

В. П. Белик, М. И. Аккиев

**THE TENGMALM'S OWL (*AEGOLIUS FUNEREUS*) (STRIGIDAE, AVES)
IN THE NORTH CAUCASUS**

Viktor P. Belik¹ and Muzhihit I. Akkiev²

¹ Southern Federal University

105 Bolshaya Sadovaya Str., Rostov-on-Don 344006, Russia

² Kabardino-Balkaria Alpine Nature Reserve

78 Mechieva Str., Kashkhatau town, Kabardino-Balkaria Republic 361801, Russia

E-mail: vpbelik@mail.ru

Received 20 January 2018, accepted 19 February 2018

Belik V. P., Akkiev M. I. The Tengmalm's Owl (*Aegolius funereus*) (Strigidae, Aves) in the North Caucasus. *Povolzhskiy Journal of Ecology*, 2018, no. 2, pp. 147–162 (in Russian). DOI: 10.18500/1684-7318-2018-2-147-162

Tengmalm's Owl (*Aegolius funereus caucasicus* But.) inhabits dark coniferous, pine and deciduous forests in the mountains of the North Caucasus from the City of Tuapse in the west to the Inner Dagestan in the east, rising to pine forests to a height of 1,900 – 2,000 m above sea level. During its winter wanderings it occasionally occurs in the foothills, but almost does not go out to the piedmont plains. Winter records in the steppe regions of Ciscaucasia may refer to nomadic specimens of a nominate subspecies (*A. f. funereus* L.), common in the Voronezh region and in the north of the Rostov region. The bird finds the most optimal conditions in old dark coniferous and mixed forests of the Western Caucasus, and its maximum abundance is noted in the Teberda Nature Reserve (1 pair per 10 sq. km). In the Central and Eastern Caucasus, it lives in old deciduous forests (low-height mountains) and in pine forests (middle-height mountains). The population of Tengmalm's Owl in the North Caucasus is considered relatively stable, and its total number is now estimated at 1–2 thousand pairs, including 200 – 400 pairs living in Karachaevo-Cherkessia and 20 – 30 pairs living in Adygea. Ecologically, Tengmalm's Owl is closely connected with the Black Woodpecker (*Dryocopus martius*), whose old hollows it usually nests in. The birds display from January to May, but most actively in mid-April. In late April, they lay eggs, and fledglings appear in June – July.

Key words: *Aegolius funereus*, distribution, population status, ecology, North Caucasus, Russia.

DOI: 10.18500/1684-7318-2018-2-147-162

REFERENCES

Averin Yu. V., Nasimovich A. A. Birds of the mountainous part of the North-Western Caucasus. *Proceedings of the Caucasian Nature Reserve*, 1938, vol. 1, pp. 5–56 (in Russian).

Anisimov P. S. Biotopicheskoe raspredelenie ptic stepnogo i lesnogo poyasov Checheno-Ingushskoj ASSR [Biotopic distribution of birds in steppe and forest belts of the Chechen-Ingush ASSR]. *Nature and Economy of the Chechen-Ingush ASSR*. Grozny, Checheno-Ingushskoe knizhnoe izdatelstvo, 1989, iss. 5, pp. 84–97 (in Russian).

Afonin P. V. The structure of the bird population of high-altitude belts of Kabardino-Balkaria. *Ornithology*, 1985, vol. 20, pp. 104–112 (in Russian).

