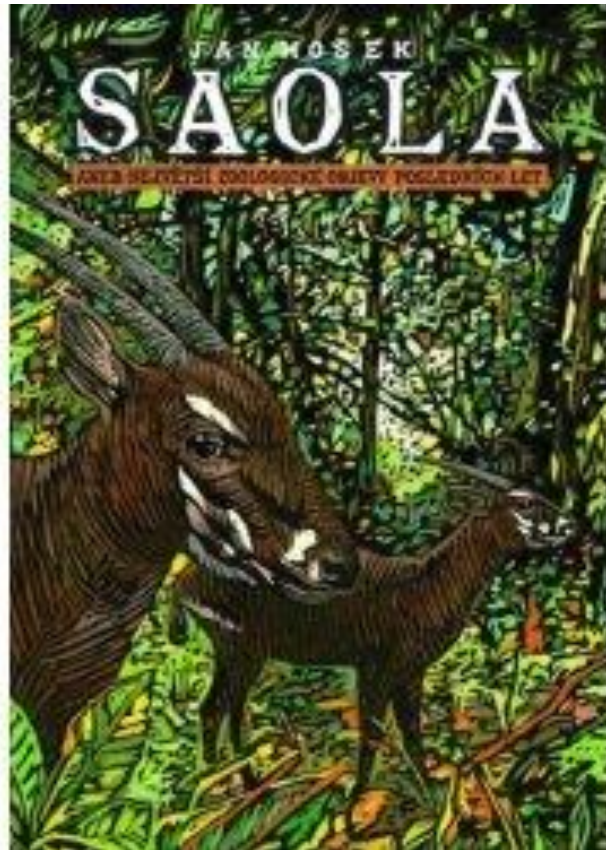


Mammaliologie

4. diverzita savcù

Jan Hošek, 2007: Saola aneb největší zoologické objevy posledních let.
Scientia, Praha 2007, 215 str.

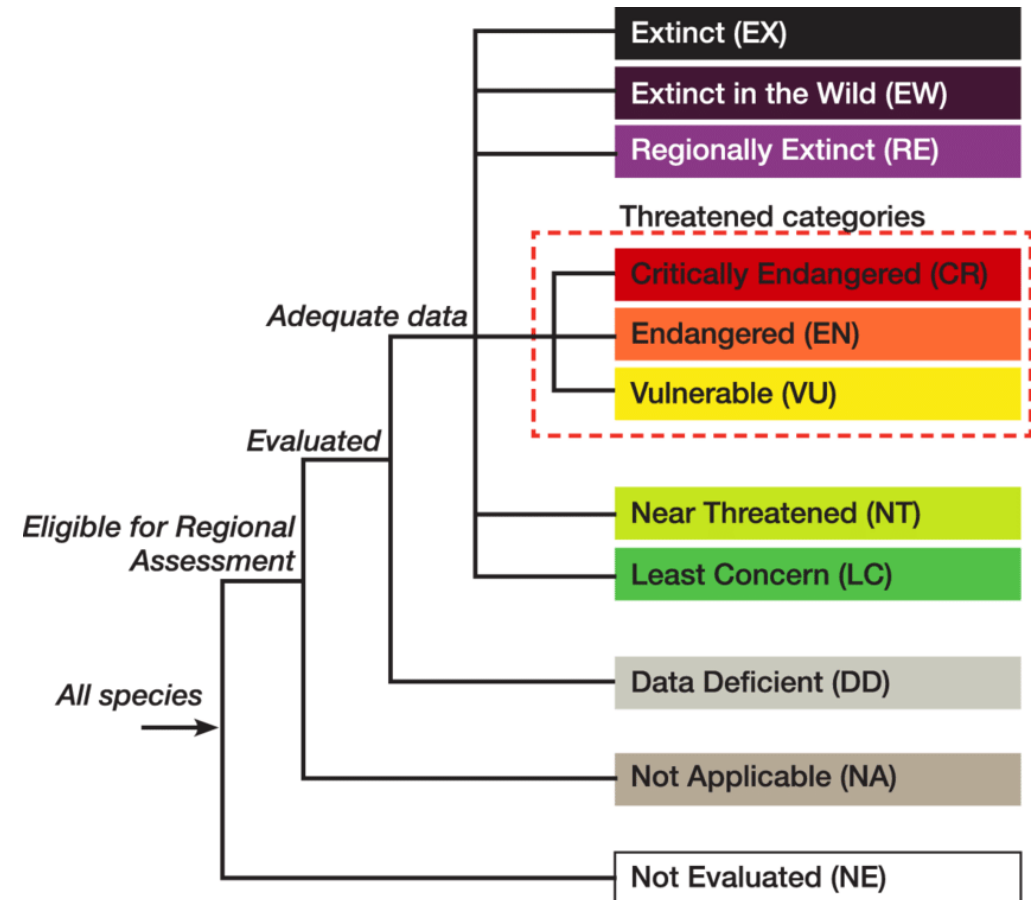


Kingdom	Phylum/division	Within phylum	Major division	Currently catalogued	Described species range	Estimated
Animals (cont.)		Insecta		~1M	720,000->1 M	5 M ^a
			Coleoptera	360,000–400,000		1.1M
			Diptera	152,956		240,000 ^a
			Hemiptera	80,000–88,000		
			Hymenoptera	115,000		>300,000 ^a
			Lepidoptera	174,250		300,000–500,000
		Crustacea		47,000	25,000–68,171	150,000
	Platyhelminthes			20,000	20,000–25,000	(~80,000)
	Nematoda			<25,000	12,000–80,000	~500,000 ^a
	Echinodermata			7003	6100–7003	~14,000
	Chordata			64,788		~80,500
			Mammals	5487	4300–5487	~5500
			Birds	9990	9000–9990	>10,000
			Birds	10,052		
			Reptiles	8734	6300–8734	~10,000
			Amphibians	6515	4950–6515	~15,000
			Fishes	31,269	25,000–31,269	~40,000

Asi 5 500 recentních druhů

IUCN – NGO, International Union for Conservation of Nature

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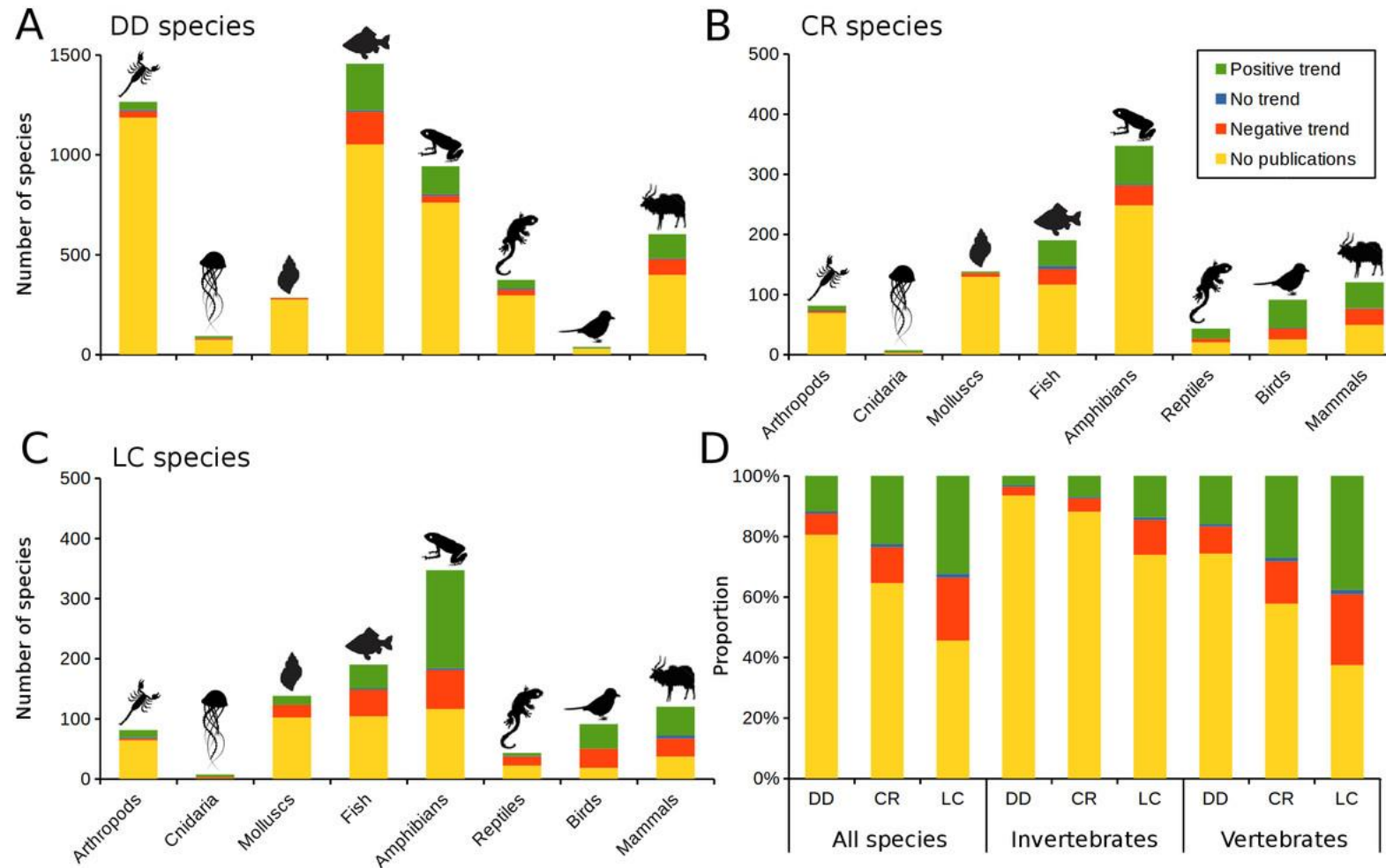
SEARCH FILTERS

- Taxonomy
- Red List Category
- Land Regions
- Country Legends
- Marine Regions
- Threats

RESULTS (6758)

ANIMALIA – MAMMALIA	Wallace's Tarsier	<i>Tarsius wallacei</i>	Decreasing	Global	
ANIMALIA – MAMMALIA	Madidi Titi Monkey	<i>Plecturocebus aureipalatii</i>	Stable	Global	
ANIMALIA – MAMMALIA	Walrus	<i>Odobenus rosmarus</i>	Unknown	Global	
ANIMALIA – MAMMALIA	Siau Island Tarsier	<i>Tarsius tumpara</i>	Decreasing	Global	
ANIMALIA – MAMMALIA	Siamang	<i>Symphalangus syndactylus</i>	Decreasing	Global	
ANIMALIA – MAMMALIA	Walrus	<i>Odobenus rosmarus</i>	Unknown	Europe	

feedback



Influence of the IUCN Red List classification on research efforts.

Number of species revealing one of the three trends (i.e., positive, neutral, negative) in publication output, based on the mean number of publications per year per species before and after their classification as DD, CR (critically endangered) or LC on the IUCN Red list of threatened species

6758 druhů savců podle IUCN, součtem?

EX - Extinct (97)

EW - Extinct In The Wild (2)

RE - Regionally Extinct (regional category) (8)

CR - Critically Endangered (309)

EN - Endangered (649)

VU - Vulnerable (654)

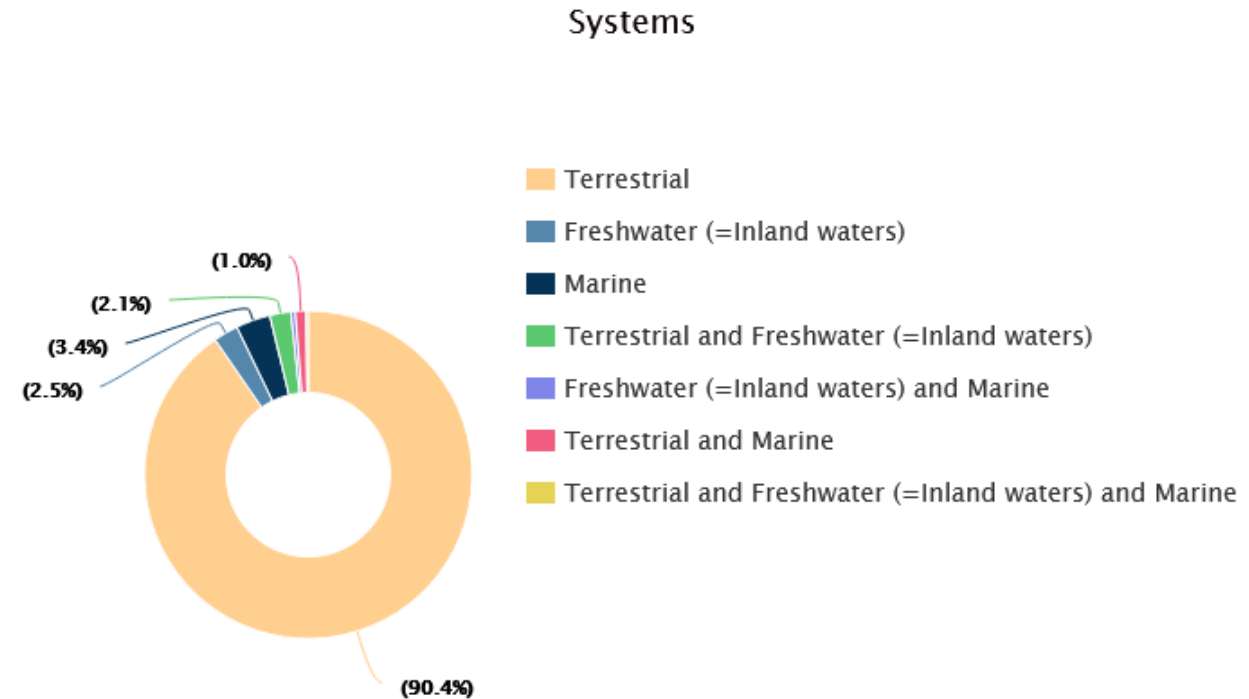
LR/cd - Lower Risk: Conservation Dependent (1)

