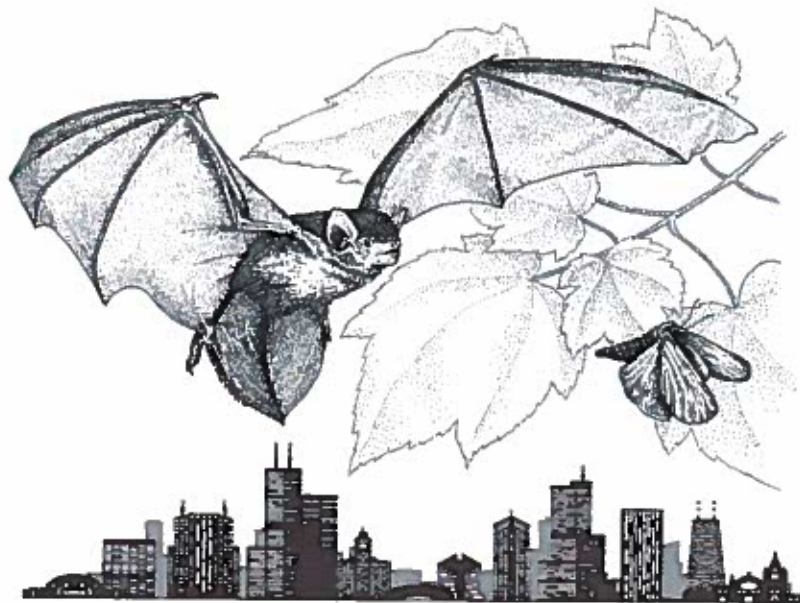


Midwest Bat Working Group

11th Annual Meeting
April 4-5, 2019
Field Museum, Chicago, IL

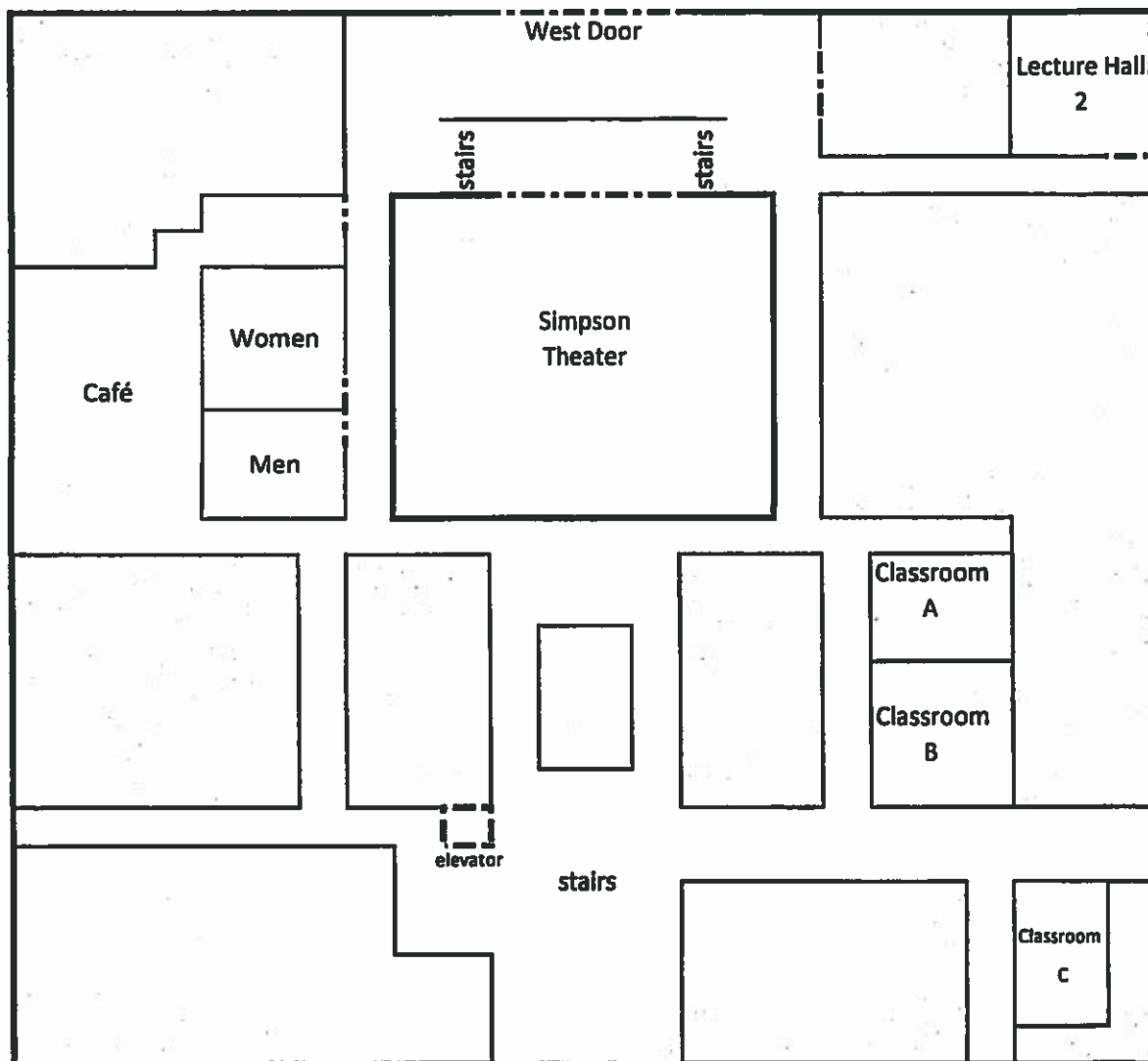


FIELD.
MUSEUM




Shedd
AQUARIUM

FIELD MUSEUM WEST ENTRANCE LOBBY FLOOR PLAN





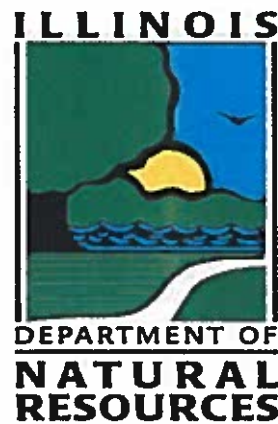
Use Museum **WEST** ENTRANCE/EXIT at all times.

