

Crystal Rink, Bid Clerk
Department of Administration, Purchasing Division
2019 Washington St. E.
Charleston, WV 26305-0130

April 11, 2016

Ms. Rink,

Attached is AllStar Ecology's (ASE) bid concerning a Proposal for Critical Faunal Survey and Endangered Species Management Plan for the Indiana and Northern Long-eared Bat, CRFQ 0603 ADJ160000020. ASE provides advanced rare, threatened, and endangered (RTE) bat species services throughout West Virginia and its neighboring states. Our bat services include: mist netting, harp trapping, acoustic surveys, portal surveys and assessments, summer habitat assessments, habitat suitability modelling, artificial roost (i.e., boxes) construction and installation, potential roost tree identification and creation (e.g. snags), conservation plans and conservation areas, and long term monitoring.

ASE has completed several large scale surveys throughout West Virginia, Pennsylvania, and Ohio; key biologist have also received training in Kentucky. During the summer of 2013 we completed a large-scale, comprehensive acoustic and mist netting survey at the Camp Dawson Army Training Facility near Kingwood in Preston County, WV. Indiana bat presence data collected were the basis of our publication *Summer-Habitat Suitability Modeling of Indiana Bats (Myotis sodalis) in the Eastern Mountains of West Virginia* - Northeastern Naturalist 23(1):100-118. We completed a similar survey for the U.S. Army Corps of Engineers (2014) to determine the presence/absence of northern long-eared (NLEB) and Indiana bats at Raystown Lake, PA, and a large survey of abandoned mine portals for the West Virginia Department of Environmental Protection during (2015). Additionally, we were commissioned by the Greenbrier Valley RR to acoustically survey the West Fork-Rail-to-Trail for the presence of RTE bat species (2014). Finally, ASE has begun an extensive conservation initiative with the aim of preserving lands for *Myotis* bats throughout northcentral, WV. To date we have successfully founded the North Fork Conservation Site in Ritchie County, WV, documenting the presence of NLEB and their roosts.

ASE employs a diverse group of specialized scientists trained to serve the needs of the greater Appalachian region. We have conducted a variety of surveys throughout the state for a variety of RTE plant, mammal, and mollusk species. We are confident that our wealth of experience will be beneficial to the project and are confident that we can complete the survey and report both on time and budget.

Regards,

Jesse L. De La Cruz, M.S.
Wildlife Biologist

AllStar Ecology, LLC.
1582 Meadowdale Road
Fairmont, WV 26554
Office: 304-816-3490
Cell: 304-322-0060

04/15/16 10:08:41
WV Purchasing Division

I have read many definitions of what is a conservationist, and written not a few myself, but I suspect that the best one is not written with a pen, but with an axe – Aldo Leopold

Proposal for Critical Faunal Survey and Endangered Species Management Plan for the Indiana and Northern Long-eared Bat

WEST VIRGINIA ARMY NATIONAL GUARD (WVANG)



Northern long-eared bat (*Myotis septentrionalis*)

Prepared for:
West Virginia Purchasing Division
2019 Washington Street East
P.O. Box 50130
Charleston, WV 25305-0130

RFQ Number
CRFQ 0603 ADJ1600000020

Prepared by:
1582 Meadowdale Road
Fairmont, WV 26554
Office: (304)-816-3490

April 11, 2016



ALLSTAR ECOLOGY
Natural Resource Specialists

Table of Contents

Contact Information:	1
Signed RFQ:.....	2
Completed and Signed Quotation	5
FEIN Number	5
DUNS	5
Addendums	8
Purchasing Affidavit	10
Vender Preference Certificate.....	12
Certificate of Insurance.....	14
Technical Proposal.....	16
Phase 1: Habitat Assessment	17
Phase 2: Presence/Absence Sampling – Acoustic Survey	18
Verification of Deployment Location.....	19
Verification of Proper Functioning.....	19
Weather Conditions	19
Weatherproofing.....	20
Acoustic Analysis.....	20
Phase 3: Mist netting to Capture Indiana and Northern Long-eared Bats	20
Net Placement.....	21
Survey Period	21
Net Checks.....	21
Documentation of <i>Myotis</i> Bat Captures.....	21
Phase 4: Radio-Tracking and Emergence Surveys	22
Emergence Surveys of Located Roost Trees	22
Endangered Species Management Plan	23
Literature Cited	24
Recent Relevant Experience	26
Qualifications of Key Personnel: Resumes.....	28

Contact Information:

AllStar Ecology LLC.
1582 Meadowdale Road
Fairmont WV, 26554
Project Manager: Jesse De La Cruz, M.S.
Cell: (304) 322-0060
Office: (304) 816-3490
Website: www.allstarecology.com
Email: jesse@allstarecology.com

FEIN Number: 26-1557130

Total Cost: \$46,500.00



Indiana bat (*M. sodalis*)

Signed RFQ:



Northern long-eared bat (*Myotis septentrionalis*)



Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

State of West Virginia
 Request for Quotation

Proc Folder: 203105
 Doc Description: BAT SURVEY-CAMP DAWSON
 Proc Type: Central Purchase Order

Date issued	Solicitation Closes	Solicitation No	Version
2016-03-28	2016-04-19 13:30:00	CRFQ 0603 ADJ1600000020	1

BID RECEIVING LOCATION
 BID CLERK
 DEPARTMENT OF ADMINISTRATION
 PURCHASING DIVISION
 2019 WASHINGTON ST E
 CHARLESTON WV 25305
 US

VENDOR
 Vendor Name, Address and Telephone Number:
 AllStar Ecology LLC ATTN: Jesse De La Cruz
 1582 Meadowdale Road (cell) 304-322-0060
 Fairmont, WV 26554
 (office) 304-816-3490

FOR INFORMATION CONTACT THE BUYER
 Crystal Rink
 (304) 558-2402
 crystal.g.rink@wv.gov

Signature X  FEIN # 26-1557130 DATE 04/11/2016
 All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

THE STATE OF WEST VIRGINIA PURCHASING DIVISION FOR THE AGENCY, THE WEST VIRGINIA ARMY NATIONAL GUARD'S CAMP DAWSON ARMY TRAINING SITE'S ENVIRONMENTAL OFFICE, IS SOLICITING BIDS TO ESTABLISH A CONTRACT TO PROVIDE ALL PROFESSIONAL AND TECHNICAL PERSONNEL, LABOR, FACILITIES, EQUIPMENT, MATERIALS, TRANSPORTATION, AND SUPPLIES NEEDED FOR A CRITICAL FAUNA SURVEY AND DEVELOPMENT OF AN ENDANGERED SPECIES MANAGEMENT PLAN FOR THE INDIANA BAT AND THE NORTHERN LONG-EARED BAT PER THE ATTACHED.

INVOICE TO		SHIP TO	
DIVISION ENGINEERING & FACILITIES ADJUTANT GENERALS OFFICE 1707 COONSKIN DR		FACILITY MAINTENANCE MANAGER CAMP DAWSON ARMY TRAINING SITE 240 ARMY RD	
CHARLESTON	WV25311	KINGWOOD	WV 26537-1077
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Bat Survey-Endangered Species Mgmt Plan-Camp Dawson	1		\$46,500.00	\$46,500.00

Comm Code	Manufacturer	Specification	Model #
77111507			

Extended Description :

Critical Fauna Survey and Endangered Species Management Plan for the Indiana Bat and the Northern Long-Eared Bat

SCHEDULE OF EVENTS

Line	Event	Event Date
1	VENDOR QUESTION DEADLINE	2016-04-11

Completed and Signed Quotation

AllStar Ecology LLC.
1582 Meadowdale Road
Fairmont, WV 26554
FEIN Number: 26-1557130
DUNS: 829007876



Tri-colored bat (*Perimyotis subflavus*)

EXHIBIT A
CRFQ ADJ160000020

ALL LABOR, MATERIALS, EQUIPMENT, AND SUPPLIES NECESSARY TO CONDUCT CRITICAL FAUNA
SURVEY AND ENDANGERED SPECIES MANAGEMENT PLAN FOR THE INDIANA BAT AND
NORTHERN LONG-EARED BAT, ON CAMP DAWSON ARMY TRAINING SITE AT KINGWOOD, WV

BID FORM

The undersigned, hereafter called the Bidder, being familiar with and understanding the bidding documents; and being familiar with the required qualifications and the mandatory requirements of the Project with regards to the deliverables and associated timelines, hereby proposes to furnish labor, material, equipment, supplies, and transportation to perform the work as described in the bidding documents

BIDDERS COMPANY NAME: AllStar Ecology LLC

VENDOR ADDRESS: 1582 Meadodale Road

Fairmont WV, 26554

TELEPHONE: 304-816-3490

FAX NUMBER: 1-866-213-2666

E-MAIL ADDRESS: jesse@allstarecology.com

CONTRACT TOTAL BID:

Forty-six Thousand Five Hundred 00/100 Dollars

(\$ 46,500.00) ***(Contract bid to be written in words and numbers.)

The contract will be awarded to the Bidder with the lowest contract total bid meeting all of the specifications. Bidder understands that to the extent allowed by the West Virginia Code, the OWNER reserves the right to waive any informality or irregularity in any bid, or bids, and to reject any and all bids in whole or in part; to reject a bid not accompanied by the required bid security or by other data required by the bidding documents; to reject any conditions of the bid by the Bidder that is any way inconsistent with the requirements, terms, and conditions of the bidding documents; or to reject a bid that is in any way incomplete or irregular.

Failure to use this bid form may result in bid disqualification.

SIGNATURE:  DATE: 4/11/2016

NAME: Jesse De La Cruz
(Please Print)

TITLE: Wildlife Biologist

CERTIFICATION AND SIGNATURE PAGE

By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

AllStar Ecology LLC

(Company)



(Jesse De La Cruz, Wildlife Biologist)

(Authorized Signature) (Representative Name, Title)

304-816-3490; 1-866-213-2666

(Phone Number) (Fax Number) (Date)

Addendums



Small-footed bat (*Myotis leibii*)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFQ ADJ160000020

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.

Addendum Numbers Received:
(Check the box next to each addendum received)

- | | |
|---|--|
| <input type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> 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.

AllStar Ecology LLC

Company



Authorized Signature

4/11/2016

Date

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

Purchasing Affidavit



Indiana bat and little brown bat (*M. lucifugus*)

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 exceeds 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: AllStar Ecology LLC

Authorized Signature: [Signature] Date: 4/13/16

State of WV

County of Morgan, to-wit:

Taken, subscribed, and sworn to before me this 13 day of April, 2016.

My Commission expires Jan 8, 2020

AFFIX SEAL HERE

NOTARY PUBLIC

[Signature]
Purchasing Affidavit (Revised 07/01/2012)



Vender Preference Certificate



Hoary bat (*Lasiurus cinereus*)

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 Vendor Preference, if applicable.

1. **Application is made for 2.5% vendor preference for the reason checked:**

Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,

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% vendor preference for the reason checked:**

Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being 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% 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 one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,

4. **Application is made for 5% 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% 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% 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.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Under penalty of law for false swearing (*West Virginia Code*, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: AllStar Ecology LLC

Signed: 

Date: 04/11/2016

Title: Wildlife Biologist

Certificate of Insurance



Red bat (*Lasiurus borealis*)



ALLSECO-01

ACOY

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

4/8/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Dyer, Heflin, Bowers & Eckels 250 Scott Avenue Morgantown, WV 26505	CONTACT NAME: PHONE (A/C, No, Ext): (304) 599-3445 FAX (A/C, No): (304) 599-4607 E-MAIL ADDRESS: <table style="width: 100%; border: none;"> <tr> <td style="text-align: center; border: none;">INSURER(S) AFFORDING COVERAGE</td> <td style="text-align: center; border: none;">NAIC #</td> </tr> <tr> <td style="border: none;">INSURER A: Evanston Insurance Company</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">INSURER B: The Cincinnati Insurance Co.</td> <td style="border: none; text-align: center;">10677</td> </tr> <tr> <td style="border: none;">INSURER C: BrickStreet Mutual Insurance Company</td> <td style="border: none; text-align: center;">12372</td> </tr> <tr> <td style="border: none;">INSURER D:</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">INSURER E:</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">INSURER F:</td> <td style="border: none;"></td> </tr> </table>	INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A: Evanston Insurance Company		INSURER B: The Cincinnati Insurance Co.	10677	INSURER C: BrickStreet Mutual Insurance Company	12372	INSURER D:		INSURER E:		INSURER F:	
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INSURER D:															
INSURER E:															
INSURER F:															
INSURED Allstar Ecology, LLC 1582 Meadowdale Road Fairmont, WV 26554															

COVERAGES	CERTIFICATE NUMBER:	REVISION NUMBER:
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THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Including Pollution GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:	X	X	16PKGNE60629	03/28/2016	03/28/2017	EACH OCCURRENCE \$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000
							MED EXP (Any one person) \$ 5,000
							PERSONAL & ADV INJURY \$ 1,000,000
							GENERAL AGGREGATE \$ 2,000,000
							PRODUCTS - COMP/OP AGG \$ 2,000,000
							\$
B	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS	X	X	ENP 0380766	03/28/2016	03/28/2017	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
							BODILY INJURY (Per person) \$
							BODILY INJURY (Per accident) \$
							PROPERTY DAMAGE (Per accident) \$
							\$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$	X	X	16EFXNE60390	03/28/2016	03/28/2017	EACH OCCURRENCE \$ 9,000,000
							AGGREGATE \$
							\$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A	WCB1017038	03/28/2016	03/28/2017	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER
							E.I. EACH ACCIDENT \$ 1,000,000
							E.I. DISEASE - EA EMPLOYEE \$ 1,000,000
							E.I. DISEASE - POLICY LIMIT \$ 1,000,000
A	Liability	X	X	16PKGNE60629	03/28/2016	03/28/2017	Professional Liab 1,000,000
A	General Liability	X	X	16PKGNE60629	03/28/2016	03/28/2017	Pollution Liability 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
 Excluding Workers Compensation and professional liability, the certificate holder is included as an additional insured as required by written contract; a waiver of subrogation is granted in favor of the holder; the coverage evidenced is primary and non-contributory.

CERTIFICATE HOLDER
CANCELLATION

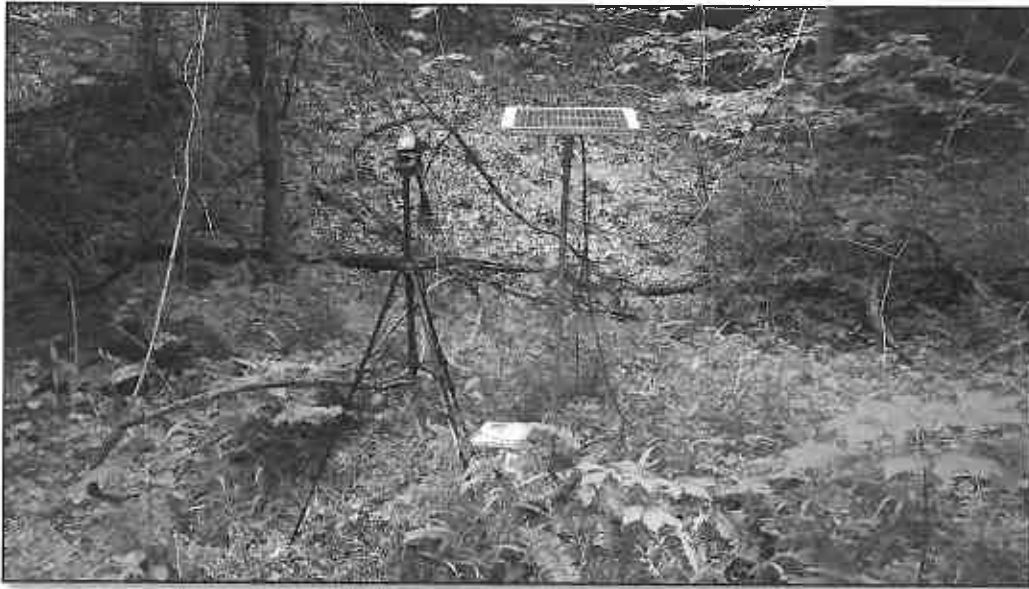
State of West Virginia
 Department of Administration, Purchasing Division
 2019 Washington Street E
 Building 15
 Charleston, WV 25305

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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Technical Proposal



Long-term Acoustic Monitoring Station – North Fork Conservation Site, Ritchie County, WV

Phase 1: Habitat Assessment

Suitable summer habitat for Indiana bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags greater than 5 inches dbh (12.7 centimeter) that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure (Carter and Feldhamer 2005). Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat.

Suitable summer habitat for northern long-eared consists primarily of dense wooded habitat and associated forested streams and wetlands. Selected roosts of the northern long-eared bat are typically over-topped (i.e., live trees and/or snags), early successional tree species such as black locust (*Robinia pseudoacacia*) and sassafras (*Sassafra albidum*). Selected trees are typically shorter than associated trees within the forest stand and are located in heavy crown cover. Northern long-eared bats typically select trees with cavities but will also roost under sloughing bark (Silvis et al. 2012).

The habitat survey will entail the remote sensing and onsite quantification/qualification of suitable Indiana bat and northern long-eared bat habitat. Remote sensing will require the determination of forest/non-forest, forest fragmentation within a 2 mile (3.2 km) buffer. This overall analysis is intended to better describe the current state of the landscape, in and around the sites as it pertains to potential use by Indiana and northern long-eared bats. The raster dataset Landuse/Landcover of WV 2011 raster dataset will be used to characterize the landscape. The onsite habitat assessment will involve the characterization of forest cover types near recording stations, netting sites, and any located roost trees. Data collected will include overall composition (i.e., species, successional stage, etc.), and qualitative assessment of habitat suitability (i.e., PRTs, riparian/upland corridors).



Northern long-eared bat maternity colony roost (red maple [*Acer rubrum*])

Phase 2: Presence/Absence Sampling – Acoustic Survey

Phase 2 presence/absence acoustic sampling will be the primary means of species determination for this project. Approximately 42 sites are proposed to be sampled to achieve a minimum of 84 recorder nights of sampling. Sampling will incorporate the deployment of iFR-IV Integrated Field Recorders near (a) forest-canopy openings; (b) near water sources; (c) wooded fence lines that are adjacent to large openings or connect two larger blocks of suitable habitat; (d) blocks of recently logged forest where some potential roost trees remain; (e) road and/or stream corridors with open tree canopies or canopy height of more than 33 feet (10 meters); and (f) woodland edges (Britzke et al. 2010, U.S. Fish and Wildlife Service 2015). Recorders will be deployed at sites established during the 2013 survey (Figure 2; De La Cruz et al. 2013) with recordings beginning at sunset and ending at sunrise for two consecutive nights.

The iFR-IV Integrated Field Recorders will be deployed: (a) at least 5 feet (1.5 meters) in any direction from vegetation or other obstructions (Hayes et al. 2000, Weller and Zabel 2002); (b) in areas without, or with minimal, vegetation within 33 feet (10 meters) in front of the microphone; (c) parallel to woodland edges; and (d) at least 49 feet (15 meters) from known or suitable roosts (e.g., trees/snags, buildings, bridges, bat houses, cave or mine portal entrances) (U.S. Fish and Wildlife Service 2015). If possible, the iFR-IV Integrated Field Recorder microphone will be elevated ≥ 4.92 feet (1.5 meters) above ground level vegetation via a tripod to listen out into flight space to gather the highest quality calls possible. Acoustic sites will be distributed throughout the respective Pringle (1,632 ac), Briery (1,251 ac), and Volkstone (504 ac) tracts of Camp Dawson, with individual recorders being at least 656 feet (200 meters) apart. Camp Dawson proper is not proposed for sampling due to its developed status.

