

Animal Welfare & Cultural Heritage in Alpine Transhumant Dairy Systems of Valtellina, Italy

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3-MINUTE FLASH TALK – poster section 1 – poster 17

THE AIM OF THIS WORK

During the 2022 summer season, as part of an international research project led by the Faculty of Agricultural and Forest Sciences (UNLP, Argentina)

To evaluate animal welfare in Valtellina's alpine dairy systems using an adapted Welfare Quality[®] approach and farmers' cultural perspectives.



(this study is still running)

LANDSCAPE IN TRANSITION

A Century-Old Tradition Multifunctional Role

68

HISTORICAL
PASTURES



27

CURRENTLY
ACTIVE



A millenary pastoral system facing a critical crossroads of **resilience** and **vulnerability**.

(Agnelli, U. 2022, 2024).

Preserving heritage through the lens of animal welfare.

A TRIANGULATED APPROACH



ANIMAL WELFARE

Animal-based indicators: behavior, clinical signs, and handling ease.



FARMERS PERCEPTION

Surveys exploring tradition, innovation, and future challenges.



SOCIO-ECOLOGICAL

Nutritional management, water access, and ecological role.



Trust & Care

- ✓ High trust levels toward familiar handlers.
- ✓ Individualized human-animal relationships.
- ✓ Adaptive management tuned to harsh mountain conditions.

"Alpine environments support favorable welfare outcomes when management is coordinated."





Barriers to Continuity



Labor Availability

Critical Concern



Generational Turnover

High Risk



Economic Viability

Moderate

CHALLENGING FARMERS FOR THE NEXT DECADE

Abandonment risks accelerate without policies recognizing **multifunctional value**.

| Key Stewardship Pillars



Family-based organization

Knowledge transmission and rapid decision-making anchored in household structures.



Ecological adaptation

Pasture use, water access, and resource management optimized for mountain ecosystems.



System vulnerability

Socio-economic pressures jeopardize the sustainability of transhumant landscapes and their cultural value.

FINDINGS

"Integrating traditional ecological knowledge with welfare-oriented monitoring reinforces the sustainability of alpine pastoral heritage."



Animal
Health



Culture



Landscape

Thank you for your attention!

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