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2019 SYMPOSIUM SCHEDULE

Wednesday, April 3, 2019

6:00pm – 8:00+pm Early Bird Social: *Aurelio's Pizza* 1212 S. Michigan Avenue

Day 1 – Thursday, April 4, 2019

➤ 8:00am-10:00am	Breakfast	Classroom C (eat A & B)
➤ 8:00am-5:00pm	Registration	Museum West Lobby
➤ 8:30am-9:30am	Board of Directors Meeting	Simpson Theater
➤ 8:00am-5:00pm	Vendors	Lecture Hall II
➤ 10:00am-5:00pm	Presentations	Simpson Theater
➤ 5:00pm-6:00pm	Wildlife Acoustics Workshop	Classroom C
➤ 5:30pm-8:00pm	Poster Session/Silent Auction/Social	Founders Room
➤ "After Social" Social	<i>First Draft Bar</i> (Offsite)	649 S. Clark St.

- | | |
|-------------------|---|
| ➤ 8:30am-9:30am | Board of Directors Meeting [Open to all MWBWG members] |
| ➤ 10:00am-10:15am | Welcome: Joe Kath, IL. Department of Natural Resources |

- 10:15am-11:00am
Keynote Speakers: Liza Lehrer and Seth Magle, Lincoln Park Zoo-Urban Wildlife Institute. RESEARCH OF THE URBAN WILDLIFE INSTITUTE: COORDINATED MONITORING AND PUBLIC OUTREACH TO MAKE CITIES MORE WILDLIFE FRIENDLY.

***IMPORTANT REMINDERS ABOUT THE FIELD MUSEUM:**


NO food or drinks in Simpson Theater; Food from the break room (LH2) is allowed into the W Lobby; Breakfast and lunch will be dispensed in Room C and eaten in Rooms A & B; and food at the Founders' Room reception needs to stay there.

PLEASE wear your conference name badge at all times when in the museum!

Thank you for attending the 2019 MWBWG Annual Symposium!

2019 SYMPOSIUM SCHEDULE

Day 1 – Thursday, April 4, 2019 – Oral Presentations



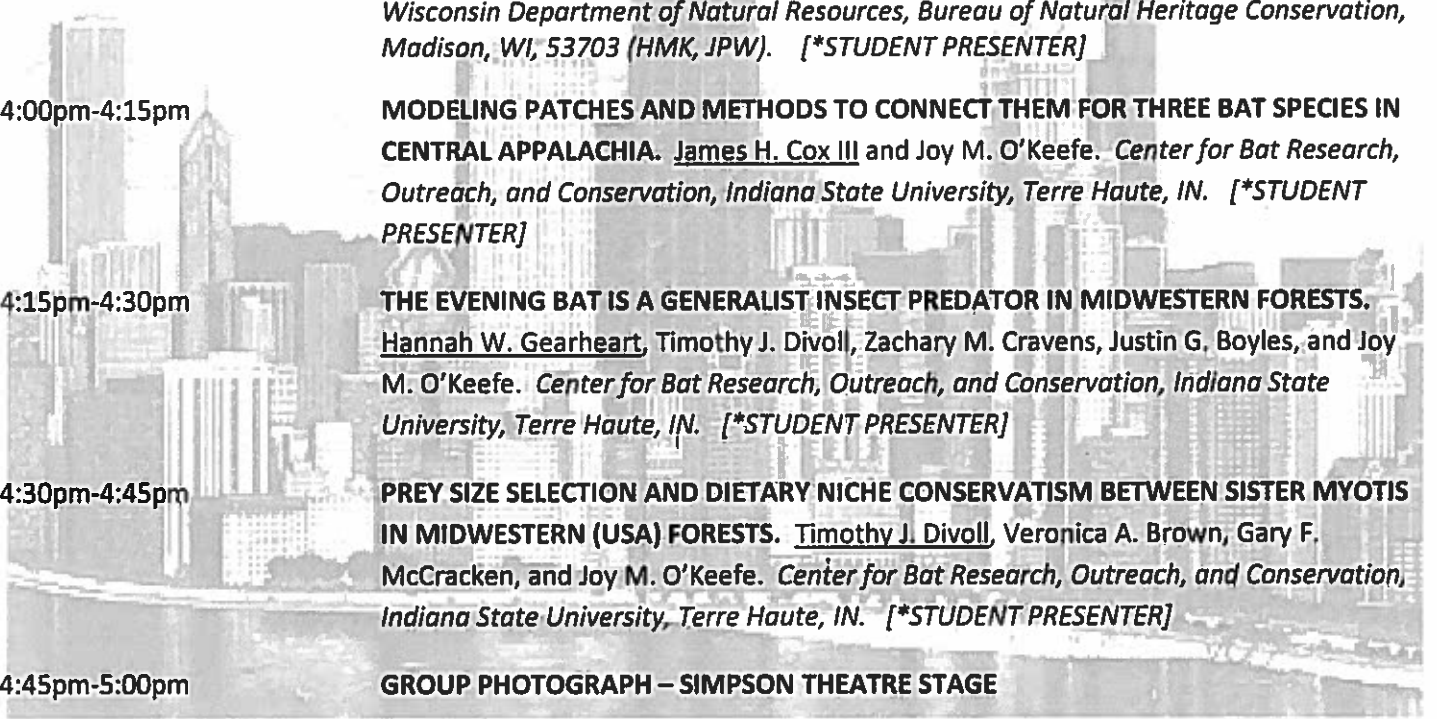
11:00am-11:15am	WNS NATIONAL RESPONSE IN 2019. Richard Geboy and <u>Jeremy Coleman</u> . <i>U.S. Fish and Wildlife Service, Bloomington, IN 47403 (RG); U.S. Fish and Wildlife Service, Hadley, MA 01035.</i>
11:15am-11:30am	WORKING TOWARDS RELIABLE RANGE-WIDE STATUS AND TRENDS ANALYSES USING NABAT MONITORING DATA. <u>Brian E. Reichert</u> . <i>US Geological Survey, Fort Collins Science Center, Fort Collins, CO.</i>
11:30am-11:45am	HOW DO BATS UTILIZE OFFSHORE AREAS OF LAKE ERIE? Rhett Good, <u>Ashley Matteson</u> , and Ed Verhamme. <i>Western EcoSystems Technology, Bloomington, IN 47404 (RG, AM); LimnoTech, Cleveland, OH 44101 (EV).</i>
11:45am-12:00pm	BATS IN BRIDGES: BORESCOPE USE AIDS IN MINIMALLY INVASIVE TECHNIQUE FOR BAT COLONY IDENTIFICATION. <u>Jocelyn Karsk</u> , Jean Mengelkoch, and Travis Griest. <i>Illinois Natural History Survey, Prairie Research Institute, University of Illinois Urbana Champaign, Champaign, IL 61820 (JK, JM) Illinois State Geological Survey, Prairie Research Institute, University of Illinois Urbana Champaign, Champaign, IL 61820 (TG).</i>
12:00pm-12:15pm	ACOUSTIC MONITORING OF BAT POPULATIONS AT GREAT LAKES NATIONAL PARKS DETECTS LITTLE BROWN BAT DECLINE. <u>Katy R. Goodwin</u> and Erin H. Gillam. <i>North Dakota State University, Fargo, ND 58102. [*STUDENT PRESENTER]</i>
12:15pm-12:30pm	TADARIDA BRASILIENSIS ADJUSTS ECHOLOCATION CALLS TO DETECT CAVE OPENING: EVIDENCE FOR BIMODAL SENSING IN BATS. <u>Kathryn A. McGowan</u> , Laura N. Kloepper. <i>Saint Mary's College, Department of Biology, Le Mans Hall, 149, St Mary S College, Notre Dame, IN 46556. [*STUDENT PRESENTER]</i>

