

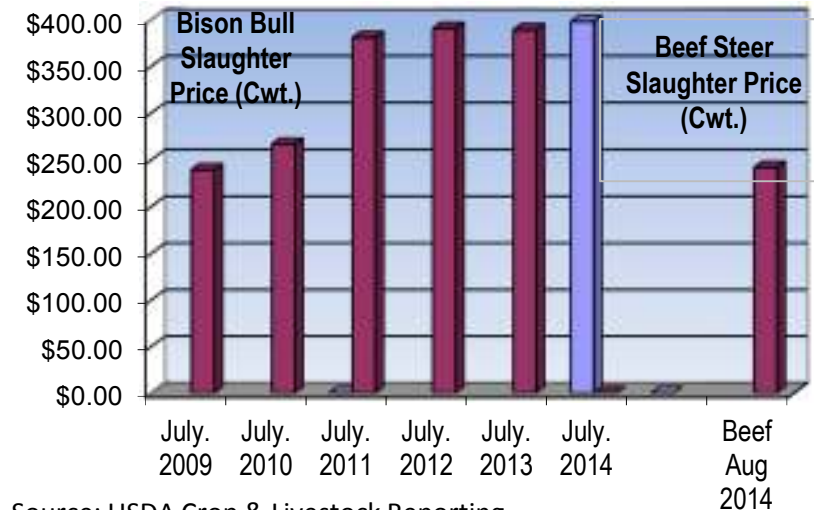
National Bison Association On the Move

Prepared for the Michigan Bison Bash
August 30, 2014

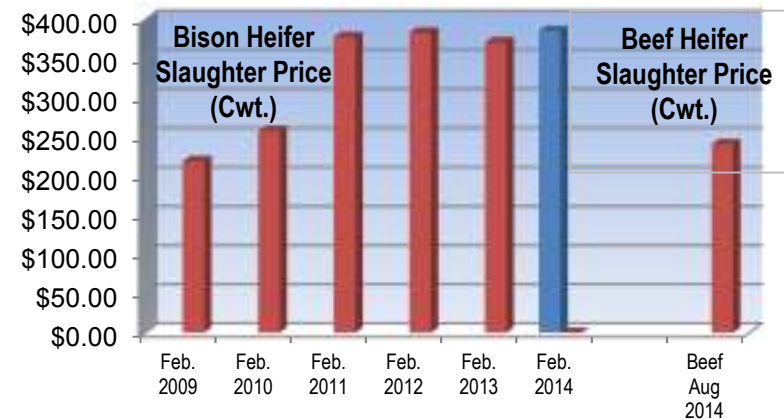


Yesterday's story: Growth

- Young bull prices up 160% over 2009 – \$3.98/lb.
- Young heifer prices up 157% over 2009 – \$3.86/lb.



Source: USDA Crop & Livestock Reporting



Source: USDA Crop & Livestock Reporting Service

Today's story: strong & steady

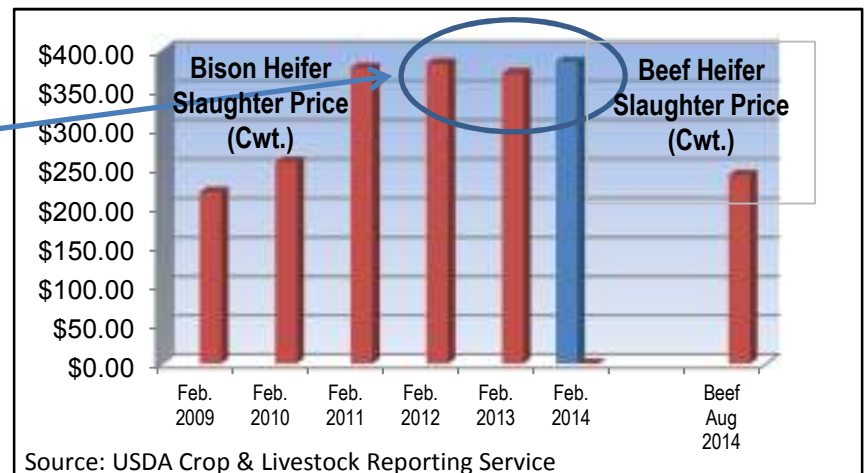
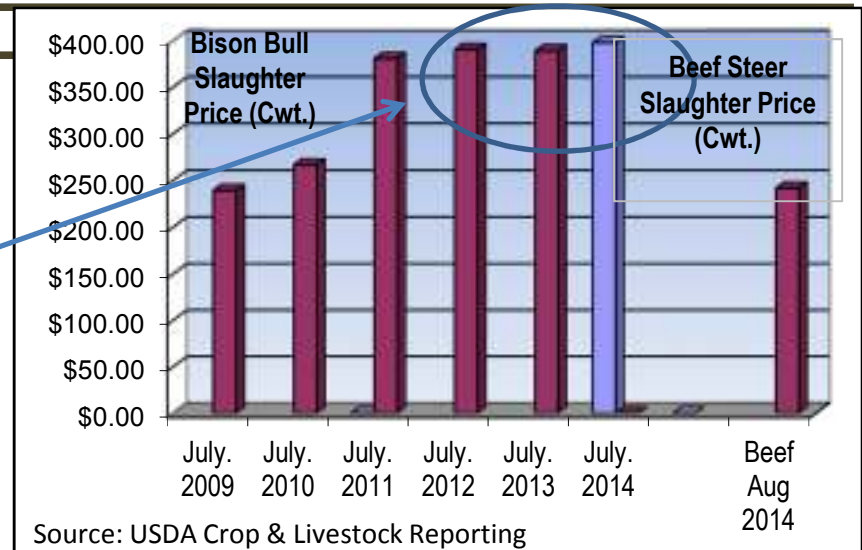
- Prices stable for past three years

