

DOI: 10.30906/1026-2296-2025-32-1-77-79

## NEW RECORD OF RED-BANDED SNAKE *Lycodon rufozonatus* (SERPENTES: COLUBRIDAE) IN PRIMORSKY KRAY, RUSSIA

Yuri N. Sundukov<sup>1</sup>

*Submitted September 2, 2024.*

Information about a new find of the Red-banded Snake (*Lycodon rufozonatus* Cantor, 1842) in the Primorsky Kray is presented. The new discovery site is located 220 km northeast of previously known finds and is currently the northernmost for *L. rufozonatus* on range.

**Keywords:** reptiles; Colubridae; *Lycodon rufozonatus*; new record; Primorsky Kray; Russian Far East.

### INTRODUCTION

The Red-banded Snake (*Lycodon rufozonatus* Cantor, 1842) is one of the rarest and most beautiful snakes in the Russian fauna (Figs. 1 and 2). In our country, it is reliably known only from the extreme southwest of Primorsky Kray — the Malaya Ananyevka River basin (Maslova et al., 2021a, 2021b), and the main range of this species is in China (Fig. 3). For this reason, the Red-banded Snake is included in the Red Data Books of the Russian Federation (with the status of the 4<sup>th</sup> category — vulnerable, species with an uncertain status) (Maslova et al., 2021b) and Primorsky Kray (3<sup>rd</sup> category — rare species on the outskirts of the range) (Kostenko, 2005).

The Red-banded Snake was first mentioned in Russia under the name *Dinodon rufozonatum* (Cantor, 1842) by Kudryavtsev and Mamet (1989) based on a female found in 1987 in the vicinity of Nezhino. The snakes were found several more times in the late 20th century: in May 1988 on the Bolshevistskiy Creek (a tributary of the Malaya Ananyevka River; a male and a female under boards next to a hunting hut), in 1989 (a dead male), and in July 1995 (one female was found in the same area) (Kudryavtsev and Mamet, 1989; Solkin, 1990; Maslov and Kotlobay, 1998). The last find was made in early June 2011 in the middle reaches of the Malaya Ananyevka River (Maslova, 2017). Thus, all reliable encounters with *L. rufozonatus* are known in the Nadezhdensky District of

Primorsky Kray: in the middle reaches of the Malaya Ananyevka River and its tributary, the Bolshevistskiy Creek (Maslova et al., 2021b).

Outside of Russia, the Red-banded Snake is found in Eastern and Southern China (Zhao and Adler, 1993; Chen et al., 2007), the islands of Hainan and Taiwan (Dieckmann et al., 2010; Wallach et al., 2014), the Korean Peninsula (Won, 1971), the Tsushima Island and the south of the Ryukyu Archipelago in Japan (Goris and Maeda, 1997; Ashimine, 2009), Northern Vietnam (Janssen et al., 2019) and Northern Laos (Uetz and Hošek, 2024).

### NEW RECORD OF THE RED-BANDED SNAKE

On May 21, 2024, we made an unexpected discovery of a young Red-banded Snake (snake length 33 – 34 cm) at the northern end of the Siny Ridge, not far from the confluence of the Ussuri and Arsenyevka rivers (Figs. 1 and 2). The discovery site is located 220 km northeast of the middle reaches of the Malaya Ananyevka River and is currently the northernmost location for *L. rufozonatus* in its range (Fig. 3).

The snake was found on a forest road at the bottom of the slope of Beltsovsky Cliff during a night entomological excursion. The place of discovery is a forest road running across a steep slope and rising above the Arsenyevka River bed by about 15 – 20 m. The vegetation in this area is mainly represented by oak-birch forest with Korean pine and broad-leaved trees.

<sup>1</sup> Federal Scientific Center of the East Asia Terrestrial Biodiversity FEB RAS, 159, 100-letiya Vladivostoka, Vladivostok, 680022, Russia; e-mail: yun-sundukov@mail.ru



**Fig. 1.** The front part of the body of the Red-banded Snake *Lycodon rufozonatus* Cantor, 1842, Beltsovsky Utes, Siny Ridge, Primorsky Kray, Russia. Photo by A. V. Makarov.

**Geographical data of the snake's discovery.** "Russia, Primorsky Kray, Yakovlevsky District, Beltsovsky Utes, forest road ~1 km north of Beltsovo, 44.842408 °N 133.575549 °E, 21.05.2024."

That same night (from 10:00 p.m. to 11:30 p.m.) on the same road, two young (one alive and one dead, which was being eaten by two ground beetles *Carabus canaliculatus* Adams, 1812) and one adult *Elaphe dione* (Pallas, 1773), one adult *Gloydus intermedius* (Strauch, 1868) and an adult *Rhabdophis tigrinus* (Boie, 1826) crushed by a car were noted. During the daytime, one *Elaphe schrenckii* (Strauch, 1873) was also encountered here.

**Acknowledgments.** I am sincerely grateful to my colleagues, K. V. Makarov and A. V. Makarov (both Moscow) for passing on for use photographs of the captured snake. The research was carried out within the state assignment of Ministry of Science and Higher Education of the Russian Federation (theme No. 124012400285-7).

