

SECTION 319
NONPOINT SOURCE CONTROL PROGRAM
BOOTSTRAPS NATURAL RESOURCES INVENTORY
AND COORDINATION PROJECT FINAL REPORT

SOUTH DAKOTA NONPOINT SOURCE PROJECT
Grant #C9998185-97

SOUTH DAKOTA ASSOCIATION OF
CONSERVATION DISTRICTS, INC.

DECEMBER 2002

This project was conducted in cooperation with the State of South Dakota and
the United States Environmental Protection Agency, Region VIII

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EXECUTIVE SUMMARY

PROJECT TITLE: BOOTSTRAPS NATURAL RESOURCES INVENTORY AND
COORDINATION PROJECT

PROJECT START DATE: 03/21/1997 PROJECT COMPLETION DATE: 12/31/2002

FUNDING:	TOTAL PROJECT BUDGET	\$819,020.00
	TOTAL EPA GRANT	306,706.00
	TOTAL EXPENDITURES OF EPA FUNDS	306,706.00
	TOTAL SECTION 319 MATCH ACCRUED	285,356.23
	TOTAL EXPENDITURES	592,116.23

The Bootstraps Program was developed during the late 1980s – early 1990s as a grass-roots strategy to address community needs linked to the economic challenges confronting agricultural operations during that time period. The implementation plan for this grant was designed to:

Expand the use of Bootstraps, a holistic resource management strategy for sustainable agriculture, as an effective practice for the protection and improvement of water quality.

To attain the goal:

- an interagency council was formed to coordinate completion of the project
- assistance was provided for:
 - the formation and operation of new Bootstraps groups
 - completion of natural resource inventories
 - development and implementation of farm/ranch resource management plans
- monitoring and evaluation activities were completed to:
 - track project progress
 - identify project changes needed to attain the goal
 - document effectiveness of Bootstraps as a holistic resource management strategy and water quality protection and improvement practice.

Fourteen Bootstraps groups made up of farm/ranch families from nearly 260 operations were formed during the project. The operations encompass over 1.2 million total acres. The participation level increased total Bootstraps involvement to approximately 385 families who manage over 1.5 million acres.

The program participants:

- attended over 200 classroom sessions, workshops and field days to gain the skills needed to develop resource management plans for their operations
- completed resource inventories of 357,010 acres

- received assistance for the development and implementation of management plans for over 1.2 million acres.

Monitoring and evaluation activities completed during and at the end of the project found that:

- training provided improved producer and assistance provider management plan development and implementation capacity
- resource management plans developed are
 - being implemented
 - the basis for creating a sustainable operation
- based on an evaluation of plan implementation, the best management practices identified in the plans are
 - being implemented as financial resources become available
 - improving the overall environmental health of the range and pasture lands
- project participants feel strongly that the program should be continued.

Project activities completed are described in the report that follows. Additional information about the Bootstraps is available by visiting: <http://www.sdconservation.org/local/index.html>

INTRODUCTION

INTRODUCTION

Bootstraps was developed during 1988-90 by a group of community leaders from south central South Dakota. The program was the result of the innovation and the dedication of community leaders who analyzed the challenges facing not only their profitability, but also their community and their families.

To address the challenges, a plan was developed by working with several agencies. The program partners structured the program around the premise that a sustainable operation results when good resource conservation practices are followed. Because most of the operations in the original Bootstraps area were primarily ranches, the leaders recognized that

- quality animals and animal products were their most basic commodity,
- they had to find a way to assure some kind of continuity in farm/ranch ownership from one generation to the next,
- families needed to hold their operations together economically, as no family can remain on the land for long without profit,
- none of these efforts would succeed, however, without better family communication and goal setting.

The program founders selected a six-step approach to achieve their goals of conserving their families, community, and natural resources. The six steps are a continuous process rather than a short-term training program. Each step involves not only finding the right kind of outside help, but also developing an adult education program that would enhance each family's own abilities to utilize that help.

The six steps are:

1. Inventory financial, livestock, and natural resources of each participating ranch. Family skills were to be considered as one of those resources.
2. Develop family goals and commit them to paper.
3. Develop a long-range operational plan for each ranch that reflects family goals from step 2.
4. Strengthen family members' skills in areas such as record keeping and communication.
5. Monitor each family's progress and find out what worked and what didn't.
6. Re-plan.

Bootstraps groups addressed existing or potential water quality problems, including:

- riparian areas
- surface and ground water resources
- wellhead contamination
- drinking water quality.

This project was designed to expand upon past successful experiences by assisting other Bootstraps groups in developing the tools necessary to address water quality issues. The goal selected to accomplish this was:

Expand the use of Bootstraps, a holistic resource management strategy for sustainable agriculture, as an effective practice for the protection and improvement of water quality.

Tasks identified to attain the goal were:

1. Organize a coordinating council to guide Bootstraps development on a long term basis.
2. Assist producers with initiation of Bootstraps groups.
3. Implement Bootstraps groups.
4. Develop and implement farm/ranch resource management plans.
5. Provide long-range monitoring, evaluation and reporting.

During the first project year (May 1998), the addition of a sixth task to the work plan was requested and approved in response to needs identified by program participants. Task six provided the financial resources needed to purchase educational materials and fund informational workshops needed to implement the management plans developed. Funding for Task six was made available by reducing the 319 budget for Task 3 by \$50,000.

Additional revisions were made to the work plan during December of 1999, April of 2000, June of 2001, and December of 2001. The revisions extended the project period through June 30, 2000; June 30, 2001; December 31, 2001; and December 31, 2002, respectively. The project period extensions were necessary to complete resource assessments and companion management plans and facilitate completion of additional project evaluation activities.

A descriptive summary of the activities completed during the project period appears in the Project Goals, Objectives and Activities section of this report.

The grant closed with \$306,760.00 in total expenditures. Cash and in-kind contributions provided by local project partners during the grant period totaled \$285,356.23. A comparison of planned versus actual expenditures and local contributions appears in the Project Budget section of this report.

SUMMARY OF PROJECT ACCOMPLISHMENTS

PROJECT GOALS, OBJECTIVES and ACTIVITIES

Descriptive summaries of the activities completed to attain the project goal are presented in this report section. The summaries are arranged by work plan objective and task. The summary for each activity includes information about:

- milestones
- outputs
- partnerships/participation
- distribution of items produced or reports prepared.

Copies of items produced or a final report as appropriate for each activity described have been provided to DENR.

GOAL:

Expand the use of Bootstraps, a holistic resource management strategy for sustainable agriculture, as an effective practice for the protection and improvement of water quality.

Objective 1.

Provide for the organization and operation of Bootstraps groups based on the interest identified through the local conservation districts, county Extension offices, and the Lower James RC&D Pollution Prevention Incentives Strategies Grant funded in part by the US EPA through the South Dakota DENR.

Initiated 03/21/1997

Complete 12/31/2002

Task 1. Organize a Coordinating Council to guide Bootstraps development on a long-term basis.

Initiated 03/21/1997

Complete 09/05/1997

Product 1. Coordinating Council.

319 Budget: \$19,260

Expended: \$17,494.76

Match: \$0.00

A project coordinating council was formed to:

- coordinate and manage implementation of the project workplan
- develop guidelines for providing financial and technical assistance to local groups
- review applications for technical assistance for natural resource inventories
- reach consensus relative to the best course of action to follow.