12:30pm-2:30pm **LUNCH (Aurelio's Pizza or on your own)**

Collections Tour:

Group A: 12:40pm-1:25pm

Group B: 1:30pm-2:15pm



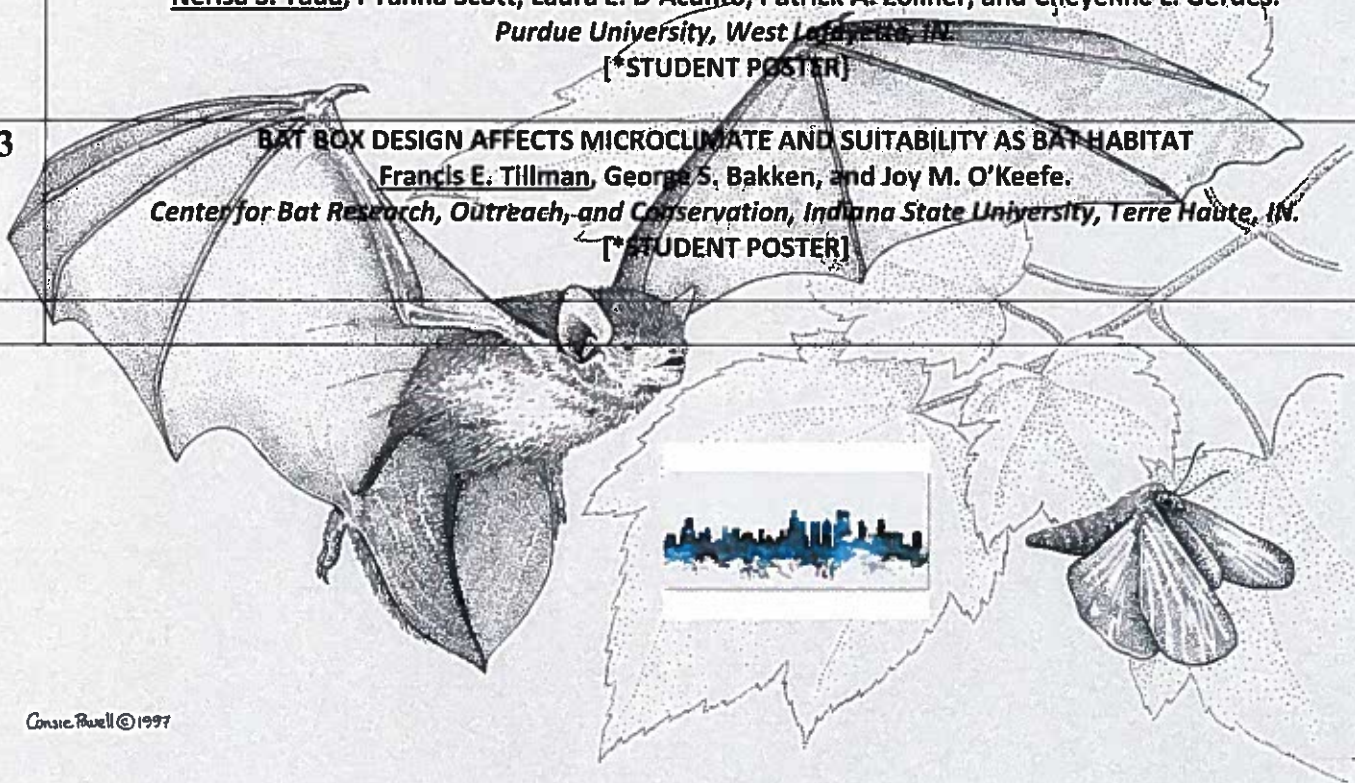
2:30pm-2:45pm	EASTERN RED BAT HABITAT SELECTION IN AREAS WITH DIFFERENT LAND USE HISTORIES IN SOUTHEAST OHIO. <u>Maria N. Monarchino</u> and Joseph S. Johnson. <i>Ohio University, Athens, OH.</i> [*STUDENT PRESENTER]
2:45pm-3:00pm	COMPLEMENTARY ACOUSTIC TECHNIQUES PROVIDE A LONG-TERM PERSPECTIVE ON BAT DIVERSITY AND DISTRIBUTIONS. <u>Amanda K. Martin</u> , Jacob Schoen, and Karen V. Root. <i>429e Life Science Building, Bowling Green State University, Bowling Green, OH 43403.</i> [*STUDENT PRESENTER]
3:00pm-3:15pm	GOOD GENES OR GOOD LUCK? LITTLE BROWN BATS SHOW SIGNS OF EVOLUTIONARY ADAPTATION TO WHITE-NOSE SYNDROME. <u>Giorgia G. Auteri</u> and L. Lacey Knowles. <i>Department of Ecology and Evolutionary Biology, University of Michigan, Ann Arbor, MI.</i> [*STUDENT PRESENTER]
3:15pm-3:45pm	BREAK – Posters can be set up in FOUNDERS ROOM
3:45pm-4:00pm	SUMMER RANGE AND HABITAT SUITABILITY OF <i>PERIMYOTIS SUBFLAVUS</i> AND <i>MYOTIS SEPTENTRIONALIS</i> IN WISCONSIN. <u>Heather M. Kaarakka</u> , J. Paul White, Philip A. Townsend and Timothy R. Van Deelen. <i>Department of Forestry and Wildlife Ecology, University of Wisconsin, Russell Laboratories, Madison, WI, 53706 (HMK, PAT, TRV); Wisconsin Department of Natural Resources, Bureau of Natural Heritage Conservation, Madison, WI, 53703 (HMK, JPW).</i> [*STUDENT PRESENTER]
4:00pm-4:15pm	MODELING PATCHES AND METHODS TO CONNECT THEM FOR THREE BAT SPECIES IN CENTRAL APPALACHIA. <u>James H. Cox III</u> and Joy M. O'Keefe. <i>Center for Bat Research, Outreach, and Conservation, Indiana State University, Terre Haute, IN.</i> [*STUDENT PRESENTER]
4:15pm-4:30pm	THE EVENING BAT IS A GENERALIST INSECT PREDATOR IN MIDWESTERN FORESTS. <u>Hannah W. Gearheart</u> , Timothy J. Divoll, Zachary M. Cravens, Justin G. Boyles, and Joy M. O'Keefe. <i>Center for Bat Research, Outreach, and Conservation, Indiana State University, Terre Haute, IN.</i> [*STUDENT PRESENTER]
4:30pm-4:45pm	PREY SIZE SELECTION AND DIETARY NICHE CONSERVATISM BETWEEN SISTER MYOTIS IN MIDWESTERN (USA) FORESTS. <u>Timothy J. Divoll</u> , Veronica A. Brown, Gary F. McCracken, and Joy M. O'Keefe. <i>Center for Bat Research, Outreach, and Conservation, Indiana State University, Terre Haute, IN.</i> [*STUDENT PRESENTER]
4:45pm-5:00pm	GROUP PHOTOGRAPH – SIMPSON THEATRE STAGE
5:00pm-6:00pm	WILDLIFE ACOUSTICS WORKSHOP FOR THOSE WHO HAVE PRE-REGISTERED: Hands-on workshop with Song Meter SM4BAT. Participants will learn how to set up the SM4BAT recorder as well as helpful deployment tips and how to configure multiple units quickly. Registered participants will have the opportunity to win Wildlife Acoustics swag in a raffle at the end of the workshop.
5:30PM-8:00PM	POSTER SESSION, SOCIAL, AND SILENT AUCTION – FOUNDERS ROOM (2ND FLOOR)
8:00PM-?	"After the Social" Social: <u>First Draft Bar – 649 S. Clark</u> (Just 1 block south of hotel). See map in registration packet.

