

## Harrison Institute - new mammal species

To date, Institute staff, together with their students and honorary research fellows, at home and abroad, have named 23 species of mammal new to science. Of these, 17 have been published since 2004.

All are either bats or rodents and have originated from 14 countries (Cambodia x2, Comoro Islands x1, Democratic Republic of Congo x1, Indonesia x2, Iraq x1, Israel x 1, Lao PDR x1, Madagascar x1, Malaysia x1, Myanmar x3, Oman x1, Thailand x4, Tunisia x1, Vietnam x3).

### 23 – *Murina hkakaboraziensis* (Hkakabo Razi bat) - Soisook et al. (2017)

Type locality: 6 km north of Mali Raing Village, Hkakabo Razi National Park, Putao Township, Kachin, Myanmar, 27°37'19" N, 97°22'13"E, 510 m a.s.l.

Holotype specimen: PS 160218.6 (to be subsequently deposited in the Zoological Collection of the University of Mandalay (UMZC), adult male, body in alcohol, skull and baculum extracted.

Reference: Soisook, P. Win Naing Thaw, Myint Kyaw, Sai Sein Lin Oo, **A. Pimsai**, M. Suarez-Rubio, and S. Renner, 2017. A new species of *Murina* (Chiroptera: Vespertilionidae) from sub-Himalayan forests of northern Myanmar. *Zootaxa*, 4320(1): 159-172.

### 22 – *Rhinolophus monticolus* (Mountain horseshoe bat) - Soisook et al. (2017)

Type locality: Pu Nam Ron Stream, Mae Nam Pha Chi Wildlife Sanctuary, Ratchaburi Province, Thailand, 13°16'N, 99°20'E, 800 m a.s.l.

Holotype specimen: PSUZC-MM.2008.1, field no. PS080123.2, adult male, body in alcohol, skull and baculum extracted, collected by Pipat Soisook, Piyawan Niyomwan and Tuanjit Srithongchuay on 23 January, 2008.

Reference: Soisook, P., Sunate Karapan, Mattana Srikrachang, Ariya Dejtaradol, Kwan Nualcharoen, Sara Bumrungsri, Sai Sein Lin Oo, Moe Moe Aung, **Paul J. J. Bates**, Margarita Harutyunyan, Magdalena M. Buś, and Wiesław Bogdanowicz. 2016. Hill forest dweller: a new cryptic species of *Rhinolophus* in the 'pusillus group' (Chiroptera: Rhinolophidae) from Thailand and Lao PDR. *Acta Chiropterologica*, 18(1): 117–139, 2016.

### 21 – *Glischropus aquilis* (Thick-thumbed bat) - Csorba et al. (2015)

Type locality: Sukabanjar village, Lampung, Sumatra, Indonesia, 04°56'N, 103°52'E, 768 m a.s.l.

Holotype specimen: MZM 35030, adult male, body in alcohol, skull extracted, collected by Joe Chun-Chia Huang on 15 August, 2011.

Reference: Csorba, G., T. Gorfal, S. Wiantoro, T. Kingston, **P. J. J. Bates**, and J. C.-C. Huang. 2015. Thumb-pads up – a new species of thick-thumbed bat from Sumatra (Chiroptera: Vespertilionidae: *Glischropus*). *Zootaxa*, 3980(2): 267-278.

**20 – *Rhinolophus francisi* (Francis's woolly horseshoe bat) - Soisook et al. (2015)**

Type locality: Gunung Trus Madi, Sabah, Malaysia (approx. 5°34'N, 116°29'E), at an elevation of about 1,600 m a.s.l.

Holotype specimen: BMNH.84.1970 (field number CMF830703.1), adult female, body in alcohol, skull intact (original skull images taken with computed tomography), collected by Charles M. Francis on 3 July 1983.

Reference: Soisook, P., M. J. Streubig, S. Noerfahmy, H. Bernard, I. Maryanto, S.-F. Chen, S. J. Rossiter, H.-C. Kuo, K. Deshpande, **P. J. J. Bates**, D. Sykes, and R. P. Miguez. 2015. Description of a new species of the *Rhinolophus trifoliatus*-group (Chiroptera: Rhinolophidae) from Southeast Asia. *Acta Chiropterologica*, 17(1): 21-36.

**19 - *Eudiscoderma thongareeae* (Thongaree's disc-nosed bat) – Soisook et al. (2015)**

Type locality: Sirindhorn Waterfall, Bala Forest, Halabala WS, Wang District, Narathiwat Province, S. Thailand, 5°48'08" N, 101°49'37"E, 135 m a.s.l.