NT or LR/nt - Near Threatened (423)

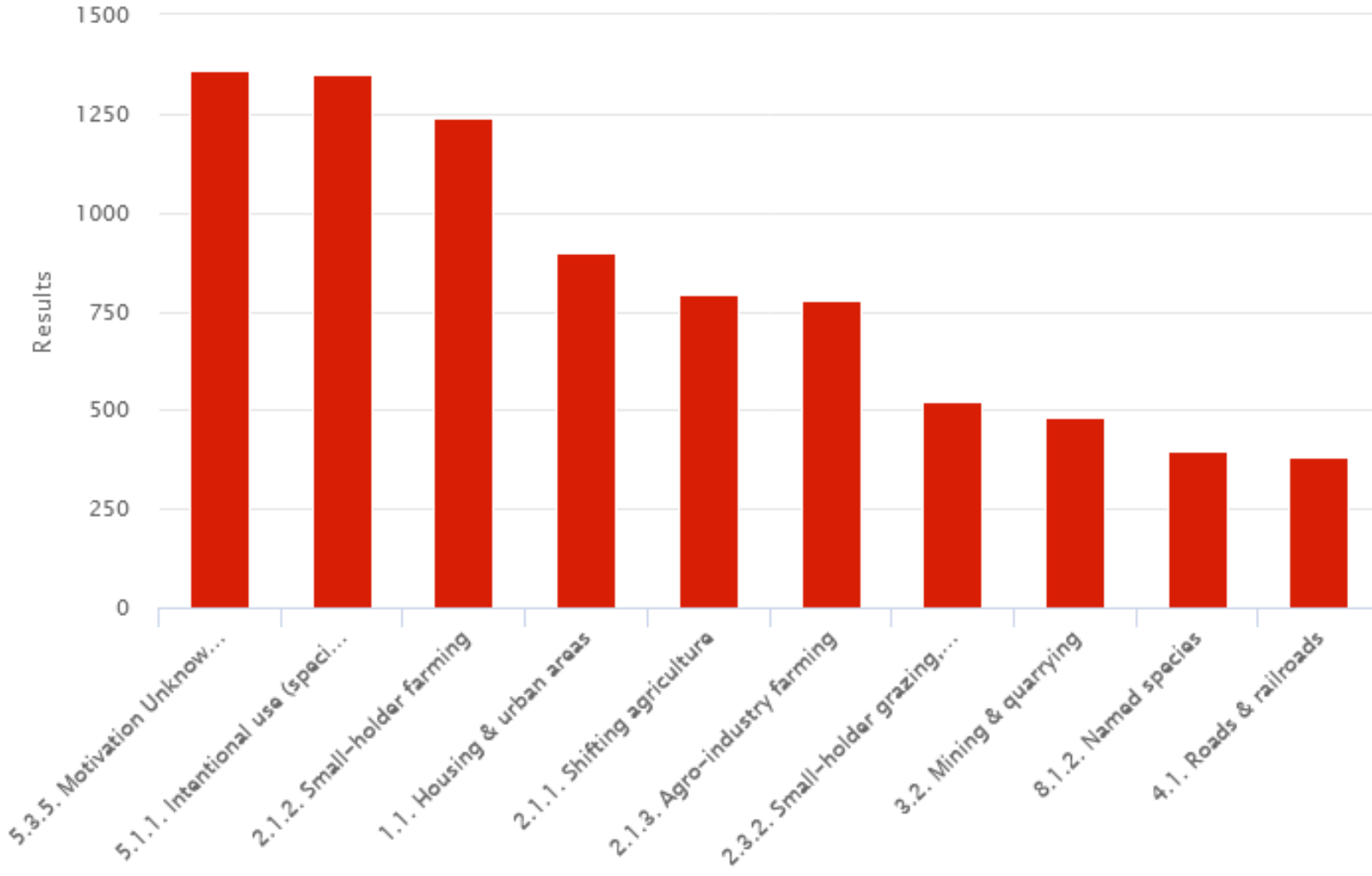
LC or LR/lc - Least Concern (3631)

DD - Data Deficient (935)

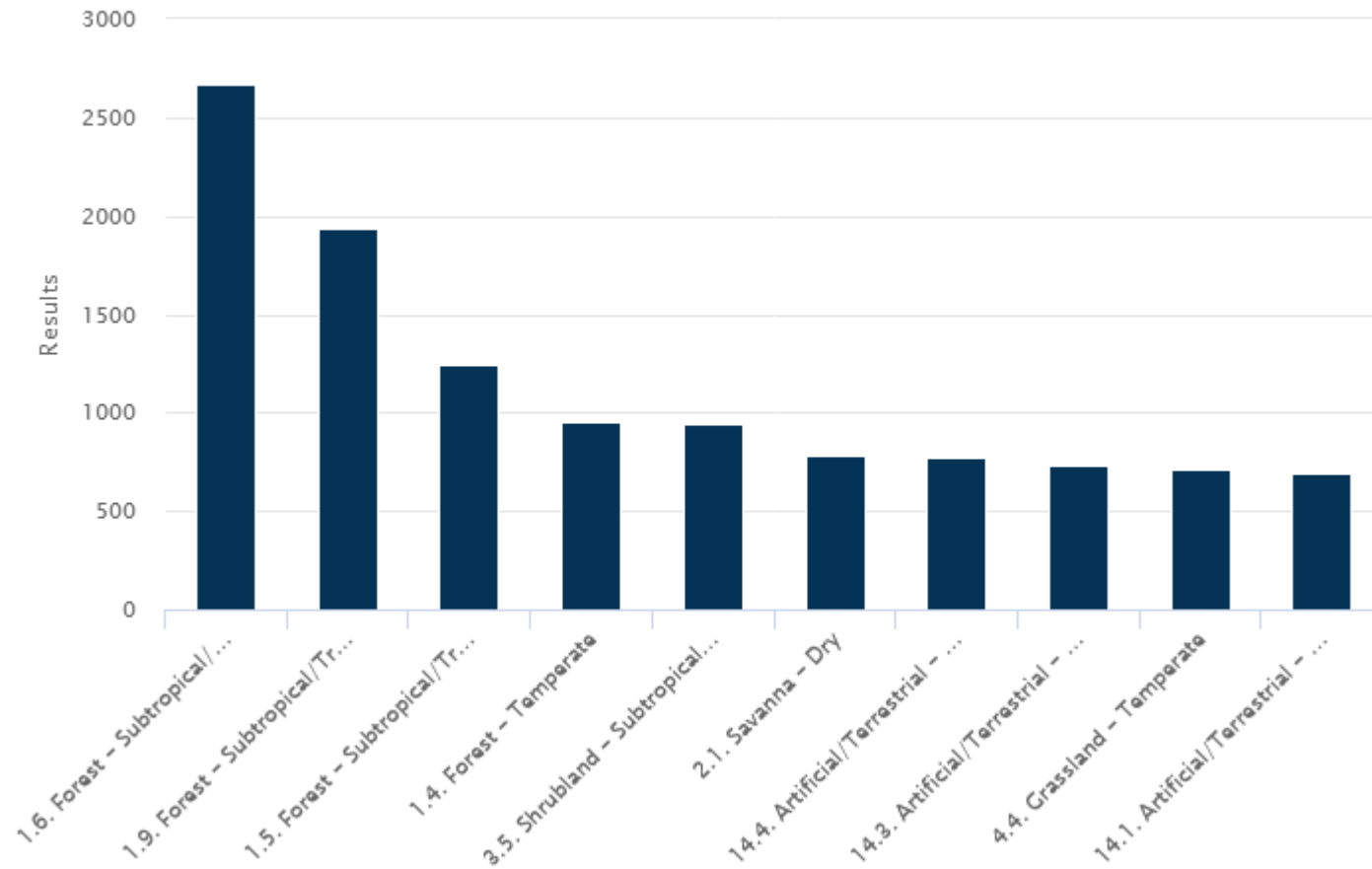
NA - Not Applicable (regional category) (49)



Threats



Habitats



1. Forest (4665)

2. Savanna (987)

3. Shrubland (1885)

4. Grassland (1636)

5. Wetlands (inland) (610)

6. Rocky areas (eg. inland cliffs, mountain peaks) (561)

7. Caves and Subterranean Habitats (non-aquatic) (561)

8. Desert (560)

9. Marine Neritic (206)

10. Marine Oceanic (202)

11. Marine Deep Benthic (2)

12. Marine Intertidal (105)

13. Marine Coastal/Supratidal (160)

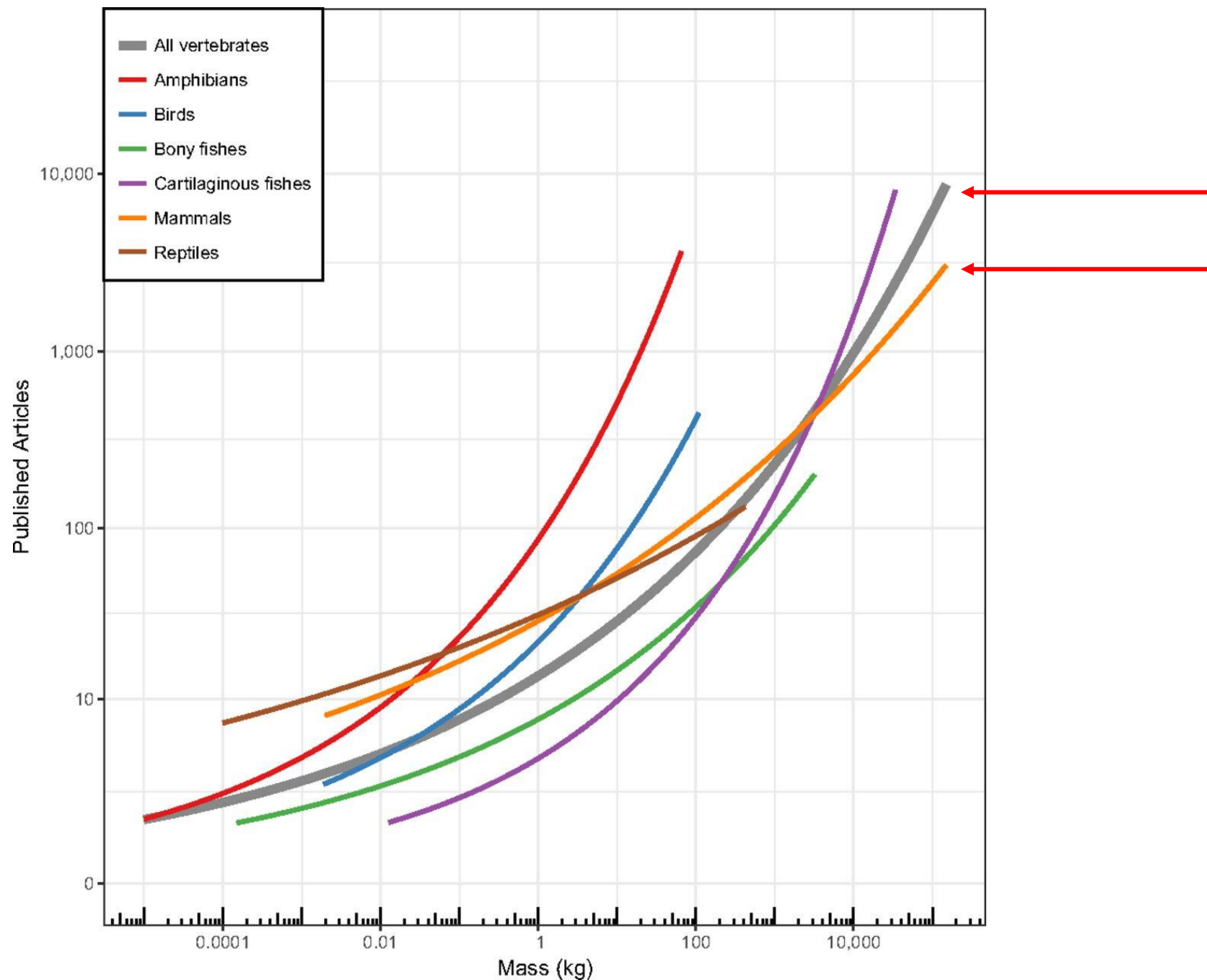
14. Artificial/Terrestrial (1926)

