



Field-based grazing evidence proxies livestock stocking rate in alpine pastures

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Aims and Materials and methods

San Besso e Balma pasture Gran Paradiso National Park, NW Italy

83 ha · 1800–2400 m a.s.l. · 100 Pustertaler-Barà cattle (87 LU)

GPS reference Field evidence Validation

10 GPS collars

number of
fixes = true
site-use
intensity

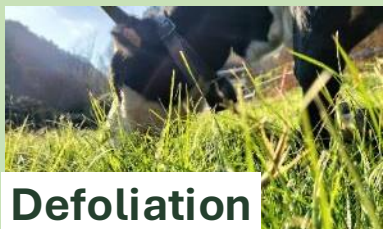
715 points

Field-based
scores

5-m buffers

Indicator
scores related
to GPS fixes
around each
point

1 = absent · 5 = extreme



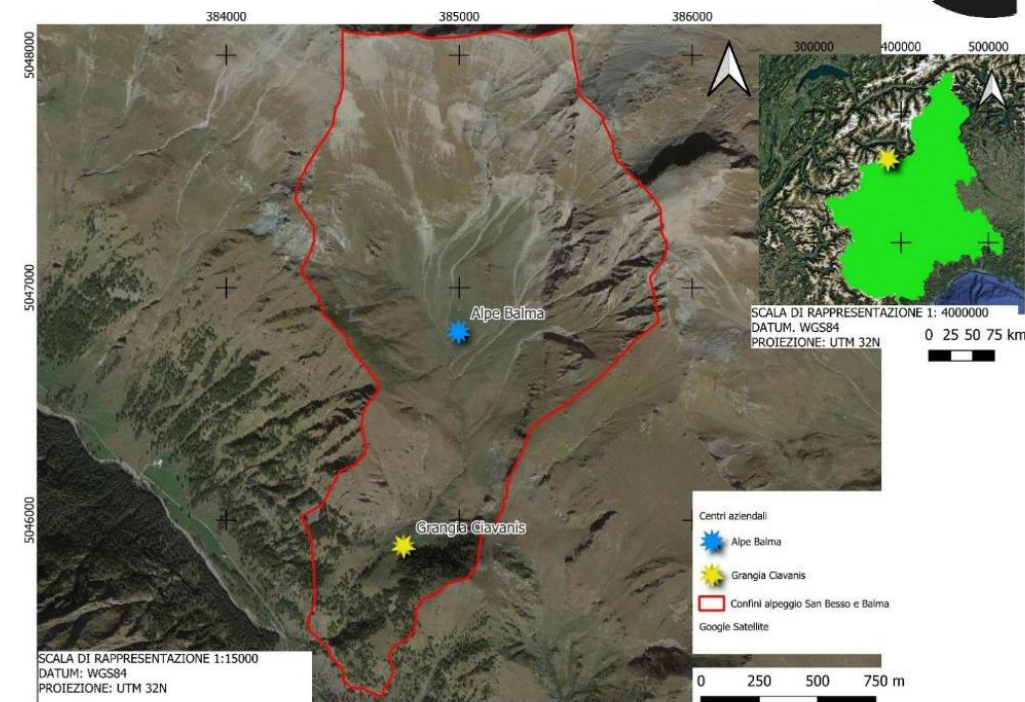