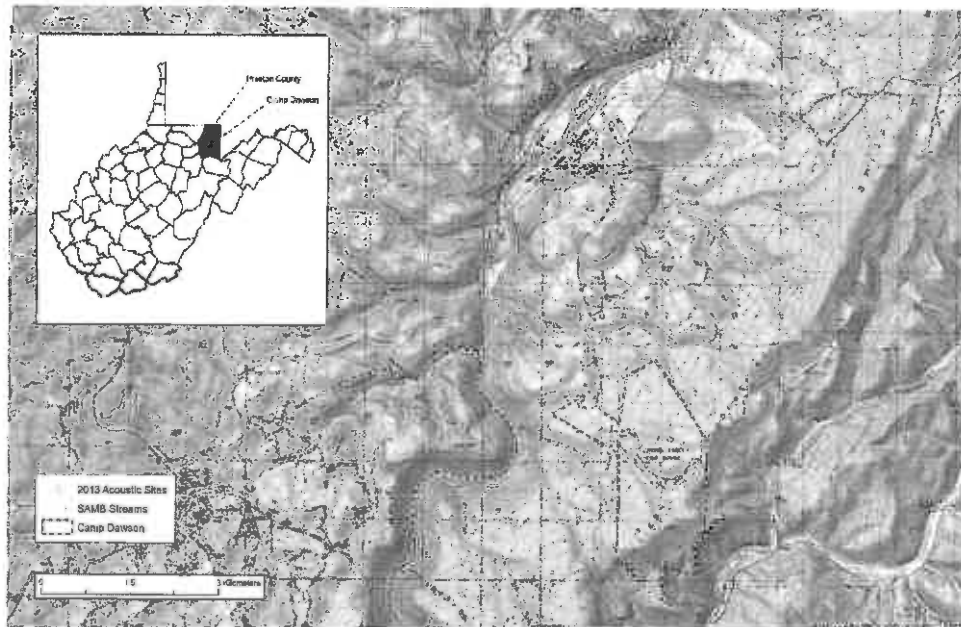


Figure 1. Acoustic Vicinity Map

Verification of Deployment Location

Trimble 6000 GPS units will be used to document the exact location of each acoustic site and its individually named iFR-IV Integrated Field Recorder.

Verification of Proper Functioning

Field verification of iFR-IV Integrated Field Recorder functionality will be done by creating ultrasonic sounds (e.g., finger rubs, whistles) in front of the microphone at survey start and finish. This documents that the equipment was working when deployed and retrieved. The iFR-IV Integrated Field Recorder settings (e.g., sensitivity, frequency, etc.) will follow the recommendations provided by the manufacturer. Surveyors will save files produced daily to ensure data organization and protection during the survey.

If an iFR-IV Integrated Field Recorder is deployed near the ground it will be aimed $\geq 45^\circ$ above horizontal. Any microphones deployed higher within the flight path/zone (e.g., on a pole) will be oriented horizontally. If sampling within features such as forest openings, the iFR-IV Integrated Field Recorder's microphone will be aimed vertically (Britzke et al. 2010).

Photographs documenting the orientation, detection cone (i.e., "what the detector is sampling"), and relative position of the microphone will be taken for later submittal to the USFWS FO(s) as part of the acoustic survey report.



Acoustic recorder over vernal pool

Weather Conditions

If any of the following weather conditions exist at a survey site during acoustic sampling, the time and duration of such conditions will be noted, and it will be necessary to repeat the acoustic sampling effort for that night: (a) temperatures below 50°F (10°C) during the first 5 hours of survey period; (b) precipitation that exceeds 30 minutes or continues intermittently during the first 5 hours of the survey, and (c) sustained wind speeds greater than 9 miles/hour (4 meters/second) during the first 5 hours of the survey period (U.S. Fish and Wildlife Service 2015). At a minimum, nightly weather conditions for survey sites will be checked using the nearest NOAA National Weather Service station and summarized in the survey reports.



Indiana bat call

Weatherproofing

The iFR-IV Integrated Field Recorder is a fully waterproof system that and may be left out in periods of precipitation. No modification (i.e., pvc cones) will be made to the unit to ensure the highest quality recordings possible. Despite its weatherproof nature, weather condition protocols will be strictly followed.

Acoustic Analysis

Two automated acoustic identification programs (Kaleidoscope and Echoclass) will be used to complete call identification (Ford and Silvis 2014). All data will be analyzed by site/night. Kaleidoscope will only be used to filter calls and convert all full spectrum data to zero-cross format for identification in Echoclass. Each file indicating a positive probable detection of Indiana and/or northern long-eared bats ($P < 0.05$) will be flagged. Sites with a significant presence value ($P < 0.05$) of either species will be selected for Phase 3 mist netting. Sites with high total acoustic classifications of little brown bats (*M. lucifugus*) or other *myotis* calls may be mist netted to better gauge potential false-positive or false-negative classifications.

Phase 3: Mist netting to Capture Indiana and Northern Long-eared Bats

Because presence/absence will be determined via acoustics, there are no minimum requirements for this phase, mist netting will adhere to the 2007 sampling guidance for the capture of Indiana bats (United States Fish and Wildlife Service 2007). If a significant presence value ($P < 0.05$) is recorded two net sets will be erected at one site for two consecutive nights (4 net nights).

Furthermore, ASE recommends a minimum of 10 net nights of sampling within areas identified as high quality Indiana bat habitat (De La Cruz and Ward 2016; Figure 2).

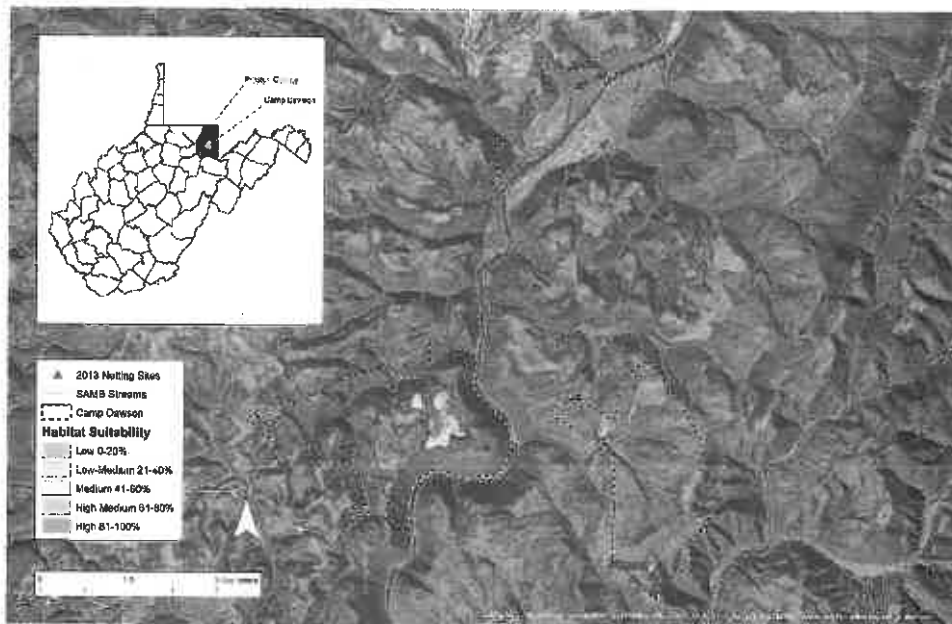


Figure 2. Netting Vicinity Map

Net Placement

Mist netting sites will be in the approximate location of the iFR-IV Integrated Field Recorder that registers a significant presence value ($P < 0.05$). It is likely that nets will be placed perpendicularly across corridors. Nets will fill the corridor from side to side, extending beyond the corridor boundaries when possible, and from stream (or ground) level up to the overhanging canopy. Nets of varying widths and heights will be used as the situation dictates. A typical set is at least 5 m to 9 m high consisting of two or more nets stacked on top one another and from 6 m to 18 m wide. If netting over water, there will be enough space between the net and the water so that captured bats will not get wet. Although no minimum spacing between mist nets is being specified, nets will be set-up throughout suitable habitat. Photo documentation of net placement will be made at each site (U.S. Fish and Wildlife Service 2015).

Survey Period

The survey period shall begin at sunset and continue for at least 5 hours.

Net Checks

Each net set will be checked approximately every 10-15 minutes (Gannon et al. 2007). Care will be taken to minimize noise, lights, and movement near the nets. There will be no other disturbance near the nets, other than to check nets and remove bats. Biologists will be prepared to cut the net if a bat is severely entangled and cannot be safely extracted within 3 or 4 minutes (Canadian Council on Animal Care 2003, Kunz et al. 2009).

Indiana and northern long-eared bats will not be held for more than 30 minutes after capture, unless the individual is targeted for radio-tracking. Bats targeted for radio-tracking will be released ≤ 45 minutes after capture.



Captured Northern Long-eared Bat

Documentation of *Myotis* Bat Captures

All bats captured will be photographed.

If an Indiana and northern long-eared bats are captured during mist netting

the USFWS FO and WV DNR will be notified of the capture within 48 hours, and the sex and reproductive condition of the bat and GPS coordinates of the capture site will be provided.

Photo-documentation of all bats captured and identified as Indiana bats and the first 10 little brown bats will be submitted to the USFWS FO to verify the identifications made in the field.

Photo-documentation will include diagnostic characteristics:

- a 3/4-view of face showing ear, tragus, and muzzle
- view of calcar showing presence/absence of keel

Documentation of capture site, date of capture, time of capture, sex, reproductive condition, age, weight, right forearm measurement, band number and type (if applicable), and Reichard's wing damage index score (Reichard and Kunz 2009) will be conducted for each bat captured.

To minimize potential for disease transmission, any equipment that comes in contact with bats will be cleaned, following approved protocols (U.S. Fish and Wildlife Service 2012).

Phase 4: Radio-Tracking and Emergence Surveys

The radio transmitter, adhesive, and any other markings (e.g., wing bands) will weigh less than 5% of pre-attachment body weight (Animal Care and Use Committee 1998), but will not weigh more than 10% of a bat's total body weight (Kurta and Murray 2002) and will comply with any USFWS and state permits. The attachment of a transmitter to any pregnant or juvenile bats will be forgone to avoid any negative health effects. All Indiana, northern long-eared and little brown bats will be banded using WV DNR bands. It is assumed that no more than 2-3 northern long-eared and/or Indiana bats will be fitted with transmitters from any one mist net site.

Biologist(s) will track all radio-tagged bats captured to diurnal roosts using TRX-1000WR tracking receivers. Tracking will proceed on until the transmitter fails, falls off, or for at least 7 days. In the event that a roost is located, two emergence counts at each identified roost will be conducted. If landowner access is denied, approximate roost locations (i.e., coordinates) will be determined using triangulation.

Daily radio telemetry searches for roosts will be conducted during daylight hours and will be conducted until the bat(s) is located or for a minimum of 4 hours of ground effort per tagged bat per day for 7 days. However, multiple bats captured at the same net location or nearby will be, if feasible, tracked simultaneously. Once a signal is detected, tracking will continue until the roost is located. The biologist(s) will document all ground searching efforts for all bats not recovered during radio-tracking for submittal with the survey report (U.S. Fish and Wildlife Service 2015). For each roost identified during tracking, the biologist(s) will complete a "USFWS Indiana Bat Roost Datasheet".



Attaching telemetry transmitter

Emergence Surveys of Located Roost Trees

Bat emergence surveys will begin one half hour before sunset and continue until at least one hour after sunset or until it is otherwise too dark to see emerging bats. The surveyor(s) will be positioned so that emerging bats will be silhouetted against the sky as they exit the roost. Tallies of emerging bats will be recorded every few minutes or as natural breaks in bat activity allow. There will be at least one surveyor per roost. Surveyors will be close enough to the roost to observe all exiting bats but not close enough to influence emergence (U.S. Fish and Wildlife Service 2015). A Sony infrared recorder will be used to aid in identifying the exact timing and number of bats emerging.

Emergence surveys will not be conducted when the following conditions exist: (a) temperatures fall below 50°F (10°C); (b) precipitation that exceeds 30 minutes or continues intermittently during the survey period; and (c) sustained wind speeds greater than 9 miles/hour (4 meters/second) (U.S. Fish and Wildlife Service 2015).

Biologist(s) will use the (or similar) “Bat Emergence Survey Datasheet”. Biologist(s) will also complete an “Indiana Bat Roost Datasheet” for each roost known to be used by one or more Indiana bats.

Endangered Species Management Plan

To develop an Endangered Species Management Plan (ESMP) for Camp Dawson the Guidance on Developing and Implementing an Indiana Bat Conservation Plan” from the USFWS West Virginia Field Office will be consulted for the identification of conservation measures and activities. The ESMP will be consistent with the Indiana Bat Draft Recovery Plan: First Revision (United States Fish and Wildlife Service 2007).

Conservation measures will likely center around the location of maternity roost trees found during Phase 4 radio tracking of female northern long-eared and Indiana bats. Conservation measure may include but are not limited to preservation of located maternity roost trees, creation of new roost trees, installation of bat boxes, creation of wetland resources, and the biological timing of management activities such as logging. All such conservation measures will be detailed in the resulting ESMP.



Infrared emergence monitoring

Literature Cited

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- Silvis, A., W.M. Ford, E.R. Britzke, N.R. Beane, and J.B. Johnson. 2012. Forest Succession and Maternity Day Roost Selection by *Myotis septentrionalis* in a Mesophytic Hardwood Forest. *International Journal of Forestry Research* 2012:1–8.

- U.S. Fish and Wildlife Service. 2012. National white-nose syndrome decontamination protocol. Available online at https://www.whitenosesyndrome.org/sites/default/files/resource/national_wns_revise_final_6.25.12.pdf.
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- Weller, T., and C. Zabel. 2002. Variation in bat detections due to detector orientation in a forest. *Wildlife Society Bulletin* 30:922–930. Available online at <http://www.jstor.org/stable/10.2307/3784248>.

Recent Relevant Experience

- **Camp Dawson Presence/Absence Survey** – This project involved a large scale survey of 2,866 acres of the Camp Dawson WV Army National Guard training facility in Preston County, WV. The survey utilized both acoustic monitoring and active capture of bats. The project found the likely presence of Indiana bats via acoustics and captured northern long-eared, little brown, tri-colored, red, big brown, and small-footed bats.
- **Raystown Lake Presence/Absence Survey** – The project required sampling all forest management areas (1,996 acres) of the Army Corps of Engineers' Raystown Lake property in Huntingdon County, PA. The survey used acoustic monitoring to determine bat activity within these actively managed lands. Acoustics determined the likely presence of both Indiana and northern long-eared bats, an unsurprising result due to the proximity to the Canoe Creek Mine hibernaculum.
- **West Fork of the Greenbrier Rail-to-Trail Presence/Absence Survey** – The project required acoustic sampling of 26 miles of the existing rail-to-trail on behalf of the Durbin and Greenbrier Valley Railroad in Pocahontas and Randolph Counties, WV. The project found the likely presence of Indiana and northern long-eared bats and the potential presence of Virginia big-eared bats during qualitative analysis.
- **Sandstrom Presence/Absence Survey** – The project entailed mist netting to determine the probable presence/absence of Indiana and northern long-eared bats at Antero Resources' Sandstrom Water Treatment Facility located in Doddridge County, WV. Northern long-eared bats were captured onsite with one male and one lactating female fitted with radio transmitters. Nine (9) roost trees were located using radio telemetry, two (2) of which were identified as primary roost trees of a local maternity colony, having 10 and 23 bats emerging, respectively. No Indiana bats were captured.
- **North Fork Hughes River Conservation Site** – The North Fork Hughes River Conservation Site was established in Ritchie County, WV. The site serves as conservation measures to offset development projects undertaken by Antero Resources. Acoustic monitoring, capture, banding, and telemetry efforts were conducted. Several northern long-eared bats were captured with a single post-lactating female fitted with a radio transmitter; two (2) roost trees located. Furthermore >20 rocket box bat houses, >60 snags, and 11 internal voids have been erected/created for use by bats as roosts. Additionally, four (4) open water wetlands were created for foraging/drinking. Several hundred trees were planted to reforest portions of the site.

- Kanawha State Forest Portal Survey(s) – The project involved harp trapping, mist netting, and IR video surveillance of several abandoned, relic mine shafts for the Mary Ingles Trail Blazers at the Kanawha State Forest in Kanawha County, WV. The project captured an adult female northern long-eared bat exiting the largest mine shaft providing evidence of hibernation onsite.
- WV DEP AML Mine Portal Survey(s) – The project entailed harp trapping, mist netting, and acoustic monitoring of 58 abandoned, relic mines shafts for the WV Department of Environmental Protection in Greenbrier, Wyoming, Barbour, Marion, Monongalia, Kanawha, Wayne, Logan, and Boone Counties, WV. The surveys captured several species of interest such as the small-footed bat and tricolored bat, as well as a few big brown and red bats. Acoustic evidence may also suggest use of some mines by the northern long-eared bat.

Qualifications of Key Personnel: Resumes



Banded northern long-eared bat

Jesse L. De La Cruz

– *Wildlife Biologist*



Jesse De La Cruz is a Wildlife Biologist at AllStar Ecology. Mr. De La Cruz has worked in several states with a focus on environmental research/evaluations and natural resource industrial activities. He has participated in both forestry and wildlife related research and specializes in wildlife biology and natural resource/forestry related issues with a focus on wildlife habitat availability and selection. He has been affiliated with various private, state, and federal agencies conducting surveys for invasive plants and trees, forest inventory, small mammal surveys, big game home-range monitoring, habitat assessments, and habitat improvements. He has conducted/participated in numerous summer presence/absence surveys (netting/harp trapping and acoustics) and spring emergence and fall portal surveys for rare, threatened, and endangered bat species in the states of West Virginia, Ohio, Pennsylvania, and Kentucky.

Education

M.S. (2012): Wildlife and Fisheries Resources, West Virginia University, Morgantown, WV.

B.S. (2009): Natural Resource Management, Glenville State College, Glenville, WV.

A.S. (2008): Forestry, Glenville State College, Glenville, WV.

Experience

Wildlife Biologist - AllStar Ecology, LLC	2012 - present
Graduate Research Assistant - West Virginia University, Morgantown, WV	2009 - 2012
Forest Technician - USFS, Fernow Experimental Forest, Parsons WV	2009
Undergraduate Research Assistant - Glenville State College, Glenville, WV	2008 - 2009

Professional Development

Eastern Bat Survey Techniques Workshop (Bat Conservation and Management)
 West Virginia Scientific Collecting Permit for Bat Surveys
 Bat Working Groups – Northeast (2016), Midwest (2015), Ohio (2015), Kentucky (2016)
 The Wildlife Society
 Safe Capture International Inc. - Chemical Immobilization of Animals
 Ohio Rapid Assessment Method v 5.0 Training Course (Ecological Training Services)
 Ohio QHEI and HHEI Training Course (Midwest Biological Institute)
 The Swamp School – Wetland Delineation and Regional Supplements (40 hour training course)
 North American Forest Technician Honorary - Council of Eastern Forest Technician Schools
 American Heart Association First Aid and CPR Training and PEC Safeland Basic (Bickerstaff Safety Consulting)



Publication

De La Cruz, Jesse and R. L. Ward. Summer-Habitat Suitability Modeling of Indiana Bats (*Myotis sodalis*) in the Eastern Mountains of West Virginia. *Northeastern Naturalist* 23(1):100–117.

De La Cruz, Jesse, S.E. Rauch, and J.T. Anderson. Habitat Use and Selection by Male Eastern Wild Turkeys (*Meleagris gallopavo silvestris*) in West Virginia. West Virginia University - Department of Natural Resource Conservation, 2012.

R. Gazal, **J. De La Cruz** and M. Vavrek. 2009. Influence of roads on the dispersion of invasive plants in an Appalachian forest. Society of American Foresters National Convention, Orlando, FL. Sep. 30 – Oct. 4, 2009.

De La Cruz, Jesse, Radcliff, Troy and Gazal, Rico. 2009. Influence of light regime and shade tolerance on leaf structure of native species and *Ailanthus*. WV Academy of Science, Glenville State College, Glenville, WV, March 21, 2009.

Radcliff, Troy, **De La Cruz, Jesse** and Gazal, Rico. 2009. Leaf structure comparison among growth stages of *Ailanthus*. Undergraduate Research Day at the Capitol, Charleston, WV. January 2009.

