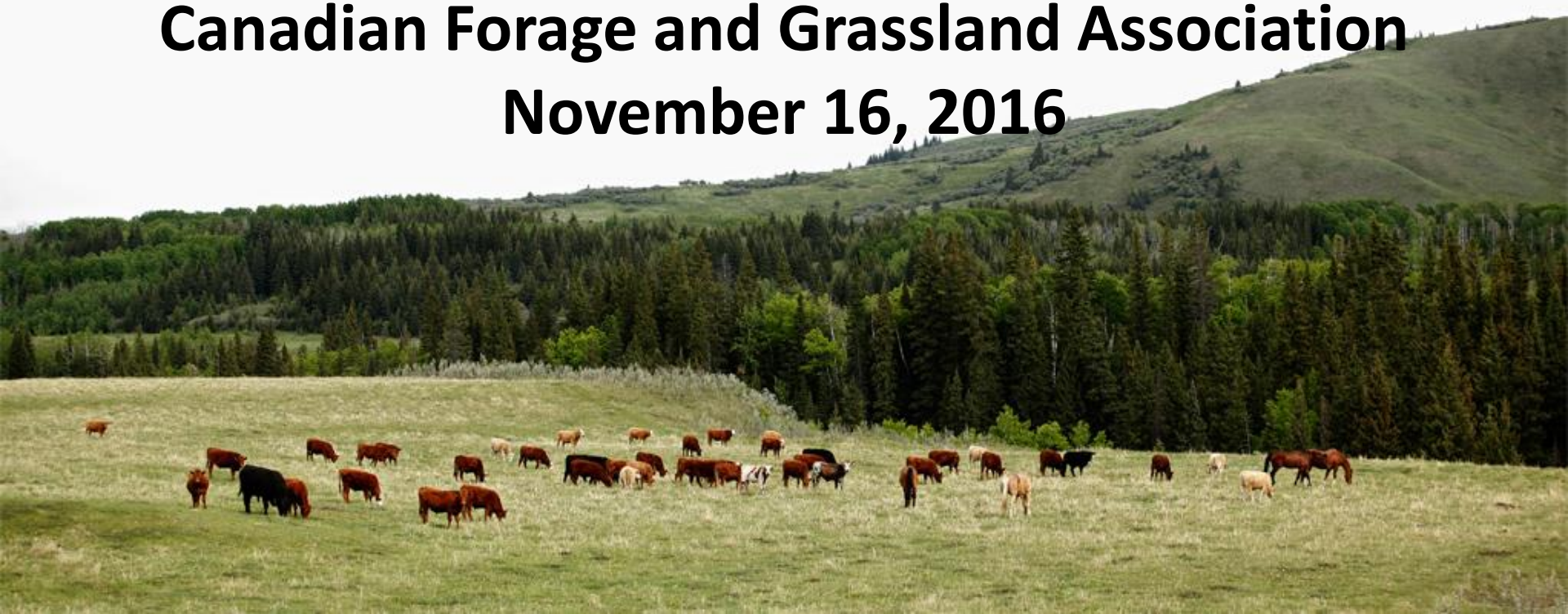
BCRC
BEEF CATTLE RESEARCH COUNCIL

www.BeefResearch.ca

Forage Research in Canada's Beef Science Cluster

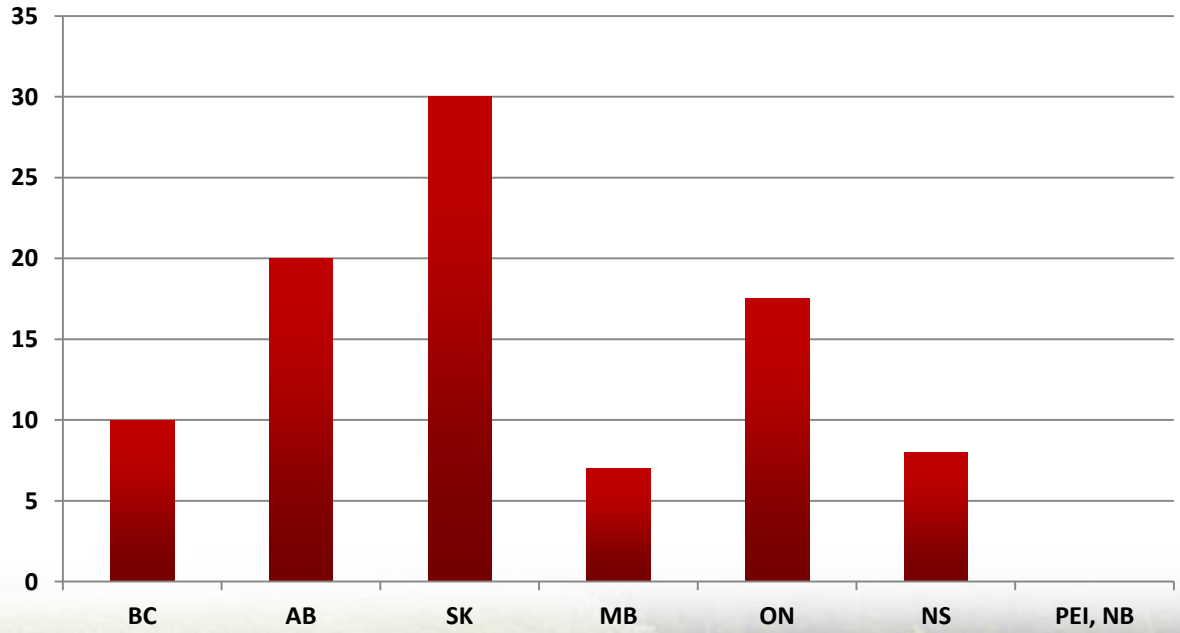
Canadian Forage and Grassland Association
November 16, 2016



Beef Cattle Research Council

- **Funded by 7 to 30% of the $1.00 National Check-off**
- **Each $ is leveraged to gain an additional $3.00 in funds**
- **Eleven representatives appointed by provincial associations**

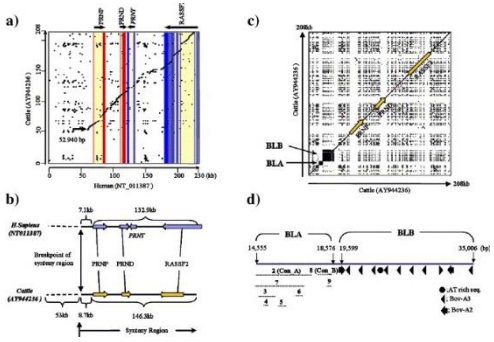
Allocation of the National Check-Off Dollar to the BCRC as determined by Provincial Cattle Associations