15. Artificial/Aquatic & Marine (84)

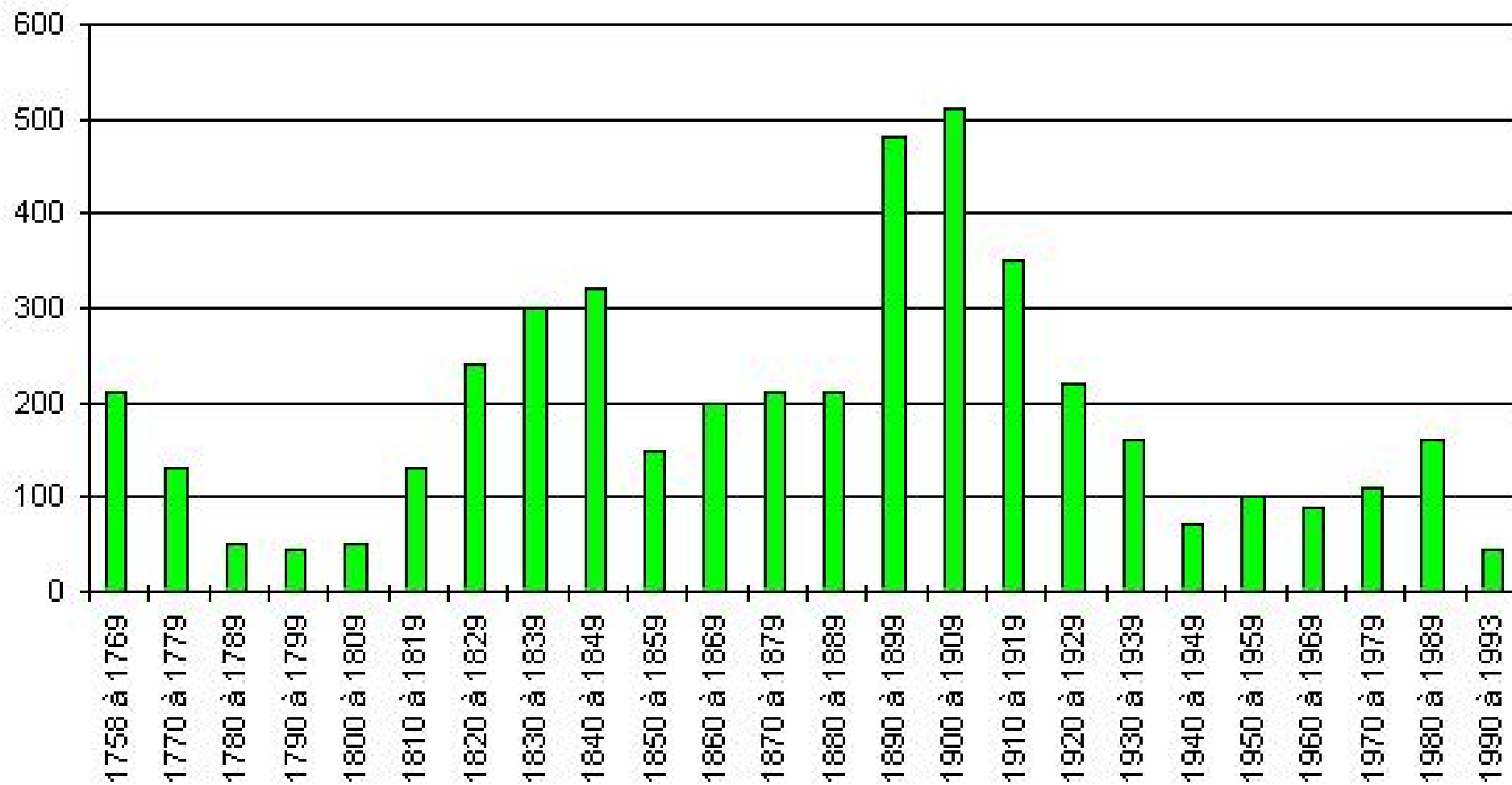
16. Introduced vegetation (27)

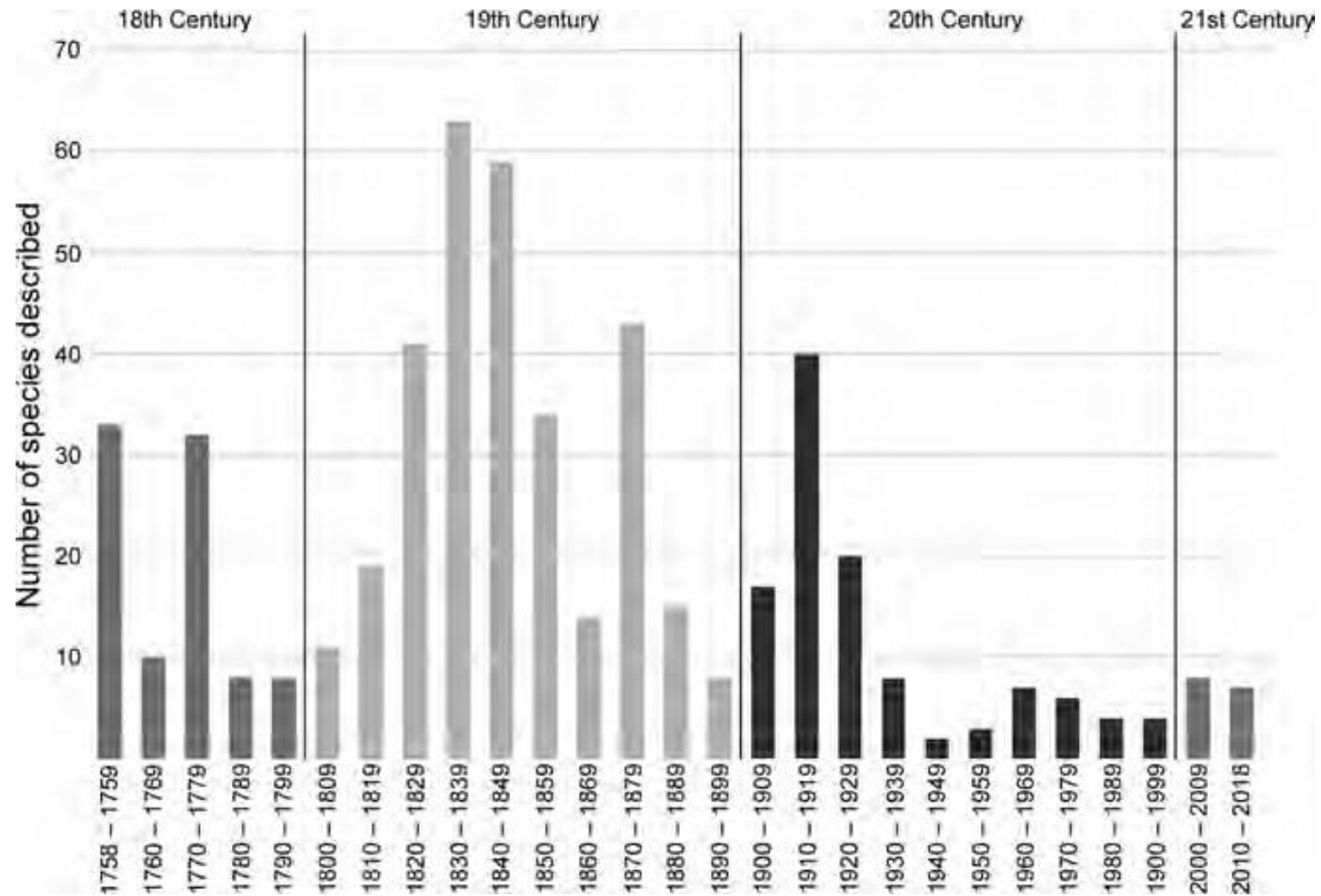
17. Other (45)

18. Unknown (210)

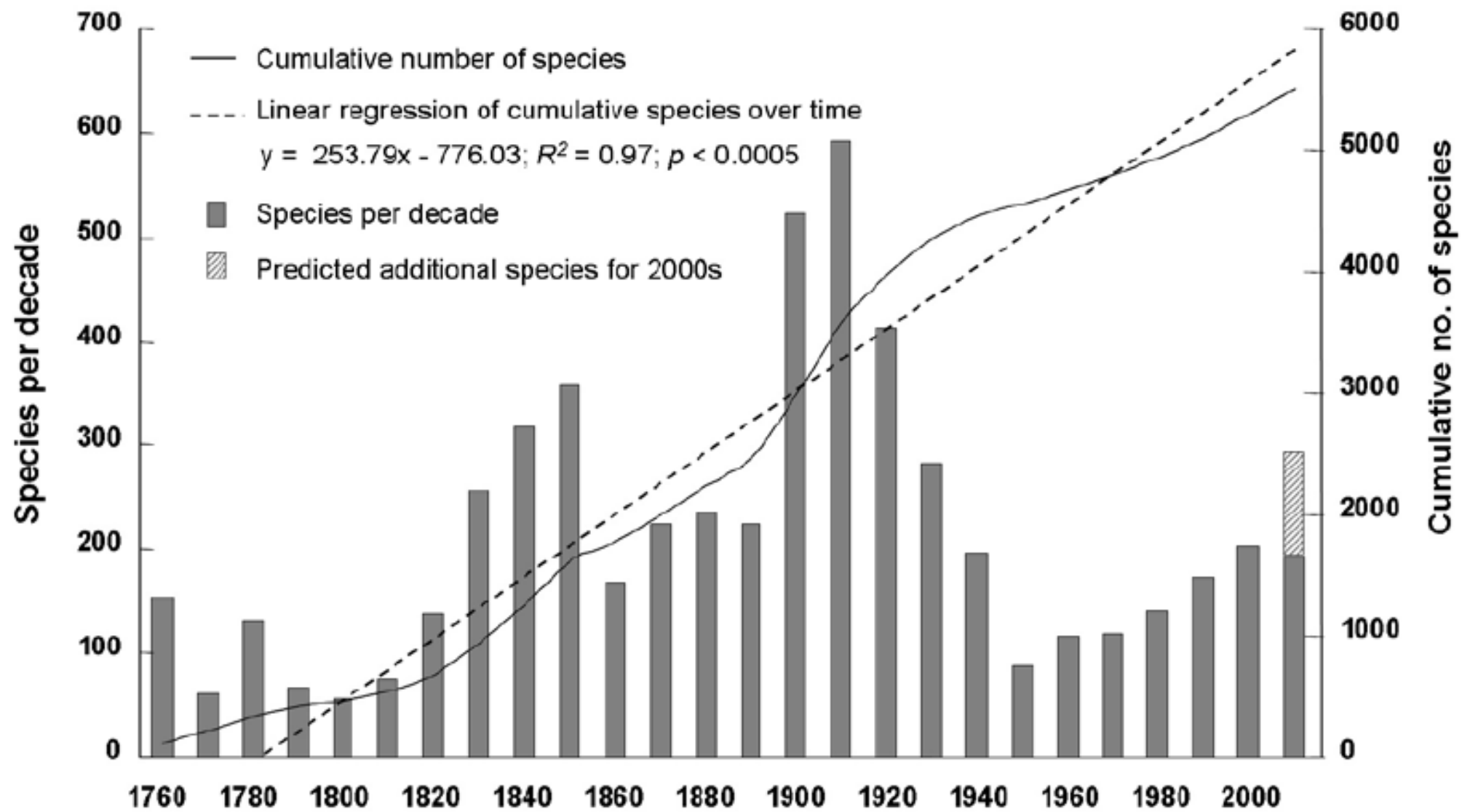


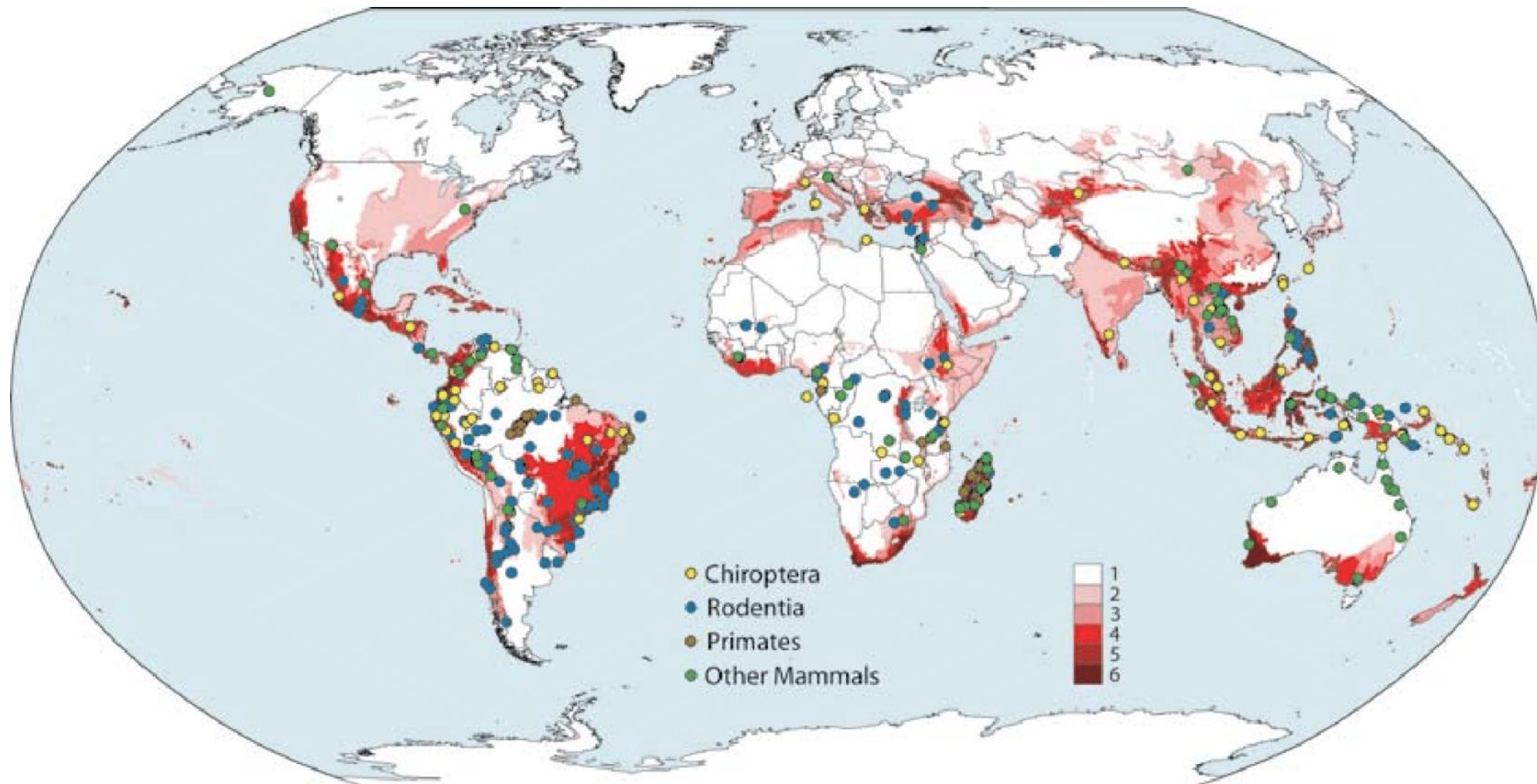
J. Hošek 2007





2 Trend of new species of mammals described from South Asia from 1758 to present





Stupně červené – hodnoty biodiverzity

Table 1. Taxonomic composition of the new species of mammals (excluding marine species) discovered since 1993 [View popup](#)

