

BAT RESEARCH NEWS



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Front Cover

Eastern red bat (*Lasiurus borealis*) caught in a mist net near the Otter Creek Wilderness section of the Monongahela National Forest in West Virginia (2018). Photo taken by Keith Christenson. Copyright 2021. All rights reserved.

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RECENT LITERATURE

Authors are requested to send reprints (PDF files) of their published papers to the Editor for Recent Literature, **Dr. Thomas A. Griffiths**, (e-mail: thomas.alan.griffiths@gmail.com) for inclusion in this section. Receipt of reprints is preferred, as it will facilitate complete and correct citation. However, if reprints and/or PDF files are unavailable, please send a complete citation (including complete name of journal and corresponding author e-mailing address) by e-mail. The Recent Literature section is based on several bibliographic sources and for obvious reasons can never be up-to-date. Any error or omission is inadvertent. Voluntary contributions for this section, especially from researchers outside the United States, are most welcome and appreciated.

ANATOMY/HISTOLOGY

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ANNOUNCEMENTS

Back Issues of *Bat Research News*

Remember, Volumes 40–56 (1999–2015), which had been available only to subscribers, are now available to all. The five most recent issues remain available to current subscribers only. I am working on adding more past issues to the site so stay tuned. If you or someone you know need back issues not available, please contact the Managing Editor, Margaret Griffiths (margaret.griffiths01@gmail.com).

Reminder—Renewal Time!

Just a reminder if you have not renewed your subscription to the 2021 volume-year of *BRN*, please check your email inbox for the invoice. One final reminder will be sent to you stragglers!

Change of Address Requested

Will you be moving in the near future or changing your e-mail address? If so, please **send your new postal and e-mail addresses** to Margaret Griffiths (margaret.griffiths01@gmail.com), and include the date on which the change will become effective. Thank you in advance!

Request for News

Please consider submitting news from your lab group, your field work, or any bat-related news. Thank you in advance for considering us as a place for bat, bat worker, and bat lab news items.

Request for Manuscripts — *Bat Research News*

Original research/speculative review articles, short to moderate length, on a bat-related topic would be most welcomed. Please submit manuscripts as .rtf documents to Allen Kurta, Editor for Feature Articles (akurta@emich.edu). Also please consider submitting short articles, notes, or letters on a bat-related topic. If you have questions, please contact Al. Thank you for considering *BRN*.

FUTURE MEETINGS and EVENTS

ALL 2021 Professional Meetings and Events

Please check the websites of all professional societies regarding meetings. Given the rapidly changing situation of the COVID-19 pandemic, decisions as to whether professional meetings will be face-to-face or virtual this year are being updated.

2021

The 15th European Bat Research Symposium will be held virtually 4–7 May 2021. The University of Turku, Turku, Finland, will host the virtual meeting. Please visit: <https://ebrs2021.fi/> for updates and information.

The 11th European Bat Detector Workshop has been **cancelled** for 2021. It will be rescheduled for 2023 or 2024, depending on when and where the next European Bat Research Symposium will be held. For information please go to: <http://www.batlife.info/ebdw/>.

The **NASBR** plans to celebrate their **50th anniversary, 20–23 October 2021**, at the Tempe Mission Palms, **Tempe, Arizona**. Please check the NASBR website for information and updates: <https://www.nasbr.org/>.

2022

The Annual NASBR meeting will be held in conjunction with the International Bat Research Conference (IBRC), 7–12 August 2022, at the Hilton Austin, in Austin, Texas. Check the NASBR website for updates — <https://www.nasbr.org/>.

2023

The Annual NASBR meeting will be held 11–14 October 2023, at the Fort Garry Hotel, in Winnipeg, Manitoba, Canada. Check the NASBR website for updates — <https://www.nasbr.org/>.

To *BRN* Subscribers: Greetings and Happy Spring (or Fall)!

I hope this finds you safe and well. 2020 definitely was a challenging year for all of us as well as for the world's bat populations, so let's hope 2021 is much better for everyone.