POSTER SESSION: THURSDAY EVENING, APRIL 4, 2019

No.	Title and Authors
1	<p>FUNGAL INHIBITION OF <i>PSEUDOGYMNOASCUS DESTRUCTANS</i>, USING MICROBIOME STUDIES OF THE INDIANA BAT, <i>MYOTIS SODALIS</i> <u>A. Bender</u> and H. K. Dannelly. <i>Department of Biology, Indiana State University, Terre Haute, IN 47809.</i> [*STUDENT POSTER]</p>
2	<p>ROOST SELECTION OF AN EASTERN SMALL-FOOTED BAT (<i>MYOTIS LEIBII</i>) <u>Zoe Bryant</u>, Lisa Kleinschmidt, and Kathleen McDaniel. <i>ERM Consulting, Holland, MI.</i></p>
3	<p>A COMPARISON OF THREE INDIANA BAT (<i>MYOTIS SODALIS</i>) FORAGING RANGES IN SOUTHERN IOWA <u>Drew Carson</u>, Timothy J. Divoll, Andrea Giampoli. <i>SWCA Environmental Consultants, Cincinnati, OH 45226.</i> (DC, TJD); <i>Invenergy Wind Development, LLC, Chicago, IL 60606 (AG).</i></p>
4	<p>MIST-NETTING AND ASSOCIATED SURVEYS FOR BATS ON THE SUPERIOR NATIONAL FOREST, 2013–2017 <u>Tim Catton</u>, Kari Kirschbaum, and Morgan Swinger. <i>USFS-Superior NF, Minnesota.</i></p>
5	<p>INVESTIGATION OF THE IMPACT THAT SOCIAL CONTEXTS OF ROOSTS HAVE UPON ECHOLOCATION CALLS OF THE INDIANA BAT (<i>MYOTIS SODALIS</i>) <u>Logan DeSchepper*</u>, Allison Pardo, and Laura N. Kloepper. <i>St. Mary's College, Notre Dame, IN.</i> [*STUDENT POSTER]</p>
6	<p>BAT USE OF UPLAND POND'S WITHIN THE HARDWOOD FOREST ECOSYSTEM OF SOUTHERN INDIANA Katelyn P. Harrison, <u>Angela N. Fletcher</u>, and Timothy C. Carter. <i>Ball State University, Muncie, IN.</i> [*STUDENT POSTER]</p>
7	<p>CHANGES IN BAT CALL ABUNDANCE PRE- AND POST-WHITE-NOSE SYNDROME USING MOBILE ACOUSTIC SURVEYS IN MINNESOTA <u>Andrew M. Herberg</u>, Melissa S. Boman, Timothy J. Catton, Gerda E. Nordquist, Nancy J. Dietz, Brian J. Dirks, and Devona Berndt. <i>Minnesota Biological Survey, Minnesota Department of Natural Resources, St. Paul, MN.</i></p>
8	<p>BAT ROOSTS IN BRIDGES: ASSESSING ILLINOIS BRIDGES FOR BAT USE <u>Jean M. Mengelkoch</u>, Jocelyn R. Karsk, and Janet L. Jarvis. <i>Illinois Natural History Survey, Champaign, IL.</i></p>
9	<p>USING NON-INVASIVE METHODS TO EVALUATE URBAN BAT STRESS THOUGHOUT THE CHICAGO METROPOLITAN AREA <u>Matthew P. Mulligan</u>, Maureen H. Murray, Katherine Fowler, and Rachel M. Santymire. <i>Lincoln Park Zoo, Chicago, IL.</i></p>
10	<p>USE OF AN ACOUSTIC DETTERENT SYSTEM FOR RESIDENT BAT COLONIES IN BRIDGES <u>D. T. Powell</u>, L. Droppelman, T. Mullins, B. Morton, D. Williams, S. Veeramachaneni, and D. Hedeem. <i>Eco-Tech Consultants, Inc., 311 Clark Station Rd., Fisherville, KY.</i></p>