Order	Families with new species	Genera with new species	New species	New species with restricted distribution	New species probably at risk of extinction
Afrosoricida	2	2	12	8	2
Artiodactyla	5	9	11**	7	1
Carnivora	1	2	2*	2	2
Macroscelidae	1	1	1	1	1
Chiroptera	8	44	94*	75	6
Cingulata	1	1	1	1	0
Dasyuromorpha	1	4	6*	2	0
Didelphimorphia	2	5	8*	8	0
Diprodontia	2	6	11*	11	2
Erinaceomorpha	1	1	1	1	0
Lagomorpha	2	3	5	3	0
Monotremata	1	1	1	1	0
Paucituberculata	1	1	1*	1	1
Peramelemorphia	1	1	2*	2	0
Pilosa	1	1	1	1	0
Primates	9	16	55*	51	10
Rodentia	16	87	174*	29	4
Soricomorpha	2	9	22**	17	2
TOTAL	57	195	408	221	34

There are new taxa up to the family levels. Some orders have either more (*) or fewer (**) new species than expected by their species richness.

letouni

dvojitozubci

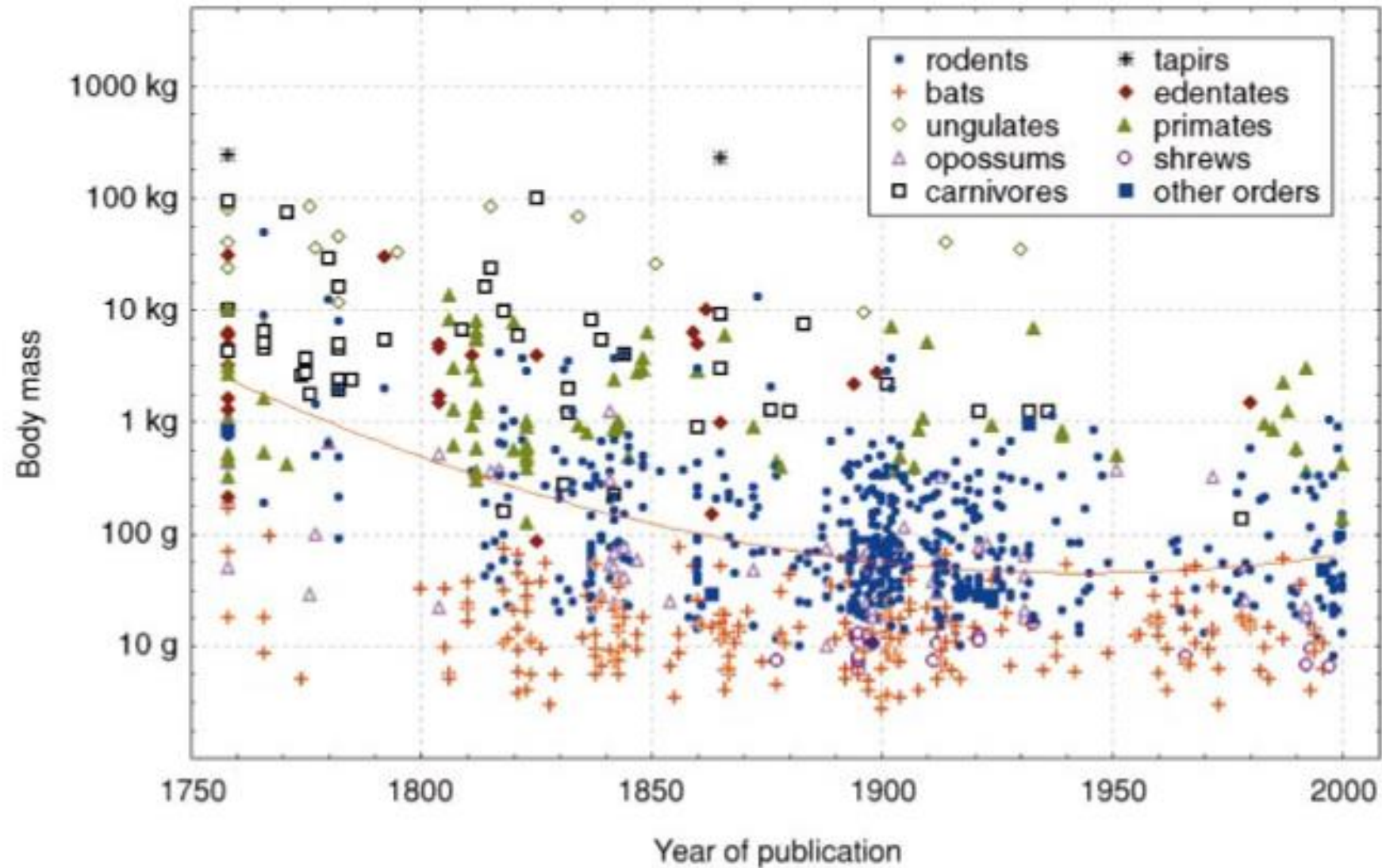
primáti

hlodavci

hmyzožravci

Table 2.—Breakdown of numbers of previously named species (currently recognized as valid) and newly described species by Order of mammals. Expected numbers of new species were calculated by dividing the number of previously named species in an Order by the total number of previously named species in all mammals (5,080) and multiplying by the total number of new species described (341). The allocation of new species across all mammals was not what would be expected due to chance ($\chi^2 = 41.52$, $df = 11$, $p < 0.0005$); that is, there are biases in what types of mammals are being newly described.

Classification	Total number of extant species named before 1 July 1992	New Extant Species Observed	New Extant Species Expected
Class Mammalia	5080	341	
Order Monotremata	4	1	0
Order Didelphimorphia	85	7	6
Order Paucituberculata	5	1	0
Order Microbiotheria	1	0	0
Order Notoryctemorphia	2	0	0
Order Dasyuromorphia	65	6	4
Order Peramelemorphia	19	1	1
Order Diprodontia	131	9	9
Order Afrosoricida	45	7	3
Order Macroscelidea	15	0	1
Order Tubulidentata	1	0	0
Order Hyracoidea	4	0	0
Order Proboscidea	3	0	0
Order Sirenia	4	0	0
Order Cingulata	20	1	1
Order Pilosa	9	1	1
Order Scandentia	20	0	1
Order Dermoptera	2	0	0
Order Primates	352	36	24
Order Rodentia	2113	155	142
Order Lagomorpha	86	5	6
Order Erinaceomorpha	23	1	2
Order Soricomorpha	398	20	27
Order Chiroptera	1055	78	71
Order Pholidota	8	0	1
Order Carnivora	281	1	19
Order Perissodactyla	16	0	1
Order Artiodactyla	230	9	15
Order Cetacea	83	2	6



Popisy
spíše menších, ale do 5 kg!

hlodavci (100 letý vzorec)
letouni
primáti

Fig. 2 Varying body mass of Neotropical mammals as a function of publication date. The plotted relationship is $y = 192.523 - 0.1964x + 0.000051x^2$ and all three coefficients are highly significant ($P < 0.001$).

Kopytníci od roku 1900 (Ungulates)

1901 okapi pruhovaná (*Okapia johnstoni*) – Kongo, Uganda (Giraffidae)

mazama yucatánský (*Mazama pandora*) – Mexiko (Cervidae)

chocholátka Weynsova (*Cephalophus weynsi*) – Afrika (Bovidae)

chocholátka ruwensorská (*Cephalophus rubidus*)

1903 antilopka zakrská (*Neotragus batesi*) – rovníková Afrika (Bovidae)

1904 prase pralesní (*Hylochoerus meinertzhageni*) – tropická Afr. (Suidae)

1908 **mazama venezuelský** (*Mazama bricenii*) – J Amerika (Cervidae)

1910 nyala horská (*Tragelaphus buxtoni*) - J Etiopie (Bovidae)

anoa horský (*Bubalus quarlesi*) – Celebes (Sulawesi) (Bovidae)

1911 dikdik somálský (*Madoqua piacentinii*) – Somálsko (Bovidae)

1914 **goral červený** (*Nemorhaedus baileyi*) – Tibet, Barma (Bovidae)

1918 chocholátka zanzibarská (*Cephalophus adersi*) – V Afrika

1929 **kabar Berezovského** (*Moschus berezovskii*) – J Čína, S Vietnam (Moschidae)

1930 pekari Wagnerův (*Catagonus wagneri*), fosilie, objev 1974, Lazarus taxon, JAm (Tayassuidae)

1932 muntžak Rooseveltův (*Muntiacus rooseveltorum*) – J Asie (Cervidae)

1935 gazela dlouhorohá (*Gazella saudiya*), Ex, Arabský poloostrov (Bovidae)

1937 kuprej (*Bos sauveli*) – Zadní Indie (Bovidae)

1959 mazama zakrslý (*Mazama chunyi*) – Bolívie (Cervidae)

1963 **nahur Schaeferův** (*Pseidois schaeferi*) – hory, Jang-c'-ťiang, Čína (Bovidae)



- 1981 **kabar čínský** (*Moschus fuscus*) – Čína (Bovidae)
- 1982 muntžak žlutý (*Muntiacus atherodes*) – Borneo (Cervidae)
- 1985 **gazela jemenská** (*Gazella bilkis*) – Jemen (Bovidae)
- 1987 prase floreské (*Sus heueneri*) – J Asie (Suidae)
- 1990 **muntžak gongšanský** (*Muntiacus gongshanensis*) – J Asie (Tibet, Čína),(Cervidae)
- 1993 saola (*Pseudoryx nghetinhensis*) - Vietnam-Laos (Bovidae)
- 1994 muntžak obrovský (*Megamuntiacus vuquangensis*) – Vietnam-Laos(Cervidae)
- lyrorožec - ling** (*Pseudonovibos spiralis*) – Vietnam, Kambodža (Bovidae)
- 1996 mazama bororo (*Mazama bororo*) – JV Brazílie (Cervidae)
- 1997 **muntžak černý** (*Muntiacus truongsonensis*) – stř. Vietnam (Cervidae)
- 1999 muntžak listový (*Muntiacus putaoensis*) – Myanmar (Barma) (Cervidae)
- 2003 buvolec zambijský (*Damaliscus lunatus superstes*) – Zambie, Kongo (Bovidae)
- 2005 **kančil cejlonský** (*Moschiola kathygre*) – Sri Lanka (Tragulidae – kančilovití)
- voduška konžská (*Cobus anelli*) – Kongo (Bovidae)
- 2008 **jelínek mazamu** (*Mazama ochroleuca*) – Amazónie (Brazílie)(Cervidae)



A NEW SPECIES OF LIVING BROCKET DEER
(MAMMALIA: CERVIDAE) FROM THE BRAZILIAN AMAZON

Marc G. M. VAN ROOSMALEN & Pim VAN HOOFT



(LEFT) *Mazama ochroleuca* sp. nov. redrawn from plate depicting *Mazama (gouzoupira) nemorivaga* (Eisenberg, 1989).
(ABOVE) Two spikes of *Mazama americana* above, one of *Mazama ochroleuca* sp. nov. below.

Here we report on the existence of a new species of even-toed ungulate in the Brazilian Amazon, which we name *Mazama ochroleuca* sp. nov., the fair brocket deer. It is intermediate in size between the two known species of brocket deer, *Mazama americana* and *Mazama (gouzoupira) nemorivaga*, and occurs in sympatry with both. Preliminary mitochondrial partial cytochrome b sequences of fair brocket deer compared with that of the sympatric and morphologically most related grey brocket deer (*Mazama (gouzoupira) nemorivaga*) revealed a sequence difference of 3.7%. Divergence time is therefore estimated at 1.0 million years before present. As in other



Lyrorožec, ling



Comptes Rendus de l'Académie des Sciences -
Series III - Sciences de la Vie
Volume 324, Issue 1, January 2001, Pages 71-80

Comptes
Rendus de l'...

Evidence from DNA that the mysterious 'linh duong' (*Pseudonovibos spiralis*) is not a new bovid
La preuve par l'ADN que l'énigmatique « linh duong » (*Pseudonovibos spiralis*) n'est pas un nouveau bovidé.

