



University of Groningen

Is The Netherlands a spring stopover site for Black-tailed Godwits breeding in European Russia?

Gerritsen, Gerrit J; Fokkens, Johannes R; Shchanitsyn, Dmitry Yu.; Sviridova, Tatiana V; Hooijmeijer, Jos C.E.W.

Published in: Wader Study

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Publication date: 2022

Link to publication in University of Groningen/UMCG research database

Citation for published version (APA):

Gerritsen, G. J., Fokkens, J. R., Shchanitsyn, D. Y., Sviridova, T. V., & Hooijmeijer, J. C. E. W. (2022). Is The Netherlands a spring stopover site for Black-tailed Godwits breeding in European Russia? *Wader Study*, *129*(3).

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): http://www.rug.nl/research/portal. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Is The Netherlands a spring stopover site for Black-tailed Godwits breeding in European Russia?

Gerrit J. Gerritsen¹, Johannes R. Fokkens², Dmitry Yu. Shchanitsyn³, Tatiana V. Sviridova⁴ & Jos C.E.W. Hooijmeijer⁵

- Dutch Wader Study Group, Veerallee 33, 8019 AD Zwolle, The Netherlands. gerritjgerritsen@gmail.com
- ² Bond van Friese Vogelwachten, Wilsterwerkgroep, Labadistendyk 2, 8637 VJ Wiuwert, The Netherlands
- ³ Ivanovo branch of Russian Bird Conservation Union, Ivanovo State University, Ermaka Str. 139, Ivanovo, 153025, Russia
- ⁴ A.N. Severtsov Institute of Ecology and Evolution of the Russian Academy of Sciences, Leninsky Prospekt 33, Moscow, 119071, Russia
- ⁵ Conservation Ecology Group, University of Groningen, P.O. Box 11103, 9700 CC Groningen, The Netherlands

Keywords: Limosa limosa, migration routes, colour-ring resighting

The Netherlands is an important spring stopover site for Black-tailed Godwits *Limosa limosa* (hereafter Godwits) that breed in Iceland (subspecies *L. l. islandica*; Gerritsen & Tijsen 2003). In the last decade The Netherlands has also proved to be an important spring stopover site for Godwits that breed in the Oulu region in Finland (65°1'18"N, 25°28'12"E). 18% of geolocator-tracked birds from the Oulu region stop in The Netherlands between 23 February and 25 April, with a maximum stay of 33 days (S. Timonen pers. comm.). In May 2021, a Godwit that was colourringed 5.5 weeks earlier in The Netherlands was photographed 2,300 km to the east in European Russia.

In The Netherlands, most colour-ringed Godwits are ringed as nesting adults or as non-fledged juveniles. Since 2000, one hundred Godwits have been ringed before and after the breeding season using clapnets (wilsternets) on foraging sites. On 23 March 2021, the second author caught a Godwit with a wilsternet in Friesland near Irnsum (53°74'40"N, 5°77'30"E) and ringed it with the colour-ring combination YRLf/LB (Fig. 1a). We were very surprised that this bird was photographed on 2 May 2021 near Palech in the Ivanovo Region of Russia (56°85'50"N, 41°90'00"E; Fig. 1b). The bird was seen in a cereal field and was paired, but further information on a possible breeding attempt is lacking. In 2022, YRLf/LB was seen in Portugal near Porto Alto on 6 February (38°91'70"N, 8°93'30"W) and from 3 to 8 March in The Netherlands. Therefore YRLf/LB stopped at least two years in a row in The Netherlands during spring migration. There are no observations of YRLf/LB in the Ivanovo Region or other areas of Russia in 2022; however, we suppose that in both 2021 and 2022 this individual bred in Russia.

In the second half of the 20th century, the breeding range of Godwits in European Russia expanded 450–500 km to the north; they started to breed up to the north of the boreal zone (Lebedeva 1998, Sotnikov 2002, Popov & Starikov 2015, Spiridonov 2020). Data on the breeding population in European Russia remain approximate. The most recent estimation varies widely from 12,000 to 117,000 breeding pairs (Spiridonov 2020), but the estimation of 25,000–45,000 pairs for 2010–2018 by





Fig. 1. (a) Godwit YRLf/LB during ringing in The Netherlands on 23 March 2021 (photo: Johannes R. Fokkens). **(b)** Godwit YRLf/LB seen in Russia on 2 May 2021 (photo: Dmitry Yu. Shchanitsyn).

Mischenko (2020) seems more realistic. The Ivanovo Region of Russia (21,800 km²), where YRLf/LB was observed, is thought to harbour no less than 120 breeding pairs, but probably up to 400–500 pairs, whereas in the mid-2000s this was 500–700 pairs (Sviridova 2019).