Defoliation



Dung deposition



Trampling



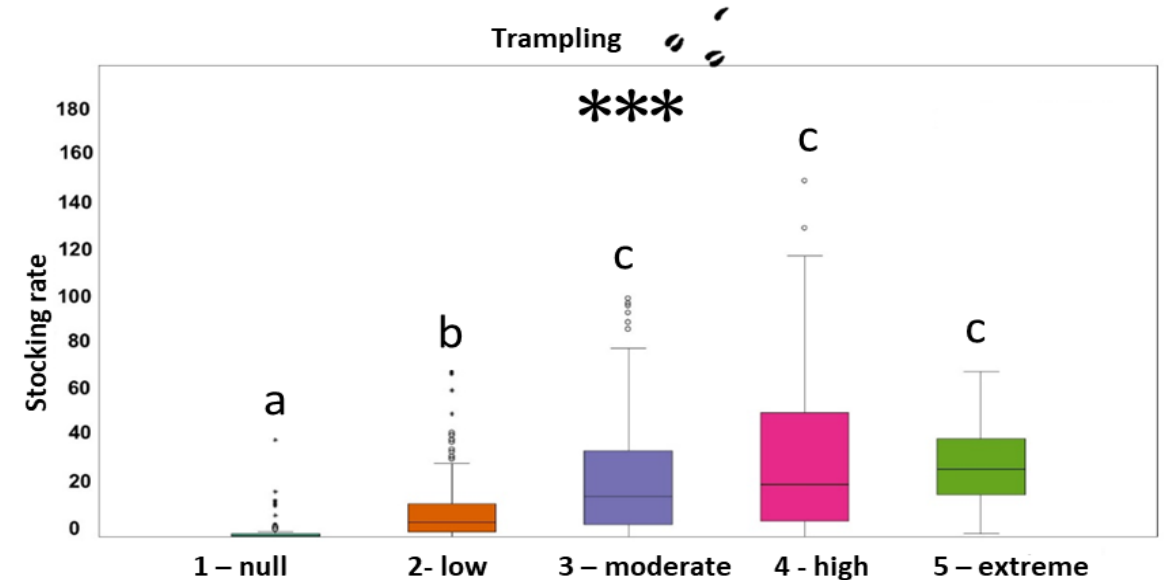
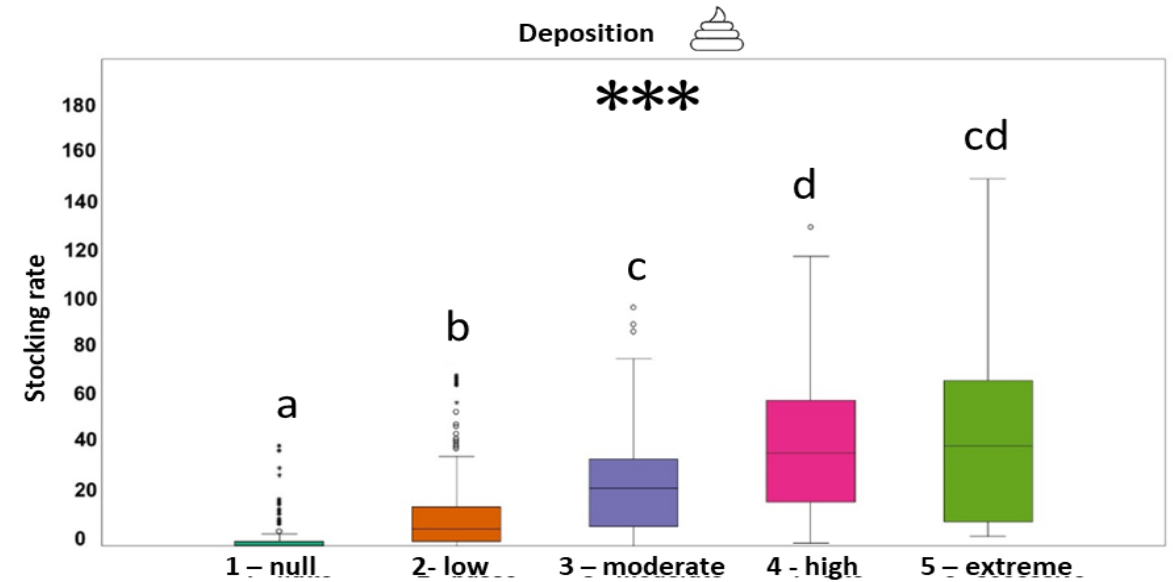
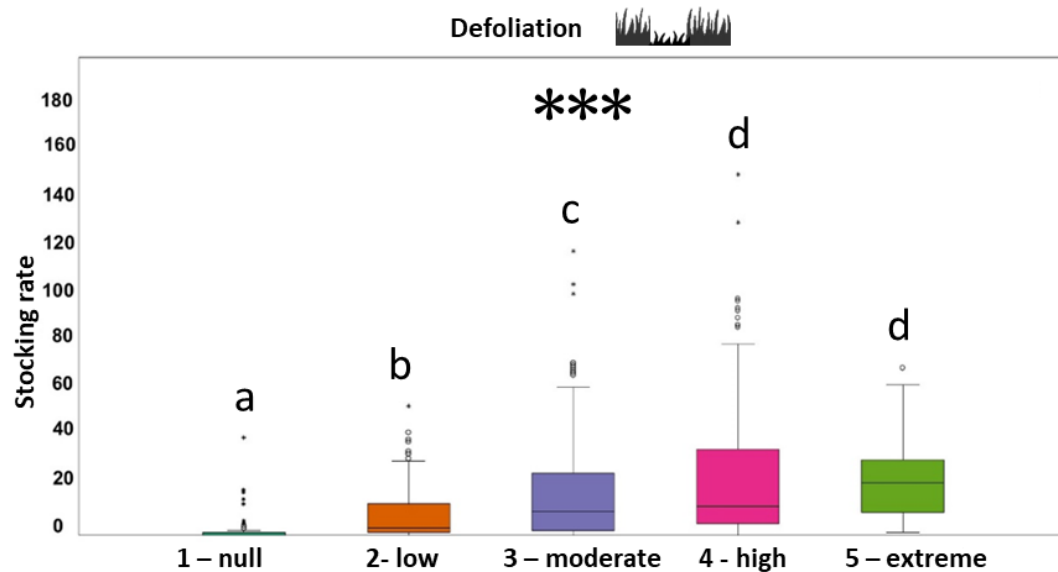
Test whether defoliation, dung deposition and trampling can proxy livestock site-use intensity in extensive alpine pasture management.

Results

All indicators reflected GPS-derived site use, but **defoliation** and **dung deposition** were the most reliable.

Take-home

A simple end-of-season field survey can map livestock site-use intensity when GPS monitoring is not feasible.





Thank you for your attention