

Obituary



Lyubov Anatolievna Tyutkova (1957 – 2011) **[Тютюкова, Tyutkova, Tjutkova, Tyut'kova, Tutkova]**

Earlier this year we have prematurely lost Lyuba Tyutkova, the mammalian paleontologist who studied Late Cenozoic small mammals of Central Asia in the Institute of Zoology, Almaty, Kazakhstan.

Lyubov Anatolievna Tyutkova was born on 13th of February, 1957 in the Kzyl-Orda Region of Kazakhstan. After the secondary school she worked as a laboratory assistant and in parallel entered the extra-mural course of the Biological Faculty of the Kazakhstan State University named after S.M. Kirov (currently named after Al-Farabi) in Alma-Ata, Kazakhstan. Lyuba defended her course and graduate theses under the guidance of Dr. Pavel F. Savinov. After the graduation from the University in 1980, Lyuba Tyutkova entered the Laboratory of Paleobiology in the Institute of Zoology of the Academy of Sciences of the Kazakh Soviet Socialist Republic (since 1990s, Institute of Zoology of Ministry of Education and Science of Kazakhstan Republic). In the laboratory Lyuba studied Pliocene and Quaternary lagomorphs and rodents under the guidance of Savinov. In 1980s Lyuba had two traineeship programs curated by Professor Igor Mikhailovich Gromov in the Zoological Institute of the USSR Academy of Sciences in Leningrad. In 1990 Tyutkova defended the doctoral thesis (candidate of biological sciences) “Late Pliocene lagomorphs and rodents of Southeastern Kazakhstan”.

Among most important achievements of L. Tyutkova is the study of Plio-Pleistocene small mammals from

successive Early Pleistocene faunas of southeastern Kazakhstan (Kiikbai, Adyrgan, Kopaly). She described a strongly hypsodont mimomyine vole *Mimomys (Tcharinomys) haplodentatus*, a probable direct ancestor of *Allophaiomys* voles, and peculiar Central Asian clethrionomyine vole *Clethrionomys mirus* (both co-authored with P. Savinov); primitive mole vole *Ellobius tsharynensis*; and species of murids, cricetids, and ochotonids (see the species list below).

Since 1994 L. Tyutkova studied Oligo-Miocene rodent and lagomorph fauna of Kazakhstan in the framework of the Kazakhstan-American joint scientific project headed by P. Tleuberdina and R. Emry. Tyutkova described several new genera and species of tachyoryctoids, cricetids, sciurids, and eomyids.

Since 1976 Lyuba annually worked in the field. In 1993–1996 she took part in the Kazakhstan-American expedition to Zaysan Basin known by rich localities of Paleogene vertebrates, especially mammals. Twice she visited the Smithsonian Institution (Washington DC) for the joint studies of Paleogene and Miocene rodents.

Lyuba was a frequent and active participant of scientific conferences in countries of the former Soviet Union, Europe, and North America. During her professional carrier in the Institute of Zoology she published more than 60 scientific works (see the list below). Tyutkova's data on Late Cenozoic mammal support high resolution of stratigraphic schemes of Kazakhstan.

Tyutkova described a number of new species and genera of small mammals from the Oligocene to Quaternary of Central Asia.

Lyuba was a devoted paleozoologist with a diverse range of scientific interests. She never lost an acute interest in fossil small mammals and was open and sincere personality and colleague.

In autumn of 2010 following a car accident Lyuba got severe liver problems and subsequently died on April 23 of 2011. Her colleagues, friends, and relatives will always remember Lyuba as a high-spirited, cheerful, and very kind person.

P. Tleuberdina, A. Tesakov, G. Nazymbetova

Taxa described by L.A. Tyutkova

Arvicolinae, Cricetidae, Rodentia:

Mimomys (Tcharinomys) haplodentatus subgen. et sp. nov. Savinov et Tyutkova, 1987: in Kozhamkulova et al. 1987, p.98, pls. V–VI.