Young Bulls:

- \$3.98/lb. in 2014 vs.
- \$3.90/lb. in 2012

Young Heifers:

- \$3.86/lb. in 2014 vs.
- \$3.84 in 2012



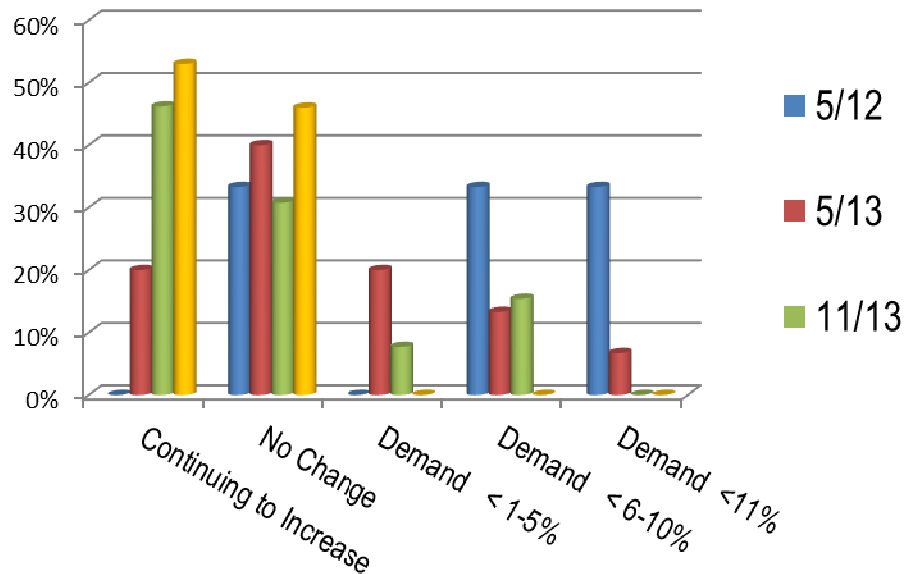
Bison meat sales: \$279 MM

- 11% increase in processing & 12% jump in sales
- Farm gate share = 44%

	No. Processed	Change from	Carcass	Retail/Foodserve
Year	USDA/State	Previous Yr	Value (MIL \$)	Value (MIL \$)
2007	67,000		\$ 66.40	\$ 221.50
2008	70,100	4%	\$ 83.30	\$ 246.70
2009	68,300	-3%	\$ 83.00	\$ 225.10
2010	63,900	-7%	\$ 93.60	\$ 235.50
2011	53,680	-12%	\$ 110.00	\$ 278.90
2012	51,500	-4%	\$ 101.22	\$ 248.33
2013	57,200	11%	\$ 121.10	\$ 278.90
Change 2007-2010		-5%	29%	6%



How are prices affecting demand?



- 53% say demand is continuing to increase
- In May, 2013, 40% saw demand declining

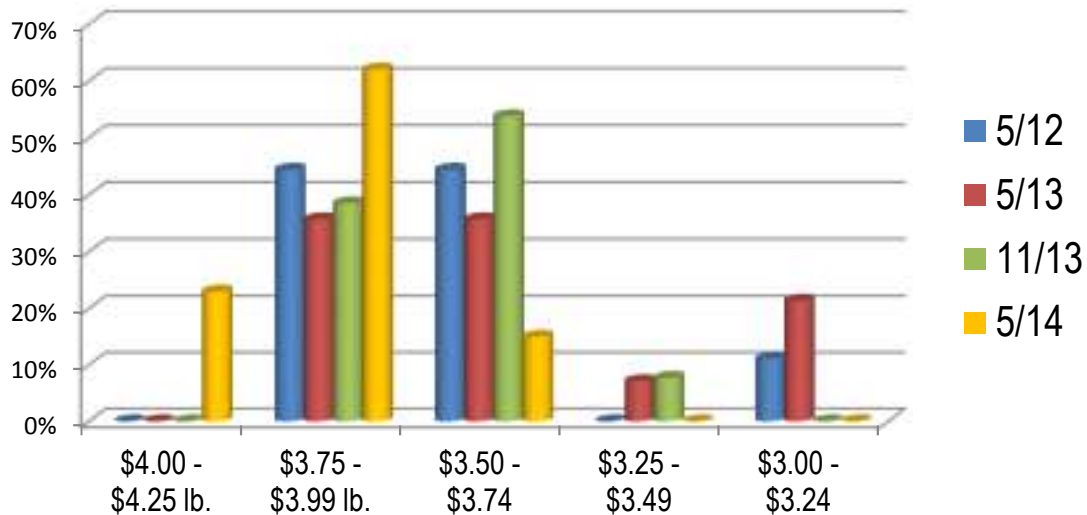
What impact is the current pricing having on the demand from your customers?

