
APPENDIX I-3
EDGEWOOD ENVIRONMENTAL CONSULTING,
LLC MIST NET AND ACOUSTIC BAT SURVEY

July 14, 2025



Mist Net and Acoustic Bat Survey

Bristol Suffolk Tech Site, Little East Neck Road,
Town of Babylon, Suffolk County, NY

Prepared for:

Bristol Suffolk, LLC

14 July 2025



| Document details | The details entered below are automatically shown on the cover and the main page footer. PLEASE NOTE: This table must NOT be removed from this document. |
|-------------------------|---|
| Document title | Mist Net and Acoustic Bat Survey |
| Document subtitle | Bristol Suffolk Tech Site, Little East Neck Road, Town of Babylon, Suffolk County, NY |
| Project No. | 2025-010 |
| Date | 14 July 2025 |
| Version | 1.0 |
| Author | MSF |
| Client Name | Bristol Suffolk, LLC |

Document history

| Version | Revision | Author | Reviewed by | Edgewood approval to issue | | Comments |
|---------|----------|--------|-------------|----------------------------|----------|---------------------------|
| | | | | Name | Date | |
| Draft | 0.0 | MSF | JSF | MSF | 07/14/25 | Internal draft for review |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |



Mist Net and Acoustic Bat Survey

Bristol Suffolk Tech Site, Little East Neck Road, Town of Babylon, Suffolk County, NY



Edgewood Environmental Consulting, LLC

Consulting · Research · Education

5 Edgewood Parkway

Fayetteville, NY 13066

(315) 456-8731

© Copyright 2025 by Edgewood Environmental Consulting, LLC.
All rights reserved. No part of this work may be reproduced or transmitted in any form,
or by any means, without the prior written permission of Edgewood Environmental Consulting, LLC.



CONTENTS

| | | |
|-----------|---|-----------|
| 1. | INTRODUCTION | 1 |
| 1.1 | Project Sponsor and Purpose of this Survey | 1 |
| 1.2 | Site Location, Description, and Surrounding Landscape | 1 |
| 1.3 | Northern Long-Eared Bat Habitat Requirements | 2 |
| 1.4 | Acoustic Identification of Bats | 2 |
| 2. | METHODS | 3 |
| 2.1 | Bat Surveyor Qualifications..... | 3 |
| 2.2 | Listed Bat Habitat Assessment | 4 |
| 2.3 | Mist Net Survey | 4 |
| 2.3.1 | Mist Net Deployment..... | 5 |
| 2.3.2 | Level of Effort..... | 5 |
| 2.4 | Acoustic Survey | 6 |
| 2.4.1 | Acoustic Bat Detector Deployment | 6 |
| 2.4.2 | Level of Effort..... | 8 |
| 2.4.3 | Acoustic Analysis | 8 |
| 3. | FINDINGS | 11 |
| 3.1 | Habitat Description and Suitability | 11 |
| 3.2 | Mist Net Survey | 12 |
| 3.2.1 | Weather | 12 |
| 3.2.2 | Bat Captures..... | 12 |
| 3.3 | Acoustic Survey | 13 |
| 3.3.1 | Equipment Function | 13 |
| 3.3.2 | Weather | 13 |
| 3.3.3 | Software-Based Bat Call Classification | 13 |
| 3.3.4 | Manual/Visual Vetting of Bat Calls | 14 |
| 4. | CONCLUSION..... | 14 |
| 4.1 | Effects Determination | 14 |
| 5. | REFERENCES CITED..... | 15 |

FIGURES

| | |
|-----------------|--|
| FIGURE 1 | SITE LOCATION MAP |
| FIGURE 2 | HABITAT COVER TYPE MAP |
| FIGURE 3 | POTENTIAL BAT HABITAT MAP |
| FIGURE 4 | MIST NET SET AND ACOUSTIC DETECTOR LOCATION MAP |

TABLES

| | |
|--|-----------|
| Table 1. Bat Mist Net Sets for the Bristol Suffolk Site Bat Survey..... | 6 |
| Table 2. Acoustic Bat Detector Deployment for Bristol Suffolk Site, Town of Babylon, NY..... | 7 |
| Table 3. Bat detector settings for the Bristol Suffolk Acoustic Bat Survey..... | 7 |
| Table 4. Signal parameter settings for Kaleidoscope Pro..... | 9 |
| Table 5. Standard 6-letter bat name abbreviations used by Kaleidoscope Pro..... | 9 |
| Table 6. Forested public lands near the Niagara Falls Storage Site Bat Survey Study Area..... | 11 |
| Table 7. Bats Species Captured at the Bristol Suffolk Site, Town of Babylon, NY..... | 12 |
| Table 8. Kaleidoscope Pro bat species classifications by sample site and night with MLE p-values..... | 13 |



APPENDICES

| | |
|-------------------|--|
| APPENDIX A | MIST NET AND ACOUSTIC SURVEY STUDY PLAN |
| APPENDIX B | BAT SURVEYOR QUALIFICATIONS |
| APPENDIX C | BAT HABITAT ASSESSMENT DATA SHEETS AND PHOTOS |
| APPENDIX D | MIST NET SURVEY DATA SHEETS AND PHOTOS |
| APPENDIX E | ACOUSTIC BAT SURVEY DATA SHEETS AND PHOTOS |
| APPENDIX F | WEATHER DATA |
| APPENDIX G | ACOUSTIC MANUAL VETTING RESULTS |



ACRONYMS AND ABBREVIATIONS

| Name | Description |
|--------|---|
| ac | Acre |
| AG | Aktiengesellschaft (German for “stock corporation”) |
| AMSL | Above mean sea level |
| °C | Degrees Celsius |
| CA | California |
| CWB | Certified Wildlife Biologist® |
| dB | Decibels |
| DBH | Diameter at Breast Height |
| E | East |
| EDT | Eastern Daylight Time |
| °F | Degrees Fahrenheit |
| Fc | Characteristic Frequency |
| FS | Full Spectrum |
| ft | Feet |
| gm | Gram |
| GPS | Global Positioning System |
| IBAT | Indiana Bat |
| kHz | Kilohertz |
| km | Kilometer |
| LLC | Limited Liability Corporation |
| m | Meter |
| MA | Massachusetts |
| mi | Mile(s) |
| MLE | Maximum Likelihood Estimator |
| mm | millimeter |
| mph | Miles per hour |
| ms | Milliseconds |
| m/s | Meters per second |
| N | North |
| NLEB | Northern Long-eared Bat |
| NW | Northwest |
| NWS | National Weather Service |
| NY | New York |
| NYSDEC | New York State Department of Environmental Conservation |
| S | South |
| Sc | Characteristic Slope |
| SPI | Swiss Precision Instruments |
| USFWS | United States Fish and Wildlife Service |
| UTC | Coordinated Universal Time |
| W | West |
| WAV | Waveform Audio File Format |
| WGS84 | World Geographic Survey Datum 1984 |
| WNS | White-nose Syndrome |
| WNW | West-northwest |
| ZC | Zero Crossing |



1. INTRODUCTION

1.1 Project Sponsor and Purpose of this Survey

Bristol Suffolk, LLC (Project Sponsor) is proposing to develop the Suffolk Technology Park Warehouse Development (Project) on a ±114-acre site located east of Little East Neck Road, and north of the Long Island Railroad and Long Island Avenue, in Wyandanch, Town of Babylon, New York (Project Site). According to the United States Fish and Wildlife Service (USFWS), the Project Site falls within the buffer zone of three known detections of the endangered northern long-eared bat (*Myotis septentrionalis*). The Project Site also falls within the known range of the proposed endangered tricolored bat (*Perimyotis subflavus*). The New York State Department of Environmental Conservation's (NYSDEC) Environmental Resource Map indicates only rare animals not listed by New York State on or near the Project Site, and that the site is in the vicinity of a 1980s record of Coastal Barrens Buckmoth (*Hemileuca maia maia*), listed as Special Concern. The NYSDEC's Environmental Assessment Form (EAF) Mapper indicates no known records of listed species on the Project Site. The NYSDEC's, *Northern Long-eared Bat Occurrences by Town* (2022) does not indicate any known occurrences of the species in the Town of Babylon.

Development of the Project Site will require clearing forested habitat, which may affect potential habitat for northern long-eared bats. Therefore, Edgewood Environmental Consulting, LLC (Edgewood) was retained by the Project Sponsor to assess the Project Site for potential bat habitat and to perform presence/probable absence surveys for northern long-eared bats and tricolored bats to determine whether either species was present on the site. This information was needed to determine whether the proposed tree clearing would adversely affect either of these vulnerable species, and whether any precautions would be necessary to avoid such adverse effects.

Edgewood assessed potential habitat for bats on 18 March 2025, and found that the Project site contained potential habitat for bats. Edgewood then conducted a combined mist-net and acoustic survey for bats following methods outlined in, *Range-Wide Indiana Bat and Northern Long-eared Bat Survey Guidelines* (USFWS, 2024, hereinafter, Federal Protocol) on the Project Site from 16-19 June 2025. This report summarizes the methods used for the surveys, and outlines the findings and conclusions of the surveys. It also documents survey conditions, indicating that the surveys were compliant with the Federal Protocol.

1.2 Site Location, Description, and Surrounding Landscape

The Project Site was a ±114-acre property located immediately east of Little East Neck Road, north of the Long Island Railroad, west of North 28th Street, and south of Circle Drive, in Wyandanch, Town of Babylon, Suffolk County, New York. The Project Site's centroid point coordinates were 40.753005°, 73.378152° (WGS84 datum, NY Plane Projection). The site lay at elevation ±80 feet above mean sea level (AMSL), and the surrounding topography was relatively flat. Reference is made to **Figure 1. Site Location Map**. The Project Site was mostly undeveloped, except for a small cemetery area in the southeast corner. Otherwise, it consisted largely of mid-aged to mature forest around its perimeter, with successional old fields and patches of trees in the core of the parcel. Habitat cover types on the site are illustrated in **Figure 2. Habitat Cover Type Map**.



The Project Site was surrounded by development, with dense residential development to the north, east, and south, and the Long Island National Cemetery to the west. There was a large expanse of forest about 300 feet north of the site in the Mid-Island Day Camp and The Adventure Park of Long Island properties. Several parks lay within 2 miles of the Project Site.

1.3 Northern Long-Eared Bat Habitat Requirements

In order to assess potential habitat for bats, it is necessary to understand how bats use their habitats. Potential bat habitats should provide a range of resources for bats at multiple spatial scales. These resources may include hibernacula (hibernation sites), roost structures, food and foraging space, water, and protective cover. They should also have habitat corridors to allow bats to disperse or travel across the landscape to migrate, find food, and move among multiple roosts. Northern long-eared bats are known to hibernate in winter months in caves or mines underground on the mainland, but on Long Island, they have been known to hibernate in building basements or crawl spaces.

Spring and summer roost structures for this species are typically trees, although they have been known to occasionally roost in man-made structures.

Northern long-eared bats forage for insects in flight, usually below the tree canopy in mature hardwood or mixed evergreen and hardwood forests with open understories. This species may capture their prey in flight, but northern long-eared bats are also known to glean their insect prey from surfaces of leaves, branches, and trunks of trees. Therefore, they require mature forest communities with open space beneath the tree canopy that allows them to acoustically detect prey and pursue prey in flight as well as from vegetation.

Bats drink water by flying low over open still or slow-flowing water bodies and dipping their tongues into the water to lap it up. They, therefore, require open water bodies with minimal clutter over which they can fly and drink. These bats may travel many miles in a night between roosting locations and foraging locations, and may travel tens to hundreds of miles to migrate to winter hibernation sites.

Thus, identification of potential habitat for northern long-eared bats includes: reviewing aerial photos to identify areas of public or private forest land and potential connective habitat corridors between the Project Site and those forested lands; review of aerial photos of the Project Site to identify forested cover types; onsite identification of trees that provide potential roost structure, as well as flyways for transit onsite; and potential water sources that could provide drinking water for bats.

1.4 Acoustic Identification of Bats

Although bats have eyes that function very well in lighted areas, they cannot see very well in the dark. Therefore, they use ultrasonic sound (high-frequency sound waves above the range of human hearing) to sense their way through their environment in the dark in a process called echolocation. They project high frequency sound pulses and listen for the echoes bouncing off objects in their immediate surroundings, to determine the distance of each object, whether it is still or moving, and if it is moving, how fast and in what direction. Echolocation is a surrogate for vision that allows bats to detect obstacles in their flightpaths and to identify, pursue, and capture potential prey, as well as to maneuver through the forest at night. The sounds that bats emit for echolocation vary depending on what they are doing. If they are navigating through the woods or searching for prey, they emit regularly spaced sound pulses about 1/10 second apart, called search-phase calls. Their calls change in both quality and quantity under different activities (e.g., pursuing prey, interacting with other bats) and circumstances (e.g., in highly cluttered



environments). Bats can be identified to species by their search phase calls using special computer programs designed to measure certain parameters of their echolocation calls. Only search phase calls can be identified to species, but the natural variability of bat calls and the impact of environmental factors on both calls and recording quality (e.g., wind, insect noise, distance of bat from the microphone, density of surrounding vegetation, temperature variations, etc.) can confound species identification. Further, some bat species have very similar search phase call characteristics to other species making it difficult, or sometimes impossible, to distinguish between the species. Acoustic identification of bats is a useful tool to detect bat species that is less costly than capture-based survey methods, but it is also less accurate than capture-based methods, and does not provide information on population density.

Computer programs designed to classify bat species from their echolocation calls can only measure certain parameters of each call, and may therefore be limited in their ability to identify bat species accurately. Therefore, when rare species are indicated by the computer programs, trained and experienced bat biologists are required to visually review each call sonogram (a visual representation of the sound plotted as sound frequency and intensity over time) to independently classify the call to species. This is done because the human eye and brain are able to observe combinations of parameters in the calls that cannot be consistently measured by the computer programs. Observed call parameters are assessed based on known ranges of each parameter for each species so that a scientifically repeatable, defensible process can be used to identify a call to species. Again, natural variability among bat call parameters may yield overlap between species so that some species identifications may be less certain or definitive than others. In many cases, calls cannot be identified to species at all because the call is either not a search phase call or the recording of the call is not of sufficient quality to observe the necessary classification parameters (*i.e.*, the bat was too far from the microphone and the call is too faint to exhibit the necessary parameters). Acoustic identification of bats is therefore not an exact science, but it is more often accurate than not. It is important to understand that although acoustic identification of bats is a valuable tool for determining potential presence of rare bat species, it has inherent limitations in its accuracy and must be practiced by experienced scientists.

2. METHODS

The methods used in this mist net and acoustic presence/probable absence survey were based on the methods outlined in Appendix B and C of the Federal Protocol. Site-specific methods were outlined in a study plan that was dated and submitted to the USFWS Long Island Field Office on 02 June 2025 (**Appendix A**) and was approved by USFWS on 05 June 2025. Methods used in this study are briefly summarized below, including any deviations from the methods proposed in the study plan.

2.1 Bat Surveyor Qualifications

The Federal Protocol states that mist net surveys should be conducted by, “a qualified biologist” that, “must (1) select/approve mist-net set-ups in areas that are most suitable for capturing IBAT [Indiana bat] and/or NLEB [northern long-eared bat], (2) be physically present at each mist-net site through the survey period, and (3) confirm all bat species identifications. This biologist may oversee other biological technicians and manage mist-net set-ups in close proximity to one another if the net-check timing (*i.e.*, every 10 minutes) can be maintained while walking between nets.” A qualified biologist is defined in the Federal Protocol as, “an individual who holds a USFWS Recovery Permit for IBAT and NLEB in the state/region in which they are surveying



and/or has been authorized by the appropriate state agency to net and handle IBAT and/or NLEB.” *Range Wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines* (USFWS, 2024, hereafter, Federal Protocol) states that acoustic surveys should be conducted by surveyors that, “have either completed one or more of the available bat acoustic courses/workshops (e.g., BCM [Bat Conservation and Management], ERM, Titley/AnaBat, Wildlife Acoustics, USFWS) or be able to show similar on-the-job or academic experience.”

These mist net and acoustic surveys were conducted by Michael S. Fishman, a Certified Wildlife Biologist® (CWB) and Qualified Indiana Bat Surveyor with 33 years of experience working with bats in New York State. Mr. Fishman held a Bachelor of Science degree in Natural Resources, Wildlife and Aquatic Sciences from Cornell University, and a Master of Science degree in Conservation Biology from the State University of New York College of Environmental Science and Forestry. His thesis study was on habitat selection by Indiana bats, and he has conducted and published additional original research on bats, has developed novel bat survey methods, and has conducted dozens of bat surveys throughout the eastern U.S., as well as in Canada, Mexico, Belize, and Suriname. Mr. Fishman developed two bat acoustic training courses, including one that was recognized by the USFWS in the Federal Protocol. He holds New York State Department of Environmental Conservation (NYSDEC) Collect and Possess (bats) License #1544, and Threatened and Endangered Species (IBAT and NLEB) License #234 (**Appendix B**). Mr. Fishman was assisted by technician Alexis A. LaFever, who graduated from State University of New York College of Environmental Science and Forestry in 2024 with a bachelor’s degree in Wildlife Science. Ms. LaFever has assisted with several acoustic and mist net bat surveys, including setting mist nets and deploying, retrieving, and downloading data from acoustic detectors.

2.2 Listed Bat Habitat Assessment

Edgewood assessed the Project Site for potential listed bat habitat on 18 and 19 March 2025. The habitat assessment was based on methods outlined in Appendix A of the Federal Protocol, and consisted of a desktop review of aerial photographs, topographic maps and map atlases to identify forested habitat on and near the Project Site, as well as forested corridors connecting the Project Site to forest patches offsite. The desktop data review was also used to identify public lands in the vicinity of the site (within 5 miles) that might provide forested habitat. This was followed by a site visit in which ecological communities were identified throughout the Project Site, and trees were sampled to determine species, size (diameter at breast height, or DBH), condition (live, dead, or live with dead branches), structural characteristics (smooth or exfoliating bark, crevices), and whether each was a potential roost tree, based on these characteristics. Data was recorded on standard data sheets that are included in **Appendix C**.

2.3 Mist Net Survey

Mist net surveys were conducted on the nights of 16 through 18 June 2025, per the 2024 Federal Protocol requirements, and in accordance with the USFWS-approved study plan (**Appendix A**) with minor modifications that did not alter the outcome of the survey. Minor in-field adjustments were made to proposed mist net locations due to unsuitability of some of the originally proposed sample sites. The Study Plan contained in **Appendix A** indicates the proposed mist net and acoustic detector locations.

The planar (non-linear) area proposed for this survey was a total of ±114 acres (0.46 square kilometers [km²]). Per the Federal Protocol, non-linear sites should be sampled for at least 10



net nights per 0.5 km² of suitable summer habitat. The proposed survey effort was for 10 net-nights in unique locations over three consecutive nights. The level of effort met the Federal Protocol requirement for northern long-eared bat.

2.3.1 Mist Net Deployment

Edgewood sampled bats on the Project Site at 10 net sets placed across likely bat travel corridors. Nets were set to fill available flyways preferably under closed canopy or between closely-spaced trees so that bats would be forced to fly into nets, rather than allowing them to fly around or over nets. Net sets consisted of 38 mm mesh nylon mist nets stretched between metal poles and stacked from 2 to 3 nets high. Nets were stacked to yield sets 7.8m high (triple high), and were either 4m, 6m, or 9m wide to fill the available space.

2.3.2 Level of Effort

The Federal Protocol required 10 net nights of sampling effort for a non-linear site of this size. Edgewood proposed 10 net nights of sampling effort in the study plan, however, NYSDEC also requested that acoustic sampling be done to better detect tricolored bats, which can be difficult to capture in mist nets. Therefore, Edgewood also deployed one acoustic bat detector, thereby exceeding the Federal Protocol requirements.

Weather conditions for each night of sampling were monitored in the field to ensure that acceptable weather conditions occurred throughout the sampling period. Acceptable weather conditions during the first 5 hours of sampling, per the Federal Protocol, must meet the following criteria:

- Air temperature of at least 10°C (50°F)
- No precipitation for longer than 30 minutes
- No intermittent precipitation
- No sustained wind greater than 4 m/s (9 mph, or ~7.5 knots) for 30 minutes or more

Weather conditions on all sampling nights were recorded in field notes, which are contained in Appendix D.

Mist nets were checked every 10 minutes from sunset to 5 hours after sunset on each sampling night. Captured bats were removed from mist nets by hand and were held in cotton holding bags for transport to a processing site away from the nets. At the processing site, each bat was identified to species, age class (adult or juvenile), sex, and reproductive status. Each bat was weighed to the nearest 0.5 gram (gm) with a 60-gm spring scale (Pesola Prezisionswaagen AG, Schindellegi, Switzerland), and had its right forearm measured to the nearest millimeter (mm) with a SPI model 31-415-3 metric caliper (SPI, Switzerland). Wings were inspected for scarring from White-nose Syndrome (WNS), and each bat was photographed to show its face and each transilluminated wing to document identification and WNS status. All captured bat data were recorded on standard data sheets, which are accompanied by a photolog of each captured bat in Appendix D.

Table 1, below, summarizes the net sets deployed to capture bats.



Table 1. Bat Mist Net Sets for the Bristol Suffolk Site Bat Survey

| Net Set | Net Width (m) | Net Height (m) | Latitude °N | Longitude °W | Placement/Cover Type |
|---------|---------------|----------------|-------------|--------------|--|
| 1 | 6 | 7.8 | 40.79393 | 73.38176 | Across cleared path through mature pitch pine-scrub oak barrens |
| 2 | 6 | 7.8 | 40.75356 | 73.38156 | Across cleared path through mature pitch pine-scrub oak barrens |
| 3 | 6 | 7.8 | 40.75293 | 73.38118 | Across cleared path through mature pitch pine-scrub oak barrens |
| 4 | 9 | 7.8 | 40.75251 | 73.38161 | Across small clearing in mature pitch pine-scrub oak barrens |
| 5 | 9 | 7.8 | 40.75448 | 73.37772 | Across dirt road at edge of mature pitch pine-scrub oak barrens and successional old field |
| 6 | 9 | 7.8 | 40.75460 | 73.37679 | Across dirt road at edge of mature pitch pine-scrub oak barrens and successional old field |
| 7 | 6 | 7.8 | 40.75454 | 73.37611 | Across dirt road at edge of mature pitch pine-scrub oak barrens and successional old field |
| 8 | 9 | 7.8 | 40.75437 | 73.37583 | Across dirt road at edge of mature pitch pine-scrub oak barrens and successional old field |
| 9 | 9 | 7.8 | 40.75109 | 73.37738 | Across dirt road entering mature pitch pine-scrub oak forest from successional old field |
| 10 | 4 | 7.8 | 40.75073 | 73.37719 | Across dirt road within closed-canopy pitch pine-scrub oak forest |

Each net set is illustrated in photos in **Appendix D. Mist Net Survey Data Sheets and Photographs**

2.4 Acoustic Survey

2.4.1 Acoustic Bat Detector Deployment

NYSDEC requested that we deploy at least one acoustic bat detector on the Project Site in order to detect tricolored bats, which are difficult to capture in mist nets. These surveys were conducted per methods outlined in Appendix C of the 2024 Federal Protocol, and the study plan that was submitted to and approved by the USFWS on 06 June 2025 (**Appendix A**). **Figure 4.**



Mist-Net Set and Acoustic Detector Location Map indicates the actual acoustic sampling site location used in this survey.

The bat detector was located near the southeast corner of the Project Site, beneath the canopy of mature oak trees at the edge of a mature successional hardwood forest, and an oak savannah. The bat detector location was plotted with a handheld 12-channel global positioning system (GPS) unit (Garmin eTrex 30, Garmin, Ltd., Olathe, KS, USA). **Table 2**, below, summarizes bat detector type and deployment logistics (locations, deployment orientation, and habitat type).

Table 2. Acoustic Bat Detector Deployment for Bristol Suffolk Site, Town of Babylon, NY

| # | Type | Latitude °N | Longitude °W | Height (m) | Angle °horiz. | Orientation °True | Habitat |
|---|---------------|----------------|-----------------|---------------|------------------|----------------------|---|
| 1 | SM MiniBAT | 40.75209° | 73.37408° | 3 | 0 | 38 | in open understory of pitch pine-scrub oak forest |

A Song Meter MiniBAT bat detectors was mounted on a 3 m tall electrical metallic tubing pole such that microphones were at the top and thus at least 3m above ground level. Internal omnidirectional microphones were oriented in the horizontal plane, at least 3 m from vegetation and other obstructions in all directions, with minimal vegetation/clutter within 10 m in any direction, and roughly parallel to adjacent forest edges (where applicable). No weatherproofing was added to the microphones, as Wildlife Acoustics' microphones are designed to be weather resistant. **Appendix E** contains Bat Acoustic Survey Data Sheets and photos of bat detector deployments, illustrating set up, reception cone in front of the microphone, and habitat setting. Bat detector settings for all detectors are summarized in Table 2.3-1-2.

Table 3. Bat detector settings for the Bristol Suffolk Acoustic Bat Survey

| <u>Ultrasonic Detector Feature</u> | <u>Setting</u> |
|------------------------------------|----------------|
| Recording Format | FS |
| Full Spectrum Sample Rate | 256 kHz |
| Minimum Trigger Frequency | 16 kHz |
| Maximum Recording Length | 15 sec |
| Trigger Window | 3 sec |
| Save noise files | no |
| Left channel gain | 12 dB |
| Time Zone | UTC – 04:00 |

Proper functioning of each Song Meter Mini bat detector was checked upon set up and take down by using a continuous 40 kHz tone generated by an Ultrasonic Calibrator (Wildlife Acoustics, LLC, Maynard, MA, USA), which provided a linked smartphone (iPhone 15 Pro, Apple, Inc., Cupertino, CA, USA) readout of microphone reception in decibels (dB). Readings



greater than -30 dB indicated a properly functioning microphone. Screenshots of each test were saved for documentation, and are included among the photographs in **Appendix E**.

Hourly weather conditions for each night of sampling were checked on the Weather Underground website, www.weatherunderground.com, to ensure that acceptable weather conditions occurred throughout the sampling period. Acceptable weather conditions during the first 5 hours of sampling, per the Federal Protocol, included the following:

- Air temperature of at least 10°C (50°F)
- No precipitation for longer than 30 minutes
- No intermittent precipitation
- No sustained wind greater than 4 m/s (9 mph, or ~7.5 knots) for 30 minutes or more

Historic weather readings from the nearest National Weather Service (NWS) weather station came from John F. Kennedy International Airport in Jamaica, Queens County, NY, about 36 km (22.5 mi) away. Whereas light drizzle, mist, and fog were all indicated at the nearest NWS weather station, weather at the Project Site remained compliant throughout the sampling period. **Appendix F** contains summary weather data for each sample night.

2.4.2 Level of Effort

The Project Site contained ± 0.39 km² (± 97 acres) of potential bat habitat (mature forest cover), and per the Federal Protocol, sites up to 0.5 km² required at least 14 detector nights to detect northern long-eared bats, if acoustic detection was used as the only detection method. However, since mist netting was the primary survey method used for this study, only one bat detector was deployed for three consecutive nights to complement the mist netting. A detector night was equal to 1 detector recording for at least a 5-hour period starting at sunset each night. Edgewood set 1 Song Meter Mini bat detector (Wildlife Acoustics, LLC, Maynard, MA, USA), running firmware version 4.7, and recording to 64 GB SanDisk SD memory cards (SanDisk, Malpitas, CA, USA), to record for 3 nights, from 16-19 June 2025, yielding three (3) detector nights of sampling effort.

2.4.3 Acoustic Analysis

All raw recording files were downloaded from the bat detector and saved as archival files, organized by sampling site. The original raw recordings were then copied to a working folder within each sampling site folder, and copied recordings were used for analysis. The copied sound files were first divided up by sampling night, which was defined as sunset to sunrise, or from the earliest evening recording to the latest morning recording on the following calendar date. This allowed analysis of the calls by night for each sample site.

2.4.3.1 Auto-Classification Software Analysis

Each night's calls for a sample site were then batch-processed through Kaleidoscope Pro v.5.7 (Wildlife Acoustics, LLC, Maynard, MA, USA) to auto-classify bat calls using the Bats of North America v. 5.7.0 classifiers, selected by region (New York), and -1 Balanced (More Sensitive). This filtered all auto-classifications to the 9 species of bats that are known to occur in New York. Signal parameter settings used for analyzing all calls are outlined in **Table 2.3.1.1-1**.



Table 4. Signal parameter settings for Kaleidoscope Pro

| Signal Parameter | Setting |
|---|---------|
| Frequency Range (min – max, kHz) | 8 - 120 |
| Length of detected pulses (min – max, ms) | 2 - 500 |
| Maximum inter-syllable gap (ms) | 500 |
| Minimum number of pulses for identification | 2 |
| Enhance with advanced signal processing when zero crossing for conversion or analysis | yes |
| Input files | WAV |
| Output files | WAV |
| Time Expansion Factor in Output Files | Auto |

Resulting files were saved as Waveform Audio File Format (WAV) files so they could be visually reviewed as both full spectrum (FS) and zero-crossing (ZC) files. Kaleidoscope Pro converted all FS recordings to ZC for its auto-classification analysis, but FS files provided more visual information about recorded sounds for manual visual analysis.

Output from Kaleidoscope Pro was a spreadsheet that provided an auto-classification of each call to species, along with a variety of measurements of call parameters. Bat classifications followed the standard 6-letter abbreviations for North American bat scientific names as summarized in Table 2.3.1.1-2, below.

Table 5. Standard 6-letter bat name abbreviations used by Kaleidoscope Pro

| 6-Letter Code | Scientific Name | Common Name |
|---------------|----------------------------------|--------------------------|
| EPTFUS | <i>Eptesicus fuscus</i> | big brown bat |
| LASBOR | <i>Lasiurus borealis</i> | eastern red bat |
| LASCIN | <i>Lasiurus cinereus</i> | hoary bat |
| LASNOC | <i>Lasionycteris noctivagans</i> | silver-haired bat |
| MYOLEI | <i>Myotis leibii</i> | eastern small-footed bat |
| MYOLUC | <i>Myotis lucifugus</i> | little brown bat |
| MYOSEP | <i>Myotis septentrionalis</i> | northern long-eared bat |
| MYOSOD | <i>Myotis sodalis</i> | Indiana bat |
| PERSUB | <i>Perimyotis subflavus</i> | tricolored bat |



Edgewood reviewed resulting bat classification ID summaries in Kaleidoscope Pro for species identified and for maximum likelihood estimator (MLE) p-values for each identified species, which provided an index of confidence in the auto-classifications. If listed bat species were identified by Kaleidoscope Pro with MLE p-values (probability value) of <0.05 , all of the high frequency (>35 kHz) calls for that site and night were visually vetted to confirm or refute the identifications. If listed species were identified at a sample site with MLE p-values >0.05 , calls were not manually reviewed. If any species identification adjustments were made, they were noted in the Manual ID column on the identification output spreadsheets in **Appendix G**.

2.4.3.2 Manual Review of Software Output

Visual vetting of bat calls was a qualitative visual reassessment of the FS and ZC sonograms plotted by Kaleidoscope Pro based on visual interpretation of the sonogram's qualitative properties by an experienced observer. As such, it can be considered a subjective and potentially biased process. However, certain standard criteria for visual species identification were used to improve its consistency and reliability to make the process defensible and repeatable. These criteria were based on call type (search phase), recording quality (at least 4 fully-formed call pulses), measured call parameters based on average characteristic frequencies and characteristic slopes of call pulses by species, and consideration of the influence that habitat conditions may have had on call parameters. In addition, qualitative individual species call characteristics were considered to more clearly define species level call sonograms.

Sonograms are visual representations of calls that are graphed as sound frequency in kilohertz (kHz) over time in milliseconds (ms). In this context, a bat call was a series of individual ultrasonic sound pulses that were emitted by a bat as part of its echolocation process. A call may be interpreted as a series of high frequency chirps, or clicks. A pulse, as used herein, was an individual ultrasonic chirp or click that was part of a call. Edgewood's visual vetting process was a visual assessment of both ZC and FS sonograms to determine whether bat calls satisfied the following criteria:

- The call had to be a search phase call to be identifiable to species. Search phase calls generally have pulses spaced about 100 ms ($1/10^{\text{th}}$ of a second) apart. Calls separated by less than 90 ms were not considered search phase calls.
- The quality of the recording, and therefore the clarity of the sonogram had to indicate fully formed call pulses of sufficient amplitude [loud enough] for the sonogram to accurately depict the sound produced by the bat. Sonograms of *Myotis* species bat calls, for example, should show a low-hanging terminal sweep, or "tail" at the lowest frequency part of each pulse. Visible harmonics of a pulse (similar structured sound pulses at octave intervals of the fundamental (original) pulse frequency, in the same time span) were also used as an indicator of a fully formed/depicted pulse.
- The characteristic frequency (F_c) and characteristic slope (S_c) of each call pulse had to fall within the known range of these parameters for the species. Ranges for these parameters were from Szewczak (2011).

Because visual vetting is a subjective method, Edgewood gathered multiple qualitative cues from each call sequence that was reviewed to support the species classification. The more qualitative cues that were observed, the higher was the confidence in the identification of the species. If most of or all the cues were observed, Edgewood noted that species presence was probable to indicate high confidence in the species identification. If only a few, but not all the species-indicating cues were observed, Edgewood noted that species presence was possible to indicate limited confidence in species identification. Manual species identification of bat calls



was indicated by the standard 6-letter abbreviations for bat species names from Table 2.3.1.1-2, with the addition of MYOSPP, indicating a call that exhibited a clear myotis tail in its sonogram, but could not be further identified to species, based on a lack of measurable metrics, and NOID, which indicated that the call could not be identified to species due a lack of sufficient indicative metrics.

3. FINDINGS

3.1 Habitat Description and Suitability

The Project Site contained potential bat habitat. Edgewood identified the following distinct ecological communities (per Edinger, *et al.*, 2014), confirmed by Edgewood on the Project Site:

- Pitch pine-scrub oak barrens
- Successional old field
- Unpaved road/path
- Mowed lawn with trees

The approximate locations and extent of these cover types are illustrated in **Figure 2. Habitat Cover Type Map**.

Aerial photographs of the Project Site and its surroundings indicated forested corridors extending to the north and southwest. Forested public lands connected by forested corridors to the Project Site are summarized in **Table 3.1-1**.