Yves Coppens

Alexandre Hassanin ^{a, b, c, d, e, f}, Arnoult Seveau ^c, Herbert Thomas ^d, Hervé Bocherens ^e, Daniel Billiou ^e, Bui Xuan Nguyen ^f

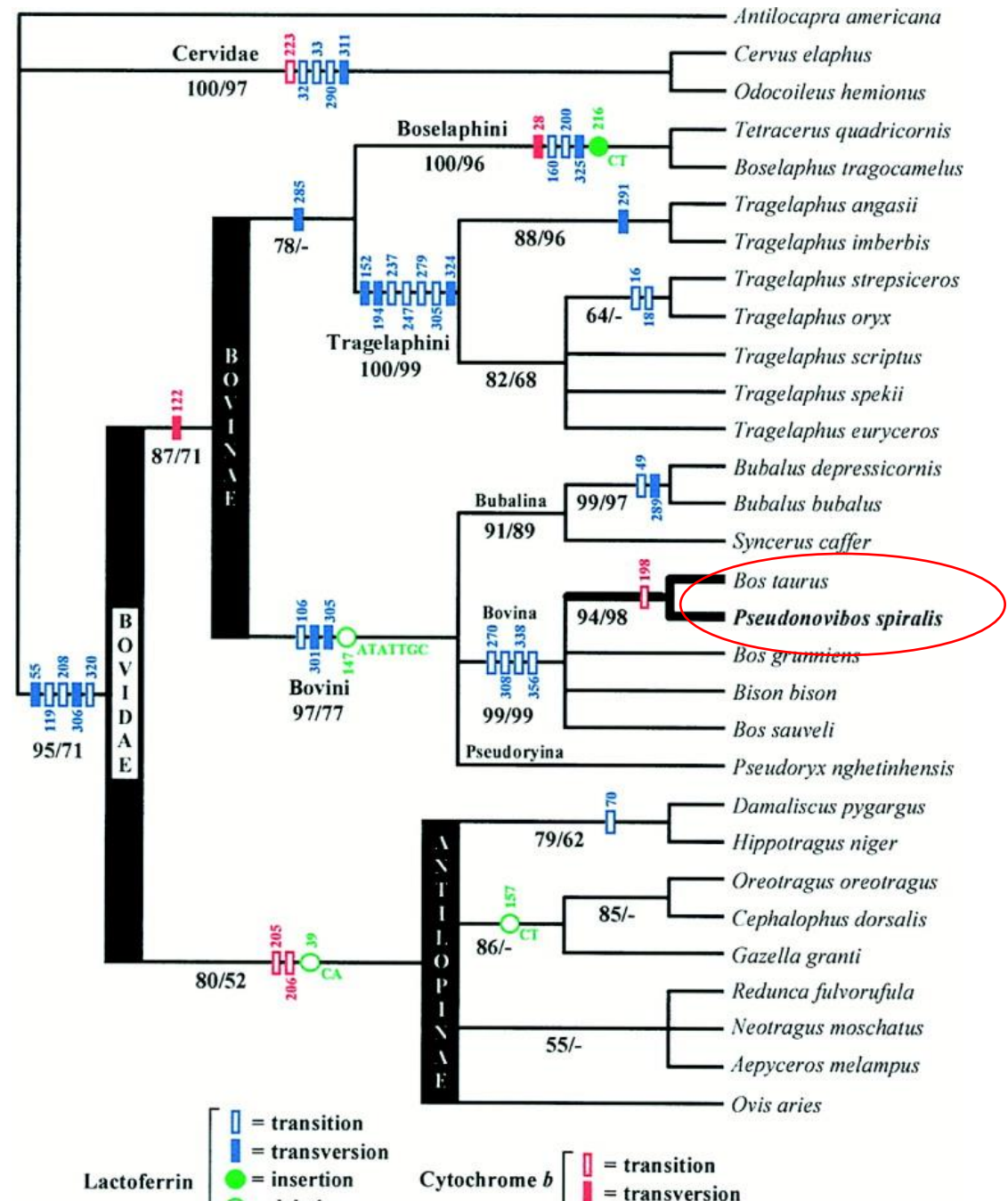
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[https://doi.org/10.1016/S0764-4469\(00\)01262-2](https://doi.org/10.1016/S0764-4469(00)01262-2)

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Abstract

In 1993, several horns of an unknown mammal were collected in the south of Vietnam. Due to the unusual characteristics of its horns, the 'linh duong', as named by Vietnamese hunters, was quickly described as belonging to a new monospecific genus of bovid, i.e. *Pseudonovibos spiralis* Peter & Feiler, 1994. The taxonomic status of *Pseudonovibos* was a highly controversial subject, and it has been suggested that this enigmatic species may be related to three different groups of Bovidae:



Pseudonovibos spiralis (Artiodactyla: Bovidae): new information on this enigmatic South-east Asian ox

Robert M. Timm¹ and John H. Brandt²

¹Natural History Museum & Department of Ecology and Evolutionary Biology, University of Kansas, Lawrence, KS 66045, U.S.A.

²Zoology Research Associate, Denver Museum of Natural History, P.O. Box 5003, Alamosa, CO, 81101, U.S.A.

(Accepted 21 January 2000)

Abstract

Two bovid frontlets with horns collected in 1929 and now housed in the collections of the University of Kansas Natural History Museum (KU) from Suoi Kiet, Binh Tuy Province, Vietnam, were previously identified as koupreys (*Bos sauveli*). We believe that they are specimens of the recently discovered bovid, *Pseudonovibos spiralis* Peter & Feiler, 1994. The KU specimens are represented by the posterior half of the frontal bones, the parietals, the horn cores and horns, and the anteriormost supraoccipitals, and are the most complete, best documented, and oldest specimens known of this poorly known species. We believe that both an adult male and an adult female are represented. Although the specimens are fragmentary, they still provide significant information that allows us to describe some aspects of *P. spiralis*, and they are especially critical to our understanding of the relationships of this animal to other bovids. We propose the English name spiral-horned ox, which reflects both its distinctively shaped horns and close relationship to other wild oxen. The Khmer name, *Khing Vor*, is also an appropriate common name. Previously overlooked references from the 1880s and 1950s document that the spiral-horned ox was believed to have magical powers over poisonous snakes.

Key words: Bovidae, Indo-China, *Pseudonovibos spiralis*, South-east Asia, spiral-horned ox



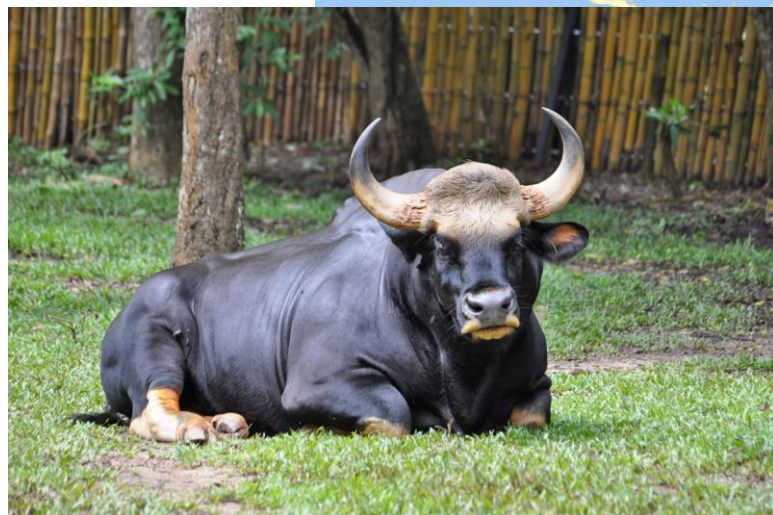
Fig. 3. Radiograph of the right horn sheaths and cores of two adult spiral-horned oxen (*Pseudonovibos spiralis*) (KU 138658 left; KU 138657 right). Note the characteristic bovid trabeculae that may be seen within the horn cores. The tip of the horn core has been sawn off on KU 138658 and the tip of KU 138657 has been broken off. This was done before the specimens were received at the University of Kansas in 1930. Given that these frontlets were in the Suttons' possession only months before they were donated to KU, that the horn cores and sheaths are quite clean and all soft tissues have been removed, and that each horn is tacked to the bony core with a small nail, we suspect that the **frontlets were boiled to remove the horns and the tips of the bony horn cores were sawn or broken off at that time to drain out the marrow as well as to remove the cartilaginous tip.** This was a common practice of hunters in that era (and remains so today) to allow removal of the soft tissues from trophy heads to prevent noxious smells created by decomposition inside the horns and in the skull. However, because the numerous grooves of irregular bone deposition of the bony cores perfectly match the ridges in the horn sheaths, we are confident that the horns and frontlets are correctly matched sets and have not been switched with those of other animals.

1937

kuprej

Bos sauveli

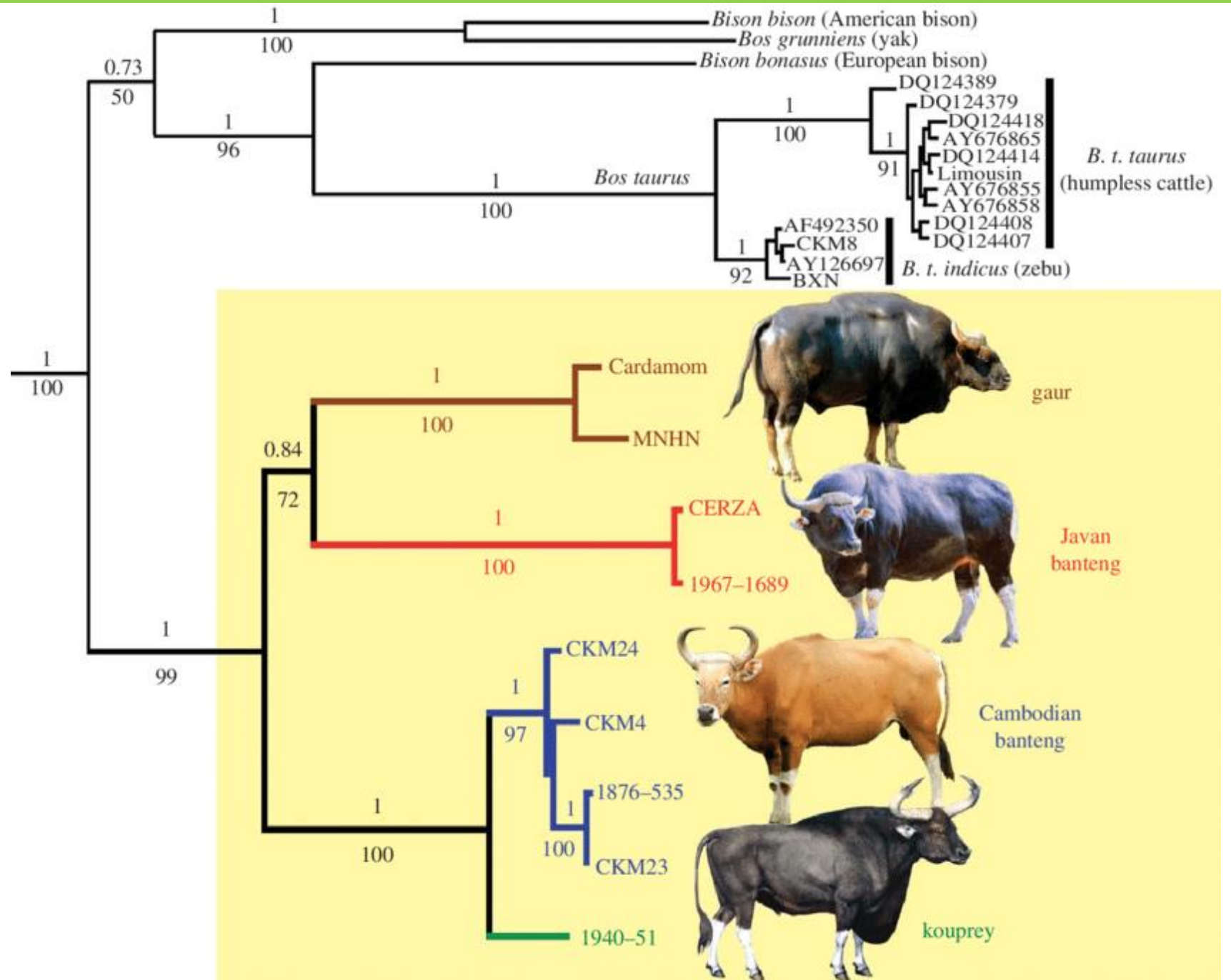
M 1 t



území Kambodže a pravděpodobně i Laosu, Vietnamu a Thajska
pařížská zoologická zahrada ve výběhu gaurů (*Bos gaurus*).

Hassanin, Alexandre & Ropiquet, Anne. (2007). Resolving a zoological mystery: The kouprey is a real species. *Proceedings. Biological sciences / The Royal Society.* 274. 2849-55. 10.1098/rspb.2007.0830.

Phylogenetic position of Cambodian banteng using mitochondrial sequences from three markers (cytochrome b, D-loop and CO2). The values indicated above the branches are Bayesian posterior probabilities and those found below are bootstrap percentages calculated with the maximum-likelihood method. The photos are from Brent Huffman (Javan banteng, Ultimate Ungulate Images) and A.H. (Cambodian banteng and gaur). The illustration of kouprey is modified from Coolidge (1940).



21.5.1992, 16:00

1993 Nature - publikace

Vietnam, Laos

Pseudoryx nghetinhensis – saola

Bovidae

Published: 03 June 1993

A new species of living bovid from Vietnam

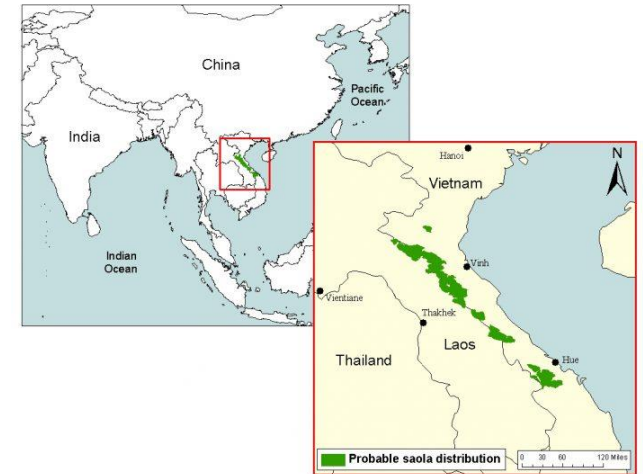
Vu Van Dung, Pham Mong Giao, Nguyen Ngoc Chinh, Do Tuoc, Peter Arcander & John MacKinnon

Nature 363, 443–445(1993) | [Cite this article](#)

771 Accesses | 86 Citations | 47 Altmetric | [Metrics](#)

Abstract

IN May 1992 a joint survey by the Ministry of Forestry and World Wide Fund for Nature of the Vu Quang Nature Reserve, Ha tinh province, found three sets of long straight horns of a new bovid (Mammalia, Artiodactyla) in hunters' houses¹. None of the specimens had dentition. On four follow-up visits by Vietnamese scientists new specimens were discovered and surveys of forests in neighbouring Nghe an province revealed more localities and some partial specimens. In all, we have examined more than 20 specimens. Three have complete



1994 *Megamuntiacus vuquangensis* – muntžak obrovský

Vietnam, Laos



DAM PROJECT REVEALS SECRET SANCTUARY OF VANISHING DEER

When Ulrike Streicher set out last year to rescue wildlife on the Nakai Plateau of northern Laos, nearly half of which was flooding as the reservoir behind the Nam Theun 2 Hydroelectric Project's dam filled, she expected to encounter the occasional curiosity. But in just 4 months, her team captured an astounding 38 large-antlered muntjacs—a rare deer that was discovered only in 1994 and was photographed for the first time

by a camera trap in the dam area in 2007. "We had our hands on more large-antlered muntjacs than anyone had ever even seen," says Streicher.