	Continuing to Increase	No Change	Demand < 1-5%	Demand < 6-10%	Demand < 11%
5/12	0%	33%	0%	33%	33%
5/13	20%	40%	20%	13%	7%
11/13	46%	31%	8%	15%	0%
5/14	53%	46%	0%	0%	0%



What's a sustainable price?

What is a Sustainable Bull Carcass Price?



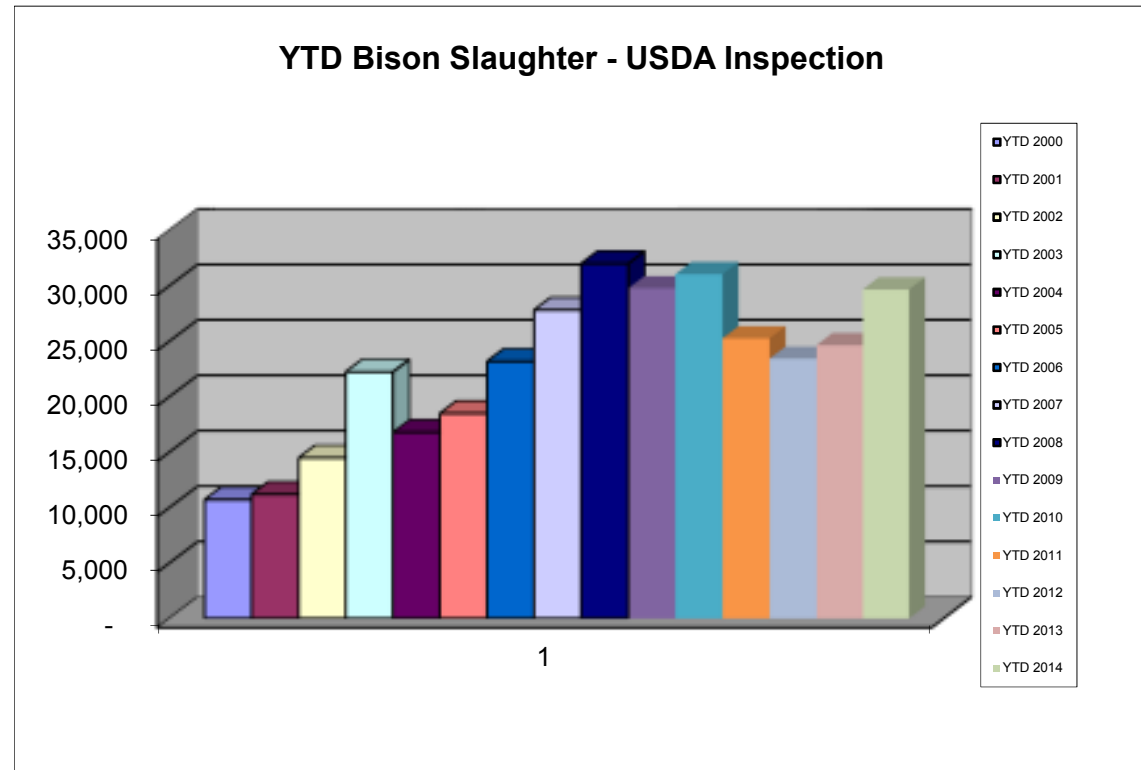
What is a sustainable bull carcass price for producers and marketers?

	\$4.00 - \$4.25 lb.	\$3.75 - \$3.99 lb.	\$3.50 - \$3.74	\$3.25 - \$3.49	\$3.00 - \$3.24
5/12	0%	44%	44%	0%	11%
5/13	0%	36%	36%	7%	21%
11/13	0%	39%	54%	8%	0%
5/14	23%	62%	15%	0%	0%



