MICROFILM DIVIDER

OMB/RECORDS MANAGEMENT DIVISION
SFN 2053 (2/85) 5M

ROLL NUMBER

DESCRIPTION

2214

2001 SENATE AGRICULTURE

SB 2214

2001 SENATE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. SB 2214

Senate Agriculture Committee

☐ Conference Committee

Hearing Date January 26, 2001

Tape Number		Side A	Side B	Meter #
Jan. 26	1	X		32.4 - End
	2	X		0.0 - 7.2
Committee Clerk Signature				

Minutes:

SENATOR ERBELE; Sponsor, introduced this bill.

This bill will put a bison producer on the board of health. The bison industry has increased in the last ten years. There are about 25,000 bison in the state. This was the home range and continues to be for the bison industry. There has been an association formed that is concerned about the business and the health of the animal. When we have auctions, sales and shows we require testing that far exceeds any other.

REPRESENTATIVE D. JOHNSON; Sponsor, testified in support of this bill.

There should be a representative on the Board of Health from the Bison industry because of the growing number of bison.

REPRESENTATIVE BRANDENBURG; Sponsor, testified in support of this bill.

There are some concerns about buffalo and the safety of the meat. By having someone on the Board of Health from the Bison industry people will be assured that bison is safe to eat.

SENATOR ERBELE; Everyone who is on the board is appointed by the respected association. The names of representatives will be chosen by the ND Buffalo Association and suggested to the Governor.

SENATOR NICHOLS; Sponsor, testified in support of this bill.

I think the buffalo business in now out of the breeding stage and into the production stage. The buffalo are selling a good prices.

DENNIS SWANSON; V.P. ND Buffalo Association, testified in support of this bill. See attached testimony.

BARB WICKEL; Executive Director of ND Buffalo Association, testified in support of this bill.

The hearing was closed.

Discussion was held.

SENATOR KLEIN moved for a DO PASS on this bill.

SENATOR NICHOLS seconded the motion.

Roll call vote: 5 Yeas, 0 No, 1 Absent and Not voting.

FISCAL NOTE

Requested by Legislative Council
01/16/2001

Bill/Resolution No.: SB 2214

Amendment to:

1A. **State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

	1999-2001 Biennium		2001-2003 Biennium		2003-2005 Biennium	
	General Fund	Other Funds	General Fund	Other Funds	General Fund	Other Funds
Revenues	$0	$0	$0	$0		
Expenditures	$0	$0	$1,000	$0	$1,000	
Appropriations	$0	$0	$0	$0	$0	

1B. **County, city, and school district fiscal effect:** *Identify the fiscal effect on the appropriate political subdivision.*

1999-2001 Biennium			2001-2003 Biennium			2003-2005 Biennium		
Counties	Cities	School Districts	Counties	Cities	School Districts	Counties	Cities	School Districts
$0	$0	$0	$0	$0	$0	$0	$0	$0

2. **Narrative:** *Identify the aspects of the measure which cause fiscal impact and include any comments relevant to your analysis.*

This bill would add one additional member to the State Board of Animal Health. Board members are paid $50 per meeting plus actual expenses.

3. **State fiscal effect detail:** *For information shown under state fiscal effect in 1A, please:*
   A. **Revenues:** *Explain the revenue amounts. Provide detail, when appropriate, for each revenue type and fund affected and any amounts included in the executive budget.*

None

   B. **Expenditures:** *Explain the expenditure amounts. Provide detail, when appropriate, for each agency, line item, and fund affected and the number of FTE positions affected.*

The Board has eight regular meetings per biennium. The members are paid $50 per meeting along with expenses. Expenses average $75 per meeting.

   C. **Appropriations:** *Explain the appropriation amounts. Provide detail, when appropriate, of the effect on the biennial appropriation for each agency and fund affected and any amounts included in the executive budget. Indicate the relationship between the amounts shown for expenditures and appropriations.*

An appropriation increase of $1000 is needed to cover the increased expenses to the Board of Animal Health line item in Department of Agricultures budget.

