BirdWatch - *A service to measure and improve biodiversity using satellite data for monitoring, evaluation and optimization of CAP greening initiatives*

Policy Brief: Recommendations For Lithuania

January, 2026

Executive Summary

Recent data from the Lithuanian Ornithological Society (LOD) confirms a severe, long-term decline in farmland bird populations. Between 2000 and 2024, the national Agrarian Landscape Bird Index (AKPPI) fell by 51%, signalling that biodiversity in agricultural landscapes continues to deteriorate. Several species have experienced dramatic collapses, including corncrake, meadow pipit, goldfinch, and lapwing. These trends are primarily driven by agricultural intensification, grassland loss, drainage, pesticide use, and climate-related pressures.

The Horizon Europe project *Birdwatch* provides Lithuania with new scientific tools—habitat suitability modelling, population trend analysis, and scenario simulations—that can directly support the refinement of national biodiversity, agricultural, Natura 2000, climate, water, and rural development policies. Integrating *Birdwatch* results enhances the ability of Lithuanian institutions to target conservation actions more effectively and align policy instruments with EU environmental strategies.

Introduction

Lithuania is experiencing rapid declines in farmland bird populations, reflected in consistent negative AKPPI trends monitored across 97 routes nationwide. The *Birdwatch* project strengthens national and EU-level monitoring by generating high-resolution suitability maps for priority species, analysing ecological pressures, and modelling the effects of different land management scenarios. These outputs can guide evidence-based policy adjustments, improve conservation targeting, and support compliance with the EU Biodiversity Strategy for 2030, Birds and Habitats Directives, the CAP Strategic Plan Regulation, the Water Framework Directive, and European Green Deal objectives.

Impact on Key Lithuanian Policies and Alignment with EU Frameworks

Biodiversity Policy and the EU Biodiversity Strategy for 2030

Farmland bird biodiversity is declining sharply, with a 51% loss since 2000. *Birdwatch* supports Lithuania's biodiversity strategy by identifying spatial hotspots of habitat degradation and quantifying suitability trends for key species. These outputs help prioritise restoration areas and identify where conservation measures will have the highest impact.

Birdwatch aligns with EU Biodiversity Strategy goals by supporting ecosystem restoration, improving monitoring capacity, and strengthening evidence for reversing farmland bird declines.

Nature Protection: Birds and Habitats Directives and Natura 2000

Several species protected under the Birds Directive Annex I, such as corncrake and lapwing, show strong negative trends. *Birdwatch* data identifies functional habitats outside existing Natura 2000 boundaries and assesses the effectiveness of current management measures. This supports more accurate Natura 2000 planning, updates site management prescriptions, and improves monitoring of conservation status.

Birdwatch strengthens Lithuania's compliance with Birds Directive Article 12

reporting and Habitats Directive Article 17 obligations.

Climate Change Policy and the European Green Deal

Climate-related pressures, such as droughts, wetland loss, and phenological shifts, increasingly affect bird habitats. *Birdwatch* maps climate refugia, evaluates the sensitivity of species to hydrological changes, and identifies areas where rewetting or natural water retention measures would be most effective.

These results support the integration of biodiversity considerations into Lithuania's national climate adaptation strategy and contribute to Green Deal objectives on nature-based solutions and climate resilience.

Rural and Agricultural Policy: CAP Strategic Plan (Eco-schemes, AECM, GAEC)

Agricultural intensification is the leading driver of farmland bird decline. *Birdwatch* quantifies the impacts of mowing dates, grazing intensity, fertilisation levels, drainage, landscape simplification, and crop choice on habitat suitability. These insights allow Lithuania to target CAP eco-schemes and agri- environment-climate measures more effectively, including the possibility of introducing result-based elements.

Birdwatch supports CAP Green Architecture implementation and strengthens reporting on CAP Impact Indicator I.20 (Farmland Bird Index).

Environmental Education and Public Participation

Farmland bird declines occur across all monitored regions, which underscores the need for broader public engagement. *Birdwatch* delivers interactive maps and species dashboards that can be used in educational programmes, citizen-science platforms, and NGO-led monitoring efforts. These tools help raise awareness of ecological pressures and promote behavioural change in rural communities.

Birdwatch aligns with EU priorities on environmental literacy and public participation.

Sustainable Tourism and Ecotourism Development

Declining populations of characteristic farmland bird species reduce nature tourism potential. *Birdwatch* identifies areas of high ecological value suitable for birdwatching

routes and ecotourism development. It also supports visitor planning to avoid disturbance to sensitive species during breeding periods.

These insights contribute to EU sustainable tourism frameworks and green regional development strategies.

Cross-Border and Regional Cooperation

Many farmland bird species are migratory or depend on habitat networks across the Baltic region. Birdwatch harmonises monitoring methods with neighbouring countries and identifies cross-border ecological corridors. This supports joint management initiatives with Latvia, Poland, and Estonia, contributing to broader EU regional biodiversity goals.

Moving Forward - Priorities For Action

Immediate Priorities

- Protect remaining semi-natural and wet grasslands identified as high suitability areas.
- Shift mowing dates in priority territories to reduce nest destruction.
- Reduce pesticide use in areas identified by Birdwatch as ecological hotspots.
- Restore small wetlands and wet meadows to increase habitat resilience.

Medium-Term Priorities

- Develop result-based CAP schemes using *Birdwatch* indicators.
- Create landscape-level ecological networks informed by suitability modelling.
- Integrate *Birdwatch* outputs into municipal spatial planning.

Long-Term Priorities

- Establish a unified national platform combining AKPPI trends, *Birdwatch* suitability layers, and CAP monitoring data.
- Transition agricultural landscapes toward more diverse, low-intensity systems that benefit biodiversity and climate resilience.

Conclusion

Lithuania is experiencing critical biodiversity loss in agricultural areas, as demonstrated by a 51% decline in farmland bird populations since 2000. The Birdwatch project provides the analytical tools and spatial modelling capacity needed to reverse these trends. Integrating Birdwatch results into national biodiversity, Natura 2000, CAP, climate, and education policies will allow Lithuania to shift from documenting decline to implementing targeted, effective conservation actions aligned with EU environmental priorities.

Project information

BirdWatch - a Copernicus-based service for the improvement of habitat suitability of farmland birds via satellite-enabled monitoring, evaluation and optimisation of CAP greening measures

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