Agencies and groups represented on the council include the SD Departments of Agriculture and Environment and Natural Resources, South Dakota State University-

Cooperative Extension Service (SD-CES), USDA-Natural Resources Conservation Service (NRCS), Resource Conservation and Development Councils (RC&D), and SD Association of Conservation Districts. The council developed guidelines for providing financial and technical assistance to local groups. During 1999, the SD Grasslands Coalition was invited to advise the council to bolster cooperation and coordination between the Coalition and Bootstraps groups. See Tasks 2 and 4 of this report for information about the Coalition's project related activities.

The council held quarterly meetings the first two years of the project and then annually thereafter. Between meetings, the council met informally via e-mail and conference call .

The council reviewed project accomplishments versus the work plan milestones at each meeting. Following the review conducted during its last meeting, the council developed a plan to complete the project by the December 31, 2002, project grant expiration date.

The culminating activity selected was a seminar for project participants at the 2002 South Dakota Ag Horizons Conference. The Bootstraps segment of the conference included educational workshops on topics chosen by participants and an open forum to discuss the future of the program. Bootstraps program participants were offered scholarships to encourage attendance.

Task 2. Assist local producers with initiation of Bootstraps groups.

Initiated 03/21/1997

Complete 10/15/2001

Product 1. Organized Bootstraps groups (20).

319 Budget: \$0

Expended: \$0

Match: \$0

Fourteen Bootstraps groups were formed during the project. Organizational assistance was provided through RC&Ds, conservation districts, the extension service and the SD Grasslands Coalition. Five of the groups were county-based, one each in Hyde-Hand, Jackson, and Bennett counties and two groups in Brule-Lyman counties. The remaining groups were subgroups of the Western Dakota Bootstraps group. At the end of the project, there was interest in forming three additional groups (Faulk County, Charles Mix County and northwestern SD.)

To bolster awareness of and participation in the program, Bootstraps information was distributed to persons who visited the *Managing Manure for Profit and the Environment* exhibit at DakotaFest 1999, 2000 and 2001. Portions of the exhibit were also set up at the 2000 SD Cattlemen's Convention and SD Pork Producers' Council Exposition. The exhibit was selected by EPA Region VIII for a 2000 Environmental Achievement Award. The 2001 exhibit integrated the Core 4 Conservation strategy practices into the exhibit's message. US Secretary of Agriculture and Representative John Thune used the 2001 exhibit as the location for a press conference and meeting with agricultural organizations.

Task 3. Implement Bootstraps groups.

Initiated: 03/21/1997

Completed 12/31/2002

Product 1. Classroom and field experiences to provide a knowledge base in goal setting, record keeping, management and natural resources sciences.

319 Budget: \$0

Expended: \$0

Match: \$40,030.95

Fourteen Bootstraps groups were provided assistance for the completion of classroom and field experiences, natural resource inventories, and management plans. The fourteen groups assisted were: Western Dakota (10 subgroups), Kirley, Jackson, Hyde-Hand, and Bennett. The ten Western Dakota subgroups were: West Pennington, Badlands, Lawrence, Tri-County #1, North Meade, Fall River, Elk Creek, Custer, Butte, South Meade.

The Western Dakota Bootstraps Group formed a steering committee to coordinate subgroup activities. The steering committee, formed during the latter part of 1997, held regular meetings to coordinate programs and maximize the use of financial and technical assistance resources available from several sources. The group published a project bulletin with the assistance of the Black Hills RC&D. An edition of the bulletin is appended (Appendix A.)

A partial list of the natural resources management topics covered during the over 200 classroom sessions, workshops and field days organized/attended by the group members includes:

- goal setting
- record keeping
- natural resources inventories
- soils
- range management
- plant identification
- weed control
- fecal monitoring as an indicator of forage quality

Other topics covered include:

- marketing
- financial management
- herd health
- cow-calf handling

Product 2. A completed natural resource inventory for each group participant to serve as a basis to subsequent management planning.

319 Budget: \$118,000

Expended: \$136,092.80

Match: \$160,123.82

Bootstraps groups applied to the coordinating council for financial and technical assistance to complete resource inventories for individual operators. An example of the application used by the council to evaluate requests from local groups for resource inventories appears in Appendix B. After an application was approved, the council matched a contractual range consultant with the group.

The consultants worked with the 79 ranchers (Table 1) to complete natural resource inventories of 357,010 acres. The inventory process involved three steps

1. review operation goals and objectives
2. inventory the natural resources
3. identify management options.

Resource inventories and development of management plan criteria were completed using NRCS criteria. The procedures used are outlined in *the USDA Natural Resources Conservation Service National Planning Procedures Handbook, National Pasture and Rangeland Handbook, and South Dakota Technical Guide*. Nonpoint source pollution related parameters determined during the inventories included:

- range condition
- pasture suitability
- erosion potential.

For information about the criteria and procedures visit the Service’s electronic field office technical guide (eFOTG) at <http://www.sd.nrcs.usda.gov/>

The information provided planners the basis for determining the

- environmental health of management units
- upland impacts on water resources
- development of resource management plans to address the impacts (see Task 4, Product 1).

Table 1. Natural Resource Inventories Completed by Bootstraps Project

Bootstraps Group	Producer	Acres
Kirley		91,960
	<i>Neuharth</i>	6,323
	<i>Scarborough-Rounds</i>	12,292
	<i>Mortenson Ranch</i>	7,627
	<i>Maupin</i>	6,265
	<i>Bush</i>	3,580
	<i>Crockett Mountain</i>	12,000
	<i>Norman P & M</i>	7,000

	<i>Norman Z</i>	6,000
	<i>River Ranch</i>	13,000
	<i>Alleman</i>	17,873
Western Dakota		81,000
	<i>Lawrence CD</i>	13,220
	<i>East Pennington CD</i>	25,531
	<i>South Meade</i>	22,000
	<i>Custer Co CD</i>	7,400
	<i>Boydston</i>	2,053
	<i>Wing</i>	7,756
	<i>Reed</i>	3,040
Jackson		71,280
		4,860
	<i>Fortune R</i>	3,040
	<i>Willard</i>	7,067
	<i>Word</i>	6,290
	<i>Herber</i>	3,817
	<i>Fortune K</i>	7,625
	<i>Fortune W</i>	5,417
	<i>Ireland</i>	2,200
	<i>Jorgenson</i>	8,520
	<i>Vogelsang</i>	1,270
	<i>Pinney</i>	1,120
	<i>Richardson</i>	6,080
	<i>Magelky</i>	1,520
	<i>Forest Service Lease Land</i>	12,454
Hand-Hyde		40,551
	<i>Stirling, Faulstich, Hanson</i>	9,933
	<i>Gimbel</i>	2,656
	<i>Froning, Hague, Hanson</i>	7,628
	<i>Campbell</i>	743
	<i>Fawcett</i>	3,065
	<i>Odden</i>	1,508
	<i>Johnson J</i>	640
	<i>Smith</i>	2,582
	<i>Fortune</i>	1,280
	<i>Krull</i>	10,516
Bennett		72,219
	<i>Livermont</i>	12,549
	<i>Vandermay</i>	3,452
	<i>Hodson</i>	14,887
	<i>Huber S</i>	2,240
	<i>Johnson J</i>	6,847
	<i>Heath</i>	5,387
	<i>Denke</i>	5,080
	<i>Pisha</i>	5,120

	<i>Mansfield</i>	2,880
	<i>Mosher</i>	3,760
	<i>Huber Scott</i>	4,700
	<i>Bakley</i>	3,647
	<i>Juhnke</i>	1,670
TOTAL		357,010

Task 4. Develop and implement farm/ranch resource management plans.

