



ID der Kurzfassung : 456

Leptospira spp. prevalence in bank voles (*Myodes glareolus*) from north-western Germany in 2023/2024

Inhalt

Leptospirosis is among the most widespread zoonoses worldwide. Transmission is often via direct or indirect contact with infected rodents which serve as a reservoir. As *Leptospira* spp. can cause severe infections in humans, it is important to understand the transmission dynamics and identify risk factors for zoonotic infections.

A previous study conducted during 2018 - 2020 in northwestern Germany demonstrated that season, population density, and individual host characteristics significantly influenced *Leptospira* prevalence in bank voles. The current study aims to compare the prevalence of *Leptospira* spp. and their genomospecies and sequence types in bank voles from the same trapping sites in 2023 and 2024 with previously published data.

In total, 560 bank voles (*Myodes glareolus*) were caught in 2023 and 2024 at seven trapping sites at forest plots near Osnabrück. So far six of 161 kidney samples were positive for the *lipL32* gene of pathogenic *Leptospira* spp.. Multilocus sequence typing (*glmU*, *pntA*, *sucA*, *tpiA*, *pfkB*, *mreA* and *caiB* gene) resulted in the identification of sequence types 24 (*L. interrogans*), 110 (*L. kirschneri*) and 197 (*L. borgpetersenii*). The results of this first subset indicates that in addition to a similar prevalence (3.7% (95% CI: 1.4–7.9)), the occurrence of sequence types remains stable over longer time periods.

These findings underscore the importance of long-term monitoring and further research based on the One Health approach.

Keywords

Leptospirosis; *Leptospira* spp.; Prevalence; Bank vole

Registration ID

145

Professional Status of the Speaker

PhD Student

Junior Scientist Status

Yes, I am a Junior Scientist.

Autor: STRIESE, Elisabeth (Friedrich-Loeffler-Institut)

Co-Autoren: Dr. TEWS, Birke A. (Friedrich-Loeffler-Institut); ANTON, Alina J. (Friedrich-Loeffler-Institut); Prof. KNAUF, Sascha (Friedrich-Loeffler-Institut); SAATHOFF, Marion (Lower Saxony State Office for Consumer Protection and Food Safety); Dr. FISCHER, Lutz (Lower Saxony State Office for Consumer Protection and Food Safety); Prof. ULRICH, Rainer G. (Friedrich-Loeffler-Institut); Prof. PFEFFER, Martin (University of Leipzig); Dr. OBIEGALA, Anna (Friedrich-Loeffler-Institut)

Vortragende(r): STRIESE, Elisabeth (Friedrich-Loeffler-Institut)

Track Klassifizierung: Conservation, Biodiversity & Wildlife Health

Typ des Beitrags: Poster presentation

Eingereicht von **STRIESE, Elisabeth** <elisabeth.striese@fli.de> am **Montag, 22. Juni 2026**