De La Cruz, Jesse, Radcliff, Troy and Gazal, Rico. 2008. Influence of light regime and shade tolerance on leaf structure of native species and *Ailanthus altissima*. Chi Beta Phi 61st National Conference, October 18, 2008, Glenville State College, Glenville, WV.



DIVISION OF NATURAL RESOURCES
 Wildlife Resources Section
 Operations Center
 P.O. Box 67
 Elkins, West Virginia 26241-3235
 Telephone (304) 637-0245
 Fax (304) 637-0250

Earl Ray Tomblin
 Governor

Robert A. Fala
 Director

NUMBER 2016.031

SCIENTIFIC COLLECTING PERMIT

Under Authority Conferred by Chapter 20, Article 2, Section 50, Code of West Virginia, As Amended

Jesse De La Cruz
AllStar Ecology, LLC
1582 Meadowdale Road
Fairmont, WV 26554

is hereby permitted to collect specimens according to the attached application and the Special Provisions on the reverse side of this permit.

This permit is not transferable and expires on August 15, 2016.

A complete list of all specimens collected will be kept and reported to the Director of the Division of Natural Resources of West Virginia no later than 45 days after the expiration date of this permit.

PERMIT PROVISIONS

I understand that (1) The privileges granted under this permit are not transferable, and to allow anyone other than myself to use my permit is unlawful and will be considered cause for revocation of said permit; (2) A Federal Scientific Collection Permit issued by the U.S. Department of Interior must be obtained before any migratory birds, or their nests or eggs, are collected or held in captivity; (3) The Federal Permit does not extend the privileges of the permittee beyond those granted by the Division of Natural Resources; (4) Permission must be obtained from either the owner or the custodian of any fenced or posted land before entering same for the purpose of collecting scientific specimens; (5) It is unlawful to carry a revolver or pistol contrary to Article VII, Chapter 61, Code of West Virginia; (6) It is unlawful to collect specimens with a gun on a Sunday; (7) It is unlawful to sell, offer for sale, barter, or offer to barter any wild animals, wild birds, fish or frogs collected; (8) When traps or nets or other devices are used UNATTENDED while exercising the privileges of this permit, said traps, nets, or devices must have attached thereto a tag bearing the name, address and number of the Scientific Collecting Permit; (9) It is unlawful to take or attempt to take any wild animals, wild birds, fish or frogs under said permit except for scientific and propagation purposes; (10) A hunting or fishing license must be obtained before specimens may be taken for sport; (11) Only those species or classes of wild birds, wild animals, fish or frogs listed below, and in the numbers stated, may be lawfully taken under said permit; and (12) I am required by law to carry my Scientific Collecting Permit, on my person while exercising the privileges granted thereunder, and to exhibit the permit to anyone requesting to see the same.

Must be signed before valid.



 Signature of permittee



 Chief, Wildlife Resources, WVDNR

Date of issue 1/29/16

IMPORTANT

THE ATTACHED APPLICATION FORM INDICATING SPECIES TO BE COLLECTED, LOCATIONS OF COLLECTIONS, MANNER OF COLLECTION, AND PURPOSE OF COLLECTION IS TO BE CONSIDERED A PART OF THIS PERMIT AND SHOULD REMAIN ATTACHED.

YOU ARE SUBJECT TO THE FOLLOWING COLLECTING AND REPORTING PROVISIONS. FAILURE TO MEET THESE CRITERIA IS GROUNDS FOR REVOCATION OF THE PERMIT AND/OR DENIAL OF FUTURE PERMIT APPLICATIONS AND/OR PENALTIES OR OTHER STRICTURES.

SPECIAL PROVISIONS:

For the purposes of this study, the permittee is designated as an agent of the State of West Virginia, and therefore covered under the WV Division of Natural Resources' Endangered Species permit as set forth in a cooperative agreement between the WVDNR and the U.S. Fish & Wildlife Service. Violation of the federal Endangered Species Act or Chapter 20 of the WV State Code may lead to arrest and prosecution.

1. Under no circumstances will a federally listed bat (*Myotis sodalis*, *Myotis grisescens*, *Myotis septentrionalis*, or *Corynorhinus townsendii virginianus*) be killed for scientific purposes or any other reason. No body tissue or blood can be taken from a federally listed bat.
2. No other bats will be killed for scientific purposes or any other reason; nor will body tissues or blood be collected without justification and written approval.
3. All *Corynorhinus townsendii virginianus*, *Corynorhinus rafinesquii*, *Myotis sodalis*, *Myotis grisescens*, *Myotis septentrionalis*, and *Myotis leibii* will be released immediately (within a few minutes) after capture and at the site of capture.
4. Mortality of bats of the six species noted in #3 above while exercising the provisions of this permit will be reported within 48 hours to the WVDNR. The permittee will take appropriate precautions to preserve the dead animal, and the entire animal will be surrendered to the WVDNR.
5. Bats will not be collected by shooting.
6. No more than two specimens of any species of bat not listed above will be taken from a collection locality.
7. Bats may be banded and released. The band numbers must be both embossed and printed on the bands. All banding numbers and other banding data must be supplied to the WVDNR as part of the permit reporting process. *Myotis leibii* may not be banded. Bands are available from the WVDNR, and only *Myotis sodalis* and *Myotis lucifugus* may be banded with WVDNR bands.
8. Radio transmitters may be placed on bats. Transmitters may not be placed on pregnant or juvenile bats.
9. Mist-net poles shall be labeled with the company's or researcher's name.
10. Notify the U.S. Forest Service one week prior to surveys if mist-netting on their properties. A permit must be obtained from the U.S. Forest Service.
11. To minimize the disturbance to hibernating bats, bats will not be collected from hibernacula containing any endangered bat species or other hibernacula known to be important for any species of bat.

12. Follow the decontamination protocol for White-nose Syndrome as instructed in this document: https://www.whitenosesyndrome.org/sites/default/files/resource/national_wns_revise_final_6.25.12.pdf.
13. In addition to the standard permit reporting requirements, the permittee will routinely notify the WVDNR (Craig Stihler or Barbara Sargent, P.O. Box 67, Elkins, WV 26241, (304) 637-0245) **within 48 hours of capture** or handling any *Corynorhinus* spp., *Myotis sodalis*, *Myotis grisescens*, or *Myotis septentrionalis*. Photographs showing diagnostic characteristics shall be taken of *Myotis sodalis*, *Myotis grisescens*, *Myotis septentrionalis*, *Corynorhinus* spp. and *Nycticeius humeralis* and provided to the WVDNR. A reporting spreadsheet will be provided via email.
14. **REPORTING REQUIREMENTS:** Please provide copies of field sheets. In addition, report information electronically via the WVBatMistNet_Reporting spreadsheet which will be provided via email.
15. It is recommended that survey proposals be approved by the US Fish and Wildlife Service prior to conducting surveys to assure that surveying guidelines are met.

Requests for exemption from any of the above conditions will be reviewed on a case by case basis by the WVDNR. Salvage of dead specimens is permitted and is not covered by the above restrictions, but must be reported to the WVDNR. If dead federally listed species are collected they must be reported to the WVDNR within 48 hours (304/637-0245), and then turned over to the WVDNR.

If any work is planned to occur in a State Park or State Forest, a permit must be obtained from WVDNR – Parks and Recreation.

Please provide disposition of any voucher specimens, including the collection number if available.

The WVDNR requests a copy of any papers, reports or theses published as a result of this research.

APPLICATION FOR WEST VIRGINIA SCIENTIFIC COLLECTING PERMIT

Name: Jesse De La Cruz

Institution/Affiliation: AllStar Ecology LLC

Street: 1582 Meadowdale Road

City: Fairmont State: WV Zip: 26554

Telephone: 304-816-3490 Email: jesse@allstarecology.com

Profession: Wildlife Biologist Major professor: N/A

Specific manner of collection

Mist netting and harp trapping for the presence/absence of RTE bat species.

Purpose for which specimens are to be collected (attach abstract):

To determine the presence/absence of RTE bat species
within proposed action areas and conservation sites.

How will specimens be disposed?

Individual specimen will be released back into the study area within 45 minutes of capture

Date on which collecting is to be: June 1st 2016 August 15th 2016
(Commence) (Terminate)

Location(s) where collections are to be taken (be specific):

County(s) Wetzel, Mon, Preston, Tyler, Doddridge, Harrison, Ritchie, Lewis, Upshur, Randolph, Pocahontas If aquatic, indicate:

Stream(s): N/A Location (distance to
nearest town, miles from the mouth) N/A

Attach separate pages if additional space is required.
(Over)

Report that will result from studies and additional comments or information which may be pertinent to issuing this permit Potential Indiana bat, northern long-eared, gray bat, or Virginia big-eared bat captures or the location of maternity colonies could be revealed during mist netting.

Have you received a WV permit in previous years? Yes Most recent year 2015

SPECIES TO BE COLLECTED OR HANDLED

<u>GENUS</u>	<u>SCIENTIFIC NAME</u>	<u>SPECIES</u>	<u>NUMBER</u>
Myotis		sodalis	
Myotis		septentrionalis	
Myotis		leibii	
Myotis		grisescens	
Lasionycteris		noctivagans	
Perimyotis		subflavus	
Myotis		lucifugus	
Eptesicus		fuscus	
Lasiurus		borealis	
Lasiurus		cinereus	
Nycticeius		humeralis	

Corynorhinus townsendii virginianus

Jim J. DeJaCz 01/18/16
 Signature Date

Send application to: Scientific Collecting Permit
 Wildlife Resources
 P.O. Box 67, Ward Road
 Elkins, WV 26241

11/18/03



Eric Schroder

- *Environmental Scientist II/Bat Biologist*



Eric Schroder is an Environmental Scientist with AllStar Ecology, LLC and specializes in bat biology. He has conducted endangered and threatened species surveys on reptile and mammalian species in California, West Virginia, Ohio, Alabama, Iowa, and Illinois. He has been affiliated with various private and federal agencies in conducting small mammal, avian, and tree community surveys, as well as wildlife behavior studies. Mr. Schroder specializes in endangered/threatened bat

presence/absence surveys, spring emergence and fall portal surveys, wildlife and data management, ArcGIS, and has worked on numerous oil and gas projects delineating streams and wetlands for permitting and construction avoidance.

Education

M.S. (2012): Biology, Western Illinois University, Macomb, IL.

B.S. (2010): Biology (emphasis in Wildlife Ecology), Iowa State University, Ames, IA.

Experience

Environmental Scientist II/Bat Biologist - AllStar Ecology,	2013 - current
Wildlife Biologist- Trutech Inc.	2012 - 2013
Field Technician- Western Ecosystems Technologies, Inc.	2012
Biological Technician- Apogee Environmental and Archaeological, Inc.	2012
Graduate Assistant-Western Illinois University	2012
Research Assistant- Western Illinois University	2011 - 2012
Field Technician-San Diego State University	2010
Field Technician-Iowa State University	2009

Professional Development

- The Swamp School: Wetland Delineation and Regional Supplement (40 hour training course)
- Ohio Rapid Assessment Method for Wetlands Training Course (Midwest Biodiversity Institute)
- Ohio Qualitative Habitat Evaluation Index for Streams Training Course (Midwest Biodiversity Institute)
- AHA CPR and First Aid Training
- PEC Safeland Basic (Bickerstaff Safety Consulting)
- Certified Wildlife Damage Control Agent (West Virginia)
- Eastern Bat Survey Techniques Workshop (Bat Conservation and Management Inc.)
- Midwest, Kentucky, and Northeast Bat Working Group
- West Virginia Scientific Collecting Permit for Bat Surveys (Indiana, northern long-eared, Virginia big-eared, gray bats)



DIVISION OF NATURAL RESOURCES
Wildlife Resources Section
Operations Center
P.O. Box 67
Elkins, West Virginia 26241-3235
Telephone (304) 637-0245
Fax (304) 637-0250

Earl Ray Tomblin
Governor

Robert A. Fala
Director

NUMBER 2016.064

SCIENTIFIC COLLECTING PERMIT

Under Authority Conferred by Chapter 20, Article 2, Section 50, Code of West Virginia, As Amended

Eric Schroder
AllStar Ecology, LLC
1582 Meadowdale Road
Fairmont, WV 26554

is hereby permitted to collect specimens according to the attached application and the Special Provisions on the reverse side of this permit.

This permit is not transferable and expires on August 15, 2016.

A complete list of all specimens collected will be kept and reported to the Director of the Division of Natural Resources of West Virginia no later than 45 days after the expiration date of this permit.

PERMIT PROVISIONS

I understand that (1) The privileges granted under this permit are not transferable, and to allow anyone other than myself to use my permit is unlawful and will be considered cause for revocation of said permit; (2) A Federal Scientific Collection Permit issued by the U.S. Department of Interior must be obtained before any migratory birds, or their nests or eggs, are collected or held in captivity; (3) The Federal Permit does not extend the privileges of the permittee beyond those granted by the Division of Natural Resources; (4) Permission must be obtained from either the owner or the custodian of any fenced or posted land before entering same for the purpose of collecting scientific specimens; (5) It is unlawful to carry a revolver or pistol contrary to Article VII, Chapter 61, Code of West Virginia; (6) It is unlawful to collect specimens with a gun on a Sunday; (7) It is unlawful to sell, offer for sale, barter, or offer to barter any wild animals, wild birds, fish or frogs collected; (8) When traps or nets or other devices are used UNATTENDED while exercising the privileges of this permit, said traps, nets, or devices must have attached thereto a tag bearing the name, address and number of the Scientific Collecting Permit; (9) It is unlawful to take or attempt to take any wild animals, wild birds, fish or frogs under said permit except for scientific and propagation purposes; (10) A hunting or fishing license must be obtained before specimens may be taken for sport; (11) Only those species or classes of wild birds, wild animals, fish or frogs listed below, and in the numbers stated, may be lawfully taken under said permit; and (12) I am required by law to carry my Scientific Collecting Permit, on my person while exercising the privileges granted thereunder, and to exhibit the permit to anyone requesting to see the same.

Must be signed before valid.

Signature of permittee

Chief, Wildlife Resources, WVDNR

Date of issue

2-18-16

IMPORTANT

THE ATTACHED APPLICATION FORM INDICATING SPECIES TO BE COLLECTED, LOCATIONS OF COLLECTIONS, MANNER OF COLLECTION, AND PURPOSE OF COLLECTION IS TO BE CONSIDERED A PART OF THIS PERMIT AND SHOULD REMAIN ATTACHED.

YOU ARE SUBJECT TO THE FOLLOWING COLLECTING AND REPORTING PROVISIONS. FAILURE TO MEET THESE CRITERIA IS GROUNDS FOR REVOCATION OF THE PERMIT AND/OR DENIAL OF FUTURE PERMIT APPLICATIONS AND/OR PENALTIES OR OTHER STRICTURES.

SPECIAL PROVISIONS:

For the purposes of this study, the permittee is designated as an agent of the State of West Virginia, and therefore covered under the WV Division of Natural Resources' Endangered Species permit as set forth in a cooperative agreement between the WVDNR and the U.S. Fish & Wildlife Service. Violation of the federal Endangered Species Act or Chapter 20 of the WV State Code may lead to arrest and prosecution.

1. Under no circumstances will a federally listed bat (*Myotis sodalis*, *Myotis grisescens*, *Myotis septentrionalis*, or *Corynorhinus townsendii virginianus*) be killed for scientific purposes or any other reason. No body tissue or blood can be taken from a federally listed bat.
2. No other bats will be killed for scientific purposes or any other reason; nor will body tissues or blood be collected without justification and written approval.
3. All *Corynorhinus townsendii virginianus*, *Corynorhinus rafinesquii*, *Myotis sodalis*, *Myotis grisescens*, *Myotis septentrionalis*, and *Myotis leibii* will be released immediately (within a few minutes) after capture and at the site of capture.
4. Mortality of bats of the six species noted in #3 above while exercising the provisions of this permit will be reported within 48 hours to the WVDNR. The permittee will take appropriate precautions to preserve the dead animal, and the entire animal will be surrendered to the WVDNR.
5. Bats will not be collected by shooting.
6. No more than two specimens of any species of bat not listed above will be taken from a collection locality.
7. Bats may be banded and released. The band numbers must be both embossed and printed on the bands. All banding numbers and other banding data must be supplied to the WVDNR as part of the permit reporting process. *Myotis leibii* may not be banded. Bands are available from the WVDNR, and only *Myotis sodalis* and *Myotis lucifugus* may be banded with WVDNR bands.
8. Radio transmitters may be placed on bats. Transmitters may not be placed on pregnant or juvenile bats.
9. Mist-net poles shall be labeled with the company's or researcher's name.
10. Notify the U.S. Forest Service one week prior to surveys if mist-netting on their properties. A permit must be obtained from the U.S. Forest Service.
11. To minimize the disturbance to hibernating bats, bats will not be collected from hibernacula containing any endangered bat species or other hibernacula known to be important for any species of bat.

12. Follow the decontamination protocol for White-nose Syndrome as instructed in this document: https://www.whitenosesyndrome.org/sites/default/files/resource/national_wns_revise_final_6.25.12.pdf.
13. In addition to the standard permit reporting requirements, the permittee will routinely notify the WVDNR (Craig Stihler or Barbara Sargent, P.O. Box 67, Elkins, WV 26241, (304) 637-0245) **within 48 hours of capture** or handling any *Corynorhinus* spp., *Myotis sodalis*, *Myotis grisescens*, or *Myotis septentrionalis*. Photographs showing diagnostic characteristics shall be taken of *Myotis sodalis*, *Myotis grisescens*, *Myotis septentrionalis*, *Corynorhinus* spp. and *Nycticeius humeralis* and provided to the WVDNR. A reporting spreadsheet will be provided via email.
14. **REPORTING REQUIREMENTS:** Please provide copies of field sheets. In addition, report information electronically via the WVBatMistNet_Reporting spreadsheet which will be provided via email.
15. It is recommended that survey proposals be approved by the US Fish and Wildlife Service prior to conducting surveys to assure that surveying guidelines are met.

Requests for exemption from any of the above conditions will be reviewed on a case by case basis by the WVDNR. Salvage of dead specimens is permitted and is not covered by the above restrictions, but must be reported to the WVDNR. If dead federally listed species are collected they must be reported to the WVDNR within 48 hours (304/637-0245), and then turned over to the WVDNR.

If any work is planned to occur in a State Park or State Forest, a permit must be obtained from WVDNR – Parks and Recreation.

Please provide disposition of any voucher specimens, including the collection number if available.

The WVDNR requests a copy of any papers, reports or theses published as a result of this research.

APPLICATION FOR WEST VIRGINIA SCIENTIFIC COLLECTING PERMIT

Name: Eric Schroder

Institution/Affiliation: AllStar Ecology, LLC

Street: 1582 Meadowdale Road

City: Fairmont State: WV Zip: 26554

Telephone: 304-816-3490 Email: eric.schroder@allstarecology.com

Profession: Environmental Scientist Major professor: N/A

Specific manner of collection

Mist netting and spring emergence surveys for the presence/absence of endangered bat species (specifically the Indiana bat). Bats will carefully be taken out of the nets and data recorded. Individuals will then be released in a timely manner.

Purpose for which specimens are to be collected (attach abstract):

To determine the presence/absence of federally endangered/threatened bat species within a client's potential project area.

How will specimens be disposed?

Individuals caught will be released back into the study area as quickly as possible after data collection.

Date on which collecting is to be: June 1, 2016 August 15, 2016
(Commence) (Terminate)

Location(s) where collections are to be taken (be specific):

County(s) Doddridge, Ritchie, Tyler, Harrison, Upshur, Marion, Taylor, Lewis If aquatic, indicate:

Stream(s): N/A Location (distance to nearest town, miles from the mouth) N/A

Attach separate pages if additional space is required.
(Over)

Report that will result from studies and additional comments or information which may be pertinent to issuing this permit Potential Indiana bat or northern long-eared hibernacula or roosting habitat could be revealed with the associated presence/absence surveys. These areas could then be protected.