Name:	Jeff Weispfenning	**Agency:**	Agriculture
Phone Number:	328-4758	**Date Prepared:**	01/22/2001

PROPOSED AMENDMENT TO SENATE BILL 2214

Page 2, line 23 after "veterinarians," insert "by the North Dakota buffalo association for the individual representing the bison industry,"

Date: 1-26-01
Roll Call Vote #: 1

2001 SENATE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. 2214

Senate Agriculture Committee

☐ Subcommittee on _____
or
☐ Conference Committee

Legislative Council Amendment Number _____

Action Taken DO PASS - AMENDMENTS

Motion Made By SEN. KLEIN Seconded By SEN. NICHOLS

Senators	Yes	No	Senators	Yes	No
Senator Wanzek - Chairman	✓		Senator Kroeplin		
Senator Erbele - Vice Chairman	✓		Senator Nichols	✓	
Senator Klein	✓				
Senator Urlacher	✓				

Total (Yes) 5 No 0

Absent 1

Floor Assignment _____

If the vote is on an amendment, briefly indicate intent:

Date: 1-26-01
Roll Call Vote #: 2

2001 SENATE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. 2214

Senate Agriculture Committee

☐ Subcommittee on _____
or
☐ Conference Committee

Legislative Council Amendment Number 10478.0101

Action Taken DO PASS AS AMENDED

Motion Made By SEN. KLEIN Seconded By SEN. NICHOLS

Senators	Yes	No	Senators	Yes	No
Senator Wanzek - Chairman	✓		Senator Kroeplin		
Senator Erbele - Vice Chairman	✓		Senator Nichols	✓	
Senator Klein	✓				
Senator Urlacher	✓				

Total (Yes) 5 No 0

Absent 1

Floor Assignment SEN. ERBELE

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE (410)
January 30, 2001 8:14 a.m.

Module No: SR-16-1884
Carrier: Erbele
Insert LC: 10478.0101 Title: .0200

REPORT OF STANDING COMMITTEE

SB 2214: Agriculture Committee (Sen. Wanzek, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (5 YEAS, 0 NAYS, 1 ABSENT AND NOT VOTING). SB 2214 was placed on the Sixth order on the calendar.

Page 2, line 23, after "veterinarians" insert ", by the North Dakota buffalo association for the individual representing the bison industry"

Renumber accordingly

2001 HOUSE AGRICULTURE

SB 2214

2001 HOUSE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. SB 2214

House Agriculture Committee

☐ Conference Committee

Hearing Date 3--1--01

Tape Number	Side A	Side B	Meter #
THREE	A		3180 TO 4440
Committee Clerk Signature			

Minutes:

1A: 3180 CHAIRMAN NICHOLAS: We will open the hearing on SB 2214.

We take testimony on SB 2214

Representative Johnson: Dist 12. North Central ND What we have here today. We want to increase the numbers on the board from seven to eight. Economic impact of Bison in ND. We have a Bison processing plant in New Rockford expanded over the years. This industry has grown so much in the past years that I think it is time that we look at legislation that helps.

DENNIS SWANSON: I raise buffalo and farm in New Rockford. I am vice president of the N.D. BUFFALO ASSOCIATION. I am here to offer support of SB 2214. Printed testimony. please listen: The Bison production direct impact to ND is $6,400,000.00 million dollars. The direct impact is about 22 million dollars last year. Secondary impact if you want to look at it totals almost 70 million dollars. That is a impressive number. Currently Bison industry employees 750 full time jobs. For every 30 Bison one job is created in ND. We are similar to

beef but because of disease affecting cattle and bison differently, that is why we think we should have a member on this board. We request you consideration as to giving us recognition. I urge a DO PASS ON 2214

CHAIRMAN NICHOLAS: Any other questions committee members?

KOPPANO: What are you doing in the market area. You were practically overproducing at one time.

DENNIS SWANSON: Two years ago. The producers agreed to a marketing arm and we do have a national sales staff with four regional sales directors. We anticipate seeing results from that. We have had a couple of real good months recently. It appears that sales are catching up to slaughter rates. We anticipate that to continue. Marketing is a big issue.

CHAIRMAN NICHOLAS: Anyone else wishing to offer support for this Bill. Any opposition.

WE WILL CLOSE THE HEARING ON SB 2214 1A:4440

2001 HOUSE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. SB 2214

House Agriculture Committee

☐ Conference Committee

Hearing Date 3--1--01

Tape Number	Side A	Side B	Meter #
FOUR	A		4900 TO END
Committee Clerk Signature	Edward D Ellison		

Minutes:

CHAIRMAN NICHOLAS: We will open hearing on SB 2214.

O.K. what is the committees thoughts on SB 2214.

REPRESENTATIVE MUELLER MOVE FOR A DO PASS, REPRESENTATIVE PIETSCH SECONDED THE MOTION.

REPRESENTATIVE NICHOLAS: IS THERE ANY MORE DISCUSSION? THE CLERK WILL TAKE THE ROLL.