As you know, the worldwide pandemic has had a profound effect on the scientific community, including those of us who are chiropterologists. Scientific meetings were cancelled in 2020, including the annual meeting of the North American Society for Bat Research (NASBR). Because of this, no meeting abstracts were submitted to *Bat Research News* for publication last year. I hope the 50th anniversary meeting of the NASBR can take place in person this year (October 2021) in Tempe, Arizona, as planned and that the NASBR will continue the tradition of having their meeting abstracts published in *BRN* again this year.

The practice of bat research worldwide was also affected by the COVID-19 pandemic in 2020. In many instances, national or international travel to potential study sites has been restricted by prohibitions on travel to those sites. Collaboration between researchers has been hampered. Long term and major research projects have sometimes partially or completely ground to a halt. As a result of all of these things, we have seen a change in the type of research being published in national and international research journals. In reviewing citations for this issue, our Editor for Recent Literature has noted a shift toward less complex published work and an increase in citations of work that is important, but generally less comprehensive in scope. We hope that widespread vaccination efforts and bringing the pandemic under control will allow researchers to resume more traditional and comprehensive research projects.

All in all, we are hoping for a safer and more fulfilling 2021! Thank you all for continuing to support bats, bat research, and *Bat Research News*.

A handwritten signature in blue ink that reads "Margaret". The signature is written in a cursive, flowing style.

BAT RESEARCH NEWS



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Front Cover

A mustached bat (*Pteronotus* sp.) exiting a sea cave at the Campanario Biological Station in southwest Costa Rica just after sunset (2018). Photo taken by Keith Christenson. Copyright 2021. All rights reserved.

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Bat Research News is published four times each year, consisting of one volume of four issues. *Bat Research News* publishes short feature articles and general interest notes that are reviewed by at least two scholars in that field. *Bat Research News* also includes abstracts of presentations at bat conferences around the world, letters to the editors, news submitted by our readers, notices and requests, and announcements of future bat conferences worldwide. In addition, *Bat Research News* provides a listing of recently published bat-related articles. *Bat Research News* is abstracted in several databases (e.g., BIOSIS).

Communications concerning feature articles and “Letters to the Editor” should be addressed to Dr. Al Kurta (akurta@emich.edu), recent literature items to Dr. Tom Griffiths (thomas.alan.griffiths@gmail.com), and all other correspondence (e.g., news, conservation, or education items; subscription information; cover art; back issues) to Dr. Margaret Griffiths (margaret.griffiths01@gmail.com).

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Back issues of *Bat Research News*, Volumes 40 (1999) through 56 (2015), are available for download from the *BRN* website at <http://batresearchnews.org/>. Other back issues may be available by contacting Dr. Margaret Griffiths (margaret.griffiths01@gmail.com). Thank you!

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RECENT LITERATURE

Authors are requested to send reprints (PDF files) of their published papers to the Editor for Recent Literature, **Dr. Thomas A. Griffiths**, (e-mail: thomas.alan.griffiths@gmail.com) for inclusion in this section. Receipt of reprints is preferred, as it will facilitate complete and correct citation. However, if reprints and/or PDF files are unavailable, please send a complete citation (including complete name of journal and corresponding author e-mailing address) by e-mail. The Recent Literature section is based on several bibliographic sources and for obvious reasons can never be up-to-date. Any error or omission is inadvertent. Voluntary contributions for this section, especially from researchers outside the United States, are most welcome and appreciated.

ANATOMY/HISTOLOGY

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NEWS

In May 2020, Robert D. Bradley and Lisa C. Bradley of Texas Tech University were invited by Dr. Sergio Ticul Álvarez-Castañeda, Editor of *Therya*, to edit and create a special issue of the journal to honor Dr. David J. Schmidly's many contributions to mammalogical research.

The special editors received 17 contributions from 67 authors, many including submissions from David's friends, colleagues, and former students. These are combined into *Therya* volume 12(2) to become a *festchrift* celebration of David's career. All of the bat-related papers in the volume are cited in the Recent Literature section of this issue of *Bat Research News*, Volume 62(2).

