

NORTH DAKOTA



HANDBOOK

North Dakota SAE Handbook

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NORTH DAKOTA SAE HANDBOOK

Definition and Philosophy of SAE

Supervised Agricultural Experiences (SAE's) are an integral component of the comprehensive agricultural education program. An SAE consists of the practical application of concepts and principles, learned in agricultural education. By requiring that every student enrolled in agricultural education have an SAE program, the relevancy of classroom instruction and involvement in the FFA increases.

SAE's need to be designed to develop the mental and manipulative skills, technical knowledge, work habits and leadership skills essential to succeed in an agricultural occupation. SAE programs stress the development of competencies that will give students a competitive edge in the work force and also increase their education and occupational options. In addition, SAE programs provide students with an opportunity to become occupationally involved in agriculture under the guidance and supervision of teachers, parents and employers.

SAE's make classroom instruction in an agricultural course relevant, practical and meaningful for all students. Participation in SAE motivates students by allowing them to apply what they learn in the classroom to a real life situation.

This handbook is designed to serve as a reference for planning and implementing local SAE programs. Information in this handbook should be used by agriculture teachers and advisory committees as a guide to facilitate thorough and intelligent planning for the integration of SAE activities into the comprehensive agricultural education program.

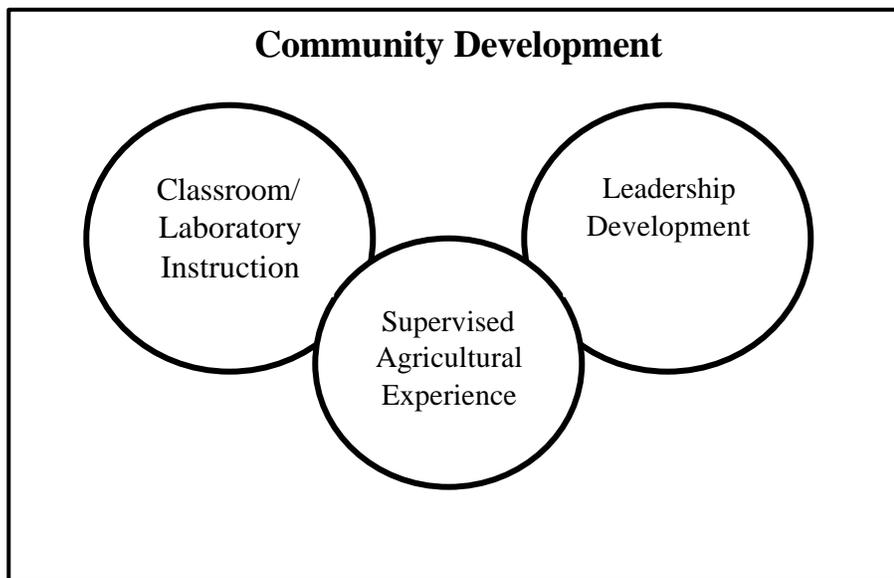


Figure 1. Four components of the Secondary Agricultural Education program.

Purpose

SAE is one of four integral parts of a comprehensive agricultural education program through classroom and laboratory instruction students gain technical knowledge and develop competencies and manipulative skills (cognitive and psychomotor skills). Through participation in the FFA students gain valuable human relation skills and leadership abilities and have the opportunity to apply these skills. Through community service or community development activities, students work to improve their community and students gain valuable group dynamics experience.

The purpose of the SAE component of the agricultural education program is to provide students the opportunity to develop and apply those technical and personal skills acquired in the classroom, lab, FFA and community activity and direct them for gainful employment in the agriculture/agribusiness industry.

Objectives of SAE Programs:

1. Make classroom and lab instruction relevant
2. Develop and apply agriculture competencies
3. Develop personal skills
4. Develop career awareness and planning
5. Gain experience in decision making
6. Develop economic skills
7. Develop problem solving skills
8. Develop entrepreneurship skills

Characteristics of an effective SAE Program:

1. Develops and applies the agricultural competencies that were taught in the classroom
2. Develops specialized skills that relate to agricultural careers
3. Includes record of activities
4. Is individualized/student centered
5. Develops employability skills
6. Requires planning, on-site supervision, evaluation and interpretation

SAE activities must be directly related to the agricultural career in which the student is interested. These activities allow the student to perform activities determined to be appropriate for employment in an agricultural career. The student's SAE program must be supported by accurate records and be supervised by the agriculture teacher.