THERE WERE ''''15 YES'''''0 NO'''''0 ABSENT''''''

CHAIRMAN NICHOLAS CLOSE THE HEARING ON SB 2214.

1st 5902

3-1-01

Date:
Roll Call Vote #:

2001 HOUSE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. SB 2214

House AGRICULTURE Committee

☐ Subcommittee on

or

☐ Conference Committee

Legislative Council Amendment Number

Action Taken DO PASS

Motion Made By Murphy Seconded By Pietsch

Representatives	Yes	No	Representatives	Yes	No
Eugene Nicholas, Chairman	✓		Rod Froelich	✓	
Dennis E. Johnson - Vice Chairman	✓		Doug Lemieux	✓	
Rick Berg	✓		Philip Mueller	✓	
Michael Brandenburg	✓		Kenton Onstad	✓	
Joyce Kingsbury	✓		Sally M. Slandvig	✓	
Myron Koppang	✓		Dennis J. Renner	✓	
Edward H. Lloyd	✓		Dwight Wrangham	✓	
Bill Pietsch	✓				

Total (Yes) 15 No 0

Absent 0

Floor Assignment REP KOPPANG

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE (410)
March 1, 2001 3:55 p.m.

Module No: HR-35-4645
Carrier: Koppang
Insert LC: . Title: .

REPORT OF STANDING COMMITTEE

SB 2214: Agriculture Committee (Rep. Nicholas, Chairman) recommends **DO PASS** (15 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). SB 2214 was placed on the Fourteenth order on the calendar.

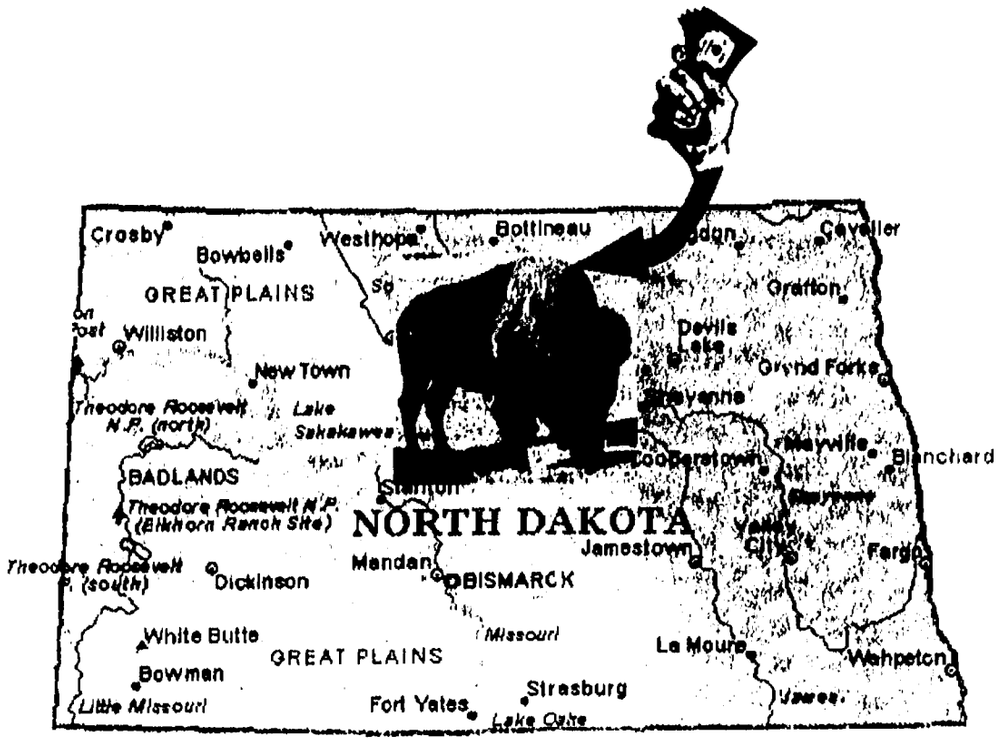
2001 TESTIMONY

SB 2214

Agricultural Economics Report No. 442-S June 2000

Contribution of the Bison Industry to the North Dakota Economy

Randall S. Sell, Dean A. Bangsund, and F. Larry Leistritz*



INTRODUCTION

Throughout North Dakota's history, agriculture has been an important sector of the economy. Although the relative contribution of the agriculture sector has declined in recent years, it remains the largest component of North Dakota's economic base (Coon and Leistritz 1998). Most people who are familiar with the state understand the importance of agriculture to the area. However, the relationship of various activities within agriculture and the relative importance of those industries continues to undergo fundamental changes - even within just a few years. For example, the North Dakota bison industry is now a commercially viable agriculture industry,

*Sell and Bangsund are research scientists and Leistritz is a professor, Department of Agricultural Economics, North Dakota State University, Fargo.

which was hardly the situation just 10 years ago.