The hands-on experience could be a boon for efforts to study and protect Indochina's more exotic denizens. Streicher's mostly Lao team attached radio collars to several large-antlered muntjacs (*Muntiacus vuquangensis*) before releasing them in habitat away from the reservoir.

Although the animals aren't presently being monitored—that was beyond the Nam Theun 2 Power Company's mission—"it was a great dress rehearsal for learning how to track animals like the saola," says Streicher, a wildlife veterinarian based in Da Nang, Vietnam, who headed the NTPC wildlife-rescue program.

Jackpot. An amazing 38 large-antlered muntjacs were rescued in Laos.

From June 2008 to February 2009, Streicher's group rescued 294 animals in Nakai's Thousand Island area, including some pygmy loris and unexpected critters such as the colugo, only the second field record of this gliding mammal in Laos. In a July review, the World Bank commended the rescue program as "impressive." "Uli and her team did a fantastic job, under often difficult conditions," says Laos-based zoologist William Robichaud.

The fate of the large-antlered muntjac—those Streicher released and the population in general—is not rosy. Unlike the saola (see main text), this heaviest of muntjac species—adult males weigh up to 60 kilograms—is a favorite of hunters. "We tried to be secretive about where we brought captive animals," Streicher says. "But when you run into a bunch of locals and you are carrying a couple cages, it doesn't take much imagination to figure out what you're up to." Streicher hopes outside experts will pick up where NTPC left off and join the quest to save the large-antlered muntjac. Otherwise, she warns, "it could be a big scientific loss."

—R.S.



1997 *Muntiacus truongsonensis* – muntžak černý

Vietnam, Laos

Cervidae



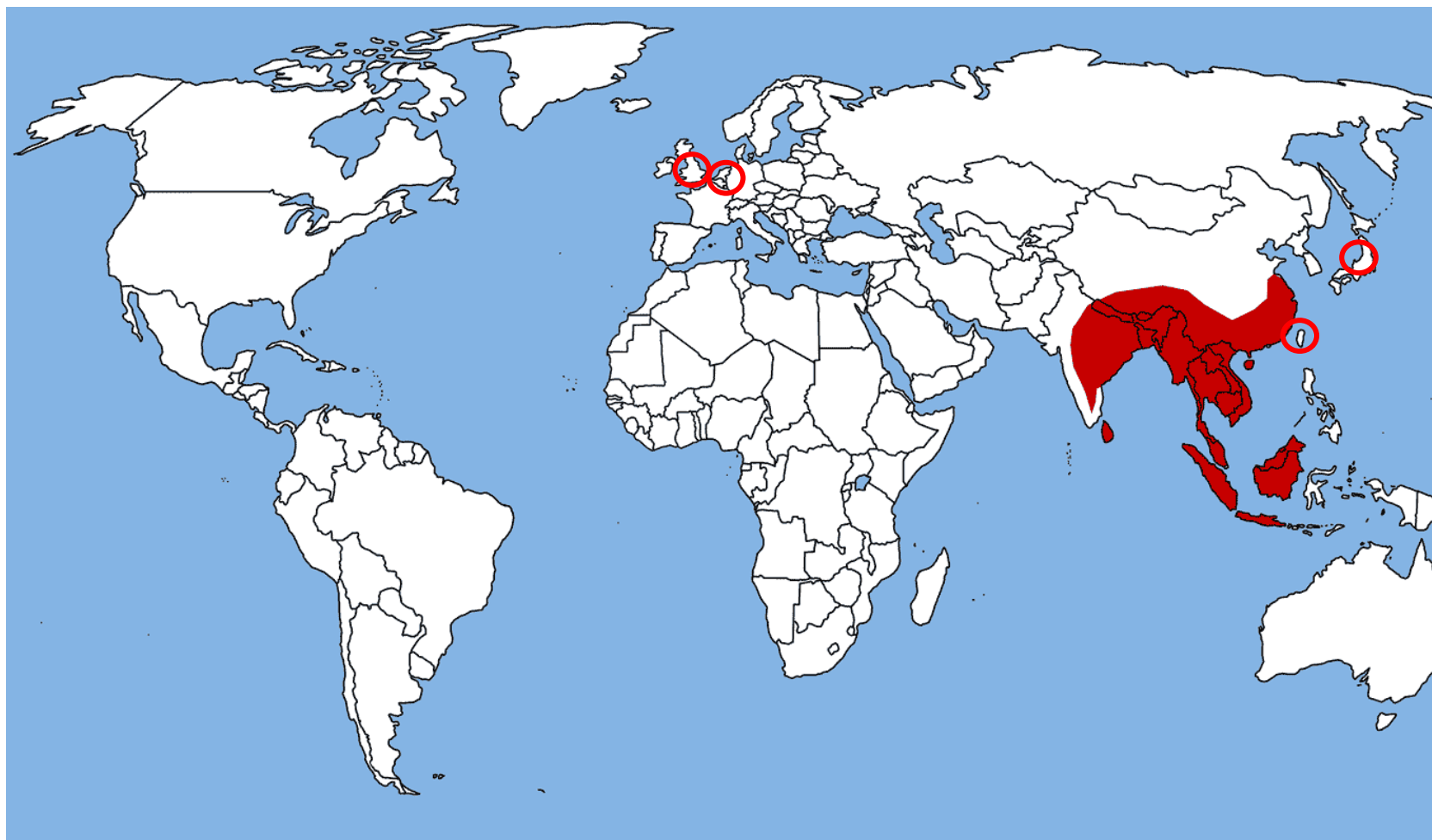
© Klaus Rudloff



1999 *Muntiacus putaoensis* – muntžak listový
Myanmar, Indie



Muntiacus spp., introdukce Tchaj-wan, Japonsko, jižní Anglie, Belgie, Holandsko

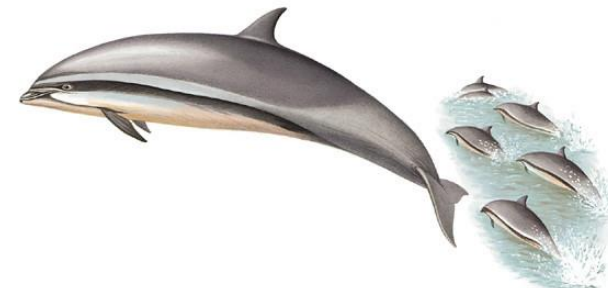


Muntiacus reevesi, m. malý



Kytovci od roku 1900

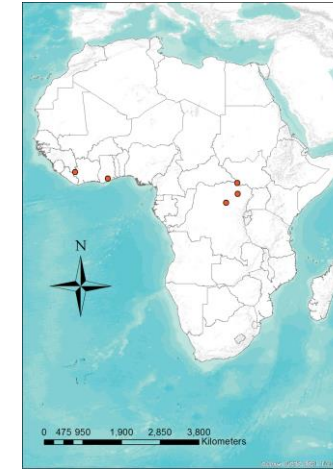
- 1908 **vorvaňovec australský** (*Mesoplodon bowdoini*)
- 1912 **sviňucha jižní** (*Australo*)*Phocaena dioptrica*), Phocoenidae
- 1913 vorvaňovec tmavý (*Mesoplodon mirus*), Ziphiidae
- 1918 **delfínovec čínský** (*Lipotes vexillifer*), delfínovcovití (Platanistidae), vyhynulý
- 1926 vorvaňovec Longmanův (*Indocetus pacificus*)
- 1934 delfín Graffmanův (*Stenella attenuata graffmani*) – dnes poddruh
- 1937 vorvaňovec Shepherdův (*Tasmacetus shepherdi*)
- 1956 **plískavice saravacká** (*Lagenodelphis hosei*), delfínovití (Delphinidae)
- 1958 vorvaňovec japonský (*Mesoplodon ginkkodens*)
- sviňucha kalifornská (*Phocoena sinus*)
- 1963 **vorvaňovec kalifornský** (*Mesoplodon carlhubbsi*)
- 1991 vorvaňovec peruánský (*Mesoplodon peruvianus*)
- 2002 vorvaňovec Perrinův (*Mesoplodon perrini*) – DNA
- 2003 **plejtvák Omurův** (*Balaenoptera amurai*) – DNA, plejtvákovití (Balaenopteridae)?
- 2005 **orcela tupoploutvá** (*Orcaella heinsohni*)



Letouni od roku 2000

2000	3 druhy
2001	6 druhů, v Evropě <i>Myotis alcathoe</i> – netopýr alkathoe (nymfin)
2002	8 druhů
2003	3 druhy
2004	10 druhů, <i>Plecotus gaisleri</i> – S Afrika, <i>Pipistrellus hanaki</i> - Libye
2005	13 druhů
2006	9 druhů
2007	1 druh, <i>Styloctenium mindorensis</i>
2011	1 druh, <i>Niumbaha superba</i> – J Sudán
2020	4 druhy, průměrně 15 druhů za dekádu

Reeder DM, Helgen KM, Vodzak ME, Lunde DP, Ejotre I., 2013. A **new genus** for a rare African vespertilionid bat: insights from South Sudan. ZooKeys, 285: 89-115. doi: 10.3897/zookeys.285.4892



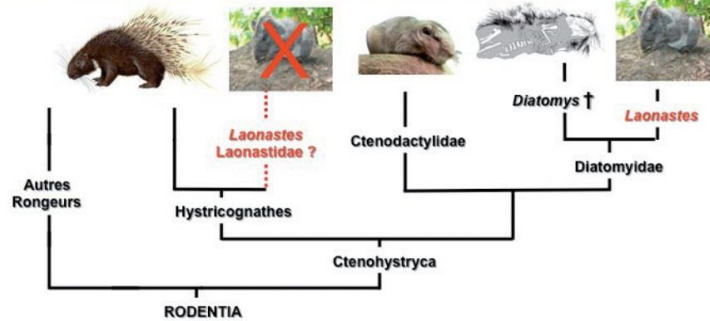
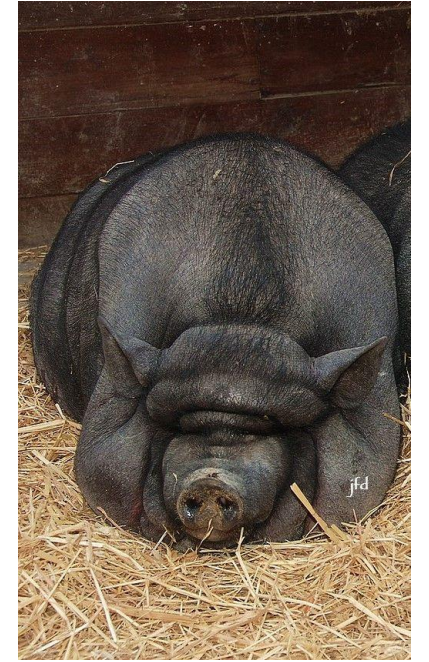
Ostatní savci po roce 1990

1995 **prase vietnamské** (*Sus bucculentus*) – Laos, popis 1892, Lazarus taxon

králík Timminsův (*Nesolagus timminsi*) – Laos

1996 **khanyou** (*Laonastes aenigmaemus*) – stř. Laos – skalní krysa, laoš

Samostatná čeleď! (Laonastidae), Lazarus taxon (živoucí fosílie), bazální linie hystericognátních hlodavců, ale až 2006 video+foto (David Redfield)



Extinkce skupiny cca před 11 mil let.

1997 langur duk (*Pygathrix nemaeus*) – Vietnam (Cercopithecidae)

cibetka tainguenská (*Viverra zibethica*) – Vietnam, Annamity

2001 slon pralesní trpasličí (*Loxodonta cyclotis*) – kryptický druh, DNA, dnes nepřijímán
dnes *Loxodonta africana* (slon africký), *Loxodonta cyclotis* (slon pralesní), *Elephas sp.* slon indický 4-5 poddruhů



Orangutan tapanulijský či tapanulský (*Pongo tapanuliensis*)

Hominidae, Ponginae

Current Biology
Report



Morphometric, Behavioral, and Genomic Evidence for a New Orangutan Species

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SUMMARY

Six extant species of non-human great apes are currently recognized: Sumatran and Bornean orangutans, eastern and western gorillas, and chimpan-

utans of a similar developmental stage, we found consistent differences between the Batang Toru individual and other extant Ponginae. Our analyses of 37 orangutan genomes provided a second line of evidence. Model-based approaches revealed that the

Sumatra, na jih od jezera Toba, 800 ks
Menší a chlupatější



Primáti

1998 *Callithrix humilis* – kosman (Callithrichidae, drápkaté opice)

2000 *Callithrix manicorensis*, *Callithrix acariensis*

2003 *Callicebus bernhardi* – titi (Cebidae – malpovití), *Callicebus stephennashi*