Have you received a WV permit in previous years? Yes; 2015.046 Most recent year 2015

SPECIES TO BE COLLECTED OR HANDLED

<u>GENUS</u>	<u>SCIENTIFIC NAME</u>	<u>SPECIES</u>	<u>NUMBER</u>
Myotis		sodalis	
Myotis		septentrionalis	
Myotis		leibii	
Myotis		grisescens	
Lasionycteris		novticagens	
Perimyotis		subflavus	
Myotis		lucifugus	
Eptesicus		fuscus	
Lasiurus		borealis	
Lasiurus		cinereus	
Corynorhinus		townsendii	

Eric S. Schider

1/26/16

Signature

Date

Send application to:

Scientific Collecting Permit
Wildlife Resources
P.O. Box 67, Ward Road
Elkins, WV 26241

11/18/03

Neil Lafleur

- *Environmental Scientist II/Bat Biologist*



Neil Lafleur is an Environmental Scientist and Wildlife Biologist at AllStar Ecology with diverse experience working throughout the country. He has been affiliated with various private, state, and federal agencies conducting surveys for invasive plants, forest inventory, and small mammal surveys. He has worked primarily throughout the Northeast, more specifically NY, PA, WV, OH, and IN participating in forestry and wildlife related research, specializing in conducting bat surveys for threatened and endangered species. Mr. Lafleur is also

gaining further experience as a qualified wetland delineator working on projects primarily for the oil and gas industry.

Education

B.S. (2008): Environmental Science (emphasis in Wildlife Ecology), Franklin Pierce University, Rindge, NH.

Experience

Environmental Scientist II/Bat Biologist - AllStar Ecology	2015 - current
Bat Biologist/Project Manager - Apogee Environmental & Archaeological, Inc.	2012 - 2014
Extractions Technician - Con-Test Analytical Laboratory	2012 - 2014
Fisheries Biologist - Saltwater Inc.	2011
Fish Processor/Culturist - Australis Aquaculture LLC.	2010
Bat Biologist - Bat Conservation and Management, Inc.	2010
Biological Technician/Mechanic - Colorado Division of Wildlife	2009
Biological Technician - North East Ecological Services	2008 - 2009
Biological Technician - Curry & Kerlinger	2008

Professional Development

- The Swamp School: Wetland Delineation and Regional Supplement (40 hour training course)
- West Virginia Scientific Collecting Permit for Bat Surveys 2014, 2015 (Indiana, northern long-eared, Virginia big-eared, gray bats)
- Kentucky Bat Working Group
- First Aide Training
- Confined Space Entry Training



DIVISION OF NATURAL RESOURCES
 Wildlife Resources Section
 Operations Center
 P.O. Box 67
 Elkins, West Virginia 26241-3235
 Telephone (304) 637-0245
 Fax (304) 637-0250

Earl Ray Tomblin
 Governor

Robert A. Fala
 Director

NUMBER 2016.153

SCIENTIFIC COLLECTING PERMIT

Under Authority Conferred by Chapter 20, Article 2, Section 50, Code of West Virginia, As Amended

Neil Lafleur
AllStar Ecology, LLC
1582 Meadowdale Road
Fairmont, WV 26554

Is hereby permitted to collect specimens according to the attached application and the Special Provisions on the reverse side of this permit.

This permit is not transferable and expires on **October 31, 2016.**

A complete list of all specimens collected will be kept and reported to the Director of the Division of Natural Resources of West Virginia no later than 45 days after the expiration date of this permit.

PERMIT PROVISIONS

I understand that (1) The privileges granted under this permit are not transferable, and to allow anyone other than myself to use my permit is unlawful and will be considered cause for revocation of said permit; (2) A Federal Scientific Collection Permit issued by the U.S. Department of Interior must be obtained before any migratory birds, or their nests or eggs, are collected or held in captivity; (3) The Federal Permit does not extend the privileges of the permittee beyond those granted by the Division of Natural Resources; (4) Permission must be obtained from either the owner or the custodian of any fenced or posted land before entering same for the purpose of collecting scientific specimens; (5) It is unlawful to carry a revolver or pistol contrary to Article VII, Chapter 61, Code of West Virginia; (6) It is unlawful to collect specimens with a gun on a Sunday; (7) It is unlawful to sell, offer for sale, barter, or offer to barter any wild animals, wild birds, fish or frogs collected; (8) When traps or nets or other devices are used UNATTENDED while exercising the privileges of this permit, said traps, nets, or devices must have attached thereto a tag bearing the name, address and number of the Scientific Collecting Permit; (9) It is unlawful to take or attempt to take any wild animals, wild birds, fish or frogs under said permit except for scientific and propagation purposes; (10) A hunting or fishing license must be obtained before specimens may be taken for sport; (11) Only those species or classes of wild birds, wild animals, fish or frogs listed below, and in the numbers stated, may be lawfully taken under said permit; and (12) I am required by law to carry my Scientific Collecting Permit, on my person while exercising the privileges granted thereunder, and to exhibit the permit to anyone requesting to see the same.

Must be signed before valid.


 Signature of permittee


 Chief, Wildlife Resources, WVDNR

Date of issue 3-24-16

IMPORTANT

THE ATTACHED APPLICATION FORM INDICATING SPECIES TO BE COLLECTED, LOCATIONS OF COLLECTIONS, MANNER OF COLLECTION, AND PURPOSE OF COLLECTION IS TO BE CONSIDERED A PART OF THIS PERMIT AND SHOULD REMAIN ATTACHED.

YOU ARE SUBJECT TO THE FOLLOWING COLLECTING AND REPORTING PROVISIONS. FAILURE TO MEET THESE CRITERIA IS GROUNDS FOR REVOCATION OF THE PERMIT AND/OR DENIAL OF FUTURE PERMIT APPLICATIONS AND/OR PENALTIES OR OTHER STRICTURES.

SPECIAL PROVISIONS:

For the purposes of this study, the permittee is designated as an agent of the State of West Virginia, and therefore covered under the WV Division of Natural Resources' Endangered Species permit as set forth in a cooperative agreement between the WVDNR and the U.S. Fish & Wildlife Service. Violation of the federal Endangered Species Act or Chapter 20 of the WV State Code may lead to arrest and prosecution.

1. Under no circumstances will a federally listed bat (*Myotis sodalis*, *Myotis grisescens*, *Myotis septentrionalis*, or *Corynorhinus townsendii virginianus*) be killed for scientific purposes or any other reason. No body tissue or blood can be taken from a federally listed bat.
2. No other bats will be killed for scientific purposes or any other reason; nor will body tissues or blood be collected without justification and written approval.
3. All *Corynorhinus townsendii virginianus*, *Corynorhinus rafinesquii*, *Myotis sodalis*, *Myotis grisescens*, *Myotis septentrionalis*, and *Myotis leibii* will be released immediately (within a few minutes) after capture and at the site of capture.
4. Mortality of bats of the six species noted in #3 above while exercising the provisions of this permit will be reported within 48 hours to the WVDNR. The permittee will take appropriate precautions to preserve the dead animal, and the entire animal will be surrendered to the WVDNR.
5. Bats will not be collected by shooting.
6. No more than two specimens of any species of bat not listed above will be taken from a collection locality.
7. Bats may be banded and released. The band numbers must be both embossed and printed on the bands. All banding numbers and other banding data must be supplied to the WVDNR as part of the permit reporting process. *Myotis leibii* may not be banded. Bands are available from the WVDNR, and only *Myotis sodalis* and *Myotis lucifugus* may be banded with WVDNR bands.
8. Radio transmitters may be placed on bats. Transmitters may not be placed on pregnant or juvenile bats.
9. Mist-net poles shall be labeled with the company's or researcher's name.
10. Notify the U.S. Forest Service one week prior to surveys if mist-netting on their properties. A permit must be obtained from the U.S. Forest Service.
11. To minimize the disturbance to hibernating bats, bats will not be collected from hibernacula containing any endangered bat species or other hibernacula known to be important for any species of bat.

12. Follow the decontamination protocol for White-nose Syndrome as instructed in this document: https://www.whitenosesyndrome.org/sites/default/files/resource/national_wns_revise_final_6.25.12.pdf.
13. In addition to the standard permit reporting requirements, the permittee will routinely notify the WVDNR (Craig Stihler or Barbara Sargent, P.O. Box 67, Elkins, WV 26241, (304) 637-0245) **within 48 hours of capture** or handling any *Corynorhinus* spp., *Myotis sodalis*, *Myotis grisescens*, or *Myotis septentrionalis*. Photographs showing diagnostic characteristics shall be taken of *Myotis sodalis*, *Myotis grisescens*, *Myotis septentrionalis*, *Corynorhinus* spp. and *Nycticeius humeralis* and provided to the WVDNR. A reporting spreadsheet will be provided via email.
14. **REPORTING REQUIREMENTS:** Please provide copies of field sheets. In addition, report information electronically via the WVBatMistNet_Reporting spreadsheet which will be provided via email.
15. It is recommended that survey proposals be approved by the US Fish and Wildlife Service prior to conducting surveys to assure that surveying guidelines are met.

Requests for exemption from any of the above conditions will be reviewed on a case by case basis by the WVDNR. Salvage of dead specimens is permitted and is not covered by the above restrictions, but must be reported to the WVDNR. If dead federally listed species are collected they must be reported to the WVDNR within 48 hours (304/637-0245), and then turned over to the WVDNR.

If any work is planned to occur in a State Park or State Forest, a permit must be obtained from WVDNR – Parks and Recreation.

Please provide disposition of any voucher specimens, including the collection number if available.

The WVDNR requests a copy of any papers, reports or theses published as a result of this research.

APPLICATION FOR WEST VIRGINIA SCIENTIFIC COLLECTING PERMIT

Name: Neil Lafleur
 Institution/Affiliation: AllStar Ecology, LLC
 Street: 1582 Meadowdale Road
 City: Fairmont State: WV Zip: 26554
 Telephone: 413-214-2532 Email: neil@allstarecology.com
 Profession: Wildlife Biologist Major professor: N/A

Specific manner of collection

Mist netting for the presence/absence of endangered bat species (specifically the Indiana bat). Bats will carefully be taken out the nets and data recorded. Individuals will then be released in a timely manner.

Purpose for which specimens are to be collected (attach abstract):

To determine the presence/absence of federally endangered bat species within a client's potential project area.

How will specimens be disposed?

Individuals caught will be released back into the study area within 15 minutes of capture.

Date on which collecting is to be: June 1, 2016 Oct 31, 2016
 (Commence) (Terminate)

Location(s) where collections are to be taken (be specific):

County(s) Doddridge, Ritchie, Tyler, Harrison, Upshur, Marion, Taylor, Lewis, Gilmer, Randolph, Pocahontas If aquatic, indicate:
 Stream(s): N/A Location (distance to nearest town, miles from the mouth) N/A

Attach separate pages if additional space is required.
 (Over)


Report that will result from studies and additional comments or information which may be pertinent to issuing this permit Potential Indiana bat or northern long-eared maternity colonies/roosting habitat could be revealed with the associated mist netting surveys. These areas could then be protected.

Have you received a WV permit in previous years? YES Most recent year 2015

SPECIES TO BE COLLECTED OR HANDLED

<u>GENUS</u>	<u>SCIENTIFIC NAME</u>	<u>SPECIES</u>	<u>NUMBER</u>
Myotis		sodalis	
Myotis		septentrionalis	
Myotis		leibii	
Myotis		grisescens	
Lasionycteris		noctivagans	
Perimyotis		subflavus	
Myotis		lucifugus	
Eptesicus		fuscus	
Lasiurus		borealis	
Lasiurus		cinereus	
Nycticeius		humeralis	

Corynorhinus townsendii virginianus


Signature

3/4/16

Date

Send application to: Scientific Collecting Permit
Wildlife Resources
P.O. Box 67, Ward Road
Elkins, WV 26241

11/18/03

Malachia Evans

– *Wildlife Technician*



Malachia Evans is a Wildlife Technician at AllStar Ecology. Ms. Evans has worked in Maryland and West Virginia with a focus on environmental evaluations and natural resource science activities. She has participated in both avian and aquatic surveys and specializes in wildlife biology and natural resource related issues. She has been affiliated with private, non-profit, and state agencies participating in surveys for terrestrial, aquatic, and avian wildlife, along with conducting habitat assessments, habitat improvements, and stream and wetland delineations. Ms. Evans, under the instruction of AllStar Ecology's lead wildlife biologist Jesse De La Cruz, has provided technical assistance for summer presence/absence

surveys, radio telemetry tracking, roost tree emergence surveys, and habitat assessments for rare, threatened, and endangered (RTE) bat species in West Virginia.

Education

B.S. (2016): Fisheries and Wildlife Resources, West Virginia University, Morgantown WV.

A.S. (2014): Natural Resources and Wildlife Technology, Garrett College, McHenry, MD.

Experience

Wildlife Technician - AllStar Ecology, LLC	2015 – present
Student Worker – West Virginia University	2015 – present
Volunteer Owl Bander – Project Owl, Garret College	2012 – 2014
Fisheries Technician – Trout Unlimited	2013
Seasonal Naturalist – Swallow Falls State Park, MD Park Service	2013
Survey Technician – American Woodcock Survey, Potomac-Garret State Forest	2013

Professional Development

Animal Handling: Reptile and amphibian handling/care (Herrington Manor State Park), horse wrangler (Rhodes Grove Camp), northern saw-whet owl handling (Project Owl-Net).

Bird surveys: point count surveys, mist-netting surveys, collection of health data.

GPS Device Experience: Experienced with Topcon GMS II and Trimble GPS devices.

Necropsy Experience: experience with black bear, white-tailed deer (CWD), and bobcat necropsies.

Scales & Tales basic training: Trained by Maryland Park Service (MPS) to work with birds of prey, reptiles, and amphibians housed in MPS Aviaries and Nature Centers.

Other: Basic experience in pit tagging, wetland delineation, stream sampling, macroinvertebrate sampling, habitat assessment.



Sean Kline

Wildlife Technician



Sean Kline is a Wildlife Technician at AllStar Ecology. Mr. Kline has worked in Ohio, West Virginia and as far west as Idaho with a focus on environmental evaluations and natural resource science activities. He has participated in both terrestrial and aquatic surveys and specializes in wildlife biology and natural resource related issues. He has been affiliated with private and state agencies participating in surveys for terrestrial and aquatic wildlife, big game movements, habitat assessments, and habitat improvements, along with stream and wetland delineations. Mr. Kline, under the instruction of AllStar Ecology's lead wildlife biologist Jesse De La Cruz, has provided technical assistance for summer presence/absence surveys, radio telemetry tracking, roost tree emergence surveys, and habitat assessments for rare, threatened, and endangered (RTE) bat species in West Virginia. Mr. Kline also helped to develop AllStar's Bat Conservation International (BCI) certified rocket box

style bat house.

Education

B.S. (2016): Fisheries and Wildlife Resources, West Virginia University, Morgantown WV

A.S. (2014): Wildlife Science, Hocking College, Nelsonville, OH.

Experience

Wildlife Technician - AllStar Ecology, LLC	2015 - present
Ohio Department of Natural Resources – Division of Wildlife, Deerfield, OH	2012 - 2013
Lockey-U-Outfitters, Whitebird, ID	2009 - 2010

Professional Development

- Presence/absence and emergence surveys for RTE in West Virginia
- Habitat assessments for RTE bat species in West Virginia
- Swamp School – stream and wetland delineation training
- Certified herbicide applicator
- Idaho big game guide licenses
- Electroshocking with ODNR
- Migratory bird banding
- Investigation of fish kills with ODNR and EPA
- Black bass and shad population surveys



ALLSTAR ECOLOGY

Natural Resource Specialists

BAT SERVICES



Habitat Assessments

AllStar's biologists can provide an onsite evaluation of your site to check for roosting, foraging, and general overall bat habitat. The assessment includes a summary of the cover types present and how they relate to bat use, a detailed count of potential roost trees, and an assessment of the surrounding areas with GIS data to assess how the project area compares to the surrounding landscape.

Conservation Plans

AllStar can prepare Conservation Plans to prevent adverse effects to bats and help our client get clearance from the US Fish and Wildlife Service to get their permits and build their projects. AllStar has used a variety of conservation measures in various combinations to get the required approvals.

Landscape Level Modeling

AllStar has developed the Myotline Suitable Habitat Assessment Model which takes into account various landscape level factors to determine the most suitable areas for bat roosting habitat. This tool aids in land planning by allowing industry to avoid areas of higher potential and identify the best areas to use for conservation.

Artificial Roosts

AllStar can provide artificial structures to replace lost roosts or create new roosting locations for bats. AllStar's main roost structure is the "Rocket Box", which simulates bat multiple cavities of a hollow tree. AllStar's rocket box has gone through the certification process from Bat Conservation International to guarantee that it meets the highest standards and is capable to best provide habitat and the greatest likelihood of bat usage. AllStar also has artificial bark options should they be desired.

Potential Roost Tree (PRT) Creation

AllStar has preference to identify the best sites suitable for the creation of roost sites. AllStar's forestry experience has provided a guide for identifying PRTs and developing plans for forest management for bats. AllStar can provide crews to thin trees which will result in the death of a tree and as the bark peels, the tree will provide roosting space. AllStar has also developed a technique of mechanically applied thin bark which is the bark of a dead tree that is modified to create cavities for bat use, especially by northern long-eared bats.

Aquatic Resource Creation

AllStar has undertaken various habitat and tree creation projects in wetland areas. These wetlands are often critical to bat conservation efforts to provide high quality feeding and roosting areas for bats. These created features often serve as an excellent habitat for future monitoring and conservation efforts.

Monitoring

AllStar provides monitoring services for all habitat enhancement activities and will assist our clients in the design and implementation of monitoring programs. AllStar will provide monthly agency documentation of the effectiveness of conservation measures.

Offsite Conservation Areas

With the aid of the AllStar Landscaping Model, AllStar has developed a process for conservation areas in offsite areas. AllStar has a process for identifying areas of high potential for bat roosting habitat and will assist our clients in the design and implementation of monitoring programs. AllStar will provide monthly agency documentation of the effectiveness of conservation measures and long-term stewardship.



ALLSTAR ECOLOGY

Natural Resource Specialists

BAT SERVICES



Innovative Bat Services and Solutions

AllStar Ecology, LLC has developed a bat program to fulfill the needs of various counties, land managers and the scientific community. Our team can perform speciality surveys for bat species and their habitat as well as construct habitat improvement projects artificial roosting structures and watering areas. AllStar also specializes in developing conservation areas for summer bat habitat.

With qualified bat biologists, AllStar, LLC performed numerous surveys throughout West Virginia, Ohio, and Pennsylvania for various projects including oil and gas, mining, development and environmental. Surveys have ranged from a few acres to thousands of acres to meet the needs of our clients.

Our bat services include:

- Mist Netting
- Acoustic Surveys
- Portal Surveys
- Onsite Evaluations
- Conservation Plans
- Landscape Level Modeling
- Artificial Roosts
- Potential Roost Tree (PRT) Creation
- Monitoring
- Onsite Conservation Areas

Mist Netting

AllStar has extensive experience netting for bats and can complete your survey needs in a timely and professional manner. When coupled with radio telemetry, mist netting can be one of the best ways to demonstrate your avoidance of rare, threatened and endangered species.

Acoustic Surveys

AllStar maintains a large number of acoustic bat detectors and can deploy them into the field for quick surveys and for longer periods of monitoring. Acoustic monitoring can provide a much more economical option for surveys on large projects. AllStar has also had great success when coupling acoustic fieldwork with a lesser effort of mist netting and radio telemetry to locate roost trees.

Portal Surveys

AllStar has the equipment to monitor and perform surveys for caves, mine portals, and other potential bat hibernacula. These surveys help ensure you don't disturb swarming habitat or the hibernacula itself if you intend to close a portal.