МОХНОНОГИЙ СЫЧ (*AEGOLIUS FUNEREUS*) (STRIGIDAE, AVES)

- Belik V. P. New and rare species of birds of the Rostov region. *Caucasian Ornithol. Bulletin*, 1992, vol. 3, pp. 53–74 (in Russian).
- Belik V. P. Cadastre of the nesting avifauna of Southern Russia. *Strepet*, 2005, vol. 3, no. 1–2, pp. 5–37 (in Russian).
- Belik V. P. Mohnonogij sych [The Tengmalm's Owl]. *The Red Book of the Rostov Region. Vol. 1. Animals*. 2nd ed. Rostov-on-Don, Minprirody Rostovskoj oblasti, 2014, pp. 221 (in Russian).
- Belik V. P. Experience with Regional Red Books in Southern Russia. *Strepet*, 2014, vol. 12, no. 1–2, pp. 112–166 (in Russian).
- Belik V. P. To the avifauna of the National Park «Alania», North Ossetia, Digorja. *Strepet*, 2016, vol. 14, no. 1–2, pp. 39–64 (in Russian).
- Belik V. P., Polivanov V. M., Til'ba P. A., Dzhamirzoev G. S., Muzaev V. M., Bukreeva O. M., Rusanov G. M., Reutsky N. D., Moseikin V. N., Chernobay V. F., Khokhlov A. N., Ilyukh M. P., Mnatekanov R. A., Komarov Yu. E. Current population trends of breeding birds of Southern Russia. *Strepet*, 2003, no. 1, pp. 10–30 (in Russian).
- Beme L. B. Birds of North Ossetia and Ingushetia (with adjacent areas). *Science Issue of the North-Caucasian institute of Local Lore Studies*, 1926, vol. 1, pp. 175–274 (in Russian).
- Beme R. L. Birds of the Central Caucasus. *Science Issue of the North Ossetian State Pedagogical Institute*, 1958, vol. 23, no. 1, pp. 111–183 (in Russian).
- Bogdanov M. Birds of the Caucasus. *Proceedings of the Society of Naturalists at the Kazan University*, 1879, vol. 8, iss. 4, pp. 1–188 (in Russian).
- Buturlin S. A. *Polnyj opredelitel ptic SSSR* [Full determinant of birds of the USSR]. Moscow, Leningrad, KOIZ Publ., 1936, vol. 3. 256 p. (in Russian).
- Vilkov E. V., Yarovenko Yu. A. The Tengmalm's Owl. *Strepet*, 2017, vol. 15, no. 2, p. 129 (in Russian).
- Volchanetsky I. B. Materials for the study of zoogeography of Dagestan. *Science Reports of Higher School. Biological Science*, 1973, no. 7, pp. 30–36 (in Russian).
- Volchanetsky I. B., Puzanov I. I., Petrov V. S. Materials on the avifauna of the northwestern Caucasus. *Science Reports of Kharkov University*, 1962, vol. 130, pp. 8–72 (in Russian).
- Heptner V. G. Materials on the birds of Mountain Balkaria (Some considerations on the fauna of the mountain steppe of the Elbrus massif). *Science Report of the North Caucasian institute of Local History*, 1926, vol. 1, pp. 91–118 (in Russian).
- Gizatulin I. I., Khokhlov A. N., Ilyukh M. P. *Pticy Chechni i Ingushetii* [Birds of Chechnya and Ingushetia]. Stavropol, Izdatelstvo Stavropolskogo gosudarstvennogo universiteta, 2001. 142 p. (in Russian).
- Dement'ev G. P. Otryad sovy [Owls]. *Pticy Sovetskogo Soyuza* [Birds of Soviet Union]. Moscow, Sovetskaya nauka Publ., 1951, vol. 1, pp. 342–429 (in Russian).
- Dzhamirzoev G. S. On the question of the possibility of nesting of the Tengmalm's Owl in the Eastern Caucasus. *Ornithology*, 2004, vol. 31, pp. 217–220 (in Russian).
- Dzhamirzoev G. S., Bukreev S. A. Owls of the Eastern Caucasus. In: *Owls of Northern Eurasia*. Moscow, 2005, pp. 287–294 (in Russian).
- Efimtseva A. S., Yatsenko E. N. Raptors birds of Kabarda and Balkaria. *Reports of the North Caucasian Pedagogical Institute*, 1935, vol. 12, pp. 265–278 (in Russian).
- Zharkov V. I. Materials for the study of the role of birds of prey in the Caucasian Nature Reserve. *Proceedings of the Caucasian Nature Reserve*, 1938, vol. 1, pp. 87–102 (in Russian).
- Zaitseva E. F., Kharchenko V. I. Sovy Predkavkazya [Owls of the Ciscaucasia]. In: *Tezisy dokladov 1-j nauchnoj sessii Doneckogo nauchnogo centra. Sekciya biologii* [Theses of the reports of the 1st scientific session of the Donetsk scientific center. Section of Biology]. Donetsk, 1966, pp. 81–82 (in Russian).