Table 6. Forested public lands near the Niagara Falls Storage Site Bat Survey Study Area

| Public Land Name | Direction | Distance (mi) |
|--------------------------------------|-----------|---------------|
| The Adventure Park at Long Island | N | <0.1 |
| Butterfly Park | NNE | 1.05 |
| Strathmore Park | NNE | 1.46 |
| Dr. Jeffrey Wenig Memorial Park | NNW | 1.62 |
| Belmont Lake State Park | SE | 1.62 |
| Edgewood Oak Brush Plains Preserve | WNW | 3.6 |
| Pine Ridge Conservation Area | NW | 2.89 |
| Bethpage State Park | W | 2.5 |
| Pinelawn Memorial Park and Arboretum | W | 0.95 |
| West Hills County Park | NNW | 3.45 |
| USDAN Summer Camp for the Arts | N | 0.91 |

Habitat on the site was mostly forested around the perimeter of the site, with patches of mature trees in a savannah-like setting in the core of the site. A few large patches of successional old field contained almost no trees and were not considered potential habitat for bats, as they



provided no forest canopy cover preferred by listed bat species for roosting, foraging, or traveling. Bat habitat and non-habitat on the Project Site are depicted in **Figure 3. Potential Bat Habitat Map**.

Thus, there was forested habitat on the Project Site to support bats, as well as forested connective corridors across the landscape that bats could use to reach and disperse to surrounding forested habitat on public lands. Therefore, the site and the region contained potential habitat to support bats on multiple landscape spatial scales.

3.2 Mist Net Survey

Some mist-net sets were placed at locations that differed from the proposed net locations in the Study Plan, due to habitats at proposed net locations being inappropriate. **Figure 4. Mist-Net Set and Acoustic Detector Location Map** indicates the actual mist-net set and acoustic detector site locations used in this survey.

3.2.1 Weather

Weather data measured at the sample sites indicated that weather conditions for all sampling nights during the survey period complied with the Federal Protocol. Temperatures throughout the study period remained above 50°F (10°C), winds remained below 9 mph, and precipitation did not exceed 30 minutes duration during the first five hours of each sampling night. Weather conditions are noted on the Data Sheets in **Appendix D**.

3.2.2 Bat Captures

A total of eleven (11) bats, representing two species (big brown bat and eastern red bat) were captured during this survey across all sampling locations. The number and distribution of captures by site and night is summarized in Table 3.2.2-1, below. Despite weather conditions being within acceptable ranges for the survey, and nets set along potential bat flight pathways, no bats were captured on night 3 of the survey (18 June 2025).

Table 7. Bats Species Captured at the Bristol Suffolk Site, Town of Babylon, NY

| Net Set | Night | EPTFUS | | LASBOR | |
|---------|-------|--------|--------|--------|--------|
| | | Male | Female | Male | Female |
| 1 | 1 | -- | -- | -- | -- |
| 2 | 1 | -- | 1 | -- | 1 |
| 3 | 1 | -- | -- | -- | -- |
| 4 | 1 | -- | -- | -- | -- |
| 5 | 2 | 1 | 4 | | |
| 6 | 2 | -- | -- | -- | -- |
| 7 | 2 | -- | -- | -- | -- |
| 8 | 2 | 1 | 2 | -- | 1 |



| | | | | | |
|--------------|---|----|----|----|----|
| 9 | 3 | -- | -- | -- | -- |
| 10 | 3 | -- | -- | -- | -- |
| Total | | 2 | 7 | -- | 2 |

3.3 Acoustic Survey

3.3.1 Equipment Function

All deployed bat detectors functioned correctly for the duration of the survey. This was supported by microphone calibration checks that were run at retrieval, and by the fact that the detectors recorded bat calls from shortly after sundown to shortly before sunrise on every night of the survey. A smartphone screen shot of the microphone calibration check is contained in **Appendix E**.

3.3.2 Weather

Weather data from the nearest NWS weather station at John F. Kennedy International Airport, Jamaica, Queens County, NY (**Appendix F**) indicated that weather conditions for 3 nights during the survey period included light drizzle, mist, and fog, but these conditions were not experienced at the Project Site, 22.5 miles from the weather station. Temperatures throughout the study period remained above 50°F, winds remained below 9 mph, and light drizzle fell for less than 30 minutes during the first five hours of night 1 (16 June).

3.3.3 Software-Based Bat Call Classification

Kaleidoscope Pro auto-classified bat calls from 8 bat species on the Project Site, but calls for only 5 species had MLE p-values <0.05. MLE p-values are an indication of the probability of a false positive detection (a Type 1 Error in statistics), and values <0.05 indicate a low probability of false detection, or that the result is likely to be reliable. However, bat acoustic classification software may not always be entirely reliable, so the Federal Protocol recommends manual review of threatened or endangered bat call recordings regardless of MLE p-value. Software-confirmed species included big brown bat (*Eptesicus fuscus*), eastern red bat (*Lasiurus borealis*), hoary bat (*Lasiurus cinereus*), silvery haired bat (*Lasionycteris noctivagans*), and little brown bat (*M. lucifugus*) with p-values <0.05, but all high-frequency calls (Fc>35kHz) for all nights were manually vetted.

Frequency distribution of bat call detections by site, night, and species are summarized in **Table 3.3.3-1** with MLE p-values. MLE p-values >0.05 indicate a likelihood of false positive classification, and a corresponding lower confidence in the classification.

Table 8. Kaleidoscope Pro bat species classifications by sample site and night with MLE p-values

| Site & Night | Bat Passes & MLE p-values | EPTFUS | LASBOR | LASCIN | LASNOC | MYOLUC | MYOSEP | MYOSOD | PERSUB |
|--------------|---------------------------|--------|---------|----------|--------|--------|--------|--------|--------|
| Site 1 | Bat Passes | 77 | 21 | 15 | 2 | 122 | 1 | 17 | 1 |
| Night 1 | MLE p-value | 0 | 7.38E-5 | 0.011262 | 1 | 0 | 1 | 1 | 1 |
| Site 1 | Bat Passes | 79 | 37 | 6 | 8 | 172 | 1 | 21 | 1 |
| Night 2 | MLE p-value | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 |



| | | | | | | | | | |
|---------|-------------|-----|----------|----------|----|----|---|----------|---|
| Site 1 | Bat Passes | 154 | 9 | 25 | 13 | 23 | 0 | 3 | 0 |
| Night 3 | MLE p-value | 0 | 0.000128 | 0.006521 | 1 | 0 | 1 | 1 | 1 |

MLE p-values of 0 indicate value much <0.05 and relatively high confidence in species classification;

MLE p-values >0.05 indicate probable Type I Error and high likelihood of false positive detection.

Highlighted/bold/italicized values indicate manually vetted calls of listed species that were reclassified to other species or NOID.

Numbers of bat calls indicated per species in Table 3.3.3-1 are an index of bat activity in an area, but not necessarily an index of bat abundance since one bat passing a bat detector many times may be recorded repeatedly. Therefore, higher numbers of calls are indicative of higher activity of a particular species, but not necessarily higher bat numbers or relative frequency of occurrence.

3.3.4 Manual/Visual Vetting of Bat Calls

Manual vetting of all high-frequency ($F_c > 35$ kHz) calls was conducted because the computer-based autoclassification program identified listed bat species, even though MLE p-values were all >0.05. All listed species autoclassifications were reclassified by manual vetting, most of them being eastern red bats (LASBOR), which have highly variable calls that may be mis-classified by software. Most autoclassifications of little brown bat (MYOLUC) were also manually reclassified as LASBOR, though some MYOLUC calls were confirmed. Manual vetting results are included in **Appendix G**.

4. CONCLUSION

This combined mist net and acoustic bat survey resulted in the capture of 11 bats, representing 2 common species: big brown bat and eastern red bat. The acoustic survey detected 5 bat species: big brown bat, eastern red bat, hoary bat (*Lasiurus cinereus*), silver-haired bat (*Lasionycteris noctivagans*), and little brown bat (*Myotis lucifugus*). Although acoustic auto-classification software also identified listed bat species, manual vetting of all high-frequency calls revealed that the listed species autoclassifications were in error, and that no listed bat species were recorded on the Project Site. Multiple method/multiple observer surveys are known to increase probability of species detection. Whereas it is not possible to conclusively prove absence of a species, non-detection of listed bat species in this two-method survey suggests that presence of listed bat species is unlikely.

4.1 Effects Determination

In making an effects determination for listed species for the proposed action of clearing trees and constructing a technology park, one must consider the likelihood and severity of potential impacts. Since no listed species were detected on the Project Site, and they are considered unlikely to occur on or near the Project Site, adverse effects to listed species are considered unlikely. Therefore, the effects determination for this action should be considered, *may affect; not likely to adversely affect* listed bat species. This effects determination should be communicated to USFWS, and should be expected to result in no further action being required to avoid adverse effects to listed bat species.



5. REFERENCES CITED

Edinger, G.J., 2014. Ecological communities of New York State, Second Edition. New York Natural Heritage Program, New York State Department of Environmental Conservation, Albany, NY. 173 pp.

NYSDEC. 2018. Northern long-eared bat occurrences by town. NYSDEC information sheet. New York State Department of Environmental Conservation, Albany, NY.

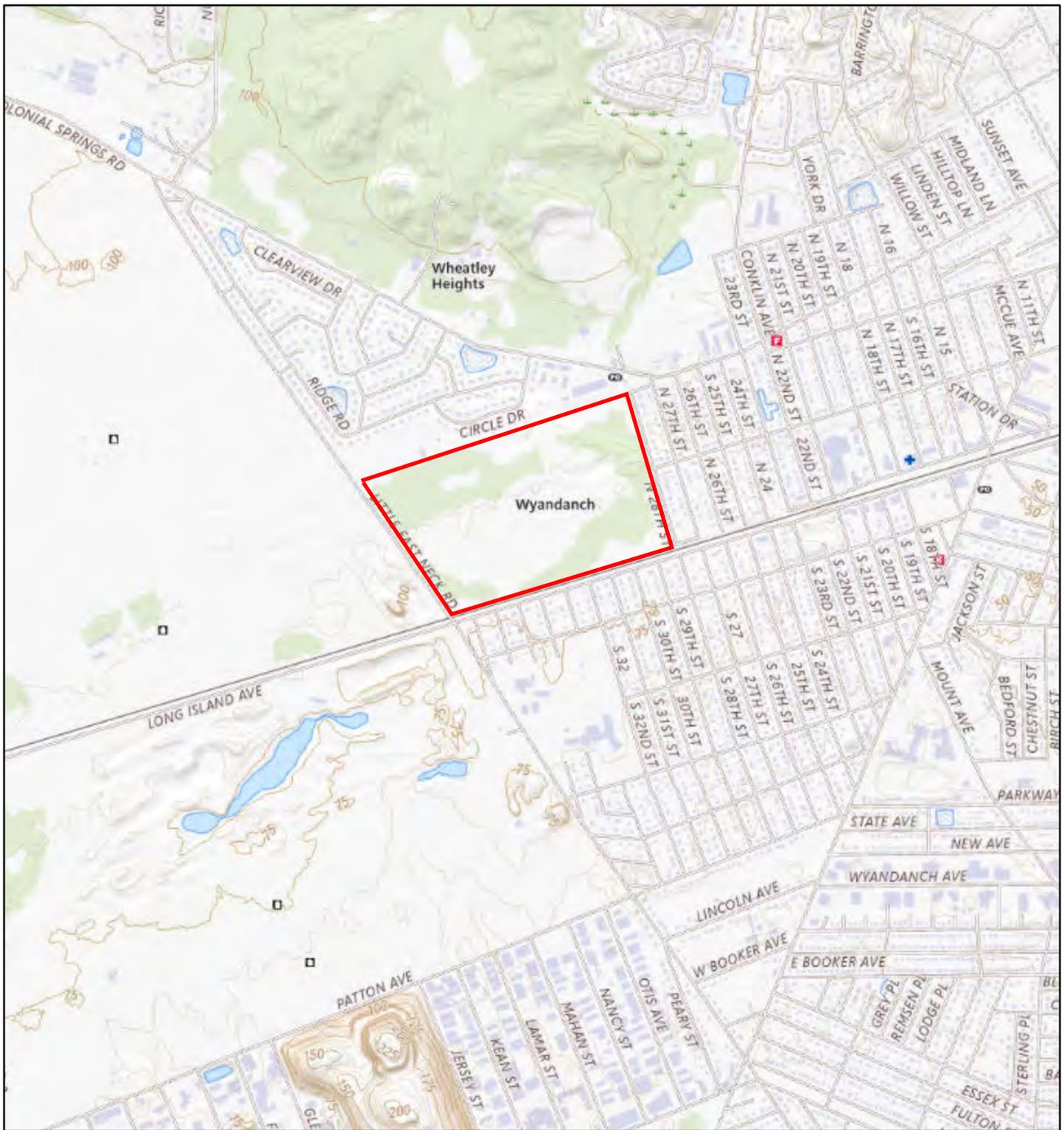
USFWS. 2024. Range-Wide Indiana Bat and Northern Long-eared Bat Survey Guidelines



FIGURES



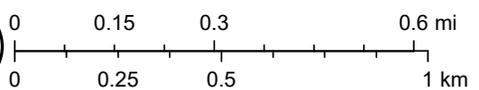
Figure 1. Site Location Map



Bristol Suffolk, LLC Bat Mist-Net and Acoustic Survey
Little East Neck Road, Wyandanch, Town of Babylon
Suffolk County, NY
40.753005°N, 73.378152°W, WGS84 datum



1:24,000



Legend:

 Bristol Suffolk Site Boundary



**Edgewood
Environmental
Consulting, LLC**

Figure 2. Ecological Communities Map

Bristol Suffolk Bat Surveys
Little East Neck Road, north of LIRR, Wyandanch, Town of Babylon
Suffolk County, New York

Legend

-  Bristol Suffolk Site
-  Mowed Lawn with Trees
-  Pitch Pine-Scrub Oak Barrens
-  Successional Old Field



Figure 3. Potential Listed Bat Habitat Map

Bristol Suffolk Bat Surveys
Little East Neck Road, north of LIRR, Wyandanch, Town of Babylon
Suffolk County, New York

Legend

-  Bristol Suffolk Site
-  Non-habitat
-  Potential Listed Bat Habitat

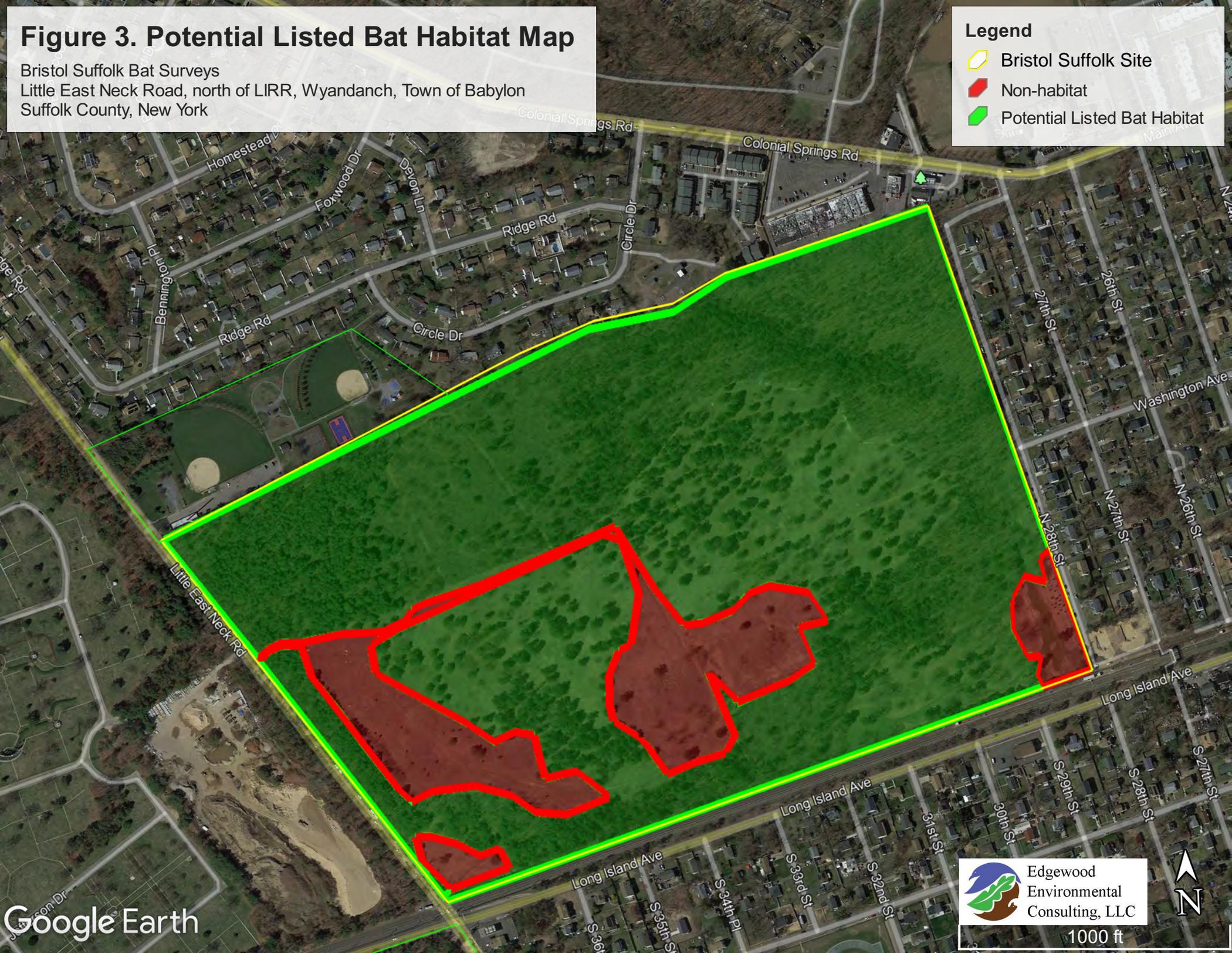
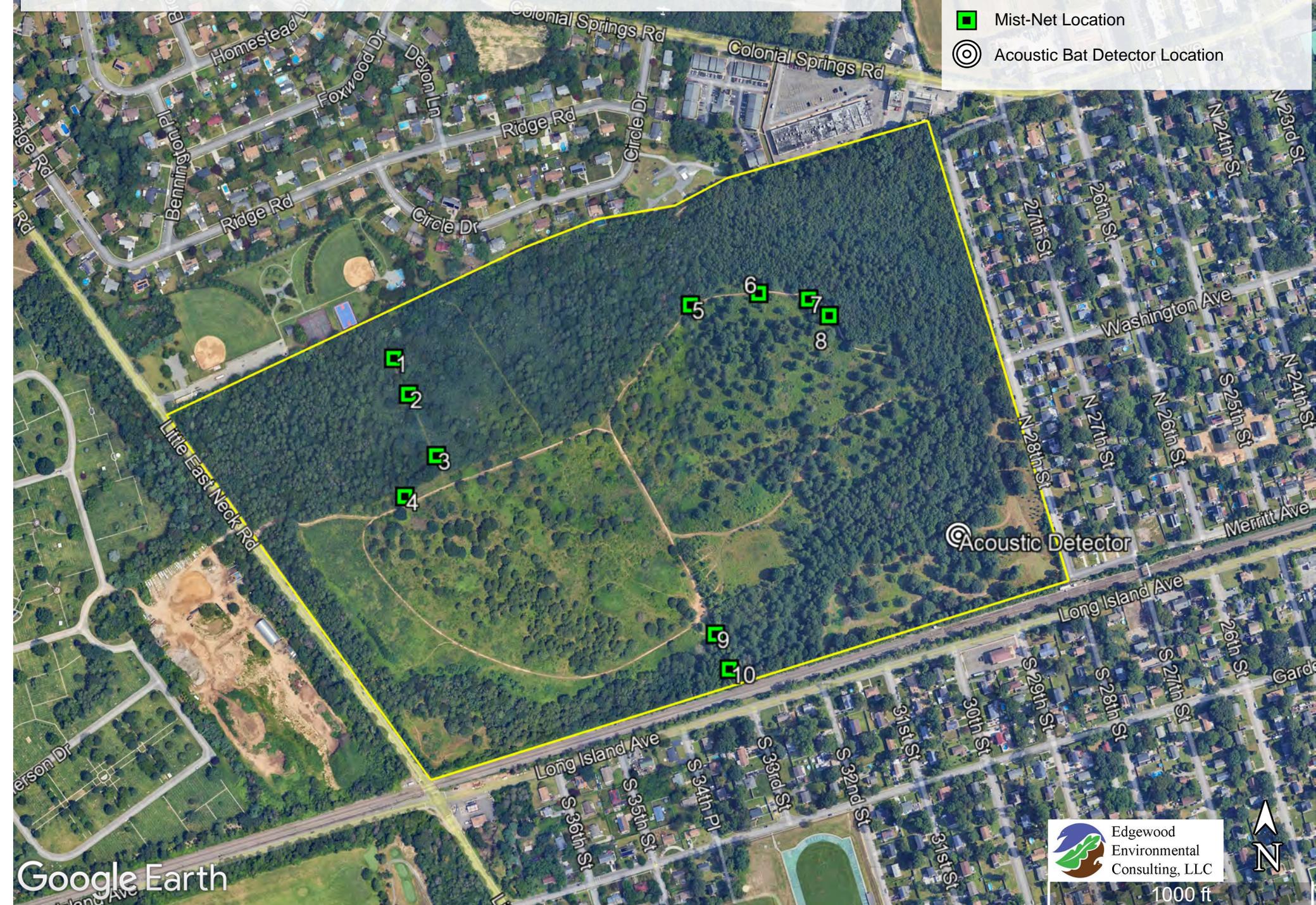


Figure 4. Mist-Net Set and Acoustic Detector Location Map

Bristol Suffolk Bat Survey, Little East Neck Road, Wyandanch, Town of Babylon, Suffolk County, NY

Legend

- Project Site Boundary
- Mist-Net Location
- Acoustic Bat Detector Location



APPENDIX A MIST NET AND ACOUSTIC SURVEY STUDY PLAN





Study Plan Form for Bat Surveys and Monitoring (v. 2.4)

PROJECT & SURVEY INFORMATION

Project Name: _____ Proposed Survey Start Date: _____

Project Proponent's Name (e.g., client/company/institution): _____

Project Location: State(s): _____ County(s): _____

Latitude: _____ Longitude: _____

REQUIRED: Attach shapefiles and/or Google Earth® KMZ files
(mapping must show project boundaries, impacted forest habitat (if known) and all proposed survey sites)
Files are attached: Yes [] No []
File link/URL (if applicable): _____

Project Summary. In the space provided below, please provide a description of the proposed action, including any activities that will permanently or temporarily alter the current environment and existing habitat features.

[Empty box for Project Summary]

CONTACT INFORMATION

Project Manager/Primary Point of Contact (POC): _____ Phone: _____

Field Survey Crew Leader (if different from POC): _____ Cell Phone: _____

Institution/Company Name: _____

Mailing Address: _____

POC Email Address: _____

USFWS Sec. 10(a)(1)(A) Permit No.(s) (if applicable): _____

State Permit No.(s) (if applicable): _____

Have project proponents been informed that abiding by protective time-of-year restrictions (where available) may be sufficient to avoid take of federally listed bats and (in some cases) may negate the need for a bat survey? Yes [] No []

Have project proponents been informed that the Service does not require presence/probable absence surveys for federally listed species and that presence can be assumed in a project area containing suitable habitat? Yes [] No []

Will this survey be conducted on private or public lands? (Check both if applicable): Private [] Public []

Has permission of all necessary landowners/managing agencies been obtained? Yes No

If no, explain: _____

Does this project have a federal nexus¹? Yes No Unsure

If yes, explain: _____

IPaC² Consultation Code (if applicable): _____

Purpose of Survey: Official P/A Survey Research Monitoring
Educational Outreach/Training Other: _____

Survey Target Species: Indiana bat (IBAT) Northern long-eared bat (NLEB)
Tricolored bat (TCB) Other: _____

Has a Phase-1 Habitat Assessment* of the project area been conducted? Yes No
If yes, how was the habitat assessment conducted? Field Desktop Combo
(*if available, attach a written report)

Is suitable habitat³ present (or assumed present) for all “target” species? Yes No

If no, explain: _____

Does this project fall within the outer-tier⁴ of any “target” species known home range? Yes No Unsure

If yes, which species: _____

Project Configuration

Is this project **linear** (>1 km in total length)? Yes No Combo Unsure

If yes, how many 1-km sections containing suitable IBAT/NLEB habitat will be impacted? _____

Is this project **non-linear**? Yes No Combo Unsure

If yes, how many acres of suitable IBAT/NLEB habitat is in the overall project area? _____

If yes, how many acres of suitable IBAT/NLEB habitat will be directly impacted/cleared? _____

PROPOSED METHODS & SURVEY LEVEL OF EFFORT

Identify which method (acoustics, mist-netting, combination) proposed to be used: _____

Has availability of high-quality sites for target species been assessed via ground-truthing to meet the required LOE?

Yes No (If No, justify method selection):

¹ A project or action that is authorized, funded, and/or permitted by a federal agency.

² <https://ipac.ecosphere.fws.gov/>

³ See Appendix A of the Bat Survey Guidelines regarding suitable habitat definitions.

⁴ See Appendix G of the Bat Survey Guidelines regarding what constitutes “out-tier” of a known range.

ACOUSTICS

Total number of detector sites proposed to be surveyed: _____ Number of detector nights/site: _____

Total number of detector nights for entire survey: _____

Total proposed number of calendar nights to complete the entire survey: _____

Detector(s) (Brand, Model): _____ Microphone(s): directional omnidirectional

Recording Format: Full Spectrum Zero-Crossing

FWS-Approved⁵ Acoustic Bat ID Software: **KaPro**: vers.____ Classifier, NA vers. ____ **BCID** vers.____
SonoBat: vers. _____ Classifier _____ Other: _____

Species to be included for automatic software ID classification analysis:

EPFU CORA COTO LABO LACI LANO LASE TABR MYCI MYEV MYGR MYLU
MYLE MYSE MYSO MYTH MYVO NYHU PESU Others: _____

Will qualitative analysis (i.e., manual vetting) be used? Yes No Unsure

Name(s) of qualified biologist(s) conducting qualitative/manual identifications (attach resume or link with qualifications):

MIST-NETTING

Total number of net sites to be surveyed: _____ Total number of net nights/site: _____

Total number of net nights for entire survey (No. of sites X No. of net nights/site): _____

Total proposed number of calendar nights to complete the entire survey: _____

- A) Maximum number of net set-ups that will be operated/checked (10-min interval) on a given calendar night at a given survey site: _____
- B) Minimum Number of personnel present to operate/check X (see A) net set-ups on a given site: _____
- C) Proposed Staffing Rate (A divided by B): _____

Staffing Rate

Number of Section 10-permitted biologists per net site (or state-permitted in USFWS R5): _____

Do you propose to band bats? Yes No

If yes, please answer the following:

What species will be banded? COTO MYGR MYLU MYSE MYSO PESU
Others: _____ All captured bats: _____

If banding *Myotis* sp. or PESU, specify band size: _____

Describe your proposed bands (color and letter-numbers) and banding scheme: _____

Will banding pliers be used? Yes No

Will any biological samples be collected from captured bats (e.g., guano, hair, swab, wing punch)? Yes No

If yes, explain: _____

Name of institution or facility to conduct DNA analysis: _____

⁵ <https://www.fws.gov/media/automated-acoustic-bat-id-software-programs>

RADIO-TRACKING

Will any bats be radio-tagged and tracked? Yes No

If yes, please answer following:

Which species will be radio-tagged? _____

Name of USFWS Section 10 permitted biologist(s) who will apply transmitter(s): _____

Make/model and approximate weight of transmitter(s) to be used: _____

Manufacturer date and estimated life-span of transmitters to be used: _____

Frequency range (MHz) of transmitters (e.g., 150.xxx or 172.xxx): _____

If radio-tracking multiple targeted bats/species, what criteria will be used in selecting which bats will be tracked?

Will all radio-tagged bats be tracked (min. of 4-hrs. search effort/day) to their diurnal roosts for the minimum recommended period of 7 days? Yes No

If no, explain: _____

Will night-time foraging data/telemetry be collected? Yes No

Glue used for attaching transmitters: Type: _____ Name: _____

Manufacturer: _____ Other: _____

EMERGENCY SURVEYS

After diurnal roost sites of radio-tagged bats are identified, will emergence surveys be conducted at each identified roost (assuming landowner permission is obtained)? Yes No

If yes, how many emergence surveys/roost? _____

Have you identified a small number (e.g., ≤10) of potentially suitable roost trees* that you propose to conduct emergence surveys for? Yes No

(*If yes, provide photographs of each tree documenting that all of the tree can be observed by the surveyor along with coordinates (lat/long and/or KML/shapefile) of all trees to be surveyed.)

POTENTIAL HIBERNACULA SURVEYS

Are you aware of any known hibernacula used by the target species within the project area itself or nearby?

Yes No Unknown

If yes or unknown, list sites or explain: _____

Has your desktop analysis identified any natural or man-made features that could be used as a hibernaculum by any of the target bat species? Yes No Unknown

If yes, underground features (e.g., caves, mines, tunnels, bunkers, cisterns) present: Yes No

If yes, above-ground features* (e.g., crawl spaces) present: Yes No

If unknown, explain: _____

Are you requesting approval of a field survey for potential hibernacula at this time? Yes* No

(*If yes, attach a separate narrative explaining how the project area(s) will be surveyed for potential hibernacula.)

Are you submitting the results of a Phase 1 Habitat Assessment of potentially suitable hibernacula identified from field surveys? Yes* No

(*If yes, provide a Phase 1 Habitat Assessment Data Sheet for each potential hibernaculum/portal(s)⁶ identified to be surveyed.)

⁶ If multiple cave entrances/portals, please list all locations.

BRIDGE & CULVERT ASSESSMENTS

Will any bridges or culverts be surveyed for bat presence? Yes No

If yes, please answer the following:

Structure type(s) (check all that apply): Bridge Culvert Other

If "other", explain: _____

Survey methodology for structure(s) (check all that apply):

Visual inspection Guano collection Emergence survey Acoustics*

Mist-net* Harp-trap* Other _____

(*Due to site-specific conditions of structures, coordination with the local USFWS Field Office and appropriate state agency(ies) is necessary before proceeding with these survey methodologies)

Will guano be collected and analyzed to confirm species ID? Yes No

If "yes", name of institution/entity performing analysis: _____

Acknowledgment that USFWS bats & transportation structures virtual training materials¹⁰ have been viewed: Yes

ADDITIONAL SURVEY INFORMATION

Will the proposed bat survey deviate from the current version of the USFWS Survey Guidelines?⁷ Yes No

If yes, provide justification for any departures or modifications to the guidelines (if applicable) below:

I hereby acknowledge that the information being provided to the Service is accurate and complete as of today's date.

Signature: _____

Date: _____

⁷ Proposed surveys deviating from the current Range-wide Bat Survey Guidelines will only be accepted with a thoroughly described justification; coordinate with your local USFWS Field Office (<https://www.fws.gov/our-facilities>) for acceptable modifications.

United States Department of the Interior
Fish and Wildlife Service



SITE-SPECIFIC AUTHORIZATION - BAT SURVEYS

Our Field Office has reviewed your study plan and found it to contain sufficient information for our approval. When signed, this statement serves as your site-specific authorization to conduct the proposed activities at the specified locations included in the attached Study Plan Form and supporting files and must be carried with your federal permit when conducting work for this project. All activities must be carried out with strict adherence to permit conditions and authorizations specified in your federal permit as well as your state permit(s) (if needed). The section 10(a)(1) (A) permit authorizing the activities (if applicable) must remain with the surveyor at all times. For proposed activities on private lands, this authorization is not valid without explicit private landowner permission.

In addition to the final survey report, please use the appropriate U.S. Fish and Wildlife Service (USFWS) bat survey data spreadsheet, available on the Range-wide Bat Survey Guidelines website⁸, for reporting live capture and acoustic survey results. To mitigate the risk of viral transmission between bats and humans (e.g., SARS-CoV-2), USFWS requests anyone directly handling or working in close proximity to bats follow current guidelines prepared by the CDC⁹ and IUCN Bat Specialist Group¹⁰ in addition to the following the standard WNS decontamination protocols¹¹.

If the work expands beyond the scope of your original study plan or if there are adverse effects to bats that were not anticipated, cease all survey and/or research activities, and contact this office prior to continuing. Additionally, if a federally listed bat is captured, this USFWS Field Office must be notified within 48 hours.

Field Office POC: _____
email: _____ phone: _____

Authorized as Proposed

Authorized with Conditions (see below)

Not Authorized. (see comments)

Signature: _____ Date: _____

⁸ <https://www.fws.gov/library/collections/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>

⁹ <https://www.cdc.gov/healthypets/covid-19/wildlife.html>

¹⁰ https://www.iucnbsg.org/uploads/6/5/0/9/6509077/amp_recommendations_for_researchers_final.pdf

¹¹ <https://whitenosesyndrome.org/mmedia-education/national-wns-decontamination-protocol-u-s>

Figure 2. Proposed Mist Net and Acoustic Detector Location Map

Bristol Suffolk Tech Site
E/o Little East Neck Road, N/o Long Island Avenue
Pinelawn, Town of Babylon, Suffolk County, NY
Centroid: 40.753008°N, 73.378296°W
(WGS84 datum, NY Plane Projection)

- ### Legend
- Project Site Boundary
 - Not Bat Habitat
 - Proposed Mist Net Location
 - Proposed Acoustic Detector



Edgewood
Environmental
Consulting, LLC

900 ft



APPENDIX B BAT SURVEYOR QUALIFICATIONS



Michael S. Fishman, CWB, FTWS

Certified Wildlife Biologist; Professional Wetland Scientist; Regulatory Specialist

Mr. Fishman has 37 years of professional experience in biodiversity and natural resources survey, threatened and endangered species surveys (all taxa, but especially bats and birds), terrestrial, and wetland ecology, environmental impact assessment, environmental permitting, and endangered species management and consultations. He has served as principal investigator on more than 200 biodiversity inventories, each including surveys for birds, mammals, reptiles, amphibians, insects, aquatic invertebrates, and vascular plants, involving a wide variety of observational, photographic, acoustic, and live capture survey techniques. Mr. Fishman has developed original survey protocols for some species. His field work has spanned 26 states in the U.S., as well as Canada, Mexico, Puerto Rico, Belize, and Suriname, and his study plan experience has included Dominican Republic and Panama.