Callicebus sp.nov. 1

Callicebus sp.nov. 2

Pithecia sp.nov. 1 – chvostan

Pithecia sp.nov. 2

Saguinus sp.nov. 1 – tamarín

Saguinus sp.nov. 2

Ateles sp.nov. 1 – chápan

Ateles sp.nov. 2

Cacajao sp.nov. – uakari

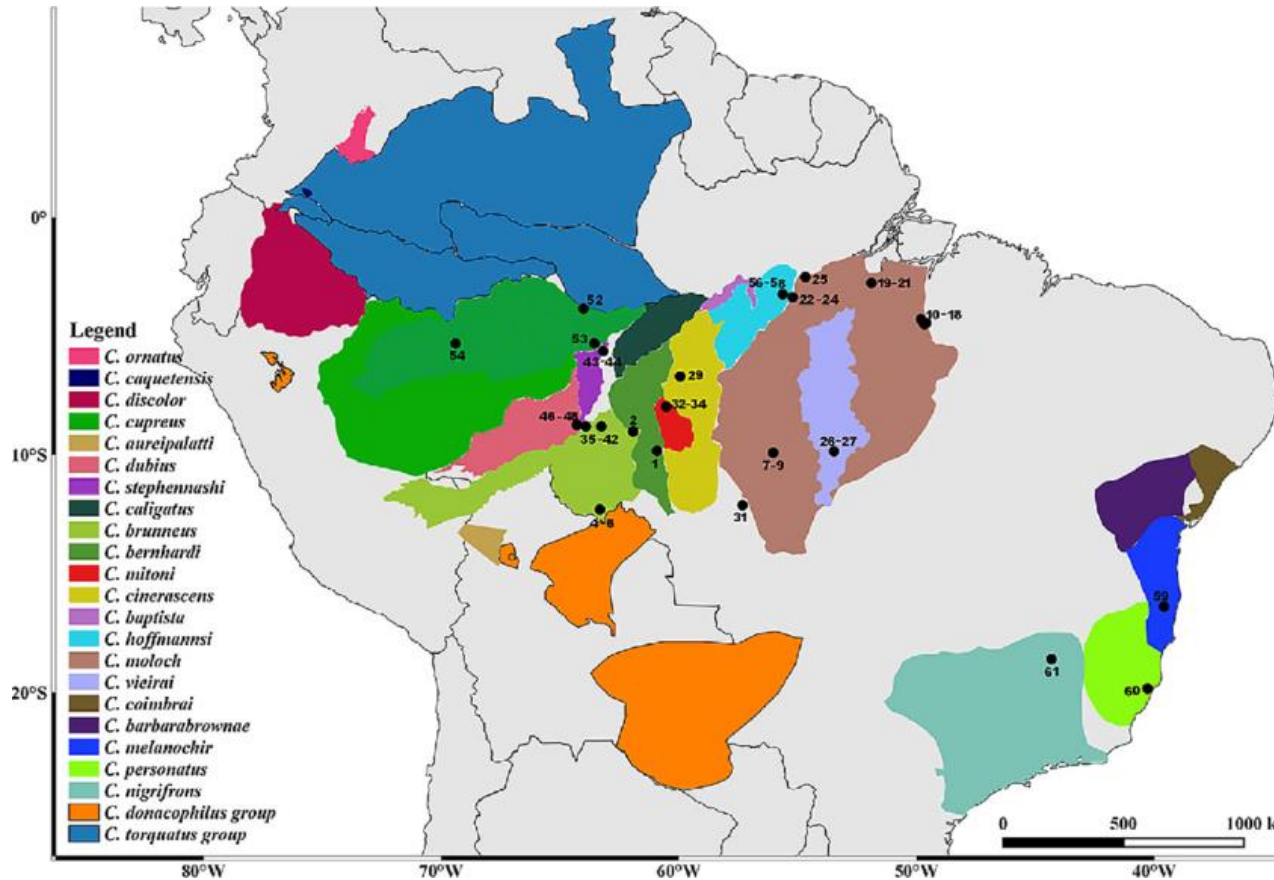
Lagothrix sp.nov. 1 – chápan

Lagothrix sp.nov. 2

Callithrix sp.nov. – kosman

Callicebus sp. nov. – titi

Saimiri sp.nov. - kotul



2016

2018

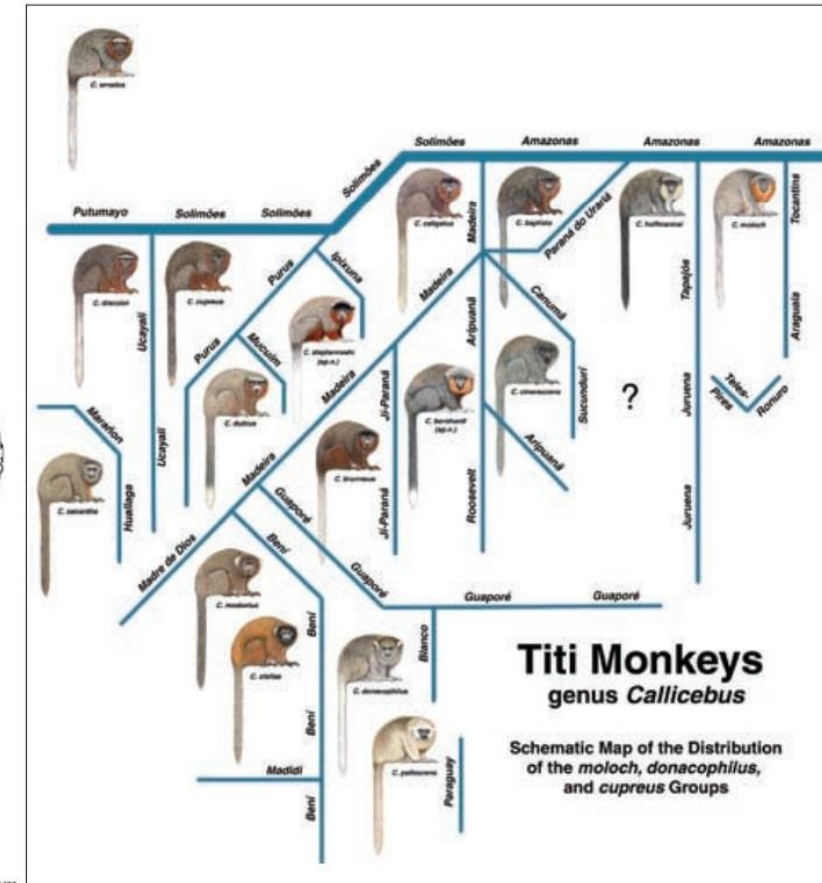
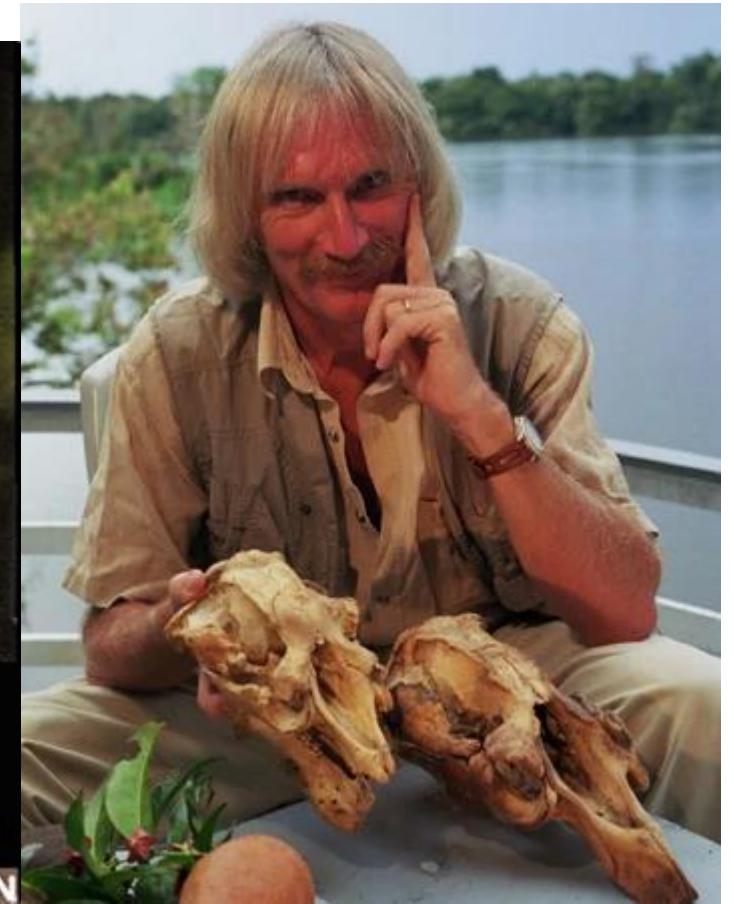
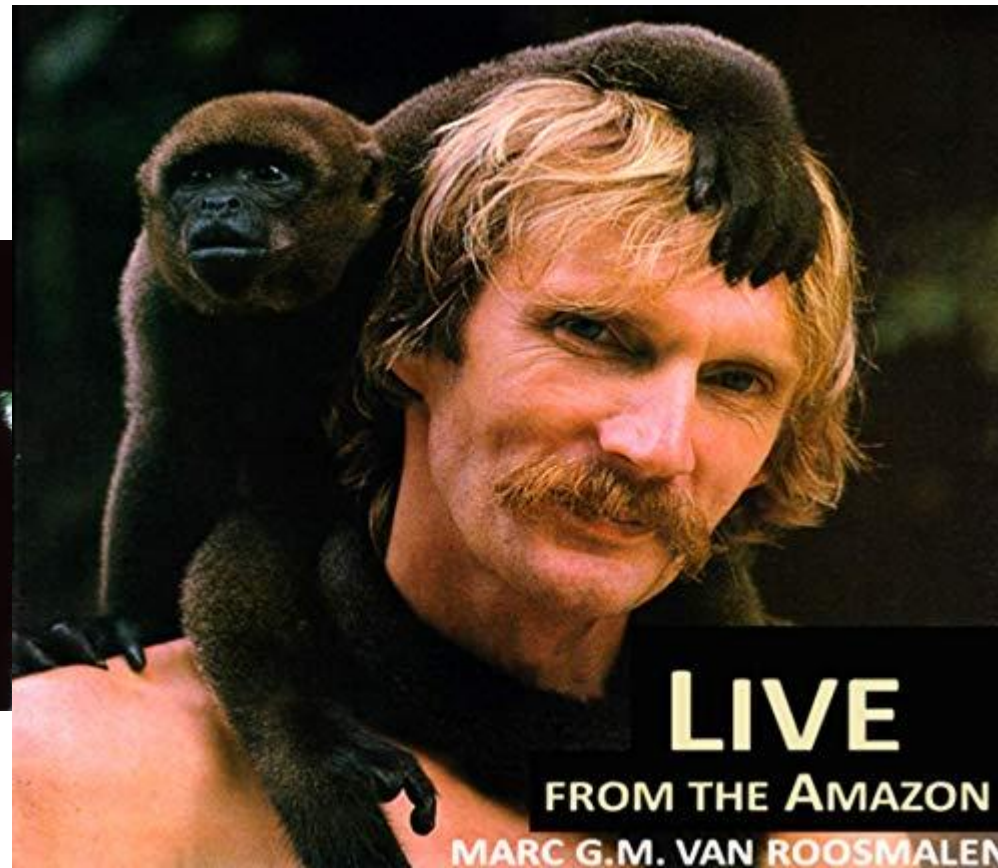


Figure 2. Schematic map of the distribution of Amazonian titi monkeys, belonging to the *donacophilus*, *cupreus* and *moloch* Groups. Illustration by Stephen D. Nash.

Marc van Roosmalen

24.7. 1947, Tilburg, Holanďan žijící v brazilském Manau, primatolog

<http://www.marcvanroosmalen.org/news.htm>



A.R. Wallace – hypotéza říční bariéry – oddělené – geneticky, tedy evolučně oddělené regiony

NAMED NEW SPECIES

Black-crowned dwarf marmoset

Callibella humilis – kosman černošlavý

Rio Acarí Amazonian marmoset

Mico (Callithrix) acariensis – kosman akarský

Satarè Amazonian marmoset

Mico (Callithrix) saterei - kosman brazilský

Rio Manicoré Amazonian marmoset

Mico (Callithrix) manicorensis - kosman

Stephen Nash's titi monkey

Callicebus stephennashi - titi

HRH Prince Bernhard's titi monkey *Callicebus*

bernhardi- titi

Giant collared peccary

Pecari maximus – pekari obrovský

Van Roosmalen's dwarf porcupine *Sphiggurus*

roosmalenorum - kuandu

Dwarf manatee

Trichechus pygmaeus sp. nov. - kapustňák

Lecythidaceae (Brazilnut Family)

Lecythis oldemani sp. nov. - rostlina

Black dwarf lowland tapir

Tapirus pygmaeus sp. nov. - tapír

Van Tienhoven's fair brocket deer

Mazama tienhoveni sp. nov. - jelínek

NEW SPECIES SEARCH

Arboreal giant anteater - *Myrmecophaga sp. nov.*

White-throated black jaguar - *Panthera sp. nov.* - jaguár

Black giant otter - *Pteronura sp. nov.* - vydra

Orange coati-mundè - *Nasua sp. nov.* - nosál

Orange tayra - *Eira sp. nov.* - kuna

Black woolly monkey - *Lagothrix sp. nov.* – chápan vlnatý

Cruz Lima's saddleback tamarin monkey

Saguinus (fuscicollis) cruzlimai sp. nov. - tamarin

Rio Pauini white bald-headed uacari

Cacajao (calvus) sp. nov. - uakari

Rio Aripuanã green-backed squirrel monkey

Saimiri (ustus) sp. nov. - kotul

Rio Mamerú titi monkey

Callicebus (moloch) sp. nov. - titi

Upper Xingú Amazonian marmoset monkey -titi

Mico (Callithrix) sp. nov. - kosman

Orange woolly monkey - *Lagothrix sp. nov.* - chápan

Long-limbed black spider monkey - *Ateles sp. nov.* - chápan

Silvery bellied spider monkey - *Ateles sp. nov.* - chápan

Eastern saddleback tamarin monkey

Saguinus (fuscicollis) orientalis sp. nov. - tamarin

Rio Purús collared titi monkey *Callicebus (torquatus) sp. nov.*

Upper Rio Xingú titi monkey - *Callicebus (moloch) sp. nov.*

Grey saki monkey - *Pithecia sp. nov.* -

Southbank Rio Negro saki monkey

Pithecia (Pithecia) sp. nov. - chvostan

Hotspot of new megafauna found in the Central Amazon (Brazil): the lower Rio Aripuanã Basin