Fragmented Funding

Consequences

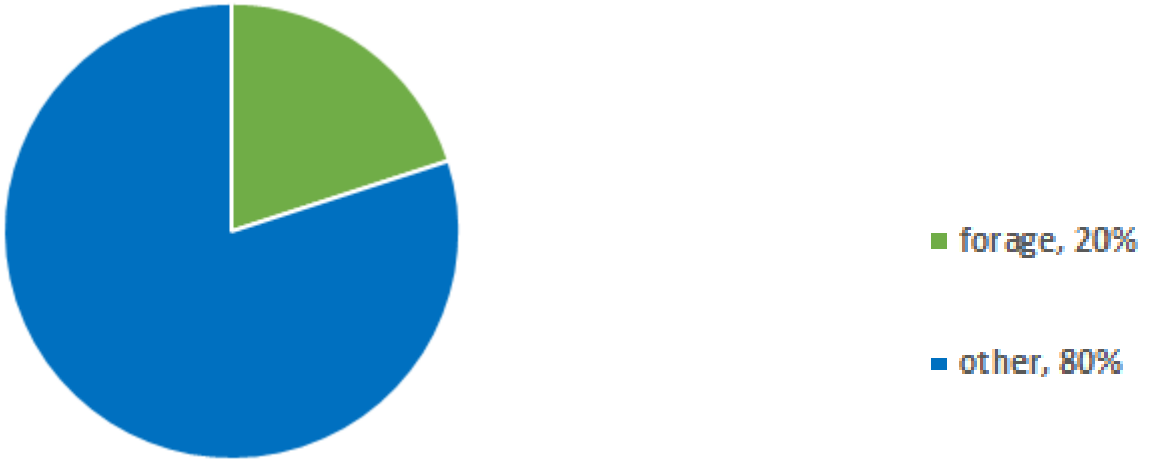
<u>Dogpiles:</u> Over-funding of glamorous research (transformative, silver bullet research)



<u>Gaps:</u> Neglect of long-term, less glamorous areas (incremental progress)

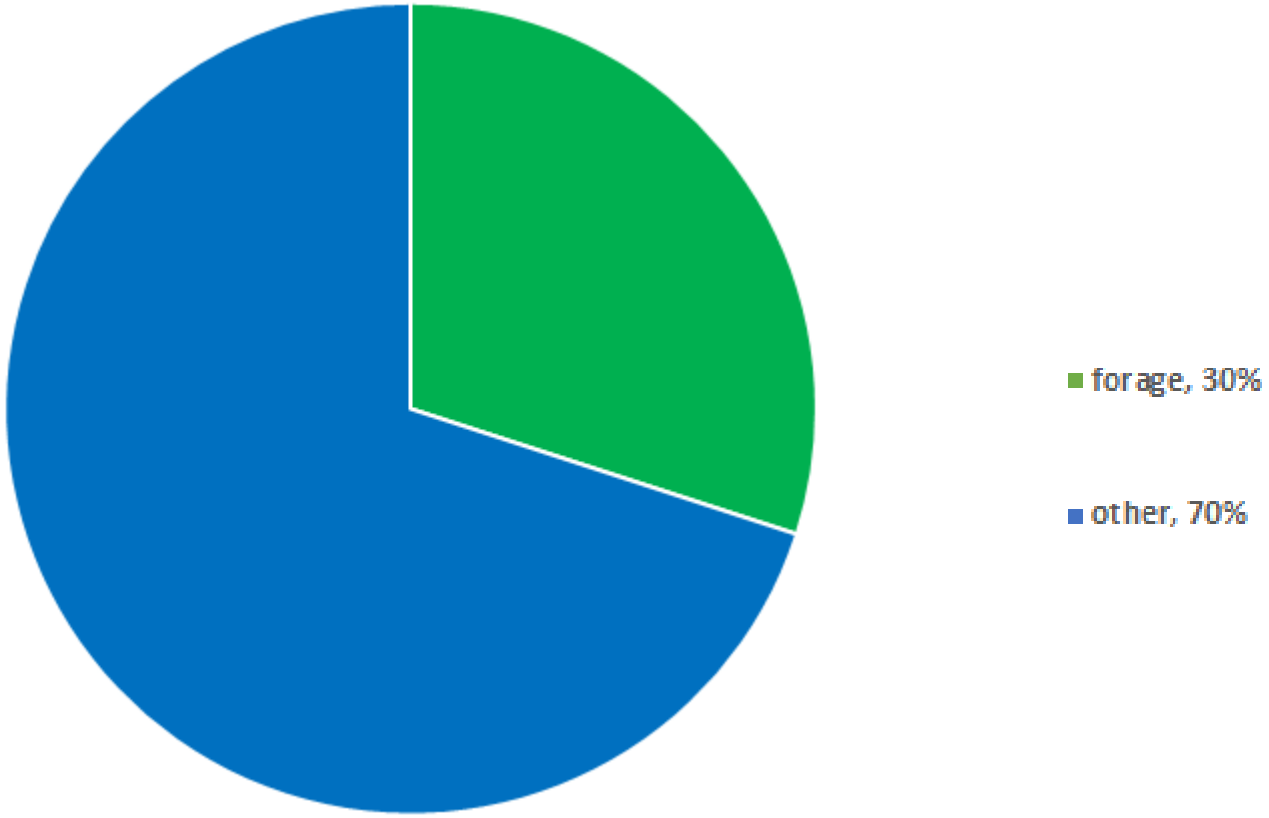
2001-08 $413,000 to Forage

2009-13: $2,000,000 to Forage



BCRC
BEEF CATTLE RESEARCH COUNCIL

2013-18: $6,000,000 to Forage



BCRC
BEEF CATTLE RESEARCH COUNCIL

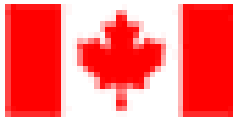
The Beef Science Cluster:

Government of Canada
Gouvernement du Canada

BCRC
BEEF CATTLE RESEARCH COUNCIL

SINCE 1874
Alberta Beef Producers

The Second Beef Science Cluster:



Government of Canada / Gouvernement du Canada

BCRC
BEEF CATTLE RESEARCH COUNCIL

SINCE 1874
Alberta Beef Producers

Government of Saskatchewan

MANITOBA BEEF PRODUCERS™

Beef Farmers of Ontario

ALBERTA CATTLE FEEDERS' ASSOCIATION

PIONEER.

ALMA
Alberta Livestock and Meat Agency Ltd.

Grey Wooded Forage Association
"Creating an Awareness of Forages"