His environmental impact assessment experience includes extensive experience with the preparation of environmental impact statements (EIS) and Environmental and Social Impact Assessments (ESIAs) under IFC Performance Standard 6 (Biodiversity). His permitting experience includes local, state, and federal wetlands and waters, endangered species, energy generation and transmission certification, for renewable energy (solar, wind, hydro, bio), oil & gas, mining, industrial/commercial development, municipal water, wastewater, and solid waste, and residential land use.

Experience: 38 years; 2 in academia, 4 in regulatory, 2 in non-profit, and 30 in consulting.

LinkedIn: <https://www.linkedin.com/in/michael-fishman-8055379/>

Email: mfishman@edgewoodenviro.com

Education

- Master of Science, Conservation Biology, State University of New York, College of Environmental Science and Forestry, USA, Thesis Topic: Indiana Bat (*Myotis sodalis*) Habitat Characterization in the Ontario Lake Plain of New York.
- Bachelor of Science, Natural Resources, Wildlife, and Aquatic Sciences, Cornell University, USA

Professional Affiliations & Registrations

- Certified Wildlife Biologist (CWB)
- Fellow, The Wildlife Society
- Professional Wetland Scientist (PWS)(exp)
- The Wildlife Society (Renewable Energy Working Group Member; Editorial Advisory Board of *The Wildlife Professional*; President, Northeast Section; President and Vice President, New York Chapter)
- Northeast Bat Working Group (Past Chair/President)
- North American Society for Bat Research – Secretary and Member, Board of Directors

Licenses & Permits

- New York Endangered/Threatened Species/Scientific
- New York Collect & Possess/Scientific
- Former federal licensee – Possess/Collect Endangered Bats
- Former federal licensee – Migratory Bird Treaty Act – Collect and Possess

Fields of Competence

- Flora and Fauna/Biodiversity Survey & Management – especially avian and bat species, includes all taxa
- Threatened and Endangered Species Survey
- IFC Performance Standard 6 Biodiversity Survey
- Endangered Species Act Formal Consultation
- Wetland Delineation (Freshwater and Tidal)
- Environmental Due Diligence
- Environmental Impact Assessment/EIS Preparation
- State Environmental Quality Review (SEQR)
- Wetland Regulatory Permitting
- Endangered Species and Wetland Mitigation Planning
- NY State Public Service Law Article VII and Article 10 Review/Certification
- Municipal planning; Landscape/Habitat Management
- Wildlife management planning

Languages

- English, native speaker; some Spanish

Key Industry Sectors

- Renewable Energy (Solar, Wind, Hydro, Biofuel)
- Oil & Gas Midstream
- Mining
- Golf Course
- Residential, Commercial, Industrial, and Mixed-Use Development
- Municipal Water, Wastewater, and Solid Waste

Honors & Awards

- Organization for Bat Conservation Award, 2011
- 40 Under 40 Award, 2009

Bat Acoustic Training

Bat Conservation & Management's Bat Acoustic Training Course, 2011

Developed and Taught ERM's Bat Acoustic Training Course, Amherst, MA (2015); Knoxville, TN (2017); Syracuse, NY (2019). Course recognized by USFWS as qualification for acoustic training.

Wildlife Acoustics, LLC's Bat Acoustic Training Course – Kaleidoscope Pro and SM MiniBAT Bat Detector, 2019

Vesper Bat Detection Services Bat Acoustic Training Course – Eastern Bats, 2020

Developed and taught Edgewood's bat acoustics training course and delivered to consulting client in 2024.

Recent Bat Projects

Niagara Falls Storage Site Bat Survey, Lewiston, NY, 2024.

Conducted joint mist-net and acoustic bat surveys to determine presence/probable absence of endangered and proposed endangered bat species for proposed clearing for hazardous waste remediation project.

Confidential Project, New York, 2024.

Conducted mist net and acoustic surveys for a proposed large-scale industrial development (1,200 acres).

Confidential Project, New York, 2024.

Monitored acoustic detectors during geotechnical testing at a proposed large-scale manufacturing development site to determine if listed bat species were present on site, and to redirect clearing and drilling activities away from listed bat detections.

Breuer House Bat Habitat Assessment and Emergence Survey, Fayetteville, NY, 2024.

Assessed potential bat habitat on a proposed single family home construction site, and performed emergence surveys for 6 trees to be cleared during bat maternity season.

TTM Technologies, Bat Habitat Assessment and Emergence Surveys, DeWitt, NY, 2024.

Assessed potential bat habitat on a proposed microchip manufacturing facility site, and performed emergence surveys for 8 trees to be cleared during bat maternity season.

Selkirk Blade Manufacturing Facility Project – Bat Habitat Assessment and Mist Net Survey, New York, 2023-4.

Conducted listed bat habitat assessments and combination mist net and acoustic surveys for a proposed offshore wind turbine blade manufacturing facility along the Hudson River.

Champlain-Hudson Power Express Project – Bat habitat and acoustic surveys, New York, 2023.

Conducted listed bat habitat assessments along a powerline right-of-way to enable tree clearing within the maternity season; developed bespoke protocol for surveys that was accepted by USFWS and NYSDEC.

Sojourner Truth State Park Bat Survey, Town of Kingston, Ulster County, NY, 2023

Conducted acoustic and harp trap capture surveys to determine bat use of historic structures in preparation for building renovation/conservation.

Bat Use of Burned Lands Mist Net Survey, Brookhaven National Laboratory, Town of Brookhaven, Suffolk County, NY, 2022.

Conducted mist net survey for bats to determine bat species distribution in sample sites with various controlled burn and wildfire histories.

Bat Mist Net Survey, Mt. Defiance Powerline Access Road Project, Essex County, NY, 2022.

Conducted a federal protocol Phase 2 mist net survey for Indiana bats for a proposed access road project for an existing electrical transmission line.

Bat Biodiversity Mist Net Survey, Greentree Foundation, Manhasset, Nassau County, NY, 2022. Conducted a mist net survey to determine the species distribution of bats on a ±450-acre private preserve.

Bat Acoustic Survey, Confidential Campsite Development Project, Town of Saugerties, Ulster County, NY, 2022

Completed a Phase 1 Habitat Assessment and Phase 2 Acoustic Survey for listed bat species for proposed development of a ±77-acre forested site.

Bat Acoustic Survey, Confidential Client; Mt. Ivy Project, Rockland County, NY, 2022

Completed a Phase 1 Habitat Assessment and Phase 2 acoustic survey for listed bat species on a former golf course site proposed for a multi-use development.

Remington Mills Bat Emergence Survey for limited tree clearing, Town of Watertown, Jefferson County, NY, 2022.

Conducted potential roost tree bat emergence surveys at one location to facilitate tree clearing for access to demolish ruins of an old mill along the Black River.

Number Three Wind, Bat Emergence Survey for limited tree clearing, Town of Lowville, Lewis County, NY, 2021, 2022

Conducted potential roost tree bat emergence surveys at multiple locations for limited tree clearing activities during the seasonal restriction on tree clearing. No bats were detected emerging from selected trees, so clearing was able to proceed without risk of take, and under state and federal agency approval.

Confidential Solar Power Development Bat Acoustic Survey, Town of Cortlandt, Westchester County, NY, 2021

Conducted a Phase 2, Step 5/6/7 Acoustic Survey for Indiana and northern long-eared bats on a ±43-acre property proposed for a solar power facility.

Brookhaven National Laboratory Bat Mist Net Surveys, Upton, Town of Brookhaven, Suffolk County, NY, 2021

Conducted mist net surveys to determine potential continued presence of northern long-eared bats, which we detected in previous surveys in 2012, 2014, and 2015.

Confidential Mixed Use Development Project Bat Acoustic Survey, Dutchess County, NY, 2021

Conducted a Phase 2, Step 5/6/7 Acoustic Survey for Indiana and northern long-eared bats on a 3,000-acre property proposed for a mixed-use development. This was a follow-up survey to a mist-net survey I conducted in 2005 for the same client.

Invenergy Number Three Wind Project Bat Potential Roost Tree Survey, Lowville, Lewis County, NY, 2021

Conducted winter survey for potential bat roost trees to enable seasonally restricted clearing of bat roost trees during the winter.

Verizon Cellular Tower Bat Habitat and Impact Assessment, Wappingers Falls, Dutchess County, NY, 2020

Assessed proposed site of a new cellular phone tower for threatened and endangered bat habitat. Determined that although the site was mature forest, no suitable potential roost trees would be cut. USFWS concurred with our findings thereby clearing the project to proceed.

The Wetland Trust Overlook Property, Bat Acoustic Survey, LaGrange, Dutchess County, NY, 2020

Conducted federal protocol acoustic surveys for Indiana and northern long-eared bats on conservation lands to explore feasibility of establishing a bat habitat mitigation bank.

Endangered Bat Habitat Assessment and Tree Management Plan, Trammell Crow – Amazon Warehouse Facility, Liverpool, NY, 2019-20

Conducted Indiana bat habitat assessment and documented management recommendations, and completed seasonal tree clearing compliance inspections for a proposed 4 million square foot warehouse facility on an existing golf course.

Bird and Bat Impact Assessment, Delphos International – Wind Farm Siruai, Kenya, 2019-20

Assisted with design and oversight of baseline field studies for bird and bat biodiversity in compliance with IFC Performance Standard 6 Guidelines for Wind Development; next phase is to assess potential impacts to birds and bats, including 2 critically endangered species of vulture. Draft bird and bat

section of the Environmental and Social Impact Assessment.

Avian and Bat Field Study Protocol for Proposed Wind Energy Project (Confidential), Dominican Republic, 2019.

Drafted IFC PS6-compliant avian and bat study protocol for proposed second phase of a wind energy development project in Dominican Republic.

Biodiversity Due Diligence Review for Proposed Mine Reactivation, Nucor Steel – Project 200, Clifton, NY, 2019

Led natural resources inventory baseline studies, for feasibility study for re-opening an iron mine in the Adirondack Park Preserve. Included identifying baseline environmental resources and required permitting. Next phase will include designing and overseeing field studies for baseline data, coordinating environmental impact assessment, impact avoidance/minimization design guidance, assessing impacts to wetlands, wildlife, and habitats, and preparing environmental permit applications.

Endangered Bat Surveys, Waymart II Wind Farm, NextEra Energy, Northeastern Pennsylvania, USA, 2018

Oversaw and conducted endangered bat presence/absence surveys for a proposed wind energy facility of 20+ turbines.

Endangered Species and Wetland Impact Assessment and Permitting for Multiuse Development, BRH Land – LaGrange Town Center Development, Poughkeepsie, NY, USA 2010-21

Completed federal and state wetland permitting and endangered species permitting/formal consultation for Indiana bat and Blanding's turtle on a proposed multi-use commercial/residential development.

Included developing mitigation and management plans for Indiana bat and Blanding's turtles.

Avian and Bat Impact Assessment, Medline Distribution Center EIS, Goshen, NY, USA 2018-20

Completed the wetlands and flora and fauna sections of a DEIS for a proposed 1.3 million square foot medical equipment distribution facility. Issues addressed included avoidance and mitigation of potential impacts to grassland birds, including several state-listed species, and endangered bats.

Biodiversity Due Diligence, Impact Assessment and Permitting for Solar PV Arrays, Duke Energy Renewables, Multiple sites, NY, USA, 2018-20

Conducted environmental due diligence, local permitting, and helped to coordinated NYSERDA bid for 3 ca. 20-MW solar farms in central and western NY.

Biodiversity Due Diligence, Impact Assessment and Permitting for Solar PV Arrays, Cypress Creek Renewables, LLC, 8 sites in New York, USA; 2016 - 2020

Conducted environmental due diligence (Phase 1 ESA, wetlands, T&E species, cultural resources), environmental impact assessment under SEQRA, and prepared local, state, and federal permitting applications for 8 local community generated solar power facilities. Included wetland mitigation planning, watercourse crossings, and conservation plans for bog turtle, Blanding's turtle, and Indiana bat.

Bat and Arboreal Mammal Survey and ESIA, IAMGOLD Saramacca Concession, Brokopondo and Sipilawini Districts, Suriname; 2017 - 2018

Conducted field capture, acoustic, and camera surveys for bats and arboreal mammals to establish baseline data for terrestrial wildlife, and prepared wildlife impacts section of an environmental and social impact assessment (ESIA) for a proposed

gold mine expansion in remote Suriname tropical forest.

Bat Hibernaculum Survey, Chevron – Kitimat LNG Site, Kitimat BC, Canada, 2017

Conducted visual and acoustic survey for bats roosting in abandoned pulp and paper mill slated for demolition for a proposed LNG plant.

Endangered Bat Surveys, Atlantic Coast Pipeline, West Virginia, Virginia, and North Carolina, USA, 2015 - 2018

Led a team of bat biologists to develop and conduct survey protocols for 4 listed bat species and potential roost trees and hibernacula along a proposed ±660 mile gas pipeline project that crossed 4 states. Negotiated conservation measures with state and federal agencies, and led team to conduct construction monitoring for compliance with conservation measures.

Endangered Bat Surveys, Virginia Department of Transportation (VDOT), 9 sites throughout Virginia, USA, 2015

Coordinated acoustic bat surveys on 9 proposed bridge replacement sites in various locations around Virginia and provided final report and conservation recommendations.

Endangered Bat Survey, DeWitt Community Library, DeWitt, New York, USA, 2016.

Conducted acoustic bat survey on greenfield site proposed for construction of a new community library. Included preparing study plan approved by USFWS, deploying acoustic detectors, identifying bat calls, and preparing final report.

Threatened Bat Habitat Assessment, Amazon Distribution Facility, Fall River, Massachusetts, USA, 2016

Assessed site proposed for Amazon distribution facility for potential Northern Long-eared Bat (*Myotis*

septentrionalis) habitat. Obtained concurrence from USFWS that site was not suitable habitat, which allowed the development to proceed.

Endangered Bat Surveys, Algonquin Incremental Market Pipeline Project, Various locations in NY, CT, RI, and MA, USA, 2014

Coordinated large-scale acoustic bat survey for proposed gas pipeline expansion project across New England region. Developed study plan approved by USFWS, coordinated field crews and conducted surveys, prepared final report and coordinated with state and federal wildlife agencies for approvals.

Long Island Century Bat Survey, Long Island, New York, USA, 2012-2013

Obtained grant from the National Parks Foundation to conduct the largest bat survey on Long Island in more than 100 years. Survey included 4 U.S. National Park properties, Brookhaven National Laboratory, and Wertheim National Wildlife Refuge, and was performed in cooperation with the NYSDEC, USFWS, USNPS, Brookhaven National Laboratory, and numerous private volunteers.

Endangered Indiana Bat Survey Ultra Resources Marshlands Gas Play, Tioga and Potter Counties, Pennsylvania, USA, 2010

Served as principal investigator for mist net surveys of more than 200 sites in north-central Pennsylvania for a proposed gas play expansion. Recruited surveyors, coordinated staff, collated data, and produced report.

Biodiversity Inventory, Environmental Impact Statement, and Wetland and Endangered Species Permitting, Hudson River Valley Resort Development, Rosendale, New York, USA, 2006-2012

Conducted 4-year natural resource inventory and completed wetlands and wildlife sections of a DEIS and FEIS for a 900-acre proposed resort

development. Developed original protocols for vernal pool ecosystem services assessment and threatened Northern Cricket Frog (*Acris crepitans*) surveys that were approved by state wildlife agency, and developed conservation plan for the 2nd largest Indiana bat (*Myotis sodalis*) hibernaculum in the Northeast U.S.

Endangered Bat Survey, West Point Military Reservation, Town of Highland, New York, USA, 2008

Principal investigator for the survey of the 50,000+ acre U.S. Military Academy and Reservation, including mist net and acoustic surveys, preparation of reports, and follow-up guidance to Natural Resources Department personnel on bat management.

Bat-Related Publications

- Fishman, M.S. In Prep. Bats of New York. Commissioned book.
- Fishman, M.S. and R. Allen. In Prep. Filling the gap in the range map of *Micronycteris schmidtorum*; a capture in Suriname.
- Fishman, M.S. 2024. Seeing the forest through the trees: Improving Bat Habitat Assessments in New York. Invited presentation to the New York State Wetlands Forum, Saratoga Springs, April 2024.
- Fishman, M.S. 2017. Indiana Bat Selection of Day Roosts in the Ontario Lake Plain of New York. Master's Degree Thesis, State University of New York College of Environmental Science and Forestry, New York, USA.
- Fishman, M.S. 2016. Indiana Bat Selection of Day Roosts in the Ontario Lake Plain of New York. Chapter 11 *in* Sociality in Bats, Jorge Ortega (ed.). Springer.
- Fishman, M.S. 2005. Saving your project from the endangered species list. *New York State Real Property Law Journal*, 33(3), Summer, 2005.
- Fishman, M.S. 1995. A selective cut above. *Wildlife in the News* 7(1).
- Fishman, M.S. 1994. A rose by any other name. *Wildlife in the News* 6(4).
- Fishman, M.S. 1994. Wastelands to wetlands. *Wildlife in the News* 6(3).
- Fishman, M.S. and M.S. Scheibel. 1990. Osprey productivity on Long Island 1978-1987: a decade of stabilization. *Kingbird* 40(1).

Bat-Related Professional Presentations

- Delivered 3-day bat acoustic training course to private client, Minneapolis, MN, May 2024.
- Preliminary acoustic bat survey of the boreal peatlands of central Ontario. Poster presentation with James Rettie (coauthor) at the 49th Annual North American Symposium on Bat Research, Kalamazoo, MI. October 2019.
- Resilience of Northern Long-eared Bats in Coastal Plains. Invited presentation at the White Nose Syndrome Symposium, Rosendale, NY. April 2017.
- The Long Island Century Bat Survey. Invited presentation at Westfield State University, Westfield, MA. February 2017
- Final Threatened Listing and §4(d) Rule for Northern Long-eared Bats. Invited presentation at the Southern Gas Association's 2016 Annual Meeting, Savannah, GA, February 2016.
- Bats at the Beach: Northern Long-eared Bats Are Alive and Well in Northeastern Coastal Communities. Presentation at the 45th Annual American Symposium on Bat Research, Monterey, CA, October, 2015.
- "The Northern Long-eared Bat Threatened Species Listing and Interim 4(d) Rule: How Do They Affect Right-of-Way Work?", invited presentation at the 11th Annual Environmental Concerns in Right-of-Way Management Symposium, Halifax, NS, September 2015.
- "Remnant Populations of Northern Long-Eared Bat in Northeastern Coastal Communities". Presentation at the Northeast Natural History Conference, Springfield, MA, April 2015.

- “Bats of Long Island and the Long Island Century Bat Survey”, Invited presentation to the Seatuck Environmental Association’s annual Bats and Brews Conference, October, 2015.
- “Remnant Populations of Northern Long-Eared Bat in Northeastern Coastal Communities”. Cooperative presentation with the USFWS, NYSDEC, and BiodiversityWorks at the Northeast Bat Working Group Meeting, Portland, ME, January, 2015.
- “Reviewing for Endangered Species”, invited presentation for the Lorman Seminar, *Wetland Regulation*, scheduled for December 4, 2014, Albany, NY.
- “Male and Female Indiana bats Select Different Roost Trees in the Ontario Lake Plain of Central New York”, poster accepted for presentation at the North American Symposium on Bat Research, Albany, NY, October 2014.
- “Indiana bat day roost selection and characteristics in the Ontario Lake plain of New York”, poster accepted for exhibit at The Wildlife Society 2014 Annual Meeting, Pittsburgh, PA, October 2014.
- “Habitat Modeling for Indiana Bats in Central New York” – Presentation at the Northeast Bat Working Group 2014 Annual Meeting, Clinton, NJ, January 2014.
- “Long Island’s Bats” – Invited presentation at the 2nd Annual Long Island Natural History Conference, Long Island, NY, December 2013
- “Bats of the Barrens” – Invited presentation at the 18th Annual Long Island Pine Barrens Research Forum, Long Island, NY, October 2013

APPENDIX C BAT HABITAT ASSESSMENT DATA SHEETS AND PHOTOS



Indiana Bat Phase 1 Summer Habitat Assessment Page 1 of 3

Date: 18 March

Time In: 13:00

Out: 16:45 EDT

Position: 40, 75287° N 73, 38241° E

W Datum: WGS84 Site # 1
N Elev. 35 ft. (m)

Location: Northwest Corner
Bristol Suffolk Tech Site, E/s Little East
Neck Road, N/o Long Island Railroad and

Long Island Avenue, Pinelawn, To Babylon, Suffolk

Observers: County, NY
USF, Alexis LaFever

Brief Project Description:

Project Area Total Acres: 114 Forested Acres: ± 97.76 Open Acres: 16.24

Proposed Trees (ac) Cleared: Partially Cleared: Preserved:

Landscape Within 5 Mile Radius:
Contains Connective Forested Corridors? Y N See Aerial Photo

Direction(s) of Corridors (circle all that apply): N NE E SE S SW W NW

Adjacent Land Uses (circle all that apply):
Undeveloped: Forested Shrubland Open/Successional Open/Agricultural Water
Developed: Residential Commercial Industrial Parkland Road Other

Other (describe): Cemetery

Proximity to Forested Public Land or Preserve (miles): _____ Direction: N S E W
The Adventure Park at Long Island N 0.12 mi

Butterfly Park NNE 1.05 mi

Strathmore Park NNE 1.46 mi

Dr. Jeffrey Wenig Mem'l Park NNW 1.62 mi

Sample Site Description: Mature pitch pine-oak-heath forest with dense ground cover of scrub oak, low bush blueberry/huckleberry, bracken, and open flyways sub-canopy.

Indiana Bat Phase 1 Summer Habitat Assessment Page 2 of 3

Date: 18 March

Location: NW corner of site

Site #: 1

Vegetation Cover Types:

Pitch Pine-Oak-Heath Forest

Forest Resources at Sample Site:

Dominant Species of Mature Trees:

Pinus rigida

Quercus ~~occifolia~~

of Trees In 30m Circle: 25 % Trees w/Exfoliating Bark: _____ # of Snags: _____

Clutter/% Closure: _____ Canopy @ 15m
Canopy (>20m): _____ Midstory (7-20m): 60-80 Understory (<7m): 20-40

Size Dist. of Live Trees (%): N= _____ /Estimated
Small (8-20cm): _____ Medium (20-40 cm): _____ Large (40+cm): _____
(3-8 in): _____ (8-16 in): _____ (>16 in): _____

Water Resources at Sample Site: Width (m/ft) Intermittent/Perennial Bat Accessible
Streams: N/A

Pools/Ponds/Wetlands: _____ Area (ac/ha) Vernal/Perennial Bat Accessible
N/A

Is this habitat potentially suitable for ~~Indiana~~ Northern Long-Eared Bats? Y N

Photo #s: Edge _____ Interior 5026, 5027 and TCB Understory _____ Canopy _____

Snags _____ Live Roosts _____ Water bodies _____

Roosting Habitat: Yes, in exfoliating bark

Foraging Habitat: Yes, in open forest understory

Transit Habitat: Yes, in open forest understory

Hibernaculum: N/A

Endangered Bat Species Habitat Assessment Page 3 of 3
Forest Habitat Sampling Data

Date: 18 March Site: NW Corner Sample Pt. 1

Location: 40.75287° °N 73.38241 °W Datum: WGS 84

Condition: L=Live; S=Snag; B=Dead Branches; Bark/Cavity: EF=Exfoliating; SM=Smooth; AB=Absent; G=Gap; Position: CA=Canopy; SC=Sub-Canopy

| Species | DBH cm/in | Cond | Bark/ Gap | Position | PRT | Photo |
|--------------------|--------------|------|--------------|----------|-----|-------|
| 1 Quercus velutina | 37.5 | L/DB | SM | C | N | |
| 2 " " | 17.0 | L | SM | SC | N | |
| 3 Pinus rigida | 33.0 | L/DB | EF | C | Y | |
| 4 " " | 31.5 | L/DB | EF | C | N | |
| 5 " " | 32.25 | L/DB | EF | C | Y | |
| 6 " " | 29.0 | L/DB | EF | C | Y | |
| 7 " " | 21.25 | L/DB | EF | SC | Y | |
| 8 " " | 16.75 | L/DB | EF | SC | Y | |
| 9 " " | 40.75 | L/DB | EF | C | Y | |
| 10 " " | 26.5 | L/DB | EF | SC | Y | |
| 11 " " | 20.25 | L/DB | EF | C | Y | |
| 12 " " | 25.0 | L/DB | EF | C | Y | |
| 13 Q. velutina | 33.75 | L/DB | SM | C | N | |
| 14 " " | 21.0 | L/DB | SM | C | N | |
| 15 P. rigida | 30.5 | L/DB | EF | C | Y | |
| 16 " " | 29.25 | L/DB | EF | C | Y | |
| 17 " " | 34.75 | L/DB | EF | C | Y | |
| 18 " " | 42.75 | L/DB | EF | C | Y | |
| 19 " " | 30.25 | S | EF | SC | Y | |
| 20 " " | 23.5 | S | EF | C | Y | |
| 21 " " | 24.5 | S | EF | C | Y | |
| 22 " " | 24.0 | L/DB | EF | C | Y | |
| 23 " " | 34.75 | L/DB | EF | C | Y | |
| 24 Quercus alba | 20.25 | L/DB | EF | C | Y | |
| 25 P. rigida | 29.25 | L/DB | EF | C | Y | |

Dominant Tree Spp.: Pinus rigida Dominant/PRT Spp.: Pinus rigida

DBH Mean: _____ cm/in Mode: _____ cm/in

Exfoliating Bark: n= _____ / _____ % Snags: n= 3 / _____ %

Size Class (DBH): 3-8": n= _____ / _____ %; 8-16": n= _____ / _____ %; >16": _____ / _____ %

Indiana Bat Phase 1 Summer Habitat Assessment Page 1 of 2

Date: 18 March

Time In: 13:00 Out: 1645

EDT
EST

Position: 40.75342° (N) 73.38148° (W) Datum: WGS84 Site # 2
Zone: E N Elev. 35 ft. km

Location: North-West-central portion of Bristol Suffolk
Tech Site, E/s Little East Neck Rd, N/o Long Island
Railroad and Long Island Ave, T/o Babylon, Suffolk
County, NY

Observers: MSF, Alexis LaFever

Brief Project Description:

Project Area Total Acres: 114 Forested Acres: Open Acres:

Proposed Trees (ac) Cleared: Partially Cleared: Preserved:

Landscape Within 5 Mile Radius:

Contains Connective Forested Corridors? (Y) N See Aerial Photo

Direction(s) of Corridors (circle all that apply): (N) NE E SE S SW (W) NW

Adjacent Land Uses (circle all that apply):

Undeveloped: Forested Shrubland Open/Successional Open/Agricultural Water

Developed: Residential Commercial Industrial Parkland Road Other

Other (describe): cemetery

Proximity to Forested Public Land or Preserve (miles): Direction: N S E W

See Site 1.

Sample Site Description:

Mature mixed oak woodland

Date: 18 March

Location: Bristol Suffolk Tech

Site #: 2

Vegetation Cover Types:

Mature Mixed oak woodland
(Successional hardwood forest)

Unpaved Road/Path

Forest Resources at Sample Site:

Dominant Species of Mature Trees:

Quercus velutina

Quercus ilicifolia

of Trees In 30m Circle: 25 % Trees w/Exfoliating Bark: _____ # of Snags: _____

Clutter/% Closure:
Canopy (>20m): _____ Midstory (7-20m): 20-40 Understory (<7m): 20-40

Size Dist. of Live Trees (%): N= _____ /Estimated
Small (8-20cm): _____ Medium (20-40 cm): _____ Large (40+cm): _____
(3-8 in): _____ (8-16 in): _____ (>16 in): _____

Water Resources at Sample Site: Width (m/ft) Intermittent/Perennial Bat Accessible
Streams: N/A

Pools/Ponds/Wetlands: Area (ac/ha) Vernal/Perennial Bat Accessible
N/A

Is this habitat potentially suitable for Indiana/Northern Long-Eared Bats? Y N

Photo #: Edge _____ Interior 5028, 5029, 5030 + FCB Understory _____ Canopy _____

Snags _____ Live Roosts _____ Water bodies _____

Roosting Habitat: Yes, under exfoliating bark of snags

Foraging Habitat: Yes, in open understory and unpaved path

Transit Habitat: " " " " " " "

Hibernaculum: N/A

Endangered Bat Species Habitat Assessment Page 3 of 3
Forest Habitat Sampling Data

Date: 18 March Site: Bristol Suffolk Sample Pt. 2

Location: 40.75342 °N 73.38148 °W Datum: WGS84

Condition: L=Live; S=Snag; B=Dead Branches; Bark/Cavity: EF=Exfoliating; SM=Smooth; AB=Absent; G=Gap; Position: CA=Canopy; SC=Sub-Canopy

| Species | DBH cm/in | Cond | Bark/ Gap | Position | PRT | Photo |
|--------------------|--------------|------|--------------|----------|-----|-------|
| 1 Quercus velutina | 21.5 | L/DB | SM | C | N | |
| 2 | 16.25 | L/DB | SM | C | N | |
| 3 | 14.5 | L/DB | SM | C | N | |
| 4 | 14.25 | L/DB | SM | C | N | |
| 5 | 20.75 | L/DB | SM | C | N | |
| 6 | 20.5 | L/DB | SM | C | N | |
| 7 | 14.75 | L/DB | SM | C | N | |
| 8 | 20.0 | L/DB | SM | C | N | |
| 9 | 21.75 | L/DB | SM | C | N | |
| 10 Quercus alba | 21.75 | L/DB | EF | C | N | |
| 11 Q. velutina | 19.0 | L/DB | SM | C | N | |
| 12 | 9.5 | L/DB | SM | SC | N | |
| 13 | 27.25 | L/DB | SM | C | N | |
| 14 | 27.25 | L/DB | SM | C | N | |
| 15 | 17.25 | L/DB | SM | C | N | |
| 16 | 9.5 | L/DB | SM | SC | N | |
| 17 | 18.25 | L/DB | SM | C | N | |
| 18 | 16.75 | L/DB | SM | C | N | |
| 19 Q. alba | 11.75 | L/DB | EF | SC | N | |
| 20 Q. velutina | 35.75 | L/DB | EF/SM | C | Y | |
| 21 | 23.5 | L/DB | SM | C | N | |
| 22 | 27.0 | L/DB | SM | C | N | |
| 23 | 21.75 | L/DB | SM | C | N | |
| 24 | 18.75 | L/DB | SM | C | N | |
| 25 | 16.75 | L/DB | SM | C | N | |

Dominant Tree Spp.: Quercus velutina Dominant/PRT Spp. Q. velutina

DBH Mean: _____ cm/in Mode: _____ cm/in

Exfoliating Bark: n= ___ / ___ % Snags: n= ___ / ___ %

Size Class (DBH): 3-8": n= ___ / ___ %; 8-16": n= ___ / ___ %; >16": ___ / ___ %

Indiana Bat Phase 1 Summer Habitat Assessment Page 1 of 3

Date: 18 March

Time In: 1300

Out: 1645

EDT
EST

Position: 40.75428° (N) 73.37922° (W) Datum: WGS84 Site # 3
Zone: E N Elev. 31 ft. (m)

Location:
Northeast Central Forest Patch, Bristol Suffolk
Tech, E/s Little East Neck Rd, N/o LIRR and Long
Island Ave, T/o Babylon, Suffolk Co., NY

Observers:
MSF, Alexis LaFever

Brief Project Description:

Project Area Total Acres: 114 Forested Acres: Open Acres:

Proposed Trees (ac) Cleared: Partially Cleared: Preserved:

Landscape Within 5 Mile Radius:

Contains Connective Forested Corridors? Y N See Aerial Photo

Direction(s) of Corridors (circle all that apply): N NE E SE S SW W NW

Adjacent Land Uses (circle all that apply):

Undeveloped: Forested Shrubland Open/Successional Open/Agricultural Water

Developed: Residential Commercial Industrial Parkland Road Other

Other (describe): cemetery

Proximity to Forested Public Land or Preserve (miles): Direction: N S E W

See Site #1

Sample Site Description:

Mature Pitch Pine - Oak - Heath forest;
lower density of pines than NE corner.