There is also a very well-written biography of David, written by Robert and Lisa:

Bradley, R. D., and L. C. Bradley, Eds. 2021. Issue dedicated to David J. Schmidly, Ph.D., in recognition of his contributions to mammalogy in México. *Therya*, 12(2): 163-169.

<https://www.sciencegate.app/document/10.12933/therya-21-1125>.

[E-mails: robert.bradley@ttu.edu and lisa.bradley@ttu.edu]

From all of us at *Bat Research News*, congratulations, David, on a remarkable and distinguished career!

ERRATUM

In the Spring issue of *Bat Research News*, Volume 62: No. 1, I mistakenly used "Winter 2021" on the Table of Contents page rather than "Spring 2021." My apologies, and I hope it did not cause too much confusion, Your Confused (and somewhat senile) Managing Editor.

ANNOUNCEMENTS

Back Issues of *Bat Research News*

Remember, Volumes 40–56 (1999–2015), which had been available only to subscribers, are now available to all. The five most recent issues remain available to current subscribers only. I am working on adding more past issues to the site so stay tuned. If you or someone you know need back issues not available, please contact the Managing Editor, Margaret Griffiths (margaret.griffiths01@gmail.com).

Change of Address Requested

Will you be moving in the near future or changing your e-mail address? If so, please **send your new postal and e-mail addresses** to Margaret Griffiths (margaret.griffiths01@gmail.com), and include the date on which the change will become effective. Thank you in advance!

Request for News

Please consider submitting news from your lab group, your field work, or any bat-related news. Thank you in advance for considering us as a place for bat, bat worker, and bat lab news items.

Request for Manuscripts — *Bat Research News*

Original research/speculative review articles, short to moderate length, on a bat-related topic would be most welcomed. Please submit manuscripts as .rtf documents to Allen Kurta, Editor for Feature Articles (akurta@emich.edu). Also please consider submitting short articles, notes, or letters on a bat-related topic. If you have questions, please contact Al. Thank you for considering *BRN*.

FUTURE MEETINGS and EVENTS

ALL 2021 Professional Meetings and Events

Please check the websites of all professional societies regarding meetings. Given the rapidly changing situation of the COVID-19 pandemic, decisions as to whether professional meetings will be face-to-face or virtual this year are being updated.

2021

The 11th European Bat Detector Workshop has been **cancelled** for 2021. It will be rescheduled for 2023 or 2024, depending on when and where the next European Bat Research Symposium will be held. For information please go to: <http://www.batlife.info/ebdw/>.

The NASBR plans to celebrate their **50th anniversary, 20–23 October 2021**, at the Tempe Mission Palms, **Tempe, Arizona**. Please check the NASBR website for information and updates: <https://www.nasbr.org/>.

2022

The Annual NASBR meeting will be held in conjunction with the International Bat Research Conference (IBRC), 7–12 August 2022, at the Hilton Austin, in Austin, Texas. Check the NASBR website for updates — <https://www.nasbr.org/>.

2023

The Annual NASBR meeting will be held 11–14 October 2023, at the Fort Garry Hotel, in Winnipeg, Manitoba, Canada. Check the NASBR website for updates — <https://www.nasbr.org/>.

BAT RESEARCH NEWS



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Front Cover

Close-up of *Pteronotus* bat pups in Campanario Bat Cave, on the Osa Peninsula, Costa Rica. This sea cave contains a large population of three species of *Pteronotus* bats. Although an unusual locale for a large bat colony, the bats were doing quite well given the number of pups in residence. Photo by Keith Christenson. Copyright 2021. All rights reserved.

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Bat Research News is published four times each year, consisting of one volume of four issues. *Bat Research News* publishes short feature articles and general interest notes that are reviewed by at least two scholars in that field. *Bat Research News* also includes abstracts of presentations at bat conferences around the world, letters to the editors, news submitted by our readers, notices and requests, and announcements of future bat conferences worldwide. In addition, *Bat Research News* provides a listing of recently published bat-related articles. *Bat Research News* is abstracted in several databases (e.g., BIOSIS).