Clethrionomys mirus sp. nov. Savinov et Tyutkova, 1987: in Kozhamkulova et al. 1987, 91, pls. II–III.

Ellobius tsharynensis sp. nov. Tyutkova 1989: 124, fig. 1.

Ochotonidae, Lagomorpha:

Ochotonoides progressivus sp. nov. Tyutkova, 1992: 89, fig. 1 a, b.

Cricetidae, Rodentia:

Phodopus minutus sp. nov. Tyutkova, 1992: 91, fig. 1 g.

Ochotonidae, Lagomorpha:

Bohlinotona kalkamanensis sp. nov. Tyutkova, 1993: 139, pl. XV, g.

Muridae, Rodentia:

Orientalomys adirganus sp. nov. Tyutkova, 1993: 162, pl. VIII.

Eomyidae, Rodentia:

Symplokeomys zaysanicus gen. et sp. nov. Emry, Wang, Tyutkova et Lucas, 1997:

Cylindrodontidae, Rodentia:

Polinaomys shintuzsaensis sp. nov. Tyutkova, 1997: 97.

Cricetidae, Rodentia:

Pappocricetodon kazakstanicus sp. nov. Emry, Tyutkova, Wang et Lucas, 1998: 222, fig.4.

Zhungaromys gromovi gen. et sp. nov. Emry, Tyutkova, Wang et Lucas, 1998: 222, fig.5.

Tachyoryctoidinae, Rodentia:

Ayakozomys sergiopolis gen. et sp. nov. Tyutkova, 2000: 67, figs. 1–2, 3: v, g.

Aralomys padre sp. nov. Tyutkova, 2000: 70, fig. 3: g, d.

Tachyoryctoidinae, Rodentia:

Rhinocerotomys savinovi gen. et sp. nov. Tyutkova, 2005: 57, fig. 1.

[= Cricetidae, Cricetodontinae, *Rhinocerotomys pauli* Zazhigin, 2003: Russ. J. Theriol. Vol.2. No.2. P.65–69]

Lagomorpha

Zaysanolagus Tyutkova et al., 2003: 361. [nomen nudum]

Cricetidae, Rodentia:

Gobicricetodon natalia[e] sp. nov. Tyutkova, 2008: 438, fig.2, 1–4.

Ctenodactyloidae, Rodentia

Yindirtemys minimus sp. nov. Tyutkova, 2009: 42, fig. 1 zh.

Sciuridae, Rodentia

Sinotamias maximus Tyutkova sp. nov., 2009: 44, fig.1 n–u.

Eomyidae, Rodentia

Pseudotheridomys emry[i] Tyutkova sp. nov., 2009: 47, fig. 1 A, B.

Rhodanomys bayshashovi sp. nov., 2009: 48, fig. 1 V.

Taxa described in honour of L.A. Tyutkova

Asiadidelphis tyutkovae Emry, Lucas, Szalay et Tleuberdina, 1995

Emry R.J., Lucas S.G., Szalay F.S. & Tleuberdina P.A. 1995. A new herpetotherine didelphid (Marsupialia) from the Oligocene of Central Asia // Journal of Vertebrate Paleontology. Vol.15. No.4. P. 850–854.

Main publications of L.A. Tyutkova

Savinov P.F. & Tyutkova L.A. 1982. [Middle Pleistocene rodents from the piedmonts of the Zailay Alatau Mts] // VINITI, dep. no. 634-82, Alma-Ata, 25 p. [in Russian].

Galkina L.I. & Tyutkova L.A. 1986. [The Late Pleistocene steppe marmot, *Marmota bobac* Müller, from the “lemming fauna” of the middle reaches of the Desna River] // Trudy Zoologicheskogo Instituta AN SSSR. T.156. P.143–156 [in Russian, English summary].