Presence/Absence Surveys

Crystal Rink, Bid Clerk
Department of Administration, Purchasing Division
2019 Washington St. E.
Charleston, WV 26305-0130

April 14, 2016

Ms. Rink,

Attached is AllStar Ecology's (ASE) bid concerning a Proposal for Critical Faunal Survey and Endangered Species Management Plan for the Indiana and Northern Long-eared Bat, CRFQ 0603 ADJ1600000020; this latest submission includes Addendum #1 from April 14, 2016. ASE provides advanced rare, threatened, and endangered (RTE) bat species services throughout West Virginia and its neighboring states. Our bat services include: mist netting, harp trapping, acoustic surveys, portal surveys and assessments, summer habitat assessments, habitat suitability modelling, artificial roost (i.e., boxes) construction and installation, potential roost tree identification and creation (e.g. snags), conservation plans and conservation areas, and long term monitoring.

ASE has completed several large scale surveys throughout West Virginia, Pennsylvania, and Ohio; key biologist have also received training in Kentucky. During the summer of 2013 we completed a large-scale, comprehensive acoustic and mist netting survey at the Camp Dawson Army Training Facility near Kingwood in Preston County, WV. Indiana bat presence data collected were the basis of our publication *Summer-Habitat Suitability Modeling of Indiana Bats (Myotis sodalis) in the Eastern Mountains of West Virginia* - *Northeastern Naturalist* 23(1):100-118. We completed a similar survey for the U.S. Army Corps of Engineers (2014) to determine the presence/absence of northern long-eared (NLEB) and Indiana bats at Raystown Lake, PA, and a large survey of abandoned mine portals for the West Virginia Department of Environmental Protection during (2015). Additionally, we were commissioned by the Greenbrier Valley RR to acoustically survey the West Fork-Rail-to-Trail for the presence of RTE bat species (2014). Finally, ASE has begun an extensive conservation initiative with the aim of preserving lands for *Myotis* bats throughout northcentral, WV. To date we have successfully founded the North Fork Conservation Site in Ritchie County, WV, documenting the presence of NLEB and their roosts.

ASE employs a diverse group of specialized scientists trained to serve the needs of the greater Appalachian region. We have conducted a variety of surveys throughout the state for a variety of RTE plant, mammal, and mollusk species. We are confident that our wealth of experience will be beneficial to the project and are confident that we can complete the survey and report both on time and budget.

Regards,

Jesse L. De La Cruz, M.S.
Wildlife Biologist

AllStar Ecology, LLC.
1582 Meadowdale Road
Fairmont, WV 26554
Office: 304-816-3490
Cell: 304-322-0060

04/18/16 15:10:56
WV Purchasing Division

I have read many definitions of what is a conservationist, and written not a few myself, but I suspect that the best one is not written with a pen, but with an axe – Aldo Leopold

Proposal for Critical Faunal Survey and Endangered Species Management Plan for the Indiana and Northern Long-eared Bat

WEST VIRGINIA ARMY NATIONAL GUARD (WVANG)



Northern long-eared bat (*Myotis septentrionalis*)

Prepared for:
West Virginia Purchasing Division
2019 Washington Street East
P.O. Box 50130
Charleston, WV 25305-0130

RFQ Number
CRFQ 0603 ADJ160000020

Prepared by:
1582 Meadowdale Road
Fairmont, WV 26554
Office: (304)-816-3490

April 14, 2016



ALLSTAR ECOLOGY
Natural Resource Specialists

Table of Contents

Contact Information:	1
Signed RFQ:.....	2
Completed and Signed Quotation	5
FEIN Number	5
DUNS	5
Addendums	8
Purchasing Affidavit.....	15
Vender Preference Certificate.....	17
Certificate of Insurance.....	19
Technical Proposal.....	21
Phase 1: Habitat Assessment	22
Phase 2: Presence/Absence Sampling – Acoustic Survey	23
Verification of Deployment Location.....	24
Verification of Proper Functioning.....	24
Weather Conditions	24
Weatherproofing	25
Acoustic Analysis.....	25
Phase 3: Mist netting to Capture Indiana and Northern Long-eared Bats	25
Net Placement.....	26
Survey Period	26
Net Checks.....	26
Documentation of <i>Myotis</i> Bat Captures.....	26
Phase 4: Radio-Tracking and Emergence Surveys	27
Emergence Surveys of Located Roost Trees.....	27
Endangered Species Management Plan	28
Literature Cited	29
Recent Relevant Experience	31
Qualifications of Key Personnel: Resumes.....	33

Contact Information:

AllStar Ecology LLC.
1582 Meadowdale Road
Fairmont WV, 26554
Project Manager: Jesse De La Cruz, M.S.
Cell: (304) 322-0060
Office: (304) 816-3490
Website: www.allstarecology.com
Email: jesse@allstarecology.com

FEIN Number: 26-1557130

Total Cost: \$46,500.00



Indiana bat (*M. sodalis*)

Signed RFQ:



Northern long-eared bat (*Myotis septentrionalis*)



Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

State of West Virginia
 Request for Quotation

Proc Folder: 203105

Doc Description: BAT SURVEY-CAMP DAWSON

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2016-03-28	2016-04-19 13:30:00	CRFQ 0603 ADJ1600000020	1

BID REFERING LOCATION

BID CLERK
 DEPARTMENT OF ADMINISTRATION
 PURCHASING DIVISION
 2019 WASHINGTON ST E
 CHARLESTON WV 25305
 US

VENDOR

Vendor Name, Address and Telephone Number:

AllStar Ecology LLC ATTN: Jesse De La Cruz
 1582 Meadowdale Road (cell) 304-322-0060
 Fairmont, WV 26554
 (office) 304-816-3490

FOR INFORMATION CONTACT THE BUYER

Crystal Rink
 (304) 558-2402
 crystal.g.rink@wv.gov

Signature X

FEIN # 26-1557130

DATE 04/11/2016

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

THE STATE OF WEST VIRGINIA PURCHASING DIVISION FOR THE AGENCY, THE WEST VIRGINIA ARMY NATIONAL GUARD'S CAMP DAWSON ARMY TRAINING SITE'S ENVIRONMENTAL OFFICE, IS SOLICITING BIDS TO ESTABLISH A CONTRACT TO PROVIDE ALL PROFESSIONAL AND TECHNICAL PERSONNEL, LABOR, FACILITIES, EQUIPMENT, MATERIALS, TRANSPORTATION, AND SUPPLIES NEEDED FOR A CRITICAL FAUNA SURVEY AND DEVELOPMENT OF AN ENDANGERED SPECIES MANAGEMENT PLAN FOR THE INDIANA BAT AND THE NORTHERN LONG-EARED BAT PER THE ATTACHED.

INVOICE TO		SHIP TO	
DIVISION ENGINEERING & FACILITIES ADJUTANT GENERALS OFFICE 1707 COONSKIN DR		FACILITY MAINTENANCE MANAGER CAMP DAWSON ARMY TRAINING SITE 240 ARMY RD	
CHARLESTON	WV25311	KINGWOOD	WV 26537-1077
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Bat Survey-Endangered Species Mgmt Plan-Camp Dawson	1		\$46,500.00	\$46,500.00

Comm Code	Manufacturer	Specification	Model #
77111507			

Extended Description :

Critical Fauna Survey and Endangered Species Management Plan for the Indiana Bat and the Northern Long-Eared Bat

SCHEDULE OF EVENTS

Line	Event	Event Date
1	VENDOR QUESTION DEADLINE	2016-04-11

Completed and Signed Quotation

AllStar Ecology LLC.
1582 Meadowdale Road
Fairmont, WV 26554
FEIN Number: 26-1557130
DUNS: 829007876



Tri-colored bat (*Ferimystis subflavus*)

EXHIBIT A
CRFQ ADJ1600000020

ALL LABOR, MATERIALS, EQUIPMENT, AND SUPPLIES NECESSARY TO CONDUCT CRITICAL FAUNA
SURVEY AND ENDANGERED SPECIES MANAGEMENT PLAN FOR THE INDIANA BAT AND
NORTHERN LONG-EARED BAT, ON CAMP DAWSON ARMY TRAINING SITE AT KINGWOOD, WV

BID FORM

The undersigned, hereafter called the Bidder, being familiar with and understanding the bidding documents; and being familiar with the required qualifications and the mandatory requirements of the Project with regards to the deliverables and associated timelines, hereby proposes to furnish labor, material, equipment, supplies, and transportation to perform the work as described in the bidding documents

BIDDERS COMPANY NAME: AllStar Ecology LLC

VENDOR ADDRESS: 1582 Meadodale Road
Fairmont WV, 26554

TELEPHONE: 304-816-3490

FAX NUMBER: 1-866-213-2666

E-MAIL ADDRESS: jesse@allstarecology.com


CONTRACT TOTAL BID:

Forty-six Thousand Five Hundred 00/100 Dollars

(\$ \$46,500.00) ****(Contract bid to be written in words and numbers.)*

The contract will be awarded to the Bidder with the lowest contract total bid meeting all of the specifications. Bidder understands that to the extent allowed by the West Virginia Code, the OWNER reserves the right to waive any informality or irregularity in any bid, or bids, and to reject any and all bids in whole or in part; to reject a bid not accompanied by the required bid security or by other data required by the bidding documents; to reject any conditions of the bid by the Bidder that is any way inconsistent with the requirements, terms, and conditions of the bidding documents; or to reject a bid that is in any way incomplete or irregular.

Failure to use this bid form may result in bid disqualification.

SIGNATURE:  **DATE:** 4/11/2016
NAME: Jesse De La Cruz
(Please Print)
TITLE: Wildlife Biologist

CERTIFICATION AND SIGNATURE PAGE

By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

All Star Ecology LLC
(Company)

Jim J. DeJaca (James De La Cruz, Wildlife Biologist)
(Authorized Signature) (Representative Name, Title)

Cell: 304-322-0060 Fax: 1864-213-2666 04/14/14
(Phone Number) (Fax Number) (Date)
Office: 704-814-3470 (Addendum #1)

Addendums



Small-footed bat (*Myotis letii*)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFQ ADJ1600000020

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.

Addendum Numbers Received:
(Check the box next to each addendum received)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> 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.

All Star Ecology LLC
Company
Jon Z. DeJong
Authorized Signature
4/14/14
Date

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

SOLICITATION NUMBER: CRFQ-ADJ160000020

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 Category:

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

Description of Modification to Solicitation:

- 1) To change the Bid Opening date for this solicitation to Thursday April 21, 2016 at 1:30pm.
- 2) To provide responses to vendor questions regarding this solicitation.
- 3) To provide previous Bat Survey from August of 2013.
- 4) 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

**Vendor Questions for CRFQ 0603 ADJ16CC000020
Bat Survey-Camp Dawson**

1. Can shapefiles of the study areas be provided prior to the bid due date?

Answer) No. However, shapefiles will be available for use by the successful bidder after contract award.

2. Can a copy of the previous ESMP be provided prior to the bid due date?

Answer) No. An ESMP for Indiana Bat and Northern Long-eared Bat has not yet been developed for Camp Dawson.

3. If the acoustic survey methodology is solely proposed (ie, no mist-netting), can we assume that a surveyor meeting the qualifications required by the USFWS for such surveys to be considered a "Qualified Biologist"? That is to say, if mist-netting is not performed, does the requirement for someone qualified/permitted to perform mist-netting surveys still stand?

Answer) Yes, as long as 2016 Range-wide Indiana Bat Summer Survey Guidelines are followed, a surveyor meeting the qualifications required by the USFWS may conduct such surveys. It is the responsibility of the surveyor to ensure that methodology and personnel are approved by USFWS. However, a "Qualified Biologist" as defined by USFWS guidelines will be required for phase 3 and phase 4 if endangered bats are detected.

<http://www.fws.gov/midwest/Endangered/mammals/inba/surveys/pdf/2016IndianaBatSummerSurveyGuidelines11April2016.pdf>

4. We are preparing a bid on the Camp Dawson bat survey solicitation and was wondering if the report from 2013 bat survey is available/something you could send us. As current protocol calls for follow up netting when endangered bats are detected acoustically, the report from 2013 would be very helpful to putting together an accurate bid for the 2016 solicitation?

Answer) Yes. The 2013 report is attached.

5. I have just recently seen the Request for Quotation for the Bat Survey at Camp Dawson, attached here. Our firm is well-qualified for this project and very interested. Could you provide more information about the survey? The RFQ refers to an attachment that may not have been included?

Answer) Yes, the 2013 report is attached. All documents and attachments are available online at the WV Oasis Vendor Self Service website

<https://prod-fin-vss.wvoasis.gov/webapp/provss11/AltSelfService>

**Vendor Questions for CRFQ 0503 ADJ1600000020
Bat Survey-Camp Dawson**

6. Will there be a site visit before quotations are due?

Answer) A pre-bid meeting will not be held prior to bid opening. Site visits will not be available before bids are due.

7. Have there been surveys at Camp Dawson in the past? If so, where might we find them?

Answer) Yes. The most recent survey report (2013) is attached.

8. What is the area of the Camp Dawson property to be surveyed?

Answer) Survey area includes the Briery, Pringle, and Volkstone tracts. The three tracts surveyed on Camp Dawson in 2013 incorporated approximately 3,358 acres.

9. The Request for Quotation specifies that anyone performing under this contract is subject to "Agency's security protocol and procedures." Will there be agency directed security protocol and procedures training for key personnel, or will these protocols and procedures be provided to the vendor to inform their staff? Other than the security protocol, are there any other outside training needed to access the properties (OSHA, etc...)?

Answer) Camp Dawson Environmental Staff will coordinate with the vendor and Camp Dawson Security, Operations, and Range Control personnel to ensure that field work and/or site visits do not interfere with military training activities and that appropriate protocol and procedures are followed. Outside of USFWS requirements there will be no specialized training required. Protocol and procedures will be addressed during the pre-work conference.

10. The Request for Quotation specifies that "Surveys will be conducted during the summer survey season on *all suitable habitat* located on the Camp Dawson Army Training Site." Should we assume the "suitable habitat" comprises the total 3,797 acre site, or is the "suitable habitat" a portion of that total acreage? If it is a portion of the 3,797 acres, could we be provided with the "suitable habitat" acreage or is the "suitable habitat" to be determined by the vendor?

Answer) Survey area includes the Briery, Pringle, and Volkstone tracts. The three tracts surveyed on Camp Dawson in 2013 incorporated approximately 3,358 acres. However, it will be up to the vendor to determine the "suitable habitat" and coordinate with USFWS as outlined in the 2016 Range-wide Indiana Bat Summer Survey Guidelines.
<http://www.fws.gov/midwest/Endangered/mammals/inba/surveys/pdf/2016IndianaBatSummerSurveyGuidelines11April2016.pdf>

**Vendor Questions for CRFQ 0603 AD/1600000020
Bat Survey-Camp Dawson**

11. Could the different habitat types present within the four distinct tracts be made available in a map form?

Answer) Land use and cover type (LULC 2011) maps for Briery, Pringle, and Volkstone tracts can be found in the 2013 survey report (attached).

12. What is the total acreage of forested land, compared to meadow or open field?

Answer) From 2013 survey--total acreage forested: 2955.84, total acreage grass/pasture: 83.38, total acreage barren/developed: 93.86, total acreage open water: 55.15, total acreage road: 89.81

Purchasing Affidavit



Indiana bat and little brown bat (*M. lucifugus*)

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 exceeds 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: AllStar Ecology LLC

Authorized Signature: [Signature] Date: 4/14/16

State of WV

County of Marion, to-wit:

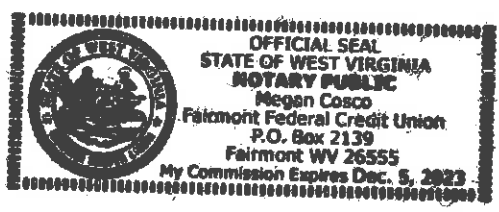
Taken, subscribed, and sworn to before me this 14th day of April, 2016

My Commission expires 12-5-23, 2023

AFFIX SEAL HERE

NOTARY PUBLIC [Signature]

Purchasing Affidavit (Revised 07/01/2012)



Vender Preference Certificate



Hoary bat (*Lasiurus cinereus*)

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 Vendor Preference, if applicable.

1. **Application is made for 2.5% vendor preference for the reason checked:**
 Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or**,
 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% vendor preference for the reason checked:**
 Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being 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% 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 one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or**,
4. **Application is made for 5% 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% 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% 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.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Under penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: AllStar Ecology LLC

Signed: 

Date: 04/11/2016

Title: Wildlife Biologist

Certificate of Insurance



Red bat (*Lasiurus borealis*)



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
4/8/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement.

PRODUCER: Dyer, Heflin, Bowers & Eckels
CONTACT NAME:
PHONE (A/C, No., Ext): (304) 599-3445
FAX (A/C, No.): (304) 599-4607
INSURED: Allstar Ecology, LLC
INSURER A: Evanston Insurance Company
INSURER B: The Cincinnati Insurance Co.
INSURER C: BrickStreet Mutual Insurance Company

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES.

Table with columns: INSR LTR, TYPE OF INSURANCE, ADDL INSD, SUBR WVD, POLICY NUMBER, POLICY EFF, POLICY EXP, LIMITS. Rows include Commercial General Liability, Automobile Liability, Umbrella Liability, Workers Compensation, and Professional/Pollution Liability.

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) Excluding Workers Compensation and professional liability, the certificate holder is included as an additional insured as required by written contract; a waiver of subrogation is granted in favor of the holder, the coverage evidenced is primary and non-contributory.

CERTIFICATE HOLDER CANCELLATION

State of West Virginia Department of Administration, Purchasing Division
SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
AUTHORIZED REPRESENTATIVE: [Signature]

Technical Proposal



Long-term Acoustic Monitoring Station – North Fork Conservation Site, Ritchie County, WV

Phase 1: Habitat Assessment

Suitable summer habitat for Indiana bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags greater than 5 inches dbh (12.7 centimeter) that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure (Carter and Feldhamer 2005). Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat.

Suitable summer habitat for northern long-eared consists primarily of dense wooded habitat and associated forested streams and wetlands. Selected roosts of the northern long-eared bat are typically over-topped (i.e., live trees and/or snags), early successional tree species such as black locust (*Robinia pseudoacacia*) and sassafras (*Sassafras albidum*). Selected trees are typically shorter than associated trees within the forest stand and are located in heavy crown cover. Northern long-eared bats typically select trees with cavities but will also roost under sloughing bark (Silvis et al. 2012).

The habitat survey will entail the remote sensing and onsite quantification/qualification of suitable Indiana bat and northern long-eared bat habitat. Remote sensing will require the determination of forest/non-forest, forest fragmentation within a 2 mile (3.2 km) buffer. This overall analysis is intended to better describe the current state of the landscape, in and around the sites as it pertains to potential use by Indiana and northern long-eared bats. The raster dataset Landuse/Landcover of WV 2011 raster dataset will be used to characterize the landscape. The onsite habitat assessment will involve the characterization of forest cover types near recording stations, netting sites, and any located roost trees. Data collected will include overall composition (i.e., species, successional stage, etc.), and qualitative assessment of habitat suitability (i.e., PRTs, riparian/upland corridors).



Northern long-eared bat maternity colony roost (red maple [*Acer rubrum*])

Phase 2: Presence/Absence Sampling – Acoustic Survey

Phase 2 presence/absence acoustic sampling will be the primary means of species determination for this project. Approximately 42 sites are proposed to be sampled to achieve a minimum of 84 recorder nights of sampling. Sampling will incorporate the deployment of iFR-IV Integrated Field Recorders near (a) forest-canopy openings; (b) near water sources; (c) wooded fence lines that are adjacent to large openings or connect two larger blocks of suitable habitat; (d) blocks of recently logged forest where some potential roost trees remain; (e) road and/or stream corridors with open tree canopies or canopy height of more than 33 feet (10 meters); and (f) woodland edges (Britzke et al. 2010, U.S. Fish and Wildlife Service 2015). Recorders will be deployed at sites established during the 2013 survey (Figure 2; De La Cruz et al. 2013) with recordings beginning at sunset and ending at sunrise for two consecutive nights.