POSTER SESSION: THURSDAY EVENING, APRIL 4, 2019

No.	Title and Authors
11	<p>BODY MASS OF PREGNANT EPTESICUS FUSCUS IS DIVERGING WITH LONG-TERM EXPOSURE TO <i>PSEUDOGYMNOASCUS DESTRUCTANS</i></p> <p><u>Molly C Simonis</u>, Lynn K Hartzler, Greg G Turner, Michael R Scafani, Joseph S Johnson and Megan A Rúa. <i>Wright State University Environmental Sciences PhD Program, Dayton, OH.</i> [*STUDENT POSTER]</p>
12	<p>EVALUATING THE CONTRIBUTION ACOUSTIC MONITORS HAVE IN PREDICTING BAT MIST-NETTING SUCCESS</p> <p><u>Nerisa S. Tava</u>, l'Yanna Scott, Laura E. D'Acunto, Patrick A. Zollner, and Cheyenne L. Gerdes. <i>Purdue University, West Lafayette, IN.</i> [*STUDENT POSTER]</p>
13	<p>BAT BOX DESIGN AFFECTS MICROCLIMATE AND SUITABILITY AS BAT HABITAT</p> <p><u>Francis E. Tillman</u>, George S. Bakken, and Joy M. O'Keefe. <i>Center for Bat Research, Outreach, and Conservation, Indiana State University, Terre Haute, IN.</i> [*STUDENT POSTER]</p>



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FIELD.
MUSEUM



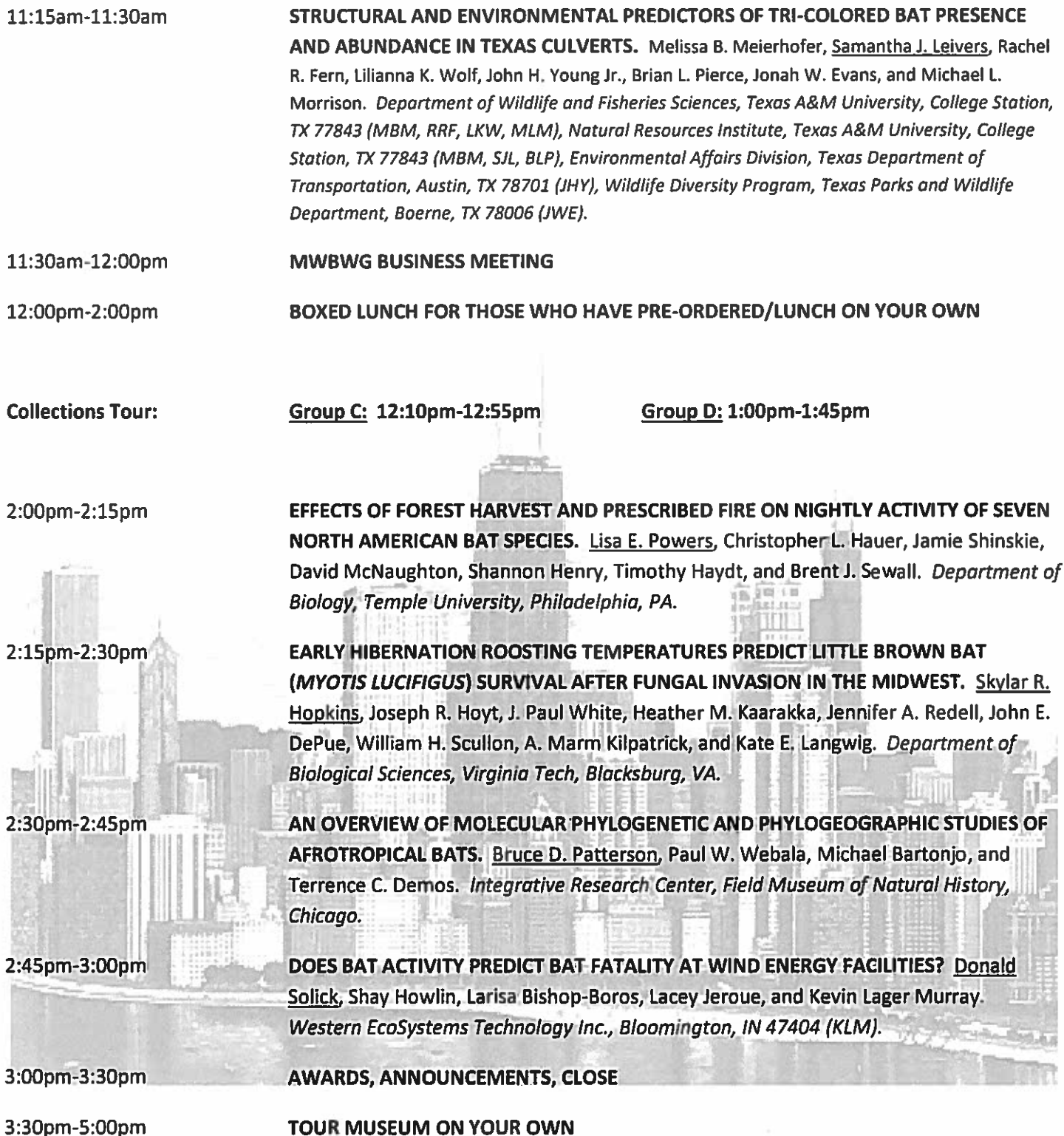
Shedd
AQUARIUM

2019 SYMPOSIUM SCHEDULE

Day 2 – Friday, April 5, 2019

➤ 7:30am-9:00am	Breakfast	Classroom C (eat A & B)
➤ 8:00am-3:00pm	Registration	Museum West Lobby
➤ 8:00am-3:00pm	Vendors	Lecture Hall II
➤ 9:00am-3:00pm	Presentations	Simpson Theater