Types of SAE Programs:

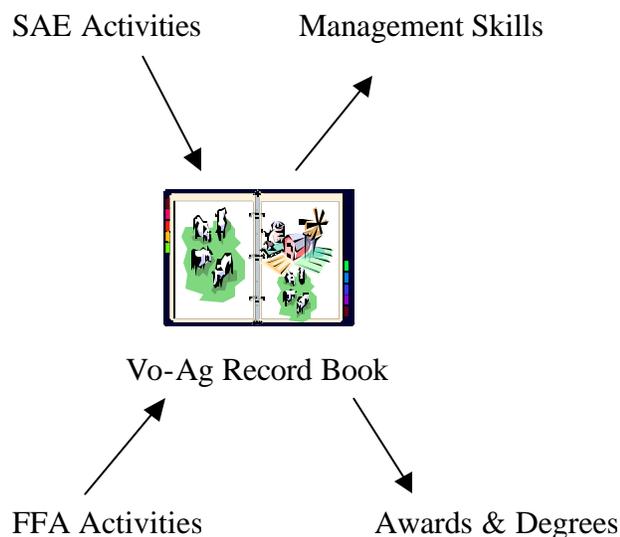
1. Entrepreneurship
2. Placement (agricultural or other employment)
3. Directed activities

Entrepreneurship – programs allow the student to plan, implement, operate and assume the risk in a business venture of their own. These programs may be developed on a farm, ranch or as an agribusiness. School or community facilities can be used providing the student owns that materials used in the business. Examples may include but are not limited to: animal production, crop production, vegetable production, lawn care business, custom machinery business, repair or maintenance service, bait and tackle sales, horse training service, bedding plant production and sales, etc.

Placement

- A. Agricultural Employment – involves employment of students in agriculture/agribusiness occupations. Employment on farms, ranches, agribusiness or natural resource occupations allows students to gain practical experiences needed to enter and advance in agricultural careers. In most instances students involved in an employment experience will receive a wage. Examples may include but are not limited to: agricultural supply salesperson, farm worker-machinery operator, ranch hand, research assistant, wildlife technician, greenhouse worker, carpenters helper, produce employee, parts warehouse stocker, retail sales employee, etc.
- B. Other Employment – include wage earning employment in other occupational areas which may be indirectly related to agriculture. Students employed in these types of occupations gain first hand experience in some of the skills necessary for successful employment. Examples may include but are not limited to: food service and preparation, home and yard care and maintenance, janitorial jobs, service station attendant, camp counselor, receptionist, teachers aide, park attendant, tour guide, retail salesperson, etc.

Directed Activities - do not include ownership or employment for a wage. A directed activity could include but should not be limited to: a directed lab activity, research or science fair project, work toward any one of 29 specific proficiency award areas identified in the FFA Student Handbook, improvement projects undertaken by the student, work on a school farm or school lab as a part of a group activity, Agriscience activities (e.g. hydroponics, aquaculture, tissue culture, integrated pest management, biotechnology), artificial insemination training, community development or improvement activities (group or individual activity), computer applications or programs designed by the students, etc. Students may or may not earn an income from this activity.



Benefits of SAE Programs

For Students

- ❖ Develop occupational skills
- ❖ Gain experience in money management
- ❖ Make classroom & laboratory instruction relevant
- ❖ Solve real agriculture problems
- ❖ Gain experience in decision-making
- ❖ Develop plans for career & personal life
- ❖ Develop human relation skills
- ❖ Develop record keeping abilities
- ❖ Develops creative entrepreneurial thinking

For Teachers

- ❖ Achieve major program objectives
- ❖ Improve school-community relations
- ❖ Serve as a motivational tool
- ❖ Familiarize the teacher with new technology
- ❖ Promote parental involvement & support of the program
- ❖ Develop good public relations
- ❖ Improve the efficiency of agriculture in the community
- ❖ Develop a strong FFA program
- ❖ Keep teaching practical & relevant