The North American bison[1] has come full circle from just a few decades ago. The number of native bison left in the United States was estimated to be less than 1,500 head in the late 1800s (National Bison Association 2000). Currently, the number of bison in the United States has been estimated at 350,000 (National Bison Association 2000). In 1998, there were more than 20,000 head of bison in North Dakota (North Dakota Buffalo Association 1999b).

A producer-owned processing facility, which became operational in 1994, was a major factor in the development of the bison industry in North Dakota (Leistritz and Sell 2000). Prior to the construction of that facility, much of the production of bison in the state was of a hobby farm nature. Since the facility opened, bison production has become a viable, commercial industry. The facility has more than doubled its original capacity, and plans to build another processing facility are pending (Leistritz and Sell 2000).

The objective of this study is to estimate the economic contribution that the bison industry makes to the North Dakota economy. The economic contribution will be measured in terms of personal income, retail trade volume, total business activity, secondary employment, and selected state tax revenues. The bison industry, as defined in this study, includes production and slaughter/processing activities within the state.

PROCEDURES

Analysis of impacts associated with the bison industry required several steps. Discussion of the procedures used in the study was divided into the following sections: 1) bison production, 2) bison processing, and 3) input-output analysis.

Bison Production

Commercial bison production is a relatively new industry to North Dakota's agricultural sector. The United States Department of Agriculture - National Agricultural Statistics Service, which is responsible for collecting data on production and prices for agricultural commodities, does not collect production and price information for the bison industry. Cost and return budgets are available for bison producers from Alberta Agriculture, Food and Rural Development (1999) and Metzger and Anderson (1998).

On-farm visits and personal interviews were conducted to develop a questionnaire which would be useful for developing the economic contribution analysis and be relatively simple to complete by the individual producers. All North Dakota members of the North Dakota Buffalo Association (NDBA) were mailed a one-page questionnaire which asked about their basic operation and whether they would be interested in completing a cost of production/economic contribution questionnaire. Of the 186 members, 87 (47 %) returned the one-page questionnaire. Of the respondents who returned the initial questionnaire, 50 respondents (57 %) agreed to complete a longer, more detailed questionnaire. Of the 50 respondents who initially agreed to complete the second

[1] The American Buffalo is not a true buffalo. Bison is the proper scientific name, and it belongs to the Bovine family of mammals, as do domestic cattle. The National Bison Association encourages the use of the term 'Bison' to differentiate the American Buffalo from the Asian Water Buffalo and African Cape Buffalo.

questionnaire, 18 returned completed questionnaires (36 % of those who agreed to complete the survey).

The questionnaire asked respondents to provide the income and expenses generated by their bison enterprise. The questionnaire required information on revenues by type of animal sold and estimates of revenue from other sources (e.g., sale of hides, skulls, cooperative dividends). The respondents were asked to indicate the amount of the expenses by category and the percentage of each expense category which occurred within state versus out-of-state. An estimate of in-state expenditures was necessary so that an estimate of total direct impact within North Dakota could be calculated. In addition, producers were asked to provide some basic production coefficients related to their bison herd's performance. A more detailed breakdown of the expenditures for bison cow-calf and bison finishing can be found in the full report.

Bison Processing

There were five USDA inspected and approved bison processing plants in North Dakota in 1997 (National Bison Association 2000). Of these facilities, only one buys and markets bison meat products on a commercial scale. This processing plant is located just south of New Rockford, North Dakota. The processing facility operates as a closed cooperative and was formed in 1993 by a group of bison ranchers whose goal was to build and operate a modern, efficient processing plant. To determine the direct economic impact of the processing plant on North Dakota's economy, the processing plant was asked to provide a breakdown of operating expenditures within the state.

A questionnaire was provided to the bison processing facility which asked for the total operating budget for 1998. The respondent was then asked to indicate the percentage of the operating budget for each expenditure category and the percentage of each item which occurred within state versus out-of-state.