Communications concerning feature articles and “Letters to the Editor” should be addressed to Dr. Al Kurta (akurta@emich.edu), recent literature items to Dr. Tom Griffiths (thomas.alan.griffiths@gmail.com), and all other correspondence (e.g., news, conservation, or education items; subscription information; cover art; back issues) to Dr. Margaret Griffiths (margaret.griffiths01@gmail.com).

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Back issues of *Bat Research News*, Volumes 40 (1999) through 56 (2015), are available for download from the *BRN* website at <http://batresearchnews.org/>. Other back issues may be available by contacting Dr. Margaret Griffiths (margaret.griffiths01@gmail.com). Thank you!

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Relative Efficacy of 9-mm and 12-mm PIT Tags for Studying Little Brown Myotis (*Myotis lucifugus*): a Cautionary Note

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Passive integrated transponders (PIT) are commonly used to monitor bat populations (Garroway and Broders, 2007; O'Shea et al., 2011) and are more effective than conventional capture-recapture studies in determining survival rates (Ellison et al., 2007). We studied little brown myotis (*Myotis lucifugus*) at a roost in a stone shed, with two openings, near Cambridge, in southwestern Ontario. Our initial purpose was to study the demography and roosting ecology of a population exposed to white-nose syndrome, but our project provided an unexpected opportunity to test results obtained using two sizes of PIT tags.

We implanted bats with tags on seven dates from 2015 to 2017. In May 2015, we used 12-mm tags (HPT12; 12.5 by 2.1 mm, 0.12 g, BioMark, Boise, Idaho), but upon recommendation of the Ontario Ministry of Natural Resources and Forestry (OMNRF), we applied 9-mm transponders (HPT9; 9 by 2.1 mm, 0.08 g) in July and August 2015. During August 2015, we observed that some bats had lost their 9-mm tags or that the transponder did not register when the animal was recaptured. After further consultation with OMNRF, we again implanted 12-mm tags in May, July, and August 2016 and July 2017. In all years, we positioned two cord-type PIT readers (BioMark IS1001) around each opening without restricting access by the bats. The readers ran continuously, except during power outages, collecting data from 2015 until the end of 2020.

We marked individuals of all age and sex classes, but only the sample of adult females

(89) was large enough for statistical analyses. We implanted 24 adult females with 9-mm transponders, 54 with 12-mm units, and 11 with both sizes. The double-tagged bats initially were implanted with 9-mm tags in 2015, and the 12-mm versions were inserted when the animals were recaptured in 2016 or 2017.

The readers detected 11 of 35 (31.4%) 9-mm tags at least once in the year of placement and/or a subsequent year (2015–2020), compared with 50 of 65 (76.9%) 12-mm tags ($X_1^2 = 17.93$; $P < 0.001$). Number of animals detected in a year subsequent to the year of capture was 7 of 35 (20%) for those carrying 9-mm units and 40 of 65 (61.5%) for bats with 12-mm tags ($X_1^2 = 14.14$, d.f. = 1, $P < 0.001$). For 9-mm transponders, mean number of days between first and last dates of detection within a year was 16.5 ± 7.7 (SE) days compared with 69.3 ± 3.6 days for 12-mm tags ($\beta = 51.22$; $t_{75.8} = 4.32$; $P < 0.001$). Mean number of days detected within a year was 2.2 ± 0.5 days versus 24.3 ± 1.9 days for 9-mm and 12-mm tags, respectively ($\beta = 25.69$; $t_{65.1} = 4.50$, $P < 0.001$).

Our results suggest that 9-mm tags do not perform as well as 12-mm tags and may lead to inaccurate conclusions about movements of bats and underestimates of return rates. This was probably due to a combination of tag loss and lower detectability of 9-mm tags. We documented loss of some 9-mm transponders but no loss of 12-mm units. The signal from the 9-mm tags appeared weaker and occasionally could not be detected even when the bat was in hand. Ousterhout and

Semlitsch (2014) reached similar conclusions in a study of movements by juvenile ringed salamanders (*Ambystoma annulatum*). Those authors determined that detection and recapture rates increased with increasing size of PIT tag, due to the longer detection distances of larger units, and that detection rates decreased when the long axis of the tag was perpendicular, rather than parallel, to a portable antenna.