The iFR-IV Integrated Field Recorders will be deployed: (a) at least 5 feet (1.5 meters) in any direction from vegetation or other obstructions (Hayes et al. 2000, Weller and Zabel 2002); (b) in areas without, or with minimal, vegetation within 33 feet (10 meters) in front of the microphone; (c) parallel to woodland edges; and (d) at least 49 feet (15 meters) from known or suitable roosts (e.g., trees/snags, buildings, bridges, bat houses, cave or mine portal entrances) (U.S. Fish and Wildlife Service 2015). If possible, the iFR-IV Integrated Field Recorder microphone will be elevated ≥ 4.92 feet (1.5 meters) above ground level vegetation via a tripod to listen out into flight space to gather the highest quality calls possible. Acoustic sites will be distributed throughout the respective Pringle (1,632 ac), Briery (1,251 ac), and Volkstone (504 ac) tracts of Camp Dawson, with individual recorders being at least 656 feet (200 meters) apart. Camp Dawson proper is not proposed for sampling do to its developed status.

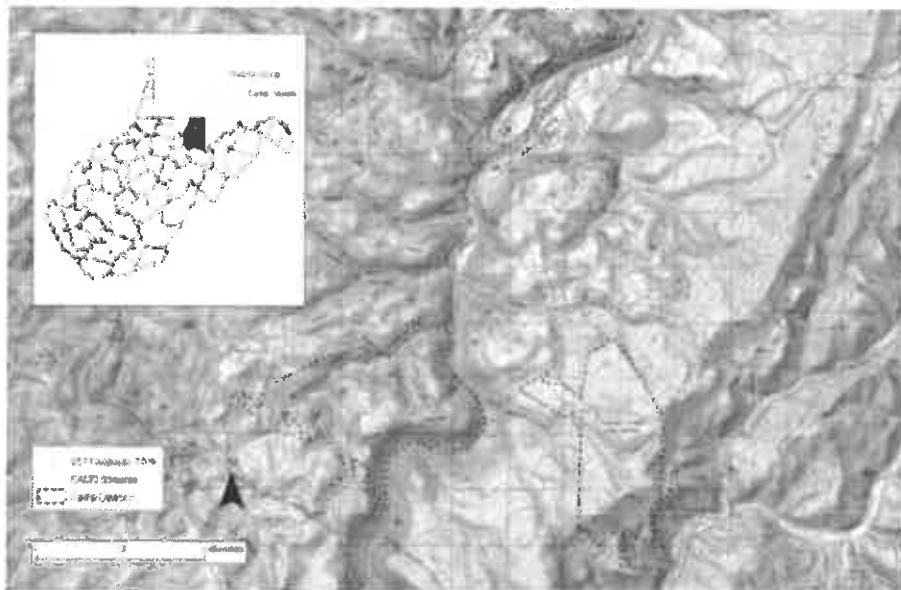


Figure 1. Acoustic Vicinity Map

Verification of Deployment Location

Trimble 6000 GPS units will be used to document the exact location of each acoustic site and its individually named iFR-IV Integrated Field Recorder.

Verification of Proper Functioning

Field verification of iFR-IV Integrated Field Recorder functionality will be done by creating ultrasonic sounds (e.g., finger rubs, whistles) in front of the microphone at survey start and finish. This documents that the equipment was working when deployed and retrieved. The iFR-IV Integrated Field Recorder settings (e.g., sensitivity, frequency, etc.) will follow the recommendations provided by the manufacturer. Surveyors will save files produced daily to ensure data organization and protection during the survey.

If an iFR-IV Integrated Field Recorder is deployed near the ground it will be aimed $\geq 45^\circ$ above horizontal. Any microphones deployed higher within the flight path/zone (e.g., on a pole) will be oriented horizontally. If sampling within features such as forest openings, the iFR-IV Integrated Field Recorder's microphone will be aimed vertically (Britzke et al. 2010).

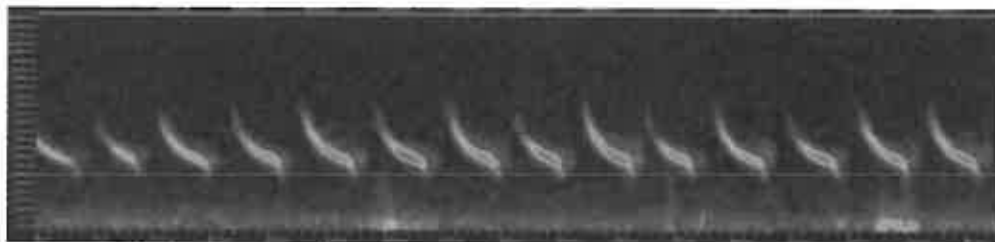
Photographs documenting the orientation, detection cone (i.e., "what the detector is sampling,,"), and relative position of the microphone will be taken for later submittal to the USFWS FO(s) as part of the acoustic survey report.



Acoustic recorder over vernal pool

Weather Conditions

If any of the following weather conditions exist at a survey site during acoustic sampling, the time and duration of such conditions will be noted, and it will be necessary to repeat the acoustic sampling effort for that night: (a) temperatures below 50°F (10°C) during the first 5 hours of survey period; (b) precipitation that exceeds 30 minutes or continues intermittently during the first 5 hours of the survey, and (c) sustained wind speeds greater than 9 miles/hour (4 meters/second) during the first 5 hours of the survey period (U.S. Fish and Wildlife Service 2015). At a minimum, nightly weather conditions for survey sites will be checked using the nearest NOAA National Weather Service station and summarized in the survey reports.



Indiana bat call

Weatherproofing

The iFR-IV Integrated Field Recorder is a fully waterproof system that and may be left out in periods of precipitation. No modification (i.e., pvc cones) will be made to the unit to ensure the highest quality recordings possible. Despite its weatherproof nature, weather condition protocols will be strictly followed.

Acoustic Analysis

Two automated acoustic identification programs (Kaleidoscope and Echoclass) will be used to complete call identification (Ford and Silvis 2014). All data will be analyzed by site/night. Kaleidoscope will only be used to filter calls and convert all full spectrum data to zero-cross format for identification in Echoclass. Each file indicating a positive probable detection of Indiana and/or northern long-eared bats ($P < 0.05$) will be flagged. Sites with a significant presence value ($P < 0.05$) of either species will be selected for Phase 3 mist netting. Sites with high total acoustic classifications of little brown bats (*M. lucifugus*) or other *myotis* calls may be mist netted to better gauge potential false-positive or false-negative classifications.

Phase 3: Mist netting to Capture Indiana and Northern Long-eared Bats

Because presence/absence will be determined via acoustics, there are no minimum requirements for this phase, mist netting will adhere to the 2007 sampling guidance for the capture of Indiana bats (United States Fish and Wildlife Service 2007). If a significant presence value ($P < 0.05$) is recorded two net sets will be erected at one site for two consecutive nights (4 net nights).

Furthermore, ASE recommends a minimum of 10 net nights of sampling within areas identified as high quality Indiana bat habitat (De La Cruz and Ward 2016; Figure 2).

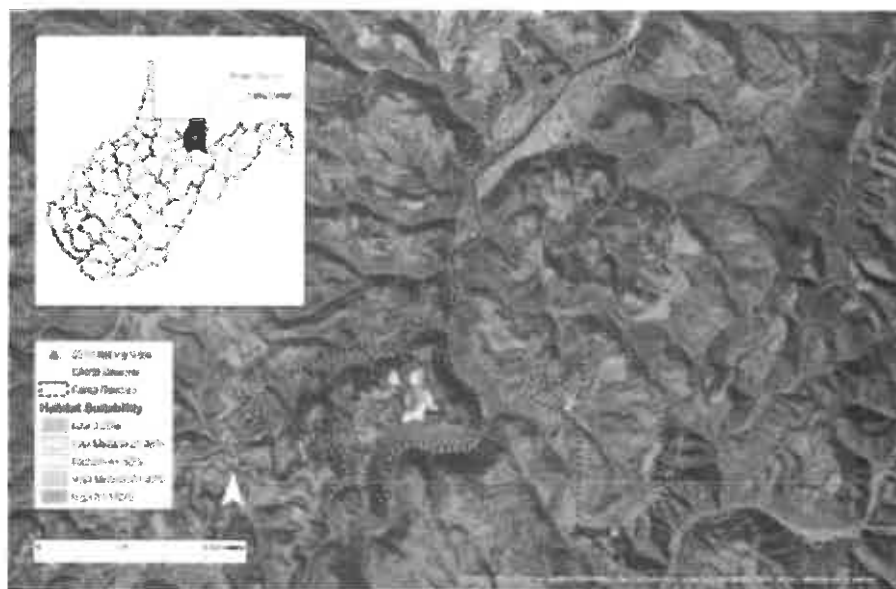


Figure 2. Netting Vicinity Map

Net Placement

Mist netting sites will be in the approximate location of the iFR-IV Integrated Field Recorder that registers a significant presence value ($P < 0.05$). It is likely that nets will be placed perpendicularly across corridors. Nets will fill the corridor from side to side, extending beyond the corridor boundaries when possible, and from stream (or ground) level up to the overhanging canopy. Nets of varying widths and heights will be used as the situation dictates. A typical set is at least 5 m to 9 m high consisting of two or more nets stacked on top one another and from 6 m to 18 m wide. If netting over water, there will be enough space between the net and the water so that captured bats will not get wet. Although no minimum spacing between mist nets is being specified, nets will be set-up throughout suitable habitat. Photo documentation of net placement will be made at each site (U.S. Fish and Wildlife Service 2015).

Survey Period

The survey period shall begin at sunset and continue for at least 5 hours.

Net Checks

Each net set will be checked approximately every 10-15 minutes (Gannon et al. 2007). Care will be taken to minimize noise, lights, and movement near the nets. There will be no other disturbance near the nets, other than to check nets and remove bats. Biologists will be prepared to cut the net if a bat is severely entangled and cannot be safely extracted within 3 or 4 minutes (Canadian Council on Animal Care 2003, Kunz et al. 2009).

Indiana and northern long-eared bats will not be held for more than 30 minutes after capture, unless the individual is targeted for radio-tracking. Bats targeted for radio-tracking will be released ≤ 45 minutes after capture.



Captured Northern Long-eared Bat

Documentation of *Myotis* Bat Captures

All bats captured will be photographed.

If an Indiana and northern long-eared bats are captured during mist netting the USFWS FO and WV DNR will be notified of the capture within 48 hours, and the sex and reproductive condition of the bat and GPS coordinates of the capture site will be provided.

Photo-documentation of all bats captured and identified as Indiana bats and the first 10 little brown bats will be submitted to the USFWS FO to verify the identifications made in the field.

Photo-documentation will include diagnostic characteristics:

- a 3/4-view of face showing ear, tragus, and muzzle
- view of calcar showing presence/absence of keel

Documentation of capture site, date of capture, time of capture, sex, reproductive condition, age, weight, right forearm measurement, band number and type (if applicable), and Reichard's wing damage index score (Reichard and Kunz 2009) will be conducted for each bat captured.

To minimize potential for disease transmission, any equipment that comes in contact with bats will be cleaned, following approved protocols (U.S. Fish and Wildlife Service 2012).

Phase 4: Radio-Tracking and Emergence Surveys

The radio transmitter, adhesive, and any other markings (e.g., wing bands) will weigh less than 5% of pre-attachment body weight (Animal Care and Use Committee 1998), but will not weigh more than 10% of a bat's total body weight (Kurta and Murray 2002) and will comply with any USFWS and state permits. The attachment of a transmitter to any pregnant or juvenile bats will be forgone to avoid any negative health effects. All Indiana, northern long-eared and little brown bats will be banded using WV DNR bands. It is assumed that no more than 2-3 northern long-eared and/or Indiana bats will be fitted with transmitters from any one mist net site.

Biologist(s) will track all radio-tagged bats captured to diurnal roosts using TRX-1000WR tracking receivers. Tracking will proceed on until the transmitter fails, falls off, or for at least 7 days. In the event that a roost is located, two emergence counts at each identified roost will be conducted. If landowner access is denied, approximate roost locations (i.e., coordinates) will be determined using triangulation.

Daily radio telemetry searches for roosts will be conducted during daylight hours and will be conducted until the bat(s) is located or for a minimum of 4 hours of ground effort per tagged bat per day for 7 days.

However, multiple bats captured at the same net location or nearby will be, if feasible, tracked simultaneously. Once a signal is detected, tracking will continue until the roost is located. The biologist(s) will document all ground searching efforts for all bats not recovered during radio-tracking for submittal with the survey report (U.S. Fish and Wildlife Service 2015). For each roost identified during tracking, the biologist(s) will complete a "USFWS Indiana Bat Roost Datasheet,,.



Attaching telemetry transmitter

Emergence Surveys of Located Roost Trees

Bat emergence surveys will begin one half hour before sunset and continue until at least one hour after sunset or until it is otherwise too dark to see emerging bats. The surveyor(s) will be positioned so that emerging bats will be silhouetted against the sky as they exit the roost. Tallies of emerging bats will be recorded every few minutes or as natural breaks in bat activity allow. There will be at least one surveyor per roost. Surveyors will be close enough to the roost to observe all exiting bats but not close enough to influence emergence (U.S. Fish and Wildlife Service 2015). A Sony infrared recorder will be used to aid in identifying the exact timing and number of bats emerging.

Emergence surveys will not be conducted when the following conditions exist: (a) temperatures fall below 50°F (10°C); (b) precipitation that exceeds 30 minutes or continues intermittently during the survey period; and (c) sustained wind speeds greater than 9 miles/hour (4 meters/second) (U.S. Fish and Wildlife Service 2015).

Biologist(s) will use the (or similar) “Bat Emergence Survey Datasheet,,. Biologist(s) will also complete an “Indiana Bat Roost Datasheet,, for each roost known to be used by one or more Indiana bats.



Infrared emergence monitoring

Endangered Species Management Plan

To develop an Endangered Species Management Plan (ESMP) for Camp Dawson the Guidance on Developing and Implementing an Indiana Bat

Conservation Plan,, from the USFWS West Virginia Field Office will be consulted for the identification of conservation measures and activities. The ESMP will be consistent with the Indiana Bat Draft Recovery Plan: First Revision (United States Fish and Wildlife Service 2007).

Conservation measures will likely center around the location of maternity roost trees found during Phase 4 radio tracking of female northern long-eared and Indiana bats. Conservation measure may include but are not limited to preservation of located maternity roost trees, creation of new roost trees, installation of bat boxes, creation of wetland resources, and the biological timing of management activities such as logging. All such conservation measures will be detailed in the resulting ESMP.

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Recent Relevant Experience

- **Camp Dawson Presence/Absence Survey** – This project involved a large scale survey of 2,866 acres of the Camp Dawson WV Army National Guard training facility in Preston County, WV. The survey utilized both acoustic monitoring and active capture of bats. The project found the likely presence of Indiana bats via acoustics and captured northern long-eared, little brown, tri-colored, red, big brown, and small-footed bats.
- **Raystown Lake Presence/Absence Survey** – The project required sampling all forest management areas (1,996 acres) of the Army Corps of Engineers' Raystown Lake property in Huntingdon County, PA. The survey used acoustic monitoring to determine bat activity within these actively managed lands. Acoustics determined the likely presence of both Indiana and northern long-eared bats, an unsurprising result due to the proximity to the Canoe Creek Mine hibernaculum.
- **West Fork of the Greenbrier Rail-to-Trail Presence/Absence Survey** – The project required acoustic sampling of 26 miles of the existing rail-to-trail on behalf of the Durbin and Greenbrier Valley Railroad in Pocahontas and Randolph Counties, WV. The project found the likely presence of Indiana and northern long-eared bats and the potential presence of Virginia big-eared bats during qualitative analysis.
- **Sandstrom Presence/Absence Survey** – The project entailed mist netting to determine the probable presence/absence of Indiana and northern long-eared bats at Antero Resources' Sandstrom Water Treatment Facility located in Doddridge County, WV. Northern long-eared bats were captured onsite with one male and one lactating female fitted with radio transmitters. Nine (9) roost trees were located using radio telemetry, two (2) of which were identified as primary roost trees of a local maternity colony, having 10 and 23 bats emerging, respectively. No Indiana bats were captured.
- **North Fork Hughes River Conservation Site** – The North Fork Hughes River Conservation Site was established in Ritchie County, WV. The site serves as conservation measures to offset development projects undertaken by Antero Resources. Acoustic monitoring, capture, banding, and telemetry efforts were conducted. Several northern long-eared bats were captured with a single post-lactating female fitted with a radio transmitter; two (2) roost trees located. Furthermore >20 rocket box bat houses, >60 snags, and 11 internal voids have been erected/created for use by bats as roosts. Additionally, four (4) open water wetlands were created for foraging/drinking. Several hundred trees were planted to reforest portions of the site.

- **Kanawha State Forest Portal Survey(s)** – The project involved harp trapping, mist netting, and IR video surveillance of several abandoned, relic mine shafts for the Mary Ingles Trail Blazers at the Kanawha State Forest in Kanawha County, WV. The project captured an adult female northern long-eared bat exiting the largest mine shaft providing evidence of hibernation onsite.
- **WV DEP AML Mine Portal Survey(s)** – The project entailed harp trapping, mist netting, and acoustic monitoring of 58 abandoned, relic mines shafts for the WV Department of Environmental Protection in Greenbrier, Wyoming, Barbour, Marion, Monongalia, Kanawha, Wayne, Logan, and Boone Counties, WV. The surveys captured several species of interest such as the small-footed bat and tricolored bat, as well as a few big brown and red bats. Acoustic evidence may also suggest use of some mines by the northern long-eared bat.

Qualifications of Key Personnel: Resumes



Banded northern long-eared bat



Jesse L. De La Cruz

– *Wildlife Biologist*



Jesse De La Cruz is a Wildlife Biologist at AllStar Ecology. Mr. De La Cruz has worked in several states with a focus on environmental research/evaluations and natural resource industrial activities. He has participated in both forestry and wildlife related research and specializes in wildlife biology and natural resource/forestry related issues with a focus on wildlife habitat availability and selection. He has been affiliated with various private, state, and federal agencies conducting surveys for invasive plants and trees, forest inventory, small mammal surveys, big game home-range monitoring, habitat assessments, and habitat improvements. He has conducted/participated in numerous summer presence/absence surveys (netting/harp trapping and acoustics) and spring emergence and fall portal surveys for rare, threatened, and endangered bat

species in the states of West Virginia, Ohio, Pennsylvania, and Kentucky.

Education

M.S. (2012): Wildlife and Fisheries Resources, West Virginia University, Morgantown, WV.

B.S. (2009): Natural Resource Management, Glenville State College, Glenville, WV.

A.S. (2008): Forestry, Glenville State College, Glenville, WV.

Experience

Wildlife Biologist - AllStar Ecology, LLC	2012 - present
Graduate Research Assistant - West Virginia University, Morgantown, WV	2009 - 2012
Forest Technician - USFS, Fernow Experimental Forest, Parsons WV	2009
Undergraduate Research Assistant - Glenville State College, Glenville, WV	2008 - 2009

Professional Development

- Eastern Bat Survey Techniques Workshop (Bat Conservation and Management)
- West Virginia Scientific Collecting Permit for Bat Surveys
- Bat Working Groups – Northeast (2016), Midwest (2015), Ohio (2015), Kentucky (2016)
- The Wildlife Society
- Safe Capture International Inc. - Chemical Immobilization of Animals
- Ohio Rapid Assessment Method v 5.0 Training Course (Ecological Training Services)
- Ohio QHEI and HHEI Training Course (Midwest Biological Institute)
- The Swamp School – Wetland Delineation and Regional Supplements (40 hour training course)
- North American Forest Technician Honorary - Council of Eastern Forest Technician Schools
- American Heart Association First Aid and CPR Training and PEC Safeland Basic (Bickerstaff Safety Consulting)



Publication

De La Cruz, Jesse and R. L. Ward. Summer-Habitat Suitability Modeling of Indiana Bats (*Myotis sodalis*) in the Eastern Mountains of West Virginia. *Northeastern Naturalist* 23(1):100–117.

De La Cruz, Jesse, S.E. Rauch, and J.T. Anderson. Habitat Use and Selection by Male Eastern Wild Turkeys (*Meleagris gallopavo silvestris*) in West Virginia. West Virginia University - Department of Natural Resource Conservation, 2012.