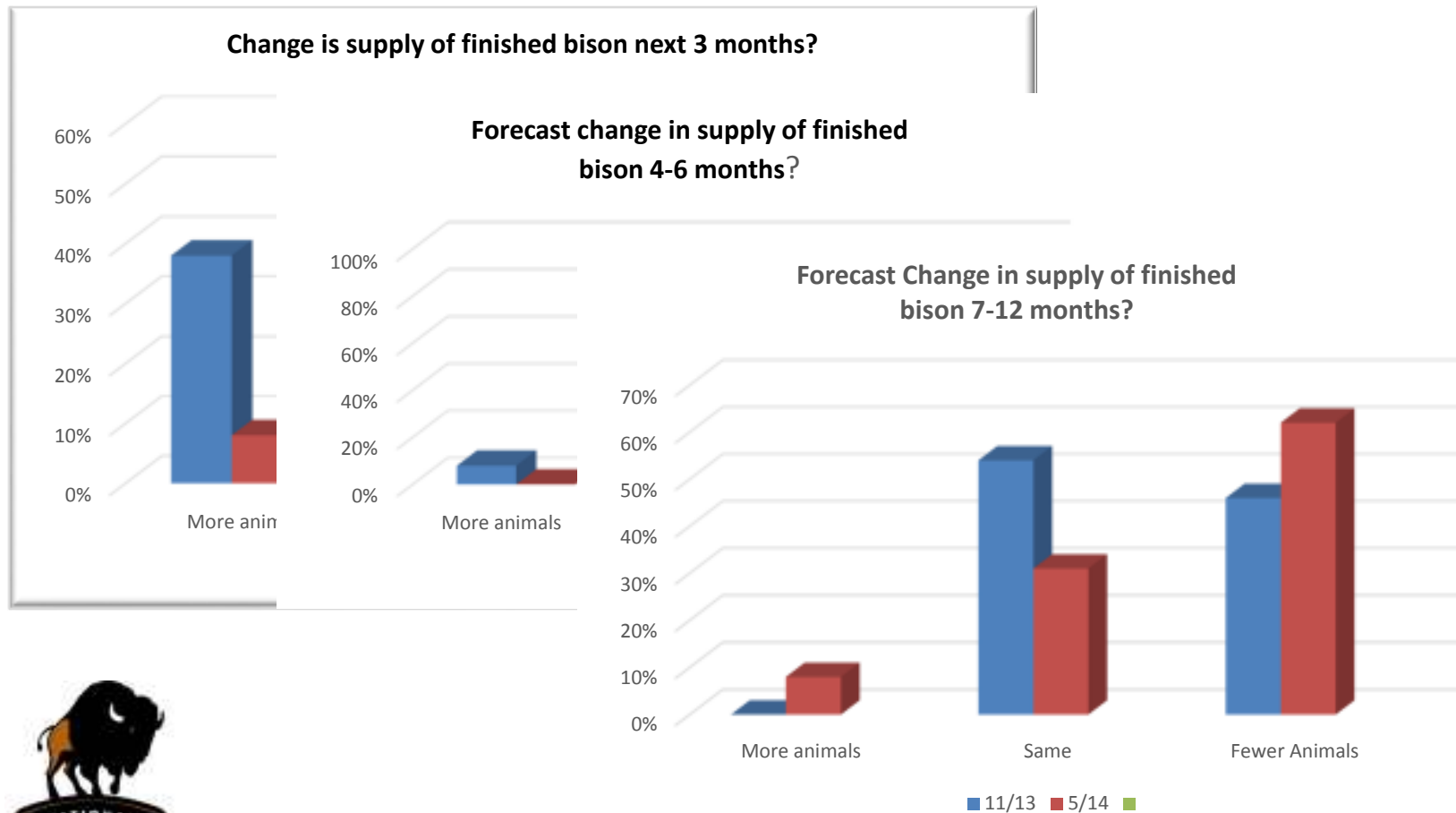
Biology limits market growth

YTD 2000	10,706
YTD 2001	11,186
YTD 2002	14,476
YTD 2003	22,231
YTD 2004	16,784
YTD 2005	18,484
YTD 2006	23,179
YTD 2007	27,803
YTD 2008	31,998
YTD 2009	29,769
YTD 2010	31,040
YTD 2011	25,246
YTD 2012	23,418
YTD 2013	24,637
YTD 2014	29,659



- Canadian animals are 40% of USDA slaughter YTD

Marketers concerned about supply



2012 Census shows our challenge

- Total Herd 18% down from 2007

	2012		2007		2002
Total Herd	161,915		198,234		231,008
Change from Previous	(35994.00)		(32774.00)		