Indiana Bat Phase 1 Summer Habitat Assessment Page 2 of 2

Date: 18 March

Location: Bristol Suffolk Tech

Site #: 3

Vegetation Cover Types:

Pitch pine-oak-heath forest

(Lower density of pine than Sample 1)

Forest Resources at Sample Site:

Dominant Species of Mature Trees:

Pinus rigida

(small sassafras albidum)

Quercus velutina

of Trees In 30m Circle: 25 % Trees w/Exfoliating Bark: # of Snags:

Clutter/% Closure:

Canopy (>20m): Midstory (7-20m): Understory (<7m):

Size Dist. of Live Trees (%): N= /Estimated

Small (8-20cm): (3-8 in): Medium (20-40 cm): (8-16 in): Large (40+cm): (>16 in):

Water Resources at Sample Site: Width (m/ft) Intermittent/Perennial Bat Accessible Streams: N/A

Pools/Ponds/Wetlands: N/A Area (ac/ha) Vernal/Perennial Bat Accessible

Is this habitat potentially suitable for Indiana/Northern Long-Eared Bats? Y N

Photo #: Edge Interior 5031; 5032 Understory Canopy

Snags Live Roosts Water bodies

Roosting Habitat: Yes; in exfoliating bark

Foraging Habitat: Yes, in open understory

Transit Habitat: Yes, in open understory

Hibernaculum: N/A

Endangered Bat Species Habitat Assessment Page 3 of 3

Forest Habitat Sampling Data

Date: 18 March Site: Bristol Suffolk Tech Sample Pt. 3
 Location: 40.75428 °N 73.37922 °W Datum: WGS84

Condition: L=Live; S=Snag; B=Dead Branches; **Bark/Cavity:** EF=Exfoliating;
SM=Smooth; AB=Absent; G=Gap; Position: CA=Canopy; SC=Sub-Canopy

| Species | DBH cm/in | Cond | Bark/ Gap | Position | PRT | Photo |
|---------------------|--------------|------|--------------|----------|-----|-------|
| 1 Pinus rigida | 41.75 | L/DB | EF | C | Y | |
| 2 Quercus alba | 9.5 | L | SM | SC | N | |
| 3 Quercus alba | 8.25 | L | SM | SC | N | |
| 4 Quercus velutina | 28.25 | L/DB | SM | C | N | |
| 5 Sassafras albidum | 10.5 | L | SM | SC | N | |
| 6 " " | 9.25 | L | SM | SC | N | |
| 7 Pinus rigida | 50.0 | L/DB | EF | C | Y | |
| 8 " " | 22.0 | L/DB | EF | SC | Y | |
| 9 S. albidum | 8.75 | L | SM | SC | N | |
| 10 Q. velutina | 36.25 | L/DB | SM/EF | C | Y | |
| 11 Q. alba | 12.25 | L/DB | EF | SC | N | |
| 12 Q. alba | 20.0 | L/DB | EF | C | N | |
| 13 Q. alba | 19.25 | L/DB | EF | C | N | |
| 14 P. rigida | 35.5 | L/DB | EF | C | Y | |
| 15 S. albidum | 8.0 | L | SM | SC | N | |
| 16 P. rigida | 33.75 | L/DB | EF | C | Y | |
| 17 P. rigida | 28.25 | L/DB | EF | C | Y | |
| 18 " " | 29.0 | L/DB | EF | C | Y | |
| 19 " " | 30.5 | L/DB | EF | C | Y | |
| 20 " " | 40.25 | L/DB | EF | C | Y | |
| 21 " " | 31.75 | L/DB | EF | C | Y | |
| 22 Q. velutina | 14.75 | L/DB | SM | C | N | |
| 23 P. rigida | 33.5 | L/DB | EF | C | Y | |
| 24 P. rigida | 28.25 | S | EF | Fallen | Y | 5033 |
| 25 Q. velutina | 26.75 | L/DB | S | C | N | |

Dominant Tree Spp.: Pinus rigida Dominant/PRT Spp. Pinus rigida

DBH Mean: _____ cm/in Mode: _____ cm/in

Exfoliating Bark: n= _____ / _____ % Snags: n= _____ / _____ %

Size Class (DBH): 3-8": n= _____ / _____ %; 8-16": n= _____ / _____ %; >16": _____ / _____ %

Indiana Bat Phase 1 Summer Habitat Assessment Page 1 of 2

Date: 18 March

Time In: 13:00

Out: 1645

EDT
EST

Position: 40.75548°N 73.37649° Datum: WGS 84 Site # 4

Zone: E N Elev. 22 ft. (m)

Location: Northeast corner of Bristol Suffolk
Tech Site, Els Little East Neck Rd., N/o LIRR and
Long Island Ave, T/o Babylon, Suffolk Co. NY

Observers: MSF, Alexis LaFever

Brief Project Description:

Project Area Total Acres: 114 Forested Acres: Open Acres:
Proposed Trees (ac) Cleared: Partially Cleared: Preserved:

Landscape Within 5 Mile Radius:

Contains Connective Forested Corridors? Y N See Aerial Photo

Direction(s) of Corridors (circle all that apply) N NE E SE S SW W NW

Adjacent Land Uses (circle all that apply):

Undeveloped: Forested Shrubland Open/Successional Open/Agricultural Water

Developed: Residential Commercial Industrial Parkland Road Other

Other (describe): cemetery

Proximity to Forested Public Land or Preserve (miles): _____ Direction: N S E W

See Site #1

Sample Site Description:

Mature
a White Oak-Pitch Pine stand with
heath understory

Indiana Bat Phase 1 Summer Habitat Assessment Page 2 of 3

Date: 18 March

Location: Bristol Suffolk Tech Site #: 4

Vegetation Cover Types:

Pitch Pine - Oak - Heath Forest

Oaks dominated by Quercus alba

Forest Resources at Sample Site:

Dominant Species of Mature Trees:

Quercus alba

Pinus rigida

of Trees In 30m Circle: _____ % Trees w/Exfoliating Bark: _____ # of Snags: _____

Clutter/% Closure: _____
Canopy (>20m): _____ Midstory (7-20m): 40-60 Understory (<7m): 20-40

Size Dist. of Live Trees (%): N= _____ /Estimated
Small (8-20cm): _____ Medium (20-40 cm): _____ Large (40+cm): _____
(3-8 in): _____ (8-16 in): _____ (>16 in): _____

Water Resources at Sample Site: Width (m/ft) Intermittent/Perennial Bat Accessible
Streams: N/A

Pools/Ponds/Wetlands: N/A Area (ac/ha) Vernal/Perennial Bat Accessible

Is this habitat potentially suitable for ~~Indiana~~/Northern Long-Eared Bats? Y N

Photo #s: Edge _____ Interior 503A, 5035 Understory _____ Canopy _____

Snags _____ Live Roosts _____ Water bodies _____

Roosting Habitat: Pitch pine exfoliating bark; dead + down trees

Foraging Habitat: Open understory / Path

Transit Habitat: Open understory / Path

Hibernaculum: N/A

Endangered Bat Species Habitat Assessment Page 3 of 3

Forest Habitat Sampling Data

Date: 18 March

Site: Bristol Suffolk Tech Northeast corner Sample Pt. 4

Location: 40.75548 °N 73.37649 °W Datum: WGS84

Condition: L=Live; S=Snag; B=Dead Branches; Bark: EF=Exfoliating; SM=Smooth; AB=Absent; Position: CA=Canopy >50'; SC=Sub-Canopy 20'-50'; US=Understory <20'

| Species | DBH cm/in | Cond | Bark/Gap | Position | PRT | Photo |
|---------------------|-----------|------|----------|----------|-----|-------|
| 1 Pinus rigida | 26.25 | L/DB | EF | C | Y | |
| 2 Quercus alba | 20.0 | L/DB | SM | SC | N | |
| 3 P. rigida | 30.75 | L/DB | EF | C | Y | |
| 4 " " | 29.0 | L/DB | EF | C | Y | |
| 5 Quercus velutina | 27.0 | L/DB | SM | C | N | |
| 6 Q. alba | 12.0 | L/DB | SM | SC | N | |
| 7 P. rigida | 21.5 | S | EF | C | Y | |
| 8 " " | 29.0 | L/DB | EF | C | Y | |
| 9 Q. alba | 8.5 | L | S | SC | N | |
| 10 Q. alba | 14.5 | L | S | SC | N | |
| 11 Q. alba | 18.75 | L/DB | EF | SC | N | |
| 12 Q. alba | 20.0 | L/DB | EF | C | N | |
| 13 Q. alba | 15.25 | L/DB | EF | SC | N | |
| 14 Q. alba | 15.25 | L/DB | EF | SC | N | |
| 15 " " | 20.5 | L/DB | EF | C | N | |
| 16 " " | 16.0 | L/DB | EF | C | N | |
| 17 Quercus velutina | 32.0 | L/DB | SM | C | N | |
| 18 Q. alba | 10.0 | L/DB | EF | SC | N | |
| 19 Q. alba | 14.5 | L/DB | EF | SC | N | |
| 20 Pinus rigida | 32.75 | L/DB | EF | C | Y | |
| 21 Q. alba | 13.0 | L/DB | EF | SC | N | |
| 22 P. rigida | 31.5 | L/DB | EF | C | Y | |
| 23 Q. alba | 15.25 | L/DB | EF | SC | N | |
| 24 P. rigida | 24.5 | L/DB | EF | SC | Y | |
| 25 Q. velutina | 33.0 | L/DB | SM | C | N | |

Dominant Tree Spp.: Q. alba Dominant/PRT Spp. P. rigida

DBH Mean: _____ cm/in Mode: _____ cm/in

Exfoliating Bark: n= _____ / _____ % Snags: n= _____ / _____ %

Size Class (DBH): 3-8": n= _____ / _____ %; 8-16": n= _____ / _____ %; >16": _____ / _____ %

Indiana Bat Phase 1 Summer Habitat Assessment Page 1 of 2

Date: 19 MARCH

Time In: 0945 Out: 1145

EDT EST

Position: 40.75165° N 73.37439° W Datum: WGS84 Site # 5

Zone: E N Elev. 29 ft. (m) Location: Southeast corner, Bristol Suffolk Tech Site E/s Little East Neck Road, N/2 LIRR and Long Island Avenue, Pmelawn, T/6 Babylon, Suffolk Co., NY

Observers: M.S.F, Alexis Lalaver

Brief Project Description:

Project Area Total Acres: 114 Forested Acres: Open Acres: Proposed Trees (ac) Cleared: Partially Cleared: Preserved:

Landscape Within 5 Mile Radius: Contains Connective Forested Corridors? Y N [X] See Aerial Photo

Direction(s) of Corridors (circle all that apply): N NE E SE S SW W NW

Adjacent Land Uses (circle all that apply): Undeveloped: Forested Shrubland Open/Successional Open/Agricultural Water Developed: Residential Commercial Industrial Parkland Road Other

Other (describe): cemetery

Proximity to Forested Public Land or Preserve (miles): See site #1 Direction: N S E W

Sample Site Description:

Small patch of coastal oak savannah dominated by mature white oaks in an old field of little bluestem.

Indiana Bat Phase 1 Summer Habitat Assessment Page 2 of 3

Date: 19 March

Location: SE corner - Bristol Suffolk Tech Site #: 5

Vegetation Cover Types:

Coastal Oak Savannah / Successional Old Field

Forest Resources at Sample Site:

Dominant Species of Mature Trees:

Quercus alba

of Trees In 30m Circle: 25 % Trees w/Exfoliating Bark: _____ # of Snags: _____

Clutter/% Closure:

Canopy (>20m): _____ Midstory (7-20m): _____ Understory (<7m): _____

Size Dist. of Live Trees (%): N= _____ /Estimated

Small (8-20cm): _____ Medium (20-40 cm): _____ Large (40+cm): _____
(3-8 in): _____ (8-16 in): _____ (>16 in): _____

Water Resources at Sample Site: Width (m/ft) Intermittent/Perennial Bat Accessible Streams:

N/A

Pools/Ponds/Wetlands: Area (ac/ha) Vernal/Perennial Bat Accessible

N/A

Is this habitat potentially suitable for Indiana/Northern Long-Eared Bats? (Y) N

Photo #s: Edge _____ Interior 5048, 5049, 5050 TCB Understory _____ Canopy _____

Snags _____ Live Roosts _____ Water bodies _____

Roosting Habitat: Mature oaks - foliage roosts for TCB

Foraging Habitat: for TCB

Transit Habitat: for all - open understory / edge

Hibernaculum: N/A

Endangered Bat Species Habitat Assessment Page 3 of 3
Forest Habitat Sampling Data

Date: 19 March Site: SE corner - Bristol Suffolk Sample Pt. 5

Location: 40.75164 °N 73.37440 °W Datum: WGS84

Condition: L=Live; S=Snag; B=Dead Branches; Bark: EF=Exfoliating; SM=Smooth; AB=Absent; Position: CA=Canopy >50'; SC=Sub-Canopy 20'-50'; US=Understory <20'

| Species | DBH cm/in | Cond | Bark/Gap | Position | PRT | Photo |
|--------------------|-----------|------|----------|----------|-----|-------|
| 1 Quercus alba | 50.5 | L/DB | EF | C | Y | |
| 2 ↓ ↓ | 74.75 | L/DB | EF | C | Y | |
| 3 ↓ ↓ | 20.75 | L/DB | EF | SC | N | |
| 4 ↓ ↓ | 28.0 | L/DB | EF | C | Y | |
| 5 Prunus serotina | 18.0 | L/DB | EF | SC | N | |
| 6 Pinus rigida | 24.75 | L/DB | EF | SC | N | |
| 7 " " | 13.0 | L/DB | EF | SC | N | |
| 8 Quercus alba | 17.25 | L/DB | EF | SC | Y | |
| 9 Quercus velutina | 104.25 | L/DB | EF | C | Y | |
| 10 Prunus serotina | 10.5 | L | SM | SC | N | |
| 11 Quercus alba | 49.0 | L/DB | EF | C | Y | |
| 12 ↓ ↓ | 44.5 | L/DB | EF | C | Y | |
| 13 ↓ ↓ | 48.75 | L/DB | EF | C | Y | |
| 14 ↓ ↓ | 67.5 | L/DB | EF | C | Y | |
| 15 ↓ ↓ | 32.25 | L/DB | EF | C | Y | |
| 16 Prunus serotina | 19.0 | L | SM | SC | N | |
| 17 Q. alba | 39.75 | L/DB | EF | C | Y | |
| 18 Pinus rigida | 68.5 | L/DB | EF | C | Y | |
| 19 " " | 41.25 | L/DB | EF | C | Y | |
| 20 Prunus serotina | 10.5 | L | SM | SC | N | |
| 21 Pinus rigida | 59.5 | L/DB | EF | C | Y | |
| 22 Q. alba | 59.75 | L/DB | EF | C | Y | |
| 23 " " | 49.5 | L/DB | EF | C | Y | |
| 24 P. rigida | 62.5 | L/DB | EF | C | Y | |
| 25 Q. alba | 44.0 | L/DB | EF | C | Y | |

Dominant Tree Spp.: Quercus alba Dominant/PRT Spp: Quercus alba

DBH Mean: _____ cm/in Mode: _____ cm/in

Exfoliating Bark: n= _____ / _____ % Snags: n= _____ / _____ %

Size Class (DBH): 3-8": n= _____ / _____ %; 8-16": n= _____ / _____ %; >16": _____ / _____ %

Indiana Bat Phase 1 Summer Habitat Assessment Page 1 of 2

Date: 19 March

Time In: 0945

Out: 1145

EDT
EST

Position: 40.75272° ^N 73.37873° ^W Datum: WGS84 Site # 6

Zone: E N Elev. 31 ft. ^m

Location: Central Pine/Oak Savannah, Bristol Suffolk Tech Site, E/s Little East Neck Rd, T/o Babylon, Suffolk Co., NY

Observers: MSF, A. LaFever

Brief Project Description:

Project Area Total Acres: 114 Forested Acres: Open Acres:

Proposed Trees (ac) Cleared: Partially Cleared: Preserved:

Landscape Within 5 Mile Radius:

Contains Connective Forested Corridors? Y N See Aerial Photo

Direction(s) of Corridors (circle all that apply): N NE E SE S SW W NW

Adjacent Land Uses (circle all that apply):

Undeveloped: Forested Shrubland Open/Successional Open/Agricultural Water

Developed: Residential Commercial Industrial Parkland Road Other

Other (describe): cemetery

Proximity to Forested Public Land or Preserve (miles): Direction: N S E W

See Site #1

Sample Site Description:

Pine/Oak Savannah - Mature and younger trees scattered in successional old field

Indiana Bat Phase 1 Summer Habitat Assessment Page 2 of 3

Date: 19 March Location: Central Savannah-Bristol Suffolk Site #: 6

Vegetation Cover Types:

Pine-oak Savannah / successional Old Field

Forest Resources at Sample Site:

Dominant Species of Mature Trees:

Pinus rigida

Quercus alba

of Trees In 30m Circle: 25 % Trees w/Exfoliating Bark: # of Snags:

Clutter/% Closure:

Canopy (>20m): Midstory (7-20m): Understory (<7m):

Size Dist. of Live Trees (%): N= /Estimated

Small (8-20cm): (3-8 in): Medium (20-40 cm): (8-16 in): Large (40+cm): (>16 in):

Water Resources at Sample Site: Width (m/ft) Intermittent/Perennial Bat Accessible Streams: N/A

Pools/Ponds/Wetlands: Area (ac/ha) Vernal/Perennial Bat Accessible N/A

Is this habitat potentially suitable for Indiana/Northern Long-Eared Bats? Y N

Photo #s: Edge Interior 5054, 5055, 5056 & TCB Understory Canopy

Snags Live Roosts Water bodies

Roosting Habitat: Mature Oaks for TCB

Foraging Habitat: Open field/edge - possibly for TCB

Transit Habitat: Edges

Hibernaculum: N/A

Endangered Bat Species Habitat Assessment Page 3 of 3
Forest Habitat Sampling Data

Date: 19 March

Site: Central Savannah

Sample Pt. 6

Location: 40.75270 °N 73.37872 °W Datum: WGS84

Condition: L=Live; S=Snag; B=Dead Branches; Bark: EF=Exfoliating; SM=Smooth; AB=Absent; Position: CA=Canopy >50'; SC=Sub-Canopy 20'-50'; US=Understory <20'

| Species | DBH cm/in | Cond | Bark/Gap | Position | PRT | Photo |
|------------------------|-----------|------|----------|----------|-----|-------|
| 1 Pinus rigida | 46.75 | L/DB | EF | C | Y? | |
| 2 Prunus serotina | 12.0 | L | SM | SC | N | |
| 3 P. rigida | 11.0 | L | SM | SC | N | |
| 4 " " | 44.25 | L/DB | EF | C | Y | |
| 5 P. serotina | 10.0 | L | SM | SC | N | |
| 6 Quercus alba | 28.75 | L/DB | EF | C | Y | |
| 7 " " | 40.0 | L/DB | EF | C | Y | |
| 8 P. rigida | 58.75 | L/DB | EF | C | Y | |
| 9 P. rigida | 55.75 | L/DB | EF | C | Y | |
| 10 Q. alba | 46.0 | L/DB | EF | C | Y | |
| 11 Populus tremuloides | 13.0 | L | SM | SC | N | |
| 12 " " | 9.5 | L | SM | SC | N | |
| 13 P. rigida | 37.0 | L/DB | EF | C | Y | |
| 14 " " | 68.75 | L/DB | EF | C | Y | |
| 15 Pyrus calleryana | 8.75 | L | SM | SC | N | |
| 16 Q. alba | 41.75 | L | EF | C | Y | |
| 17 P. rigida | 68.25 | L/DB | EF | C | Y | |
| 18 " " | 57.5 | L/DB | EF | C | Y | |
| 19 Prunus serotina | 17.0 | L | SM | SC | N | |
| 20 P. rigida | 51.75 | L/DB | EF | C | Y | |
| 21 P. serotina | 11.0 | L | SM | SC | N | |
| 22 P. rigida | 41.0 | L/DB | EF | C | Y | |
| 23 ↓ ↓ | 41.25 | L/DB | EF | C | Y | |
| 24 ↓ ↓ | 49.5 | L/DB | EF | C | Y | |
| 25 P. serotina | 15.0 | L | SM | SC | N | |

Dominant Tree Spp.: Pinus rigida / Dominant/PRT Spp.: Quercus alba

DBH Mean: _____ cm/in Mode: _____ cm/in

Exfoliating Bark: n= ___ / ___ % Snags: n= ___ / ___ %

Size Class (DBH): 3-8": n= ___ / ___ %; 8-16": n= ___ / ___ %; >16": ___ / ___ %

Indiana Bat Phase 1 Summer Habitat Assessment Page 1 of 2

Date: 19 March

Time In: 09:45 Out: 11:45

EDT EST

Position: Zone: 40.75150° ^(N)E 73.38198° ^(W)N Datum: WGS84 Site # 7

N Elev. 31 ft. ^(m)

Location: South West end Old Fields, Bristol Suffolk Tech site

E/s Little East Neck Rd, N/o L.I.R.R. and Long Island

Avenue T/o Babylon, Suffolk Co., NY

Observers: MSF, A. LaFever

Brief Project Description:

Project Area Total Acres: 114 Forested Acres: Open Acres:

Proposed Trees (ac) Cleared: Partially Cleared: Preserved:

Landscape Within 5 Mile Radius:

Contains Connective Forested Corridors? ^(Y) N See Aerial Photo

Direction(s) of Corridors (circle all that apply): ^(N) NE E SE S SW ^(W) NW

Adjacent Land Uses (circle all that apply):

Undeveloped: Forested Shrubland Open/Successional Open/Agricultural Water

Developed: ^(Residential) ^(Commercial) Industrial Parkland Road Other

Other (describe): cemetery

Proximity to Forested Public Land or Preserve (miles): Direction: N S E W

Sample Site Description:

Successional old field with dense young scrub oak and little bluestem - virtually no trees.

Indiana Bat Phase 1 Summer Habitat Assessment Page 2 of 3

Date: 19 March

Location: Western Old field

Site #: 7

Vegetation Cover Types:

Successional Old field

Forest Resources at Sample Site:

Dominant Species of Mature Trees:

Scrub Oak - all low young growth

River Birch } 2 shrub-sized trees

Black cherry }

of Trees In 30m Circle: 2 % Trees w/Exfoliating Bark: # of Snags:

Clutter/% Closure: Canopy (>20m): Midstory (7-20m): Understory (<7m):

Size Dist. of Live Trees (%): N= /Estimated Small (8-20cm): Medium (20-40 cm): Large (40+cm): (3-8 in): (8-16 in): (>16 in):

Water Resources at Sample Site: Width (m/ft) Intermittent/Perennial Bat Accessible Streams: N/A

Pools/Ponds/Wetlands: Area (ac/ha) Vernal/Perennial Bat Accessible N/A

Is this habitat potentially suitable for Indiana/Northern Long-Eared Bats? Y (N)

Photo #: Edge Interior 5057, 5058 Understory Canopy

Snags Live Roosts Water bodies

Roosting Habitat: N/A

Foraging Habitat: N/A - too open

Transit Habitat: Edge only

Hibernaculum: N/A

Endangered Bat Species Habitat Assessment Page 3 of 3
Forest Habitat Sampling Data

Date: 19 March Site: West Old Field Sample Pt. 7

Location: 40.75150 °N 73.38197 °W Datum: WGS 84

Condition: L=Live; S=Snag; B=Dead Branches; Bark: EF=Exfoliating; SM=Smooth; AB=Absent; Position: CA=Canopy >50'; SC=Sub-Canopy 20'-50'; US=Understory <20'

| Species | DBH cm/in | Cond | Bark/ Gap | Position | PRT | Photo |
|---------|--------------|------|--------------|----------|-----|-------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | No trees | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |

Dominant Tree Spp.: Quercus illinoensis Dominant/PRT Spp. N/A

DBH Mean: _____ cm/in Mode: _____ cm/in

Exfoliating Bark: n= ___ / ___ % Snags: n= ___ / ___ %

Size Class (DBH): 3-8": n= ___ / ___ %; 8-16": n= ___ / ___ %; >16": ___ / ___ %

APPENDIX D MIST NET SURVEY DATA SHEETS AND PHOTOS



Date: 16 June

Time In: 1729

Out: 0300

EDT
EST

Observers:

MSF, AA LAFEVER

Weather:

High overcast, 21.7°C, wind

Position: 40.753008°N 73.378296°W Datum: WGS84 lev.

Zone: E N

Location/Activity Description:

Bristol Suffolk Tech site,

E/s Little East Neck Road, N/o Long Island Railroad

Pinelawn, T/o Babylon, Suffolk County, NY

Bat Mist Net Survey

| Net Set | Net Size | Lat | Long | Photo |
|---------|----------|------------|------------|---------------------------|
| 1 | 6m x 3 | 40.75393°N | 73.38176°W | D7500 2793 DSC 2794 |
| 2 | 6m x 3 | 40.75356°N | 73.38156°W | 2795 |
| 3 | 6m x 3 | 40.75293°N | 73.38118°W | 2796 |
| 4 | 9m x 3 | 40.75251°N | 73.38161°W | 2797 |

Habitat

1 in line with cleared path through Pitch Pine/Oak forest

2 across cleared path through Pitch Pine/Oak forest

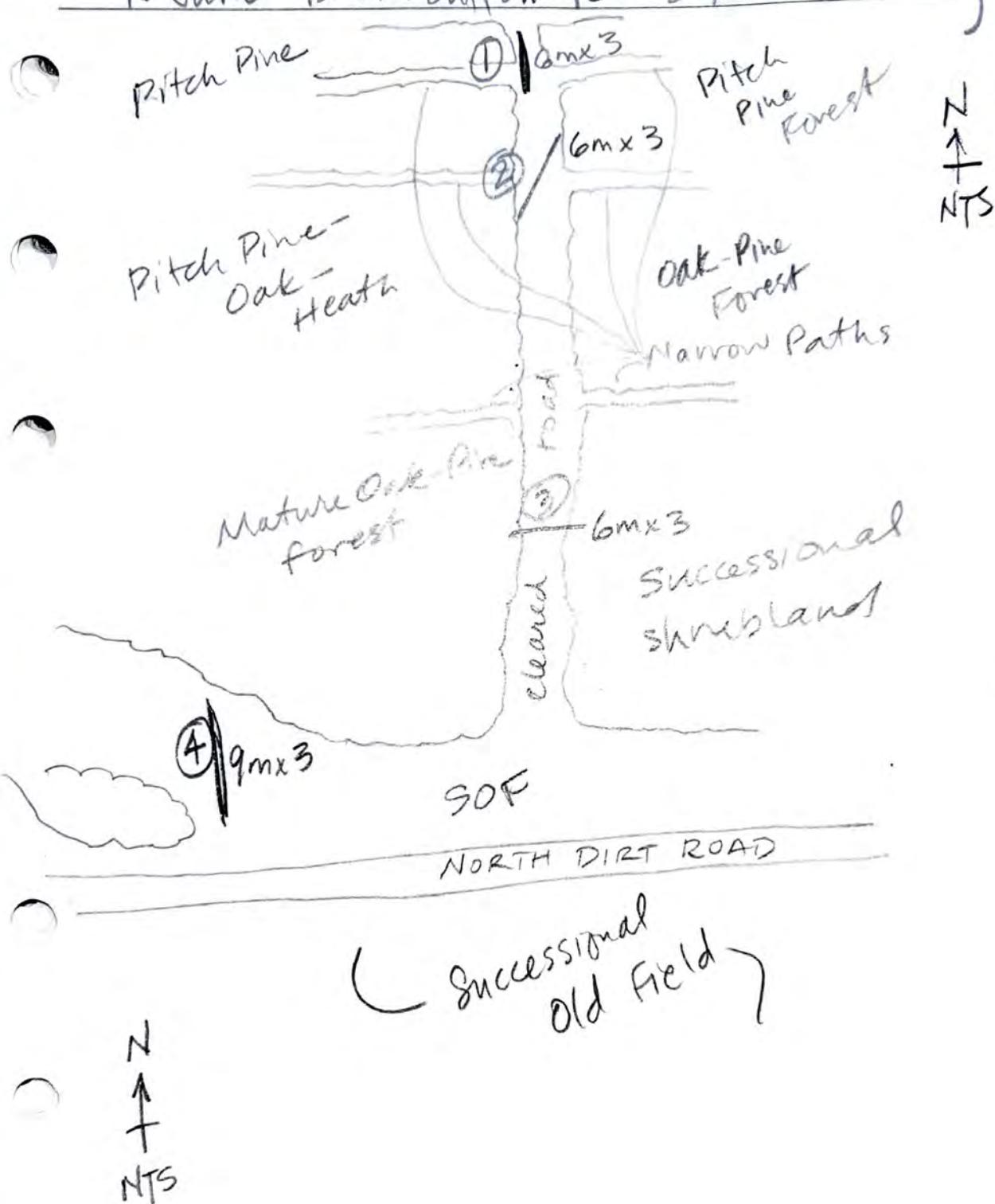
3 across cleared path between mature and young forest

4 at/perpendicular to forest edge at
successional field.

Acoustic detector placed at 40.75210°N, 73.37408°W

(WGS84 datum); 3 m above ground, horizontal, +/- 30 m
from clutter, and oriented at 67 degrees, true. (no photo)

Date: 16 June - Bristol Suffolk Tech site Bat Survey Activity (continued):



Date:

17 June

Time In:

1830

Out:

01:45

EDT
EST

Observers:

MSF, A.A. Lafever

Weather:

Overcast, humid, calm - 1 kt E wind, °C

Position:

N

W Datum:

Elev.

Zone:

E

N

Location/Activity Description:

Bristol Suffolk Tech Site

Bat Survey (See 16 June for location)

Night 2 of bat mist net survey

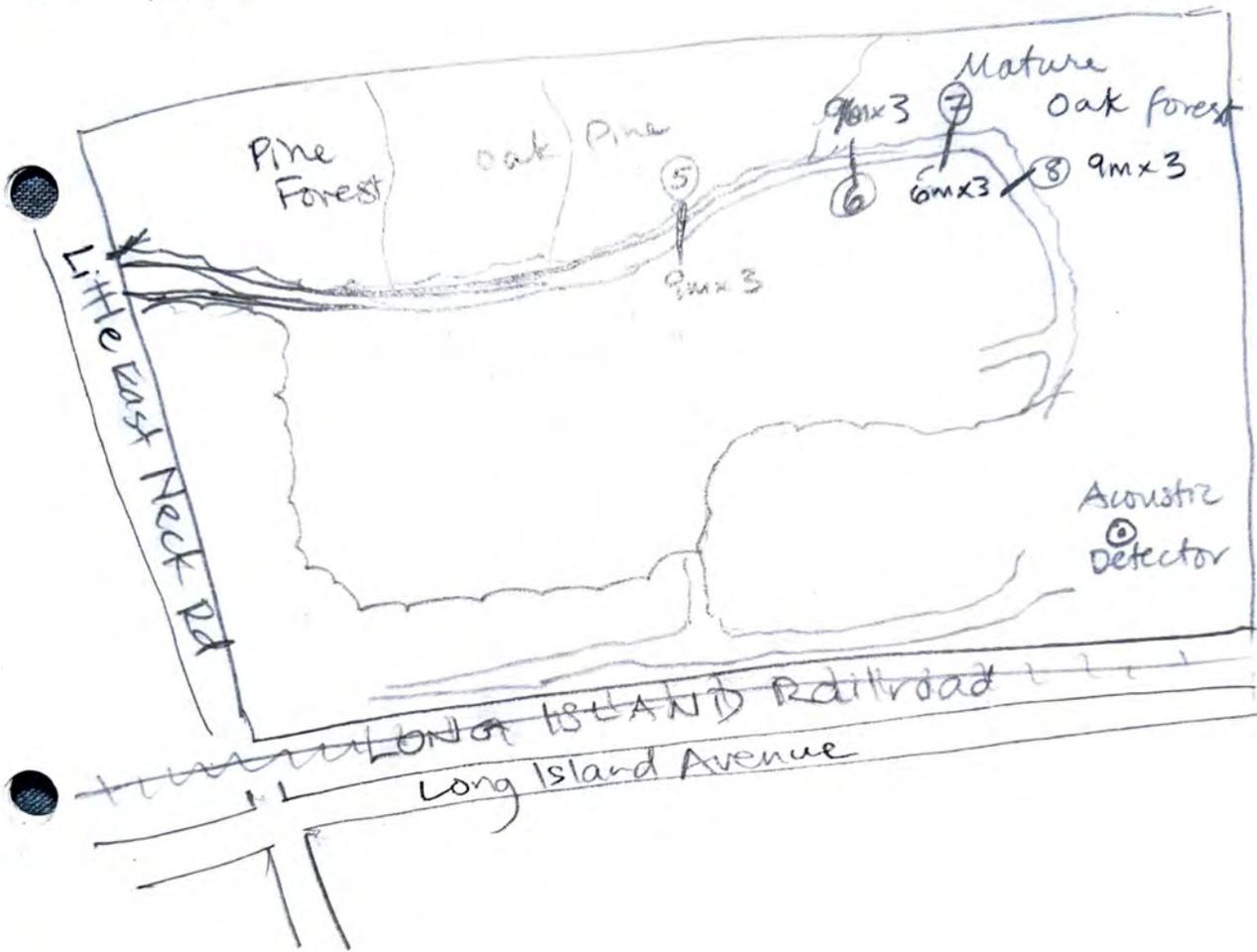
| Net set | Net size | Lat. °N | Long. °W | D7500 Photo DSC- |
|---------|----------|-----------|-----------|------------------|
| 5 | 9m x 3 | 40.75448° | 73.37772° | 2820 |
| 6 | 9m x 3 | 40.75460° | 73.37679° | 2821 |
| 7 | 6m x 3 | 40.75454° | 73.37611° | 2822 |
| 8 | 9m x 3 | 40.75437° | 73.37583° | 2823-4 |

Habitat for all was across unpaved road at edge of mature oak forest and successional old field/oak savannah.

Date: 17 JUNE - Bristol Suffolk Tech Site Bat Survey Activity (continued):

Night #2

UP
↑
NR



Date: 18 June

Time In: 2030 Out: _____

EDT
EST

Observers: MSF, A.A. LaFever, Hope Mahon, Lily Fallar (NPV)

Weather: High overcast, 22.6°C, Wind SE @ 0.8 kts

Position: _____ N _____ W Datum: _____ Elev. _____

Zone: _____ E _____ N

Location/Activity Description: Bristol Suffolk Tech Site

(See 16 June for location) Sites 9+10

| Netset | Nets | Lat ^{°N} | Long ^{°W} | Photo |
|--------|--------|-------------------|--------------------|-------|
| 9 | 9m x 3 | 40.75109° | 73.37738° | 2861 |
| 10 | 4m x 3 | 40.75073 | 73.37719° | 2860 |

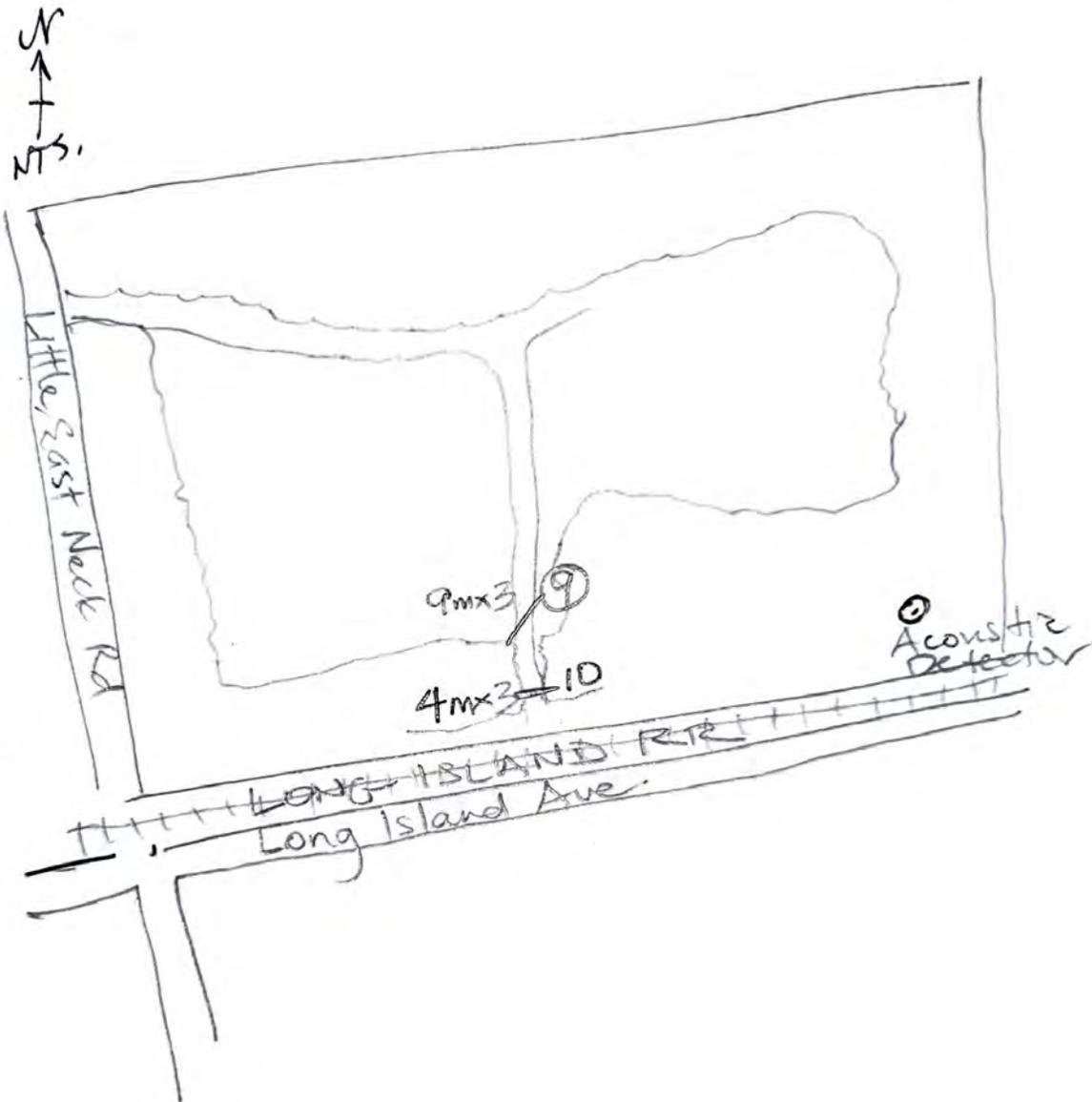
9 - At opening of dirt road from forest cover into open field, near a large snag (potential roost tree).

