By December 2014, Ph.D. Student will have first committee meeting and select committee.
- **4.2.2** Microsatellite genotyping and mtDNA sequencing of all samples shall be performed, with:
 - **4.2.2.1** Report detailing completion of 4.2.2 due by August 31, 2015. Report will be submitted to Supervisor of Game Management Services and Cervid Project Leader via email in either Word or PDF format and will detail completion percentage of said task.
- **4.2.3** Landscape genetic analysis overlaying genetic and GIS assignment of male deer to neighborhoods shall be performed, with:
 - **4.2.3.1** Report detailing completion of 4.2.3 due by February 29, 2016. Report will be submitted to Supervisor of Game Management Services and Cervid Project Leader via email in either Word or PDF format and will detail completion percentage of said task.
- 4.2.4 SNP assay of all samples shall be performed, with:

- **4.2.3.1** Report detailing completion of 4.2.4 due by October 31, 2016. Report will be submitted to Supervisor of Game Management Services and Cervid Project Leader via email in either Word or PDF format and will detail completion percentage of said task.
- **4.2.5** Complete analysis of genetic data and preparation of manuscripts shall be performed, with:
 - **4.2.5.1** Report detailing completion of 4.2.4 due by October 31, 2016. Report will be submitted to Supervisor of Game Management Services and Cervid Project Leader via email in either Word or PDF format and will detail completion percentage of said task.

Literature Cited

- Anderson, J. D., R. L. Honeycutt, R. A. Gonzales, K. L. Gee, L. C. Skow, R. L. Gallagher, D. A. Honeycutt, and R. W. DeYoung. 2002. Development of microsatellite DNA markers for the automated genetic characterization of white-tailed deer populations. Journal of Wildlife Management 66:67-74.
- Anselin, L., I. Syabri, and Y. Kho. 2005. GeoDA: an introduction to spatial data analysis. Geographical Analysis 38:5-22.
- DeYoung, R. W., S. Demarais, R. L. Honeycutt, R. A. Gonzales, K. L. Gee, and J. D. Anderson. 2003. Evaluation of DNA microsatellite panel useful for genetic exclusion studies in white-tailed deer. Wildlife Society Bulletin 31:220-232.
- Farnsworth, M. L., L. L. Wolfe, N. T. Hobbs, K. P. Burnham, E. S. Williams, D. M. Theobald, M. M. Conner, and M. W. Miller. 2005. Human land use influences chronic wasting disease prevalence in mule deer. Ecological Applications 15:119-126.
- Grear, D. A., M. D. Samuel, K. T. Scribner, B. V. Weckworth, and J. A. Langenberg. 2010. Influence of genetic relatedness and spatial proximity on chronic wasting disease infection among female white-tailed deer. Journal of Applied Ecology 47:532-540.
- Kelly, A. C., N. E. Mateus-Pinilla, J. Diffendorfer, E. Jewell, M. O. Ruiz, J. Killefer, P. Shelton, T. Beissel, and J. Novakofski. 2008. Prion sequence polymorphisms and chronic wasting disease resistance in Illinois white-tailed deer (Odocoileus virginianus). Prion 2:28-36.
- Kelly, A. C., N. E. Mateus-Pinilla, M. Douglas, W. Brown, M. O. Ruiz, J. Killefer, P. Shelton, T. Beissel, and J. Novakofski. 2010. Utilizing disease surveillance to examine gene flow and dispersal in white-tailed deer. Journal of Applied Ecology 47:1189-1198.
- Long, E. S., D. R. Diefenbach, C. S. Rosenberry, B. D. Wallingford, and M. D. Grund. 2005. Forest cover influences dispersal distance of white-tailed deer. Journal of Mammalogy 86:623-629.
- Miller, M. W., and M. M. Conner. 2005. Epidemiology of chronic wasting disease in free-ranging mule deer: spatial, temporal, and demographic influences on observed prevalence patterns. Journal of Wildlife Diseases 41:275-290.
- Miller, M. W., and M. A. Wild. 2004. Epidemiology of chronic wasting disease in captive white-tailed and mule deer. Journal of Wildlife Diseases 40:320-327.
- O'Rourke, K. I., T. R. Spraker, L. K. Hamburg, T. E. Besser, K. A. Brayton, and D. P. Knowles. 2004. Polymorphisms in the prion precursor functional gene but not the pseudogene are associated with susceptibility to chronic wasting disease in white-tailed deer. Journal of General Virology 85:1339-1346.