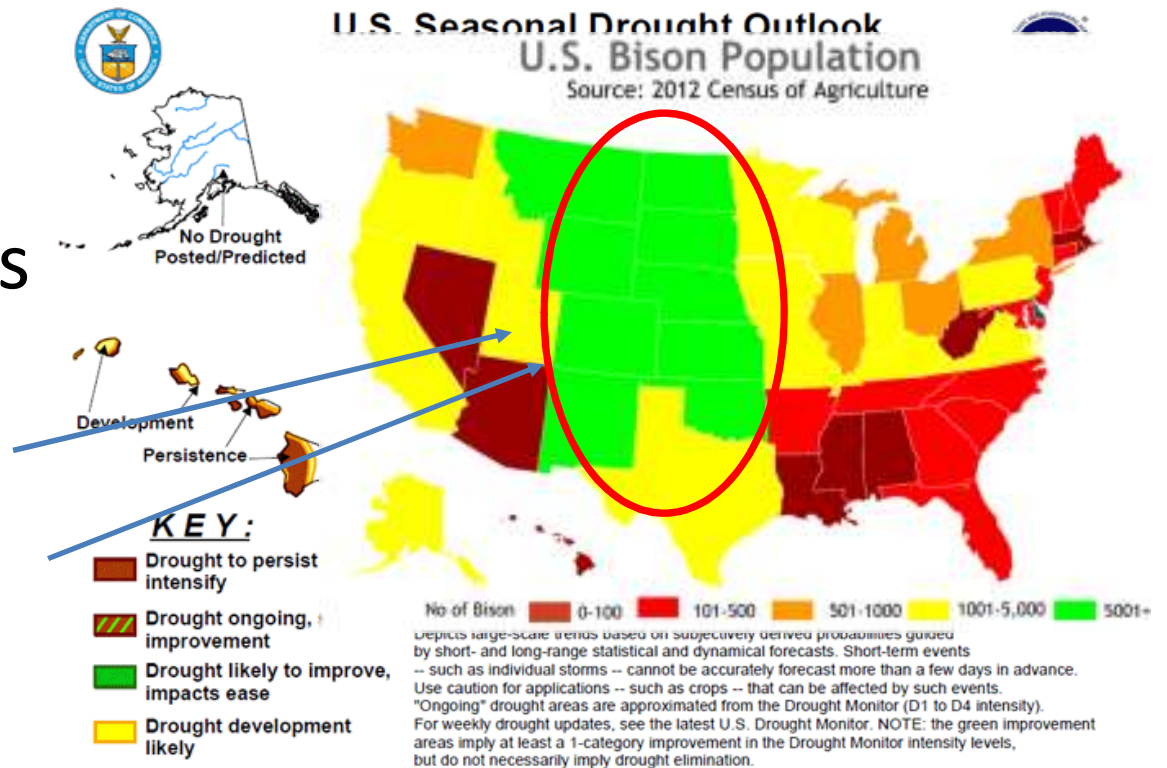


Factors in change

- Drought
- Liquidations
- Processor issues

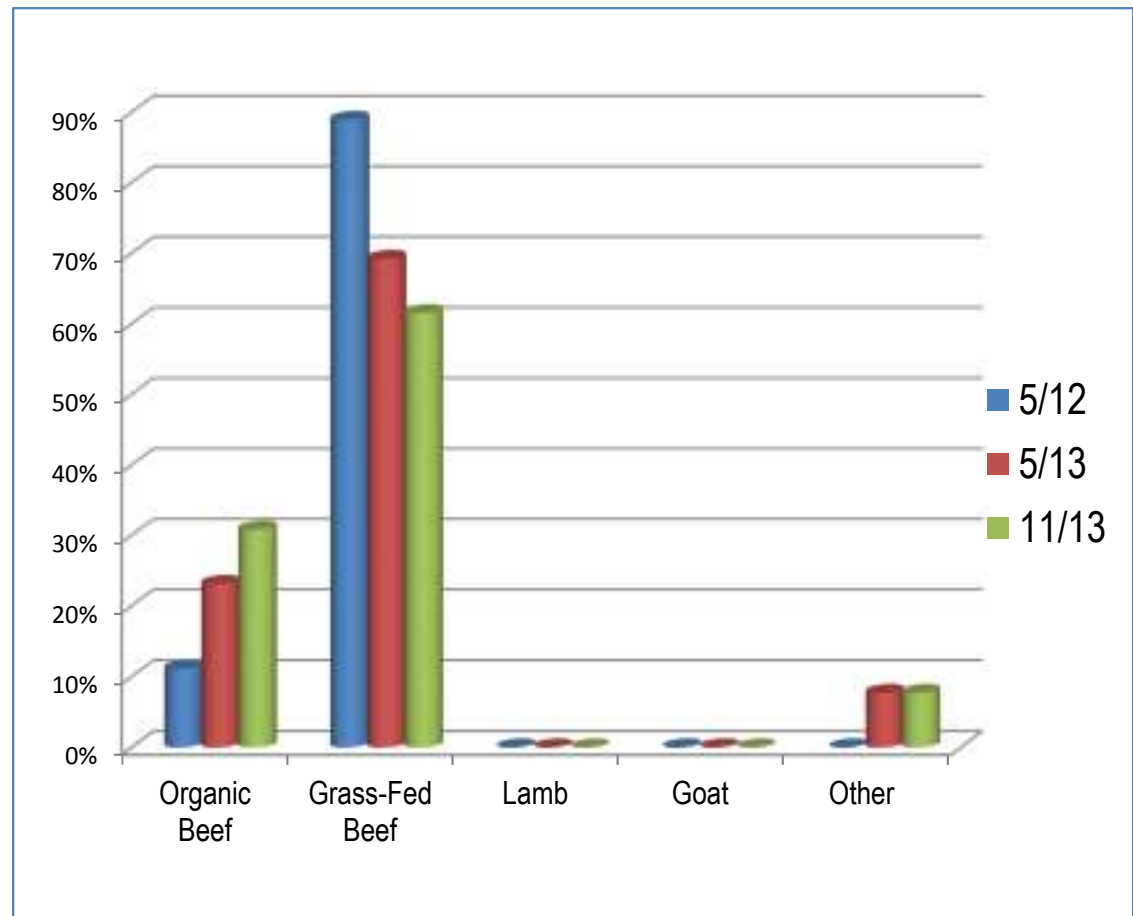
Key drought region 2010 - 2012

Largest bison herds
75.8% of U.S. herd



What protein is our major competitor?