10 - across dirt road through mature mixed evergreen and hardwood forest, at T-junction with another road.

Date:

Activity (continued):

18 June - Bristol Suffolk Tech Bat Survey,
Night # 3





Photograph: 1 | Mist-Net Set #1



Photograph: 2 | Mist-Net Set #2



Photograph: 3 | Mist-Net Set #3



Photograph: 4 | Mist-net Set #4



Photograph: 5 | Mist-Net Set #5



Photograph: 6 | Mist-Net Set #6



Edgewood
Environmental
Consulting, LLC

Appendix D – Mist Net Survey Photos
Bristol Suffolk Site Bat Mist-Net and Acoustic Survey
Little East Neck Road, Town of Babylon, Suffolk County, NY
Project Number 2025-010



Photograph: 7 | Mist-Net Set #7



Photograph: 8 | Mist-Net Set #8





Photograph: 9 | Mist-Net Set #9



Photograph: 10 | Mist-Net Set #10



Edgewood
Environmental
Consulting, LLC

Appendix D – Mist Net Survey Photos
Bristol Suffolk Site Bat Mist-Net and Acoustic Survey
Little East Neck Road, Town of Babylon, Suffolk County, NY
Project Number 2025-010



Photograph: 11 | Capture #1: Big Brown Bat (*Eptesicus fuscus*) adult female, lactating



Photograph: 12 | Capture #1, Right Wing transilluminated for WNS scar examination



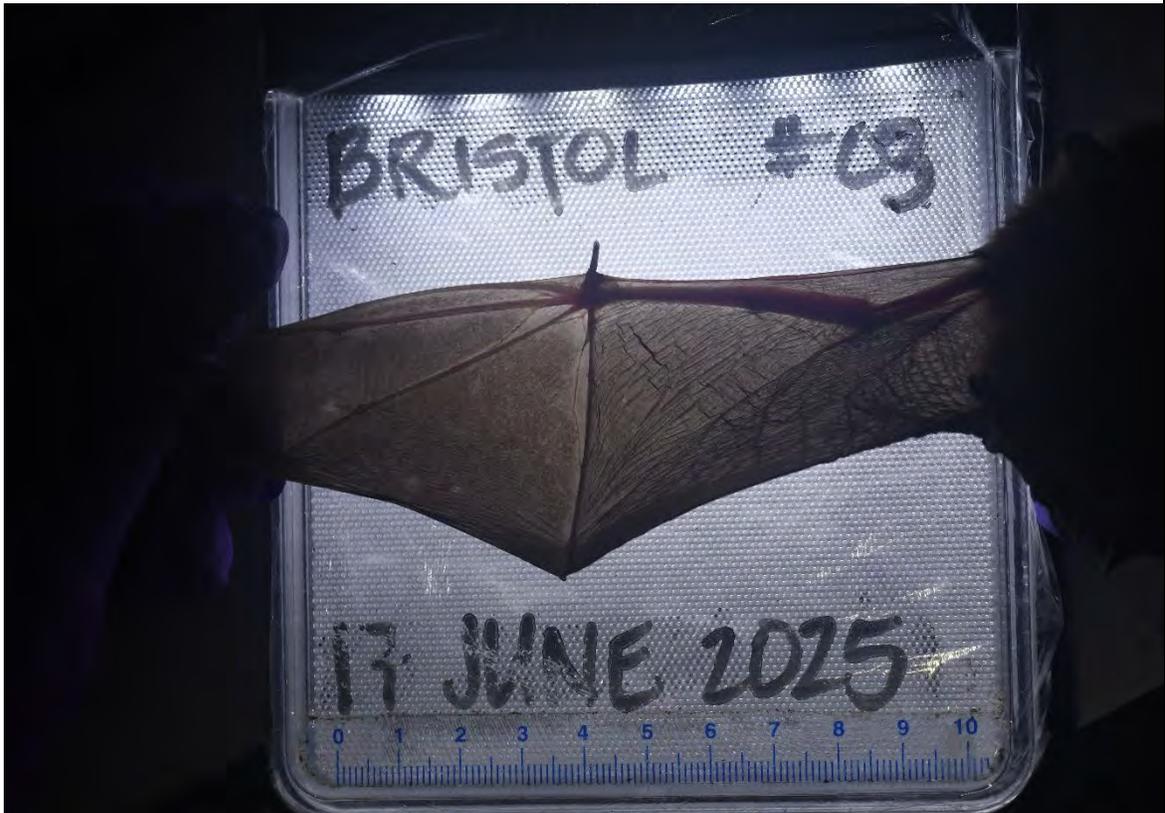
Photograph: 13 | Capture #1, Left Wing transilluminated for WNS scar examination



Photograph: 14 | Capture #2: Eastern Red Bat (*Lasiurus borealis*), adult female, post-reproductive



Photograph: 15 | Capture #3: Big Brown Bat (*Eptesicus fuscus*) adult female, pregnant



Photograph: 16 | Capture #3, Right Wing transilluminated for WNS scar examination



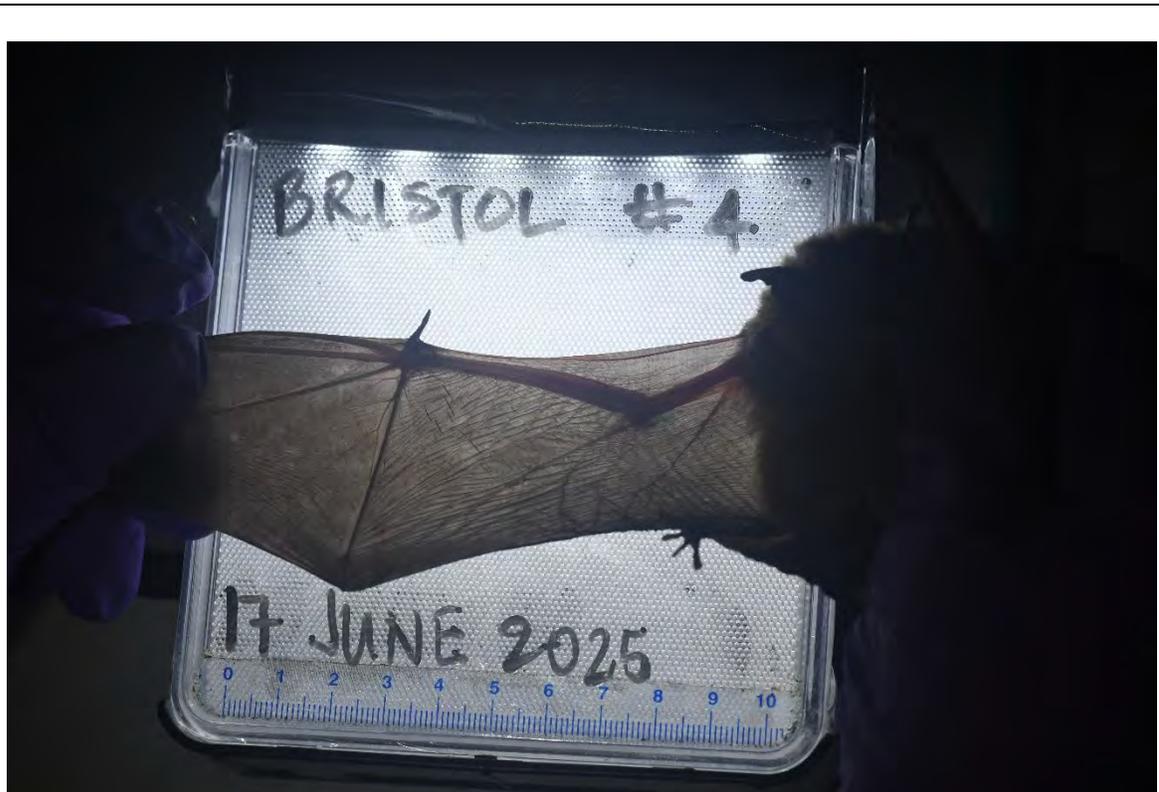
Appendix D – Mist Net Survey Photos
Bristol Suffolk Site Bat Mist-Net and Acoustic Survey
Little East Neck Road, Town of Babylon, Suffolk County, NY
Project Number 2025-010



Photograph: 17 | Capture #3, Left Wing transilluminated for WNS scar examination



Photograph: 18 | Capture #4: Big Brown Bat (*Eptesicus fuscus*) adult female, pregnant



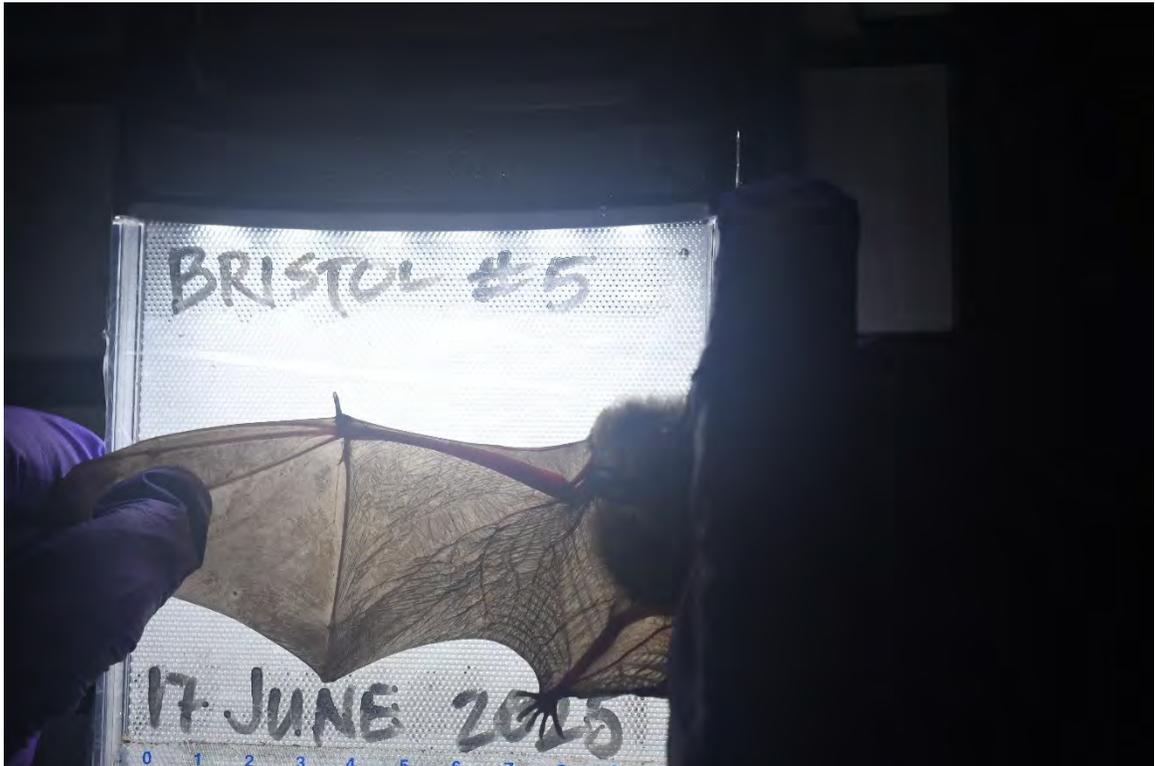
Photograph: 19 | Capture #4, Right Wing transilluminated for WNS scar examination



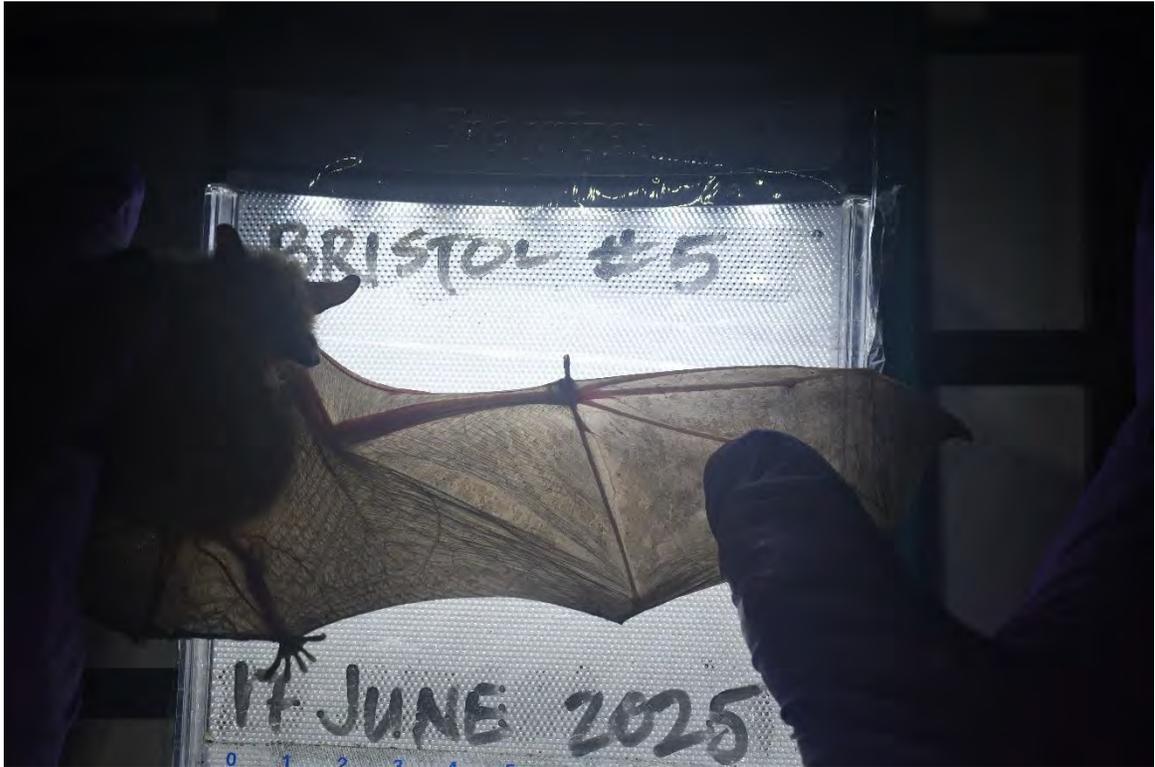
Photograph: 20 | Capture #4, Left Wing transilluminated for WNS scar examination



Photograph: 21 | Capture #5: Big Brown Bat (*Eptesicus fuscus*) adult female, pregnant



Photograph: 22 | Capture #5, Right Wing transilluminated for WNS scar examination

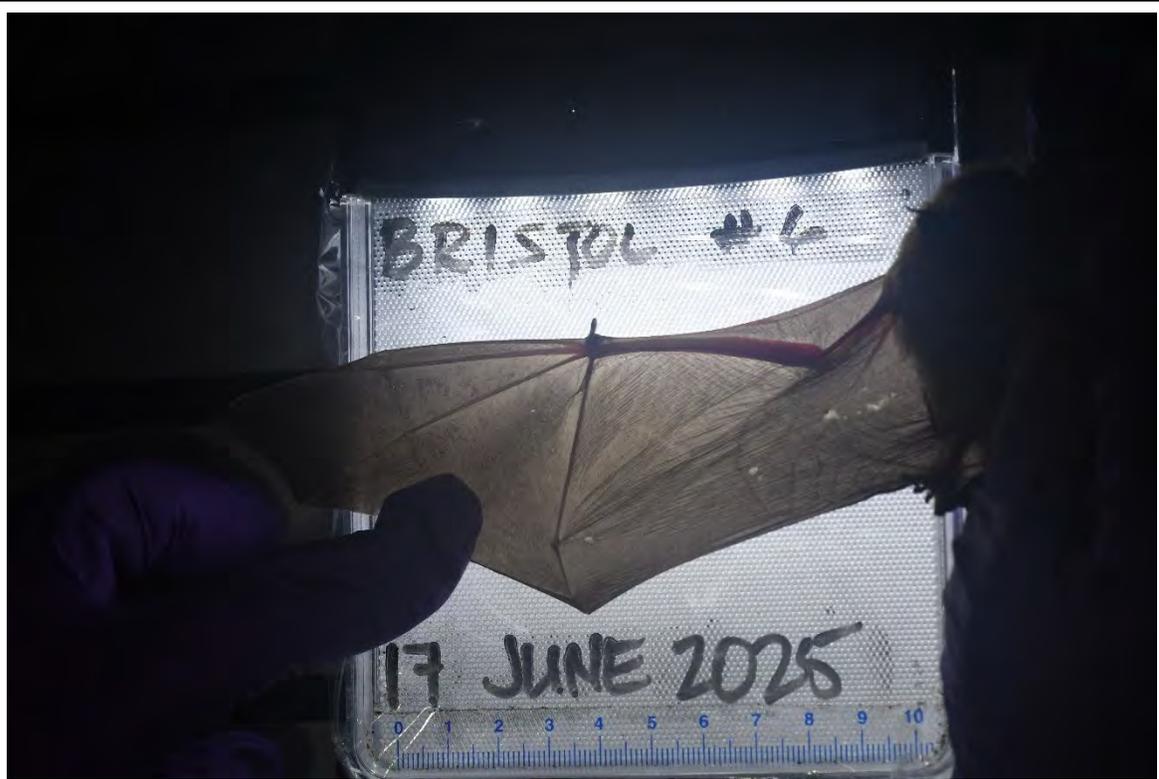


Photograph: 23 | Capture #5, Left Wing transilluminated for WNS scar examination



Photograph: 24 | Capture #6: Big Brown Bat (*Eptesicus fuscus*) adult male, non-reproductive

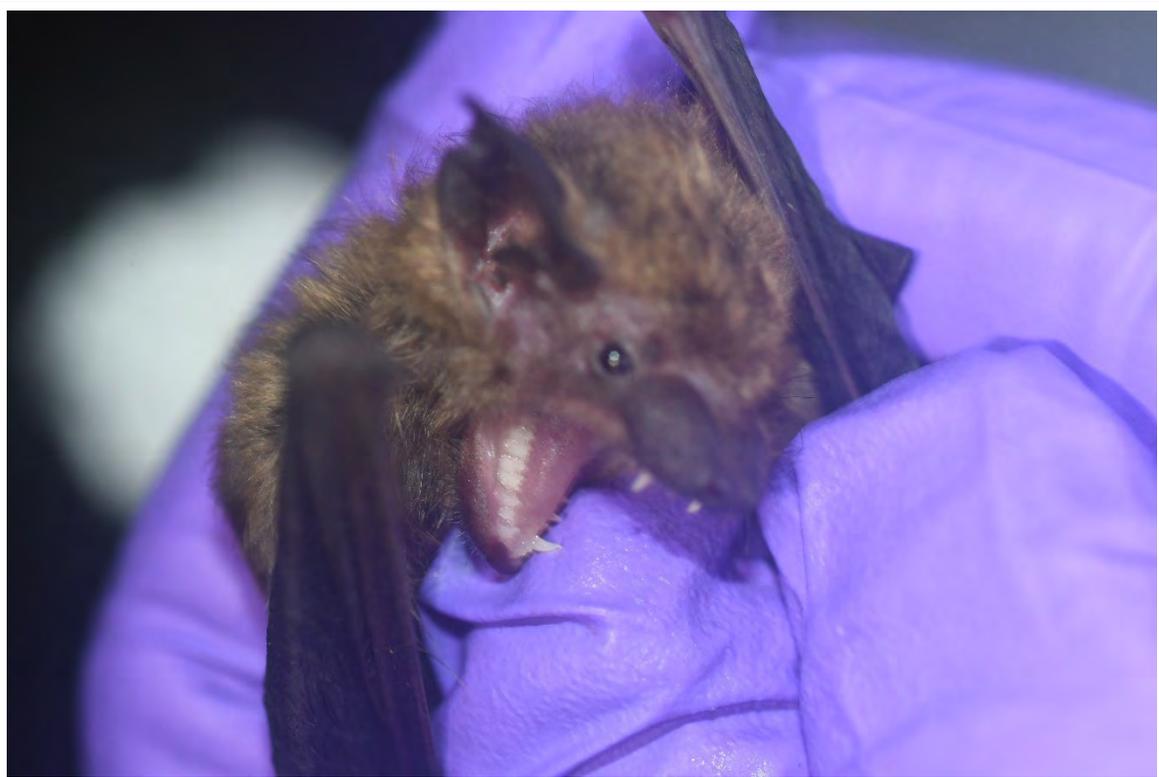




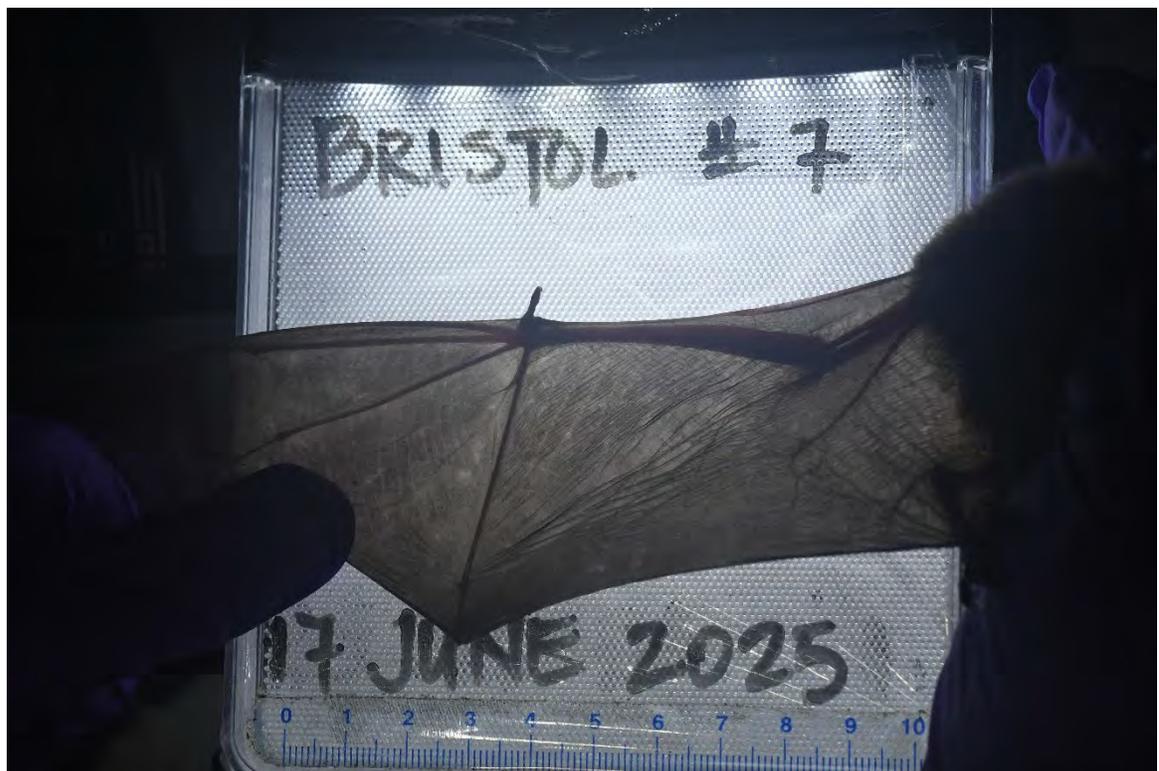
Photograph: 25 Capture #6, Right Wing transilluminated for WNS scar examination



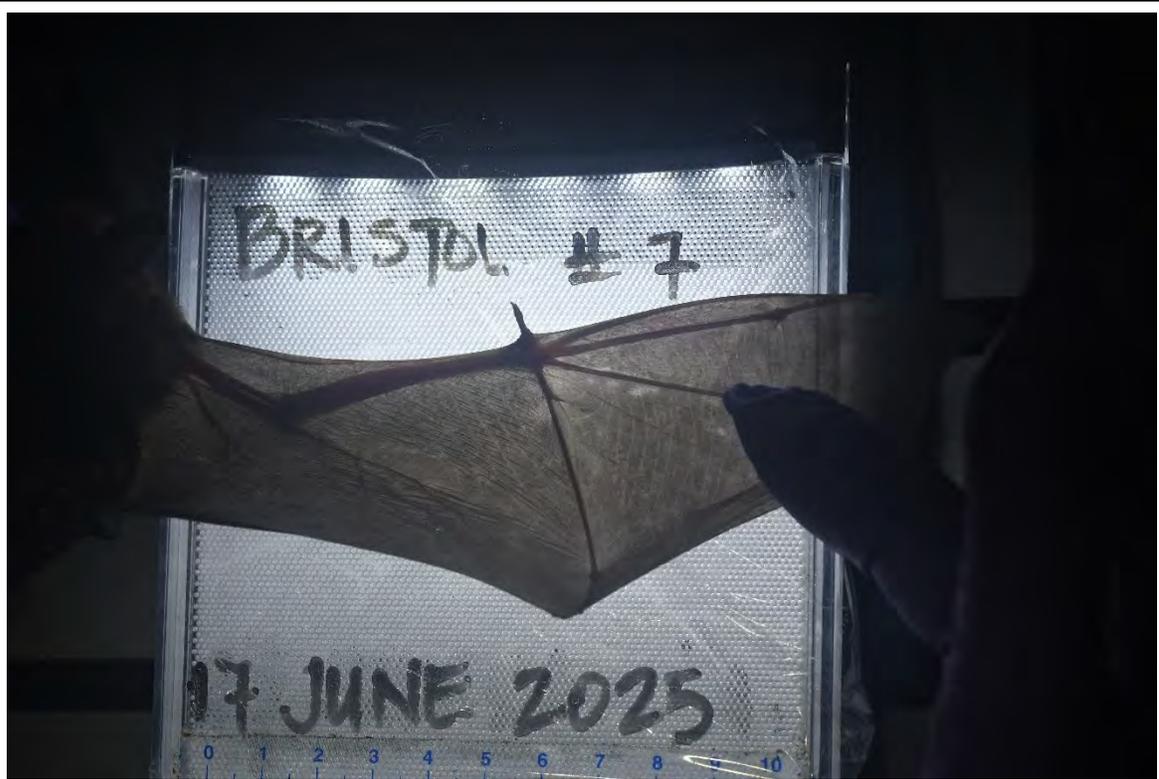
Photograph: 26 Capture #6, Left Wing transilluminated for WNS scar examination



Photograph: 27 Capture #7: Big Brown Bat (*Eptesicus fuscus*) adult female, pregnant



Photograph: 28 Capture #7, Right Wing transilluminated for WNS scar examination



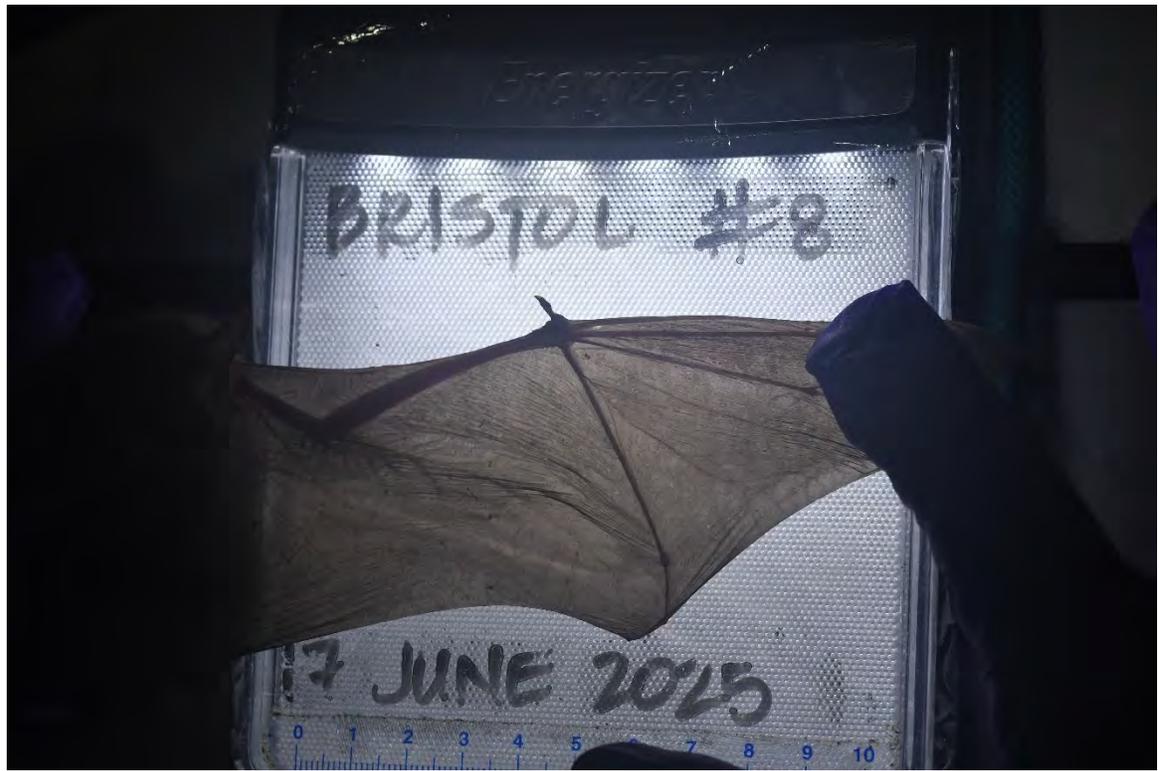
Photograph: 29 | Capture #7, Left Wing transilluminated for WNS scar examination



Photograph: 30 | Capture #8: Big Brown Bat (*Eptesicus fuscus*) adult female, pregnant



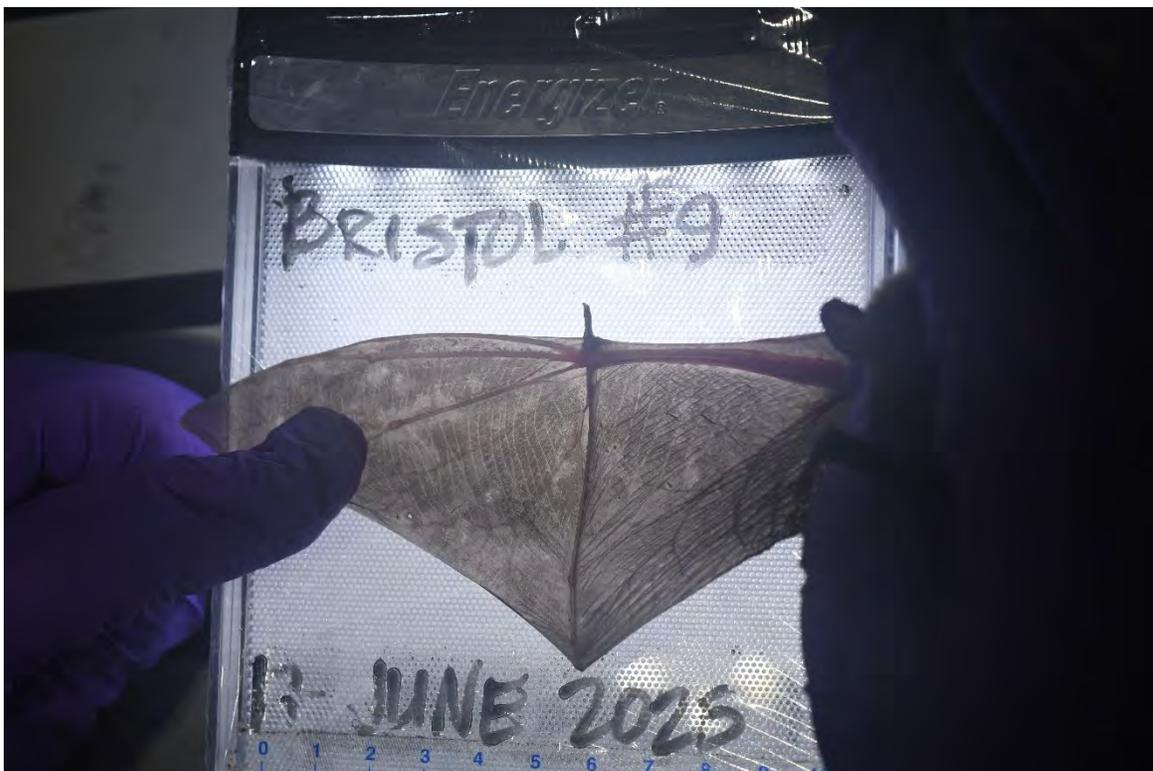
Photograph: 31 Capture #8, Right Wing transilluminated for WNS scar examination