This study was partly funded by the Canadian Wildlife Service and the Rapid Response Fund of the National Speleological Society. The OMNRF issued the necessary permits. We thank A. Alic, G. Buck, A. Ceballos-Vasquez, R. Del Giudice, S. Fraser, L. Greville, L. Haines, K. Hoo, S. Labrie, N. Leava, O. Morningstar, L. Owens, R. Perdiao, C. Risley, P. Ronald, M. Russel, B. Talbot, and R. Valdizon for helping with field work and decontamination of equipment. G. Bettini conducted the statistical analyses.

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RECENT LITERATURE

Authors are requested to send reprints (PDF files) of their published papers to the Editor for Recent Literature, **Dr. Thomas A. Griffiths**, (e-mail: thomas.alan.griffiths@gmail.com) for inclusion in this section. Receipt of reprints is preferred, as it will facilitate complete and correct citation. However, if reprints and/or PDF files are unavailable, please send a complete citation (including complete name of journal and corresponding author e-mailing address) by e-mail. The Recent Literature section is based on several bibliographic sources and for obvious reasons can never be up-to-date. Any error or omission is inadvertent. Voluntary contributions for this section, especially from researchers outside the United States, are most welcome and appreciated.

ANATOMY/HISTOLOGY

Luziga, C., H. Miyata, H. Nagahisa, T. Oji, and N. Wada. 2021. Muscle fibre distribution in forelimb, hindlimb and trunk muscles in three bat species: The little Japanese horseshoe, greater horseshoe and Egyptian fruit. *Anatomia Histologia Embryologia*, 50: 685-693. <https://doi.org/10.1111/ahe.12670> [naomi@yamaguchi-u.ac.jp]

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BAT POOP BIOLOGY

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BATS IN FRENCH ROMANTICISM

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BEHAVIOR

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**PAPERS INCLUDED IN A RECENT SPECIAL ISSUE OF THE JOURNAL
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IN MEMORIAM**Jens Rydell, 1953–2021**

As many of you know, our colleague, Jens Rydell, died earlier this year. His obituary can found at: <https://onlinelibrary.wiley.com/doi/full/10.1111/mam.12259> .

ANNOUNCEMENTS**Change of Address Requested**

Will you be moving in the near future or changing your e-mail address? If so, please **send your new postal and e-mail addresses** to Margaret Griffiths (margaret.griffiths01@gmail.com), and include the date on which the change will become effective. Thank you in advance!

Request for Drawings or Photos

Do you or one of your students have an interesting photo or drawing of a bat? If so, please consider submitting it to Margaret Griffiths (margaret.griffiths01@gmail.com) for use as a future cover illustration on *Bat Research News*!

Request for News

Please consider submitting news from your lab group, your field work, or any bat-related news. Thank you in advance for considering us as a place for bat, bat worker, and bat lab news items.

Request for Manuscripts — *Bat Research News*

Original research/speculative review articles, short to moderate length, on a bat-related topic would be most welcomed. Please submit manuscripts as .rtf documents to Allen Kurta, Editor for Feature Articles (akurta@emich.edu). Also please consider submitting short articles, notes, or letters on a bat-related topic. If you have questions, please contact Al. Thank you for considering *BRN*.

Back Issues of *Bat Research News*

Remember, Volumes 40–56 (1999–2015), which had been available only to subscribers, are now available to all. The five most recent issues remain available to current subscribers only. I am working on adding more past issues to the site so stay tuned. If you or someone you know need back issues not available, please contact the Managing Editor, Margaret Griffiths (margaret.griffiths01@gmail.com).

FUTURE MEETINGS and EVENTS

ALL 2021 Professional Meetings and Events

Please check the websites of all professional societies regarding meetings. Given the rapidly changing situation of the COVID-19 pandemic, decisions as to whether professional meetings will be face-to-face or virtual this year are being updated.

2021

CANCELLED: The 2021 meeting of the **NASBR** has been **CANCELLED**. Please check the NASBR website for more information: <https://www.nasbr.org/>.