Initiated 03/21/1997

Completed: 12/31/2002

Product 1. Resource management plans.

319 Budget: \$112,000

Expended: \$37,651.21

Match: \$43,487.49

Approximately 260 operations that manage over 1.2 million acres were provided management plan development and implementation assistance. The plans used the information from the resource inventories completed with assistance from this project (Task 3, Product 2) or information available from activities completed outside the project as the basis for developing the holistic resource management plans. Watershed protection aspects of the plan included managed grazing and cropland management BMPs selected to address resource concerns identified.

Data obtained from an evaluation of plan development and implementation (see Monitoring Plans Results and Discussion) indicates that:

- the number of plans developed and completed can be expected to vary by group from 50 to 90 percent
- most operators who have not completed plan development and/or implementation are working toward that end.

Several reasons why development and implementation of plans has not been completed by some project participants were identified:

- financial resources available to the operation
- operator management skill level(s)
- time required to implement the plan in an orderly sequence
- need to modify/expand the plan
- availability of financial and technical assistance.

The addition of Task 6 to the project work plan and development of the managed grazing demonstration sites helped address operator skill level need. While finances are always a limiting factor relative to making operational changes, the effect of drought over much of the state's rangeland area magnified this limitation.

Of the reasons identified, the availability of financial technical assistance provided the greatest challenge. How this obstacle to plan development and implementation was addressed follows.

Early in the project it was determined the ability of the producers to implement the plans was by and large limited by the ability of natural resource agencies to provide the technical and financial assistance identified. A partial list of the practices identified to implement grazing management plans on approximately 50,000 acres (Table 2) illustrates the enormity of the challenge.

Table 2. Practices Needed Implement Grazing Management Plans on 50,000 Acres

Practice	Number/Units
Pipeline	56.35 miles
Water tanks	110
Wells	7
Dam/dugouts (new)	45
Dam repair	3
Spring development	13
Nose pumps	13
Pumps	2
Cross fence	101 miles
Riparian fencing	1,000 feet
Stream crossings	4
Grass seeding	2,770 acres

The Grassland Management and Planning Project was developed to address the technical and financial assistance needs identified. The project was pivotal in overcoming the obstacle to plant implementation and reaching the established milestones for this task and improving grasslands in South Dakota in general.

The Grassland Management and Planning Project was developed in two phases:

1. demonstration sites
2. technical assistance for grazing plan development and implementation.

The American Creek Conservation District and Hand-Hyde, Lyman-Buffalo-Brule, Redfield and Western Dakota Bootstraps Groups partnered with the SD Grassland Coalition and local, state and federal resource management agencies and organizations to establish six management intensive grazing demonstration sites across the state. The demonstration sites showcase and evaluate water quality and economic effects that can be realized from planned grazing systems.

Financial assistance to initiate development of the demonstration sites was provided through a SD Soil and Water Conservation Grant from the SD Department of

Agriculture. The Grassland Planning and Management Project, funded by a 319 NPS Grant (C9998185-01):

- continued the development and operation of the demonstration sites
- is providing producers with planning and management technical assistance

The first demonstration site was established during summer 2000. A field day at the site later that summer was attended by approximately 50 ranchers and resource managers. Information about the site was also presented at the 2000 SD Section of the Range Society's annual meeting. The meeting was attended by approximately 75 Society members. Two additional demonstration sites were established during summer 2001. Nearly 200 ranchers and grassland managers attended the field days held at the three sites during July-August 2001. The remaining three sites were developed during 2002. Field days held during summer 2002 at two of the new and two of the previously established sites were attended by 150 producers and resource managers.

Preliminary monitoring data collected at the demonstration sites indicates that the grazing systems installed are having a positive effect on both water quality and economic impact.

Because of the drought and the recent installation of the sites, the number of water samples collected at the sites is insufficient to make pre- and post-grazing system installation water quality improvement comparisons based on water quality parameters. However, parameters monitored at the sites that provide surrogate measures of improvement show:

- an increase in
 - forage production
 - the density of native, especially warm season, grasses
 - the amount of vegetation left at the end of a grazing cycles has increased
- a decrease in
 - the use of surface water through the installation of pipelines and tanks for stock water
 - bare ground

Information about each demonstration site can be accessed at: www.sdconservation.org/grass.

During the project period, the Grassland Management and Planning project provided managed grazing technical assistance to 25 operators who manage approximately 54,131 acres. Assistance for the implementation of grazing management plans developed by Bootstraps participants is a project priority.

In partnership with the Management Intensive Grazing project, the Hand-Hyde, Lyman-Buffalo-Brule and Redfield Groups implemented monitoring projects to assist members with evaluating the effectiveness of managed grazing as a BMP for improving water quality. Results of the monitoring projects are available at www.sdconservation.org/grassland

The site also contains Bootstraps success stories.

Implementation of management plans developed directly through Bootstraps and with the assistance of the Grassland Planning and Management Project have been slowed by the largely drought-related poor agricultural economy and the limited availability of cost share funds. This has resulted in fewer plans being implemented than projected in the project milestone table. As conditions improve the rate implementation is expected to increase.

Task 5. Provide long-range monitoring, evaluation and reporting.

Initiated 03/21/1997

Completed: 12/31/2002

Product 1. Evaluation/monitoring of program's effectiveness and retention.

319 Budget: \$7,500

Expended: \$25,000.00

Match: \$26,800.00

Monitoring and evaluation activities are summarized below. The information gained from the activities was used in evaluating project and Bootstraps program success.

A video, *Bootstraps: A Bridge to the Future* was produced through a cooperative effort with the SD Pollution Prevention Program, South Central Resource Conservation and Development Council, Todd and Mellette County Conservation Districts, SD-CES and NRCS. The video, which is both a program evaluation component and information transfer activity, captures the ongoing use of the holistic resource management principles learned through Bootstraps by four ranch families. Each family interviewed stated that “the key to a sustainable operation is wise use of nature resources”. A video segment about each family aired on *Today's Ag*. The SDSU-produced agriculture issues program has a documented weekly audience of 45,000 – 60,000 viewers. For information about how to obtain a copy, access www.sdconservation.org/local/boots4

An onsite evaluation of the implementation and effectiveness of management plans developed by Bootstraps program participants was initiated during summer 1999. The evaluation was part of the comprehensive evaluation of the program as a holistic strategy for sustainable agriculture. Todd-Mellette Bootstraps group participants were selected as the study population. These groups were provided plan development assistance during the late 1980s – early 1990s. The data collection phase of the study was completed during spring-summer 2000. The data indicates that

- the number of plans developed and complete varies, by group, from 50-90%
- the number of planned practices (BMPs) implemented varies from 25 to 200% with over half of the participants implementing 75-100% of the practices identified
- most operators who have not completed plan development and/or implementation are working to that end

- the plans are commonly expanded to include additional practices as additional resource management needs are identified
- over 60% of the operators interviewed during the study reported that they use monitoring skills learned through the program to better manage pastures and rangeland
- the practices implemented resulted in an improvement in range condition of approximately one range class (= nearly 25% improvement)

The report which describes the evaluation process and more fully discusses the conclusions reached is available at www.sdconservation.org/local/boots3

Data collected at the six grazing demonstration sites (Task 4) is helping document the economic and environmental benefits realized by managed grazing. Information about the sites is available at www.sdconservation.org/grassland