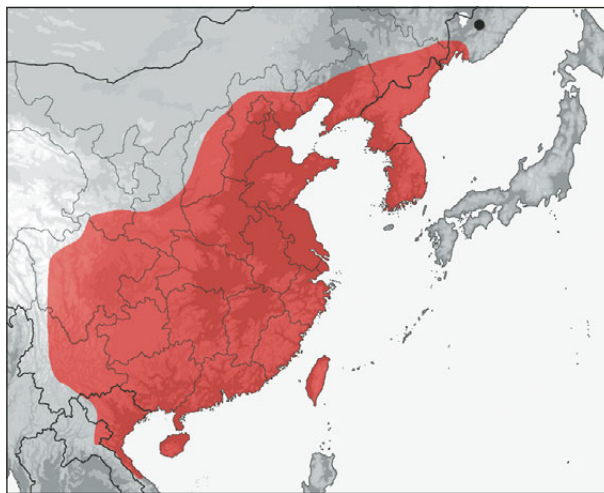
## REFERENCES

- Ashimine K. (2009), "A field observation of the combat dance of *Dinodon rufozonatum walli* on Ishigakijima Island," *Bull. Herpetol. Soc. Jap.*, **2**, 113 – 116 [in Japanese].
- Chen H., Liu P., and Zhao W. G. (2007), "Distribution pattern in species diversity of amphibians and reptiles in Heilong-jian Province," *Sichuan J. Zool.*, **26**(2), 441 – 444 [in Chinese with English summary].
- Dieckmann S., Norval G., and Mao J. J. (2010), "A description of an Asian King Snake (*Dinodon rufozonatum rufozonatum* (Cantor, 1842)) clutch size from central western Taiwan," *Herpetol. Notes*, **3**, 313 – 314.
- Goris R. C. and Maeda N. (1997), *Guide to the Amphibians and Reptiles of Japan*, Krieger Publishing Company, Florida.
- Janssen H. Y., Pham C. T., Ngo H. T., Le M. D., Nguyen T. Q., and Ziegler T. (2019), "A new species of *Lycodon* Boie, 1826 (Serpentes, Colubridae) from northern Vietnam," *ZooKeys*, **875**, 1 – 29.





**Fig. 2.** Red-banded Snake *Lycodon rufozonatus* Cantor, 1842, Bel'tsovsky Utes, Siny Ridge, Primorsky Kray, Russia. Photo by K. V. Makarov.



**Fig. 3.** The modern range of the Red-banded Snake *Lycodon rufozonatus* Cantor, 1842 (red fill) (after: Midtgaard, 2024) and its new find in Primorsky Kray, Russia (black dot).

- Kostenko V. A.** (2005), "Red-banded Snake *Dinodon rufozonatum* Cantor, 1842," in: *Red Data Book of Primorsky Kray. Animals. Rare and Endangered Species of Animals. Official Publication*, AVK "Apelsin," Vladivostok, p. 185 [in Russian].
- Kudryavtsev S. V. and Mamet S. V.** (1989), "Find of the Red-banded Snake *Dinodon rufozonatum* (Colubridae, Squamata) in Primorsky Kray," *Zool. Zh.*, **68**, 144 – 145 [in Russian].
- Maslov D. A. and Kotlobay A. A.** (1998), "Geographic distribution: *Dinodon rufozonatum* (Red Banded Snake)," *Herpetol. Rev.*, **29**(2), 111 – 112.
- Maslova I. V.** (2017), "Species composition of the Herpetofauna of National Park "Land of the Leopard" (Primorsky Kray, Russia)," *Biota Environm. Far East Reserves*, **2**(11), 56 – 69 [in Russian].

- Maslova I. V., Akulenko M. V., Portnyagina E. Yu., Pokhi-lyuk N. E., and Rogashevskaya D. A.** (2021a), "Rare and endangered amphibians and reptiles of Primorsky Kray (Russian Far East)," *Biota Environm. Nat. Terr.*, **4**, 102 – 121 [in Russian].
- Maslova I. V., Orlov N. L., and Ryabov S. A.** (2021b), "Red-banded Snake *Lycodon rufozonatum* Cantor, 1842," in: *Red Data Book of the Russian Federation. Animals. 2<sup>nd</sup> Edition*, VNIIEcology, Moscow, pp. 465 – 466 [in Russian].
- Midtgaard R.** (2024), RepFocus — A Survey of the Reptiles of the World, [https://repfocus.dk/maps1/TAX/Serpentes/Colubridae/Lycodon\\_rufozonatus\\_map.html](https://repfocus.dk/maps1/TAX/Serpentes/Colubridae/Lycodon_rufozonatus_map.html) (accessed August 3, 2024).
- Solkin V. A.** (1990), "On the place of the Red-banded Snake *Dinodon rufozonatum* in the Herpetofauna of the USSR," *Zool. Zh.*, **69**, 144 – 145 [in Russian].
- Uetz P. and Hošek J.** (2024), *The Reptile Database*, <http://www.reptile-database.org> (accessed August 3, 2024).
- Wallach V., Williams K. L., and Boundy J.** (2014), *Snakes of the World. A Catalogue of Living and Extinct Species*, CRC Press, Boca Raton, FL.
- Won W. K.** (1971), *Amphibian and Reptilian fauna of Korea*, Kwahagwon Chulpansa, Pyongyang [in Korean].
- Zhao E.-M. and Adler K.** (1993) *Herpetology of China*, Society for the Study of Amphibians and Reptiles, Oxford, Ohio.