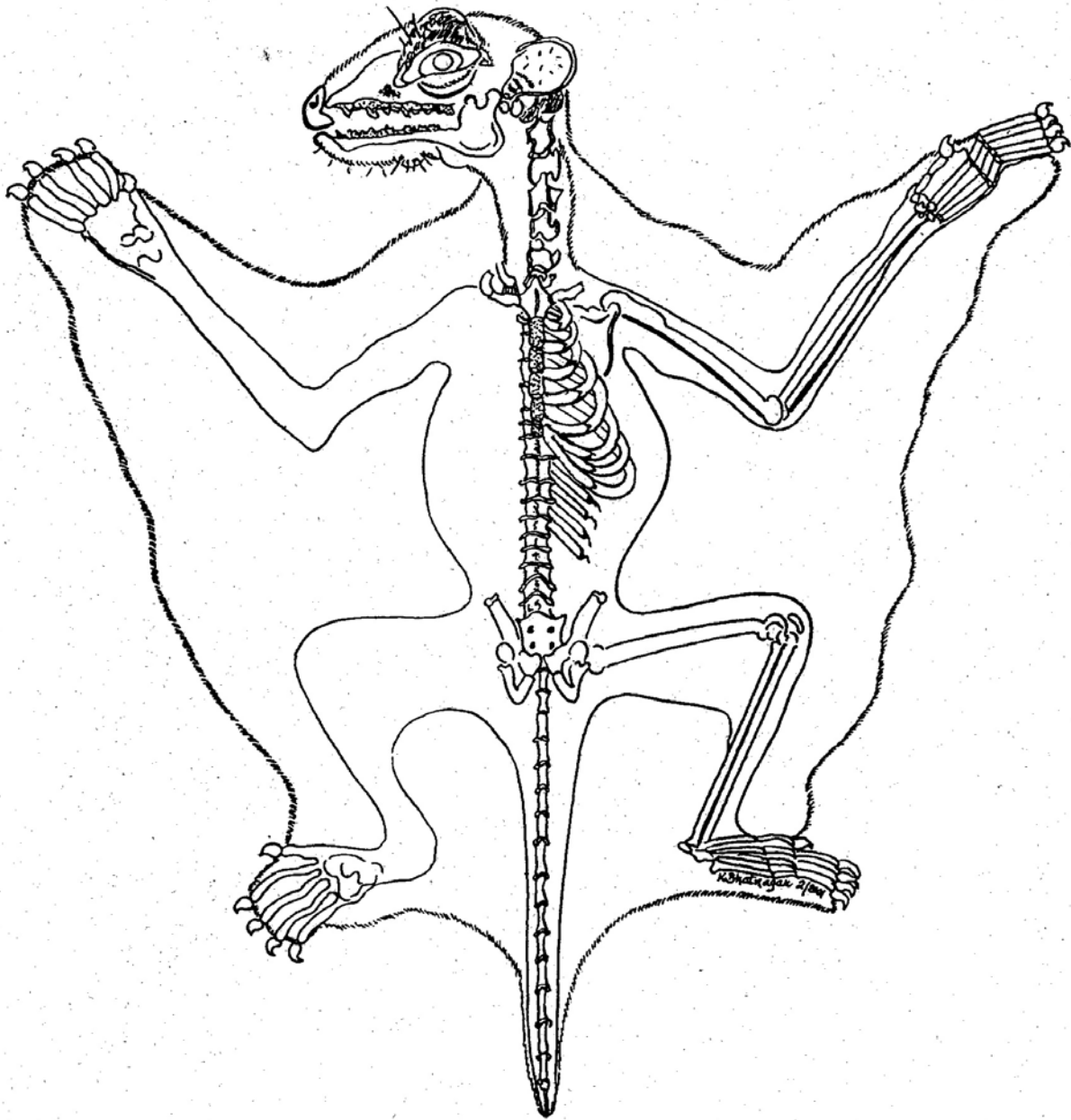
2022

The Annual NASBR meeting will be held in conjunction with the International Bat Research Conference (IBRC), 7–12 August 2022, at the Hilton Austin, in Austin, Texas. Check the NASBR website for updates — <https://www.nasbr.org/>.