Tyutkova L.A. 1986. [Late Pleistocene rodents of the middle reaches of the Desna River] // VI all-Union conference for the study of the Quaternary. Kishinev. P.264 [in Russian].

Kozhamkulova B.S., Savinov P.F., Tyutkova L.A. & Pak T.T. 1987. [Pliocene mammals from the Aktogay locality] // Materialy po Istorii Fauny i Flory Kazakhstana. T.9. P.82–120 [in Russian].

Tyutkova L.A. 1988. [Concerning the presence of the yellow steppe lemming in the composition of the Holocene microtheriofauna of southeastern Kazakhstan] // Izv. Akad. Nauk Kaz. SSR, Ser. Biol. No.5. P.85–87 [in Russian].

Tyutkova L.A. 1988. [New data on Late Pliocene fauna of small mammals from Aktogay locality]. Materialy po Istorii Fauny i Flory Kazakhstana. T.10. P.83–93 [in Russian].

Tyutkova L.A. 1988. Concerning *Clethrionomys mirus* Savinov et Tyutkova, 1987 as a component of the Late Pliocene rodent fauna of eastern Kazakhstan // Materialy po Istorii Fauny i Flory Kazakhstana. T.10. P.94–98 [in Russian].

- Tyutkova L.A.** 1989. [Concerning the history of the Tcharyn small mammal (southeastern Kazakhstan)] // Materials of I all-Union conference on paleotheriology. Moscow. P.57–59 [in Russian].
- Tyutkova L.A.** 1989. [A new species of mole-vole (Rodentia) from the Late Pliocene of south-east Kazakhstan] // Paleontological Journal. No.2. P.112–116 [in Russian].
- Tyutkova L.A.** & Nikolskaya V.D. 1990. [Late Pliocene charophytes and pikas from Charyn River Vally] // Materialy po Istorii Fauny i Flory Kazakhstana. T.11. P.17–26 [in Russian].
- Aubekerov B.Zh., Zhakupova Sh.A., Kostenko N.N., Kochenov V.G., Kunaev M.S. & **Tyutkova L.A.** 1990. [The reference section for Pliocene deposits in the Kopaly locality] // Materialy po Istorii Fauny i Flory Kazakhstana. T.11. P.140–163 [in Russian].
- Tyutkova L.A.** 1990. [Late Pliocene lagomorphs and rodents of Southeastern Kazakhstan] // Author's abridged thesis of candidate of biological sciences, Kiev. 26 p. [in Russian].
- Tjutkova L.A.** 1991. Late Neogene and Early Quaternary Rodents from the South-Eastern Kazakhstan (USSR) // 13 Congress of INQUA, China. P.357.
- Tyutkova L.A.** 1991. [Late Pleistocene rodents from the Betovo habitation site on the Desna River] // Trudy Zoologicheskogo Instituta AN SSSR. T.243. P.159–179 [in Russian].
- Tyutkova L.A.** 1992. [Rodents and lagomorphs of the Late Pliocene Kiikbay Fauna (southeastern Kazakhstan)] // Paleontological Journal. No.4. P.89–93 [in Russian].
- Tleuberdina P.A., Volkova V.S., Gutieva N., Kaipova G.O., Luschaeva T.T., Lychev G.F., Pita O.M., **Tyutkova L.A.** & Chkhikvadze V.M. 1993. [Vertebrate fauna of Kalkaman (Pavlodar Priirtyshie)] // Materialy po Istorii Fauny i Flory Kazakhstana. T.12. P.132–157 [in Russian].
- Tyutkova L.A.** & Kaipova G.O. 1993. [First data on Late Pliocene small mammal fauna of Tekess Depression] // Materialy po Istorii Fauny i Flory Kazakhstana. T.12. P.158–180 [in Russian].
- Tyutkova L.A.** 1994. Eopleistocene *Prolagurus* Kormos, 1938 from southeastern Kazakhstan // Selevinia. No.2. P.11–15 [in Russian].
- Tyutkova L.A.** 1994. Oligocene-Early Miocene lagomorphs of North Aral region // Materials of IPGC-326 meeting, Oligocene-Miocene Transition in the Northern Hemisphere. Alma-Ata. P.15, 29.
- Bayshashov B.U. & **Tjutkova L.A.** 1994. List of mammals from some localities of Cis-Aralian Region // Oligocene-Miocene boundary in Kazakhstan. Field excursion guidebook. Kazakhstan. Aktyubinsk. P.71–72.