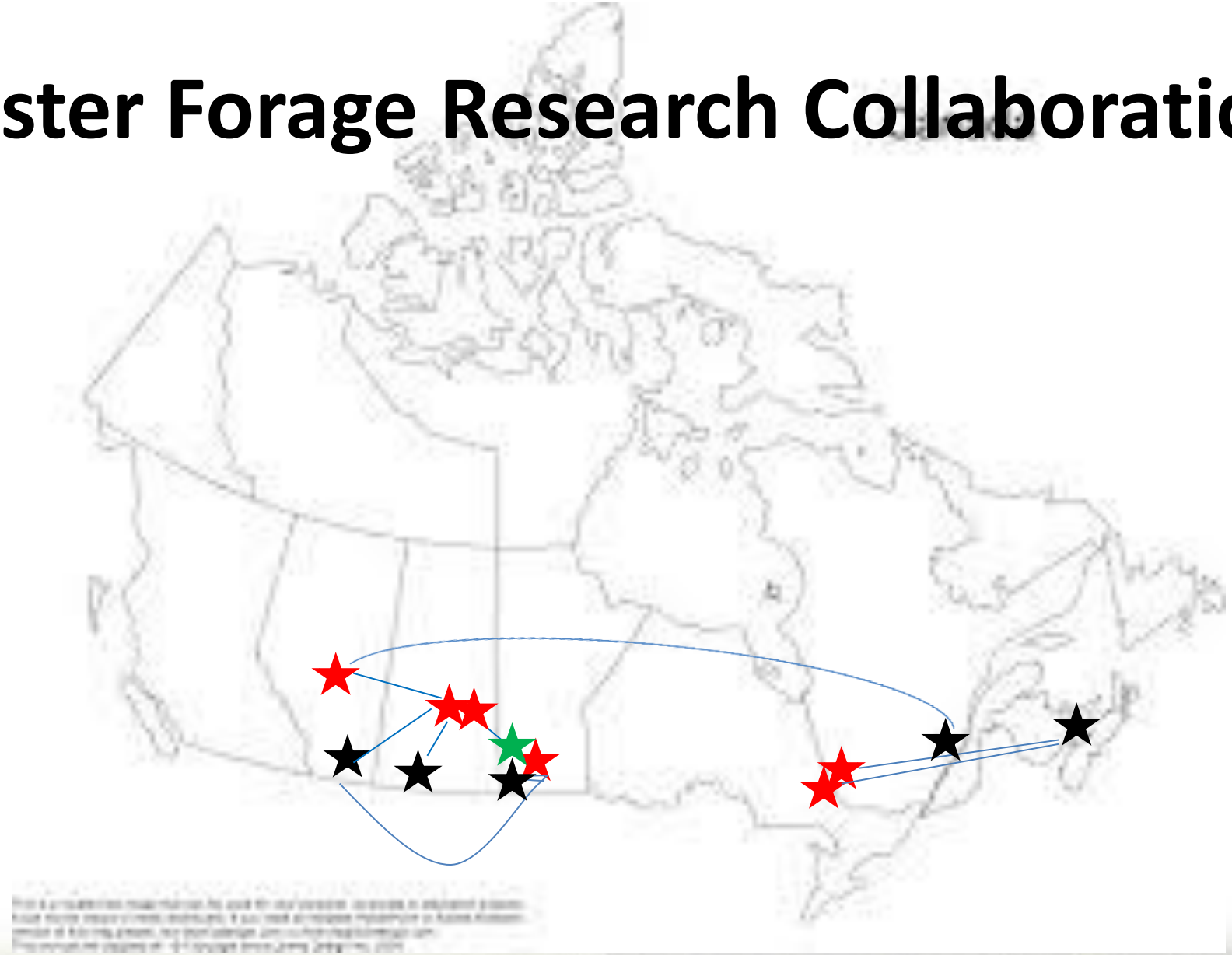
Fédération des producteurs de bovins du Québec

Fragmented Funding

Cluster Forage Research Teams

BCRC
BEEF CATTLE RESEARCH COUNCIL

Cluster Forage Research Collaborations



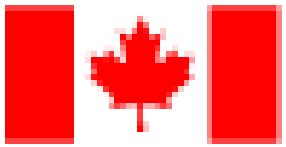
BCRC
BEEF CATTLE RESEARCH COUNCIL

Forage Research Capacity

Government of Saskatchewan

BCRC
BEEF CATTLE RESEARCH COUNCIL

AAFC Capacity since 2015



Government of Canada

Integrated forage crops management
(Nityananda Khamal)

Forage pathologist
(Linda Jewel)

Forage agronomist

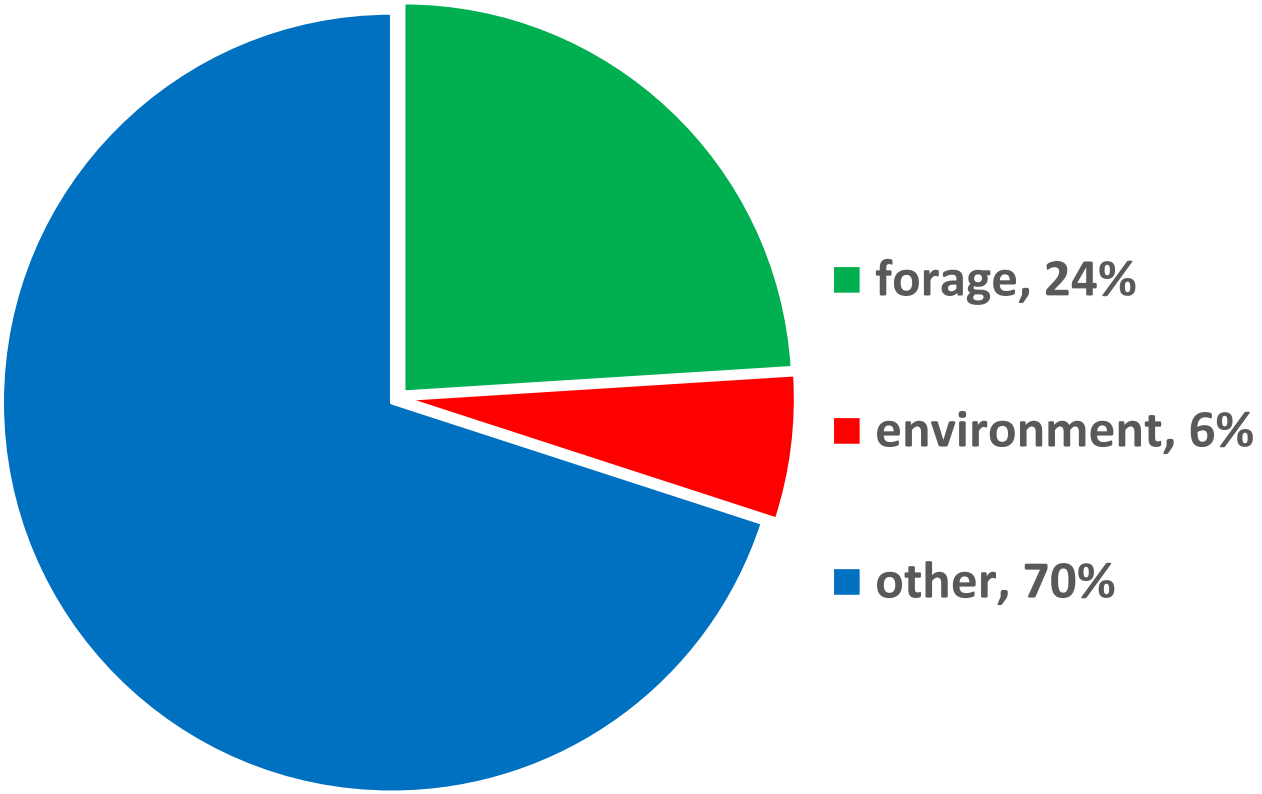
Forage physiologist
(Solen Rocher)

Forage biotech

Forage plant eco-physiologist,
Forage breeder

BCRC
BEEF CATTLE RESEARCH COUNCIL

Beef Cluster Environment Research



BCRC
BEEF CATTLE RESEARCH COUNCIL

Posted on January 11, 2016 by Beef Research

← Previous Next →

The Environmental Hoofprint of Canada's Beef Industry

Producing beef with lower GHG emissions and using fewer resources

Over the years, Canada's beef industry has invested a lot of time and resources in, and reaped considerable economic benefits, from improvements in productivity and efficiency. With higher forage and feed crop yields, less land needs to be bought, leased or rented to produce the same number of calves or the same amount of beef. Similarly, improved feed conversions mean that less forage is needed to winter the cow herd or less feed grain is needed to grow a pound of beef.

These improvements in productivity and efficiency have also produced environmental benefits. To produce high yields, forages need an extensive root system that promotes healthy soil, healthy soil microbes, improves structure, reduces soil losses due to wind and water erosion, and builds up soil organic matter (also known as carbon sequestration). Better feed conversion efficiencies are accompanied by reductions in methane and manure production.