SDSU's Rural Sociology Program conducted a survey to determine the barriers to the adoption use of no-till farming in SD. The survey provided information needed to more effectively address cropland included in the management plans developed by program participants and needed to increase the adoption of this practice by other operators across the state. Major barriers identified included

- capital costs associated with adopting the practice
- manure management needs/requirements
- environmental concerns associated with pesticide use

The results of the survey were presented to the SD Nonpoint Source Task Force and are available at <http://www.state.sd.us/denr/DFTA/WatershedProtection/P2/Documents/Publications.html>

All Bootstraps participants were invited to a statewide program seminar and evaluation session held December 10, 2002 , in Pierre, South Dakota. The seminar was held and evaluation session were held in conjunction with the 2002 Ag Horizons Conference. The annual conference is sponsored by SD Wheat, Inc., SD Pulse Growers, SD Oilseeds Council, SD Crop Improvement Association, SD No-Till Association and SD Seed Trade Association. Bootstraps seminar topics (Appendix C) were selected based on feedback from Bootstraps groups. The evaluation session was held at the end of the conference. Approximately 30 project participants attended the evaluation session which was moderated by a trained facilitator. General consensus of the group was that the program needs to continue, but that a person is needed to coordinate a statewide program. Opportunities for using technology to share information and other methods to improve program delivery were discussed. The notes from the evaluation session appear in Appendix B and are available at www.sdconservation.org/local.

Task 6. Purchase or develop materials and provide assistance for specialized workshops to facilitate implementation of conservation plans developed as a result of natural resource inventories.

Initiated: 05/30/1998

Completed: 12/31/2002

319 Budget: \$50,000

Expended: \$90,521.23

Match: \$14,913.97

Task 6 was added to the project implementation plan in response to Bootstraps group requests to the coordinating council for support of informational programs, the purchase of reference materials and access to technical assistance providers with special skills. Programs groups communicating the requests indicated the assistance requested was needed to effectively develop and implement their natural resource management plans.

The Bootstraps Coordinating Council reviewed activities proposed by various Bootstraps groups and selected those judged as having the potential to provide the greatest benefit.

The programs, materials and training selected for funding by the coordinating council are described below.

Informational programs:

- Scholarships to attend *Ranching for Profit* workshops, take-home study courses and/or participate in grazing management field workshops were provided to 78 Bootstraps participants
- Scholarships to attend the 2002 Ag Horizons Conference were provided to 17 Bootstraps group members.

Reference materials:

- Fifteen hundred copies of *Plants of South Dakota Grasslands and Northern Great Plains* were purchased to assist with the identification of grasslands plants during the completion of natural resource inventories and management plan monitoring activities. Each Bootstraps group member, SD Vocational Agriculture teacher, Grassland Planning and Management Project participant and SD conservation district were provided with a copy.
- Assistance was provided to make natural resources information previously available only in touch screen format available in a Windows format on a CD. Over 3,500 CDs were distributed.
- Instructional materials for four sessions of the SD-CES sustainable ranching program in the Black Hills region of the state were provided to fifty-six Bootstraps group members.
- When the project implementation plan was prepared, the Internet was not yet in wide use by the public. However, during the early stages of the project, use of the web by producers and others to locate and exchange information increased exponentially. To take advantage of this technology, a Bootstraps web site was developed. The web site contains information about Bootstraps, sources of assistance and grassland resources. Over 3,500 hits to the site have been recorded as of December 31, 2002. The site may be accessed at www.sdconservation.org/grassland

Technical Service Providers:

Assistance was provided to train thirty-two USDA and DENR staff in the use of the “AnnAGNPS” watershed model. The training increased the level of technical assistance that could be provided when the resource inventory data for a program participant was used to develop conservation and water quality protection-based resource management plans.

**EVALUATION OF GOAL ATTAINMENT
AND RELATIONSHIP TO MANAGEMENT PLAN**

EVALUATION OF GOAL ATTAINMENT AND RELATIONSHIP TO MANAGEMENT PLAN

Information in the project summary and provided by monitoring activities served as the basis for evaluating attainment of the project goal:

Expand the use of Bootstraps, a holistic resource management strategy for sustainable agriculture, as an effective practice for the protection and improvement of water quality.

Several challenges to attaining the project goal were encountered. Among these were:

- The assignment of a project partner employee to serve as the statewide coordinator to assist with Bootstraps group organization and operation did not become available as anticipated when the project was developed.
- Materials and training needed by program participants to develop and implement management plans had not been included in the project budget.
- The level of technical and financial resources available from natural resource management agencies to implement the management plans developed was not sufficient to meet the needs identified during plan development.
- The death of a key project coordinator in a farm accident delayed completion of planned project evaluation activities.
- Drought-related effects on the ag economy reduced the resources producers had to available for plan implementation.

To address barriers to goal attainment, the work plan was amended as described in the previous sections of this report. While the changes did not result in reaching all of the milestones established for each task, most were reached and some exceeded revised expectations.

- While only 14 of the planned twenty Bootstraps groups were formally organized, the milestone was essentially reached when the additional area groups that formed informally/outside the program umbrella and interacted with the program and Grassland Management and Planning project are considered.
- Natural resource inventories were completed for the 79 Bootstraps participants who requested assistance. A total of 357,010 acres inventoried as compared to a milestone of 750,000.
- Assistance with the development and implementation of farm/ranch resource management plans exceeded the work plan milestone of 150 plans. Assistance was provided to approximately 260 participants operating over 1.2 million acres.
- The development of the Grasslands Management and Planning project and Bootstraps web site and production of the Bootstraps video:

1. expanded the adoption of Bootstraps program principles by a greater portion of the state's livestock producers
2. transferred information about the economic and environmental advantages of managed grazing systems
3. increased resource management agency and organization financial and technical support for the implementation of management plans developed, especially those that included managed grazing systems
4. resulted in the SD Grassland Coalition assuming leadership for Bootstraps.

As outlined above and in other sections of this report,

- the participation in the Bootstraps program increased during the project period
- the resource management principles learned are being used by project participants
- management plans are being developed and implemented by a majority of program participants
- the management practices implemented are improving range condition (ecological status) which in turn:
 1. reduces nonpoint source pollution
 2. promotes better functioning riparian systems
- the Grasslands Management and Planning project and other related projects and programs will help perpetuate the Bootstraps philosophy and continue to expand the opportunities for the program.

The project goal was attained.

**BEST MANAGEMENT PRACTICES
DEVELOPED/REVISED**

BEST MANAGEMENT PRACTICES DEVELOPED/REVISED

While development and/or revision of best management practices were not a planned outcome, several activities completed during the project resulted in the increased use of managed grazing as a strategy to improve water quality. These activities include

- development of managed grazing systems
- water quality sampling, fecal sampling
- forage quantity/quality monitoring.

Using the information provided by the monitoring tools, producers have become better managers of their pastures and range lands. The improved management has resulted in improved range condition. Range in a higher condition has a greater proportion of desirable forage species, especially warm season grasses; higher biodiversity; and increased ground cover as animals do not over-graze the resource as a whole and especially areas close to water sources; and better functioning riparian systems.