- Tjutkova L.A.** 1994. The early Quaternary *Allophajomys* Kormos, 1932 from South-Eastern Kazakhstan // Neogene and Quaternary mammals of the Palaeartic. P.72–73.
- Tjutkova L.A.** & Kaipova G.O. 1994. Late Pliocene and Early Quaternary microtheriofaunas of South-Eastern Kazakhstan // Neogene and Quaternary mammals of the Palaeartic. Conference in honour of Prof. K. Kowalski, Krakow, May 17–21, 1994. P.73–74.
- Emry R.J., **Tjutkova L.A.**, Wang B.-y. & Lucas S.G. 1995. The Ergilian-Shandgolian (Eocene-Oligocene) transition in the Zaysan basin of Kazakhstan // Journal of Vertebrate Paleontology. Vol.15. Supp.No.3. P.27A.
- Tjutkova L.A.**, Emry R.J., Wang B.-y. & Lucas S.G. 1995. Lagomorphs and Rodents of the Middle Eocene Shinzhalys fauna, Eastern Kazakhstan // Journal of Vertebrate Paleontology. Vol.15. Supp.No.3. P.56A.
- Averianov A.O. & **Tjutkova L.A.** 1995. *Ranodon* cf. *sibiricus* (Amphibia, Caudata) from the Upper Pliocene of Southern Kazakhstan: the first fossil record of the family Hynobidae // Paläont. Zeitschrift. Vol.69. No.1/2. P.257–264.
- Tjutkova L.A.** & Kaipova G.O. 1996. Late Pliocene and Eopleistocene micromammal faunas of southeastern Kazakhstan // Acta Zoologica Cracov. Vol.39. No.1. P.549–557.
- Tjutkova L.A.** 1996. To the biostratigraphical importance of *Prolagurus* Kormos, 1938 // Abstracts of 30th International Geological Congress China. Vol.2. P.83.
- Lucas S.G., Emry R.J., Bayshashov B.U. & **Tjutkova L.A.** 1996. Paleogene mammalian biochronology, Zaysan basin, Kazakhstan. // Abstracts of 30th International Geological Congress China. Vol.2. P.84.
- Lucas S.G., Emry R.J., **Tyutkova L.A.** & Bayshashov B.U. 1996–1997. [Extinct mammals and Eocene-Oligocene boundary in the Zaysan Depression, Kazakhstan] // Selevinia. P.64–70.
- Tyutkova L.A.** 1997. [A new cylindrodontid (Rodentia, Mammalia) from the *Indricotherium* fauna] // Paleontological Journal. No.6. P.96–101 [in Russian].
- Erbajeva M.A. & **Tyutkova L.A.** 1997. Paleogene and Neogene Lagomorphs from Kazakhstan // Aguilar J.-P., Legendre S. & Michaux, J. (eds.), Actes du Congrès Biochrom '97. Mémoires et travaux de l'Institut de Montpellier de l'École Pratique des Hautes. Vol.21. P.209–214.
- Lucas S.G., Bayshashov B.U., **Tjutkova L.A.**, Dzamangaraeva A.K. & Aubekerov B.J. 1997. Mammalian biochronology of the Paleogene-Neogene boundary at Aktau mountain, Eastern Kazakhstan // Paläontol. Zeitschrift. Vol.71. No.3/4. P.305–314.
- Emry R.J., Wang B.-y., **Tjutkova L.A.** & Lucas S.G. 1997. Late Eocene Eomyid Rodent from the Zaysan basin of Kazakhstan // Journal of Vertebrate Paleontology. Vol.17. No.1. P.229–234.
- Emry R.J., **Tyutkova L.A.**, Lucas S.G. & Wang B.-y. 1998. Rodents of the middle Eocene Shinzhalys fauna of Eastern Kazakhstan // Journal of Vertebrate Paleontology. Vol.18. No.1. P.218–227.
- Emry R.J., Lucas S.G., **Tyutkova L.A.** & Wang B.-y. 1998. The Ergilian-Shandgolian (Eocene-Oligocene) transition in the Zaysan basin, Kazakhstan // Bulletin of Carnegie Museum of Natural History. Vol.34. P.298–312.
- Baishashov B.U. & **Tyutkova L.A.** 1998–1999. [Early Oligocene (*Indricotherium*) fauna of Central Kazakhstan] // Selevinia. No.12. P.122–134 [in Russian].
- Erbajeva M.A. & **Tyutkova L.A.** 1998–1999. [Pikas (Ochtonidae, Lagomorpha) from sites of the Zaysan Depression (East Kazakhstan)] // Selevinia. No.12. P.134–142 [in Russian].