- Pritchard, J. K., M. Stephens, and P. Donnelly. 2000. Inference of population structure using multilocus genotype data. Genetics 155:945-959.
- Rees, E. E., E. H. Merrill, T. K. Bollinger, Y. T. Hwang, M. J. Pybus, and D. W. Coltman. 2011. Targeting the detection of chronic wasting disease using the hunter harvest during early phases of an outbreak in Saskatchewan, Canada. Preventive Veterinary Medicine 104:149-159.
- Robinson, S. J., M. D. Samuel, C. J. Johnson, M. Adams, and D. I. McKenzie. 2012. Emerging prion disease drives host selection in a wildlife population. Ecological Applications 22:1050-1059.
- Walsh, D. P., and M. W. Miller. 2010. A weighted surveillance approach for detecting chronic wasting disease foci. Journal of Wildlife Diseases 46:118-135.
- Walter, W. D., D. P. Walsh, M. L. Farnsworth, D. L. Winkelman, and M. W. Miller. 2011. Soil clay content underlies prion infection odds. Nature Communications 2:1-6.
- Williams, E. S., and S. Young. 1980. Chronic wasting disease of captive mule deer: a spongiform encephalopathy. Journal of Wildlife Diseases 16:89-96.

REQUEST FOR QUOTATION DNR214058 – Ph.D. Student to analyze white tailed deer

- **10.1.4.** Failure to remedy deficient performance upon request.
- 10.2. The following remedies shall be available to Agency upon default.
 - 10.2.1. Cancellation of the Contract.
 - 10.2.2. Cancellation of one or more release orders issued under this Contract.
 - 10.2.3. Any other remedies available in law or equity.

11. MISCELLANEOUS:

11.1. Contract Manager: During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below. The Contract manager for this project will be the academic advisor of the Ph.D. Student.

Contract Manager: W. David Walter
Telephone Number: 814-867-4763
Fax Number: 814-862-4710
Email Address: Wdwalter@psu.edu

Request for Quotation #DNR214058 Research Project for Chronic Wasting Disease on White-Tailed Deer Attachment A: Pricing Page

YEAR ONE (1)		YEAR TWO (2)		YEAR THREE (3)		
	Unit Price		Unit Price		Unit Price	
Year One (1) Tota	4120,300	Year Two (2)	Total \$36,956	Year Three (3) Tot	al \$7,170	

TOTAL BID (Combine All Years)	典	16	4	426

Request for Quotations #DNR214058 Attachment B: Study References Sheet

see previous page

Publication Name:	
Date of Publication:	
Name of Study:	
Summary of Study:	
·	·
Publication Name:	
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Date of Publication:	
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Summary of Study:	
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Name of Study:	
Summary of Study:	
Publication Name:	
Date of Publication:	
Name of Study:	
Summary of Study:	

CERTIFICATION AND SIGNATURE PAGE

By signing below, I certify that I have reviewed this Solicitation in its entirety, understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid or proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that to the best of myknowledge, the bidder has properly registered with any State agency that may require registration.

*Note following exceptions to RFQ terms * (see next page)

The Pennsy Var (Company)	via State University
John W. Han (Authorized Signature)	old
John W. Hanold (Representative Name, Title)	Interim Director-OSP
B14-865-137Z	814-865-3377
(Phone Number)	(Fax Number)
(Date) 3 19 2014	



Agricultural Ecosystem Science and Management

Doctor of Philosophy (Ph.D.)