2023

The Annual NASBR meeting will be held 11–14 October 2023, at the Fort Garry Hotel, in Winnipeg, Manitoba, Canada. Check the NASBR website for updates — <https://www.nasbr.org/>.

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Front Cover

The cover artwork for this issue is from the front cover of Volume 42: no. 3. We include it here in remembrance of Dr. Kunwar Bhatnagar who passed away on November 17, 2021 (see page 71). Kunwar was also a former editor of *Bat Research News* from 1982–1986. Caption for the Volume 42: no. 3 cover art read:

“The front cover artwork was provided by Kunwar Bhatnagar.
Cynocephalus volans, the flying lemur. Head and body 16 inches, tail 9 inches, weight up to 1.75 kg. These small animals which are like a small cat can glide up to 136 meters between trees. (Almost a bat and it almost flies)”

IN MEMORIAM



Kunwar Prasad Bhatnagar: 1934–2021

J. Gregory Cooper

*Family Care Associates PSC, 1210 Kentucky Highway 36 East, Suite 2C, Cynthiana, KY, 41031
E-mail: gregcoopermd@yahoo.com.*

Kunwar Bhatnagar was born 21 March 1934 in Gwalior, India. He received his Bachelor of Science degree from Agra University, in 1956, and his Master of Science degree with honors in Zoology from Vikram University, in 1958. He came to the United States and studied under the direction of Frank C. Kallen at the State University of New York at Buffalo, where Kunwar received a Ph.D. in Anatomy in 1972. Kunwar respectfully claimed his academic heritage through Dr. Kallen, who was a student of the acclaimed chiroptologist William A. Wimsatt (1917–1985) of Cornell University. Dr. Wimsatt, in turn, had descended academically from Howard B. Adelman (1898–1988) at Cornell,

and the line of succession extended back through Bert G. Wilder (1841–1925) at Cornell and ultimately to Louis Agassiz (1807–1873) at Harvard University. Such was Kunwar's respect for academic integrity and the honor and responsibility that he felt in carrying on credible and impactful research. He became an Assistant Professor of Anatomy at the University of Louisville School of Medicine and Dentistry in 1972, with promotion to Associate Professor in 1978, and became Professor of Anatomical Sciences and Neurobiology at the University of Louisville School of Medicine in 1985.

His areas of interest included microscopy of olfactory and accessory olfactory systems;

anatomical, electrophysiological, and behavioral studies on olfactory systems; morphology of the vomeronasal organ; comparative morphology and ultrastructure of the pineal gland; the rhinencephalon and cardiac conduction system in bats; and human anatomical development. His research resulted in over 150 scientific publications and reports in prominent academic journals and texts. Selected references are included in this report to indicate the scope and trajectory of his work, but emphasizing his work with bats.

In his numerous collaborations he was a most generous colleague and a mentor to many. In addition to his legacy as a research scientist, Dr. Bhatnagar's passion for education and the pursuit of excellence has served many students at the University of Louisville and created a powerful testament to the success of his career as a professor and mentor to now more than 5,000 doctors practicing medicine. He lived a life of leading by example, teaching that caring for people was the real purpose of the practice of medicine.

Kunwar's exceptional career included his role as editor of *Bat Research News* from 1982 to 1986. He was also a regular contributor and a bibliographer for the publication. He was a dedicated, industrious, creative, and prolific scientist, whose work in teaching and research extended even past his achieving emeritus

status at the University of Louisville School of Medicine.

Kunwar Bhatnagar passed away on 17 November 2021, in Louisville, Kentucky. He is survived by his wife of 60 years, Mrs. Indu Bhatnagar; daughters, Dr. Divya Cantor and Dr. Jyoti Burruss; sons-in-law, David Cantor and Dave Burruss; grandchildren, Alec Rouben, Dr. Cami Burruss, Matthew Burruss, Clayton Burruss, Natalie Pregliasco, and Joe Pregliasco; great grandchildren, Louis and Jolie Pregliasco; brothers, Mahesh, Chanda, and Kishan Bhatnagar; as well as many nieces and nephews residing in India, the United States, and around the world. He was preceded in death by his parents, Mr. Narain Swaroop Bhatnagar and Mrs. Bhagwati Devi, and by his brothers, Dr. Kailash Bhatnagar and Ganesh Bhatnagar, and his sister, Mrs. Raj Dulari.