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De La Cruz, Jesse, Radcliff, Troy and Gazal, Rico. 2009. Influence of light regime and shade tolerance on leaf structure of native species and *Ailanthus*. WV Academy of Science, Glenville State College, Glenville, WV, March 21, 2009.

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De La Cruz, Jesse, Radcliff, Troy and Gazal, Rico. 2008. Influence of light regime and shade tolerance on leaf structure of native species and *Ailanthus altissima*. Chi Beta Phi 61st National Conference, October 18, 2008, Glenville State College, Glenville, WV.



DIVISION OF NATURAL RESOURCES
 Wildlife Resources Section
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 Telephone (304) 637-0245
 Fax (304) 637-0250

Earl Ray Tomblin
 Governor

Robert A. Fala
 Director

NUMBER 2016.031

SCIENTIFIC COLLECTING PERMIT

Under Authority Conferred by Chapter 20, Article 2, Section 50, Code of West Virginia, As Amended

Jesse De La Cruz
AllStar Ecology, LLC
1582 Meadowdale Road
Fairmont, WV 26554

is hereby permitted to collect specimens according to the attached application and the Special Provisions on the reverse side of this permit.

This permit is not transferable and expires on August 15, 2016.

A complete list of all specimens collected will be kept and reported to the Director of the Division of Natural Resources of West Virginia no later than 45 days after the expiration date of this permit.

PERMIT PROVISIONS

I understand that (1) The privileges granted under this permit are not transferable, and to allow anyone other than myself to use my permit is unlawful and will be considered cause for revocation of said permit; (2) A Federal Scientific Collection Permit issued by the U.S. Department of Interior must be obtained before any migratory birds, or their nests or eggs, are collected or held in captivity; (3) The Federal Permit does not extend the privileges of the permittee beyond those granted by the Division of Natural Resources; (4) Permission must be obtained from either the owner or the custodian of any fenced or posted land before entering same for the purpose of collecting scientific specimens; (5) It is unlawful to carry a revolver or pistol contrary to Article VII, Chapter 61, Code of West Virginia; (6) It is unlawful to collect specimens with a gun on a Sunday; (7) It is unlawful to sell, offer for sale, barter, or offer to barter any wild animals, wild birds, fish or frogs collected; (8) When traps or nets or other devices are used UNATTENDED while exercising the privileges of this permit, said traps, nets, or devices must have attached thereto a tag bearing the name, address and number of the Scientific Collecting Permit; (9) It is unlawful to take or attempt to take any wild animals, wild birds, fish or frogs under said permit except for scientific and propagation purposes; (10) A hunting or fishing license must be obtained before specimens may be taken for sport; (11) Only those species or classes of wild birds, wild animals, fish or frogs listed below, and in the numbers stated, may be lawfully taken under said permit; and (12) I am required by law to carry my Scientific Collecting Permit, on my person while exercising the privileges granted thereunder, and to exhibit the permit to anyone requesting to see the same.

Must be signed before valid.



 Signature of permittee



 Chief, Wildlife Resources, WVDNR

Date of issue 1/29/16

IMPORTANT

THE ATTACHED APPLICATION FORM INDICATING SPECIES TO BE COLLECTED, LOCATIONS OF COLLECTIONS, MANNER OF COLLECTION, AND PURPOSE OF COLLECTION IS TO BE CONSIDERED A PART OF THIS PERMIT AND SHOULD REMAIN ATTACHED.

YOU ARE SUBJECT TO THE FOLLOWING COLLECTING AND REPORTING PROVISIONS. FAILURE TO MEET THESE CRITERIA IS GROUNDS FOR REVOCATION OF THE PERMIT AND/OR DENIAL OF FUTURE PERMIT APPLICATIONS AND/OR PENALTIES OR OTHER STRICTURES.

SPECIAL PROVISIONS:

For the purposes of this study, the permittee is designated as an agent of the State of West Virginia, and therefore covered under the WV Division of Natural Resources' Endangered Species permit as set forth in a cooperative agreement between the WVDNR and the U.S. Fish & Wildlife Service. Violation of the federal Endangered Species Act or Chapter 20 of the WV State Code may lead to arrest and prosecution.

1. Under no circumstances will a federally listed bat (*Myotis sodalis*, *Myotis grisescens*, *Myotis septentrionalis*, or *Corynorhinus townsendii virginianus*) be killed for scientific purposes or any other reason. No body tissue or blood can be taken from a federally listed bat.
2. No other bats will be killed for scientific purposes or any other reason; nor will body tissues or blood be collected without justification and written approval.
3. All *Corynorhinus townsendii virginianus*, *Corynorhinus rafinesquii*, *Myotis sodalis*, *Myotis grisescens*, *Myotis septentrionalis*, and *Myotis leibii* will be released immediately (within a few minutes) after capture and at the site of capture.
4. Mortality of bats of the six species noted in #3 above while exercising the provisions of this permit will be reported within 48 hours to the WVDNR. The permittee will take appropriate precautions to preserve the dead animal, and the entire animal will be surrendered to the WVDNR.
5. Bats will not be collected by shooting.
6. No more than two specimens of any species of bat not listed above will be taken from a collection locality.
7. Bats may be banded and released. The band numbers must be both embossed and printed on the bands. All banding numbers and other banding data must be supplied to the WVDNR as part of the permit reporting process. *Myotis leibii* may not be banded. Bands are available from the WVDNR, and only *Myotis sodalis* and *Myotis lucifugus* may be banded with WVDNR bands.
8. Radio transmitters may be placed on bats. Transmitters may not be placed on pregnant or juvenile bats.
9. Mist-net poles shall be labeled with the company's or researcher's name.
10. Notify the U.S. Forest Service one week prior to surveys if mist-netting on their properties. A permit must be obtained from the U.S. Forest Service.
11. To minimize the disturbance to hibernating bats, bats will not be collected from hibernacula containing any endangered bat species or other hibernacula known to be important for any species of bat.

12. Follow the decontamination protocol for White-nose Syndrome as instructed in this document: https://www.whitenosesyndrome.org/sites/default/files/resource/national_wns_revise_final_6.25.12.pdf.
13. In addition to the standard permit reporting requirements, the permittee will routinely notify the WVDNR (Craig Stihler or Barbara Sargent, P.O. Box 67, Elkins, WV 26241, (304) 637-0245) **within 48 hours of capture** or handling any *Corynorhinus* spp., *Myotis sodalis*, *Myotis grisescens*, or *Myotis septentrionalis*. Photographs showing diagnostic characteristics shall be taken of *Myotis sodalis*, *Myotis grisescens*, *Myotis septentrionalis*, *Corynorhinus* spp. and *Nycticeius humeralis* and provided to the WVDNR. A reporting spreadsheet will be provided via email.
14. **REPORTING REQUIREMENTS:** Please provide copies of field sheets. In addition, report information electronically via the WVBatMistNet_Reporting spreadsheet which will be provided via email.
15. It is recommended that survey proposals be approved by the US Fish and Wildlife Service prior to conducting surveys to assure that surveying guidelines are met.

Requests for exemption from any of the above conditions will be reviewed on a case by case basis by the WVDNR. Salvage of dead specimens is permitted and is not covered by the above restrictions, but must be reported to the WVDNR. If dead federally listed species are collected they must be reported to the WVDNR within 48 hours (304/637-0245), and then turned over to the WVDNR.

If any work is planned to occur in a State Park or State Forest, a permit must be obtained from WVDNR – Parks and Recreation.

Please provide disposition of any voucher specimens, including the collection number if available.

The WVDNR requests a copy of any papers, reports or theses published as a result of this research.

APPLICATION FOR WEST VIRGINIA SCIENTIFIC COLLECTING PERMIT

Name: Jesse De La Cruz

Institution/Affiliation: AllStar Ecology LLC

Street: 1582 Meadowdale Road

City: Fairmont State: WV Zip: 26554

Telephone: 304-816-3490 Email: jesse@allstarecology.com

Profession: Wildlife Biologist Major professor: N/A

Specific manner of collection

Mist netting and harp trapping for the presence/absence of RTE bat species.

Purpose for which specimens are to be collected (attach abstract):

To determine the presence/absence of RTE bat species
within proposed action areas and conservation sites.

How will specimens be disposed?

Individual specimen will be released back into the study area within 45 minutes of capture.

Date on which collecting is to be: June 1st 2016 August 15th 2016
(Commence) (Terminate)

Location(s) where collections are to be taken (be specific):

County(s) Wetzel, Mon. Preston, Tyler, Doddridge, Harrison, Ritchie, Lewis, Upshur, Randolph, Pocahontas If aquatic, indicate:

Stream(s): N/A Location (distance to
nearest town, miles from the mouth) N/A

Attach separate pages if additional space is required.
(Over)

Report that will result from studies and additional comments or information which may be pertinent to issuing this permit Potential Indiana bat, northern long-eared, gray bat, or Virginia big-eared bat captures or the location of maternity colonies could be revealed during mist netting.

Have you received a WV permit in previous years? Yes Most recent year 2015

SPECIES TO BE COLLECTED OR HANDLED

<u>GENUS</u>	<u>SCIENTIFIC NAME</u>	<u>SPECIES</u>	<u>NUMBER</u>
Myotis		sodalis	
Myotis		septentrionalis	
Myotis		leibii	
Myotis		grisescens	
Lasionycteris		noctivagans	
Perimyotis		subflavus	
Myotis		lucifugus	
Eptesicus		fuscus	
Lasiurus		borealis	
Lasiurus		cinereus	
Nycticeius		humeralis	

Corynorhinus townsendii virginianus

Signature James J. DeJong

Date 01/18/16

Send application to:

Scientific Collecting Permit
Wildlife Resources
P.O. Box 67, Ward Road
Elkins, WV 26241

11/18/03



Eric Schroder

- Environmental Scientist II/Bat Biologist



Eric Schroder is an Environmental Scientist with AllStar Ecology, LLC and specializes in bat biology. He has conducted endangered and threatened species surveys on reptile and mammalian species in California, West Virginia, Ohio, Alabama, Iowa, and Illinois. He has been affiliated with various private and federal agencies in conducting small mammal, avian, and tree community surveys, as well as wildlife behavior studies. Mr. Schroder specializes in endangered/threatened bat

presence/absence surveys, spring emergence and fall portal surveys, wildlife and data management, ArcGIS, and has worked on numerous oil and gas projects delineating streams and wetlands for permitting and construction avoidance.

Education

M.S. (2012): Biology, Western Illinois University, Macomb, IL.

B.S. (2010): Biology (emphasis in Wildlife Ecology), Iowa State University, Ames, IA.

Experience

Environmental Scientist II/Bat Biologist - AllStar Ecology,	2013 - current
Wildlife Biologist- Trutech Inc.	2012 - 2013
Field Technician- Western Ecosystems Technologies, Inc.	2012
Biological Technician- Apogee Environmental and Archaeological, Inc.	2012
Graduate Assistant-Western Illinois University	2012
Research Assistant- Western Illinois University	2011 - 2012
Field Technician-San Diego State University	2010
Field Technician-Iowa State University	2009

Professional Development

- The Swamp School: Wetland Delineation and Regional Supplement (40 hour training course)
- Ohio Rapid Assessment Method for Wetlands Training Course (Midwest Biodiversity Institute)
- Ohio Qualitative Habitat Evaluation Index for Streams Training Course (Midwest Biodiversity Institute)
- AHA CPR and First Aid Training
- PEC Safeland Basic (Bickerstaff Safety Consulting)
- Certified Wildlife Damage Control Agent (West Virginia)
- Eastern Bat Survey Techniques Workshop (Bat Conservation and Management Inc.)
- Midwest, Kentucky, and Northeast Bat Working Group
- West Virginia Scientific Collecting Permit for Bat Surveys (Indiana, northern long-eared, Virginia big-eared, gray bats)



DIVISION OF NATURAL RESOURCES
 Wildlife Resources Section
 Operations Center
 P.O. Box 67
 Elkins, West Virginia 26241-3235
 Telephone (304) 637-0246
 Fax (304) 637-0250

Earl Ray Tomblin
 Governor

Robert A. Fala
 Director

NUMBER 2016.064

SCIENTIFIC COLLECTING PERMIT

Under Authority Conferred by Chapter 20, Article 2, Section 50, Code of West Virginia, As Amended

Eric Schroder
AllStar Ecolgy, LLC
1582 Meadowdale Road
Fairmont, WV 26554

is hereby permitted to collect specimens according to the attached application and the Special Provisions on the reverse side of this permit.

This permit is not transferable and expires on August 15, 2016.

A complete list of all specimens collected will be kept and reported to the Director of the Division of Natural Resources of West Virginia no later than 45 days after the expiration date of this permit.

PERMIT PROVISIONS

I understand that (1) The privileges granted under this permit are not transferable, and to allow anyone other than myself to use my permit is unlawful and will be considered cause for revocation of said permit; (2) A Federal Scientific Collection Permit issued by the U.S. Department of Interior must be obtained before any migratory birds, or their nests or eggs, are collected or held in captivity; (3) The Federal Permit does not extend the privileges of the permittee beyond those granted by the Division of Natural Resources; (4) Permission must be obtained from either the owner or the custodian of any fenced or posted land before entering same for the purpose of collecting scientific specimens; (5) It is unlawful to carry a revolver or pistol contrary to Article VII, Chapter 61, Code of West Virginia; (6) It is unlawful to collect specimens with a gun on a Sunday; (7) It is unlawful to sell, offer for sale, barter, or offer to barter any wild animals, wild birds, fish or frogs collected; (8) When traps or nets or other devices are used UNATTENDED while exercising the privileges of this permit, said traps, nets, or devices must have attached thereto a tag bearing the name, address and number of the Scientific Collecting Permit; (9) It is unlawful to take or attempt to take any wild animals, wild birds, fish or frogs under said permit except for scientific and propagation purposes; (10) A hunting or fishing license must be obtained before specimens may be taken for sport; (11) Only those species or classes of wild birds, wild animals, fish or frogs listed below, and in the numbers stated, may be lawfully taken under said permit; and (12) I am required by law to carry my Scientific Collecting Permit, on my person while exercising the privileges granted thereunder, and to exhibit the permit to anyone requesting to see the same.

Must be signed before valid.

Signature of permittee

Chief, Wildlife Resources, WVDNR

Date of issue

2-18-16

IMPORTANT

THE ATTACHED APPLICATION FORM INDICATING SPECIES TO BE COLLECTED, LOCATIONS OF COLLECTIONS, MANNER OF COLLECTION, AND PURPOSE OF COLLECTION IS TO BE CONSIDERED A PART OF THIS PERMIT AND SHOULD REMAIN ATTACHED.

YOU ARE SUBJECT TO THE FOLLOWING COLLECTING AND REPORTING PROVISIONS. FAILURE TO MEET THESE CRITERIA IS GROUNDS FOR REVOCATION OF THE PERMIT AND/OR DENIAL OF FUTURE PERMIT APPLICATIONS AND/OR PENALTIES OR OTHER STRICTURES.

SPECIAL PROVISIONS:

For the purposes of this study, the permittee is designated as an agent of the State of West Virginia, and therefore covered under the WV Division of Natural Resources' Endangered Species permit as set forth in a cooperative agreement between the WVDNR and the U.S. Fish & Wildlife Service. Violation of the federal Endangered Species Act or Chapter 20 of the WV State Code may lead to arrest and prosecution.

1. Under no circumstances will a federally listed bat (*Myotis sodalis*, *Myotis grisescens*, *Myotis septentrionalis*, or *Corynorhinus townsendii virginianus*) be killed for scientific purposes or any other reason. No body tissue or blood can be taken from a federally listed bat.
2. No other bats will be killed for scientific purposes or any other reason; nor will body tissues or blood be collected without justification and written approval.
3. All *Corynorhinus townsendii virginianus*, *Corynorhinus rafinesquii*, *Myotis sodalis*, *Myotis grisescens*, *Myotis septentrionalis*, and *Myotis leibii* will be released immediately (within a few minutes) after capture and at the site of capture.
4. Mortality of bats of the six species noted in #3 above while exercising the provisions of this permit will be reported within 48 hours to the WVDNR. The permittee will take appropriate precautions to preserve the dead animal, and the entire animal will be surrendered to the WVDNR.
5. Bats will not be collected by shooting.
6. No more than two specimens of any species of bat not listed above will be taken from a collection locality.
7. Bats may be banded and released. The band numbers must be both embossed and printed on the bands. All banding numbers and other banding data must be supplied to the WVDNR as part of the permit reporting process. *Myotis leibii* may not be banded. Bands are available from the WVDNR, and only *Myotis sodalis* and *Myotis lucifugus* may be banded with WVDNR bands.
8. Radio transmitters may be placed on bats. Transmitters may not be placed on pregnant or juvenile bats.
9. Mist-net poles shall be labeled with the company's or researcher's name.
10. Notify the U.S. Forest Service one week prior to surveys if mist-netting on their properties. A permit must be obtained from the U.S. Forest Service.
11. To minimize the disturbance to hibernating bats, bats will not be collected from hibernacula containing any endangered bat species or other hibernacula known to be important for any species of bat.

12. Follow the decontamination protocol for White-nose Syndrome as instructed in this document: https://www.whitenosesyndrome.org/sites/default/files/resource/national_wns_revise_final_6.25.12.pdf.
13. In addition to the standard permit reporting requirements, the permittee will routinely notify the WVDNR (Craig Stihler or Barbara Sargent, P.O. Box 67, Elkins, WV 26241, (304) 637-0245) **within 48 hours of capture** or handling any *Corynorhinus* spp., *Myotis sodalis*, *Myotis grisescens*, or *Myotis septentrionalis*. Photographs showing diagnostic characteristics shall be taken of *Myotis sodalis*, *Myotis grisescens*, *Myotis septentrionalis*, *Corynorhinus* spp. and *Nycticeius humeralis* and provided to the WVDNR. A reporting spreadsheet will be provided via email.
14. **REPORTING REQUIREMENTS:** Please provide copies of field sheets. In addition, report information electronically via the WVBatMistNet_Reporting spreadsheet which will be provided via email.
15. It is recommended that survey proposals be approved by the US Fish and Wildlife Service prior to conducting surveys to assure that surveying guidelines are met.

Requests for exemption from any of the above conditions will be reviewed on a case by case basis by the WVDNR. Salvage of dead specimens is permitted and is not covered by the above restrictions, but must be reported to the WVDNR. If dead federally listed species are collected they must be reported to the WVDNR within 48 hours (304/637-0245), and then turned over to the WVDNR.

If any work is planned to occur in a State Park or State Forest, a permit must be obtained from WVDNR – Parks and Recreation.

Please provide disposition of any voucher specimens, including the collection number if available.

The WVDNR requests a copy of any papers, reports or theses published as a result of this research.

APPLICATION FOR WEST VIRGINIA SCIENTIFIC COLLECTING PERMIT

Name: Eric Schroder
Institution/Affiliation: AllStar Ecology, LLC
Street: 1582 Meadowdale Road
City: Fairmont State: WV Zip: 26554
Telephone: 304-816-3490 Email: eric.schroder@allstarecology.com
Profession: Environmental Scientist Major professor: N/A

Specific manner of collection
Mist netting and spring emergence surveys for the presence/absence of endangered bat species (specifically the Indiana bat). Bats will carefully be taken out of the nets and data recorded. Individuals will then be released in a timely manner.

Purpose for which specimens are to be collected (attach abstract):
To determine the presence/absence of federally endangered/threatened bat species within a client's potential project area.

How will specimens be disposed?
Individuals caught will be released back into the study area as quickly as possible after data collection.

Date on which collecting is to be: June 1, 2016 August 15, 2016
(Commence) (Terminate)

Location(s) where collections are to be taken (be specific):
County(s) Doddridge, Ritchie, Tyler, Harrison, Upshur, Marion, Taylor, Lewis If aquatic, indicate:
Stream(s): N/A Location (distance to
nearest town, miles from the mouth) N/A

Attach separate pages if additional space is required.
(Over)

Report that will result from studies and additional comments or information which may be pertinent to issuing this permit Potential Indiana bat or northern long-eared hibernacula or roosting habitat could be revealed with the associated presence/absence surveys. These areas could then be protected.