Input-Output Analysis

Economic activity from a project, program, or policy can be categorized into direct and secondary impacts. Direct impacts are those changes in output, employment, or income that represent the initial or direct effects of the project, program, or event. Secondary impacts (sometimes further categorized into indirect and induced effects) result from subsequent rounds of spending and respending within an economy. This process of spending and respending is sometimes referred to as the multiplier process, and the resultant secondary effects are sometimes called the multiplier effects (Leistritz and Murdock 1981). Input-output (I-O) analysis is a programming tool that delineates linkages among sectors of an economy and calculates the resultant total business activity resulting from a direct impact in a basic sector (Coon et al. 1985). The North Dakota I-O Model has 17 economic sectors, is closed with respect to households (households are included within the model), and was developed from primary (survey) data from firms and households in North Dakota. An economic sector is a group of similar economic units (e.g., communications and public utilities, retail trade, construction).

The process of spending and respending can be explained by an example. A single dollar from an area farmer (**Households** sector) may be spent for a buffalo roast at a local store (**Retail Trade** sector); the store uses part of that dollar to

pay for the next shipment of meat (**Transportation** and **Agricultural Processing** sectors) and part to pay the store employee (**Households** sector) who shelved or sold the roast; the meat supplier uses part of that dollar to pay for the animals from which the roasts are made (**Agricultural-Livestock** sector) ... and so on.

ECONOMIC IMPACTS

The economic contribution from the bison industry was estimated from production and processing activities occurring within the state. Expenditures and returns from these activities represent direct economic impacts. The direct impacts were used with the North Dakota I-O Model to estimate the secondary impacts. This section is divided into four major sections: 1) direct impacts, 2) secondary impacts, 3) tax revenue, and 4) total economic impacts.

Direct Impacts

Direct impacts are those changes in output, employment, or income that represent the initial or direct effects of a program, project, or activity. The direct impacts from the bison industry on North Dakota's economy are represented by 1) expenditures and returns from bison production (cow-calf and finishing) and 2) expenditures and returns from bison processing. The following section describes these direct impacts.

Bison Production

Bison producers generate direct economic impacts to North Dakota's economy through their expenditures for production outlays (e.g., feedstuffs, fuel, supplies, fencing materials, interest, equipment) and returns to unpaid labor, management, and equity (i.e., money used to pay family living expenses or for reinvestment in the business). The direct economic impacts for the bison industry were estimated using the bison cow-calf and finishing budgets developed from survey data, combined with the North Dakota bison inventory determined by the NDBA.

The number of bison breeding animals was 16,395 head, composed of 15,337 female animals and 1,058 breeding males. An additional 6,499 head of slaughter males results in a total of 22,894 bison in North Dakota in January 1999.[2]

In-state production outlays were handled as direct impacts generated by the bison producers in North Dakota. Cash and non-cash expenses from bison cow-calf and finishing were considered as direct impacts. Returns to unpaid labor, management, and equity were considered direct impacts even though they did not represent a cash outlay. Net returns were considered retained by the producer and eventually result in personal or business expenditures.

Bison Cow-Calf

Bison producers generate direct economic impacts to the area economy through 1) direct expenditures for production outlays and 2) net returns. Direct economic impacts from bison cow-calf production were estimated by using the survey of NDBA members to develop a bison cow-calf production budget. The bison production budget contained estimated revenue, variable and fixed costs, and returns to unpaid labor, management, and equity (Table 1). Gross revenue per head was estimated by dividing the total revenue for the herd by the number of breeding animals. The number of animals in the breeding herd was the average of the

[2] Bison which are not privately owned, primarily those within the Theodore Roosevelt National Park, were not included within this analysis.

beginning and ending inventory of brood cows, breeding bulls, and replacement females. Variable and fixed expenses were estimated from the completed questionnaires. Returns to unpaid owner labor, management, and equity were defined as the difference between revenue and production expenses.

Total direct impacts resulting from bison production would equal gross revenue per head, providing all economic activity (production expenses and returns to unpaid labor, management, and equity) remained in the North Dakota economy. Survey results of North Dakota bison cow-calf producers revealed that a small amount of production expenses were paid to out-of-state sources and as such result in a slight economic leakage from the state.

Gross revenue per breeding animal in 1998 was $814 per head. Total production expenditures were $555 per head, of which more than 95 percent or $529 per head occurred in North Dakota. Returns to unpaid labor, management and equity represented the difference between gross revenue and total expenditures or $259 per head. Total in-state direct impact per breeding animal was $788. Total in-state direct impact was slightly less than $13 million.

