



Forage-Grassland Research and Development Update

CFGAs 2019 • Moncton, NB

François Eudes, PhD • Sector Director Lead



Agriculture and
Agri-Food Canada

Agriculture et
Agroalimentaire Canada

Canada

Canada's Forage Sector

Largest land-use type in agriculture

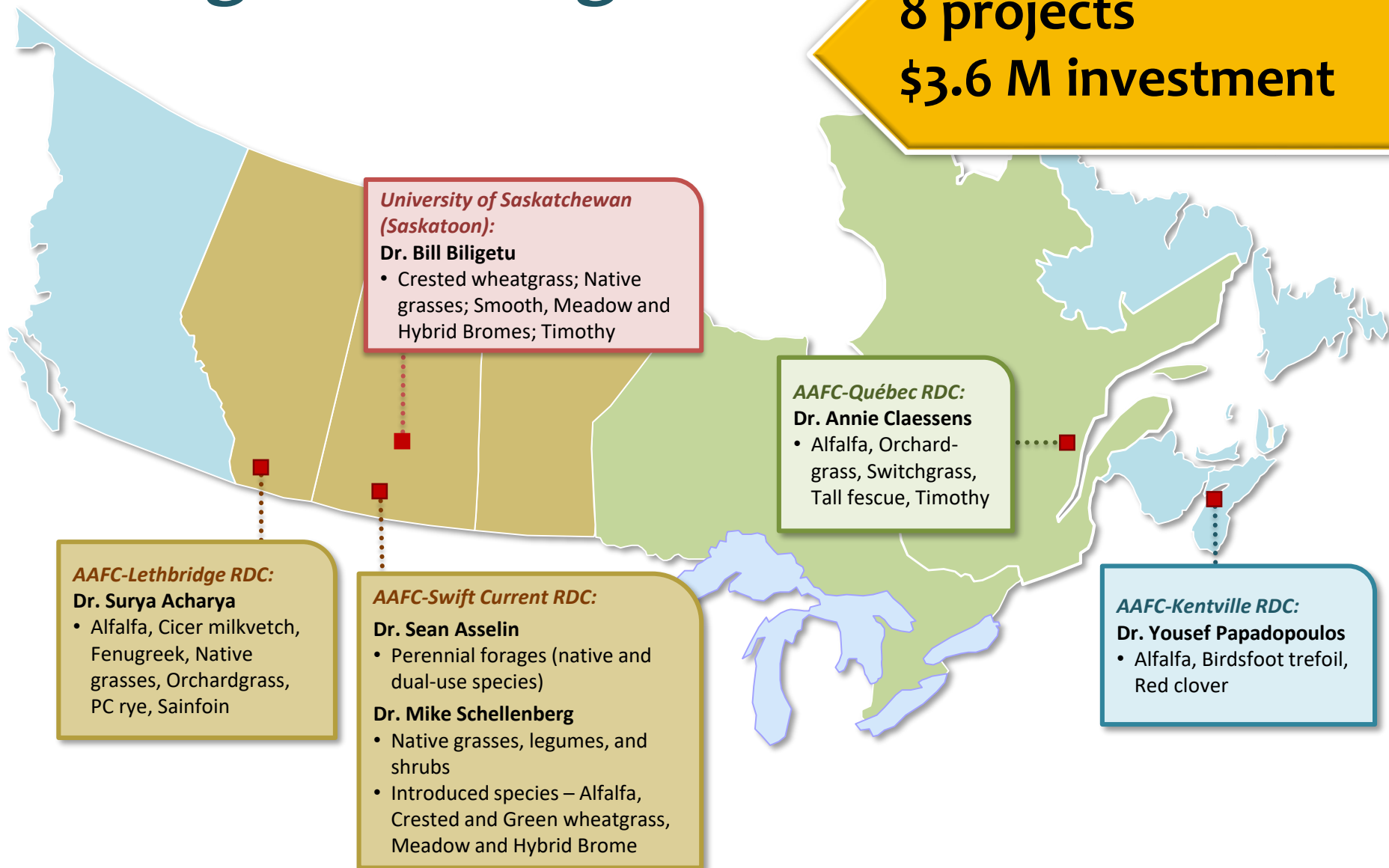
29 M ha coast to coast

\$361 M value exports

\$5 B value to economy

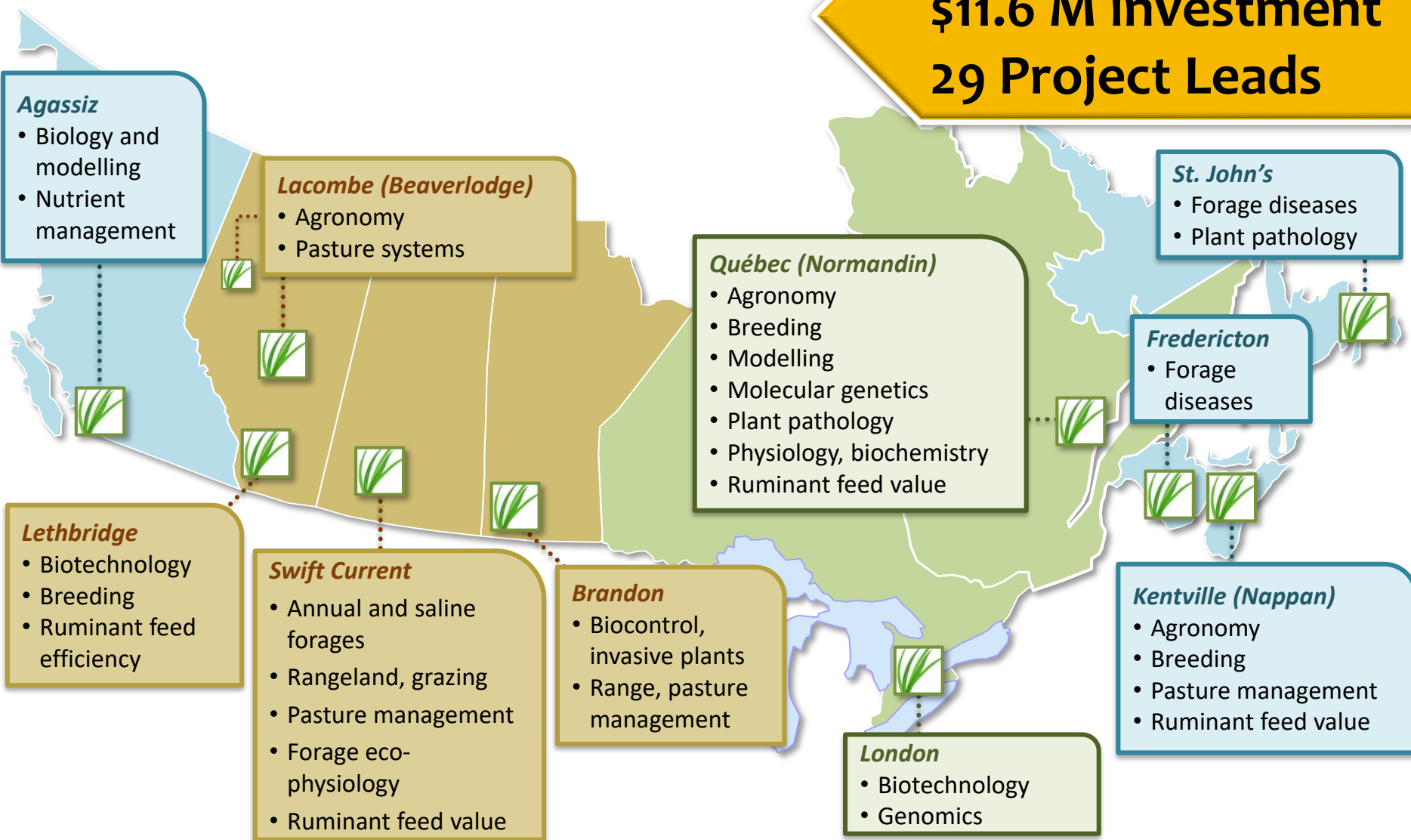
Forage Breeding

8 projects
\$3.6 M investment



Forage, Range Capacity