Subscribe

Email *

Subscribe

Recent Posts

- Reminder: Artificial insemination (AI) webinar tomorrow
- Practical applications of forage rejuvenation: Webinar February 24
- Dr. John McKinnon named inaugural recipient of the Canadian Beef Industry Award for Outstanding Research and Innovation
- Why use artificial insemination? Webinar January 28
- The Environmental Hoofprint of Canada's Beef Industry

Recent Comments

- Reynold Bergen on The Environmental Hoofprint of Canada's Beef Industry
- Tristan Stallcup on How much feed

CTV NEWS KITCHENER

NEWS | VIDEO | WEATHER | SPORTS | MORE | CONNECT

FEATURED


AM Update: Police looking for Brantford shooter


5th serious barn fire in southern Ontario this year


'First stable thing' for at-risk youth on its way out


Jurors hear timeline of Tim Bosma's alleged murder

Study finds Canadian farmers cutting emissions while producing more beef

when they are being fattened before slaughter, says the study published in the journal Animal

Business

Remaining

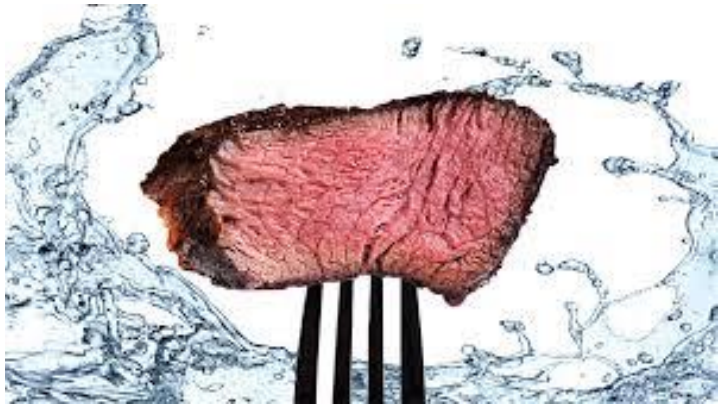
with less

Print | Font Size:

Events

BCRC
BEEF CATTLE RESEARCH COUNCIL

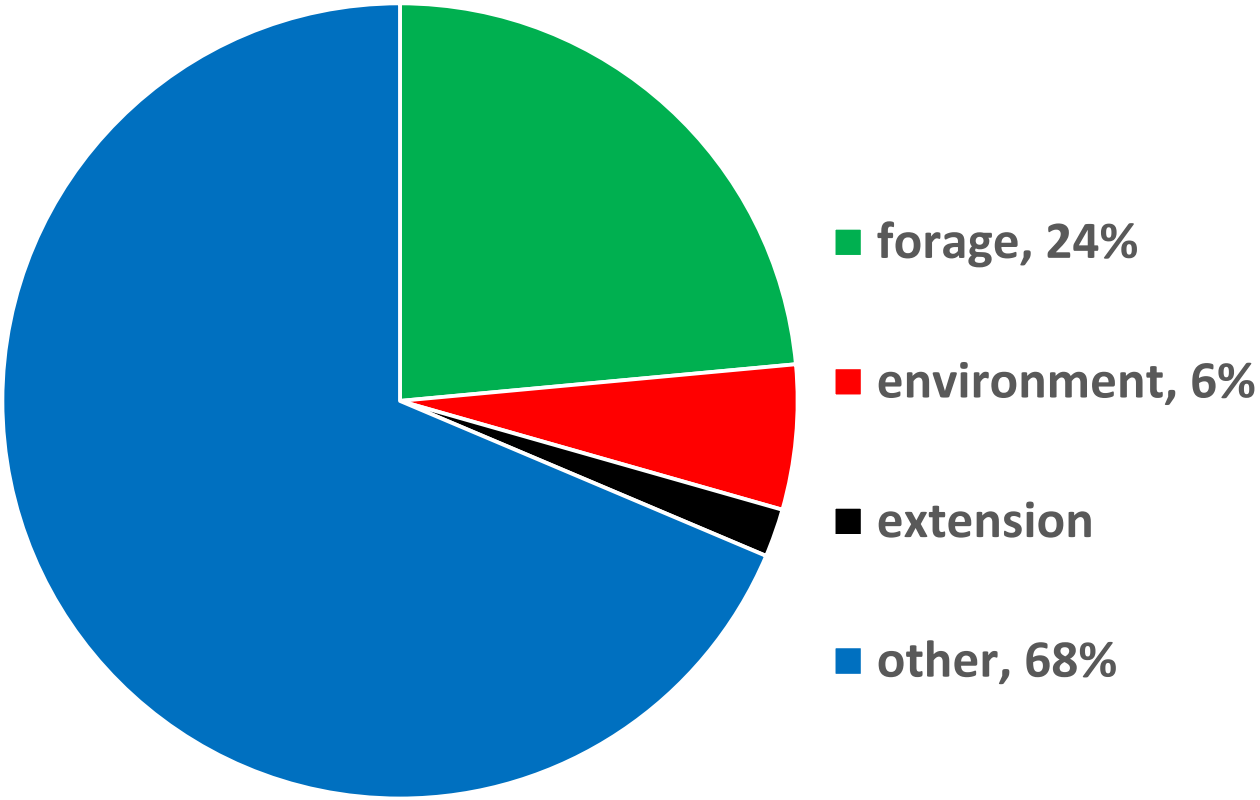
Environmental footprint study



ALMA
Alberta Livestock and Meat Agency Ltd.

BCRC
BEEF CATTLE RESEARCH COUNCIL

Extension / tech transfer



www.beefresearch.ca

Research Facts

Research & Technology Development for the Canadian Beef Industry

NIR could make screenings more attractive for feedlots

by Alberta Crop Industry Development Fund

Project Title:

Determination of energy content and utilization of feedlot ingredients using NIRS

Project Code:	2011C301F
Completed:	June 2014

Researchers:

Raylene Boehmer, Senior Nutritionist, Hi-Pro Feeds, Lethbridge Raylene.Boehmer@Hiprofeeds.com
Darryl Gibb PhD, Hi-Pro Feeds, Mary-Lou Swift, PhD. (Alberta Agriculture and Hi-Pro Feeds, Lethbridge and Co-operating Feedlots - TF Industries, Kolk Farms, Grandview, JF Murray Feedlots

Background:

In a study supported by ACIDF and ALMA, a feed resource that gets little respect was found to have potentially much to offer.

Weed seeds, off-types, stems, hulls, assorted bits and pieces. Considering what it can consist of, it's no wonder cattle feeders might think twice about buying a load of grain screenings as a feed component. Then again, if you could see this imperfect feed resource as Raylene Boehmer does, you might think differently.

"It can be quite high in energy and undervalued in terms of price," says Boehmer, Senior Nutritionist with Hi-Pro Feeds, based in Lethbridge. "The fat content has a lot to do with the energy. Some grain screenings look a lot like straw. Other times, you might have seeds in there with high oil content."

To Boehmer, this variability is a major problem with grain screenings as livestock feed – but also the key to unlocking its value. Over the past three years, Boehmer has been lead investigator on a research project supported by the Alberta Crop Industry Development Fund (ACIDF) under the $8 million Feeding Initiative managed for the Alberta Livestock and Meat Agency (ALMA).