Holotype specimen: PSUZC-MM.2014.157 (formerly BL130), adult male, body in ethanol, skull and baculum extracted, collected by A. Prajakjitr and Siriporn Thongaree on 11 April 2001.

Reference: Soisook, P., A. Prajakjitr, S. Karapan, C. M. Francis and **P. J. J. Bates**. A new genus and species of false vampire (Chiroptera: Megadermatidae) from peninsular Thailand. *Zootaxa*, 3931 (4), 528-550.

**18 - *Murina guilleni* (Guillen's tube-nosed bat) - Soisook et al. (2013)**

Type locality: Rajjaprabha Dam, Ban Takhun District, Surat Thani Province, peninsular Thailand, 8°57'N, 98°47'E, 80 m a.s.l.

Holotype specimen: PSUZC-MM 2010.22 (field number PS100419.2), adult male, body in alcohol, skull and baculum extracted, collected by P. Soisook on 19 April 2010.

Reference: Soisook, P., S. Karapan, C. Satasook, V. D. Thong, F. A. A. Khan, I. Maryanto, G. Csorba, N. Furey, B. Aul, and **P. J. J. Bates**. A review of the *Murina cyclotis* complex (Chiroptera: Vespertilionidae) with descriptions of a new species and subspecies. *Acta Chiropterologica*, 15(2): 271-292.

**17 - *Murina balaensis* (Bala tube-nosed bat) – Soisook et al. (2013)**

Type locality: Second bridge trail, Bala Forest, Halabala Wildlife Sanctuary, Wang, Narathiwat Province, S. Thailand, approx. 5°48.9'N 101°48.1'E, 370 m a.s.l.

Holotype specimen: PSUZC-MM2012.214, field number PS121013.1, adult male, dry skin with skull and baculum extracted, collected by Abdullah Samoh, Saowaluk Binlasoi and Jirapan Yimkaew on 13 October 2012, on behalf of faunal diversity survey of Halabala Wildlife Research Station.

Reference: Soisook, P., S. Karapan, C. Satasook, and **P. J. J. Bates**. 2013. A new species of *Murina* (Mammalia: Chiroptera: Vespertilionidae) from peninsular Thailand. *Zootaxa*, 3746: 567-579.

#### 16 - *Biswamoyopterus laoensis* (Laotian giant flying squirrel) – Sanamxay et al. (2013)

Type locality: Ban Thongnami, Pak Kading District, Bolikhamxai Province, Lao PDR, 18°10.302'N, 104°14.115'E.

Holotype specimen: FES.MM.12.163 in National University of Lao collection, Vietianne, Lao PDR - adult female, dry skin, skull extracted. Collected by Daovanh Sanamxay, Sysouphanh Xayavong, and Vilakhan Xayaphet on 25 September, 2012.

Reference: Sanamxay, D., B. Douangboubpha, S. Bumrungsri, S. Xayavong, V. Xayaphet, C. Satasook, and **P.J.J. Bates**. 2013. Rediscovery of *Biswamoyopterus* (Mammalia: Rodentia: Sciuridae: Pteromyini) in Asia, with the description of a new species from Lao PDR. *Zootaxa*. 3686: 471–481.

#### 15 - *Hipposideros griffini* (Griffin's leaf-nosed bat) – Thong et al. (2012)

Type locality: Cat Ba National Park, Cat Ba Island, Ha Long Bay, Vietnam, 20°48'N, 107°01'E, (248 metres above sea level).

Holotype specimen: IEBR-T.200809.12 in IEBR collection, Hanoi, Vietnam - adult male, in alcohol, skull removed. Collected by Vu Dinh Thong on 20 August, 2009.

Reference: Thong, V.D., S.J. Puechmaille, A. Denzinger, C. Dietz, G. Csorba, **P.J.J. Bates**, E.C. Teeling, and H-U. Schnitzler. 2012. A new species of *Hipposideros* (Chiroptera: Hipposideridae) from Vietnam. *Journal of Mammalogy*, 93(1): 1-11.

#### 14 - *Hipposideros einnaythu* (House-dwelling leaf-nosed bat) – Douangboubpha et al. (2011)

Type locality: Kan Thar Yar Beach, Gwa Township, Rakhine State, Myanmar, 17°44'00"N, 94°32'30"E, (sea level).