Admission criteria requirements for the Ph.D. degree in Forest Resources

The objectives of the PhD degree are:

- 1. to attain the highest level of scholarship and independent research in one of the three subject matter areas within the Department of Ecosystem Science and Management,
- 2. to conduct original research in a scholarly manner which represents a significant contribution to knowledge within the scope of the Department's programs, and
- 3. to develop a proficiency in a basic scientific discipline in relation to one of the Department's subject matter areas.

The PhD candidate must develop and demonstrate the ability to conceive and conduct independent research. The degree is designed to produce a scientist proficient in scientific principles and capable of academic teaching and/or scholarly research.

Following admission to residency, even if course work and thesis research have been initiated, full acceptance in the PhD program requires passing the Candidacy Examination early in the residency period. The student must be registered during the semester that the Candidacy Exam is administered.

Admission Requirements [http://ecosystems.psu.edu/graduateprograms/forest-resources/phd/admissions]

Course and Credit Requirements [http://ecosystems.psu.edu/graduateprograms/forest-resources/phd/course-requirements]

International Understanding & Communications Requirements [http://ecosystems.psu.edu/graduateprograms/forest-resources/phd/international]

Student's Committee [http://ecosystems.psu.edu/graduateprograms/forest-resources/phd/students-committee]

Thesis Research [http://ecosystems.psu.edu/graduateprograms/forest-resources/phd/thesis-research]

Candidacy Examination [http://ecosystems.psu.edu/graduateprograms/forest-resources/phd/candidacy-examination]

Comprehensive Examination [http://ecosystems.psu.edu/graduateprograms/forest-resources/phd/comprehensive-examination]

Final Oral Exam [http://ecosystems.psu.edu/graduateprograms/forest-resources/phd/final-oral-exam]

Graduate School Requirements [http://ecosystems.psu.edu/graduateprograms/forest-resources/phd/appendix-g]

Appendix G

Graduate Programs Handbook [http://ecosystems.psu.edu/graduateprograms/forest-resources/phd/graduate-programs-handbook]

Note: this is only available to current graduate students

The Pennsylvania State University exceptions to the Solicitation Terms and Conditions:

- Article 12 Liquidated Damages. Please delete as PSU cannot agree up front to pay liquidated damages as a non-profit educational institution.
- Article 17 Payment. In the second sentence, please delete the words "and acceptance" –
 this can be perceived as a warranty of work which the University cannot provide.
- Article 27 Applicable Law. Request Pennsylvania law or remain silent as an alternative.
- Article 35 Warranty. Please delete Items (b) and (c) from this clause. PSU can only warrant
 that our work will conform to the specifications as outlined in the bid.
- Article 39 Confidentiality. Many of the terms contained in this referenced agreement are
 problematic or unacceptable by the University. Please mark this article as not applicable for
 this work and agree that there will be no confidential information, personally identifiable
 information or protected health information provided to Penn State under the resultant
 Contract. There does not appear to be a need for us to receive Confidential Information based
 on the scope of work.
- Article 41 Licensing. Please delete or confirm that this article is not applicable to PSU as an
 educational institution.
- Article 42 Antitrust. Please delete or confirm that this article is not applicable to PSU as an
 educational institution.
- Article 44 Purchasing Card Acceptance. PSU is not equipped at this time to accept credit
 card payments. Please check the box that says we are not required to accept the State of
 West Virginia's Purchasing Card as payment. We can accept check or wire transfer at this
 time.
- Article 46 Indemnification. Please delete this article in its entirety as PSU cannot agree to indemnify any sponsor as our status is a non-profit educational institution.
- Article 47 Purchasing Affidavit. Please delete or confirm that this article is not applicable to PSU as an educational institution.

STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name:		
Authorized Signature:	Date:	
State of		
County of, to-wit:		
Taken, subscribed, and sworn to before me this day	of, 20_	·
My Commission expires	, 20	
AFFIX SEAL HERE	NOTARY PUBLIC	

1.

ing the date of this certification: or.

State of West Virginia

VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with **West Virginia Code**, §5A-3-37. (Does not apply to construction contracts). **West Virginia Code**, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the **West Virginia Code**. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preced-

Application is made for 2.5% resident vendor preference for the reason checked:

	Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has
_	maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or , Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; or ,
2.	Application is made for 2.5% resident vendor preference for the reason checked: Bidder is a resident endor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project using bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
3.	Application is made for 2.5% resident vendor preference for the reason checked: Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of the hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or singler saffiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the contract, on average at least 75% of the employees or singler saffiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the contract, on average at least 75% of the employees or singler saffiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the contract, on average at least 75% of the employees or singler saffiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the contract.
4.	Application is neede for 5% resident vendor preference for the reason checked: Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; or,
5.	Application is made for 3.5% resident vendor preference who is a veteran for the reason checked: Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; or,
6.	Application is made for 3.5% resident vendor preference who is a veteran for the reason checked: Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.
7.	Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with West Virginia Code §5A-3-59 and West Virginia Code of State Rules. Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, women- and minority-owned business.
requiren against	understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the nents for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency cted from any unpaid balance on the contract or purchase order.
the requ	dission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and es the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid ired business taxes, provided that such information does not contain the amounts of taxes paid nor any other information by the Tax Commissioner to be confidential.
and acc	penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true curate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate is during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.
Bidder:	Signed:
Date:	Title



TITLE

State of West Virginia Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

Solicitation

NUMBER
DNR214058

PAGE 1

ADDRESS CORRESPONDENCE TO ATTENTION OF:

ADDRESS CHANGES TO BE NOTED ABOVE

DEAN WINGERD 304-558-0468

Pennsylvania State University 419 Forest Resources Building University Park, PA 16802

S	DIVISION PROCUREM	OF ENT	NATURAL OFFICE	RESOURCES
1				
	324 4TH A SOUTH CHA			
	25303-1	1228	304-	-558-3397

DATE PRINTED 03/11/2014 1:30PM BID OPENING TIME BID OPENING DATE: 03/20/2014 CAT. AMOUNT UOP ITEM NUMBER UNIT PRICE LINE QUANTITY ADDENDUM NO. 1 ADDENDUM IS ISSUED: 1. TO PROVIDE RESPONSES TO VENDORS' QUESTIONS REGARDING THE ABOVE SOLICITATION. QUESTION AND ANSWER PAGES ARE ATTACHED. TO PROVIDE ADDENDUM ACKNOWLEDGMENT. THIS DOCUMENT SHOULD BE SIGNED AND RETURNED WITH YOUR BID. FAILURE TO SIGN AND RETURN MAY RESULT IN THE DISQUALIFICATION OF YOUR BID. END OF ADDENDUM NO.1 ****** TELEPHONE DATE SIGNATURE

SOLICITATION NUMBER: DNR214058 Addendum Number: 1

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Car	tegory:
-------------------------	---------

1]	Modify bid opening date and time			
[1	Modify specifications of product or service being sought			
[\]		Attachment of vendor questions and responses			
[Attachment of pre-bid sign-in sheet			
[ĺ	Correction of error			
[ı	Other			

Description of Modification to Solicitation:

- 1. To provide copy of vendor questions and responses.
- 2. To provide Addendum Acknowledgment form.