Objectives:

Use Near InfraRed Spectroscopy (NIR) technology to determine the energy content and feed value of grain screening pellets.

Proudly Funded By:

ALMA Alberta Livestock and Meat Agency Ltd. ACIDF

RESEARCH

READ MORE

TWITTER

agriculture: Cattle can st-effective way to re...

ure seeding rejuvenates /SF82Tkx via #FCC...

Forages: Watch this vide rotect species at ri...

Research Facts

Alberta Beef Producers

Research & Technology Development for the Canadian Beef Industry

Cows & Wolves

by Alberta Beef Producers

Project Title:

Prey composition, habitat selection, and movement of wolves in southwest Alberta

Project Code:	0009-007
Completed:	December 2010

Researchers:

Dr. Mark Boyce boyce@ualberta.ca
Mark Boyce, PhD, Andrea Morehouse (University of Alberta)

Published:

- From venison to beef: seasonal changes in wolf diet composition in a livestock grazing landscape

Background:

Ranching benefits the environment by helping to preserve natural habitats and ecosystems. Grasslands maintain watersheds, reduce soil erosion, accumulate organic matter in the soil (called carbon sequestration), promote plant biodiversity, and provide a habitat for wildlife. In some areas of Canada, grazing lands border on or overlap with crown lands, national parks, and nature reserves. This can lead to conflict, particularly if deer, elk or moose damage fences, forage, or stored feed. Wolves and other predators help to control populations of prey species. But when wild game is scarce, wolves may turn their eyes to domestic livestock.

Alberta's wolf population fell dramatically in the 1950's and 60's as a result of efforts to control rabies. In fact, wolves were completely eliminated from southern Alberta. Wolves have made a comeback since then, along with concerns about wolf predation. Several provinces have programs to compensate producers who have had livestock killed by predators. Usually, a producer can be compensated if wildlife officers confirm that the cattle were killed (or probably killed) by a predator. In Alberta, 74% of predator compensation payments are for cattle that have been killed or injured by wolves. Compensation is generally not available for scavenged or "missing" cattle, which means that kills must be found when they are relatively fresh. This is difficult in heavily wooded areas or rough terrain. Ranchers have often suspected that these missing animals were killed by wolves, although no one knew for sure.

Wolves avoid human contact, and this makes them difficult to study. To improve knowledge about wild wolf habits, captured wolves have been fitted with radiotelemetry collars, returned to their packs and tracked. Older systems report wolf pack locations about three times per day, and were accurate to within a mile or so. Newer, GPS-based radiotelemetry collars can pinpoint locations to

BCRC BEEF CATTLE RESEARCH COUNCIL

http://www.beefresearch.ca/blog/

« Return to Blog Homepage

SHARE

Print Page

Posted on October 27, 2016 by Beef Research

« Previous Next »

Let cattle do the seeding

Cattle can be managed to produce calves, beef and milk, but can they also be put to work re-seeding pastures?

As long as you're not in a hurry, producers who manage beef cows and yearlings so they distribute legume seeds through their manure,

Subscribe

Email *

Subscribe

Recent Posts

Decision Making Tools

In addition to the information provided on the BCRC Blog and under the Research tab of this website, the following tools can help you make specific production decisions that suite your operation.

Tools Created by the Beef Cattle Research Council

Economics of Pregnancy Testing Beef Cattle

The following calculator is based on the economics of preg-checking model which was developed by Ben-Ezra and Muzzin in 2015. It can help cow-calf producers determine which of the following three options is most economical

Resources

FAQs
For Researchers
Reports
Images
Videos
Webinars
Decision Making Tools

Upcoming BCRC Webinars

Resources

- Swath and bale grazing strategies - November 23, 2016 (7:00pm EST)
- What is the environmental footprint of beef production? - November 28, 2016

http://www.youtube.com/beefresearch

BeefResearch

Subscribe 177

Home Videos Playlists Channels Discussion About

Who is the Beef Cattle Research Council?

1,068 views 1 year ago

This short animation gives you a sense of who we are, how we're funded, the priorities we focus on to advance the competitiveness and sustainability of Canada's beef industry, and the excellent extension resources we provide to Canadian farmers and ranchers on www.beefresearch.ca.

As the only national beef cattle industry research agency, the Beef Cattle Research Council (BCRC) plays an important role in identifying the industry's research and development priorities and subsequently influencing public sector investment in beef cattle research.

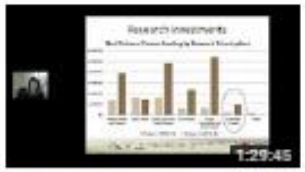
...

Read more

Popular channels

- BuzzFeedVideo Subscribe
- BuzzFeedYellow Subscribe
- CaseyNeistat Subscribe
- Ryan ToysReview Subscribe
- CookieSwirlC Subscribe
- RomanAtwoodVlogs Subscribe

Uploads



Managing pregnant cows for improved cow and calf...

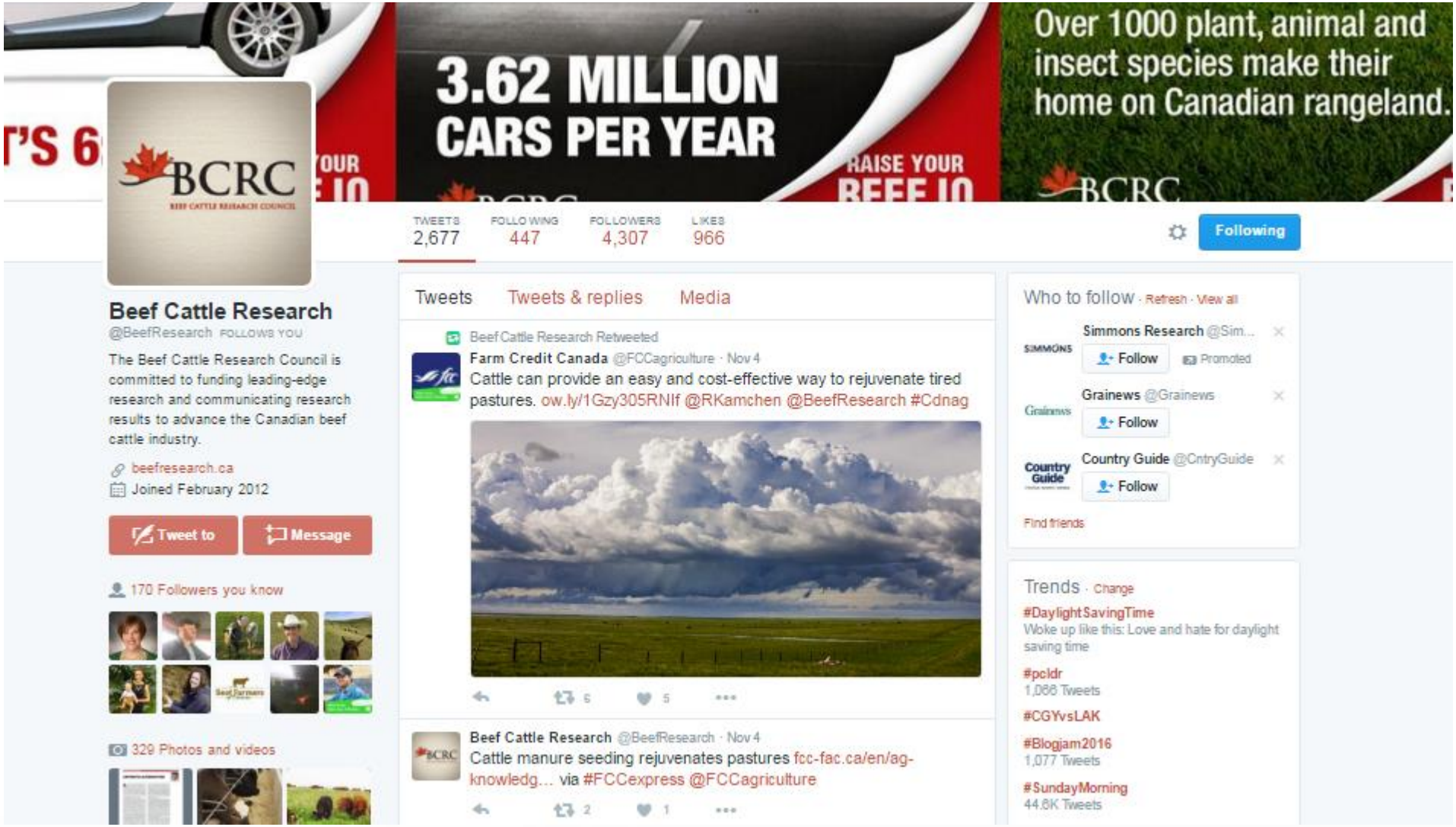
The economics of pregnancy detection (BCRC webinar...