9:00am-10:00am	STATE REPORTS (IA, IL, IN, MI, MN, MO, OH, WI)
10:00am-10:15am	EXAMINING THE EFFECTIVENESS OF ACOUSTIC DETERRENTS AND BLADE FEATHERING ON BAT MORTALITY AT THE PILOT HILL WIND PROJECT IN ILLINOIS. <u>Goniela Iskali</u> , John Lombardi, and Michael Azeka. <i>Western EcoSystems Technology, Bloomington, IN 47401 (GI, JL); EDF Renewables, San Diego, CA 92128 (MA)</i> .
10:15am-10:30am	SELECTIVE FORAGING MINIMIZES COMPETITION FOR PREY BETWEEN SYMPATRIC BAT SPECIES. <u>Macy J. Kailing</u> , Terry L. Derting, and Gary T. ZeRuth. <i>Department of Biological Sciences, Murray State University, Murray, KY 42071 (MJK, TLD, GTZ); USGS National Wildlife Health Center, Madison, WI 53711 (MJK)</i> .
10:30am-10:45am	BREAK
10:45am-11:00am	HIGH-THROUGHPUT AMPLICON SEQUENCING REVEALS INFLUENCES OF PREY AVAILABILITY AND LANDSCAPE COMPOSITION ON LITTLE BROWN AND BIG BROWN BAT DIETS. <u>Amy K. Wray</u> , Claudio Gratton, Jade M. Kochanski, Michelle A. Jusino, J. Paul White, Heather Kaarakka, Jon Palmer, Mark T. Banik, Daniel L. Lindner, and M. Zachariah Peery. <i>Department of Forest and Wildlife Ecology, University of Wisconsin-Madison, Madison, WI</i> .
11:00am-11:15am	EIGHT YEARS OF ACOUSTIC DATA IN OHIO SUGGESTS CHANGING BAT SPECIES COMPOSITION. <u>Sarah Stankavich</u> , Bridget Brown, Molly Simonis, and Volker Bahn. <i>Ohio Department of Natural Resources, Division of Wildlife, Columbus, OH</i> .



11:15am-11:30am	STRUCTURAL AND ENVIRONMENTAL PREDICTORS OF TRI-COLORED BAT PRESENCE AND ABUNDANCE IN TEXAS CULVERTS. Melissa B. Meierhofer, <u>Samantha J. Leivers</u> , Rachel R. Fern, Lilianna K. Wolf, John H. Young Jr., Brian L. Pierce, Jonah W. Evans, and Michael L. Morrison. <i>Department of Wildlife and Fisheries Sciences, Texas A&M University, College Station, TX 77843 (MBM, RRF, LKW, MLM), Natural Resources Institute, Texas A&M University, College Station, TX 77843 (MBM, SJL, BLP), Environmental Affairs Division, Texas Department of Transportation, Austin, TX 78701 (JHY), Wildlife Diversity Program, Texas Parks and Wildlife Department, Boerne, TX 78006 (JWE).</i>	
11:30am-12:00pm	MWBWG BUSINESS MEETING	
12:00pm-2:00pm	BOXED LUNCH FOR THOSE WHO HAVE PRE-ORDERED/LUNCH ON YOUR OWN	
Collections Tour:	<u>Group C:</u> 12:10pm-12:55pm	<u>Group D:</u> 1:00pm-1:45pm
2:00pm-2:15pm	EFFECTS OF FOREST HARVEST AND PRESCRIBED FIRE ON NIGHTLY ACTIVITY OF SEVEN NORTH AMERICAN BAT SPECIES. <u>Lisa E. Powers</u> , Christopher L. Hauer, Jamie Shinskie, David McNaughton, Shannon Henry, Timothy Haydt, and Brent J. Sewall. <i>Department of Biology, Temple University, Philadelphia, PA.</i>	
2:15pm-2:30pm	EARLY HIBERNATION ROOSTING TEMPERATURES PREDICT LITTLE BROWN BAT (<i>MYOTIS LUCIFIGUS</i>) SURVIVAL AFTER FUNGAL INVASION IN THE MIDWEST. <u>Skylar R. Hopkins</u> , Joseph R. Hoyt, J. Paul White, Heather M. Kaarakka, Jennifer A. Redell, John E. DePue, William H. Scullon, A. Marm Kilpatrick, and Kate E. Langwig. <i>Department of Biological Sciences, Virginia Tech, Blacksburg, VA.</i>	
2:30pm-2:45pm	AN OVERVIEW OF MOLECULAR PHYLOGENETIC AND PHYLOGEOGRAPHIC STUDIES OF AFROTROPICAL BATS. <u>Bruce D. Patterson</u> , Paul W. Webala, Michael Bartonjo, and Terrence C. Demos. <i>Integrative Research Center, Field Museum of Natural History, Chicago.</i>	
2:45pm-3:00pm	DOES BAT ACTIVITY PREDICT BAT FATALITY AT WIND ENERGY FACILITIES? <u>Donald Solick</u> , Shay Howlin, Larisa Bishop-Boros, Lacey Jeroue, and Kevin Lager Murray. <i>Western EcoSystems Technology Inc., Bloomington, IN 47404 (KLM).</i>	
3:00pm-3:30pm	AWARDS, ANNOUNCEMENTS, CLOSE	
3:30pm-5:00pm	TOUR MUSEUM ON YOUR OWN	

***PLEASE NOTE:** All conference attendees will be allowed **FREE ADMISSION TO THE SHEDD AQUARIUM** April 4-7, 2019 with your MWBWG conference name tag – so please hold on to your name tag and present it at the door!