This memorial is respectfully submitted by J. Gregory Cooper, M.D., the first anatomy graduate student of Kunwar Bhatnagar, Ph.D., and now in my 41st year of family medicine practice in Cynthiana, Kentucky, and an Assistant Clinical Professor, in the Department of Family and Geriatric Medicine, at the University of Louisville School of Medicine. If there were no Dr. Kunwar Bhatnagar, there would be no Dr. Greg Cooper.

Acknowledgments.—This tribute was made possible through the contributions of Timothy D. Smith and Divya Bhatnagar Cantor.

A Chronological List of Selected Publications

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RECENT LITERATURE

Authors are requested to send reprints (PDF files) of their published papers to the Editor for Recent Literature, **Dr. Thomas A. Griffiths**, (e-mail: thomas.alan.griffiths@gmail.com) for inclusion in this section. Receipt of reprints is preferred, as it will facilitate complete and correct citation. However, if reprints and/or PDF files are unavailable, please send a complete citation (including complete name of journal and corresponding author e-mailing address) by e-mail. The Recent Literature section is based on several bibliographic sources and for obvious reasons can never be up-to-date. Any error or omission is inadvertent. Voluntary contributions for this section, especially from researchers outside the United States, are most welcome and appreciated.

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ANNOUNCEMENTS

Reminder—Renewal Time!

Just a reminder that this is the last issue of the 2021 series of *Bat Research News*. That means many of you will be receiving renewal information in your e-mail inbox fairly soon. We hope you will continue to support *BRN* for the 2022 volume-year. All of us at *Bat Research News* wish you a safe and happy 2022!

Change of Address Requested

Will you be moving in the near future or changing your e-mail address? If so, please **send your new postal and e-mail addresses** to Margaret Griffiths (margaret.griffiths01@gmail.com), and include the date on which the change will become effective. Thank you in advance!

Request for Drawings or Photos

Do you or one of your students have an interesting photo or drawing of a bat? If so, please consider submitting it to Margaret Griffiths (margaret.griffiths01@gmail.com) for use as a future cover illustration on *Bat Research News*!

Request for News

Please consider submitting news from your lab group, your field work, or any bat-related news. Thank you in advance for considering us as a place for bat, bat worker, and bat lab news items.

Request for Manuscripts — *Bat Research News*

Original research/speculative review articles, short to moderate length, on a bat-related topic would be most welcomed. Please submit manuscripts as .rtf documents to Allen Kurta, Editor for Feature Articles (akurta@emich.edu). Also please consider submitting short articles, notes, or letters on a bat-related topic. If you have questions, please contact Al. Thank you for considering *BRN*.

Back Issues of *Bat Research News*

Limited back issues are available on the *Bat Research News* website. The five most recent issues remain available to current subscribers only. To download back issues, click on the “Past Volumes” link found on the home page, and then on the volume you would like to download. I am working on adding more past issues to the site so stay tuned. If you or someone you know need back issues not available, please contact the Managing Editor, Margaret Griffiths (margaret.griffiths01@gmail.com).

FUTURE MEETINGS and EVENTS**ALL Professional Meetings and Events**

Please check the websites of all professional societies regarding meetings. Given the rapidly changing situation of the COVID-19 pandemic, decisions as to whether professional meetings will be face-to-face, virtual, or hybrid during the year are updated on the respective website.

2022

The Annual NASBR meeting will be held in conjunction with the International Bat Research Conference (IBRC), 7–12 August 2022, at the Hilton Austin, in Austin, Texas. Check the NASBR website for updates — <https://www.nasbr.org/>.

2023

The Annual NASBR meeting will be held 11–14 October 2023, at the Fort Garry Hotel, in Winnipeg, Manitoba, Canada. Check the NASBR website for updates — <https://www.nasbr.org/>.