- 62% -
Grass-Fed
Beef
- 31% -
Organic
Beef
- 8% Other



In 2013...

- National Bison Day Resolution
- Nationwide Insurance Program
- Summer Conference in Deadwood
- FFA Convention/NAFB
- Student Group Membership Program
- U.S./EU Trade Negotiations
- Washington Roundup
- Bison herd health



What's ahead.....



Bison Study 2014

- NBA Requested study in Jan 2013
- Request granted in April; 2013
- Goals
 - Provide a baseline description of health, nutrition, and management practices in the U.S. bison industry.
 - Health promotion and biosecurity practices important for the productivity and health of ranched bison.
 - Describe producer-reported occurrence of select health problems and evaluate associated risk factors.



Herd Health Issues

- M bovis
 - 2011 Meeting
 - Cooperative work among producers, vets, federal officials and researchers
 - M bovis vaccine
- MCF
- TB
- Parasites



\$103,675 SARE Grant

- North Central Region includes Michigan
- Objectives:
 - Develop a bison-specific college curriculum
 - Bison-specific research on pasture management protocols with partner ranches.
 - Develop a Best Practices manual for producers.



\$61,000 Risk Management Grant

- Specified for Billings Region
- Objectives
 - Develop bison-production benchmarks
 - Conduct outreach workshops
 - Additional curriculum development



Misinformation

“...but nearly all of the buffalo are bred with cattle and raised as livestock for their meat.”

Dan Springer

Fox News

4/10/12



Setting the Record

What's all this Bull About Crossing Bison and Beef?

Clearing up misconceptions about cattle genetics in today's bison.



You may have heard comments on TV, or read stories on the internet, that today's bison herds contain widespread cattle genetics. We want you to know the truth.

What's behind these comments?

To understand the full story, we have to go back more than 150 years. As the 1800's came to a close, the American bison teetered on the brink of extinction. The more than 30 million animals roaming North America at one time had been decimated to the point where fewer than 500 remained alive. Roughly 34 remained in the newly-created Yellowstone National Park. The remainder wandered in isolated clusters across the prairie.

Fortunately, five ranchers scattered along the Great Plains began to gather up those remnants and pulled the species back from the brink. Some of those ranchers experimented briefly with crossing bison with cattle in the hope of creating a hearty crossbreed. They discovered instead that the crossbred animals were highly infertile, had problems calving, and generally performed poorly. The ranchers soon dropped the experiment.

How widespread are the resulting levels of cattle genetics in today's bison?

In the process, though, some cattle genetics were introduced into some bison. We have to set the record straight. Some media stories refer to "widespread" levels of cattle genetics in the bison herds on private farms and ranches across the United States. Texas A&M University has conducted DNA testing on more than 30,000 bison from both private and public herds across North America. About six percent of the tested have shown evidence of cattle DNA. And, the level of cattle genetics in bison averages less than 1.5 percent of the genetic make-up.



COVERAGE FOR MORE THAN 50 YEARS

So, when you see these bison animals that look like "hybrids", the animal chosen to provide the bison genome reference sequence, in our National and State parks or in the numerous NGO and private herds, you should realize that this species is truly a survivor that is uniquely adapted over thousands of years to the great plains and grasslands of North America.

These animals are properly referred to as **American Bison**.



What is this Animal? Bison, Buffalo, Beefalo or Cattalo?

Dr. James Deane
Professor
Texas A&M University

Bovine species evolved over millions of years in Africa, Asia, Europe, India and North America. While historically bison (American and European) are found in North America and Europe, buffalo are really old world species that evolved in Africa and Asia. Cape and water buffalo evolved in Africa, while swamp buffalo and other large bosu (Asian, Bangladeshi, Gaur, Haryana and Vais) developed in specific regions of Africa, Asia and India. Domestic cattle are thought to have descended from an extinct wild ox or aurochs in Eurasia (*Bos taurus taurus*), India and Africa (*Bos taurus indicus*).

Somewhere around 3 million years ago, ancient European bison (*Bos primus*) evolved from bison in Europe and eventually traveled across the Bering land bridge that connected eastern Siberia with present-day Alaska during the Pleistocene (about 250,000 thousand years ago). Over time at least four different species of bison occurred in North America (*Bos primus*, *Bos latifrons*, *Bos occidentalis* and finally the only surviving bison in North America, *Bos bison*). American bison (*Bos bison*) now consist of two recognized subspecies, *Bos bison bison* (Prairie bison) and *Bos bison athabascensis* (Wood bison). Following the final closing of the Bering land bridge about 12,000 years ago and the demise of the mega-grasslands such as the short face bear, American bison, dire wolf and the water-buckled ant, population numbers of this species exploded into millions of animals across the plains and grasslands of North America from Mexico to Alaska.