NOTES

NOTES

Chicago Museums Map

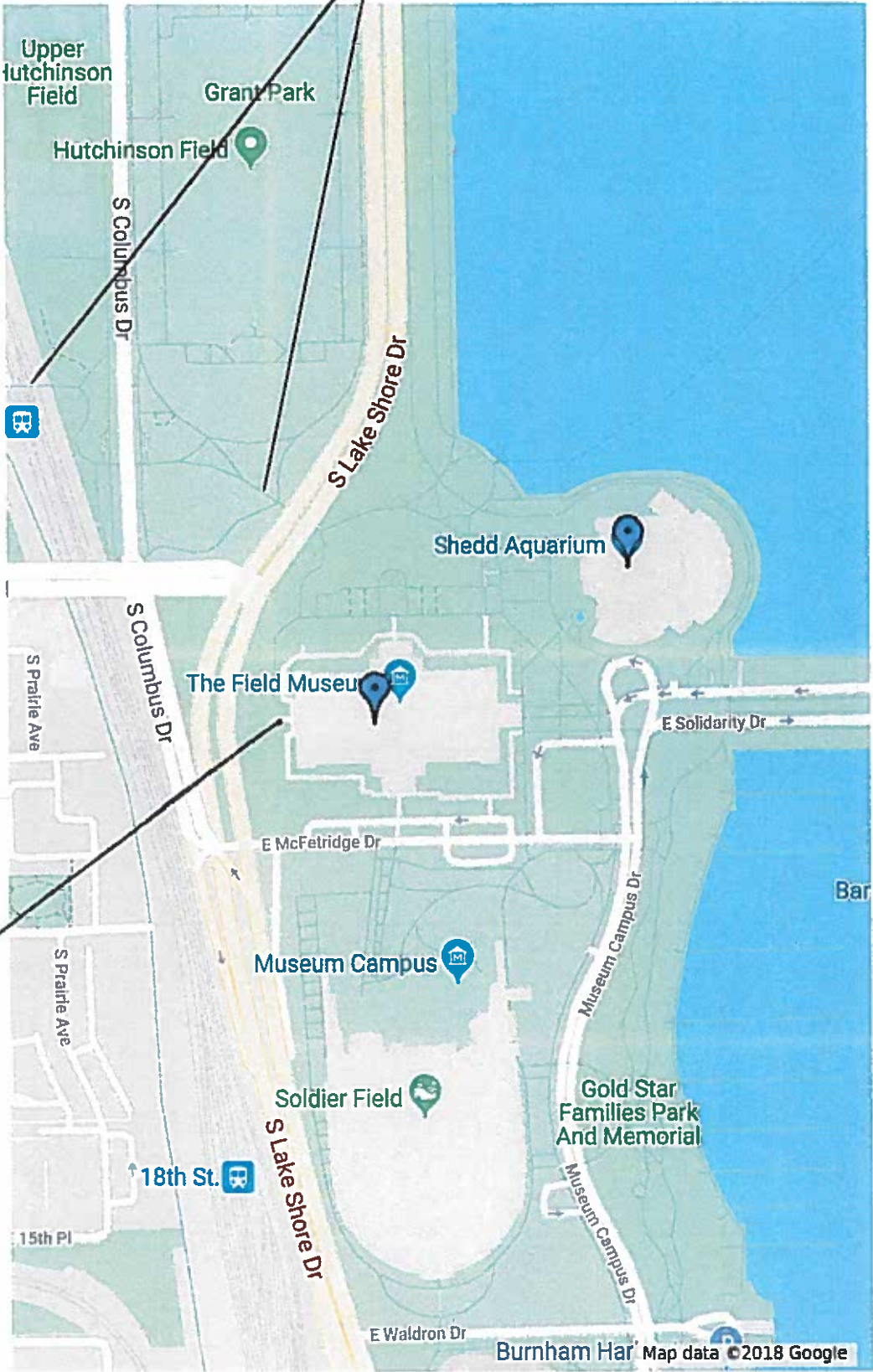
WALKING TRAILS

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- Smart Museum of Art
- School of the Art Institute of Chicago
- Museum of Contemporary Art Chicago
- Chicago History Museum
- Museum of Science & Industry
- The Field Museum
- Adler Planetarium
- John G. Shedd Aquarium
- Frank Lloyd Wright Home and Studio
- Museum of Contemporary Photography











A map of Chicago area museums.

WEST ENTRANCE



Chicago Museums Map

Untitled layer

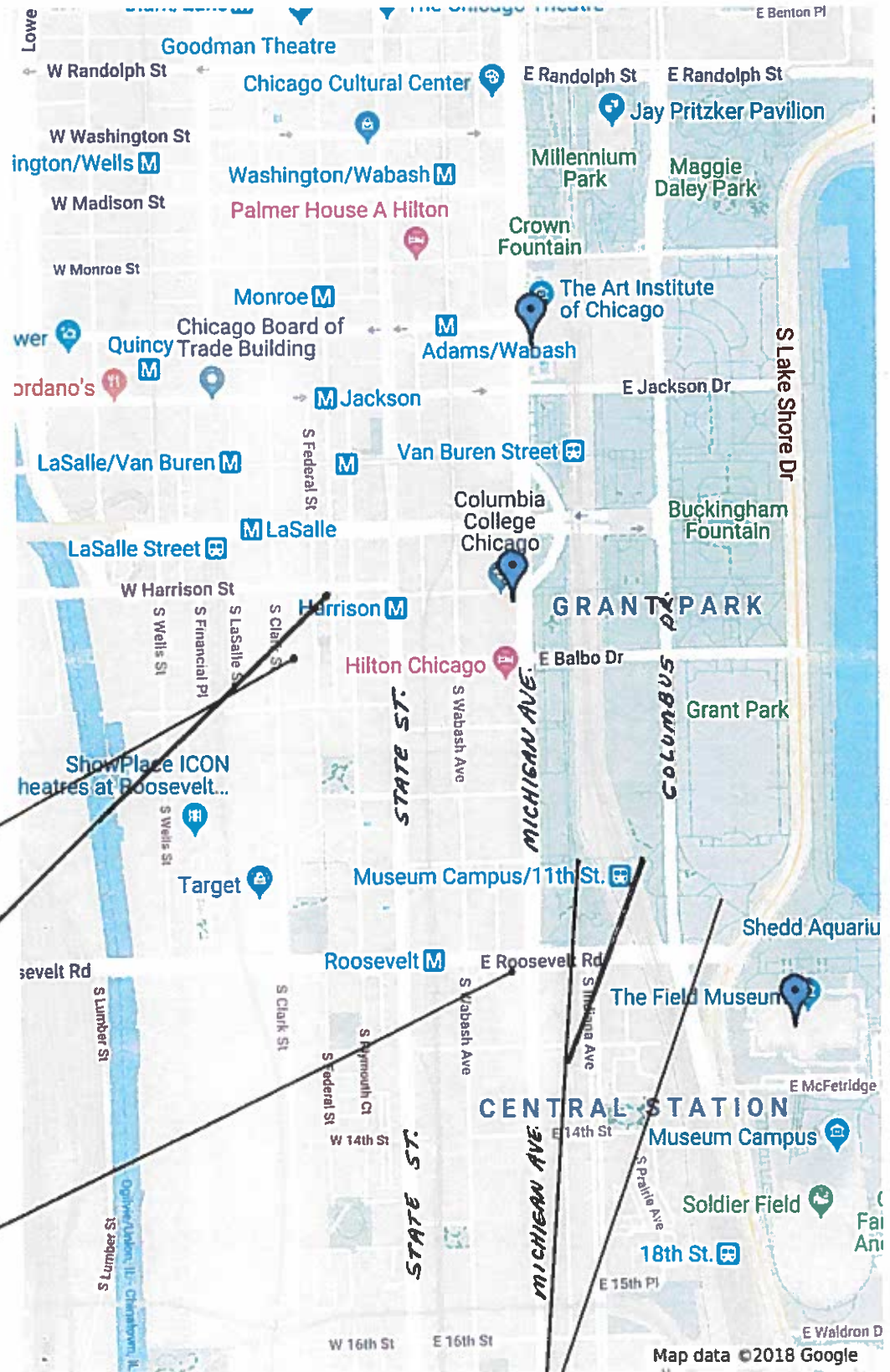
-  Smart Museum of Art
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-  Adler Planetarium
-  John G. Shedd Aquarium
- 
- Frank Lloyd Wright Home and Studio
- 
- Museum of Contemporary Photography