Table 1. North Dakota Bison Cow-calf Enterprise Budget per Head of Breeding Animals, 1998

Gross Sales/Breeding Animal [1]	$814.47	
	Total Cost/ breeding animal	In-State Cost/ breeding animal
Total Feed and Pasture Costs	$236.05	$233.05
Total Other Direct Costs	243.45	221.95
Total Equipment Costs	75.65	73.54
Total Cost	$555.15	$528.54
Contribution to unpaid labor, management, and equity	$259.32	$259.32
Total Direct Impact	$814.47	$787.86

[1] Gross sales = (cull cow income+cull bull income+bull calf income+heifer calf income+other income). No depreciation expense was calculated per breeding animal since revenue and expenses associated with replacement animals was included within the budget. Breeding animal = (beginning brood cow inventory + beginning breeding bulls+beginning replacement females inventory)/2+(ending brood cow inventory+ending breeding bull inventory+ending replacement female inventory)/2

Bison Finishing

Similar to the bison cow-calf producers, bison producers who are involved in the finishing phase of the production schedule generate direct impacts to the area economy through operating expenditures and returns to unpaid labor, management, and equity. Direct economic impacts from bison finishing were estimated from the survey of NDBA members. The bison finishing budget contained estimated revenue, variable and fixed costs, and returns to unpaid labor, management, and equity (Table 2). Gross revenue per head was estimated by dividing the total revenue for the finishing enterprise by the average number of bison in the finishing herd (i.e., an average of the beginning and ending inventory of finishing animals plus the number of purchased animals). Variable and fixed expenses were estimated from completed questionnaires. Returns to unpaid owner labor, management, and equity were defined as the difference between revenue and production expenses.

Total direct impacts resulting from bison finishing would equal the additional gross revenue per head, providing all economic activity (production expenses and returns to unpaid labor, management, and equity) remained in the North Dakota economy. Survey results of North Dakota bison finishing producers revealed that a small amount of production expenses were paid to out-of-state sources and as such result in a slight economic leakage from the state.

Gross revenue per finishing animal in 1998 was $1,289 per head. Total production expenditures were $276 per head, of which more than 98 percent or $271 per head occurred in North Dakota. The original value of the finishing animal, as transferred from the cow-calf enterprise, was $740. This was the average bull calf selling price in the fall of 1998 (North Dakota Buffalo Association 1999a). Returns to unpaid labor, management and equity for the finishing phase of bison production represented the difference between total expenditures, the original value of the animal, and gross revenue, or $272 per head. The additional in-state direct impact per finishing animal was $543. Total direct impact for bison finishing in the state was $3.5 million.

Table 2. North Dakota Bison Finishing Enterprise Budget per Head of Finishing Animals, 1998

Gross sales/finishing animal [1]	$1,288.65	
	Total Cost/ finishing animal	In-State Cost/ finishing animal
Total Feed Costs	$181.73	$180.11
Total Other Direct Costs	66.53	64.23
Total Equipment Costs	28.01	26.35
Total Cost	$276.27	$270.69
Average purchase price of bull calves in 1998 [2]	$740.00	$740.00
Contribution to unpaid labor, management, and equity	$272.38	$272.38
Total Direct Impact [3]	$548.65	$543.07

[1] Gross sales formula = (gross sales of finished animals+ cooperative dividends+other income): Number of finishing = (beginning finishing bulls inventory + ending finishing bulls inventory)/2

[2] 1998 Fall Consignment Sale Bull calf average price on 100 head (North Dakota Buffalo Association 1999a).

[3] Total direct impact = gross revenue less purchase price (value) less out-of-state expenditures.

The total direct impact of bison cow-calf enterprise combined with bison finishing for North Dakota in 1998 was $16.4 million (Table 3).

Bison Processing

The bison processing facility impacts the North Dakota economy through its expenditures for production (i.e., finished bulls) and processing inputs, labor, and investment in facilities and capital. Total cash expenditures by the processing cooperative in 1998 were $10 million. The majority of the operational expenditures were for animals to be processed, $7.9 million. Approximately 54 percent of the bison processed in the state were purchased from members located within North Dakota; the remainder was purchased from members not located in North Dakota. The total direct impact in North Dakota from processing bison was $6.4 million (Table 3).

Secondary Impacts

The secondary impacts of the bison production in North Dakota were estimated using the North Dakota I-O Model. Total direct impacts of $16.4 million generated about $34 million in secondary impact to the state. Secondary impacts were greatest in the **Households** sector ($11.3 million) followed closely by the **Retail Trade** sector ($10.6 million). Total economic impacts from bison production were $50 million and included indirect support for about 546 full-time equivalent (FTE) jobs. Secondary jobs represent employment outside of activities and services directly involved with bison production, but employment that is dependent on the existence of those activities.