MONITORING PLAN

MONITORING PLAN

The evaluation and monitoring plan included in the project implementation plan was product based. Measures of success centered largely on tracking activity participation levels. Measures listed in the implementation plan were:

- tracking:
 1. program participation levels
 2. number of program participants developing a holistic resource management plan
 3. implementation and maintenance of the BMPs selected to improve the natural resource and economic health of the participant's agricultural enterprise

Survey related monitoring activities developed and completed during the project include:

- *Evaluation of Bootstraps as an Effective Strategy for Sustainable Agriculture*
- *Bootstraps: A Bridge to the Future* video
- evaluation session conducted at the 2002 Ag Horizons conference

Measures of the effectiveness of BMPs (practices) installed in improving resource (environmental) health and subsequently water quality were included in the *Evaluation of Bootstraps as an Effective Strategy for Sustainable Agriculture* study and are included in the operation of the six demonstration sites developed as part of the Grassland Management and Planning project. Monitoring activities included:

- range (ecological) conditions
- forage production
- fecal sampling
- water quality monitoring

Water quality samples at the demonstration sites were collected by project staff. Participation in the South Dakota Volunteer Water Quality Monitoring Network by producers who developed non-demonstration site managed grazing systems with assistance from the project was encouraged. All samples were analyzed by the South Dakota Health Laboratory.

The data gathered through project monitoring activities is located in the Monitoring Plan Results and Discussion section of this report.

MONITORING PLAN RESULTS AND DISCUSSION

MONITORING PLAN RESULTS AND DISCUSSION

The information contained in the Project Goals, Objectives and Activities section and summarized in the discussion that follows supports the conclusion that the project completed supported goal attainment. A comparison of planned project versus actual project outcomes appears in Table 3.

Table 3. Milestones Comparison - Planned Activities to Actual Accomplishments

Task	Output	Planned Quantity	Actual Quantity
Organize Coordinating Council	Coordinating Council	1	1
Assist local producers with initiation of Bootstraps groups	Organizational meetings	20	14
	Group organization	20	14
Implement Bootstraps groups	Classroom & field experiences	250	79
	Natural resource inventories	250	79
Develop & implement farm/ranch resource management plans	Resource management plans	150	260
	Implementation of resource management plans	150	In progress
Monitor & evaluate program effectiveness	Semi-annual reports	6	6
	Final report	1	1
	Implementation of monitoring plan	1	1

The data in Table 3 and results of the other monitoring activities completed, as discussed in Task 4, Product 1 and Task 5, Product 1 in the Summary of Project Accomplishments section, show that:

- Fourteen Bootstraps groups were organized as part of the program and that several other area groups formed informally
- Seventy-nine participants who manage 357,010 acres completed natural resource inventories. Additional inventories are being completed for operations receiving assistance through the Grasslands Management and Planning project.
- Approximately 260 producers developed natural resource management plans covering about 1.2 million acres. Although the rate of plan implementation progress has been slower than anticipated because of the current drought and resulting depressed farm economy, most of these producers are implementing their plans.

- The video, *Bootstraps: A Bridge to the Future*, and the evaluation of the implementation and effectiveness of the resource management plans developed using the Todd-Mellette Bootstraps groups as a study population documented that program participants are:
 1. using the lessons learned through Bootstraps
 2. implementing the strategies learned to better manage natural resources and create sustainable operations.
- The practices implemented are improving environmental health of the resource, to include water quality, as evidenced by an increase in:
 1. forage production
 2. plant density, especially warm season grasses
 3. range condition by approximately one class (= 25%).
- The survey of South Dakota producers completed to identify barriers to the adoption of no-till farming practices and preferred methods of training in the use of models to predict pollutant load are helping develop and implement resource management plans. Many participants indicated the materials and/or workshops improved their resource management skills significantly.
- Many program participants indicated the materials and/or workshops funded by the addition of Task 6 to the work plan:
 1. improved their resource management skills significantly
 2. was very important in providing the ability to effectively implement and manage grazing systems that will lead to water quality improvements.
- Program participants who attended the seminar and evaluation session held during December 10, 2002 , agreed the program was effective and should be continued.

PROJECT BUDGET

PROJECT BUDGET

Expenditures from the grant award totaled \$306,760.00. Local project partners contributed \$285,356.23 toward completion of work plan activities. The local contributions equals 48.19 percent of the total project expenditures from all sources compared to the projected 62.55 percent when the project budget was prepared. A comparison of planned as amended versus actual expenditures and local contributions for each project activity appears in the Section 319/Non-federal Budget Comparison Table.

The budget was amended by transferring \$50,000 from Task 3 to Task 6. Task 6 was added to provide educational materials and workshops needed to effectively implement resource management plans.

Bootstraps Resource Inventory Budget vs. Actual Expenditures

Item	BUDGET			ACTUAL		
	Cash & In-kind Match	319 Funds	TOTAL	Cash & In-kind Match	319 Funds	TOTAL
Objective 1. Provide for organization and operation of Bootstraps Groups						
1) Coordinating Council	5,760.00	19,260.00	25,020.00	0.00	17,494.76	17,494.76
Subtotals	5,760.00	19,260.00	25,020.00	0.00	17,494.76	17,494.76
2) Organize & assist Bootstraps Groups	142,000.00	0.00	142,000.00	0.00	0.00	0.00
Subtotals	142,000.00	0.00	142,000.00	0.00	0.00	0.00
3) Classroom & field experiences	52,500.00	0.00	52,500.00	40,030.95	0.00	40,030.95
Natural resource inventories	225,000.00	118,000.00	343,000.00	160,123.82	136,092.80	296,216.62
Subtotals	277,500.00	118,000.00	395,500.00	200,154.77	136,092.80	336,247.57
4) Develop resource management plans	80,000.00	112,000.00	192,000.00	43,487.49	37,651.21	81,138.70
Subtotals	80,000.00	112,000.00	192,000.00	43,487.49	37,651.21	81,138.70
5) Monitoring/evaluation	7,000.00	7,500.00	14,500.00	26,800.00	25,000.00	51,800.00
Subtotals	7,000.00	7,500.00	14,500.00	26,800.00	25,000.00	51,800.00
6) Materials/assistance to facilitate conservation plan implementation	0.00	50,000.00	50,000.00	14,913.97	90,521.23	105,435.20
Subtotals	0.00	50,000.00	50,000.00	14,913.97	90,521.23	105,435.20
TOTAL	512,260.00	306,760.00	819,020.00	285,356.23	306,760.00	592,116.23

Note: Task 3 was reduced by \$50,000 to fund Task 6 which was added in and funded by \$50,000 from Task 3.

SUMMARY AND FUTURE RECOMMENDATIONS

SUMMARY AND FUTURE RECOMMENDATIONS

The rural community has accepted Bootstraps as a viable strategy for sustainable agriculture through the wise use of natural resources. The evaluation of the implementation and effectiveness of the resource management plans developed by Todd-Mellette Bootstraps group members indicates the plans are

- being implemented
- effective in improving the ecological status of range resources
- providing the basis for water quality improvement by reducing nonpoint source pollution from uplands
- contributing to the long-term improvement and sustainability of the participants' operations.

Bootstraps participants tend to become leaders in the development and completion of water quality projects and initiatives. Information gathered during the completion of resource assessments and management plans is being used in the preparation of EQIP Priority Area applications, TMDLs and watershed project work plans.

Continued interest in the program is evidenced by inquiries to the SD Grassland Coalition about providing continued support to existing and new Bootstraps groups after the close of this project. Feedback from the evaluation session held December 10, 2002, also indicates strong interest in continuing the program and that the program has value in assisting producers to protect natural resources, including water quality.