A map of Chicago area museums.



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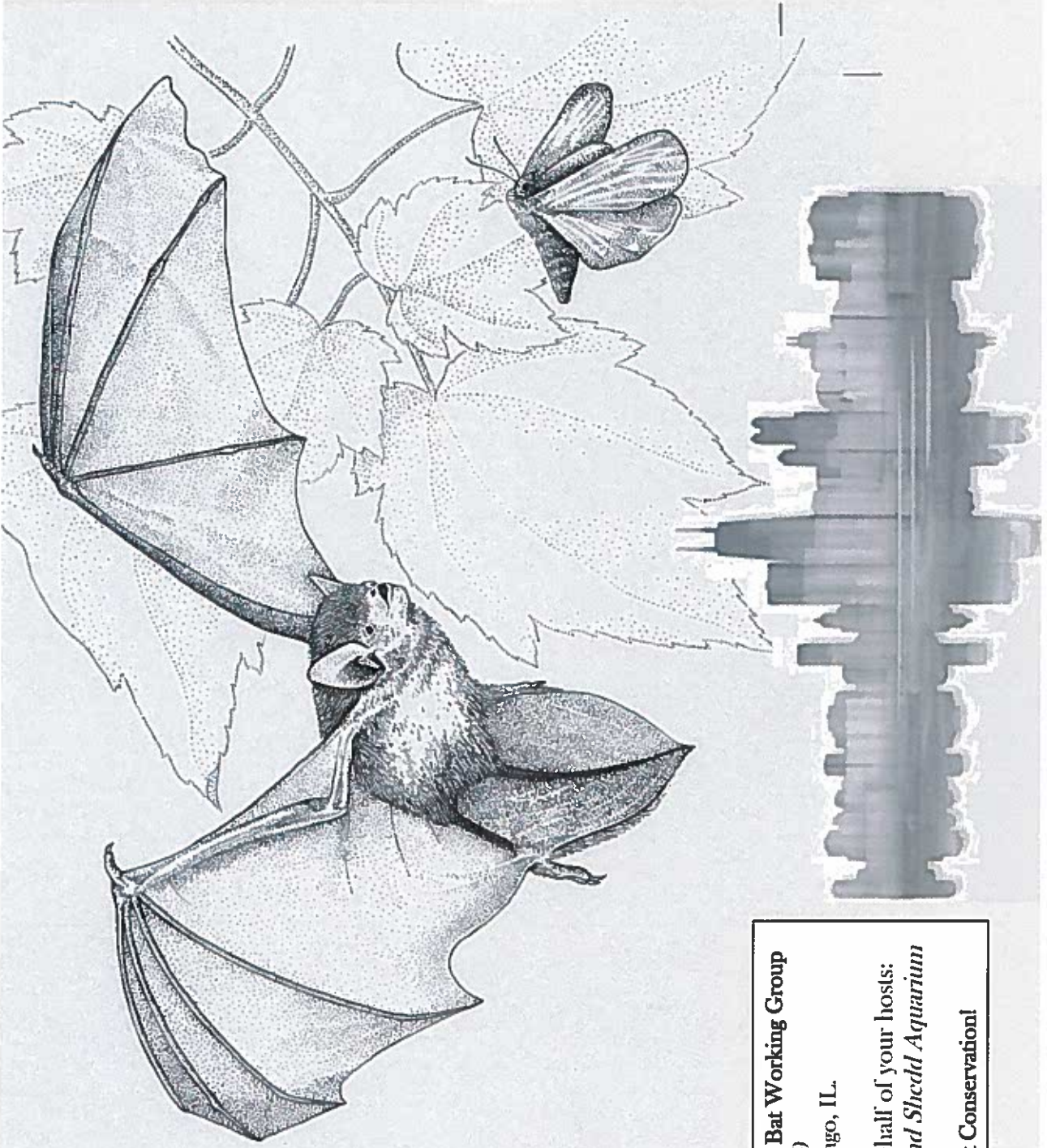
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11th Annual Meeting of the Midwest Bat Working Group
April 4-5, 2019
Field Museum, Chicago, IL.

Thank you for attending on behalf of your hosts:
Illinois DNR, Field Museum, and Shedd Aquarium

We are ALL partners in Bat Conservation!