- Tyutkova L.A.** 1999. [Early Miocene lagomorphs and rodents from the locality Ayaguz (East Kazakhstan)] // Problems of protection and sustainable use of animal biodiversity in Kazakhstan Almaty. P.46 [in Russian].
- Bayshashov B.U., **Tyutkova L.A.** & Lucas S.G. 1999. Mammalian fauna and Miocene age of the Ayakoz locality Eastern Kazakhstan // *Journal of Vertebrate Paleontology* (Abstracts). Vol.19. Supp.No.3. P.31A.
- Lucas S.G., Aubekero B.Z., Dzamangaraeva A.K., Bayshashov B.U. & **Tyutkova L.A.** 2000. Cenozoic Lacustrine Deposits of the Ily Basin Southeastern Kazakhstan // Gierlowski-Kordesch E.H. & Kelts K.R. (eds.). Lake basins through space and time. American Association of Petroleum Geologists Studies in Geology. Vol.46. P.59–64.
- Lucas S.G., Emry R.J., Chkhikvadze V.M., Bayshashov B.U., **Tyutkova L.A.**, Tleuberdina P.A. & Zhamangara A. 2000. Upper Cretaceous Cenozoic Lacustrine Deposits of the Zaysan Basin, Eastern Kazakhstan // Gierlowski-Kordesch E.H. & Kelts K.R. (eds.). Lake basins through space and time. American Association of Petroleum Geologists Studies in Geology. Vol.46. P.335–340.
- Tyutkova L.A.** 2000. [New Early Miocene Tachyoryctoididae (Rodentia, Mammalia) from Kazakhstan] // *Selevinia*. No.1–4. P.67–72 [in Russian].
- Tyutkova L.A.**, Emry R.J. & Lucas S.G. 2002. [Fossil hamsters of Zaysan] // *Zoological studies in Kazakhstan*. P.209–210 [in Russian].
- Tyutkova L.A.**, Erbajeva M.A., Emry R.J. & Lucas S.G. 2002 [Miocene small mammal fauna of Zaysan and its biostratigraphic significance] // *Zoological studies in Kazakhstan*. P.208–209 [in Russian].
- Tyutkova L.A.**, Erbajeva M.A. & Emry R.J. 2002. [History and taxonomic diversity of lagomorphs of Kazakhstan] // *Zoological studies in Kazakhstan*. P.198–199 [in Russian].
- Bayshashov B.U., **Tyutkova L.A.**, Lucas S.G. & Emry R.J. 2002. New mammal finds and the Early Miocene age of the Askazansor locality, Kazakhstan // *Journal of Vertebrate Paleontology* (Abstracts). Vol.22. No.3. P.34.
- Tyutkova L.A.** 2003. [Neogene rodents of the locality “Gusinyi Perelet” (Pavlodar, Kazakhstan)] // Averianov A.O. & Abramson N.I. (eds.). Systematics, phylogeny and paleontology of small mammals. Zoological Institute of Russian Academy of Sciences: St.-Petersburg. P.218–220 [in Russian].
- Tyutkova L.A.** 2003. [First find of rodents in Ashut (Central Kazakhstan)] // Materials of VII congress of Theriological Society. Severtsov Institute of Ecology and Evolution: Moscow. P.360 [in Russian].