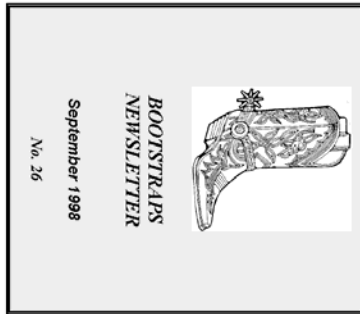
Although the drought and resulting depressed ag economy has slowed the implementation of management plans, producers are steadily making progress in putting planned BMPs on the ground. The project will have a long-term effect on water quality.

Although direct support for the Bootstraps program does not appear to be readily available, it is recommended that

- support for the development and implementation of resource management plans should be continued indirectly through the Grassland Management and Planning project grant to the South Dakota Grasslands Coalition
- the sponsor's project partners should be encouraged to continuing providing program assistance to groups formed during the project and that may form at a later date
- an agency or organization to take the lead to continue the program should be identified and provided with financial and technical assistance needed to accomplish the task.

APPENDICES

APPENDIX A



WESTERN DAKOTA BOOTSSTRAPS STEERING COMMITTEE BOARD

*Suzanne Koch, Chairman - W. Penn. Co. Grp.,
 F. V. Chairman, Lynn Denke - Badlands Grp.,
 Dianne Miller, Sec.-Treas. - Lawrence Co. Grp.,
 Mark Keiter, W. Penn. Grp.,
 Jason Reed, Tri-County Grp.,
 Deb Wickes, Tri-Co. Cons. Dist. Rep.,
 Ronny Mackabeer, Meade Co. Grp.,
 Ross & Serena Riechert, Meade Co. Grp.,
 Dan Puckett, Fall River Co. Grp.,
 Sandra Hood, Lawrence Co. Grp.,
 Eddie Guidt, Elk Creek Cons. Dist.,
 Eddy Schaeck, Badlands Grp.,
 Lynn Denke, Badlands Grp.,
 Alan Bishop, Custer Co. Grp.,
 Sue & Laverri Koch, W. Penn. Grp.,
 Lloyd Miller, W. Penn. Cons. Dist.,
 Kenneth Eide, Butte County Grp.,
 Ed Dodson, Black Hills R. C. & D. Rep.*

BOOTSSTRAPS FALL FLING

To be held at the Wall Community Center, September 27, 1998 from 2:00 to 4:00 p.m. Hosted by the Badlands Bootsstraps Group. Come all you fellow Bootsstraps friends and have an enjoyable afternoon visiting and jolting in the activities.

TRI-BOOTSSTRAPS

By Deb Wickes

Jason Reed has been elected as the new Chairman of the Tri-Bootsstraps Group. He will also be the groups representative on the Western Dakota Bootsstraps Steering Committee.

The group is working on their field inventories. They have contracted with Lance Frei for assistance with these inventories.

BUTTE CO. BOOTSSTRAPS

By Lynn Eide

This group contracted with Dannie Simonsen for completing the groups inventories. Exclosure cages are being purchased to assist with monitoring the production and utilization of the rangeland resources in this area.

The group is planning on a soil testing tour in October.

LAWRENCE BOOTSSTRAPS GROUP

By Dianne Miller

MORTENSON RANCH TOUR

SEPTEMBER 23, 1998

7:00 AM DEPARTURE TIME FROM SPEARFISH

We will car pool from Spearfish and travel to Hayes, SD to tour Mortenson's ranch. This family ranch has won several awards, including national, for their grazing practices and riparian improvements.

We will return to Spearfish somewhere around 6:00 p.m.

You will need to make a reservation with Dianne Miller by September 20, 1998 to ensure your seat.

CALL THE OFFICE 642-3590 OR HOME 642-5212

FOR LUNCH YOU MUST BRING YOUR OWN SACK LUNCH!!!

THE LAWRENCE CONSERVATION DISTRICT IS ONE LINE NOW.

You may reach the District office on Internet at the address of lawcd@matco.com.

This would be a great way to send your local matching funds that are required to be reported for the grants involved in this Bootsstraps program. The grant funds are paying for your inventories, RancherToolKits your received, consultation services, and has paid for several workshops. Please make sure you are recording and reporting your local matching funds to this office.

DON'T FORGET



WEST PENNINGTON BOOTSSTRAPS

The group met August 27, 1998 at Carl & Judy Knupe's ranch for a workshop on monitoring. We did some hands on measuring with a transect, learned how to do photo points and etc. This was a very interesting and productive meeting. A Potluck dinner followed.

The next meeting will be held in Rapid, City at the Walt Taylor 4-H Building. The planned program will be on Investments by T. G. Hunt.

BADLANDS GROUP

By Sue Erickson

We will be having a monitoring workshop, instructed by Dwayne Breyer, at the Lynn Denke ranch north of Wall, on September 21, 1998 at 2:00 p.m.

A barbecue will follow. The meat and drink will be provided. Bring a side dish or dessert.

Also on September 27, 1998, at the Wall Community Center at 2:00 P. M. we will be hosting the FALL FLING. We will have some cowboy poets, ice cream, goodies and drinks. This is the time to visit with other groups and see what they are doing. Come and enjoy! More information will be sent later.

FALL RIVER BOOTSSTRAPS

By John Keiter

On September 21, 1998, Dan Puckett will be giving our group a presentation on commodities and marketing.

October 19, 1998, we have scheduled a Tax Consultant seminar (with a CPA presiding).

ARE YOU ENJOYING THIS NEWSLETTER?

WORTH REPEATING: "Farmers and ranchers make professional gamblers look like wimps. Can you imagine putting your entire worth, your home and all your dreams into an agricultural product—a product that depends on the weather, insect control, foreign markets, world politics, rumors of the president's love life, Oprah, and Shandon Hussein?"

By Rep. David Swinford, Texas House of Representatives

MEHOPE YOU ARE!!! Unfortunately funds are getting low and we might have to decrease the number of newsletters being mailed.

There are lots of people on our mailing list who are **not** BOOTSTRAPS MEMBERS, but are associated in some manner such as bankers, agencies, agency personnel, legislators, some of our neighbors who are interested in Bootstraps but have never become members.

If you are not interested in receiving this newsletter any longer, please advise the Black Hills R C & D and your name and address will be removed from our mailing list. Phone 605-348-2611.

If you wish to continue receiving the newsletter a donation would be much appreciated. Mail it to "The Bootstraps Newsletter" c/o Black Hills R C & D, 1530 Samco Road, Suite 4, Rapid City, SD 57702-8007.

A special thank-you to those who have donated to date. They are:

Diane Beyer
Ron Hendricks
Farm Credit Services
First Western Bank, Edgemont
South Dakota Stockgrowers
First Western Bank of the Northern Hills
First Western Bank, New Underwood
First Western Bank, Sturgis

"THANKS" FROM THE R C & D

This is your newsletter. Local groups are interested in what each group is doing and accomplishing. This newsletter is a great tool in sharing ideas, concerns and goals. Tell about what is going on with your Bootstraps group. How your group is doing with your planning and natural resource inventories. Also, if you have an idea to share with others relating to the Bootstraps theme please send it in.

Remember, we have moved. Our new location

and mailing address is 1530 Samco Road - Suite 4, Rapid City, SD 57702-8007.

We are planning to put the September issue together the week of October 19, 1998 and in the mail by October 23, 1998. So please mail in your articles or phone in an article to Plyphis 605-348-2611 or fax it in to 605-343-6310 by October 21.

Please take time to note this on your calendars.

We wish to thank each of you who contributed to this issue of the monthly Bootstraps newsletter. Your continued support is what helps make this publication possible.