In the central parts of European Russia, Godwits arrive from early April to early May, with most pronounced movements in the end of April (Sotnikov 2002, Sapetina et al. 2005, Golubev 2011). Departure of local birds after breeding occurs gradually and less noticeably at the end of June and in July. After mid-August, Godwits are rather rare in most areas of European Russia (Sotnikov 2002, Sapetina et al. 2005, Noskov et al. 2016), with the exception of the southernmost territories, where total numbers fluctuate from several hundreds to several thousands of individuals in July and August in the east of the Azov-Black Sea region and in the west of the Kuma-Manych depression in Ciscaucasia (Bukreev & Dzhamirzoev 2009, Chernichko 2015, 2019).

There are almost no ring returns or direct observations to help understand the migration routes of Godwits breeding in European Russia (Spina *et al.* 2022, Russian Bird Ringing Centre unpubl. data). So we can only hypothesize about the migration route of YRLf/LB,

primarily based on the known migration routes of Finnish, Estonian and Polish Godwits (Loonstra et al. 2019, Senner et al. 2019, S. Timonen pers. comm., M. Silva-Monteiro pers. comm.). It is supposed that the Godwits from European Russia stop during autumn migration on the northern and western coasts of the Black Sea, after which they fly over the Mediterranean countries and the Sahara to their wintering areas in Africa (Kube et al. 1998, Delany et al. 2009). During winter, Godwits move west through the Sahelian wetlands and ricefields, following the rainfall (Zwarts et al. 2009). During this westward movement the birds join Godwits originating from western Europe (mainly The Netherlands and Germany), which predominantly winter in the western Sahelian wetlands (Hooijmeijer et al. 2013, Verhoeven et al. 2021). So, in the springs of 2021 and 2022, YRLf/LB was probably part of the majority of the continental Godwits that migrate along the western coasts of Africa and Europe to arrive in The Netherlands mainly in March. If we are right in our suggestion about the possible loop-migration of YRLf/LB, this bird flies at least 16,000 km each year during migration (Fig. 2). If it first arrives in Africa in the Sudd basin in South Sudan instead of the more westerly Lake Chad basin, its yearly migration could approach 18,000 km. Hopefully future GPS-tagged birds will reveal the routes of 'Russian' Godwits.

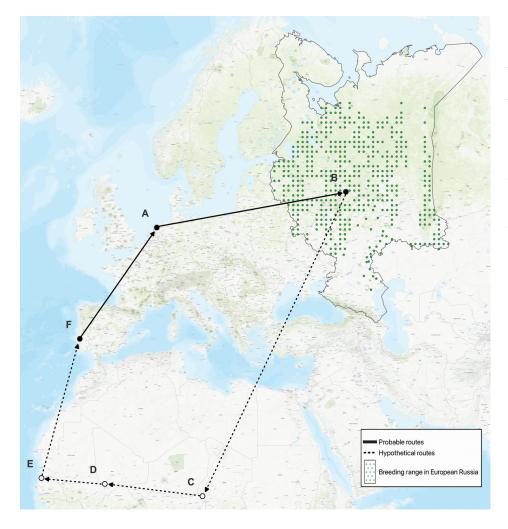


Fig. 2. Probable loop migration by YRLf/LB. Dashed lines represent hypothetical parts of the loop. A: Place of ringing during spring migration through The Netherlands (Friesland) and resighting in spring 2022; B: Probable breeding location in Russia (Ivanov Region); C: Possible wintering site along Lake Chad; D: Possible wintering site in Inner Niger-Delta; E: Possible wintering site in Senegal Delta; F: Certain spring site in ricefields around Lisboa. Breeding distribution based on Keller et al. 2020.

We thank Kees de Jager and Bob van Duin for their observations of YRLf/LB in Portugal and The Netherlands. We thank Sami Timonen for information about the migration routes of the Finnish Godwits in spring. We are thankful to Vladimir N. Melnikov for clarifying some data on the Ivanovo Region, and Konstantin E. Litvin for providing data from the Bird Ringing Center of the Russian Academy of Sciences. Thanks to Taylor Craft of the University of Groningen for creating Fig. 2.