- Ivanov V. G., Chunikhin S. P. Winter avifauna of Kabardino-Balkaria. *Science Reports of the Kabardino-Balkarian University*, 1959, vol. 5, pp. 183–197 (in Russian).
- Kadochnikov N. P. Observations in nesting and feeding of the Tengmalm's Owl (*Aegolius funereus* L.). *Zoologicheskii zhurnal*, 1962, vol. 41, no. 3, pp. 465–467 (in Russian).
- Karavaev A. A., Khubiev A. Kh. Mohnonogij sych [The Tengmalm's Owl]. In: *Krasnaya kniga Karachaevo-Cherkesskoj Respubliki* [The Red Data Book of the Karachay-Cherkess Republic]. Cherkessk, Nartizdat Publ., 2013, pp. 133 (in Russian).
- Komarov Yu. E. Annotated list of birds of the National Park «Alania». *Proceedings of the National park "Alania"*, 2013, vol. 2, pp. 102–117 (in Russian).
- Komarov Yu. E. Fauna hishnyh ptic i sov Severo-Osetinskogo zapovednika [Fauna of birds of prey and owls of the North Ossetian Nature Reserve]. In: *Pticy Severo-Zapadnogo Kavkaza* [Birds of the North-Western Caucasus]. Moscow, Glavnoe upravlenie ohotnichego hozyajstva i zapovednikov pri Sovete Ministrov RSFSR, 1985, pp. 139–151 (in Russian).
- Komarov Yu. E., Ivashchenko N. A., Maliev S. V. On the avifauna of the Mozdok region of North Ossetia-Alania. *Strepet*, 2011, vol. 9, no. 1–2, pp. 38–67 (in Russian).
- Komarov Yu. E., Lipkovich A. D. Klass Pticy [The Birds]. In: *Zhivotnyj mir Respubliki Severnaya Osetiya-Alaniya* [Animal world of the Republic of North Ossetia-Alania]. Vladikavkaz, 2000, pp. 62–198 (in Russian).
- Komarov Yu. E., Khokhlov A. N. *Zhivotnoe naselenie lesov Respubliki Severnaya Osetiya-Alaniya* [Animal population of the forests of the Republic of North Ossetia-Alania]. Stavropol, Izdatelstvo Stavropolskogo gosudarstvennogo universiteta, 2003. 67 p. (in Russian).
- Kostin Yu. V. *Pticy Kryma* [Birds of the Crimea]. Moscow, Nauka Publ., 1983. 240 p. (in Russian).
- Lorets V. F. List of birds of the vicinity of the Sarepta. *Proceedings of the Saratov Society of Naturalists*, 1928, vol. 3, iss. 1, pp. 73–95 (in Russian).
- Malchevsky A. S., Pukinsky Yu. B. *Pticy Leningradskoj oblasti i sopredelnyh territorij. Istoriya, biologiya, ohrana* [Birds of the Leningrad Region and adjacent territories. History, biology, protection]. Leningrad, Izdatel'stvo Leningradskogo universiteta, 1983, vol. 1. 480 p. (in Russian).
- Minoransky V. A. On the nesting of the Tengmalm's Owl in the Rostov region. *Ornithology*, 1976, vol. 12, pp. 238–239 (in Russian).
- Molamusov Kh. T. On some regularities in the zonal-belt distribution of birds and other representatives of the animal world in the Kabardino-Balkarian Republic. *Science Reports of the Kabardino-Balkarian Scientific-Research Institute*, 1959, vol. 14, pp. 267–314 (in Russian).
- Molamusov Kh. T. *Pticy Kabardino-Balkarii* [Birds of Kabardino-Balkaria]. Diss. Cand. Sci. (Biol.). Leningrad, 1961. 573 p. (in Russian).
- Molamusov Kh. T. Birds of the park of City of Nal'chik. In: *Nature of Kabardino-Balkaria and its Protection*. Nal'chik, Kabardino-Balkarskoe knizhnoe izdatelstvo, 1966, pp. 103–117 (in Russian).
- Numerov A. D. Pticy [Birds Aves]. In: *Prirodnye resursy Voronezhskoj oblasti: Pozvonochnye zhivotnye: Kadastr* [Natural Resources of the Voronezh Region: Vertebrates: Cadastral]. Voronezh, Biomik Publ., 1996, pp. 48–159 (in Russian).
- Ochapovsky V. S. *Materialy po faune ptic Krasnodarskogo kraya* [Materials on the fauna of birds of the Krasnodar Region]. Diss. Cand. Sci. (Biol.). Krasnodar, 1967. 445 p. (in Russian).
- Ochapovsky V. S. *Materials on the fauna of birds of the Krasnodar Region*. Rostov-on-Don, Southern Federal University Publ., 2017. 216 p. (in Russian).
- Parfenov E. A., Bayramukova A. A.-A. Fauna of rare species of the owls of the South of Stavropol Region and adjacent territories. In: *Problems of development of biology and ecology in the North Caucasus: Materials 51st scientific-methodological conference "University science – to the region"*. Stavropol, Izdatelstvo Stavropolskogo gosudarstvennogo universiteta, 2006, pp. 144–147 (in Russian).