52 projects
\$11.6 M investment
29 Project Leads



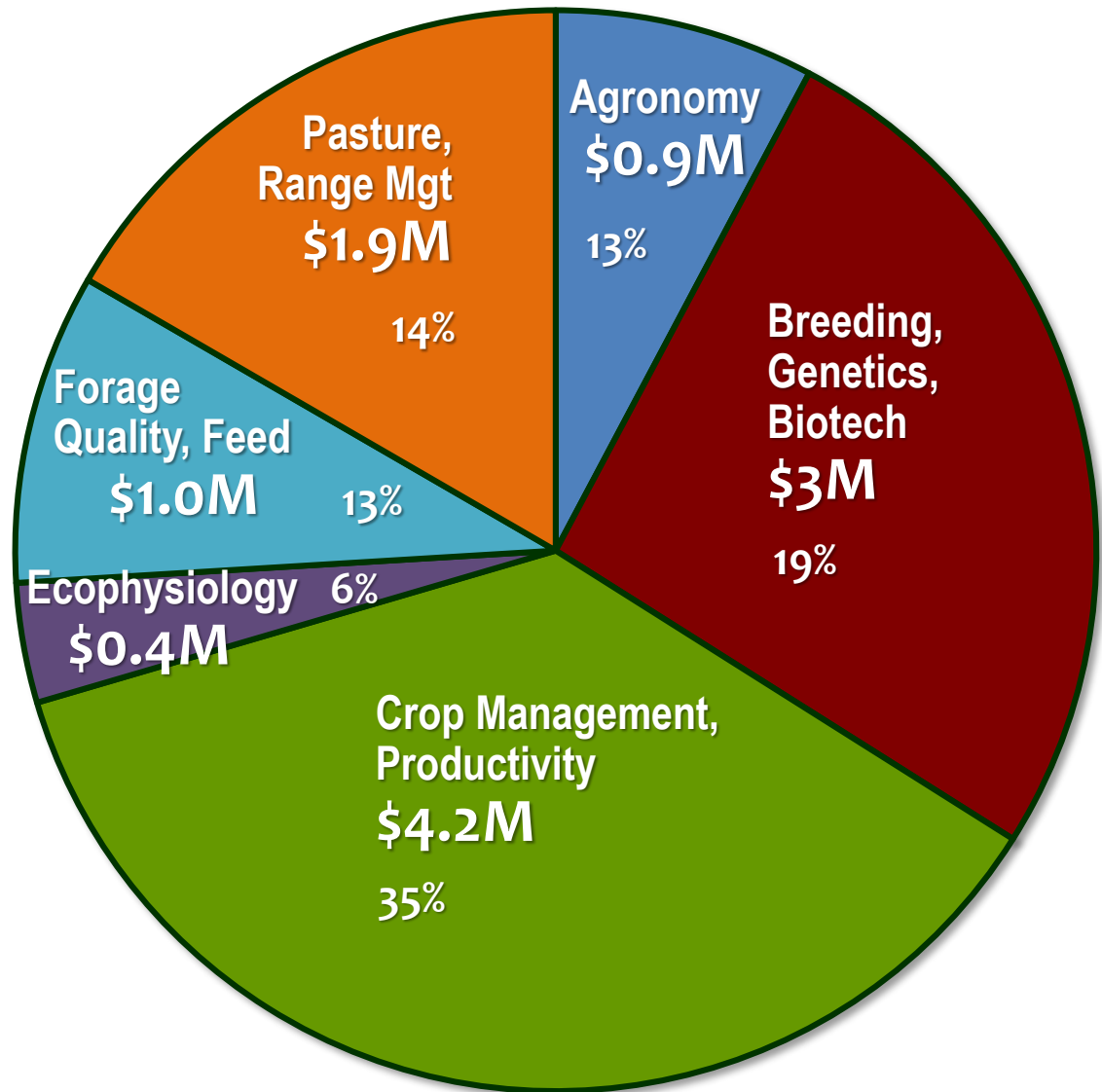
FORAGES

- Sector Priorities

*Sustainably
increasing
productivity,
quality and
resiliency*



Projects and Investment (active 2014-2023)