Chromosome differences prevent hybridization between most of the old world buffalo species and other bovines. However, American bison and Vais are known to produce a hybrid called a Vaisado and various breeds of domestic cattle have been successfully crossed with Vais (resulting in the Coo). European bison (*Bos taurus*) and American bison (*Bos bison*) are generally considered a novel breed for meat production and according to the National Beefsteak Association, these animals are typically bred to cross domestic cattle and cattle ranchers such as Charles Goodnight in Texas and Charles Jones in Kansas set out to cross domestic cattle and American bison in an attempt to develop a better beef animal. While their cross breeding experiments were conducted long ago (maybe just a few hundred animals), men abandoned their activities after 1900. However, since the number of bison surviving in the late 1800s was very low (maybe just a few hundred animals), men abandoned their activities after 1900. However, since the number of bison surviving in the late 1800s was very low (maybe just a few hundred animals), men abandoned their activities after 1900.

Bison

- Native to Europe and North America
- Two species
- Very limited domestic cattle DNA (< 1%)

Buffalo

- Native to Africa, Asia and India
- Do not hybridize with bison or cattle

Beefalo / Cattalo

- Terms used for production animals
- Typically 3/8 bison -- 5/8 cattle DNA

So, when you see these bison animals that look like "hybrids", the animal chosen to provide the bison genome reference sequence, in our National and State parks or in the numerous NGO and private herds, you should realize that this species is truly a survivor that is uniquely adapted over thousands of years to the great plains and grasslands of North America.

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A new opportunity for our story

- National Bison Day resolution passed 2013
- Bison Legacy Act in Congress



Public policy priorities

- Bison Legacy Act
- US/EU Trade Agreements
- Funding for Ag Research
- Beginning Producer Assistance
- Meat Inspection Costs



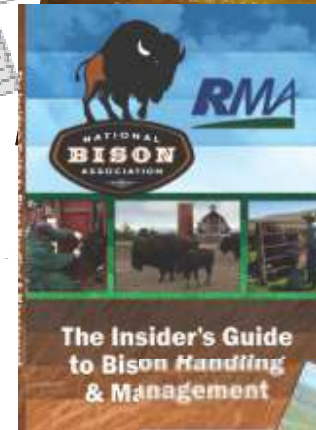
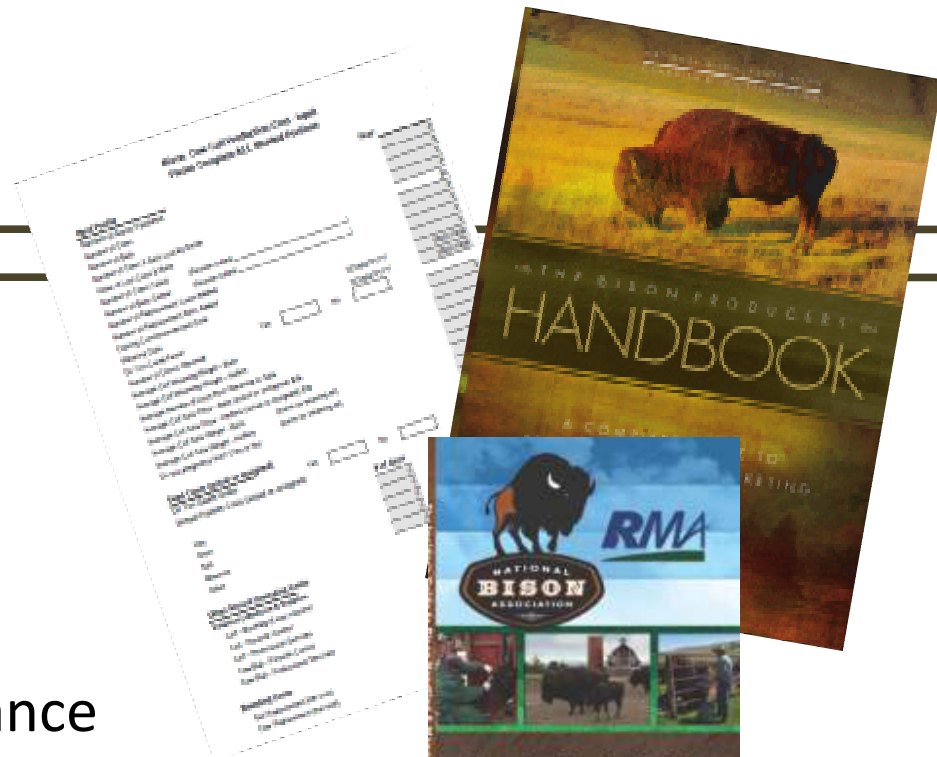
A new generation

- FFA national convention
- 4-H
- Junior Judging
- Student group membership



NBA resources

- Workshops
- Bison 101
- Bison 201
- Junior Judging
- Business Planning Assistance
- *Bison Producers' Handbook*
- *Insiders' Guide to Bison Handling & Management*
- *Mentors – Adopt a Chapter program*



Other Periscope issues

- Canadian/EU trade agreement
- GMO labeling
- Herd health management
- Humane husbandry issues
- Integrity of ranch-raised bison
- Grass fed & organic beef
- Young producer recruitment
- Building positive relationships
- We gotta stay a niche, not a commodity



Bozeman 2017!