МОХНОНОГИЙ СЫЧ (*AEGOLIUS FUNEREUS*) (STRIGIDAE, AVES)

Peklo A. M. Catalog of the Collections of the Zoological Museum NMNH, NAS of Ukraine. *Birds. Vol. 2: Non-Passeriformes (Charadriiformes – Piciformes)*. Kiev, Zoomuseum NMNH NAS of Ukraine, 1997. 235 p. (in Russian).

Perevozov A. G. Izmenenie soobshestv gnezdyashihsya ptic vdol vysotnogo gradienta na Zapadnom Kavkaze [Change of nesting bird communities along the altitudinal gradient in the Western Caucasus]. Diss. Cand. Sci. (Biol.). Maikop, 2010. 214 p. (in Russian).

Perevozov A. G. Avifauna of the Caucasian Nature Reserve and adjacent territories. *Proceedings of the Caucasian Biosphere Reserve*, 2014, vol. 21, pp. 109–171 (in Russian).

Polivanov V. M. On the structure of the summer population of the birds of the Teberda Nature Reserve. *Proceedings of the Teberda Nature Reserve*, 2000, vol. 18, pp. 130–181 (in Russian).

Polivanov V. M., Vitovich O. A., Tkachenko I. V. Birds of the Skalisty (Rocky) Range. *Proceedings of the Teberda Nature Reserve*, 2000, vol. 18, pp. 101–129 (in Russian).

Polivanov V. M., Polivanova N. N. The Tengmalm's Owl in the North Caucasus. *Proceedings of the Teberda Nature Reserve*, 1995, vol. 14, pp. 190–195 (in Russian).

Polivanov V. M., Polivanova N. N. Ecology of forest birds of the northern macro-slopes of the North-Western Caucasus. *Proceedings of the Teberda Nature Reserve*, 1986, vol. 10, pp. 23–27 (in Russian).

Ptushenko E. S. On avifauna of the Kuban region. *Ornithol. Bulletin*, 1915, vol. 6, no. 2, pp. 115–117 (in Russian).