Bison processing expenditures were allocated to the various economic sectors within the North Dakota I-O Model. Total in-state direct impacts from processing were $6.4 million, which generated $13.4 million in secondary impacts. The greatest secondary impact from the processing activities was $4.6 million in the **Retail Trade** sector followed by $3.9 million in the **Households** sector and $ 1.0 million in the **Finance, Insurance, and Real Estate** (FIRE) sector. Secondary FTE jobs resulting from bison processing activities were 211.

Tax Revenues

Input-output analysis was used to estimate personal income, retail trade and other business activity, which in turn was used to estimate tax revenue. Estimated tax revenue generated by the bison industry in the state included $0.8 million in sales and use taxes, $0.3 million in personal income taxes, and $0.4 million in corporate income taxes annually. Bison production was also directly responsible for about $2.5 million in property taxes annually. When property tax collections and revenues from sales and use tax, individual income tax, and corporate income taxes are considered, the bison industry generates about $4 million annually in tax revenues to the state of North Dakota.

Table 3. Annual Direct Impacts of the Bison Industry to the North Dakota Economy, by Economic Sector, and Industry Activity, 1998

Economic Sectors	Total Direct Impacts by Industry Activity		
	Production	Processing	Total
	---------- 000's $ ----------		
Ag-crops	4,730	0	4,730
Construction	0	100	100
Transportation	29	200	229
Comm and public utilities	225	100	325
Retail trade	2,978	200	3,178
FIRE	1,273	500	1,773
Bus & Pers Serv	193	0	193
Prof and Soc Serv	28	0	28
Households	6,587	5,345	11,932
Government	404	0	404
Total Direct Impacts	16,447	6,445	22,892

Table 4. Annual Total (Direct and Secondary) Impacts of the Bison Industry to the North Dakota Economy, by Economic Sector, and Industry Activity, 1998

Economic Sectors	Total Economic Impacts by Industry Activity		
	Production	Processing	Total
	---------- 000's $ ----------		
Ag-livestock	1,172	425	1,597
Ag-crops	5,490	173	5,663
Nonmetal mining	85	39	124
Construction	1,196	648	1,844
Transportation	196	262	458
Comm and public utilities	1,691	773	2,464
Ag proc and misc mnfg	1,273	277	1,550
Retail trade	13,623	4,767	18,390
FIRE	3,580	1,525	5,105
Bus & Pers Serv	1,091	381	1,472
Prof and Soc Serv	1,191	591	1,782
Households	17,887	9,277	27,164
Government	1,869	706	2,575
Total Economic Impacts	50,344	19,844	70,188
Secondary Employment	546	211	757
Share of Total Economic Activity	72 %	28%	

The annual total (direct and secondary) economic contribution from bison production expenditures and returns was $50.3 million (Table 4). Bison processing generated an additional $20 million in annual economic impacts. The entire bison industry generated $70.2 million in business activity in North Dakota in 1998. Bison production activities represented nearly three-fourths of all economic activity created by the industry.

Secondary employment estimates represent the number of full-time jobs generated based upon the volume of business activity created by the industry. The bison industry in North Dakota in 1998 indirectly supported 757 FTE secondary jobs (Table 4).

The economic sectors with the greatest overall impacts were **Households** ($27 million), **Retail Trade** ($18 million), **Agricultural-crops** ($5.6 million), and **FIRE** ($5.1 million). The top two sectors represented more than 60 percent of the total economic impact.

CONCLUSIONS

A survey was mailed to all members of the North Dakota Buffalo Association. Those members who indicated they would be interested in completing an economic contribution questionnaire were surveyed. This survey was used to estimate the in-state economic contribution from bison cow-calf production and bison finishing. The bison processing facility provided in-state expenditures and returns for 1998 operations, which allowed estimates to be developed for bison processing occurring in North Dakota. The direct impact of production and processing of bison in North Dakota in 1998 was estimated at $23 million. The $23 million in direct impacts, based upon the North Dakota I-O Model, generated an additional $47 million in secondary impacts within the state. The North Dakota bison industry supported a total of 757 secondary FTE jobs within the state. Total economic activity generated within the state was estimated at $70 million, including $27 million in personal income and $18 million in retail sales. In addition, the bison industry generated $4 million in tax revenue (including property, personal income, sales & use, and corporate income taxes).