CALENDAR OF EVENTS

SEPTEMBER 22, 23, & 24, 1998.
SUSTAINABLE AG TOUR: Mission, SD to Ft Keogh Range Livestock Research Station, Miles City, MT and stops along the way.

SEPTEMBER 24, 2998 ---- AG BUSINESS SEMINAR - MULLER CENTER, HOT SPRINGS, SD 9:00 A.M. - 3:30 P.M.

SEPTEMBER 24, 1998 -- GRAND OPENING OF THE NEW "WEST RIVER BUSINESS SERVICE CENTER @ Rushmore Plaza Civic Center, Room 204 1:30- 5:00 p.m.

SEPTEMBER 26, 1998 -- SD HOME BASED BUSINESS CONFERENCE @ WESTERN DAKOTA TECHNICAL INSTITUTE - 800 MITCHELSON DR., RAPID CITY, SD 8:00 A.M. - 5:15 P.M.

SEPTEMBER 27, 1998 -- WESTERN DAKOTA BOOTSTRAPS FALL FLING WALL COMMUNITY CENTER - 2:00 P.M. TO 4:00 P.M.

COMBOY POETS WILL BE THE ENTERTAINMENT

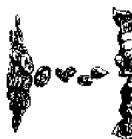
OCTOBER 2, 1998
WESTERN DAKOTA BOOTSTRAPS STEERING COMMITTEE MEETING
WREA HOSPITALITY ROOM 2:00-4:00 P.M. RAPID CITY, SD



BLACK HILLS R C & D
Area
RESOURCE CONSERVATION & DEVELOPMENT
1530 SAMCO ROAD, SUITE 4
RAPID CITY, SOUTH DAKOTA 57702-8007
(605) 348-2611

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RAPID CITY, SD

DON'T FORGET



The local match for the grant funds has to be documented to receive any dollars for this Bootstraps Program.

R C & D - "MAKING THINGS HAPPEN"

APPENDIX B

Applications are now being accepted for technical assistance for natural resource inventories (summer 1997) under the Bootstraps 319 grant.

Applications will be accepted until 5:00 pm (Central Time)
April 18, 1997. No exceptions to this deadline!!

To apply, write the Bootstraps Coordinating Council a letter containing the following information:

- ___ Group name, location, chair, chair's address/phone
- ___ Number of participants in group, the total acreage & general land uses
- ___ Status of group - milestones, how prepared is the group to go forward?
- ___ History of the group - what have you accomplished to date, programs conducted?
- ___ Demonstration of commitment to use inventories for planning this winter
- ___ Additional available resources, real or potential obstacles, match (in-kind & cash)
- ___ Statement of need in narrative form
- ___ Status of work plan, if you have a work plan

The Coordinating Council will meet April 24 to consider the applications.

Applications should be directed to:
Bootstraps Coordinating Council
c/o SD Assn of Conservation Districts
PO Box 275
Pierre, SD 57501-0275
Fax: 605-773-4531

APPENDIX C

TUESDAY, DECEMBER 10, 2002						
8:00 Registration-Lobby						
TIME	GALLERY D & E	LAKE SHARPE	LEWIS & CLARK	GALLERY F & G	AMPHITHEATER I	AMPHITHEATER II
9:00 To 9:50 Gallery A, B, C 2002 Farm Bill Implementation Speaker Bruce Knight, Chief, NRCS, Washington, D.C.						
10:00 to 10:50	Conventional/Roundup Ready SDSU Soybean Breeding Project Leader Dr. Roy Scott Brookings, SD		High Yield Wheat Production Maximizing Inputs Dylan Troske, CCA Spink County Fertilizer Company Northville, SD		Market Trends and Expectations Mark Jens, Agri-Mark Consulting Fargo, ND	Conservation Security Act of 2002 Farm Program Mike Kuck Program Manager State NRCS Huron, SD
11:00 to 11:50	Breeding Pulse Crops for Disease Resistance, Yield and Quality Dr. Fred Muebauer USDAWSU Pullman, WA		Wheat Breeding at SDSU Dr. Amir Ibrahim, Winter Wheat Project Dr. Karl Glover Spring Wheat Project Brookings, SD	Offsetting the Effects of Drought with Seeding Patterns Brian Lutter, Agronomist, Kaystar Seeds Huron, SD	Royalties Assessments for Public Varieties Dr. Fred Chelick, Dean, College of ABS, SDSU Brookings, SD	Adapted Species Seed Source/Availability Dwight Teber, Director, NRCS, Plant Materials Center Bismarck, ND
12:00 to 1:15 Lunch in the Exhibit Area—Gallery A, B, C						
1:20 to 2:00	The Latest in No-Till Dr. Dwayne Beck Dakota Lakes Research Farm, SDSU Pierre, SD	Grain Market Update/Outlook Forecast Alan May, Extension Ag Economist, SDSU Brookings, SD	Seed Certification 101: Steps to Produce Classes of Certified Seed Dan Olson Asst. Mgr. Seed Cert. SDSU Brookings, SD		Profit Analysis By Enterprise Jack Davis Woonsocket, SD	Drought & Taxes Tax Tips for Tough Times Carol Oller, IRS Rapid City, SD
2:10 to 2:50	Fusarium Head Blight and other Cereal Diseases Dr. Marty Draper Extension Plant Pathologist, SDSU Brookings, SD	New Strategies for Weed Control Speaker TBA	Wheat Breeding at SDSU Dr. Amir Ibrahim, Winter Wheat Project Dr. Karl Glover Spring Wheat Project Brookings, SD	Seed Weevils and Other Insect Pests of Sunflower Dr. Mike Catangui, Entomologist, SDSU Brookings, SD Dr. Larry Charlet USDAARS Fargo, ND	Profit Analysis By Enterprise Jack Davis Woonsocket, SD	Roundup Ready Spring Wheat Milestones to be Reached Prior to Commercialization Kelly Claus Monsanto St. Louis, MO
3:00 to 3:30 Break in Exhibit Area- Gallery A, B, C						
3:30 to 4:30	The Impact of No-Till on Soil Quality Jim Millar, NRCS Redfield, SD	The Future of Pulse Crops Paul Thomas Exec. Director ND Dry Pea & Lentil Association		Offsetting the Effects of Drought with Seeding Patterns Brian Lutter, Kaystar Seeds Huron, SD	Wheat Industry Reports Alan Lee, VP of US Wheat Associates Daren Coppock, CEO, NAWG	SDCIA Annual Meeting Clark Moeckly, Pres., Presiding Brlton, SD
4:30 To 5:30	Rotation Strategies Performance/ Economics John Rickettsen SDSU West River Ext. & Research Center, Rapid City, SD	SD No-Till Assoc. Board Meeting 5:30 to 6:30 ↓	SD Seed Trade Meeting 5:30 to 6:30 ↓	New Strategies for Weed Control Speaker TBA	Charting the Future of Bootstraps Pat Kuck, Moderator Pierre, SD	SDCIA Annual Meeting Continued
Social Hour 5:00-6:00, Mixer 6:00-6:45, 7:00-8:00, Banquet 8:00-9:00, Gallery A, B, C						

We have assembled some of the finest speakers available to provide information you as a producer need to be successful in today's global markets. The Trade Show will feature representatives of companies that will share the latest in technology, information and products. This is your opportunity to learn, to visit and to enjoy. Come join us!!