Pukinsky Yu. B. Zhizn sov [The life of Owls]. Leningrad, Izdatel'stvo Leningradskogo universiteta, 1977. 240 p. (in Russian).

Pukinsky Yu. B. The Tengmalm's Owl. In: *Birds of Russia and adjacent regions: Strigiformes, Caprimulgiformes, Apodiformes, Coraciiformes, Upupiformes, Piciformes*. Moscow, KMK Scientific Press Ltd., 2005, pp. 6–16 (in Russian).

Ravkin E. S., Bursky O. V., Vartapetov L. G., Fomin B. N. Winter population of birds in some landscapes of the North-Eastern Caucasus. *Proceedings of the Teberda Nature Reserve*, 1990, vol. 11, pp. 188–194 (in Russian).

Radishchev A. M. Materials for the knowledge of the avifauna of Kabarda and Balkaria (Passeriformes and Coraciiformes). *Science Reports of the North Caucasian Institute of Local History*, 1926, vol. 1, pp. 119–145 (in Russian).

Stepanyan L. S. *A Synopsis of the Ornithological Fauna of Russia and Adjacent Territories (within the borders of the USSR as a historical region)*. Moscow, Akademykniga, 2003. 808 p. (in Russian).

Strokov V. V. Birds of land landscapes of Sochi – Matsesta resort area. *Nature Protection and Gardening*, 1960, vol. 4, pp. 121–133 (in Russian).

Sushkin P. P. Notes on the Caucasian birds. *Ornithol. Bulletin*, 1914, vol. 5, no. 1, pp. 3–44 (in Russian).

Tilba P. A. Avifauna of the Sochi National Park. In: *Inventory of the main taxonomic groups and communities, sociological studies of the Sochi National park – the first results of the first in Russia National park*. Moscow, Prestige Publ., 2006, pp. 226–270 (in Russian).

Tilba P. A., Kazakov B. A. The structure of the summer bird population of the central part of the Western Caucasus. In: *Birds of the North-Western Caucasus*. Moscow, CNIL Glavohoty RSFSR, 1985, pp. 34–53 (in Russian).

Tilba P. A., Mnatsekanov R. A. Owls of the Krasnodar Region and the Republic of Adygea. In: *Owls of Northern Eurasia*. Moscow, 2005, pp. 269–276 (in Russian).

Tilba P. A., Mnatsekanov R. A., Perevozov A. G. The Tengmalm's Owl. *Red Data Book of Republic of Adygea: Rare and threatened representatives of the regional fauna and flora*. Part 2: Animals. 2nd ed. Maykop, Kachestvo Publ., 2012, pp. 407 (in Russian).

Tkachenko V. I. Birds of the Teberda Nature Reserve. *Proceedings of the Teberda Nature Reserve*, 1966, vol. 6, pp. 147–230 (in Russian).

Turov S. S. On the Eastern division of the Caucasian State Nature Reserve. Report on the work of the zoological expedition of 1930. *Proceedings of the Caucasian Nature Reserve*, 1932, vol. 3, pp. 1–40 (in Russian).

Chunikhin S. P. Vertical zonality in the distribution of birds of Kabardino-Balkaria. *Ornithology*, 1962, vol. 5, pp. 186–192 (in Russian).

Lorenz Th. Beitrag zur Kenntniss der ornithologischen Fauna an der Nordseite des Kaukasus. Moskau, 1887. XII+62 S.

Lorenz Th. Beitrag zur Kenntniss der ornithologischen Fauna an der Nordseite des Kaukasus: Non-Passeriformes. *Strepet*, 2010, vol. 8, no. 1, pp. 5–27.

Ménétries E. Catalogue raisonné des objects de zoologie recueillis dans un voyage an Caucase et jusqu'aux frontières actuelles de la Perse. SPb., 1832. 271 p.