Holotype specimen: HZM.5.35011 (Field No: Z36) in Harrison Institute, mature female, in spirit, skull removed. Collected by June Cree, Paul Bates, Malcolm Pearch, Si Si Hla Bu, Khin Maung Swe, Elizabeth Barratt, Lorna McGregor, Janet Leakey, and Ditte Hendrichsen on 15 September, 2000.

Reference: Douangboubpha, B., S. Bumrungsri, C. Satasook, P. Soisook, Si Si Hla Bu, B. Aul, **D.L. Harrison, M. Pearch, N.M. Thomas**, and **P.J.J. Bates**. 2011. A new species of small *Hipposideros* (Chiroptera: Hipposideridae) from Myanmar and a revaluation of the taxon *H. nicobarulae* Miller, 1902 from the Nicobar Islands. *Acta Chiropterologica*, 13(1): 61-78.

**13 - *Murina eleryi* (Eleryi's tube-nosed bat) – Furey et al. (2009)**

Type locality: Kim Hy Commune, Na Ri district of Kim Hy Nature Reserve, Bac Kan province, Vietnam, 22°16.392'N, 106°03.427'E, 525 m a.s.l. (above sea level).

Holotype specimen: HNHM.2007.51.1. (collector's number: NF. 101007.2), in Hungarian Natural History Museum, mature male, in spirit, skull removed. Collected by N. M. Furey on 10 October, 2007.

Reference: Furey, N.M., V.D. Thong, **P.J.J. Bates**, and G. Csorba. 2009. Description of a new species belonging to the *Murina* 'suilla-group' (Chiroptera: Vespertilionidae: Murinae) from north Vietnam. *Acta Chiropterologica*, 11(2): 225-236.

**12 - *Kerivoula titania* (Titania's woolly bat) – Bates et al. (2007)**

Type locality: Seima Biodiversity Conservation Area, Mondul Kiri Province, Cambodia, 12°10.49'N, 106°58.55'E, 290 m a.s.l.

Holotype specimen: HNHM.2005.81.58 (in the Hungarian Natural History Museum collection).

Reference: **Bates, P.J.J.**, M. Struebig, B. Hayes, N. Furey, Khin Mya Mya, V.D. Thong, P.D. Tien, C. Francis and G. Csorba. 2007. A new species of *Kerivoula* (Chiroptera: Vespertilionidae) from Southeast Asia. *Acta Chiropterologica*, 9(2): 323-337.

**11 - *Murina tiensa* (Fairy tube-nosed bat) – Csorba et al. (2007)**

Type locality: An Tinh commune, Na Ri district of Kim Hy Nature Reserve, Bac Kan Province, Vietnam, 22°11.725'N, 106°01.638'E, ca. 750 m a.s.l.

Holotype specimen: HZM.2.38178 (in the Harrison Institute collection).

Reference: Csorba, G., V. D. Thong, **P. J. J. Bates** and N. M. Furey. 2007. Description of a new species of *Murina* from Vietnam (Chiroptera: Vespertilionidae: Murinae). *Museum of Texas Tech University, Occasional Papers No. 268*: 1-9.

**10 - *Hipposideros boeadii* (Boeadi's leaf-nosed bat) – Bates et al. (2007)**

Type locality: Lanowulu, Rawa Aopa Watumohai National Park, South-East Sulawesi, 04°22'S, 121°44'E.

Holotype specimen: M. 28253 (in the Museum Zoologicum Bogoriense collection).

Reference: **Bates, P. J. J.**, S. J. Rossiter, A. Suyanto, and T. Kingston. 2007. A new species of *Hipposideros* (Chiroptera: Hipposideridae) from Sulawesi. *Acta Chiropterologica*, 9(1): 13–26.

**9 - *Pipistrellus raceyi* (Racey's pipistrelle) – Bates et al. (2006)**

Type locality: Kianjavato, Province de Fianarantsoa, Madagascar, 21°22.84'S, 47°51.96'E, 75 m a.s.l.

Holotype specimen: FMNH.185567 (in the Field Museum of Natural History, Chicago collection).

Reference: **Bates, P. J. J.**, F. H. Ratrimomanarivo, D. L. Harrison, and S. M. Goodman. 2006. A description of a new species of *Pipistrellus* (Chiroptera: Vespertilionidae) from Madagascar with a review of related Vespertilioninae from the island. *Acta Chiropterologica*, 8(2): 299–324.

**8 - *Murina harrisoni* (Harrison's tube-nosed bat) – Csorba et al. (2005)**

Type locality: O Tuk Chehn, Kirirom National Park, Kompong Speu Province, Cambodia, 11°29.611'N, 104°12.746'E.