New Forage Varieties (BCRC webinar recording)

Antimicrobial Use and Resistance in Beef Cattle (BCRC webinar...

Practical applications of forage rejuvenation (BCRC webinar...

https://twitter.com/BeefResearch



http://www.facebook.com/BeefResearch

Planning for the next Cluster (2018-23)

- Clusters 1 (2009-13) and 2 (2013-18); Where next?
- National beef research workshop
- ~125 invitees
  - Researchers
  - Producers and “industry stakeholders” (vets, consultants, nutritionists, pharma, packers, forage & producer associations)
  - Funders (federal, provincial, producer groups)

National Beef Research Priority Survey

« Return to Blog Homepage

SHARE

Print Page

Posted on March 3, 2016 by Beef Research

← Previous Next →

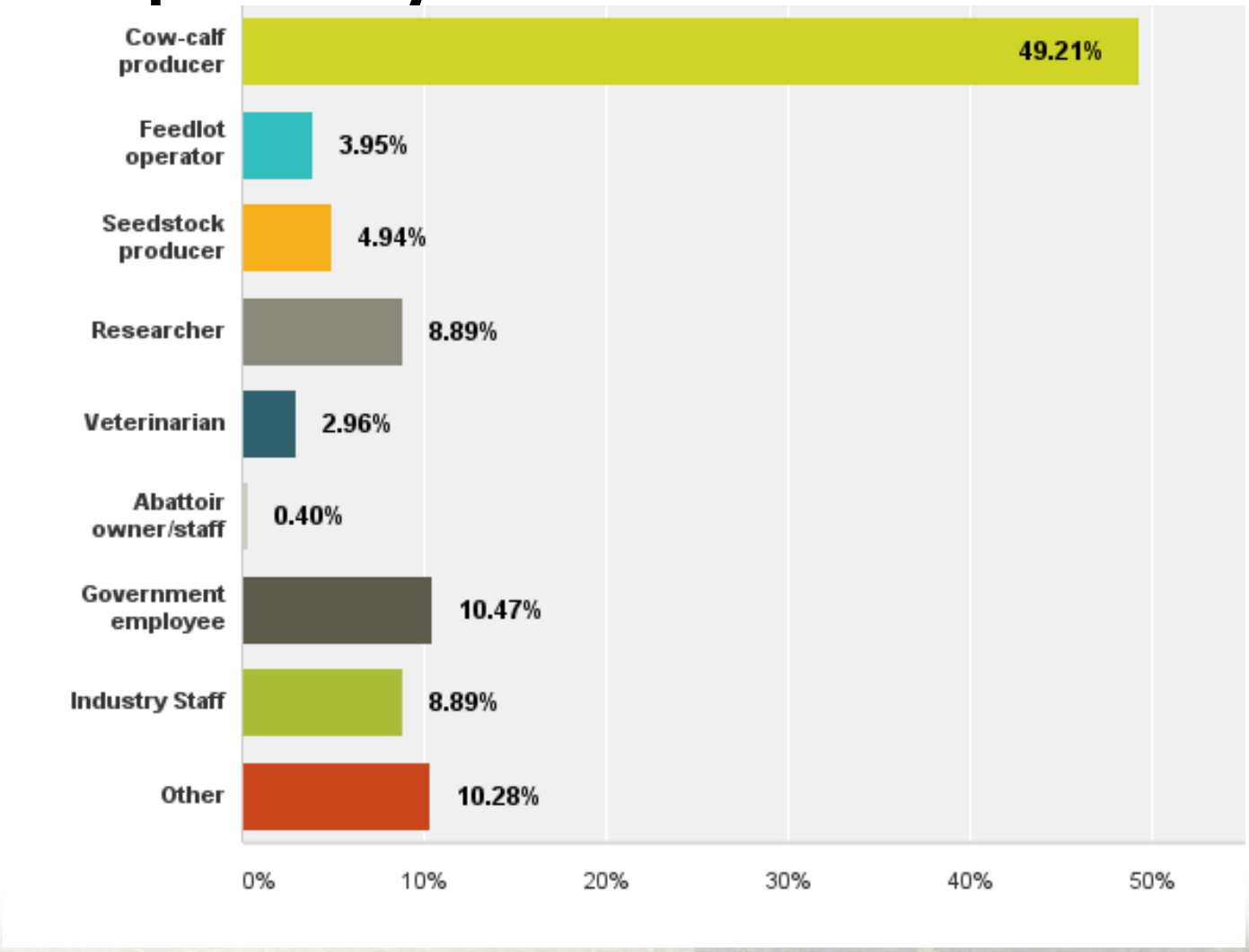
Have 15 minutes? Make an impact on the future of beef research

Thank you for your interest! The survey is now closed.