Thanks!

david@[bisoncentral.com](mailto:david@bisoncentral.com)





NBA Strategic Plan

- By 2017:
 - the NBA shall maintain \$250,000 in net worth, and increase revenue by 30%, and the membership will be 1,500 through outreach to producers and consumers.
 - the NBA will double the positive consumer awareness of bison by educating the public/consumers to embrace our story and communicate to our current and future audience.
 - increase awareness of the value of NBA membership to existing and prospective members by reducing lapsed members by 20%, and reach out to 1,000.



A New Direction for our Show & Sale

- Mission:

To create an environment where producers can compete to establish the value of their bison in today's marketplace.

- Changes coming
- Assessing video auction



A news start for NABR

- Mission

To document the origin of bison from private, public, or commercial herds, as a means to conserve the genetic integrity of the species.

- Whole Herd Registration
- Member survey on definition of Conservation Herd



Cooperation with Tribal Nations

- To continue to cooperate in support of the Bison Legacy Act;
- To work together to advocate the elimination of USDA meat inspection fees without compromising the current allowance for field slaughter and traditional tribal practices;
- To invite a leader of each respective organization to at least one board and/or general membership meeting of the other organization each year for the purpose of discussing issues of joint concern;
- To work together to address misleading stories and statements in the news media regarding the commitment of NBA members and Indian Tribes to maintaining the genetic integrity of the American bison;



Cooperation...

- To collaborate and consider whether a joint advocacy on various legislative and regulatory matters at the national and state levels might benefit the respective organizations;
- To collaborate as much as possible on activities, both independently and jointly, in recognition of the National Bison Day each year; and
- That this MOU will be an effort to collaborate and work cooperatively on the issues above and any other issues the parties agree to address through joint efforts; however, the parties are in no manner restricted from activities, actions and positions independently outside the scope of this agreement or agreed upon activities and issues.



Herd Health

- M bovis
 - 2011 Meeting
 - Cooperative work among producers, vets, federal officials and researchers
 - M bovis vaccine
 - Contact the National Bison Association or Dr. Hunter in writing with the number of animals to be vaccinated. Dr. Hunter will notify Newport Labs of the number of doses needed.
 - Instruct your Vet to contact Newport Labs to order the vaccine.
 - The veterinarian will then pay Newport Laboratories directly at the rate of \$0.71/dose, and will bill the rancher accordingly.





This table can be used to score bunn in the field.

BCS	RIBS	SPINE (backbone)	HIP BONE	TAIL HEAD	HUMP
1 very thin	prominent in summer; many ribs visible; in winter, visible but less distinct	very sharp; angle of muscle is steep	prominent and edges are very sharp; rump muscles are caved in	devoid of fat; deep sunken depressions on either side of the tailhead; no fat palpable if bison is in a squeeze	sharp outline; narrow with flat sides when viewed from the front; sharp contrast between the hump and shoulder when viewed from the side
2 moderately thin	some ribs visible in summer and winter	evident but not sharp; angle of muscle is steep	readily seen and edges are sharp; rump muscles cave in slightly	sunken depressions on both sides of the tailhead; small amounts of fat palpable if bison is in a squeeze	hump is narrow but not sharp; sides are flat when viewed from the front; distinct contrast between the hump and the shoulder
3 moderate	may be visible in summer but not sharp or distinct; edges round and covered in flesh; not visible in winter	not prominent but can be seen; angle of the muscle has a moderate slope similar to the roof of a tent	visible but not sharp; rump muscles are flat and angular	slight hollowing on either side of the tailhead; some fat palpable if bison is in a squeeze	well developed but not bulging; noticeable distinction between the hump and shoulder
4 moderately fat	may be visible in summer but not sharp or distinct; edges round and covered in flesh; not visible in winter	not readily seen; angle of the muscle has a gentle slope	hardly visible; muscles are full but not bulging	slight depression in bulls and no depression in cows	full hump when viewed from the front but not round and bulging; little distinction between the hump and shoulder when viewed from the side.
5 very fat	not visible in winter or summer; covered in fat	not visible and is buried in fat; angle of muscle has little slope and is flat	covered in fat and is not seen; rump is rounded out and full	no depression (bulls) or bulging with fat (cows) on both sides of the tailhead	thick with rounded top when viewed from the front; blends into the shoulder when viewed from the side