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

- 1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
- 2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

ATTACHMENT A

DNR214058

Technical Questions

- Q. 1. Section 3.1, page 20: What form of documentation do you need to confirm our university offers a Ph.D.? Does this require a statement on official university letterhead or would printing online information to prospective students suffice?
- A. 1. Printing of online information to prospective students will suffice or bidders may copy their academic handbook or get a letter on official university letterhead.
- Q. 2. Section 3.4, page 20: What form of documentation is necessary to be a "GIS Specialist." Does this require a university-granted "GIS Certificate" or would a researcher's manuscripts using GIS and years of experience in data analysis suffice?
- A. 2. A researcher's manuscripts using GIS and years of experience in GIS data analysis will suffice.
- Q. 3. Section 4.2.2.1. and 4.2.3.1. Is a report detailing completion of 4.2.3. really due by February 28, 2015 or should the year be 2016 or 17?
- A. 3. The date in 4.2.3.1 was a mistake. It is corrected from February 28, 2015 to February 29, 2016.
- Q. 4. Does the agency want a Report detailing landscape genetics analysis overlaying genetic and GIS assignment before the Report for 4.2.2. that actually includes the results of genetics analysis?
- A. 4. No, see A.3. Date in 4.2.3.1 has been modified.
- Q. 5. Specifications Article 5.2, Pricing Page (page 23) "Vendor should complete the Pricing Page by filling in the Unit Price for each item listed, this Unit Price shall include all costs related to the project including salaries, fringe benefits, travel, supplies and any other incidentals required."

Given the RFQ language in the preceding paragraph, does the Agency expect to see a line item budget by year for salaries, fringe benefits, travel, etc. on the Pricing Page, or does the Agency want these types of costs rolled up into a yearly total and the yearly total is the "Unit Price".

- A. 5. The Agency does not expect to see a line item budget. They want these types of costs rolled up into a yearly total and the yearly total is the "Unit Price."
- Q. 6. If the "Unit Price" on the Pricing Page is not yearly total, then what is an acceptable "unit Price" measurement? See also Specifications Article 8. Travel that states "Any anticipated mileage or travel cost may be included in the flat fee or hourly rate listed on Vendor's bid..."
- A. 6 The "Unit Price" is the yearly total on the pricing page.

Q. 7. Specifications, Article 7, Payment (page 23) – "Agency shall pay the annual unit price as shown on the Pricing Pages, for all Contract Services performed and accepted under this Contract. Vendor shall accept payment in the accordance with the payment procedures of the State of West Virginia. Vendor shall bill Agency monthly for costs accrued during that pay period."

Will this be a fixed price agreement or a cost reimbursement agreement? The language above could be interpreted to read as a fixed price agreement as well as a cost reimbursement.

- A. 7. This will be a cost reimbursement not to exceed total bid amount.
- Q. 8. Pricing Page: Would it be acceptable to have different Yearly totals? For example in out years, there may be cost of living increases, and other inflationary factors that might impact the costs of Years two (2) and three (3).
- A. 8. Yes, it is accepted, and expected, that there would be different costs between years one (1), two (2), and three (3) depending upon supplies needed for that specific time period, cost of living inflation, etc.

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: DNR214058

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

			umbers Received:						
(Check the box next to each addendum received)									
	[\	1	Addendum No. 1	[]	Addendum No. 6			
	[]	Addendum No. 2	[]	Addendum No. 7			
	[]	Addendum No. 3]]	Addendum No. 8			
	[]	Addendum No. 4	[]	Addendum No. 9			
	[]	Addendum No. 5	[]	Addendum No. 10			
I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.									
				I	he	Pennsylvania State University Company			
				(Ja	hn W. Hanold Authorized Signature			
					3/	19/2014 Date			
						2400			

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

Revised 6/8/2012



PROPOSAL TRANSMITTAL

3/19/2014 Date:

OSP No:

172886

Title:

Landscape Genetics of White-Tailed Deer to Assess Population Structure for Surveillance of Chronic

Wasting Disease

Submitted to: State of West Virginia

Department of Administration

Purchasing Division

Program:

RFQ Number DNR214058

Submitted by: W. David Walter

Budgetary Contact:

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