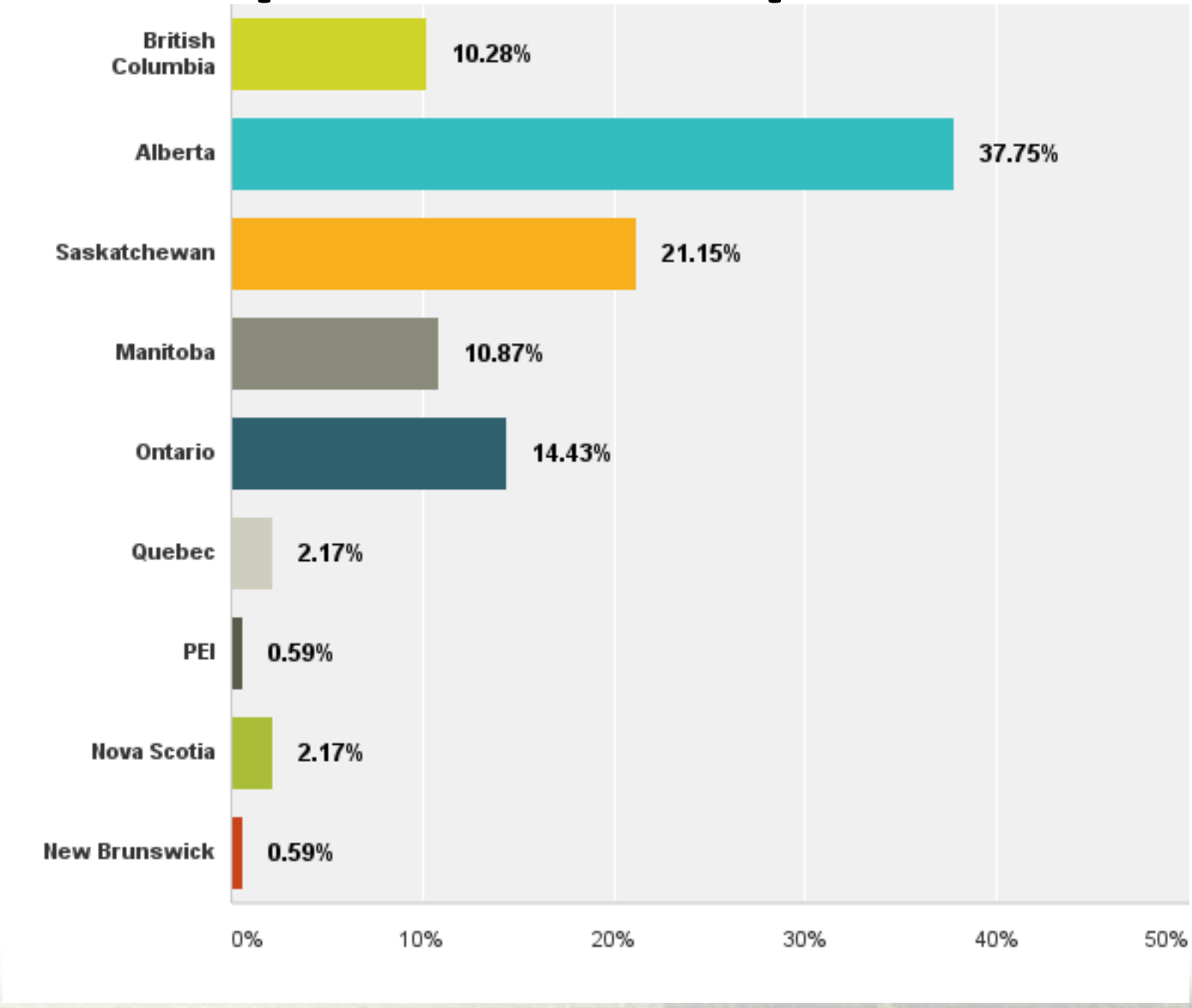
As someone who follows the BCRC Blog, you're almost guaranteed to be what we call a 'Canadian beef industry stakeholder', meaning you

506 responses – 58% Producers

- I am primarily a….