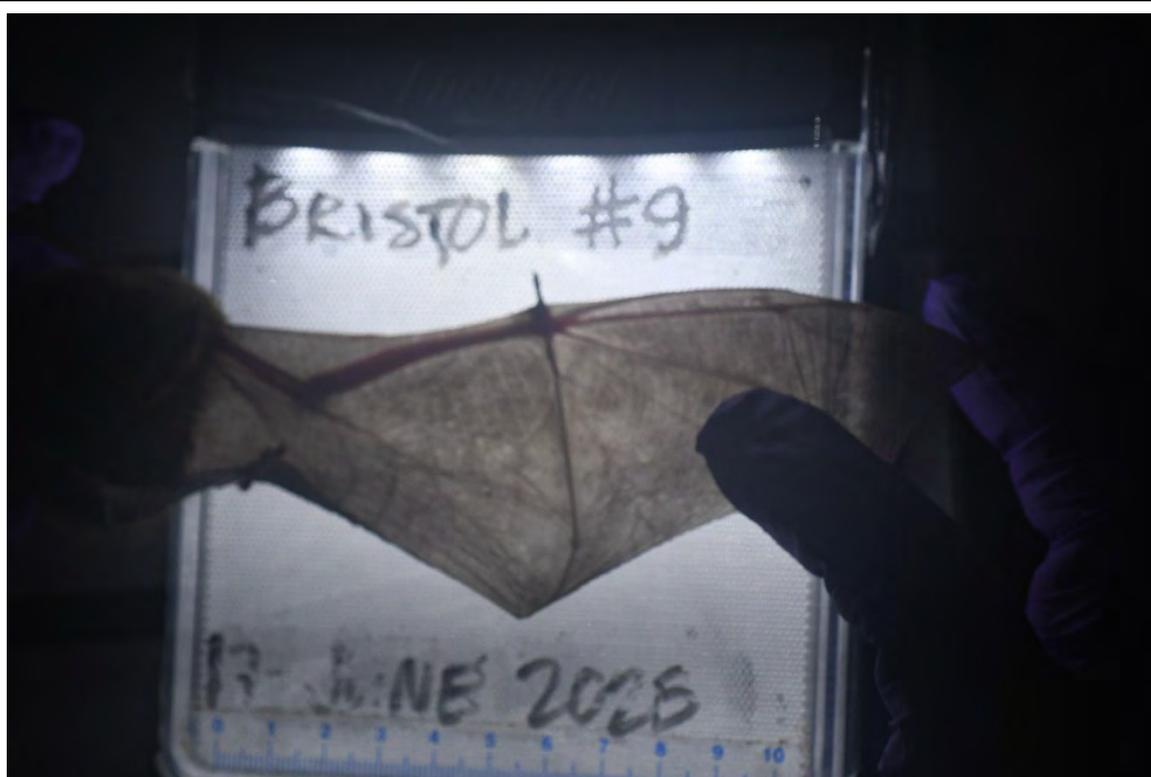
Photograph: 32 Capture #8, Left Wing transilluminated for WNS scar examination



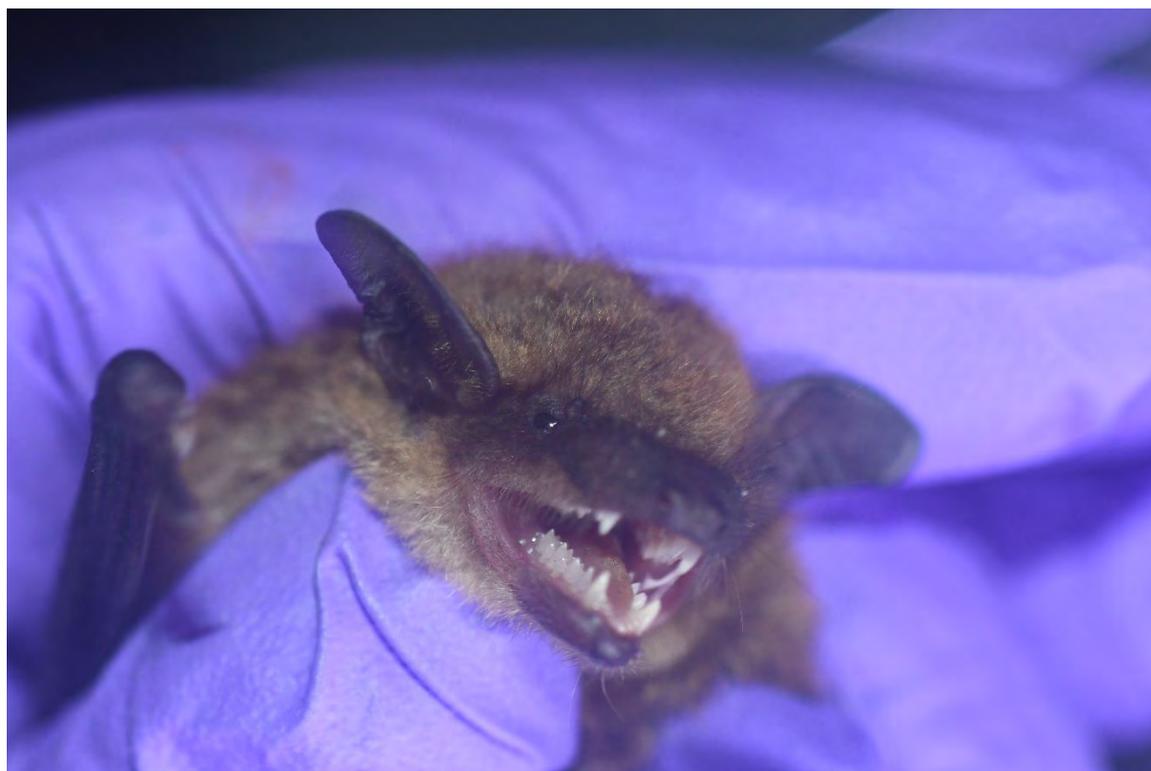
Photograph: 33 Capture #9: Big Brown Bat (*Eptesicus fuscus*) adult male, non-reproductive



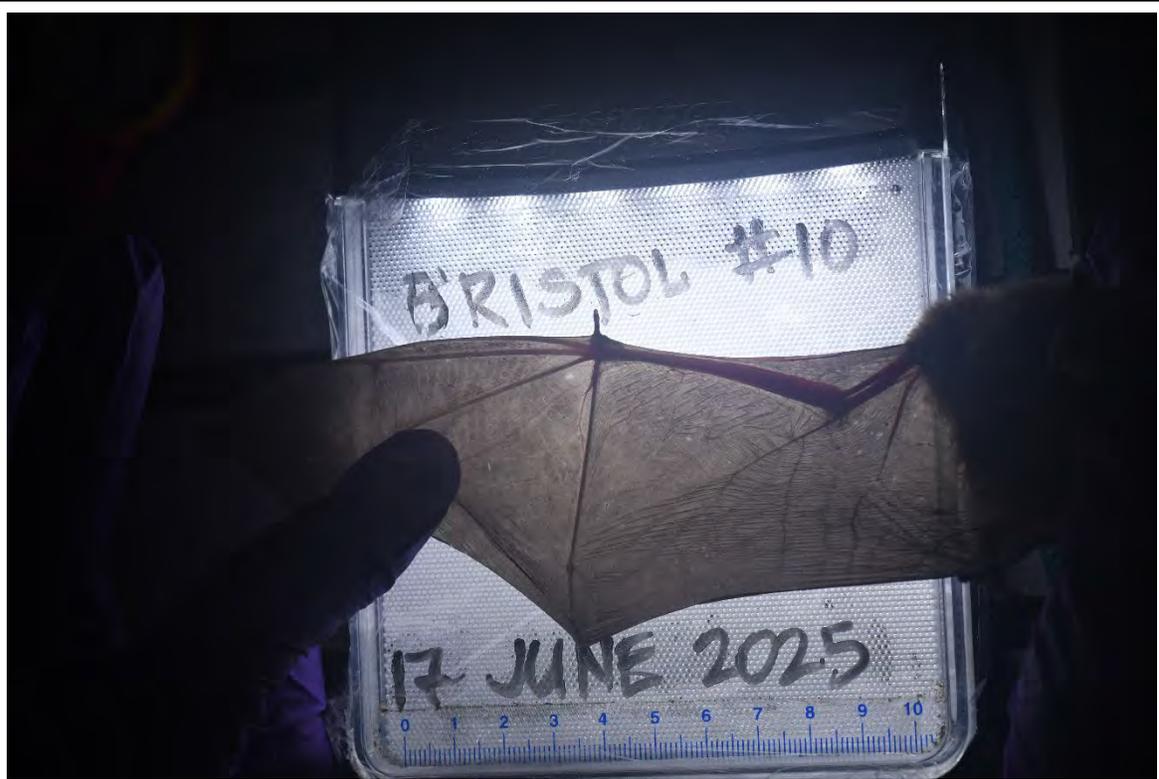
Photograph: 34 Capture #9, Right Wing transilluminated for WNS scar examination



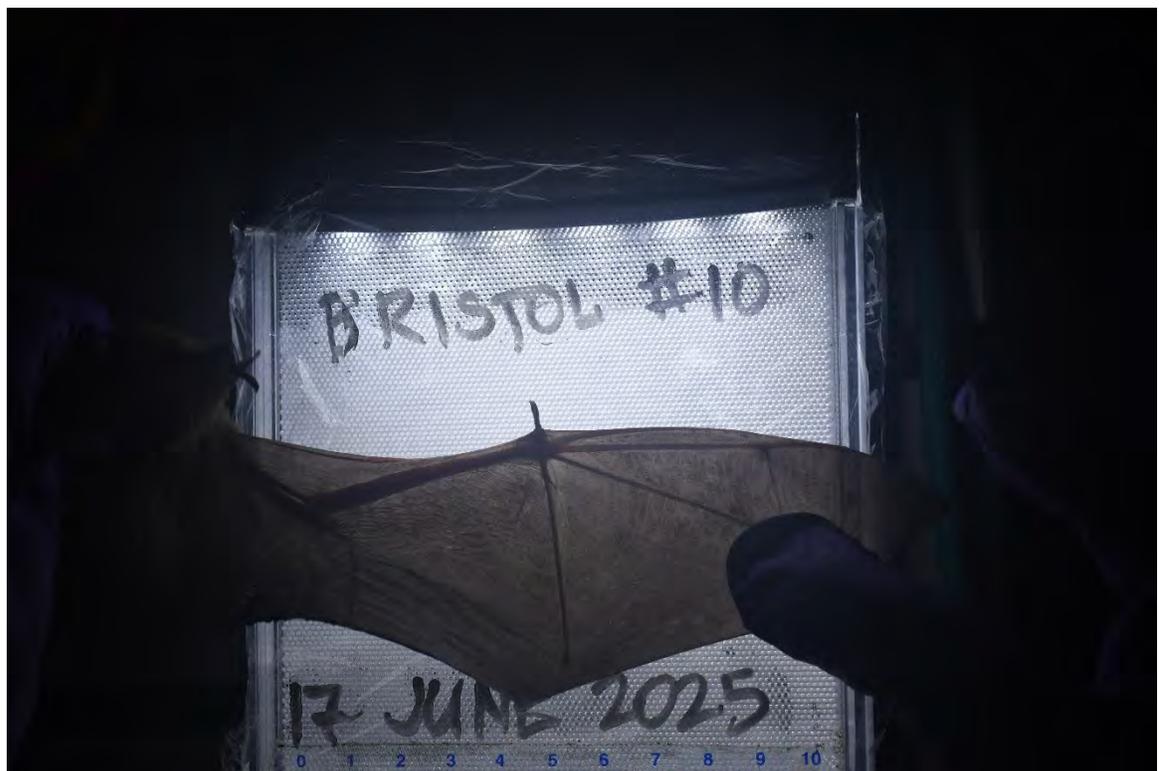
Photograph: 35 | Capture #9, Left Wing transilluminated for WNS scar examination



Photograph: 36 | Capture #10: Big Brown Bat (*Eptesicus fuscus*) adult female, pregnant



Photograph: 37 Capture #10, Right Wing transilluminated for WNS scar examination



Photograph: 38 Capture #10, Left Wing transilluminated for WNS scar examination



Photograph: 39 | 2856

| | |
|--|--|
| | |
| | |

APPENDIX E ACOUSTIC BAT SURVEY DATA SHEETS AND PHOTOS



BAT ACOUSTIC SURVEY DATA

Dates:

Deployment: 16 June Pick Up: 19 June

Project Name: Bristol Suffolk Tech Sample Site: _____

Position: 40.75209 °N 73.37408 °W Datum: WGS84

Location: SE Corner of Bristol-Suffolk site.

beneath oak savannah-like canopy

Habitat:

(a) Forest Canopy Opening (b) Near/Over Still Water (c) Wooded Hedgerow

(d) Recently Logged Forest (e) Road/Stream Corridor (f) Woodland Edge

Closed Canopy Parallel to wooded edge

Equipment:

____ Wildlife Acoustics SM4BAT w/SMM-U1 Microphone w/directional cone # _____

Wildlife Acoustics SM MiniBAT Unit # 1618

____ Other: _____

Mic. angle 0 ° to horiz Orientation 38 ° Ht. 3 m Dist to Clutter >10 m

Photos: Set Up: Reception Cone: Test Screen Start: Finish: _____

Program: Sunset to Sunrise Other: _____

Sunset: _____ EDT Sunrise: _____ EDT Moon Phase: 1Q 2Q/F 3Q N

Weather Night OK?: Night 1 2 3 4 _____ 5 _____ 6 _____

Resulting Data: _____ GB _____ Recordings

Notes:



Photograph: 1 | Acoustic Bat Detector Setup

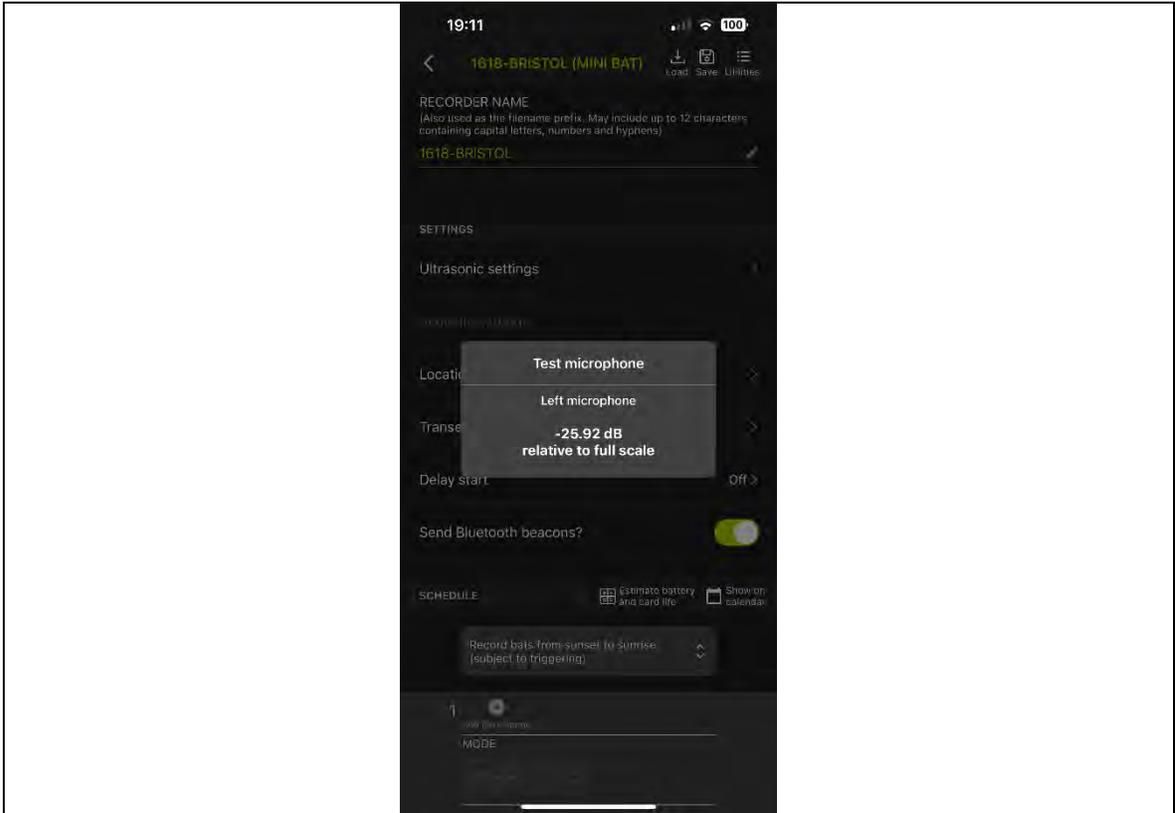


Photograph: 2 | Acoustic Bat Detector Reception Area



Edgewood
Environmental
Consulting, LLC

Attachment E – Acoustic Bat Survey Photographs
Bristol Suffolk Bat Mist-Net and Acoustic Survey
Town of Babylon, Suffolk County, New York
Project Number 2025-010



Photograph: 3 Calibration test of acoustic bat detector. Measurement >-32 means that detector microphone is functioning correctly.



APPENDIX F WEATHER DATA



| Detector Night | Date | Time | Temp (°F) | Dew Pt | Humidity | Wind Dir | Wind Spd | Gust Spd | Pressure | Precip | Condition |
|----------------|-----------|----------|-----------|--------|----------|----------|----------|----------|----------|--------|---------------|
| 1 | 6/16/2025 | 8:16 PM | 65 °F | 62 °F | 90 % | E | 8 mph | 0 mph | 30.08 in | 0.0 in | Cloudy |
| | 6/16/2025 | 8:51 PM | 65 °F | 62 °F | 90 % | E | 8 mph | 0 mph | 30.08 in | 0.0 in | Cloudy |
| | 6/16/2025 | 9:51 PM | 65 °F | 62 °F | 90 % | ENE | 9 mph | 0 mph | 30.08 in | 0.0 in | Cloudy |
| | 6/16/2025 | 10:51 PM | 65 °F | 63 °F | 93 % | E | 7 mph | 0 mph | 30.08 in | 0.0 in | Cloudy |
| | 6/16/2025 | 11:51 PM | 65 °F | 63 °F | 93 % | E | 7 mph | 0 mph | 30.07 in | 0.0 in | Light Drizzle |
| | 6/17/2025 | 12:51 AM | 65 °F | 63 °F | 93 % | E | 7 mph | 0 mph | 30.06 in | 0.0 in | Light Drizzle |
| | 6/17/2025 | 1:51 AM | 65 °F | 63 °F | 93 % | E | 5 mph | 0 mph | 30.05 in | 0.0 in | Cloudy |
| | 6/17/2025 | 2:51 AM | 65 °F | 62 °F | 90 % | E | 5 mph | 0 mph | 30.05 in | 0.0 in | Cloudy |
| 2 | 6/17/2025 | 7:51 PM | 65 °F | 64 °F | 97 % | ESE | 8 mph | 0 mph | 29.99 in | 0.0 in | Mist |
| | 6/17/2025 | 8:51 PM | 65 °F | 64 °F | 97 % | E | 7 mph | 0 mph | 29.99 in | 0.0 in | Mist |
| | 6/17/2025 | 9:51 PM | 64 °F | 64 °F | 100 % | ESE | 6 mph | 0 mph | 30.00 in | 0.0 in | Mist |
| | 6/17/2025 | 10:51 PM | 65 °F | 64 °F | 97 % | SE | 8 mph | 0 mph | 29.99 in | 0.0 in | Mist |
| | 6/17/2025 | 11:51 PM | 64 °F | 64 °F | 100 % | SE | 6 mph | 0 mph | 29.99 in | 0.0 in | Mist |
| | 6/18/2025 | 12:51 AM | 65 °F | 64 °F | 97 % | SSE | 5 mph | 0 mph | 29.99 in | 0.0 in | Fog |
| | 6/18/2025 | 1:51 AM | 65 °F | 64 °F | 97 % | SSE | 7 mph | 0 mph | 29.98 in | 0.0 in | Fog |
| | 6/18/2025 | 2:51 AM | 65 °F | 65 °F | 100 % | SE | 5 mph | 0 mph | 29.95 in | 0.0 in | Fog |
| 3 | 6/18/2025 | 8:51 PM | 72 °F | 69 °F | 91 % | ESE | 3 mph | 0 mph | 29.86 in | 0.0 in | Mostly Cloudy |
| | 6/18/2025 | 9:35 PM | 73 °F | 70 °F | 90 % | CALM | 0 mph | 0 mph | 29.87 in | 0.0 in | Cloudy |
| | 6/18/2025 | 9:51 PM | 73 °F | 69 °F | 87 % | CALM | 0 mph | 0 mph | 29.88 in | 0.0 in | Cloudy |
| | 6/18/2025 | 10:39 PM | 70 °F | 68 °F | 93 % | SSE | 6 mph | 0 mph | 29.87 in | 0.0 in | Mist |
| | 6/18/2025 | 10:51 PM | 69 °F | 68 °F | 96 % | SE | 6 mph | 0 mph | 29.86 in | 0.0 in | Fog |
| | 6/18/2025 | 11:12 PM | 69 °F | 69 °F | 100 % | CALM | 0 mph | 0 mph | 29.86 in | 0.0 in | Fog |
| | 6/18/2025 | 11:51 PM | 69 °F | 69 °F | 100 % | SW | 3 mph | 0 mph | 29.87 in | 0.0 in | Fog |
| | 6/19/2025 | 12:51 AM | 69 °F | 68 °F | 96 % | S | 5 mph | 0 mph | 29.85 in | 0.0 in | Fog |
| | 6/19/2025 | 1:44 AM | 68 °F | 67 °F | 96 % | CALM | 0 mph | 0 mph | 29.83 in | 0.0 in | Fog |
| | 6/19/2025 | 1:51 AM | 68 °F | 67 °F | 96 % | ESE | 3 mph | 0 mph | 29.83 in | 0.0 in | Fog |
| | 6/19/2025 | 1:54 AM | 68 °F | 67 °F | 96 % | ESE | 3 mph | 0 mph | 29.83 in | 0.0 in | Fog |
| | 6/19/2025 | 2:51 AM | 68 °F | 68 °F | 100 % | CALM | 0 mph | 0 mph | 29.84 in | 0.0 in | Fog |

Weather Data from Weather Underground: <https://www.wunderground.com/history/daily/us/ny/new-york-city/KJFK/date/2025-6-16>, Accessed 13 July 2025.

Weather data source: John F. Kennedy International Airport, Jamaica, NY

APPENDIX G ACOUSTIC MANUAL VETTING RESULTS



| OUT FILE FS | DATE | TIME | AUTO ID | MANUAL ID |
|--------------------------------------|-----------|----------|---------|-----------|
| 1618-BRISTOL_20250616_204854_000.wav | 6/16/2025 | 20:48:54 | EPTFUS | |
| 1618-BRISTOL_20250616_205707_000.wav | 6/16/2025 | 20:57:07 | EPTFUS | |
| 1618-BRISTOL_20250616_205832_000.wav | 6/16/2025 | 20:58:32 | EPTFUS | |
| 1618-BRISTOL_20250616_210152_000.wav | 6/16/2025 | 21:01:52 | EPTFUS | |
| 1618-BRISTOL_20250616_210212_000.wav | 6/16/2025 | 21:02:12 | EPTFUS | |
| 1618-BRISTOL_20250616_210242_000.wav | 6/16/2025 | 21:02:42 | EPTFUS | |
| 1618-BRISTOL_20250616_210552_000.wav | 6/16/2025 | 21:05:52 | EPTFUS | |
| 1618-BRISTOL_20250616_211255_000.wav | 6/16/2025 | 21:12:55 | EPTFUS | |
| 1618-BRISTOL_20250616_211358_000.wav | 6/16/2025 | 21:13:58 | EPTFUS | |
| 1618-BRISTOL_20250616_211413_000.wav | 6/16/2025 | 21:14:13 | EPTFUS | |
| 1618-BRISTOL_20250616_211445_000.wav | 6/16/2025 | 21:14:45 | EPTFUS | |
| 1618-BRISTOL_20250616_211501_000.wav | 6/16/2025 | 21:15:01 | EPTFUS | |
| 1618-BRISTOL_20250616_211636_000.wav | 6/16/2025 | 21:16:36 | EPTFUS | |
| 1618-BRISTOL_20250616_211747_000.wav | 6/16/2025 | 21:17:47 | EPTFUS | |
| 1618-BRISTOL_20250616_211802_000.wav | 6/16/2025 | 21:18:02 | EPTFUS | |
| 1618-BRISTOL_20250616_212011_000.wav | 6/16/2025 | 21:20:11 | EPTFUS | |
| 1618-BRISTOL_20250616_212026_000.wav | 6/16/2025 | 21:20:26 | EPTFUS | |
| 1618-BRISTOL_20250616_212135_000.wav | 6/16/2025 | 21:21:35 | EPTFUS | |
| 1618-BRISTOL_20250616_212203_000.wav | 6/16/2025 | 21:22:03 | EPTFUS | |
| 1618-BRISTOL_20250616_212302_000.wav | 6/16/2025 | 21:23:02 | EPTFUS | |
| 1618-BRISTOL_20250616_212322_000.wav | 6/16/2025 | 21:23:22 | EPTFUS | |
| 1618-BRISTOL_20250616_212346_000.wav | 6/16/2025 | 21:23:46 | EPTFUS | |
| 1618-BRISTOL_20250616_212357_000.wav | 6/16/2025 | 21:23:57 | EPTFUS | |
| 1618-BRISTOL_20250616_212438_000.wav | 6/16/2025 | 21:24:38 | EPTFUS | |
| 1618-BRISTOL_20250616_212453_000.wav | 6/16/2025 | 21:24:53 | EPTFUS | |
| 1618-BRISTOL_20250616_212541_000.wav | 6/16/2025 | 21:25:41 | EPTFUS | |
| 1618-BRISTOL_20250616_213600_000.wav | 6/16/2025 | 21:36:00 | EPTFUS | |
| 1618-BRISTOL_20250616_214044_000.wav | 6/16/2025 | 21:40:44 | EPTFUS | |
| 1618-BRISTOL_20250616_214214_000.wav | 6/16/2025 | 21:42:14 | EPTFUS | |
| 1618-BRISTOL_20250616_214412_000.wav | 6/16/2025 | 21:44:12 | EPTFUS | |
| 1618-BRISTOL_20250616_214427_000.wav | 6/16/2025 | 21:44:27 | EPTFUS | |
| 1618-BRISTOL_20250616_221144_000.wav | 6/16/2025 | 22:11:44 | EPTFUS | |
| 1618-BRISTOL_20250616_221500_000.wav | 6/16/2025 | 22:15:00 | EPTFUS | |

| | | | |
|--------------------------------------|-----------|----------|--------|
| 1618-BRISTOL_20250616_221511_000.wav | 6/16/2025 | 22:15:11 | EPTFUS |
| 1618-BRISTOL_20250616_222541_000.wav | 6/16/2025 | 22:25:41 | EPTFUS |
| 1618-BRISTOL_20250616_224345_000.wav | 6/16/2025 | 22:43:45 | EPTFUS |
| 1618-BRISTOL_20250616_224419_000.wav | 6/16/2025 | 22:44:19 | EPTFUS |
| 1618-BRISTOL_20250616_224734_000.wav | 6/16/2025 | 22:47:34 | EPTFUS |
| 1618-BRISTOL_20250616_224852_000.wav | 6/16/2025 | 22:48:52 | EPTFUS |
| 1618-BRISTOL_20250616_230710_000.wav | 6/16/2025 | 23:07:10 | EPTFUS |
| 1618-BRISTOL_20250616_233118_000.wav | 6/16/2025 | 23:31:18 | EPTFUS |
| 1618-BRISTOL_20250616_233138_000.wav | 6/16/2025 | 23:31:38 | EPTFUS |
| 1618-BRISTOL_20250616_234434_000.wav | 6/16/2025 | 23:44:34 | EPTFUS |
| 1618-BRISTOL_20250617_000741_000.wav | 6/17/2025 | 0:07:41 | EPTFUS |
| 1618-BRISTOL_20250617_001224_000.wav | 6/17/2025 | 0:12:24 | EPTFUS |
| 1618-BRISTOL_20250617_001330_000.wav | 6/17/2025 | 0:13:30 | EPTFUS |
| 1618-BRISTOL_20250617_001348_000.wav | 6/17/2025 | 0:13:48 | EPTFUS |
| 1618-BRISTOL_20250617_001400_000.wav | 6/17/2025 | 0:14:00 | EPTFUS |
| 1618-BRISTOL_20250617_001414_000.wav | 6/17/2025 | 0:14:14 | EPTFUS |
| 1618-BRISTOL_20250617_001427_000.wav | 6/17/2025 | 0:14:27 | EPTFUS |
| 1618-BRISTOL_20250617_001443_000.wav | 6/17/2025 | 0:14:43 | EPTFUS |
| 1618-BRISTOL_20250617_001505_000.wav | 6/17/2025 | 0:15:05 | EPTFUS |
| 1618-BRISTOL_20250617_001518_000.wav | 6/17/2025 | 0:15:18 | EPTFUS |
| 1618-BRISTOL_20250617_001532_000.wav | 6/17/2025 | 0:15:32 | EPTFUS |
| 1618-BRISTOL_20250617_001545_000.wav | 6/17/2025 | 0:15:45 | EPTFUS |
| 1618-BRISTOL_20250617_001557_000.wav | 6/17/2025 | 0:15:57 | EPTFUS |
| 1618-BRISTOL_20250617_001612_000.wav | 6/17/2025 | 0:16:12 | EPTFUS |
| 1618-BRISTOL_20250617_001622_000.wav | 6/17/2025 | 0:16:22 | EPTFUS |
| 1618-BRISTOL_20250617_001635_000.wav | 6/17/2025 | 0:16:35 | EPTFUS |
| 1618-BRISTOL_20250617_001648_000.wav | 6/17/2025 | 0:16:48 | EPTFUS |
| 1618-BRISTOL_20250617_001705_000.wav | 6/17/2025 | 0:17:05 | EPTFUS |
| 1618-BRISTOL_20250617_001721_000.wav | 6/17/2025 | 0:17:21 | EPTFUS |
| 1618-BRISTOL_20250617_003313_000.wav | 6/17/2025 | 0:33:13 | EPTFUS |
| 1618-BRISTOL_20250617_004319_000.wav | 6/17/2025 | 0:43:19 | EPTFUS |
| 1618-BRISTOL_20250617_012216_000.wav | 6/17/2025 | 1:22:16 | EPTFUS |
| 1618-BRISTOL_20250617_012233_000.wav | 6/17/2025 | 1:22:33 | EPTFUS |
| 1618-BRISTOL_20250617_012243_000.wav | 6/17/2025 | 1:22:43 | EPTFUS |

| | | | | |
|--------------------------------------|-----------|----------|--------|--|
| 1618-BRISTOL_20250617_012314_000.wav | 6/17/2025 | 1:23:14 | EPTFUS | |
| 1618-BRISTOL_20250617_012329_000.wav | 6/17/2025 | 1:23:29 | EPTFUS | |
| 1618-BRISTOL_20250617_012344_000.wav | 6/17/2025 | 1:23:44 | EPTFUS | |
| 1618-BRISTOL_20250617_012359_000.wav | 6/17/2025 | 1:23:59 | EPTFUS | |
| 1618-BRISTOL_20250617_012928_000.wav | 6/17/2025 | 1:29:28 | EPTFUS | |
| 1618-BRISTOL_20250617_012953_000.wav | 6/17/2025 | 1:29:53 | EPTFUS | |
| 1618-BRISTOL_20250617_014114_000.wav | 6/17/2025 | 1:41:14 | EPTFUS | |
| 1618-BRISTOL_20250617_021240_000.wav | 6/17/2025 | 2:12:40 | EPTFUS | |
| 1618-BRISTOL_20250617_040523_000.wav | 6/17/2025 | 4:05:23 | EPTFUS | |
| 1618-BRISTOL_20250617_045221_000.wav | 6/17/2025 | 4:52:21 | EPTFUS | |
| 1618-BRISTOL_20250616_210309_000.wav | 6/16/2025 | 21:03:09 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_210324_000.wav | 6/16/2025 | 21:03:24 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_210343_000.wav | 6/16/2025 | 21:03:43 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_210352_000.wav | 6/16/2025 | 21:03:52 | LASBOR | NOID - TOO FEW PULSES |
| 1618-BRISTOL_20250616_210400_000.wav | 6/16/2025 | 21:04:00 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211235_000.wav | 6/16/2025 | 21:12:35 | LASBOR | NOID - FAINT/POOR QUALITY CALL |
| 1618-BRISTOL_20250616_212508_000.wav | 6/16/2025 | 21:25:08 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212517_000.wav | 6/16/2025 | 21:25:17 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212808_000.wav | 6/16/2025 | 21:28:08 | LASBOR | NOID - FAINT/POOR QUALITY CALL |
| 1618-BRISTOL_20250616_213034_000.wav | 6/16/2025 | 21:30:34 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_221420_000.wav | 6/16/2025 | 22:14:20 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_221648_000.wav | 6/16/2025 | 22:16:48 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_231814_000.wav | 6/16/2025 | 23:18:14 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_002935_000.wav | 6/17/2025 | 0:29:35 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_013108_000.wav | 6/17/2025 | 1:31:08 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_013223_000.wav | 6/17/2025 | 1:32:23 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_013322_000.wav | 6/17/2025 | 1:33:22 | LASBOR | NOID - FAINT/POOR QUALITY CALL |
| 1618-BRISTOL_20250617_014216_000.wav | 6/17/2025 | 1:42:16 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_021158_000.wav | 6/17/2025 | 2:11:58 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_022210_000.wav | 6/17/2025 | 2:22:10 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_022506_000.wav | 6/17/2025 | 2:25:06 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_213636_000.wav | 6/16/2025 | 21:36:36 | LASCIN | |
| 1618-BRISTOL_20250616_214628_000.wav | 6/16/2025 | 21:46:28 | LASCIN | |
| 1618-BRISTOL_20250616_214843_000.wav | 6/16/2025 | 21:48:43 | LASCIN | |