Marc G.M. van Roosmalen

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ABSTRACT

Here I announce the discovery of a whole new ecosystem in the central-southern part of the Brazilian Amazon: the Rio Aripuanã Basin. Overall, it seems to have created more ecological niches than any other river basin in the Amazon, in particular so to aquatic and non-volant terrestrial mammals. This is plausibly explained for by the unique geo-morphological history of the region. During the Pliocene and Early Pleistocene the entire area to the southeast of the Rio Madeira contained one huge clear-water system that was drained toward the south into the Atlantic Ocean. In the course of several million years a biome quite different from the rest of Amazonia could evolve in this drainage system. Living relicts from ancient times that happened to survive in isolation here, are: a dwarf manatee here described as *Trichechus pygmaeus* n. sp., a dolphin locally called “boto roxo” that is suspected to be closer related to marine Rio Plata dolphins *Pontoporia blainvillei* (Gervais et d’Orbigny, 1844) than to Amazonian dolphins of the genus *Inia* (d’Orbigny, 1834), a black dwarf tapir (*Tapirus pygmaeus* Van Roosmalen, 2013, with *T. kabomani* Cozzuol et al., 2013 as junior name), a dwarf marmoset *Callibella humilis* Van Roosmalen et Van Roosmalen, 2003, a new monospecific genus of Callitrichidae that stands at the base of the phylogenetic tree of all extant marmosets (i.e., *Cebuella* Gray, 1866, *Mico* Lesson, 1840, and *Callithrix* Erxleben, 1777), a giant striped paca here described as *Agouti silvagaraciae* n. sp., and an arboreal giant anteater spotted in the wild but remains to be collected and described (*Myrmecophaga* n. sp.). A number of other, more advanced mammalian species discovered in the Rio Aripuanã Basin, among which a third species of brocket here described as *Mazama tienhoveni* n. sp., evolved after a dramatic vicariance took place about 1-1.8 MYA (million years ago), the break-through of the continental watershed by the proto-Madeira River during one of the glacial epochs of the Middle Pleistocene. It marked the birth of the modern fast-flowing Rio Madeira, in terms of total discharge the biggest tributary of the Amazon proper and the second strongest river barrier in the entire Amazon Basin. Furthermore, current threats to the environment in this sparsely inhabited and poorly explored river basin will be addressed. We intend to have this ‘lost world’ preserved as a UNESCO Natural World Heritage Reserve through the divulgation of new, hitherto not yet identified mammals that it appears to harbor.

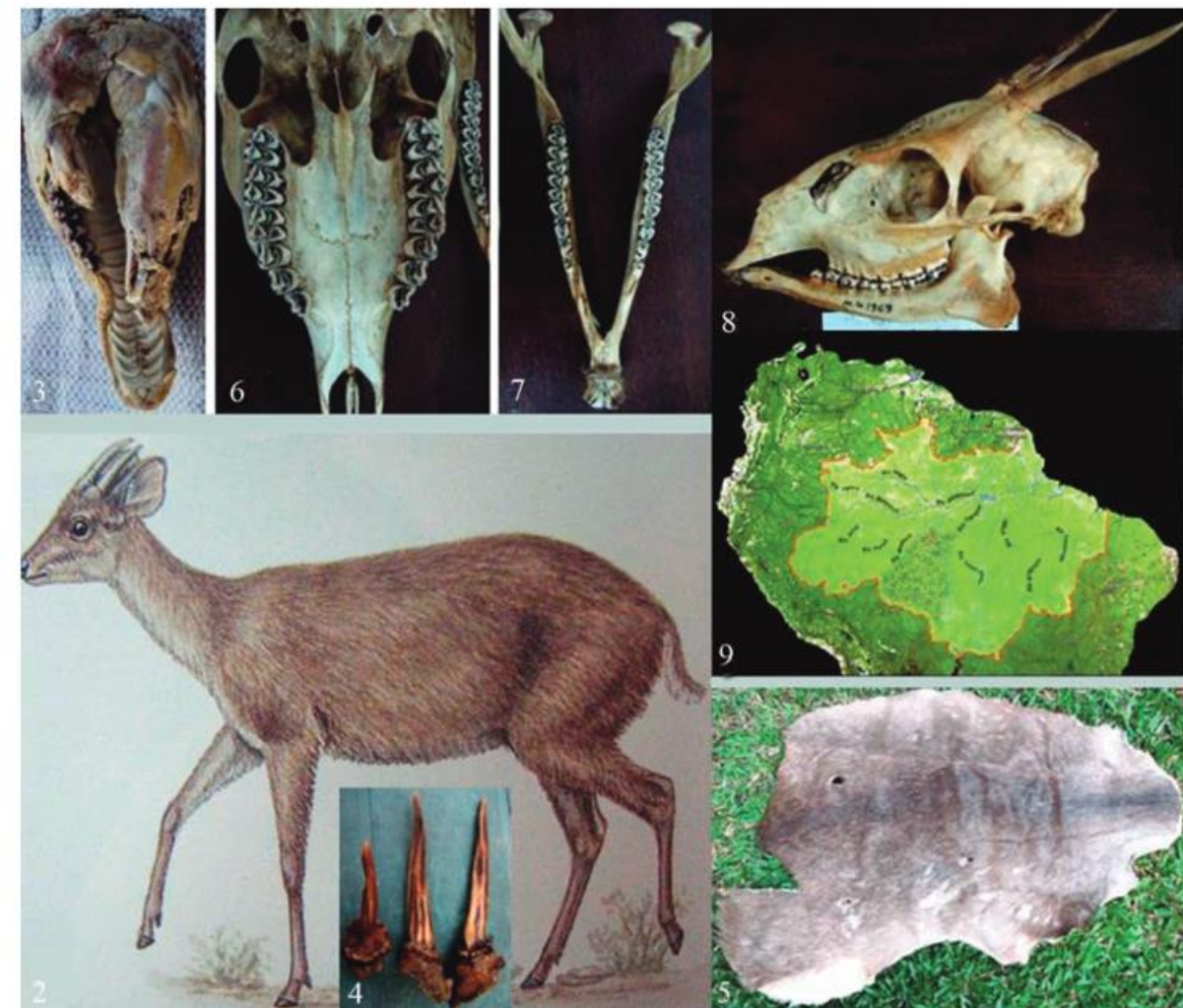
KEY WORDS Brazilian Amazon; nova species; Rio Aripuanã Basin.

Received 15.06.2014; accepted 12.12.2014; printed 30.03.2015



Figure 19. Adult dwarf manatee male kept for over four months in a fenced-off river bend of the Rio Arauazinho where it was fed with its local natural food; note the saturated eumelanin black skin, relatively short head, short trunk and flippers, the bristle hairs on the snout, and the large, tear-shaped albinotic white patch on the abdomen.

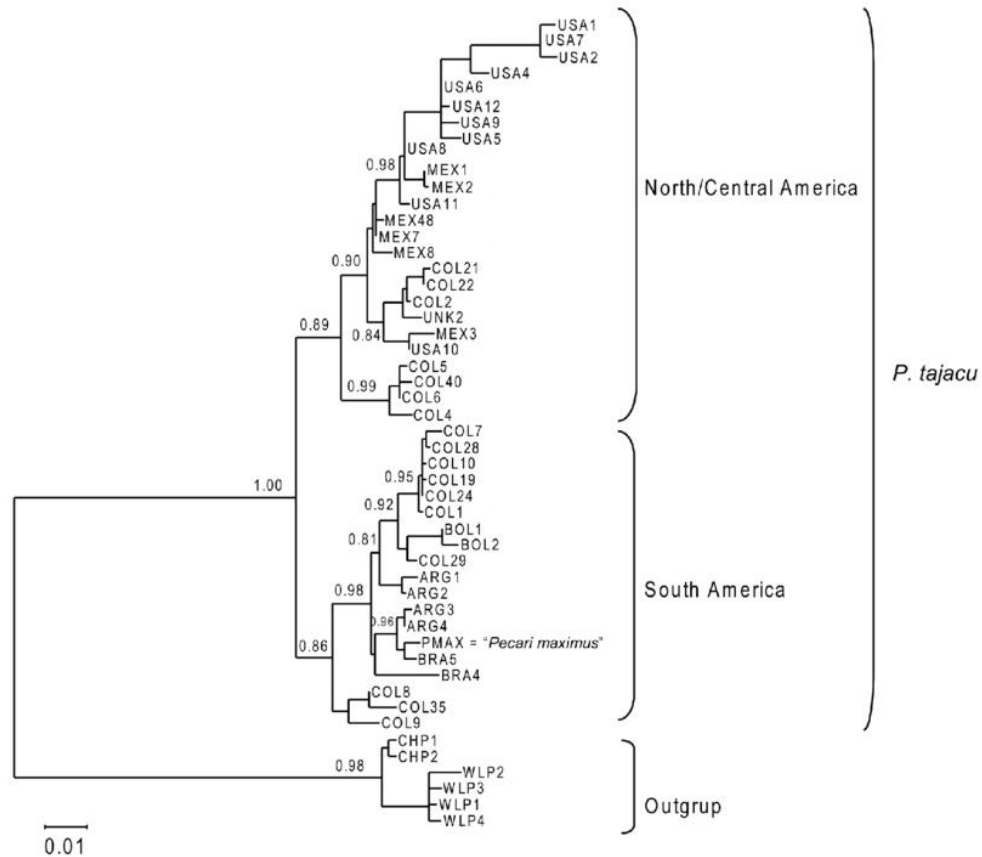
Trichechus bernhardi 2007-nejmenší kapustňák



Figures 2–9. *Mazama tienhoveni* n. sp. Figure 2. *M. tienhoveni* n. sp. drawing reconstructed from plate depicting *M. nemorivaga* (Eisenberg, 1989). Fig. 3. Skinned head of a holotype female fair brocket deer *M. tienhoveni* n. sp. Fig. 4. Two spikes of *M. nemorivaga* and one (the smallest) of *M. tienhoveni* n. sp. Fig. 5. Skin of *M. tienhoveni* n. sp. from Tucunaré village, Rio Aripuanã. Figs. 6–8. skull and mandible of gray brocket deer *M. nemorivaga* (MPEG1969). Fig. 9. Distribution map for *M. tienhoveni* n. sp.



Figures 11–16. Fig. 11. Plate from Eisenberg (1989) depicting the common spotted paca *Agouti paca*; Fig. 12. The common spotted paca *A. paca* as depicted in Emmons & Feer (1990). Fig. 13. Heads of freshly killed common spotted paca *A. paca* (at bottom) and Silva Garcia's striped giant paca *A. silvagarciæ* n. sp. (at top). The skulls and mandibles of these specimens are stored at Tucunaré village, Rio Aripuanã, State of Amazonas, Brazilian Amazon. Figs. 14, 15. Stuffed specimen of striped giant paca *A. silvagarciæ* n. sp. found by the first author in the collection of Museu Paraense Emilio Goeldi under MPEG 22302 - without locality and misidentified as *A. paca*. Fig. 16. Skull of the common spotted paca *A. paca* found by the first author in the collection of Museu Goeldi under MPEG 5418, from the locality of Tapirinha. Skull length 147 mm, skull width 97 mm.



Pecari maximus 2007 –největší pekari

Following a review in 2011, the IUCN moved the giant peccary into synonymy of the collared peccary (*P. tajacu*)

A NEW SPECIES OF LIVING LOWLAND TAPIR
(MAMMALIA: TAPIRIDAE) FROM THE BRAZILIAN AMAZON

Marc G.M. van Roosmalen / AAPN Manaus-Amazonas, Brazil



(Left) Adapted rendering of a black dwarf lowland tapir.
(Above) On the left a skull of Brazilian lowland tapir, on the right the skull of black dwarf lowland tapir.

Here we report on the existence of a new species of odd-toed ungulate in the Brazilian Amazon, which we name *Tapirus pygmaeus* sp. nov., the black dwarf lowland tapir. It is much smaller than the since long known Brazilian lowland tapir, *Tapirus terrestris*. As in other tapirs, dwarf tapirs seem to live solitary or in pairs. In view of recent developments in the interfluves where it lives and due to its limited distribution and apparent rariness, we consider the dwarf tapir highly endangered.

KEY WORDS

New species, Perissodactyla, Tapiridae, *Tapirus pygmaeus* sp. nov., black dwarf lowland tapir, Brazilian Amazon

1. INTRODUCTION

Up to recently only one member of the Pantropical family *Tapiridae* (tapirs) from lowland Amazonia was known to science belonging to the extant genus *Tapirus* (WILSON & REEDER 1993): the lowland tapir *Tapirus terrestris* (LINNAEUS, 1758).

2. MATERIAL AND METHODS

One complete skull and mandible from an adult female dwarf lowland tapir was obtained shot and eaten by locals from the village of Tucunaré along the lower Rio Aripuanã. In Spix & Martius "Reise in Brasilien in den Jahren 1817-1820" (München, 1828) Carl Friedrich Philip von Martius mentions the occurrence of a dwarf form of the lowland tapir in the Brazilian State of Minas Gerais locally known as anta-xuré claimed to be sympatric there with the anta comum or anta-sapateira (*Tapirus americana* L.). "This animal of low stature, ears of a uniform color, not white at the tips, is probably only a variety of the common tapir, but according to Dr. von Spix should be separated from the much larger common tapir and be considered a full species". It is not known to me if Spix has collected the species during his travels through Brazil together with the botanist Martius. If it turns out that the Zoologischen Staatssammlung, München contains a specimen collected by Spix back in 1818 in Minas Gerais that specimen should be considered the holotype. In that case I will name the dwarf lowland tapir for Johann Baptist von Spix: *Tapirus spixianus*.

Tapirus pygmaeus 2008 –nejmenší tapír

Tempo popisování druhů

RYBY cca 150 druhů ročně

OBOJŽIVELNÍCI cca 70 druhů ročně

PTÁCI cca 5 - 10 druhů ročně

SAVCI cca 40 – 50 druhů ročně

1992 – 2005 ptáci vs. savci 83 : 341

1992 – 2005 341 nový druh savců

1992 – 2005 Rodentia 155 druhů

1992 – 2005 Chiroptera 78 druhů

1995 – 2007 36 nových druhů primátů