Holotype specimen: HZM.1.36316 (in the Harrison Institute collection).

Reference: Csorba, G. and **P. J. J. Bates**. 2005. Description of a new species of *Murina* from Cambodia (Chiroptera: Vespertilionidae: Murininae). *Acta Chiropterologica*, 7(1): 1–7.

**7 - *Kerivoula kachinensis* (Kachin woolly bat) – Bates et al. (2007)**

Type locality: Namdee Forest, Bhamo Township, Kachin State, Myanmar. 24°34.203'N, 97°07.501'E.

Holotype specimen: HZM.1.35288 (in the Harrison Institute collection).

Reference: **Bates, P.J.J.**, M. Struebig, B. Hayes, N. Furey, Khin Mya Mya, V.D. Thong, P.D. Tien, C. Francis and G. Csorba. 2007. A new species of *Kerivoula* (Chiroptera: Vespertilionidae) from Southeast Asia. *Acta Chiropterologica*, 9(2): 323-337.

**6 - *Hypsugo arabicus* (Arabian pipistrelle) – (Harrison, 1979)**

Type locality: Wadi Sahtan, Oman. 23°22'N, 57°18'E.

Holotype specimen: HZM.2.10052 (original Harrison Institute reference number, subsequently donated to The Natural History Museum, London).

Reference: **Harrison, D. L. 1979**. A new species of Pipistrelle Bat (*Pipistrellus*: Vespertilionidae) from Oman, Arabia. *Mammalia* (Paris), 43(4): 573-576.

**5 - *Chaerephon gallagheri* (Gallagher's free-tailed bat) – (Harrison, 1975)**

Type locality: Scierie Forest, 30 km South-West of Kindu, Democratic Republic of Congo (Zaire). 3°10'N, 25°49'E.

Holotype specimen: HZM.1.7797 (original Harrison Institute reference number, subsequently donated to The Natural History Museum, London).

Reference: **Harrison, D. L.** 1975. A new species of African Free-tailed Bat (Chiroptera: Molossidae) obtained by the Zaire River Expedition. *Mammalia (Paris)*, 39 (2): 311-318.

#### 4 - *Gerbillus (Hendecapleura) jamesi* (James's gerbil) – Harrison (1967)

Type locality: near Hammamet, Tunisia.

Holotype specimen: HZM.1.4473 (original Harrison Institute reference number, subsequently donated to The Natural History Museum, London).

Reference: **Harrison, D. L.** 1967. Observations on some rodents from Tunisia, with the description of a new gerbil (Gerbillinae: Rodentia). *Mammalia (Paris)*, 31(3): 382-389.

#### 3 - *Hypsugo bodenheimeri* (Bodenheimer's pipistrelle) – Harrison (1960)

Type locality: Yotvata, Wadi Araba, 40 km north of Eilat, Israel.

Holotype specimen: HZM.1.2987 (original Harrison Institute reference number, subsequently donated to The Natural History Museum, London).

Reference: **Harrison, D. L.** 1960. A new species of Pipistrelle Bat (Chiroptera: Pipistrellus) from South Israel. *Durban Museum Novitates* 5(19): 261-265.

#### 2 - *Miniopterus griveaudi* (Griveaud's long-fingered bat) – Harrison, 1959

Type locality: Grande Comore Island, Comoro Islands, Indian Ocean.

Holotype specimen: HZM.3.2803 (original Harrison Institute reference number, subsequently donated to The Natural History Museum, London – BMNH.67.1231).

Reference: **Harrison, D. L.** 1959. A new subspecies of Lesser Long-winged Bat *Miniopterus minor* Peters, 1867 from the Comoro Islands. *Durban Museum Novitates* 5 (15): 191-196.

The taxon *griveaudi* was originally described as a subspecies in *M. minor* but was subsequently assigned to *M. manavi* by Peterson *et al.* (1995) and has recently been promoted to full species by Goodman *et al.* (2009).

#### 1 - *Gerbillus mesopotamiae* (Harrison's gerbil) – Harrison, 1956

Type locality: near Amariya, on the west bank of the Euphrates, south-west of Faluja, Iraq.

Holotype specimen: HZM.1.1737 (original Harrison Institute reference number, subsequently donated to The Natural History Museum, London).

Reference: **Harrison, D.L.** 1956. Gerbils from Iraq, with description of a new Gerbil. *Journal of Mammalogy* 37 (3): 417- 422.  
Originally named as a race of *Gerbillus dasyurus*.