| | | | | |
|--------------------------------------|-----------|----------|--------|--|
| 1618-BRISTOL_20250616_221028_000.wav | 6/16/2025 | 22:10:28 | LASCIN | |
| 1618-BRISTOL_20250616_225638_000.wav | 6/16/2025 | 22:56:38 | LASCIN | |
| 1618-BRISTOL_20250617_002712_000.wav | 6/17/2025 | 0:27:12 | LASCIN | |
| 1618-BRISTOL_20250617_005522_000.wav | 6/17/2025 | 0:55:22 | LASCIN | |
| 1618-BRISTOL_20250617_010209_000.wav | 6/17/2025 | 1:02:09 | LASCIN | |
| 1618-BRISTOL_20250617_010602_000.wav | 6/17/2025 | 1:06:02 | LASCIN | |
| 1618-BRISTOL_20250617_010848_000.wav | 6/17/2025 | 1:08:48 | LASCIN | |
| 1618-BRISTOL_20250617_011304_000.wav | 6/17/2025 | 1:13:04 | LASCIN | |
| 1618-BRISTOL_20250617_025015_000.wav | 6/17/2025 | 2:50:15 | LASCIN | |
| 1618-BRISTOL_20250617_025511_000.wav | 6/17/2025 | 2:55:11 | LASCIN | |
| 1618-BRISTOL_20250617_025837_000.wav | 6/17/2025 | 2:58:37 | LASCIN | |
| 1618-BRISTOL_20250617_032852_000.wav | 6/17/2025 | 3:28:52 | LASCIN | |
| 1618-BRISTOL_20250616_235416_000.wav | 6/16/2025 | 23:54:16 | LASNOC | |
| 1618-BRISTOL_20250617_043549_000.wav | 6/17/2025 | 4:35:49 | LASNOC | |
| 1618-BRISTOL_20250616_210335_000.wav | 6/16/2025 | 21:03:35 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_210420_000.wav | 6/16/2025 | 21:04:20 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_210438_000.wav | 6/16/2025 | 21:04:38 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_210820_000.wav | 6/16/2025 | 21:08:20 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_210833_000.wav | 6/16/2025 | 21:08:33 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_210844_000.wav | 6/16/2025 | 21:08:44 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_210855_000.wav | 6/16/2025 | 21:08:55 | MYOLUC | NOID - FAINT/POOR QUALITY CALL |
| 1618-BRISTOL_20250616_210903_000.wav | 6/16/2025 | 21:09:03 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_210924_000.wav | 6/16/2025 | 21:09:24 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_210939_000.wav | 6/16/2025 | 21:09:39 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211005_000.wav | 6/16/2025 | 21:10:05 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211015_000.wav | 6/16/2025 | 21:10:15 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211030_000.wav | 6/16/2025 | 21:10:30 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211035_000.wav | 6/16/2025 | 21:10:35 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211053_000.wav | 6/16/2025 | 21:10:53 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211108_000.wav | 6/16/2025 | 21:11:08 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211117_000.wav | 6/16/2025 | 21:11:17 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211134_000.wav | 6/16/2025 | 21:11:34 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211218_000.wav | 6/16/2025 | 21:12:18 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211227_000.wav | 6/16/2025 | 21:12:27 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |

| | | | | |
|--------------------------------------|-----------|----------|--------|--|
| 1618-BRISTOL_20250616_211240_000.wav | 6/16/2025 | 21:12:40 | MYOLUC | 2 SPP: LASBOR + EPTFUS |
| 1618-BRISTOL_20250616_211307_000.wav | 6/16/2025 | 21:13:07 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211327_000.wav | 6/16/2025 | 21:13:27 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211343_000.wav | 6/16/2025 | 21:13:43 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211431_000.wav | 6/16/2025 | 21:14:31 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211508_000.wav | 6/16/2025 | 21:15:08 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211524_000.wav | 6/16/2025 | 21:15:24 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211543_000.wav | 6/16/2025 | 21:15:43 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211550_000.wav | 6/16/2025 | 21:15:50 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211612_000.wav | 6/16/2025 | 21:16:12 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211623_000.wav | 6/16/2025 | 21:16:23 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211654_000.wav | 6/16/2025 | 21:16:54 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211712_000.wav | 6/16/2025 | 21:17:12 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211733_000.wav | 6/16/2025 | 21:17:33 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211740_000.wav | 6/16/2025 | 21:17:40 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211813_000.wav | 6/16/2025 | 21:18:13 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211824_000.wav | 6/16/2025 | 21:18:24 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211834_000.wav | 6/16/2025 | 21:18:34 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211847_000.wav | 6/16/2025 | 21:18:47 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211855_000.wav | 6/16/2025 | 21:18:55 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211902_000.wav | 6/16/2025 | 21:19:02 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211910_000.wav | 6/16/2025 | 21:19:10 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211927_000.wav | 6/16/2025 | 21:19:27 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211938_000.wav | 6/16/2025 | 21:19:38 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211950_000.wav | 6/16/2025 | 21:19:50 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212035_000.wav | 6/16/2025 | 21:20:35 | MYOLUC | MULTIPLE BATS - NOID |
| 1618-BRISTOL_20250616_212047_000.wav | 6/16/2025 | 21:20:47 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212104_000.wav | 6/16/2025 | 21:21:04 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212120_000.wav | 6/16/2025 | 21:21:20 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212150_000.wav | 6/16/2025 | 21:21:50 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212214_000.wav | 6/16/2025 | 21:22:14 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212231_000.wav | 6/16/2025 | 21:22:31 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212246_000.wav | 6/16/2025 | 21:22:46 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212316_000.wav | 6/16/2025 | 21:23:16 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |

| | | | | |
|--------------------------------------|-----------|----------|--------|--|
| 1618-BRISTOL_20250616_212338_000.wav | 6/16/2025 | 21:23:38 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212414_000.wav | 6/16/2025 | 21:24:14 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212525_000.wav | 6/16/2025 | 21:25:25 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212607_000.wav | 6/16/2025 | 21:26:07 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212622_000.wav | 6/16/2025 | 21:26:22 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212702_000.wav | 6/16/2025 | 21:27:02 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212714_000.wav | 6/16/2025 | 21:27:14 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212731_000.wav | 6/16/2025 | 21:27:31 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212741_000.wav | 6/16/2025 | 21:27:41 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212758_000.wav | 6/16/2025 | 21:27:58 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212817_000.wav | 6/16/2025 | 21:28:17 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212835_000.wav | 6/16/2025 | 21:28:35 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212847_000.wav | 6/16/2025 | 21:28:47 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212858_000.wav | 6/16/2025 | 21:28:58 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212918_000.wav | 6/16/2025 | 21:29:18 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_212926_000.wav | 6/16/2025 | 21:29:26 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_215433_000.wav | 6/16/2025 | 21:54:33 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_215503_000.wav | 6/16/2025 | 21:55:03 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_215520_000.wav | 6/16/2025 | 21:55:20 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_215531_000.wav | 6/16/2025 | 21:55:31 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_215554_000.wav | 6/16/2025 | 21:55:54 | MYOLUC | MYOLUC - F38-42 kHz; FM; Sc 60-110(<80 diag) |
| 1618-BRISTOL_20250616_215608_000.wav | 6/16/2025 | 21:56:08 | MYOLUC | MYOLUC - F38-42 kHz; FM; Sc 60-110(<80 diag) |
| 1618-BRISTOL_20250616_215639_000.wav | 6/16/2025 | 21:56:39 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_215655_000.wav | 6/16/2025 | 21:56:55 | MYOLUC | MYOLUC - F38-42 kHz; FM; Sc 60-110(<80 diag) |
| 1618-BRISTOL_20250616_215751_000.wav | 6/16/2025 | 21:57:51 | MYOLUC | MYOLUC - F38-42 kHz; FM; Sc 60-110(<80 diag) |
| 1618-BRISTOL_20250616_215810_000.wav | 6/16/2025 | 21:58:10 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_215825_000.wav | 6/16/2025 | 21:58:25 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_221617_000.wav | 6/16/2025 | 22:16:17 | MYOLUC | NOID - TOO FEW PULSES |
| 1618-BRISTOL_20250616_221623_000.wav | 6/16/2025 | 22:16:23 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_224911_000.wav | 6/16/2025 | 22:49:11 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_224923_000.wav | 6/16/2025 | 22:49:23 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_224933_000.wav | 6/16/2025 | 22:49:33 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_225224_000.wav | 6/16/2025 | 22:52:24 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_225233_000.wav | 6/16/2025 | 22:52:33 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |

| | | | | |
|--------------------------------------|-----------|----------|--------|--|
| 1618-BRISTOL_20250616_225243_000.wav | 6/16/2025 | 22:52:43 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_231309_000.wav | 6/16/2025 | 23:13:09 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_231325_000.wav | 6/16/2025 | 23:13:25 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_231342_000.wav | 6/16/2025 | 23:13:42 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_231353_000.wav | 6/16/2025 | 23:13:53 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_231410_000.wav | 6/16/2025 | 23:14:10 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_231432_000.wav | 6/16/2025 | 23:14:32 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_231451_000.wav | 6/16/2025 | 23:14:51 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_231523_000.wav | 6/16/2025 | 23:15:23 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_231930_000.wav | 6/16/2025 | 23:19:30 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_231942_000.wav | 6/16/2025 | 23:19:42 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_002523_000.wav | 6/17/2025 | 0:25:23 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_002544_000.wav | 6/17/2025 | 0:25:44 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_002602_000.wav | 6/17/2025 | 0:26:02 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_002631_000.wav | 6/17/2025 | 0:26:31 | MYOLUC | NOID - NOT SEARCH PHASE |
| 1618-BRISTOL_20250617_002645_000.wav | 6/17/2025 | 0:26:45 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_002703_000.wav | 6/17/2025 | 0:27:03 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_002726_000.wav | 6/17/2025 | 0:27:26 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_002743_000.wav | 6/17/2025 | 0:27:43 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_002823_000.wav | 6/17/2025 | 0:28:23 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_002913_000.wav | 6/17/2025 | 0:29:13 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_002928_000.wav | 6/17/2025 | 0:29:28 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_002954_000.wav | 6/17/2025 | 0:29:54 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_012848_000.wav | 6/17/2025 | 1:28:48 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_013231_000.wav | 6/17/2025 | 1:32:31 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_013240_000.wav | 6/17/2025 | 1:32:40 | MYOLUC | NOID - FAINT/POOR QUALITY CALL |
| 1618-BRISTOL_20250617_013302_000.wav | 6/17/2025 | 1:33:02 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_014952_000.wav | 6/17/2025 | 1:49:52 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_015431_000.wav | 6/17/2025 | 1:54:31 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_022218_000.wav | 6/17/2025 | 2:22:18 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_022318_000.wav | 6/17/2025 | 2:23:18 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_022342_000.wav | 6/17/2025 | 2:23:42 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_022400_000.wav | 6/17/2025 | 2:24:00 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_022527_000.wav | 6/17/2025 | 2:25:27 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |

| | | | | |
|--------------------------------------|-----------|----------|--------|--|
| 1618-BRISTOL_20250616_231801_000.wav | 6/16/2025 | 23:18:01 | MYOSEP | MYOLUC - F38-42 kHz; FM; Sc 60-110(<80 diag) |
| 1618-BRISTOL_20250616_211151_000.wav | 6/16/2025 | 21:11:51 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_211210_000.wav | 6/16/2025 | 21:12:10 | MYOSOD | NOID - NOT SEARCH PHASE |
| 1618-BRISTOL_20250616_212430_000.wav | 6/16/2025 | 21:24:30 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_215448_000.wav | 6/16/2025 | 21:54:48 | MYOSOD | 2 SPP: LASNOC + LASBOR |
| 1618-BRISTOL_20250616_215539_000.wav | 6/16/2025 | 21:55:39 | MYOSOD | MYOLUC - F38-42 kHz; FM; Sc 60-110(<80 diag) |
| 1618-BRISTOL_20250616_215600_000.wav | 6/16/2025 | 21:56:00 | MYOSOD | MYOLUC - F38-42 kHz; FM; Sc 60-110(<80 diag) |
| 1618-BRISTOL_20250616_215615_000.wav | 6/16/2025 | 21:56:15 | MYOSOD | MYOLUC - F38-42 kHz; FM; Sc 60-110(<80 diag) |
| 1618-BRISTOL_20250616_215622_000.wav | 6/16/2025 | 21:56:22 | MYOSOD | MYOLUC - F38-42 kHz; FM; Sc 60-110(<80 diag) |
| 1618-BRISTOL_20250616_215629_000.wav | 6/16/2025 | 21:56:29 | MYOSOD | NOID - NOT SEARCH PHASE |
| 1618-BRISTOL_20250616_215711_000.wav | 6/16/2025 | 21:57:11 | MYOSOD | MYOLUC - F38-42 kHz; FM; Sc 60-110(<80 diag) |
| 1618-BRISTOL_20250616_215727_000.wav | 6/16/2025 | 21:57:27 | MYOSOD | MYOLUC - F38-42 kHz; FM; Sc 60-110(<80 diag) |
| 1618-BRISTOL_20250616_221432_000.wav | 6/16/2025 | 22:14:32 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_231509_000.wav | 6/16/2025 | 23:15:09 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_231753_000.wav | 6/16/2025 | 23:17:53 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_002538_000.wav | 6/17/2025 | 0:25:38 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_012900_000.wav | 6/17/2025 | 1:29:00 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_013119_000.wav | 6/17/2025 | 1:31:19 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250616_234904_000.wav | 6/16/2025 | 23:49:04 | NoID | EPTFUS - FM call; Fc >26-33kHz; Fmax >65 |
| 1618-BRISTOL_20250617_002944_000.wav | 6/17/2025 | 0:29:44 | NoID | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_025520_000.wav | 6/17/2025 | 2:55:20 | Noise | Not a Bat |
| 1618-BRISTOL_20250617_032848_000.wav | 6/17/2025 | 3:28:48 | Noise | LASCIN - CF Call Fc<22kHz; Fc variable |
| 1618-BRISTOL_20250616_221831_000.wav | 6/16/2025 | 22:18:31 | PERSUB | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |

| OUT FILE FS | DATE | TIME | AUTO ID* | MANUAL ID |
|--------------------------------------|-----------|----------|----------|-----------|
| 1618-BRISTOL_20250617_212150_000.wav | 6/17/2025 | 21:21:50 | EPTFUS | |
| 1618-BRISTOL_20250617_212240_000.wav | 6/17/2025 | 21:22:40 | EPTFUS | |
| 1618-BRISTOL_20250617_212335_000.wav | 6/17/2025 | 21:23:35 | EPTFUS | |
| 1618-BRISTOL_20250617_211124_000.wav | 6/17/2025 | 21:11:24 | EPTFUS | |
| 1618-BRISTOL_20250617_211757_000.wav | 6/17/2025 | 21:17:57 | EPTFUS | |
| 1618-BRISTOL_20250617_212034_000.wav | 6/17/2025 | 21:20:34 | EPTFUS | |
| 1618-BRISTOL_20250617_223145_000.wav | 6/17/2025 | 22:31:45 | EPTFUS | |
| 1618-BRISTOL_20250617_204140_000.wav | 6/17/2025 | 20:41:40 | EPTFUS | |
| 1618-BRISTOL_20250617_204200_000.wav | 6/17/2025 | 20:42:00 | EPTFUS | |
| 1618-BRISTOL_20250617_211825_000.wav | 6/17/2025 | 21:18:25 | EPTFUS | |
| 1618-BRISTOL_20250617_211536_000.wav | 6/17/2025 | 21:15:36 | EPTFUS | |
| 1618-BRISTOL_20250617_212048_000.wav | 6/17/2025 | 21:20:48 | EPTFUS | |
| 1618-BRISTOL_20250617_230026_000.wav | 6/17/2025 | 23:00:26 | EPTFUS | |
| 1618-BRISTOL_20250617_213654_000.wav | 6/17/2025 | 21:36:54 | EPTFUS | |
| 1618-BRISTOL_20250617_212213_000.wav | 6/17/2025 | 21:22:13 | EPTFUS | |
| 1618-BRISTOL_20250617_212301_000.wav | 6/17/2025 | 21:23:01 | EPTFUS | |
| 1618-BRISTOL_20250617_203959_000.wav | 6/17/2025 | 20:39:59 | EPTFUS | |
| 1618-BRISTOL_20250617_204216_000.wav | 6/17/2025 | 20:42:16 | EPTFUS | |
| 1618-BRISTOL_20250617_211048_000.wav | 6/17/2025 | 21:10:48 | EPTFUS | |
| 1618-BRISTOL_20250617_212012_000.wav | 6/17/2025 | 21:20:12 | EPTFUS | |
| 1618-BRISTOL_20250617_212110_000.wav | 6/17/2025 | 21:21:10 | EPTFUS | |
| 1618-BRISTOL_20250617_213756_000.wav | 6/17/2025 | 21:37:56 | EPTFUS | |
| 1618-BRISTOL_20250617_212316_000.wav | 6/17/2025 | 21:23:16 | EPTFUS | |
| 1618-BRISTOL_20250617_211921_000.wav | 6/17/2025 | 21:19:21 | EPTFUS | |
| 1618-BRISTOL_20250617_211238_000.wav | 6/17/2025 | 21:12:38 | EPTFUS | |
| 1618-BRISTOL_20250618_021924_000.wav | 6/18/2025 | 2:19:24 | EPTFUS | |
| 1618-BRISTOL_20250617_214634_000.wav | 6/17/2025 | 21:46:34 | EPTFUS | |
| 1618-BRISTOL_20250617_212405_000.wav | 6/17/2025 | 21:24:05 | EPTFUS | |
| 1618-BRISTOL_20250618_021938_000.wav | 6/18/2025 | 2:19:38 | EPTFUS | |
| 1618-BRISTOL_20250617_212440_000.wav | 6/17/2025 | 21:24:40 | EPTFUS | |
| 1618-BRISTOL_20250617_212502_000.wav | 6/17/2025 | 21:25:02 | EPTFUS | |
| 1618-BRISTOL_20250617_212133_000.wav | 6/17/2025 | 21:21:33 | EPTFUS | |
| 1618-BRISTOL_20250617_222138_000.wav | 6/17/2025 | 22:21:38 | EPTFUS | |

| | | | |
|--------------------------------------|-----------|----------|--------|
| 1618-BRISTOL_20250618_004033_000.wav | 6/18/2025 | 0:40:33 | EPTFUS |
| 1618-BRISTOL_20250617_220755_000.wav | 6/17/2025 | 22:07:55 | EPTFUS |
| 1618-BRISTOL_20250617_211737_000.wav | 6/17/2025 | 21:17:37 | EPTFUS |
| 1618-BRISTOL_20250617_205746_000.wav | 6/17/2025 | 20:57:46 | EPTFUS |
| 1618-BRISTOL_20250617_231110_000.wav | 6/17/2025 | 23:11:10 | EPTFUS |
| 1618-BRISTOL_20250617_214340_000.wav | 6/17/2025 | 21:43:40 | EPTFUS |
| 1618-BRISTOL_20250617_211913_000.wav | 6/17/2025 | 21:19:13 | EPTFUS |
| 1618-BRISTOL_20250617_210902_000.wav | 6/17/2025 | 21:09:02 | EPTFUS |
| 1618-BRISTOL_20250617_215700_000.wav | 6/17/2025 | 21:57:00 | EPTFUS |
| 1618-BRISTOL_20250617_210224_000.wav | 6/17/2025 | 21:02:24 | EPTFUS |
| 1618-BRISTOL_20250617_213740_000.wav | 6/17/2025 | 21:37:40 | EPTFUS |
| 1618-BRISTOL_20250617_210239_000.wav | 6/17/2025 | 21:02:39 | EPTFUS |
| 1618-BRISTOL_20250617_214650_000.wav | 6/17/2025 | 21:46:50 | EPTFUS |
| 1618-BRISTOL_20250617_213638_000.wav | 6/17/2025 | 21:36:38 | EPTFUS |
| 1618-BRISTOL_20250617_211227_000.wav | 6/17/2025 | 21:12:27 | EPTFUS |
| 1618-BRISTOL_20250618_005913_000.wav | 6/18/2025 | 0:59:13 | EPTFUS |
| 1618-BRISTOL_20250617_211200_000.wav | 6/17/2025 | 21:12:00 | EPTFUS |
| 1618-BRISTOL_20250617_211429_000.wav | 6/17/2025 | 21:14:29 | EPTFUS |
| 1618-BRISTOL_20250617_211856_000.wav | 6/17/2025 | 21:18:56 | EPTFUS |
| 1618-BRISTOL_20250618_010009_000.wav | 6/18/2025 | 1:00:09 | EPTFUS |
| 1618-BRISTOL_20250617_205917_000.wav | 6/17/2025 | 20:59:17 | EPTFUS |
| 1618-BRISTOL_20250617_212026_000.wav | 6/17/2025 | 21:20:26 | EPTFUS |
| 1618-BRISTOL_20250617_204310_000.wav | 6/17/2025 | 20:43:10 | EPTFUS |
| 1618-BRISTOL_20250617_210115_000.wav | 6/17/2025 | 21:01:15 | EPTFUS |
| 1618-BRISTOL_20250617_205241_000.wav | 6/17/2025 | 20:52:41 | EPTFUS |
| 1618-BRISTOL_20250617_205730_000.wav | 6/17/2025 | 20:57:30 | EPTFUS |
| 1618-BRISTOL_20250617_212231_000.wav | 6/17/2025 | 21:22:31 | EPTFUS |
| 1618-BRISTOL_20250617_212425_000.wav | 6/17/2025 | 21:24:25 | EPTFUS |
| 1618-BRISTOL_20250617_211810_000.wav | 6/17/2025 | 21:18:10 | EPTFUS |
| 1618-BRISTOL_20250618_015551_000.wav | 6/18/2025 | 1:55:51 | EPTFUS |
| 1618-BRISTOL_20250617_215303_000.wav | 6/17/2025 | 21:53:03 | EPTFUS |
| 1618-BRISTOL_20250617_211840_000.wav | 6/17/2025 | 21:18:40 | EPTFUS |
| 1618-BRISTOL_20250617_212057_000.wav | 6/17/2025 | 21:20:57 | EPTFUS |
| 1618-BRISTOL_20250617_215853_000.wav | 6/17/2025 | 21:58:53 | EPTFUS |

| | | | | |
|--------------------------------------|-----------|----------|--------|--|
| 1618-BRISTOL_20250617_212418_000.wav | 6/17/2025 | 21:24:18 | EPTFUS | |
| 1618-BRISTOL_20250617_230039_000.wav | 6/17/2025 | 23:00:39 | EPTFUS | |
| 1618-BRISTOL_20250617_204509_000.wav | 6/17/2025 | 20:45:09 | EPTFUS | |
| 1618-BRISTOL_20250617_224819_000.wav | 6/17/2025 | 22:48:19 | EPTFUS | |
| 1618-BRISTOL_20250617_211653_000.wav | 6/17/2025 | 21:16:53 | EPTFUS | |
| 1618-BRISTOL_20250617_222620_000.wav | 6/17/2025 | 22:26:20 | EPTFUS | |
| 1618-BRISTOL_20250617_210326_000.wav | 6/17/2025 | 21:03:26 | EPTFUS | |
| 1618-BRISTOL_20250617_211146_000.wav | 6/17/2025 | 21:11:46 | EPTFUS | |
| 1618-BRISTOL_20250617_210206_000.wav | 6/17/2025 | 21:02:06 | EPTFUS | |
| 1618-BRISTOL_20250617_225604_000.wav | 6/17/2025 | 22:56:04 | EPTFUS | |
| 1618-BRISTOL_20250617_204155_000.wav | 6/17/2025 | 20:41:55 | EPTFUS | |
| 1618-BRISTOL_20250617_220741_000.wav | 6/17/2025 | 22:07:41 | EPTFUS | |
| 1618-BRISTOL_20250617_213830_000.wav | 6/17/2025 | 21:38:30 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_220944_000.wav | 6/17/2025 | 22:09:44 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_023948_000.wav | 6/18/2025 | 2:39:48 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_204910_000.wav | 6/17/2025 | 20:49:10 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_024030_000.wav | 6/18/2025 | 2:40:30 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_003439_000.wav | 6/18/2025 | 0:34:39 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214148_000.wav | 6/17/2025 | 21:41:48 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_220403_000.wav | 6/17/2025 | 22:04:03 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_024459_000.wav | 6/18/2025 | 2:44:59 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_225056_000.wav | 6/17/2025 | 22:50:56 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235658_000.wav | 6/17/2025 | 23:56:58 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_220712_000.wav | 6/17/2025 | 22:07:12 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_003210_000.wav | 6/18/2025 | 0:32:10 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_003421_000.wav | 6/18/2025 | 0:34:21 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_220114_000.wav | 6/17/2025 | 22:01:14 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234714_000.wav | 6/17/2025 | 23:47:14 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_024512_000.wav | 6/18/2025 | 2:45:12 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214623_000.wav | 6/17/2025 | 21:46:23 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_204922_000.wav | 6/17/2025 | 20:49:22 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_220722_000.wav | 6/17/2025 | 22:07:22 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_002501_000.wav | 6/18/2025 | 0:25:01 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_220100_000.wav | 6/17/2025 | 22:01:00 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |

| | | | | |
|--------------------------------------|-----------|----------|--------|--|
| 1618-BRISTOL_20250617_234549_000.wav | 6/17/2025 | 23:45:49 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_222610_000.wav | 6/17/2025 | 22:26:10 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_221011_000.wav | 6/17/2025 | 22:10:11 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_221127_000.wav | 6/17/2025 | 22:11:27 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_220311_000.wav | 6/17/2025 | 22:03:11 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_024557_000.wav | 6/18/2025 | 2:45:57 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_024115_000.wav | 6/18/2025 | 2:41:15 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_212548_000.wav | 6/17/2025 | 21:25:48 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_222232_000.wav | 6/17/2025 | 22:22:32 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_221059_000.wav | 6/17/2025 | 22:10:59 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_222602_000.wav | 6/17/2025 | 22:26:02 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214617_000.wav | 6/17/2025 | 21:46:17 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_213952_000.wav | 6/17/2025 | 21:39:52 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_221527_000.wav | 6/17/2025 | 22:15:27 | LASBOR | NOID - TOO FEW PULSES |
| 1618-BRISTOL_20250618_024436_000.wav | 6/18/2025 | 2:44:36 | LASBOR | NOID - FAINT/POOR QUALITY CALL |
| 1618-BRISTOL_20250618_021507_000.wav | 6/18/2025 | 2:15:07 | LASCIN | |
| 1618-BRISTOL_20250618_010926_000.wav | 6/18/2025 | 1:09:26 | LASCIN | |
| 1618-BRISTOL_20250617_225545_000.wav | 6/17/2025 | 22:55:45 | LASCIN | |
| 1618-BRISTOL_20250618_014614_000.wav | 6/18/2025 | 1:46:14 | LASCIN | |
| 1618-BRISTOL_20250618_030901_000.wav | 6/18/2025 | 3:09:01 | LASCIN | |
| 1618-BRISTOL_20250617_223712_000.wav | 6/17/2025 | 22:37:12 | LASCIN | |
| 1618-BRISTOL_20250617_221657_000.wav | 6/17/2025 | 22:16:57 | LASNOC | |
| 1618-BRISTOL_20250618_011445_000.wav | 6/18/2025 | 1:14:45 | LASNOC | |
| 1618-BRISTOL_20250618_004753_000.wav | 6/18/2025 | 0:47:53 | LASNOC | |
| 1618-BRISTOL_20250617_221646_000.wav | 6/17/2025 | 22:16:46 | LASNOC | |
| 1618-BRISTOL_20250617_223536_000.wav | 6/17/2025 | 22:35:36 | LASNOC | |
| 1618-BRISTOL_20250617_223649_000.wav | 6/17/2025 | 22:36:49 | LASNOC | |
| 1618-BRISTOL_20250617_222428_000.wav | 6/17/2025 | 22:24:28 | LASNOC | |
| 1618-BRISTOL_20250617_212255_000.wav | 6/17/2025 | 21:22:55 | LASNOC | |
| 1618-BRISTOL_20250617_234101_000.wav | 6/17/2025 | 23:41:01 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234435_000.wav | 6/17/2025 | 23:44:35 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235628_000.wav | 6/17/2025 | 23:56:28 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234501_000.wav | 6/17/2025 | 23:45:01 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234118_000.wav | 6/17/2025 | 23:41:18 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |

| | | | | |
|--------------------------------------|-----------|----------|--------|--|
| 1618-BRISTOL_20250617_235247_000.wav | 6/17/2025 | 23:52:47 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235804_000.wav | 6/17/2025 | 23:58:04 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235433_000.wav | 6/17/2025 | 23:54:33 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234148_000.wav | 6/17/2025 | 23:41:48 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234210_000.wav | 6/17/2025 | 23:42:10 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234759_000.wav | 6/17/2025 | 23:47:59 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235026_000.wav | 6/17/2025 | 23:50:26 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235924_000.wav | 6/17/2025 | 23:59:24 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234534_000.wav | 6/17/2025 | 23:45:34 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234920_000.wav | 6/17/2025 | 23:49:20 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234601_000.wav | 6/17/2025 | 23:46:01 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234727_000.wav | 6/17/2025 | 23:47:27 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234616_000.wav | 6/17/2025 | 23:46:16 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_205137_000.wav | 6/17/2025 | 20:51:37 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234029_000.wav | 6/17/2025 | 23:40:29 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234658_000.wav | 6/17/2025 | 23:46:58 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_233648_000.wav | 6/17/2025 | 23:36:48 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_000002_000.wav | 6/18/2025 | 0:00:02 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234842_000.wav | 6/17/2025 | 23:48:42 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_204932_000.wav | 6/17/2025 | 20:49:32 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235613_000.wav | 6/17/2025 | 23:56:13 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234827_000.wav | 6/17/2025 | 23:48:27 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_205226_000.wav | 6/17/2025 | 20:52:26 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_233449_000.wav | 6/17/2025 | 23:34:49 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_213725_000.wav | 6/17/2025 | 21:37:25 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235345_000.wav | 6/17/2025 | 23:53:45 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_233505_000.wav | 6/17/2025 | 23:35:05 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_212351_000.wav | 6/17/2025 | 21:23:51 | MYOLUC | 2 SPP: LASBOR + EPTFUS |
| 1618-BRISTOL_20250617_235226_000.wav | 6/17/2025 | 23:52:26 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_233434_000.wav | 6/17/2025 | 23:34:34 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_233241_000.wav | 6/17/2025 | 23:32:41 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234319_000.wav | 6/17/2025 | 23:43:19 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235151_000.wav | 6/17/2025 | 23:51:51 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235503_000.wav | 6/17/2025 | 23:55:03 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |

| | | | | |
|--------------------------------------|-----------|----------|--------|--|
| 1618-BRISTOL_20250617_235130_000.wav | 6/17/2025 | 23:51:30 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235115_000.wav | 6/17/2025 | 23:51:15 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_233309_000.wav | 6/17/2025 | 23:33:09 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235535_000.wav | 6/17/2025 | 23:55:35 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235706_000.wav | 6/17/2025 | 23:57:06 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_233521_000.wav | 6/17/2025 | 23:35:21 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234950_000.wav | 6/17/2025 | 23:49:50 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235557_000.wav | 6/17/2025 | 23:55:57 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214106_000.wav | 6/17/2025 | 21:41:06 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235939_000.wav | 6/17/2025 | 23:59:39 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234302_000.wav | 6/17/2025 | 23:43:02 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235643_000.wav | 6/17/2025 | 23:56:43 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235237_000.wav | 6/17/2025 | 23:52:37 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235311_000.wav | 6/17/2025 | 23:53:11 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_233629_000.wav | 6/17/2025 | 23:36:29 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214314_000.wav | 6/17/2025 | 21:43:14 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214220_000.wav | 6/17/2025 | 21:42:20 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_205057_000.wav | 6/17/2025 | 20:50:57 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_233418_000.wav | 6/17/2025 | 23:34:18 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235010_000.wav | 6/17/2025 | 23:50:10 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_233733_000.wav | 6/17/2025 | 23:37:33 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234518_000.wav | 6/17/2025 | 23:45:18 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_233344_000.wav | 6/17/2025 | 23:33:44 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234904_000.wav | 6/17/2025 | 23:49:04 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234243_000.wav | 6/17/2025 | 23:42:43 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234743_000.wav | 6/17/2025 | 23:47:43 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235052_000.wav | 6/17/2025 | 23:50:52 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235519_000.wav | 6/17/2025 | 23:55:19 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_233711_000.wav | 6/17/2025 | 23:37:11 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235210_000.wav | 6/17/2025 | 23:52:10 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_233401_000.wav | 6/17/2025 | 23:34:01 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234404_000.wav | 6/17/2025 | 23:44:04 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214528_000.wav | 6/17/2025 | 21:45:28 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234045_000.wav | 6/17/2025 | 23:40:45 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |

| | | | | |
|--------------------------------------|-----------|----------|--------|--|
| 1618-BRISTOL_20250618_003646_000.wav | 6/18/2025 | 0:36:46 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_003631_000.wav | 6/18/2025 | 0:36:31 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_233324_000.wav | 6/17/2025 | 23:33:24 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_000051_000.wav | 6/18/2025 | 0:00:51 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_000102_000.wav | 6/18/2025 | 0:01:02 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234228_000.wav | 6/17/2025 | 23:42:28 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234633_000.wav | 6/17/2025 | 23:46:33 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_003449_000.wav | 6/18/2025 | 0:34:49 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235732_000.wav | 6/17/2025 | 23:57:32 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234944_000.wav | 6/17/2025 | 23:49:44 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235401_000.wav | 6/17/2025 | 23:54:01 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235749_000.wav | 6/17/2025 | 23:57:49 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234334_000.wav | 6/17/2025 | 23:43:34 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_003342_000.wav | 6/18/2025 | 0:33:42 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214416_000.wav | 6/17/2025 | 21:44:16 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214034_000.wav | 6/17/2025 | 21:40:34 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_204953_000.wav | 6/17/2025 | 20:49:53 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_205025_000.wav | 6/17/2025 | 20:50:25 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_213553_000.wav | 6/17/2025 | 21:35:53 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_213624_000.wav | 6/17/2025 | 21:36:24 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234815_000.wav | 6/17/2025 | 23:48:15 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_234134_000.wav | 6/17/2025 | 23:41:34 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235038_000.wav | 6/17/2025 | 23:50:38 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235909_000.wav | 6/17/2025 | 23:59:09 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_002820_000.wav | 6/18/2025 | 0:28:20 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235831_000.wav | 6/17/2025 | 23:58:31 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_233723_000.wav | 6/17/2025 | 23:37:23 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_203330_000.wav | 6/17/2025 | 20:33:30 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_233613_000.wav | 6/17/2025 | 23:36:13 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_003606_000.wav | 6/18/2025 | 0:36:06 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_213852_000.wav | 6/17/2025 | 21:38:52 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_213709_000.wav | 6/17/2025 | 21:37:09 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235101_000.wav | 6/17/2025 | 23:51:01 | MYOLUC | 2 SPP: LASNOC + LASBOR |
| 1618-BRISTOL_20250617_214546_000.wav | 6/17/2025 | 21:45:46 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |

| | | | | |
|--------------------------------------|-----------|----------|--------|--|
| 1618-BRISTOL_20250617_205113_000.wav | 6/17/2025 | 20:51:13 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_205041_000.wav | 6/17/2025 | 20:50:41 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214000_000.wav | 6/17/2025 | 21:40:00 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214434_000.wav | 6/17/2025 | 21:44:34 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214303_000.wav | 6/17/2025 | 21:43:03 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235329_000.wav | 6/17/2025 | 23:53:29 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_233541_000.wav | 6/17/2025 | 23:35:41 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235852_000.wav | 6/17/2025 | 23:58:52 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_233558_000.wav | 6/17/2025 | 23:35:58 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214237_000.wav | 6/17/2025 | 21:42:37 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214358_000.wav | 6/17/2025 | 21:43:58 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214018_000.wav | 6/17/2025 | 21:40:18 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235415_000.wav | 6/17/2025 | 23:54:15 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_024139_000.wav | 6/18/2025 | 2:41:39 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_212531_000.wav | 6/17/2025 | 21:25:31 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_003155_000.wav | 6/18/2025 | 0:31:55 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_003329_000.wav | 6/18/2025 | 0:33:29 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_002749_000.wav | 6/18/2025 | 0:27:49 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_024000_000.wav | 6/18/2025 | 2:40:00 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214603_000.wav | 6/17/2025 | 21:46:03 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214255_000.wav | 6/17/2025 | 21:42:55 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_002731_000.wav | 6/18/2025 | 0:27:31 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_003539_000.wav | 6/18/2025 | 0:35:39 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214510_000.wav | 6/17/2025 | 21:45:10 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_003353_000.wav | 6/18/2025 | 0:33:53 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_213609_000.wav | 6/17/2025 | 21:36:09 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_213332_000.wav | 6/17/2025 | 21:33:32 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_000021_000.wav | 6/18/2025 | 0:00:21 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_220344_000.wav | 6/17/2025 | 22:03:44 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_205017_000.wav | 6/17/2025 | 20:50:17 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214023_000.wav | 6/17/2025 | 21:40:23 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_213404_000.wav | 6/17/2025 | 21:34:04 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_213925_000.wav | 6/17/2025 | 21:39:25 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214452_000.wav | 6/17/2025 | 21:44:52 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |

| | | | | |
|--------------------------------------|-----------|----------|--------|--|
| 1618-BRISTOL_20250617_234652_000.wav | 6/17/2025 | 23:46:52 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_205219_000.wav | 6/17/2025 | 20:52:19 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_233331_000.wav | 6/17/2025 | 23:33:31 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235446_000.wav | 6/17/2025 | 23:54:46 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_213914_000.wav | 6/17/2025 | 21:39:14 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_213538_000.wav | 6/17/2025 | 21:35:38 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_233703_000.wav | 6/17/2025 | 23:37:03 | MYOLUC | NOID - FAINT/POOR QUALITY CALL |
| 1618-BRISTOL_20250618_024421_000.wav | 6/18/2025 | 2:44:21 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_213817_000.wav | 6/17/2025 | 21:38:17 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_213942_000.wav | 6/17/2025 | 21:39:42 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_000807_000.wav | 6/18/2025 | 0:08:07 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_205153_000.wav | 6/17/2025 | 20:51:53 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_213354_000.wav | 6/17/2025 | 21:33:54 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214124_000.wav | 6/17/2025 | 21:41:24 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214925_000.wav | 6/17/2025 | 21:49:25 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_205009_000.wav | 6/17/2025 | 20:50:09 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_024041_000.wav | 6/18/2025 | 2:40:41 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_221024_000.wav | 6/17/2025 | 22:10:24 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_213908_000.wav | 6/17/2025 | 21:39:08 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_221917_000.wav | 6/17/2025 | 22:19:17 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_204537_000.wav | 6/17/2025 | 20:45:37 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214138_000.wav | 6/17/2025 | 21:41:38 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_235820_000.wav | 6/17/2025 | 23:58:20 | MYOLUC | NOID - FAINT/POOR QUALITY CALL |
| 1618-BRISTOL_20250617_222711_000.wav | 6/17/2025 | 22:27:11 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_000036_000.wav | 6/18/2025 | 0:00:36 | MYOLUC | NOID - FAINT/POOR QUALITY CALL |
| 1618-BRISTOL_20250617_220130_000.wav | 6/17/2025 | 22:01:30 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_221147_000.wav | 6/17/2025 | 22:11:47 | MYOLUC | NOID - FAINT/POOR QUALITY CALL |
| 1618-BRISTOL_20250617_220242_000.wav | 6/17/2025 | 22:02:42 | MYOLUC | NOID - FAINT/POOR QUALITY CALL |
| 1618-BRISTOL_20250618_024739_000.wav | 6/18/2025 | 2:47:39 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_222324_000.wav | 6/17/2025 | 22:23:24 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_024127_000.wav | 6/18/2025 | 2:41:27 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_003556_000.wav | 6/18/2025 | 0:35:56 | MYOSEP | NOID - NOT SEARCH PHASE |
| 1618-BRISTOL_20250617_213316_000.wav | 6/17/2025 | 21:33:16 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_213518_000.wav | 6/17/2025 | 21:35:18 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |

| | | | | |
|--------------------------------------|-----------|----------|--------|--|
| 1618-BRISTOL_20250617_220231_000.wav | 6/17/2025 | 22:02:31 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_215909_000.wav | 6/17/2025 | 21:59:09 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_024101_000.wav | 6/18/2025 | 2:41:01 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_213425_000.wav | 6/17/2025 | 21:34:25 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_023910_000.wav | 6/18/2025 | 2:39:10 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_024152_000.wav | 6/18/2025 | 2:41:52 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_221431_000.wav | 6/17/2025 | 22:14:31 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_003204_000.wav | 6/18/2025 | 0:32:04 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_024536_000.wav | 6/18/2025 | 2:45:36 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_003624_000.wav | 6/18/2025 | 0:36:24 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_220821_000.wav | 6/17/2025 | 22:08:21 | MYOSOD | NOID - FAINT/POOR QUALITY CALL |
| 1618-BRISTOL_20250618_003407_000.wav | 6/18/2025 | 0:34:07 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214052_000.wav | 6/17/2025 | 21:40:52 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_214205_000.wav | 6/17/2025 | 21:42:05 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_024719_000.wav | 6/18/2025 | 2:47:19 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_024606_000.wav | 6/18/2025 | 2:46:06 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_024050_000.wav | 6/18/2025 | 2:40:50 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_220139_000.wav | 6/17/2025 | 22:01:39 | MYOSOD | NOID - TOO FEW PULSES |
| 1618-BRISTOL_20250617_220959_000.wav | 6/17/2025 | 22:09:59 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250617_213811_000.wav | 6/17/2025 | 21:38:11 | NoID | NOID - FAINT/POOR QUALITY CALL |
| 1618-BRISTOL_20250617_215932_000.wav | 6/17/2025 | 21:59:32 | NoID | EPTFUS - FM call; Fc >26-33kHz; Fmax >65 |
| 1618-BRISTOL_20250617_221739_000.wav | 6/17/2025 | 22:17:39 | NoID | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_000040_000.wav | 6/18/2025 | 0:00:40 | NoID | NOID - FAINT/POOR QUALITY CALL |
| 1618-BRISTOL_20250618_020501_000.wav | 6/18/2025 | 2:05:01 | Noise | NOISE |
| 1618-BRISTOL_20250618_023025_000.wav | 6/18/2025 | 2:30:25 | Noise | NOISE |
| 1618-BRISTOL_20250618_031007_000.wav | 6/18/2025 | 3:10:07 | Noise | NOISE |
| 1618-BRISTOL_20250618_024012_000.wav | 6/18/2025 | 2:40:12 | PERSUB | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |

| OUT FILE FS | DATE | TIME | AUTO ID* | MANUAL ID |
|--------------------------------------|-----------|----------|----------|-----------|
| 1618-BRISTOL_20250619_013246_000.wav | 6/19/2025 | 1:32:46 | EPTFUS | |
| 1618-BRISTOL_20250618_212030_000.wav | 6/18/2025 | 21:20:30 | EPTFUS | |
| 1618-BRISTOL_20250619_012523_000.wav | 6/19/2025 | 1:25:23 | EPTFUS | |
| 1618-BRISTOL_20250619_014805_000.wav | 6/19/2025 | 1:48:05 | EPTFUS | |
| 1618-BRISTOL_20250619_012446_000.wav | 6/19/2025 | 1:24:46 | EPTFUS | |
| 1618-BRISTOL_20250619_013000_000.wav | 6/19/2025 | 1:30:00 | EPTFUS | |
| 1618-BRISTOL_20250618_235206_000.wav | 6/18/2025 | 23:52:06 | EPTFUS | |
| 1618-BRISTOL_20250619_013535_000.wav | 6/19/2025 | 1:35:35 | EPTFUS | |
| 1618-BRISTOL_20250618_213833_000.wav | 6/18/2025 | 21:38:33 | EPTFUS | |
| 1618-BRISTOL_20250619_013316_000.wav | 6/19/2025 | 1:33:16 | EPTFUS | |
| 1618-BRISTOL_20250619_012418_000.wav | 6/19/2025 | 1:24:18 | EPTFUS | |
| 1618-BRISTOL_20250619_012922_000.wav | 6/19/2025 | 1:29:22 | EPTFUS | |
| 1618-BRISTOL_20250618_235054_000.wav | 6/18/2025 | 23:50:54 | EPTFUS | |
| 1618-BRISTOL_20250619_013504_000.wav | 6/19/2025 | 1:35:04 | EPTFUS | |
| 1618-BRISTOL_20250619_000150_000.wav | 6/19/2025 | 0:01:50 | EPTFUS | |
| 1618-BRISTOL_20250619_001855_000.wav | 6/19/2025 | 0:18:55 | EPTFUS | |
| 1618-BRISTOL_20250619_014747_000.wav | 6/19/2025 | 1:47:47 | EPTFUS | |
| 1618-BRISTOL_20250618_235110_000.wav | 6/18/2025 | 23:51:10 | EPTFUS | |
| 1618-BRISTOL_20250619_013216_000.wav | 6/19/2025 | 1:32:16 | EPTFUS | |
| 1618-BRISTOL_20250619_013140_000.wav | 6/19/2025 | 1:31:40 | EPTFUS | |
| 1618-BRISTOL_20250619_014920_000.wav | 6/19/2025 | 1:49:20 | EPTFUS | |
| 1618-BRISTOL_20250619_013357_000.wav | 6/19/2025 | 1:33:57 | EPTFUS | |
| 1618-BRISTOL_20250619_012609_000.wav | 6/19/2025 | 1:26:09 | EPTFUS | |
| 1618-BRISTOL_20250618_235309_000.wav | 6/18/2025 | 23:53:09 | EPTFUS | |
| 1618-BRISTOL_20250619_012740_000.wav | 6/19/2025 | 1:27:40 | EPTFUS | |
| 1618-BRISTOL_20250619_014905_000.wav | 6/19/2025 | 1:49:05 | EPTFUS | |
| 1618-BRISTOL_20250618_220611_000.wav | 6/18/2025 | 22:06:11 | EPTFUS | |
| 1618-BRISTOL_20250619_013412_000.wav | 6/19/2025 | 1:34:12 | EPTFUS | |
| 1618-BRISTOL_20250619_013125_000.wav | 6/19/2025 | 1:31:25 | EPTFUS | |
| 1618-BRISTOL_20250618_212339_000.wav | 6/18/2025 | 21:23:39 | EPTFUS | |
| 1618-BRISTOL_20250619_000910_000.wav | 6/19/2025 | 0:09:10 | EPTFUS | |
| 1618-BRISTOL_20250619_012851_000.wav | 6/19/2025 | 1:28:51 | EPTFUS | |
| 1618-BRISTOL_20250619_013606_000.wav | 6/19/2025 | 1:36:06 | EPTFUS | |

| | | | |
|--------------------------------------|-----------|----------|--------|
| 1618-BRISTOL_20250619_011541_000.wav | 6/19/2025 | 1:15:41 | EPTFUS |
| 1618-BRISTOL_20250619_012624_000.wav | 6/19/2025 | 1:26:24 | EPTFUS |
| 1618-BRISTOL_20250618_221618_000.wav | 6/18/2025 | 22:16:18 | EPTFUS |
| 1618-BRISTOL_20250619_012652_000.wav | 6/19/2025 | 1:26:52 | EPTFUS |
| 1618-BRISTOL_20250618_235039_000.wav | 6/18/2025 | 23:50:39 | EPTFUS |
| 1618-BRISTOL_20250619_012945_000.wav | 6/19/2025 | 1:29:45 | EPTFUS |
| 1618-BRISTOL_20250619_013519_000.wav | 6/19/2025 | 1:35:19 | EPTFUS |
| 1618-BRISTOL_20250619_013201_000.wav | 6/19/2025 | 1:32:01 | EPTFUS |
| 1618-BRISTOL_20250618_234952_000.wav | 6/18/2025 | 23:49:52 | EPTFUS |
| 1618-BRISTOL_20250619_012402_000.wav | 6/19/2025 | 1:24:02 | EPTFUS |
| 1618-BRISTOL_20250619_013301_000.wav | 6/19/2025 | 1:33:01 | EPTFUS |
| 1618-BRISTOL_20250619_013427_000.wav | 6/19/2025 | 1:34:27 | EPTFUS |
| 1618-BRISTOL_20250618_234936_000.wav | 6/18/2025 | 23:49:36 | EPTFUS |
| 1618-BRISTOL_20250618_220747_000.wav | 6/18/2025 | 22:07:47 | EPTFUS |
| 1618-BRISTOL_20250619_012339_000.wav | 6/19/2025 | 1:23:39 | EPTFUS |
| 1618-BRISTOL_20250618_235254_000.wav | 6/18/2025 | 23:52:54 | EPTFUS |
| 1618-BRISTOL_20250619_013039_000.wav | 6/19/2025 | 1:30:39 | EPTFUS |
| 1618-BRISTOL_20250619_012312_000.wav | 6/19/2025 | 1:23:12 | EPTFUS |
| 1618-BRISTOL_20250618_221403_000.wav | 6/18/2025 | 22:14:03 | EPTFUS |
| 1618-BRISTOL_20250618_235150_000.wav | 6/18/2025 | 23:51:50 | EPTFUS |
| 1618-BRISTOL_20250619_012108_000.wav | 6/19/2025 | 1:21:08 | EPTFUS |
| 1618-BRISTOL_20250619_013052_000.wav | 6/19/2025 | 1:30:52 | EPTFUS |
| 1618-BRISTOL_20250618_235221_000.wav | 6/18/2025 | 23:52:21 | EPTFUS |
| 1618-BRISTOL_20250619_012836_000.wav | 6/19/2025 | 1:28:36 | EPTFUS |
| 1618-BRISTOL_20250619_012820_000.wav | 6/19/2025 | 1:28:20 | EPTFUS |
| 1618-BRISTOL_20250618_220119_000.wav | 6/18/2025 | 22:01:19 | EPTFUS |
| 1618-BRISTOL_20250619_012538_000.wav | 6/19/2025 | 1:25:38 | EPTFUS |
| 1618-BRISTOL_20250618_213853_000.wav | 6/18/2025 | 21:38:53 | EPTFUS |
| 1618-BRISTOL_20250619_013551_000.wav | 6/19/2025 | 1:35:51 | EPTFUS |
| 1618-BRISTOL_20250618_221056_000.wav | 6/18/2025 | 22:10:56 | EPTFUS |
| 1618-BRISTOL_20250619_012720_000.wav | 6/19/2025 | 1:27:20 | EPTFUS |
| 1618-BRISTOL_20250619_013108_000.wav | 6/19/2025 | 1:31:08 | EPTFUS |
| 1618-BRISTOL_20250618_232407_000.wav | 6/18/2025 | 23:24:07 | EPTFUS |
| 1618-BRISTOL_20250619_000207_000.wav | 6/19/2025 | 0:02:07 | EPTFUS |

| | | | |
|--------------------------------------|-----------|----------|--------|
| 1618-BRISTOL_20250618_235324_000.wav | 6/18/2025 | 23:53:24 | EPTFUS |
| 1618-BRISTOL_20250619_013341_000.wav | 6/19/2025 | 1:33:41 | EPTFUS |
| 1618-BRISTOL_20250618_221605_000.wav | 6/18/2025 | 22:16:05 | EPTFUS |
| 1618-BRISTOL_20250619_000957_000.wav | 6/19/2025 | 0:09:57 | EPTFUS |
| 1618-BRISTOL_20250619_012554_000.wav | 6/19/2025 | 1:25:54 | EPTFUS |
| 1618-BRISTOL_20250619_012907_000.wav | 6/19/2025 | 1:29:07 | EPTFUS |
| 1618-BRISTOL_20250619_013232_000.wav | 6/19/2025 | 1:32:32 | EPTFUS |
| 1618-BRISTOL_20250619_011559_000.wav | 6/19/2025 | 1:15:59 | EPTFUS |
| 1618-BRISTOL_20250618_220524_000.wav | 6/18/2025 | 22:05:24 | EPTFUS |
| 1618-BRISTOL_20250619_003128_000.wav | 6/19/2025 | 0:31:28 | EPTFUS |
| 1618-BRISTOL_20250619_001012_000.wav | 6/19/2025 | 0:10:12 | EPTFUS |
| 1618-BRISTOL_20250619_000611_000.wav | 6/19/2025 | 0:06:11 | EPTFUS |
| 1618-BRISTOL_20250619_013452_000.wav | 6/19/2025 | 1:34:52 | EPTFUS |
| 1618-BRISTOL_20250618_235018_000.wav | 6/18/2025 | 23:50:18 | EPTFUS |
| 1618-BRISTOL_20250618_212153_000.wav | 6/18/2025 | 21:21:53 | EPTFUS |
| 1618-BRISTOL_20250619_013621_000.wav | 6/19/2025 | 1:36:21 | EPTFUS |
| 1618-BRISTOL_20250619_001037_000.wav | 6/19/2025 | 0:10:37 | EPTFUS |
| 1618-BRISTOL_20250618_212221_000.wav | 6/18/2025 | 21:22:21 | EPTFUS |
| 1618-BRISTOL_20250619_012640_000.wav | 6/19/2025 | 1:26:40 | EPTFUS |
| 1618-BRISTOL_20250619_013015_000.wav | 6/19/2025 | 1:30:15 | EPTFUS |
| 1618-BRISTOL_20250618_221013_000.wav | 6/18/2025 | 22:10:13 | EPTFUS |
| 1618-BRISTOL_20250618_235236_000.wav | 6/18/2025 | 23:52:36 | EPTFUS |
| 1618-BRISTOL_20250618_221633_000.wav | 6/18/2025 | 22:16:33 | EPTFUS |
| 1618-BRISTOL_20250619_000923_000.wav | 6/19/2025 | 0:09:23 | EPTFUS |
| 1618-BRISTOL_20250619_012802_000.wav | 6/19/2025 | 1:28:02 | EPTFUS |
| 1618-BRISTOL_20250619_023152_000.wav | 6/19/2025 | 2:31:52 | EPTFUS |
| 1618-BRISTOL_20250618_220417_000.wav | 6/18/2025 | 22:04:17 | EPTFUS |
| 1618-BRISTOL_20250619_000628_000.wav | 6/19/2025 | 0:06:28 | EPTFUS |
| 1618-BRISTOL_20250618_213942_000.wav | 6/18/2025 | 21:39:42 | EPTFUS |
| 1618-BRISTOL_20250619_003940_000.wav | 6/19/2025 | 0:39:40 | EPTFUS |
| 1618-BRISTOL_20250619_012433_000.wav | 6/19/2025 | 1:24:33 | EPTFUS |
| 1618-BRISTOL_20250618_235404_000.wav | 6/18/2025 | 23:54:04 | EPTFUS |
| 1618-BRISTOL_20250619_002309_000.wav | 6/19/2025 | 0:23:09 | EPTFUS |
| 1618-BRISTOL_20250619_000945_000.wav | 6/19/2025 | 0:09:45 | EPTFUS |

| | | | |
|--------------------------------------|-----------|----------|--------|
| 1618-BRISTOL_20250619_011454_000.wav | 6/19/2025 | 1:14:54 | EPTFUS |
| 1618-BRISTOL_20250619_012355_000.wav | 6/19/2025 | 1:23:55 | EPTFUS |
| 1618-BRISTOL_20250619_013441_000.wav | 6/19/2025 | 1:34:41 | EPTFUS |
| 1618-BRISTOL_20250618_221002_000.wav | 6/18/2025 | 22:10:02 | EPTFUS |
| 1618-BRISTOL_20250618_211759_000.wav | 6/18/2025 | 21:17:59 | EPTFUS |
| 1618-BRISTOL_20250618_212119_000.wav | 6/18/2025 | 21:21:19 | EPTFUS |
| 1618-BRISTOL_20250618_211935_000.wav | 6/18/2025 | 21:19:35 | EPTFUS |
| 1618-BRISTOL_20250618_230516_000.wav | 6/18/2025 | 23:05:16 | EPTFUS |
| 1618-BRISTOL_20250618_212045_000.wav | 6/18/2025 | 21:20:45 | EPTFUS |
| 1618-BRISTOL_20250618_221427_000.wav | 6/18/2025 | 22:14:27 | EPTFUS |
| 1618-BRISTOL_20250618_203334_000.wav | 6/18/2025 | 20:33:34 | EPTFUS |
| 1618-BRISTOL_20250618_210224_000.wav | 6/18/2025 | 21:02:24 | EPTFUS |
| 1618-BRISTOL_20250619_022513_000.wav | 6/19/2025 | 2:25:13 | EPTFUS |
| 1618-BRISTOL_20250618_221228_000.wav | 6/18/2025 | 22:12:28 | EPTFUS |
| 1618-BRISTOL_20250618_220300_000.wav | 6/18/2025 | 22:03:00 | EPTFUS |
| 1618-BRISTOL_20250618_211850_000.wav | 6/18/2025 | 21:18:50 | EPTFUS |
| 1618-BRISTOL_20250618_211858_000.wav | 6/18/2025 | 21:18:58 | EPTFUS |
| 1618-BRISTOL_20250618_220016_000.wav | 6/18/2025 | 22:00:16 | EPTFUS |
| 1618-BRISTOL_20250618_213255_000.wav | 6/18/2025 | 21:32:55 | EPTFUS |
| 1618-BRISTOL_20250618_211829_000.wav | 6/18/2025 | 21:18:29 | EPTFUS |
| 1618-BRISTOL_20250618_203159_000.wav | 6/18/2025 | 20:31:59 | EPTFUS |
| 1618-BRISTOL_20250618_212310_000.wav | 6/18/2025 | 21:23:10 | EPTFUS |
| 1618-BRISTOL_20250619_013332_000.wav | 6/19/2025 | 1:33:32 | EPTFUS |
| 1618-BRISTOL_20250619_013653_000.wav | 6/19/2025 | 1:36:53 | EPTFUS |
| 1618-BRISTOL_20250618_210640_000.wav | 6/18/2025 | 21:06:40 | EPTFUS |
| 1618-BRISTOL_20250619_042451_000.wav | 6/19/2025 | 4:24:51 | EPTFUS |
| 1618-BRISTOL_20250618_214021_000.wav | 6/18/2025 | 21:40:21 | EPTFUS |
| 1618-BRISTOL_20250619_010759_000.wav | 6/19/2025 | 1:07:59 | EPTFUS |
| 1618-BRISTOL_20250619_011117_000.wav | 6/19/2025 | 1:11:17 | EPTFUS |
| 1618-BRISTOL_20250618_211951_000.wav | 6/18/2025 | 21:19:51 | EPTFUS |
| 1618-BRISTOL_20250618_220028_000.wav | 6/18/2025 | 22:00:28 | EPTFUS |
| 1618-BRISTOL_20250618_220113_000.wav | 6/18/2025 | 22:01:13 | EPTFUS |
| 1618-BRISTOL_20250619_004354_000.wav | 6/19/2025 | 0:43:54 | EPTFUS |
| 1618-BRISTOL_20250618_235009_000.wav | 6/18/2025 | 23:50:09 | EPTFUS |

| | | | | |
|--------------------------------------|-----------|----------|--------|--|
| 1618-BRISTOL_20250619_012937_000.wav | 6/19/2025 | 1:29:37 | EPTFUS | |
| 1618-BRISTOL_20250618_221651_000.wav | 6/18/2025 | 22:16:51 | EPTFUS | |
| 1618-BRISTOL_20250618_211824_000.wav | 6/18/2025 | 21:18:24 | EPTFUS | |
| 1618-BRISTOL_20250618_220205_000.wav | 6/18/2025 | 22:02:05 | EPTFUS | |
| 1618-BRISTOL_20250618_221535_000.wav | 6/18/2025 | 22:15:35 | EPTFUS | |
| 1618-BRISTOL_20250618_235033_000.wav | 6/18/2025 | 23:50:33 | EPTFUS | |
| 1618-BRISTOL_20250619_010554_000.wav | 6/19/2025 | 1:05:54 | EPTFUS | |
| 1618-BRISTOL_20250618_211912_000.wav | 6/18/2025 | 21:19:12 | EPTFUS | |
| 1618-BRISTOL_20250619_013155_000.wav | 6/19/2025 | 1:31:55 | EPTFUS | |
| 1618-BRISTOL_20250618_221029_000.wav | 6/18/2025 | 22:10:29 | EPTFUS | |
| 1618-BRISTOL_20250618_220104_000.wav | 6/18/2025 | 22:01:04 | EPTFUS | |
| 1618-BRISTOL_20250618_235340_000.wav | 6/18/2025 | 23:53:40 | EPTFUS | |
| 1618-BRISTOL_20250618_234932_000.wav | 6/18/2025 | 23:49:32 | EPTFUS | |
| 1618-BRISTOL_20250618_220035_000.wav | 6/18/2025 | 22:00:35 | EPTFUS | |
| 1618-BRISTOL_20250619_012517_000.wav | 6/19/2025 | 1:25:17 | EPTFUS | |
| 1618-BRISTOL_20250618_221422_000.wav | 6/18/2025 | 22:14:22 | EPTFUS | |
| 1618-BRISTOL_20250618_221236_000.wav | 6/18/2025 | 22:12:36 | EPTFUS | |
| 1618-BRISTOL_20250618_220129_000.wav | 6/18/2025 | 22:01:29 | EPTFUS | |
| 1618-BRISTOL_20250618_220539_000.wav | 6/18/2025 | 22:05:39 | EPTFUS | |
| 1618-BRISTOL_20250619_011014_000.wav | 6/19/2025 | 1:10:14 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_011044_000.wav | 6/19/2025 | 1:10:44 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_210441_000.wav | 6/18/2025 | 21:04:41 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_005711_000.wav | 6/19/2025 | 0:57:11 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_011001_000.wav | 6/19/2025 | 1:10:01 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_220606_000.wav | 6/18/2025 | 22:06:06 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_011029_000.wav | 6/19/2025 | 1:10:29 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_011100_000.wav | 6/19/2025 | 1:11:00 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_030846_000.wav | 6/19/2025 | 3:08:46 | LASBOR | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_231624_000.wav | 6/18/2025 | 23:16:24 | LASCIN | |
| 1618-BRISTOL_20250618_214348_000.wav | 6/18/2025 | 21:43:48 | LASCIN | |
| 1618-BRISTOL_20250618_204617_000.wav | 6/18/2025 | 20:46:17 | LASCIN | |
| 1618-BRISTOL_20250619_014946_000.wav | 6/19/2025 | 1:49:46 | LASCIN | |
| 1618-BRISTOL_20250618_223502_000.wav | 6/18/2025 | 22:35:02 | LASCIN | |
| 1618-BRISTOL_20250618_232053_000.wav | 6/18/2025 | 23:20:53 | LASCIN | |

| | | | | |
|--------------------------------------|-----------|----------|--------|--|
| 1618-BRISTOL_20250619_005248_000.wav | 6/19/2025 | 0:52:48 | LASCIN | |
| 1618-BRISTOL_20250619_044317_000.wav | 6/19/2025 | 4:43:17 | LASCIN | |
| 1618-BRISTOL_20250618_205432_000.wav | 6/18/2025 | 20:54:32 | LASCIN | |
| 1618-BRISTOL_20250619_001701_000.wav | 6/19/2025 | 0:17:01 | LASCIN | |
| 1618-BRISTOL_20250618_211540_000.wav | 6/18/2025 | 21:15:40 | LASCIN | |
| 1618-BRISTOL_20250618_211534_000.wav | 6/18/2025 | 21:15:34 | LASCIN | |
| 1618-BRISTOL_20250618_210052_000.wav | 6/18/2025 | 21:00:52 | LASCIN | |
| 1618-BRISTOL_20250618_231636_000.wav | 6/18/2025 | 23:16:36 | LASCIN | |
| 1618-BRISTOL_20250619_030505_000.wav | 6/19/2025 | 3:05:05 | LASCIN | |
| 1618-BRISTOL_20250618_223607_000.wav | 6/18/2025 | 22:36:07 | LASCIN | |
| 1618-BRISTOL_20250619_001937_000.wav | 6/19/2025 | 0:19:37 | LASCIN | |
| 1618-BRISTOL_20250618_204143_000.wav | 6/18/2025 | 20:41:43 | LASCIN | |
| 1618-BRISTOL_20250618_225351_000.wav | 6/18/2025 | 22:53:51 | LASCIN | |
| 1618-BRISTOL_20250619_001841_000.wav | 6/19/2025 | 0:18:41 | LASCIN | |
| 1618-BRISTOL_20250619_010452_000.wav | 6/19/2025 | 1:04:52 | LASCIN | |
| 1618-BRISTOL_20250619_012222_000.wav | 6/19/2025 | 1:22:22 | LASCIN | |
| 1618-BRISTOL_20250619_030459_000.wav | 6/19/2025 | 3:04:59 | LASCIN | |
| 1618-BRISTOL_20250619_030437_000.wav | 6/19/2025 | 3:04:37 | LASCIN | |
| 1618-BRISTOL_20250619_042011_000.wav | 6/19/2025 | 4:20:11 | LASCIN | |
| 1618-BRISTOL_20250619_002230_000.wav | 6/19/2025 | 0:22:30 | LASNOC | LASNOC - CF call; Fc=26 kHz; Fmax<55 |
| 1618-BRISTOL_20250619_002127_000.wav | 6/19/2025 | 0:21:27 | LASNOC | |
| 1618-BRISTOL_20250618_214906_000.wav | 6/18/2025 | 21:49:06 | LASNOC | |
| 1618-BRISTOL_20250618_214049_000.wav | 6/18/2025 | 21:40:49 | LASNOC | |
| 1618-BRISTOL_20250618_224423_000.wav | 6/18/2025 | 22:44:23 | LASNOC | |
| 1618-BRISTOL_20250619_022407_000.wav | 6/19/2025 | 2:24:07 | LASNOC | |
| 1618-BRISTOL_20250618_232510_000.wav | 6/18/2025 | 23:25:10 | LASNOC | |
| 1618-BRISTOL_20250618_223444_000.wav | 6/18/2025 | 22:34:44 | LASNOC | |
| 1618-BRISTOL_20250618_205927_000.wav | 6/18/2025 | 20:59:27 | LASNOC | |
| 1618-BRISTOL_20250618_230829_000.wav | 6/18/2025 | 23:08:29 | LASNOC | |
| 1618-BRISTOL_20250619_014323_000.wav | 6/19/2025 | 1:43:23 | LASNOC | |
| 1618-BRISTOL_20250619_000547_000.wav | 6/19/2025 | 0:05:47 | LASNOC | |
| 1618-BRISTOL_20250619_003246_000.wav | 6/19/2025 | 0:32:46 | LASNOC | |
| 1618-BRISTOL_20250619_001943_000.wav | 6/19/2025 | 0:19:43 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_004620_000.wav | 6/19/2025 | 0:46:20 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |

| | | | | |
|--------------------------------------|-----------|----------|--------|--|
| 1618-BRISTOL_20250619_004659_000.wav | 6/19/2025 | 0:46:59 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_001830_000.wav | 6/19/2025 | 0:18:30 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_003345_000.wav | 6/19/2025 | 0:33:45 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_000342_000.wav | 6/19/2025 | 0:03:42 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_001846_000.wav | 6/19/2025 | 0:18:46 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_002049_000.wav | 6/19/2025 | 0:20:49 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_001914_000.wav | 6/19/2025 | 0:19:14 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_223042_000.wav | 6/18/2025 | 22:30:42 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_001815_000.wav | 6/19/2025 | 0:18:15 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_002016_000.wav | 6/19/2025 | 0:20:16 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_223137_000.wav | 6/18/2025 | 22:31:37 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_004635_000.wav | 6/19/2025 | 0:46:35 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_003433_000.wav | 6/19/2025 | 0:34:33 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_002035_000.wav | 6/19/2025 | 0:20:35 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_001922_000.wav | 6/19/2025 | 0:19:22 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_030432_000.wav | 6/19/2025 | 3:04:32 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_002030_000.wav | 6/19/2025 | 0:20:30 | MYOLUC | NOID - FAINT/POOR QUALITY CALL |
| 1618-BRISTOL_20250619_004714_000.wav | 6/19/2025 | 0:47:14 | MYOLUC | NOID - FAINT/POOR QUALITY CALL |
| 1618-BRISTOL_20250619_030836_000.wav | 6/19/2025 | 3:08:36 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_003324_000.wav | 6/19/2025 | 0:33:24 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_024206_000.wav | 6/19/2025 | 2:42:06 | MYOLUC | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_002000_000.wav | 6/19/2025 | 0:20:00 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_005734_000.wav | 6/19/2025 | 0:57:34 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250619_003024_000.wav | 6/19/2025 | 0:30:24 | MYOSOD | LASBOR - Fc 37-44; bouncing Fc; terminal upswing |
| 1618-BRISTOL_20250618_215958_000.wav | 6/18/2025 | 21:59:58 | NoID | NOID - TOO FEW PULSES |
| 1618-BRISTOL_20250618_232723_000.wav | 6/18/2025 | 23:27:23 | NoID | NOID - TOO FEW PULSES |
| 1618-BRISTOL_20250618_204149_000.wav | 6/18/2025 | 20:41:49 | Noise | LASCIN - CF Call Fc<22kHz; Fc variable |
| 1618-BRISTOL_20250618_210104_000.wav | 6/18/2025 | 21:01:04 | Noise | LASCIN - CF Call Fc<22kHz; Fc variable |
| 1618-BRISTOL_20250618_214342_000.wav | 6/18/2025 | 21:43:42 | Noise | NOISE |
| 1618-BRISTOL_20250618_231700_000.wav | 6/18/2025 | 23:17:00 | Noise | NOISE |

Edgewood Environmental Consulting, LLC

5 Edgewood Parkway
Fayetteville, NY 13066

mfishman@edgewoodenviro.com

T: +1 315.456.8731