- Bukreev, S.A. & G.S. Dzhamirzoev. (Eds.) 2009. Key ornithological sites of Russia, Vol. 3: Important Bird Areas in Ciscaucasia. Russian Bird Conservation Union, Moscow, Russia. [In Russian]
- **Chernichko, I.I.** 2015. Importance of the Azov-Black Sea Coast of Ukraine in supporting the structure of Transcontinental flyways in Eastern Europe, Part. 1. *Vestnik zoologii* Supplement 33. [In Russian with English summary and captions]
- **Chernichko, J.I.** 2019. Results of the regional ornithological monitoring. *Bulletin ROM* 13: 1–72.
- **Delany, S., D. Scott, T. Dodman & D. Stroud.** 2009. *An atlas of wader populations in Africa and Western Eurasia.* Wetlands International, Wageningen, The Netherlands.
- Gerritsen, G.J. & W. Tijsen. 2003. De betekenis van Nederland als pleisterplaats voor IJslandse Grutto's *Limosa limosa islandica* tijdens de voorjaarstrek in 2001 en 2002. *Limosa* 76: 103–108. [In Dutch with English summary]
- **Golubev, S.V.** 2011. Birds of the Yaroslavl Volga region and adjacent areas: history, current state. Vol.1: Non-Passeriformes. Kantsler, Yaroslavl, Russia. [In Russian]
- Hooijmeijer, J.C.E.W, N.R. Senner, T.L. Tibbitts, R.E. Gill, Jr., D.C. Douglas, L. Bruinzeel, E. Wymenga & T. Piersma. 2013. Post-breeding migration of Dutch-breeding Black-tailed Godwits: timing, routes, use of stopovers, and nonbreeding destinations. *Ardea* 101: 141–152.
- Keller, V., S. Herrando, P. Voríšek, M. Franch, M. Kipson, P. Milanesi, D. Marti, M. Anton, A. Klvanová, M.V. Kalyakin, H.G. Bauer & R.P.B. Foppen. 2020. European Breeding Bird Atlas 2: Distribution, Abundance and Change. European Bird Census Council & Lynx Edicions, Barcelona, Spain.
- Kube, J., A.I. Korzyukov, D.N. Nankinov, O.A.G. Münster & P. Weber. 1998. The northern and western Black Sea region the Wadden Sea of the Mediterranean Flyway for wader populations. *International Wader Studies* 10: 379–393.
- **Lebedeva, E.A.** 1998. Waders in agricultural habitats of European Russia. *International Wader Studies* 10: 315–324.
- Loonstra, A.H.J., M.A. Verhoeven, A. Zbyryt, E. Schaaf, C. Both & T. Piersma. 2019. Individual Black-tailed Godwits

- do not stick to single routes: a hypothesis on how low population densities might decrease social conformity. *Ardea* 107: 251–261.
- **Mischenko, A.** 2020. Meadow-breeding waders in European Russia: main habitat types, numbers, population trends and key affecting factors. *Wader Study* 127: 43–52.
- Noskov, G.A., T.A. Rymkevich & A.R. Gaginskaya. (Eds.) 2016. *Migration of birds of Northwest Russia. Non-Passerines*. ANO LA "Professional", Saint-Petersburg, Russia. [In Russian with English captions]
- **Popov, I. & D. Starikov.** 2015. Recent northward expansion of breeding Black-tailed Godwits *Limosa limosa* in NW Russia. *Wader Study* 12: 173–183.
- Sapetina, I.M., Ya.V. Sapetin, V.P. Ivanchev, T.A. Kashentseva, V.V. Lavrovskiy & S.G. Priklonskiy. 2005. Birds of the Oksky Reserve and adjacent territories (biology, abundance, protection), Vol. 1: Non-passerine birds. ZAO "InterOst Dialog", Moscow, Russia. [In Russian]
- Senner, N.R., M.A. Verhoeven, J.M. Abad-Gómez, J.A. Alves, J.C.E.W. Hooijmeijer, R.A. Howison, R. Kentie, A.H.J. Loonstra, J.A. Masero, A. Rocha, M. Stager & T. Piersma. 2019. High migratory survival and highly variable migratory behavior in black-tailed godwits. Frontiers in Ecology & Evolution 7: 96.
- **Sotnikov, V.N.** 2002. Birds of the Kirovsk Region and adjacent territories. Vol. 1. Part. 2. Non-Passerines. OOO "Triada-S", Kirov, Russia. [In Russian]
- Spina, F., S.R. Baillie, F. Bairlein, W. Fiedler & K. Thorup. (Eds.) 2022. The Eurasian-African Bird Migration Atlas. EURING/CMS. Accessed 15 Nov 2022 at: https://migrationatlas.org/node/1749
- Spiridonov, S.N. 2020. Bolshoi veretennik. *Limosa limosa*. Black-tailed Godwit. In: *Atlas of breeding birds of the European part of Russia* (M.V. Kalyakin & O.V. Voltzit, Eds.). Fiton XXI, Moscow, Russia. [In Russian]
- **Sviridova, T.V.** 2019. Distribution and number of rare breeding waders in the Non-Chernozem Center of Russia at the beginning of the 21st century. In: *Rare bird species in the Non-Chernozem Center of Russia*. Proceedings of the 6th Conference "Distribution and ecology of rare bird species in the Non-Chernozem Center of Russia." (Moscow, Russia, 16–17 Nov 2019). [In Russian]
- Verhoeven, M.A., A.H.J. Loonstra, A.D. McBride, C. Both, N.R. Senner & T. Piersma. 2021. Migration route, stopping sites, and non-breeding destinations of adult Black-tailed Godwits breeding in southwest Fryslân, The Netherlands. *Journal of Ornithology* 162: 61–76.
- **Zwarts L., R.G. Bijlsma, J. van der Kamp & E. Wymenga.** 2009. *Living on the Edge: Wetlands and birds in a changing Sahel.* KNNV Publishing, Zeist, The Netherlands.