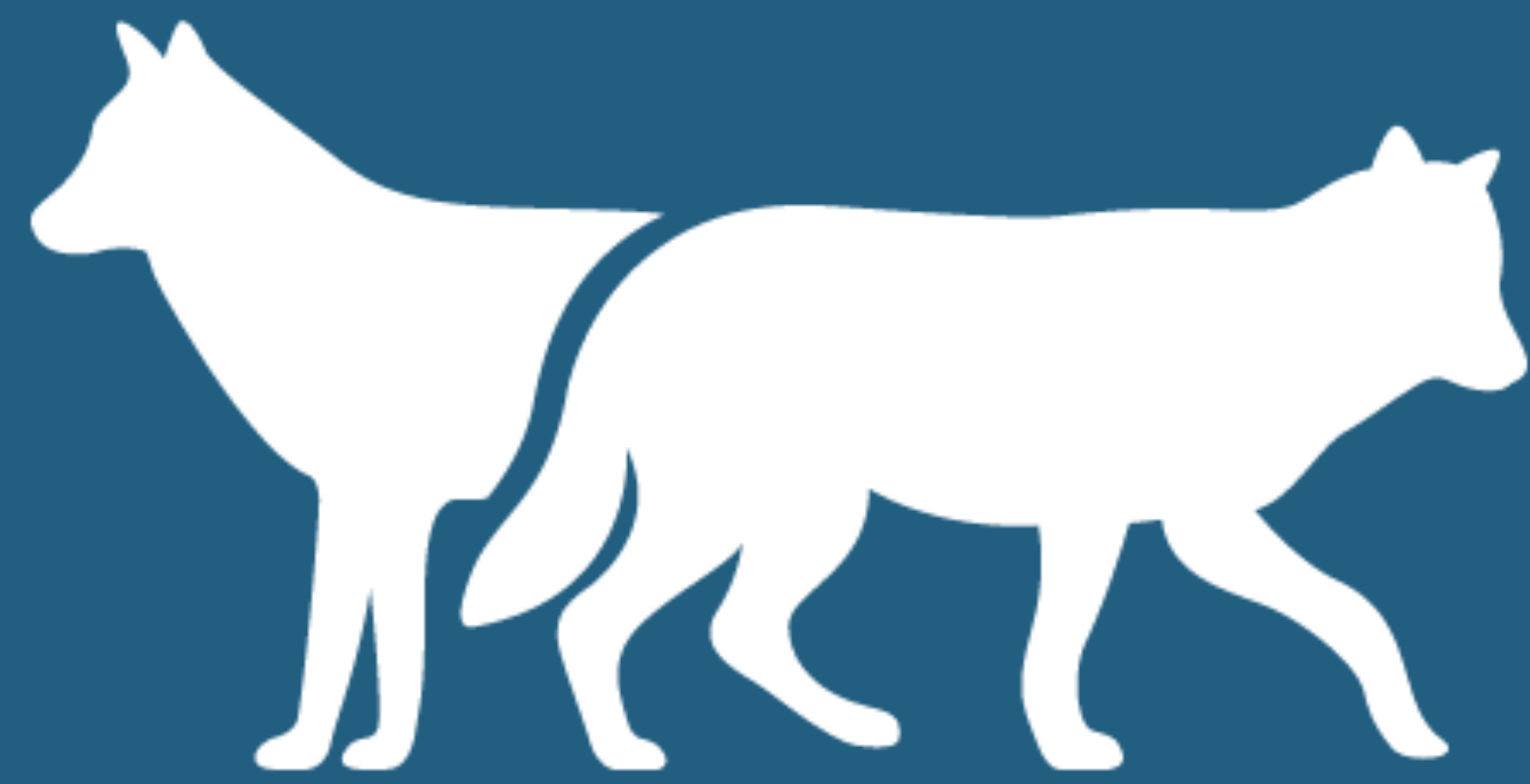


# Wolves Across Borders

International Conference on Wolf Ecology & Management



**WOLVES ACROSS BORDERS**



Hotel De Werelt

June 2nd - 6th 2025 | Lunteren, The Netherlands

[www.wolvesacrossborders.com](http://www.wolvesacrossborders.com)

# Parallel Presentations

Theme: Lessons Learned from Monitoring

Wednesday 11:10 - 11:30

## Towards transboundary genetic monitoring of wolves: an online platform for harmonization and sharing of wolf genetic monitoring data across countries and laboratories.

Tomaž Skrbinšek

Co-authors: Luca Fumagalli, Heidi Christine Hauffe, Martin Janovsky, Elmira Mohandesan, Carsten Nowak, Tomaž Žagar, Gregor Simčič

While genetic monitoring is increasingly gaining importance in national wolf monitoring programs, its potential for transboundary population-level monitoring remains largely underutilized. There are two main obstacles that hinder such use: problems with compatibility and repeatability of genotype data produced by different laboratories, and lack of an online data-sharing platform suitable for sharing of such data for the purposes of transboundary wolf monitoring. The problem of data compatibility is being solved through adoption of new genetic markers, but participating laboratories need to use the same marker panels. A joint data sharing platform still remains elusive.

Through the ARGE ALP initiative we've developed such a platform for sharing wolf genetic monitoring data across the Alps, hand-in-hand with standardization of genotyping methods that we are coordinating across genetic laboratories involved in wolf monitoring in the area. All involved laboratories are transitioning to genotyping-by-sequencing of microsatellites using a standardized panel of markers to make the data immediately compatible. The data sharing platform was developed as a plugin for the online wildlife monitoring database MBase (<https://portal.mbase.org>), which has been developed through various LIFE projects. The platform is fully based on free open source software. All genotype data is stored at the level of DNA sequence, ensuring data compatibility between participating laboratories. The platform has tools for entry and import of sample field data, tracking of samples as they are analyzed, geographic visualizations on base maps, and export of genotype data. It allows transboundary tracking of animals detected in genetic samples and can be used to provide direct feedback to different stakeholders. It also tracks data ownership, permissions, and data usage licenses, allowing the producers of the data to retain control of how their data is being used. This facilitates faster adoption of the platform and ensures that the data is used fairly.

Extreme mobility and long-range dispersals of wolves require large-scale collaboration in their monitoring to understand how their populations are developing at the level of the European continent. Harmonized methodology and efficient, seamless data sharing are the key prerequisites for any such endeavor. This is what our platform aims to provide.