Projects Initiated 2019

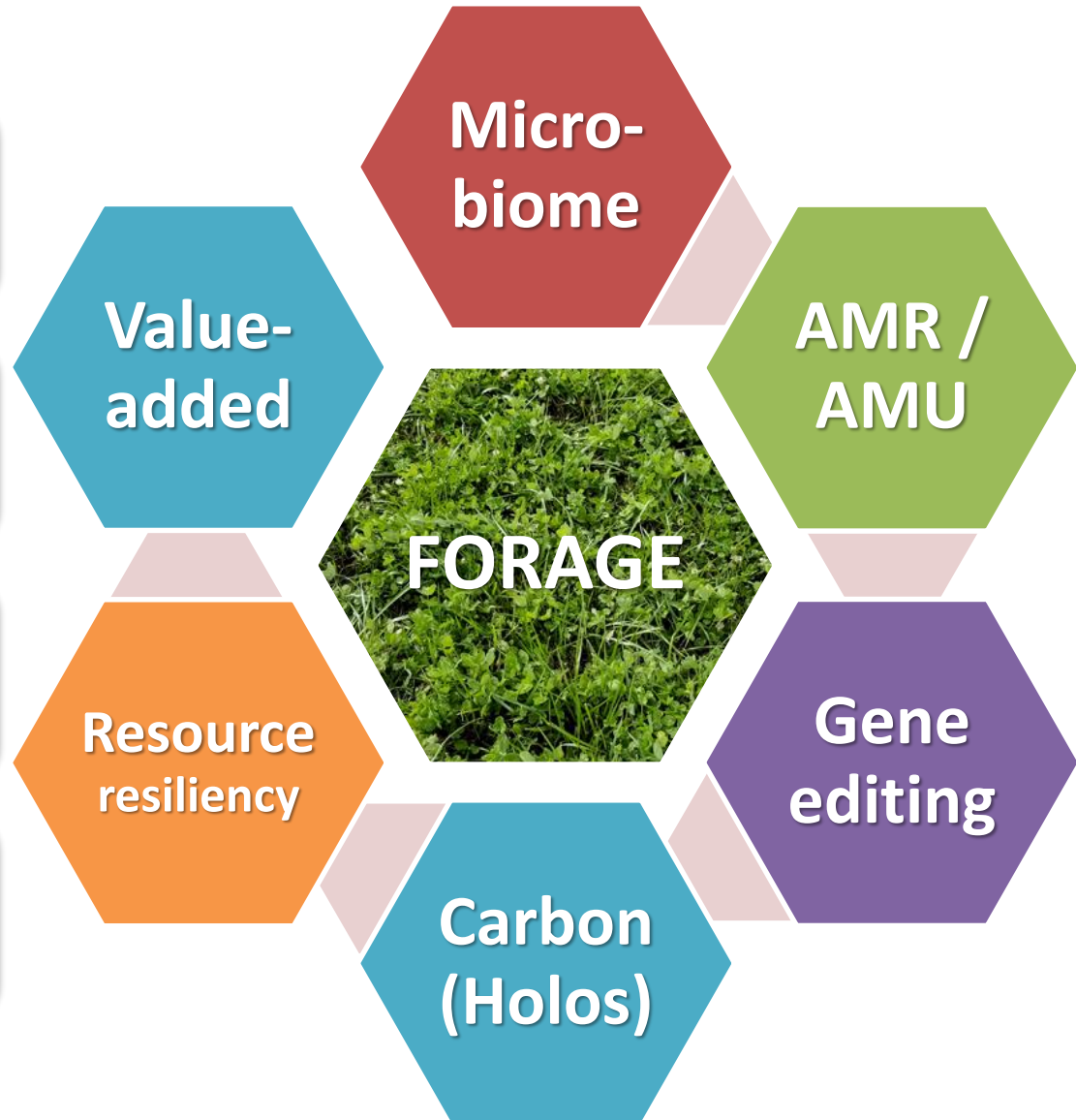
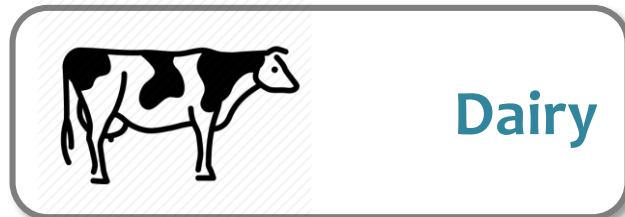
6 projects; \$1.2 M

Project Lead	Project Title
Acharya, Surya	Improving lipid content in vegetative tissue to increase nutritive value of herbaceous legume forages
Baron, Vern	Forage potential of hybrid rye
Beauchemin, Karen	Strategies in grass silage production to mitigate enteric CH ₄ emissions from ruminants
McAllister, Tim	Impact of agricultural land conversion on carbon stocks across Canada, with a focus on grazing lands
Budong, Qian	Sustainable crop production in Canada under climate change. Forage crops - adaption of harvest schedule consisting of additional cuts, would allow increasing yields while maintaining forage nutritive value in most forage production areas in Canada.
Bainard, Jillian	Assessing impact of grazing annual forage cover crops in an integrated crop-livestock system

New AAFC-led Projects for 2020-

1. Managing photosynthesis to increase crop yield and carbon capture
2. Increasing sustainability and resiliency of pasture ecosystems and beef production systems through study of microbial communities (soil, plant, ruminant animals) and their interactions

Links – Other Sector Priorities



International Activity

- **International Bioeconomy Forum – Microbiome Working Group**

- Pilot initiative to study microbiomes associated to *pasture* in all steps of food supply chain
- Mapping data capacity

- **AAFC Research collaborations**

- Brazil, Denmark, Mexico, Norway, Sweden



Considerations for Future

Aging infrastructure - livestock programs

Succession plan for forage breeders

Opportunities in emerging areas of science

New “Players” in 2018-2019



UNIVERSITY OF CALGARY
FACULTY OF VETERINARY MEDICINE



**UNIVERSITY OF
SASKATCHEWAN**
Livestock & Range Centre of Excellence