- Tyutkova L.A.**, Lucas S.G., Emry R.J. & Erbajeva M.A. 2003. [Oligocene microtheriofauna of Zaysan] // Materials of VII congress of Theriological Society. Severtsov Institute of Ecology and Evolution: Moscow. P.360–361 [in Russian].
- Emry R., Lucas S., Bayshashov B. & **Tyutkova L.** 2004. Cenozoic mammalian biostratigraphy in the Ily basin, Eastern Kazakhstan // *Journal of Vertebrate Paleontology*. Vol.24. Supp.No.3. P.54A–55A.
- Tyutkova L.A.** 2005. [New rodent from Neogene of the Pavlodar Irtysh region (“Gusinyi Perelet”, Kazakhstan)] // *Trudy of Institute of Zoology MES RK*. Vol.49. P.57–63 [in Russian].
- Tyutkova L.A.** 2008. [New data on lagomorph and rodent fauna of Kalkaman (Pavlodar Irtysh area)] // Tleuberdina P.A., Erjanov N.T. & Zysin V.S. (eds.). Materials of international scientific and practical conference “Paleontological monuments of nature as natural heritage: study, perspectives of research and problems of protection”. Pavlodar. P.108–112 [in Russian].
- Tyutkova L.A.** 2008. The Middle Miocene Rodents of the Ashut locality (Turgay Depression) // Lucas et al. (eds.). Neogene Mammals. New Mexico Museum of Natural History and Science Bulletin. Vol.44. P.437–442.
- Lucas S.G., Emry R.J., Bayshashov B.U. & **Tyutkova L.A.** 2009. Cenozoic mammalian biostratigraphy and biochronology in the Zaysan basin, Kazakhstan // *Papers of Geology, Vertebrate Paleontology, and Biostratigraphy in Honor of Michael O. Woodburne*. Museum of Northern Arizona Bulletin 65, Flagstaff, Arizona. P.621–633.
- Tyutkova L.A.** 2009. [On some rodents from Early Miocene fauna of Ayakoz (East Kazakhstan)] // *Trudy of Institute of Zoology MES RK*. Vol.50. P.41–46 [in Russian].
- Tyutkova L.A.** 2009. [Early Miocene Eomyidae and Gliridae of Ayakoz (East Kazakhstan)] // *Trudy of Institute of Zoology MES RK*. Vol.50. P.47–51 [in Russian].
- Tyutkova L.A.** 2009. [Biodiversity of Paleogene microtherian associations of Kazakhstan] // *Selevinia*. P.146–152 [in Russian].
- Baishashov B.U. & **Tyutkova L.A.** 2010. [Biozonal succession of Miocene vertebrate faunas of south-eastern Kazakhstan] // *Evolution of life on Earth. IV internat. symposium*. Tomsk. P.526–528 [in Russian].
- Tyutkova L.A.** 2010. [Paleogene microtherian associations of Kazakhstan] // *Evolution of life on Earth. IV internat. symposium*. Tomsk. P.563–566 [in Russian].
- Tyutkova L.A.** 2010. Meizhartyk — Late Pliocene locality of small mammals (North Kazakhstan) // *Abstracts of 2010 annual meeting of INQUA-SEQS*. Rostov-on-Don, Russia, June 21–26, 2010. P.177–178.