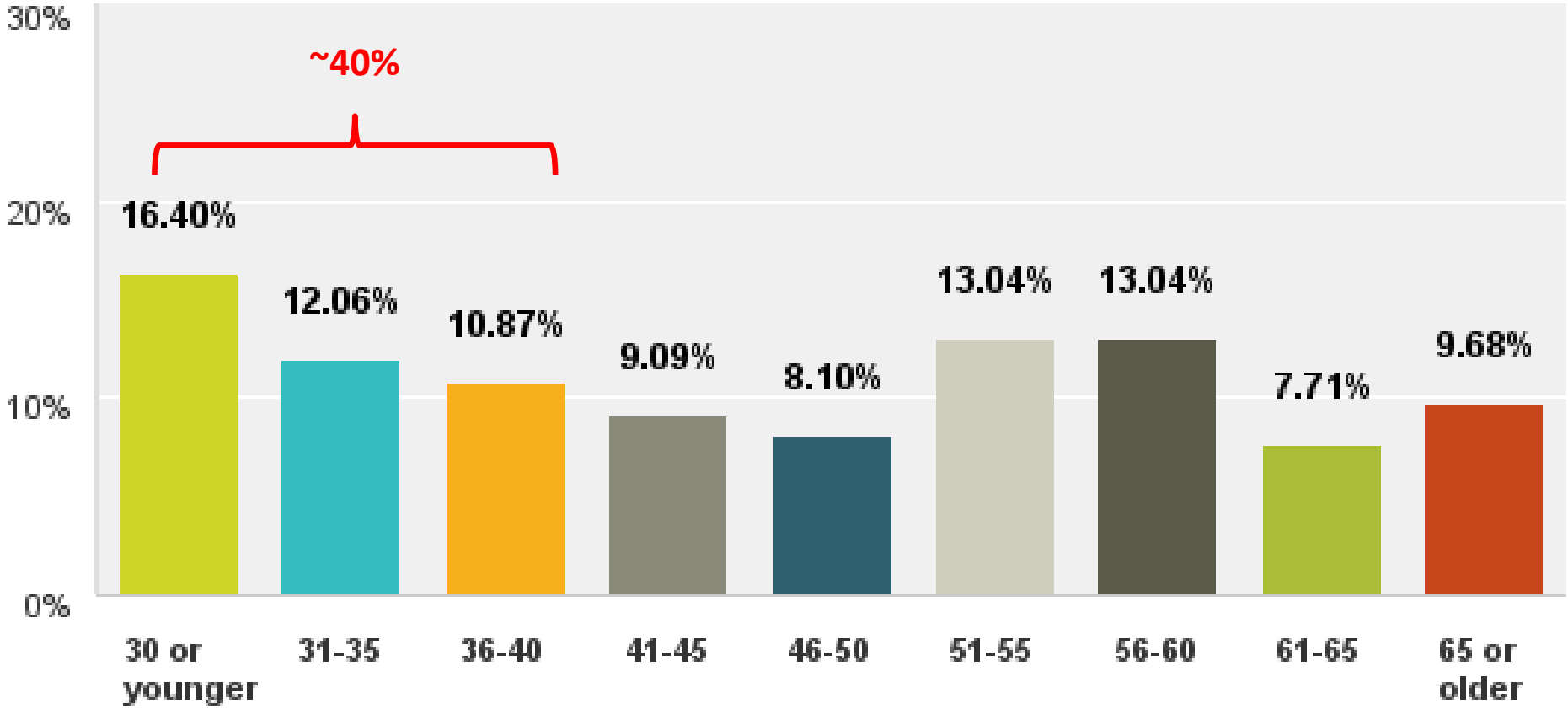


All provinces represented



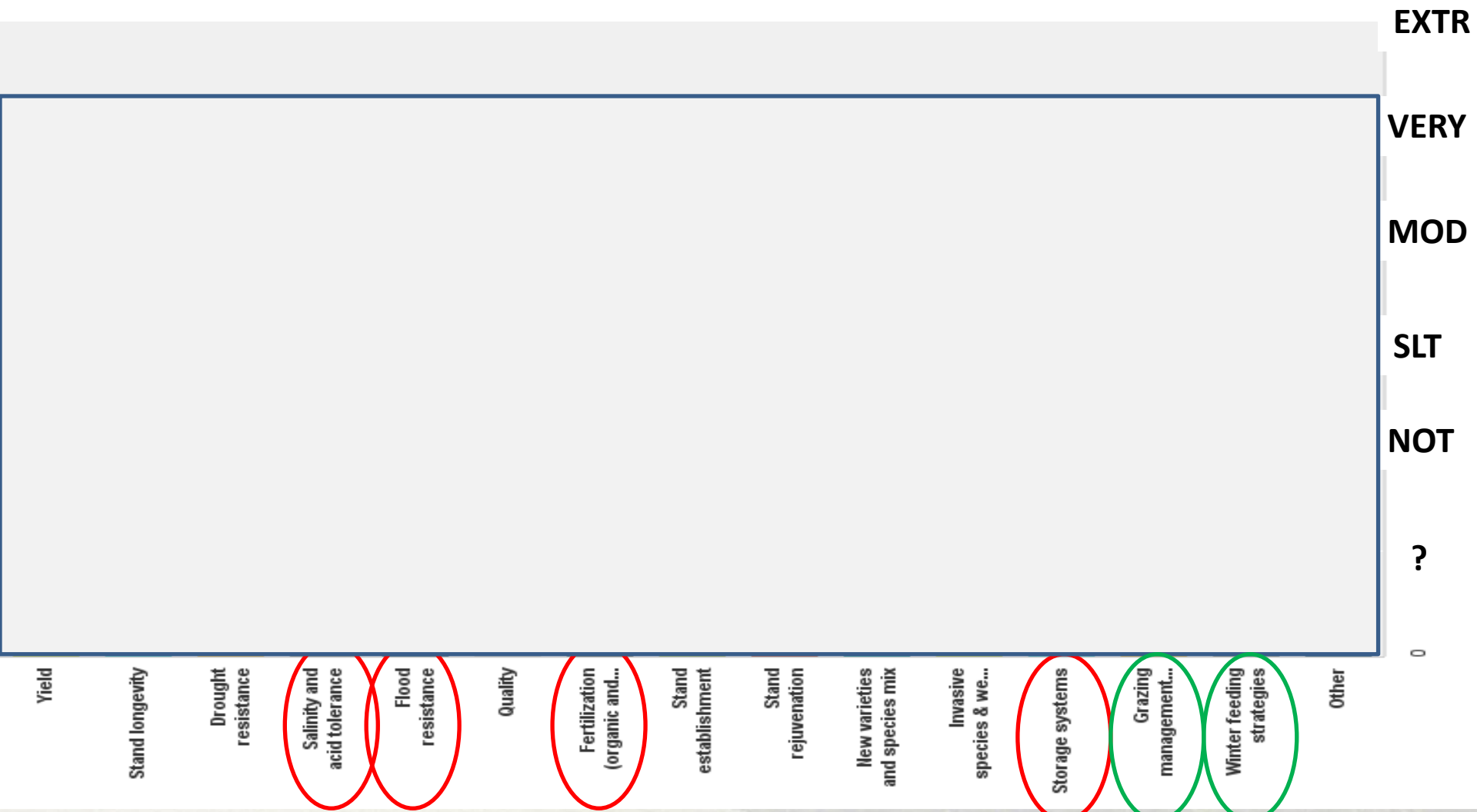
BCRC
BEEF CATTLE RESEARCH COUNCIL

All age demographics represented with 40% of responses <40yrs



BCRC
BEEF CATTLE RESEARCH COUNCIL

Forage & Grassland: survey says



National Beef Research Survey

- **Online survey results informed workshop discussions**

2016 National Beef Research Workshop

- Here's where the focus has been…
- Where to from here?
- Based on the online survey, and
- Based on what funders have been supporting in recent years,
- How should national cattle, forage and beef research be focused in Canada in 2018-23?

2016 National Beef Research Workshop

- Lauch Fraser, Vern Baron, Bruce Coulman, Alan Iwaasa, Bart Lardner, , Mike Schellenberg, Emma McGeough, Kim Ominski, Carole Lafrenière, Yousef Papadopoulos
- Jim Bauer, Ryan Beierbach, Ramona Blyth, Janice Bruynooghe, Caron Clarke, Cherie Copithorne-Barnes, Graeme Finn, Ian Murray, Tim Oleksyn, Michael Spratt, Dave Zehnder
- Glenn Friesen, Holly Mayer, Henry Soita, Sara Sommerfeld
- Brenna Grant, Cedric MacLeod, Rich Smith

Priorities vs. Outcomes

Priority Areas are *general* (e.g. “forage”)

Target research outcomes are *specific* (e.g. non-bloating legume varieties with improved yield, quality and persistence)

BCRC
BEEF CATTLE RESEARCH COUNCIL

BCRC
BEEF CATTLE RESEARCH COUNCIL

Beef Value Chain Roundtable

National Beef Research and Technology Transfer Strategy 2018-2023

DRAFT – November 3 2016

BCRC
BEEF CATTLE RESEARCH COUNCIL

Forage Research Outcomes

Forage and Grassland Productivity

Outcome 1: 15% Improvement in Yields and Nutritional Quality of tame, native and annual species through improved pasture, forage and grazing management and plant breeding; detailed outcomes include

- Develop new annual and perennial grass and legume varieties with improved stand longevity, quality, yield, and adaptability (e.g. flood and drought resistance) through traditional and/or advanced plant breeding techniques
- Characterize corn and cereal forage variety differences in nutrient profile and ensiling potential
- Quantify varietal and species differences in the ability of grasses, legumes and annual forages to maintain nutritional quality throughout the grazing season and in extended stockpiled or swath grazing systems to help inform producers' seed selection decisions
- Identify or develop improved grazing and range management strategies that optimize forage and beef production from native range and tame perennial pastures
- Investigate and refine regionally-appropriate methods of combining native, tame (annual and perennial) species and extended winter grazing practices to lengthen the grazing season and reduce winter feed costs, while meeting animal requirements
- Quantify the economic and agronomic benefits of integrated annual crop, forage and beef production systems

Forage Research Outcomes

Forage and Grassland Productivity

Outcome 2: Maintained Forage Research and Training Capacity; detailed outcomes include

- Establish industry research chairs focused on forage and grazing management and economics established to serve Central and Eastern Canada and in the Prairies and B.C.
- Reinvigorate and enhance long-term breeding programs, while capturing near-term opportunities that are currently under development

Environment Research Outcomes

Environmental Sustainability

Outcome: Science-based information to inform the development of effective public communication and policy development regarding environmental goods and services provided by the beef industry; detailed outcomes include

- Develop cost-effective methods of reducing GHG emissions in forage-based diets
- Quantify factors impacting the rate and extent of C sequestration in tame and native pastures across Canada
- Quantify the impacts of native and tame pasture management on plant, animal, bird and insect biodiversity across Canada
- Quantify the impacts of native and tame pasture management on water use, cycles and watersheds across Canada
- Identify cost-effective cleaning technologies to reduce water use in beef packing and processing facilities
- Quantify N and P excretion rates in grazing animals, and N impacts on GHG emissions and P runoff and leaching impacts on water quality / eutrophication
- Develop feedlot manure management best practices to reduce the risk of phosphorus overload in soils

What's next?

- **Call for letters of intent later this month**
- **Full proposals selected in mid-2017**
- **Beef Cluster 3 proposal submitted late 2017**
- **Beef Cluster 3 starts April 1, 2018**

Questions?

www.BeefResearch.ca

Stay connected:

@BeefResearch

facebook.com/BeefResearch

beefresearch.ca/blog/subscribe

youtube.com/BeefResearch

Sign up for CCA's Action News at www.cattle.ca