Forage Research for the Small Ruminant Sectors

Christine O’Reilly
Forage and Grazing Specialist, OMAFRA

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Why Does Forage Research Matter?
Why Does Forage Research Matter?

• Lowering cost of production
• GI parasite management
• Improving animal nutrition
• Reducing environmental impact
Meat Sheep Expenses

OSF Sheep Benchmarking Study 2009-11
5 STAR WORM PLAN

1. Manage the level of pasture contamination

2. Use anthelmintics appropriately

3. Monitor and treat animals selectively

4. Quarantine & treat new introductions

5. Investigate treatment failure

University of Guelph, Guelph Ontario Canada • Ontario Ministry of Agriculture Food and Rural Affairs
Forage Research

BREEDING
- Yield
- Palatability
- Longevity
- Winter-hardiness
- Drought-tolerance
- Disease and insect resistance
- Feed quality (high protein, high sugar, low-lignin)
- Nutrient-use efficiency
- Carbon sequestration
- Wildlife habitat value
- Water-use efficiency

MANAGEMENT
- Grazing systems
- Harvest timing
- Harvest equipment and technology
- Storage methods and facilities
- Preservation enhancement
- Reducing parasite loads
- Improved animal nutrition
- Improved animal performance

AGRONOMY
- How do we best grow this crop?
- Fertility requirements and application
- Crop protection strategies
- Best species/varieties/mixes for local conditions
While there are a few researchers in Ontario who have, or plan to, do some forage-related projects, there is no full-time forage scientist in the province.

Facilities exist where breeding, agronomy, and management (for pasture and harvested forages) research could take place, but without a dedicated researcher, these assets are under-used.
Forage research tends to fall through the cracks.

- Forages are plants
- Forages are feed
Forage research tends to fall through the cracks

Who has the most to lose if forage research falls behind?
Forage Research

Breeding → Registration → Commercialization → Adoption

10+ years → ~10 years → 1-5 years

Adoption
New forage researchers hired since 2014
98% of forage varieties developed in Canada are from publicly funded breeding programs.

When industry doesn’t invest in research, neither does government.
Summary

Forage & Pasture Research = COP + flock/ herd health
Thank You

Christine O’Reilly
Forage and Grazing Specialist
christine.oreilly@ontario.ca
705-324-5855

Twitter: @OReilly_Ag
www.fieldcropnews.com