Thanks to our SPONSORS

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Coyote Seed Mills, Inc.
Farm Credit Services of America
Gustafson LLC
Monsanto
Mustang Seed
SODAK GENETICS
South Dakota Bootstraps Council
South Dakota Crop Improvement Assoc.
SD Wheat Commission
SD Wheat Growers-Aberdeen

Certified Crop Advisor credits available. Signup following each session required.

WEDNESDAY, DECEMBER 11, 2002						
7:30 to 9:00 Breakfast Buffet Gallery A, B, & C						
8:00 Registration-Lobby						
TIME	GALLERY D & E	LAKE SHARPE	LEWIS AND CLARK	GALLERY F & G	AMPHITHEATER I	AMPHITHEATER II
8:00 to 9:00	SD Wheat Inc. Annual Meeting Carl Schwab Pres. Andover, SD	SD Pulse Growers Annual Meeting Dave Neuhaith President Ft. Pierre, SD		SoDak Genetics Meeting (7:30 to 9:00) Jack Ingemansen Chairman, SDSU Brookings, SD		
9:00 to 9:40	The Latest in No-Till Dr. Dwayne Beck Dakota Lakes Research Farm, SDSU Pierre, SD	Grain Market Update/Outlook Forecast Alan May Extension Ag Economist, SDSU Brookings, SD	Conventional/Roundup Ready SDSU Soybean Breeding Project Leader Dr. Roy Scott, SDSU Brookings, SD	Seed Certification 101: Steps to Produce Classes of Certified Seed Dan Olson, Asst. Mgr. Seed Cert., SDSU Brookings, SD	High Yield Wheat Production Maximizing Inputs Dylan Troske, CCA Spink County Fertilizer Company Northville, SD	Drought & Taxes Tax Tips for Tough Times Carol Oller, IRS Rapid City, SD
9:50 to 10:30	Rotation Strategies Performance/ Economics John Rickettsen SDSU West River Ext. & Res. Center, Rapid City, SD	Breeding Pulse Crops for Disease Resistance, Yield and Quality Dr. Fred Muebauer USDAWSU Pullman, WA		Market Trends and Expectations Mark Jens, Agri-Mark Consulting Fargo, ND	Conservation Security Act of 2002 Farm Program Mike Kuck Program Mgr State NRCS Huron, SD	Roundup Ready Spring Wheat Milestones to be Reached Prior to Commercialization Kelly Claus Monsanto St. Louis, MO
10:30 to 11:00	The Impact of No-Till on Soil Quality Jim Millar, NRCS Redfield, SD	Seed Weevils and Other Insect Pests of Sunflower Dr. Mike Catangui, Entomologist, SDSU Brookings, SD Dr. Larry Charlet USDAARS Fargo, ND	The Future of Pulse Crops Paul Thomas Exec. Director ND Dry Pea & Lentil Association		Royalties Assessments for Public Varieties Dr. Fred Chelick, Dean, College of ABS, SDSU Brookings, SD	Adapted Species Seed Source/Availability Dwight Teber, Director, NRCS, Plant Materials Center Bismarck, ND
12:00 to 1:15 Luncheon—Gallery A, B, & C Awards Presentation						

EXHIBITORS

AG IN THE CLASSROOM	GUSTAFSON LLC	SD AG PRODUCER VENTURES
AGRIPRO WHEAT	HARVEST TECHNOLOGIES	SD COOPERATIVE EXTENSION SERVICE
AMERINOP	HIVE SEEDS	SD CROP IMPROVEMENT ASSOC.
BASF	IRS CUSTOMER SERVICE	SOUTH DAKOTA WHEAT COMMISSION
BAYER CROP SCIENCE	KAYSTAR SEED	SUNBIRD INC.
CORE 4 CONSERVATION	MOVEST COOPERATIVES	SD AG STATISTICS SERVICE
CUSTOM MARKETING COMPANY	MONSANTO	VALLEY BAG & SUPPLY
DENBESTEN SEEDS	OPTI-CROP	WESTERN COMMUNICATIONS
DTN	SDSU SEED TESTING LABORATORY	
EDM MILL & ELEVATOR SUPPLY INC.	SODAK GENETICS	

VISIONS FOR SUCCESS

2002 AG HORIZONS CONFERENCE

DECEMBER 10-11
RAMKOTA INN - PIERRE

TENTATIVE PROGRAM

Hosted by:
SD Wheat Inc.
SD Pulse Growers
SD Oilseeds Council
SD Crop Improvement
SD No-Till Association
SD Seed Trade Association
SD Bootstraps Coord Council

APPENDIX D

CHARTING THE FUTURE OF BOOTSTRAPS - December 10, 2002

Facilitator - L. Pat Kuck

The facilitator reviewed the four pillars that support the Bootstraps program: 1) social, 2) economic, 3) family, and 4) natural resources. He noted that if you don't have these four pillars, your operation would find it hard to succeed.

When the question, "How many groups are still active?" was asked, it was found several groups are active. They have even expanded the program and modified it to suit their area's needs.

Information provided by evaluation seminar participants included:

- Western Pennington is still very active. They are applying for funding to help pay for programs and seminars. Having cow/calf seminars. Area wide public suppers. Have developed a steering committee. Does not want to see it end. Are not notified of availability of funds. Has followed program. Would like to see if program implementation has made a difference. Working on a follow-up program.
- Todd-Mellette original producers were re-evaluated and the program did make a difference.
- Contact retired NRCS personnel to come out and re-evaluate the program.
- Does not want to see Bootstraps die. It has started much interest in producing and how to go about it. Have coordinated with Grasslands Coalition at Black Hills Stock Show.
- There's a whole new generation that has come along that has not had the chance to experience the program.
- Not enough money used for implementation of programs.
- Is a new era coming that Bootstraps can capitalize on?
- Need a live body to go out and set up groups and take inventories & program. Needed a coordinator.
- Polled local Bootstraps group. Enjoyed camaraderie of participants. There are topics that can be addressed without costing a lot if anything.
- RC&D is coordinator in one four-county area. Has not been active in last 13 months. Polled participants and would like to see program continue with coordinator.
- More social and family-oriented programs. More coming together in large groups. Statewide.
- Program has plateaued. Plans were 2-4 years and it was hard to include newcomers as they were always behind. Need to have staggering groups of various stages. You lose members like this.
- Need to re-group, maybe start over.
- Bootstraps Councils could direct RC&Ds what programs they want.
- Need co-educational/Extension group to share ideas.
- The Hand/Hyde group just meets in winter. Members list topics they would like to hear and do their best to provide. More family/social oriented than it used to be. Sometimes just visit together at someone's house.

General discussion:

- New members need to have basic program. Should not skip it.
- Broaden topics for discussion/horizons.
- Invite other groups when you have major speakers.
- New members feel left out as they aren't on the same level, so they drop out.
- Do not have to be a rancher to be on the program.
- Perceive program has come to an end.
- Need an overall planning session to see where we are at.
- Keep concept going, no matter what it's called.
- Develop program needs for area.
- Funding is not that important. If concept is wanted, funding will be found somewhere.
- Share ideas amongst groups.
- Need total family involvement, including wife and children.
- Setting up time to get together is hard.
- Approach RC&D about assisting these groups.
- Statewide steering committee is needed.
- Need to notify groups of results of this meeting.
- Statewide communication.
- Set up statewide annual meeting, biennial, or whatever. Send out minutes from this meeting to all Bootstraps participants.
- Set up telephone conferences.
- Need to reach out to east river. More involvement.