Have you received a WV permit in previous years? ^{Yes; 2015.046} Most recent year 2015

SPECIES TO BE COLLECTED OR HANDLED

<u>GENUS</u>	<u>SCIENTIFIC NAME</u>	<u>SPECIES</u>	<u>NUMBER</u>
Myotis		sodalis	
Myotis		septentrionalis	
Myotis		leibii	
Myotis		grisescens	
Lasionycteris		novticagens	
Perimyotis		subflavus	
Myotis		lucifugus	
Eptesicus		fuscus	
Lasiurus		borealis	
Lasiurus		cinereus	
Corynorhinus		townsendii	

Eric S. Schider

Signature

1/26/16

Date

Send application to:

Scientific Collecting Permit
Wildlife Resources
P.O. Box 67, Ward Road
Elkins, WV 26241

11/18/03



Neil Lafleur

Environmental Scientist II/Bat Biologist



Neil Lafleur is an Environmental Scientist and Wildlife Biologist at AllStar Ecology with diverse experience working throughout the country. He has been affiliated with various private, state, and federal agencies conducting surveys for invasive plants, forest inventory, and small mammal surveys. He has worked primarily throughout the Northeast, more specifically NY, PA, WV, OH, and IN participating in forestry and wildlife related research, specializing in conducting bat surveys for threatened and endangered species. Mr. Lafleur is also

gaining further experience as a qualified wetland delineator working on projects primarily for the oil and gas industry.

Education

B.S. (2008): Environmental Science (emphasis in Wildlife Ecology), Franklin Pierce University, Rindge, NH.

Experience

Environmental Scientist II/Bat Biologist - AllStar Ecology	2015 - current
Bat Biologist/Project Manager - Apogee Environmental & Archaeological, Inc.	2012 - 2014
Extractions Technician - Con-Test Analytical Laboratory	2012 - 2014
Fisheries Biologist - Saltwater Inc.	2011
Fish Processor/Culturist - Australis Aquaculture LLC.	2010
Bat Biologist - Bat Conservation and Management, Inc.	2010
Biological Technician/Mechanic - Colorado Division of Wildlife	2009
Biological Technician - North East Ecological Services	2008 - 2009
Biological Technician - Curry & Kerlinger	2008

Professional Development

- The Swamp School: Wetland Delineation and Regional Supplement (40 hour training course)
- West Virginia Scientific Collecting Permit for Bat Surveys 2014, 2015 (Indiana, northern long-eared, Virginia big-eared, gray bats)
- Kentucky Bat Working Group
- First Aide Training
- Confined Space Entry Training



DIVISION OF NATURAL RESOURCES
 Wildlife Resources Section
 Operations Center
 P.O. Box 67
 Elkins, West Virginia 26241-3235
 Telephone (304) 637-0245
 Fax (304) 637-0250

Earl Ray Tomblin
 Governor

Robert A. Fala
 Director

NUMBER 2016.153

SCIENTIFIC COLLECTING PERMIT

Under Authority Conferred by Chapter 20, Article 2, Section 50, Code of West Virginia, As Amended

Neil Lafleur
AllStar Ecology, LLC
1582 Meadowdale Road
Fairmont, WV 26554

is hereby permitted to collect specimens according to the attached application and the Special Provisions on the reverse side of this permit.


This permit is not transferable and expires on **October 31, 2016.**

A complete list of all specimens collected will be kept and reported to the Director of the Division of Natural Resources of West Virginia no later than 45 days after the expiration date of this permit.

PERMIT PROVISIONS

I understand that (1) The privileges granted under this permit are not transferable, and to allow anyone other than myself to use my permit is unlawful and will be considered cause for revocation of said permit; (2) A Federal Scientific Collection Permit issued by the U.S. Department of interior must be obtained before any migratory birds, or their nests or eggs, are collected or held in captivity; (3) The Federal Permit does not extend the privileges of the permittee beyond those granted by the Division of Natural Resources; (4) Permission must be obtained from either the owner or the custodian of any fenced or posted land before entering same for the purpose of collecting scientific specimens; (5) It is unlawful to carry a revolver or pistol contrary to Article VII, Chapter 61, Code of West Virginia; (6) It is unlawful to collect specimens with a gun on a Sunday; (7) It is unlawful to sell, offer for sale, barter, or offer to barter any wild animals, wild birds, fish or frogs collected; (8) When traps or nets or other devices are used UNATTENDED while exercising the privileges of this permit, said traps, nets, or devices must have attached thereto a tag bearing the name, address and number of the Scientific Collecting Permit; (9) It is unlawful to take or attempt to take any wild animals, wild birds, fish or frogs under said permit except for scientific and propagation purposes; (10) A hunting or fishing license must be obtained before specimens may be taken for sport; (11) Only those species or classes of wild birds, wild animals, fish or frogs listed below, and in the numbers stated, may be lawfully taken under said permit; and (12) I am required by law to carry my Scientific Collecting Permit, on my person while exercising the privileges granted thereunder, and to exhibit the permit to anyone requesting to see the same.

Must be signed before valid.



 Signature of permittee



 Chief, Wildlife Resources, WVDNR

Date of issue 3-29-16

IMPORTANT

THE ATTACHED APPLICATION FORM INDICATING SPECIES TO BE COLLECTED, LOCATIONS OF COLLECTIONS, MANNER OF COLLECTION, AND PURPOSE OF COLLECTION IS TO BE CONSIDERED A PART OF THIS PERMIT AND SHOULD REMAIN ATTACHED.

YOU ARE SUBJECT TO THE FOLLOWING COLLECTING AND REPORTING PROVISIONS. FAILURE TO MEET THESE CRITERIA IS GROUNDS FOR REVOCATION OF THE PERMIT AND/OR DENIAL OF FUTURE PERMIT APPLICATIONS AND/OR PENALTIES OR OTHER STRICTURES.

SPECIAL PROVISIONS:

For the purposes of this study, the permittee is designated as an agent of the State of West Virginia, and therefore covered under the WV Division of Natural Resources' Endangered Species permit as set forth in a cooperative agreement between the WVDNR and the U.S. Fish & Wildlife Service. Violation of the federal Endangered Species Act or Chapter 20 of the WV State Code may lead to arrest and prosecution.

1. Under no circumstances will a federally listed bat (*Myotis sodalis*, *Myotis grisescens*, *Myotis septentrionalis*, or *Corynorhinus townsendii virginianus*) be killed for scientific purposes or any other reason. No body tissue or blood can be taken from a federally listed bat.
2. No other bats will be killed for scientific purposes or any other reason; nor will body tissues or blood be collected without justification and written approval.
3. All *Corynorhinus townsendii virginianus*, *Corynorhinus rafinesquii*, *Myotis sodalis*, *Myotis grisescens*, *Myotis septentrionalis*, and *Myotis leibii* will be released immediately (within a few minutes) after capture and at the site of capture.
4. Mortality of bats of the six species noted in #3 above while exercising the provisions of this permit will be reported within 48 hours to the WVDNR. The permittee will take appropriate precautions to preserve the dead animal, and the entire animal will be surrendered to the WVDNR.
5. Bats will not be collected by shooting.
6. No more than two specimens of any species of bat not listed above will be taken from a collection locality.
7. Bats may be banded and released. The band numbers must be both embossed and printed on the bands. All banding numbers and other banding data must be supplied to the WVDNR as part of the permit reporting process. *Myotis leibii* may not be banded. Bands are available from the WVDNR, and only *Myotis sodalis* and *Myotis lucifugus* may be banded with WVDNR bands.
8. Radio transmitters may be placed on bats. Transmitters may not be placed on pregnant or juvenile bats.
9. Mist-net poles shall be labeled with the company's or researcher's name.
10. Notify the U.S. Forest Service one week prior to surveys if mist-netting on their properties. A permit must be obtained from the U.S. Forest Service.
11. To minimize the disturbance to hibernating bats, bats will not be collected from hibernacula containing any endangered bat species or other hibernacula known to be important for any species of bat.

12. Follow the decontamination protocol for White-nose Syndrome as instructed in this document: https://www.whitenosesyndrome.org/sites/default/files/resource/national_wns_revise_final_6.25.12.pdf.
13. In addition to the standard permit reporting requirements, the permittee will routinely notify the WVDNR (Craig Stihler or Barbara Sargent, P.O. Box 67, Elkins, WV 26241, (304) 637-0245) **within 48 hours of capture** or handling any *Corynorhinus* spp., *Myotis sodalis*, *Myotis grisescens*, or *Myotis septentrionalis*. Photographs showing diagnostic characteristics shall be taken of *Myotis sodalis*, *Myotis grisescens*, *Myotis septentrionalis*, *Corynorhinus* spp. and *Nycticeius humeralis* and provided to the WVDNR. A reporting spreadsheet will be provided via email.
14. REPORTING REQUIREMENTS: Please provide copies of field sheets. In addition, report information electronically via the WVBatMistNet_Reporting spreadsheet which will be provided via email.
15. It is recommended that survey proposals be approved by the US Fish and Wildlife Service prior to conducting surveys to assure that surveying guidelines are met.

Requests for exemption from any of the above conditions will be reviewed on a case by case basis by the WVDNR. Salvage of dead specimens is permitted and is not covered by the above restrictions, but must be reported to the WVDNR. If dead federally listed species are collected they must be reported to the WVDNR within 48 hours (304/637-0245), and then turned over to the WVDNR.

If any work is planned to occur in a State Park or State Forest, a permit must be obtained from WVDNR – Parks and Recreation.

Please provide disposition of any voucher specimens, including the collection number if available.

The WVDNR requests a copy of any papers, reports or theses published as a result of this research.

APPLICATION FOR WEST VIRGINIA SCIENTIFIC COLLECTING PERMIT

Name: Neil Lafleur

Institution/Affiliation: AllStar Ecology, LLC

Street: 1582 Meadowdale Road

City: Fairmont State: WV Zip: 26554

Telephone: 413-214-2532 Email: neil@allstarecology.com

Profession: Wildlife Biologist Major professor: N/A

Specific manner of collection

Mist netting for the presence/absence of endangered bat species (specifically the Indiana bat). Bats will carefully be taken out the nets and data recorded. Individuals will then be released in a timely manner.

Purpose for which specimens are to be collected (attach abstract):

To determine the presence/absence of federally endangered bat species within a client's potential project area.

How will specimens be disposed?

Individuals caught will be released back into the study area within 15 minutes of capture.

Date on which collecting is to be: Unknown ^{June 1, 2016} End of 2016 ^{Oct 31, 2016}
(Commence) (Terminate)

Location(s) where collections are to be taken (be specific):

County(s) Doddridge, Ritchie, Tyler, Harrison, Upshur, Marion, Taylor, Lewis, Gilmer, Randolph, Pocahontas If aquatic, indicate:

Stream(s): N/A Location (distance to nearest town, miles from the mouth) N/A

Attach separate pages if additional space is required.
(Over)

Report that will result from studies and additional comments or information which may be pertinent to issuing this permit Potential Indiana bat or northern long-eared maternity colonies/roosting habitat could be revealed with the associated mist netting surveys. These areas could then be protected.

Have you received a WV permit in previous years? YES Most recent year 2015

SPECIES TO BE COLLECTED OR HANDLED

<u>GENUS</u>	<u>SCIENTIFIC NAME</u>	<u>SPECIES</u>	<u>NUMBER</u>
Myotis		sodalis	
Myotis		septentrionalis	
Myotis		leibii	
Myotis		grisescens	
Lasionycteris		noctivagans	
Perimyotis		subflavus	
Myotis		lucifugus	
Eptesicus		fuscus	
Lasiurus		borealis	
Lasiurus		cinereus	
Nycticeius		humeralis	

Corynorhinus townsendii virginianus



Signature

3/4/16

Date

Send application to:

Scientific Collecting Permit
Wildlife Resources
P.O. Box 67, Ward Road
Elkins, WV 26241

11/18/03



Malachia Evans

– *Wildlife Technician*



Malachia Evans is a Wildlife Technician at AllStar Ecology. Ms. Evans has worked in Maryland and West Virginia with a focus on environmental evaluations and natural resource science activities. She has participated in both avian and aquatic surveys and specializes in wildlife biology and natural resource related issues. She has been affiliated with private, non-profit, and state agencies participating in surveys for terrestrial, aquatic, and avian wildlife, along with conducting habitat assessments, habitat improvements, and stream and wetland delineations. Ms. Evans, under the instruction of AllStar Ecology’s lead wildlife biologist Jesse De La Cruz, has provided technical assistance for summer presence/absence

surveys, radio telemetry tracking, roost tree emergence surveys, and habitat assessments for rare, threatened, and endangered (RTE) bat species in West Virginia.

Education

B.S. (2016): Fisheries and Wildlife Resources, West Virginia University, Morgantown WV.

A.S. (2014): Natural Resources and Wildlife Technology, Garrett College, McHenry, MD.

Experience

Wildlife Technician - AllStar Ecology, LLC	2015 – present
Student Worker – West Virginia University	2015 – present
Volunteer Owl Bander – Project Owl, Garret College	2012 – 2014
Fisheries Technician – Trout Unlimited	2013
Seasonal Naturalist – Swallow Falls State Park, MD Park Service	2013
Survey Technician – American Woodcock Survey, Potomac-Garret State Forest	2013

Professional Development

Animal Handling: Reptile and amphibian handling/care (Herrington Manor State Park), horse wrangler (Rhodes Grove Camp), northern saw-whet owl handling (Project Owl-Net).

Bird surveys: point count surveys, mist-netting surveys, collection of health data.

GPS Device Experience: Experienced with Topcon GMS II and Trimble GPS devices.

Necropsy Experience: experience with black bear, white-tailed deer (CWD), and bobcat necropsies.

Scales & Tales basic training: Trained by Maryland Park Service (MPS) to work with birds of prey, reptiles, and amphibians housed in MPS Aviaries and Nature Centers.

Other: Basic experience in pit tagging, wetland delineation, stream sampling, macroinvertebrate sampling, habitat assessment.



Sean Kline

– *Wildlife Technician*



Sean Kline is a Wildlife Technician at AllStar Ecology. Mr. Kline has worked in Ohio, West Virginia and as far west as Idaho with a focus on environmental evaluations and natural resource science activities. He has participated in both terrestrial and aquatic surveys and specializes in wildlife biology and natural resource related issues. He has been affiliated with private and state agencies participating in surveys for terrestrial and aquatic wildlife, big game movements, habitat assessments, and habitat improvements, along with stream and wetland delineations. Mr. Kline, under the instruction of AllStar Ecology’s lead wildlife biologist Jesse De La Cruz, has provided technical assistance for summer presence/absence surveys, radio telemetry tracking, roost tree emergence surveys, and habitat assessments for rare, threatened, and endangered (RTE) bat species in West Virginia. Mr. Kline also helped to develop AllStar’s Bat Conservation International (BCI) certified rocket box

style bat house.

Education

B.S. (2016): Fisheries and Wildlife Resources, West Virginia University, Morgantown WV.

A.S. (2014): Wildlife Science, Hocking College, Nelsonville, OH.

Experience

Wildlife Technician - AllStar Ecology, LLC	2015 - present
Ohio Department of Natural Resources – Division of Wildlife, Deerfield, OH	2012 - 2013
Lockey-U-Outfitters, Whitebird, ID	2009 - 2010

Professional Development

- Presence/absence and emergence surveys for RTE in West Virginia
- Habitat assessments for RTE bat species in West Virginia
- Swamp School – stream and wetland delineation training
- Certified herbicide applicator
- Idaho big game guide licenses
- Electroshocking with ODNR
- Migratory bird banding
- Investigation of fish kills with ODNR and EPA
- Black bass and shad population surveys



ALLSTAR ECOLOGY

Natural Resource Specialists

BAT SERVICES



Habitat Assessments

AllStar's biologists can provide an onsite evaluation of your site to check for roosting, foraging, and general overall bat habitat. The assessment includes a summary of the cover types present and how they relate to bat use, a detailed count of potential roost trees, and an assessment of the surrounding areas with GIS data to assess how the project area compares to the surrounding landscape.

Conservation Plans

AllStar can prepare Conservation Plans to prevent adverse effects to bats and help our client get clearance from the US Fish and Wildlife Service to get their permits and build their projects. AllStar has used a variety of conservation measures in various combinations to get the required approvals.

Landscape Level Modeling

AllStar has developed the Myotline Suitable Habitat Assessment Model which takes into account various landscape level factors to determine the most suitable areas for bat roosting habitat. This tool aids in land planning by allowing industry to avoid areas of higher potential and identify the best areas to use for conservation.

Artificial Roosts

AllStar can provide artificial structures to replace lost aspects or create new roosting locations for bats. AllStar's main roost structure is the "rocker box" which simulates the multiple cavities of a hollow tree. AllStar's rocker box has gone through the peer review process from Bat Conservation International to guarantee that it uses the latest science and knowledge to best provide habitat and the greatest likelihood of bat usage. AllStar also has artificial bark options should they be desired.

Potential Roost Tree (PRT) Creation

AllStar has professionals to identify the trees most suitable for the creation of roost trees. AllStar's forestry experience has proven valuable for identifying trees, and developing plans for forest management for bats. AllStar can provide advice to guide PRTs, which will result in the death of a tree and as the bark loosens the tree will provide roosting space. AllStar has also developed a technique to mechanically induce removal so an entire tree (live or dead) can be modified to create cavities for bat use, especially by northern long-eared bats.

Aquatic Resource Creation

AllStar has wide open creative thinking and has experience creating small wetland. These wetlands are often added to the conservation area to provide additional feeding and drinking areas for bats. These created wetlands also serve as an excellent location for future monitoring at conservation sites.

Monitoring

AllStar provides monitoring for roosts, habitat, conservation activities and provides our next of kin, as well as, the ability to do compliance for various programs and provide regulatory approved documentation of the effectiveness of conservation measures.

Offsite Conservation Areas

With US Fish and Wildlife Service approval AllStar has created agreements for conservation easements at our client's discretion for use as offsite conservation areas for bats. AllStar has continued presence on other locations on numerous approved sites on all its sites that will be available for use. AllStar always works with industry to set up conservation areas as property the own, including habitat surveys, development plans, easement site matters, acquisition and/or enhancement, and land use stewardship.



ALLSTAR ECOLOGY

Natural Resource Specialists

BAT SERVICES



Innovative Bat Services and Solutions

AllStar Ecology, LLC has developed a bat program to fulfill the needs of various industries, land managers and the scientific community. Our team can perform scientific surveys for bat species and their habitats as well as construct habitat improvements such as artificial roosting structures and watering areas. AllStar also specializes in developing conservation areas for streamer bat habitat.

With dedicated bat biologists, AllStar has performed numerous surveys throughout West Virginia, Ohio, and Pennsylvania in various industries including oil and gas, mining, development and government lands. Surveys may range from a few acres to thousands of acres to meet the needs of our clients.

Our bat services include:

- Mist Netting
- Acoustic Surveys
- Portal Surveys
- Onsite Evaluations
- Conservation Plans
- Landscape Level Monitoring
- Artificial Roosts
- Potential Roost Tree (PRTT) Creation
- Monitoring
- Offsite Conservation Areas

Mist Netting

AllStar has extensive experience netting for bats and can complete your survey needs in a timely and professional manner. When coupled with radio telemetry, mist netting can be one of the best ways to demonstrate your avoidance of rare, threatened and endangered species.

Acoustic Surveys

AllStar maintains a large number of acoustic bat detectors and can deploy them into the field for quick surveys and for longer periods of monitoring. Acoustic monitoring can provide a much more economical option for surveys on large projects. AllStar has also had great success when coupling acoustic fieldwork with a lesser effort of mist netting and radio telemetry to locate roost trees.

Portal Surveys

AllStar has the equipment to monitor and perform surveys for caves, mine portals, and other potential bat hibernacula. These surveys help ensure you don't disturb swarming habitat or the hibernacula itself if you intend to close a portal.

Presence/Absence Surveys