Every head of bison in the state generated an average total economic impact of $3,100 (direct and secondary impacts of production and processing). Every head of bison in North Dakota in 1998 contributed about $184 to state and local government tax collections. Furthermore, for every 30 bison in the state an additional secondary FTE job was supported.

The bison industry has become a major livestock sector within North Dakota. A comparison of North Dakota bison production to other North Dakota livestock industries reveals that, in terms of farm receipts in 1998, the bison industry ranks fourth below beef, dairy, and swine, but above poultry, and sheep and lambs. Furthermore, the bison industry is continuing to expand production, as evidenced by the use of female animals. Most females are more valuable as brood stock than for processing, as such they are currently being sold as breeding stock.

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NOTICE:

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How to Obtain Additional Information

This document is a summary of a more comprehensive report which contains additional information. Additional copies of this summary and single copies of the main report, Economic Contribution of Bison Industry to the North Dakota Economy are available free of charge. Please address your inquiry to Carol Jensen, Department of Agricultural Economics, P.O. Box 5636, North Dakota State University, Fargo, ND 58105-5636, (Phone 701-231-7441, Fax 701-231-7400), E-mail: cjensen@ndsuext.nodak.edu or these documents are available on the world wide web at http://agecon.lib.umn.edu/ndsu.html

Economic Impact of Bison in North Dakota

- Completed 6-2000 by NDSU, Randall Sell, Dean Bangsund and Professor Larry Leistritz
- Impact Statement included Cow/calf, bison finishing and bison processing budgets
- 1999 NDBA Bison Census shows 22894 bison in ND
  15,337 Brood cows, 1058 Breeding males, 6499 slaughter animals
- Gross Revenue = $814.00 per head Expenditures = $529.00 per head
  Net returns = $259.00 per head
- Direct Impact from cow/calf enterprises was approximately 13 Million
- Gross revenues for bison finishing were $1289.00 per head Total production expenses were $271.00 per head with net returns per animal of $272.00 per animal with the original value of the finishing animal being $740.00
- Total Direct Impact for Bison finishing was $3.5 million
- The North American Bison Cooperative at New Rockford accounts for the largest percentage of the impact from processing bison in ND
- NABC's cash expenditures last year were approximately $10 million
- 54 % of the bison processed were from ND or a direct economic impact of $6.4 Million
- Total Direct Impacts including production and processing = $23 Million
- Total Secondary Impacts from production and processing = $70 million, with income to households at $27 million, retail trade impacts at $18 million and over $4 million in local and government tax collections
- The bison industry supports a total of 757 full time jobs
- For every 30 bison in ND another secondary FTE job is created
- The Bison industry has become a major livestock sector within ND
- Bison ranks fourth below beef, dairy and swine, but above poultry and sheep and lambs.
- The Bison industry continues to expand and the potential for growth in ND is very optimistic
- Bison, though similar to beef, are susceptible to diseases that cattle have more resistance to and different health issues arise in Bison production. As a growing industry with a significant impact to ND's economy the members of the North Dakota Buffalo Association request that consideration be given in order that a representative of the Bison industry have a seat on the State Board of Animal Health.

Testimony of Dennis Swanson

North Dakota Buffalo Association

Senate Bill 2214

House Agriculture Committee

Peace Garden Room

March 1, 2001

Chairman Nicholas, members of the committee, my name is Dennis Swanson, I raise buffalo and farm in New Rockford and serve as the vice president of the North Dakota Buffalo Association. I am here to offer support for SB 2214, which adds a representative from the buffalo industry to the State Board of Animal Health.

Included with my testimony is an NDSU commissioned economic impact study done on the bison industry within North Dakota. I would like to briefly discuss the highlights of this study (please see included page).

As you can see, bison do have a significant impact on the state of North Dakota as well as the individual ranchers who are directly involved with the production and marketing of bison. Bison, though similar to beef, are susceptible to diseases that cattle have more resistance to and different health issues do arise in bison production.

The members of the North Dakota Buffalo Association request that consideration be given in order that a representative of the Bison industry have a seat on the State Board of Animal Health. The NDBA believes representation on the state board of animal health by a member of the bison industry will add needed input on issues relative to bison that are different than issues affecting current classes of livestock represented on this board.

Chairman Nicholas and committee members, I urge a do pass on SB 2214. I would be happy to answer any questions you may have. Also, Dr. Larry Schuler is here from the State Board of Animal Health and has indicated his willingness to address any questions you may have of the board itself.