For Agriculture Programs

- ❖ Strengthen vocational emphasis by having students learn meaningful occupational competencies
- ❖ Increase involvement in FFA contest and proficiency awards
- ❖ Motivate students to enroll and excel
- ❖ Provide basis for year-round instruction
- ❖ Greater emphasis on student instruction

For Employers

- ❖ Provides a supply of experienced employees
- ❖ Keeps youth in the local community
- ❖ Assists schools in providing improved and updated curriculum

For Communities

- ❖ Develops work ethic in youth
- ❖ Develops wage earning capabilities in youth
- ❖ Provides a resource for community activities
- ❖ Provides leadership in community activities

Minimum SAE Requirements

As an integral component of agricultural education programs, minimum requirements must be met for teachers to provide quality SAE student experiences. The following are required:

1. Systematic classroom instruction on SAE for all students.
2. Extended contract for year-round supervision and individualized instruction for students.
3. Travel provided for individualized student supervision and instruction.
4. Complete and accurate maintenance of student SAE records using the official state SAE record book or other record system approved by the State Supervisor of Agricultural Education.
5. Provisions are made for release time for SAE supervision by teachers.
6. Annual SAE program summaries will be provided to students, parents, schools and state supervisors.

Guidelines for Successful SAE Programs

1. Every student enrolled in a reimbursable agricultural education program shall conduct a satisfactory SAE. Ag education instructors shall assist each student as he/she selects and develops their experience program related to the students agricultural interest or to the courses which the student is or will be enrolled. Students do not need to have a SAE project prior to enrolling in an agricultural course. It is suggested that each student will assistance from the teacher will identify an SAE during the first quarter of their first agriculture course.
2. The experience program will be agreed to by the student, parents or guardian and instructor (including employer if appropriate).
3. The SAE for each student will be based on their needs and the experiences available. It is expected that as the student advances through the program that the experiences will become progressively more challenging.

4. Every student shall keep satisfactory records of SAE participation. Records to be kept may include: program plans, budgets, agreements, financial statement, inventory, income or receipts, expenses, hours of labor, efficiency factors, goals and a record of leadership activity participation. A North Dakota record book has been developed for this purpose.
5. The agricultural education instructor will be responsible for the supervision and evaluation of the SAE. Each student is expected to receive an average of two SAE visits per year by the instructor and the evaluation of the SAE may be used as a factor in assigning a course grade.
6. The instructor should encourage the use of alternative record keeping systems that may be appropriate to the student's SAE. Use of the North Dakota Adult Farm Management record book, or appropriate computerized record keeping systems should be encouraged, especially for students that have taken major steps to becoming established in production agriculture.
7. Students in junior high exploratory agriculture courses are not required to have an SAE program, but should be encouraged to explore career interests in agriculture. Individual or cooperative (group) activities can be used to allow student to gain first hand experiences.

The agricultural education program is unique in that it allows students to learn about agricultural subjects in the classroom, while encouraging actual experimentation and application of the same material in a real life setting. Without a Supervised Agricultural Experience Program for each student, the agricultural education instructional program is incomplete.

Teacher Qualities Needed To Implement SAE

Implementing SAE programs requires knowledge and initiative on the part of the agricultural education instructor. In keeping SAE an integral component of the agricultural education program, the instructor needs to inform students, school administrators, parents, employers, and others about SAE. This will necessitate a thorough knowledge of SAE by the instructor and a professional commitment to implementation of SAE programs. Cooperation, support and reinforcement for school officials are needed to make SAE a viable component of the agriculture education program. In providing an effective SAE, the instructor must:

- ❖ Be dedicated to providing quality agricultural education in the community
- ❖ Believe in the importance of learning through experience and be fully committed to the SAE philosophy.
- ❖ Inform prospective and present students and their parents about the benefits of participating in SAE.
- ❖ Require participation in SAE by all students.
- ❖ Require all students to conduct quality SAE programs.
- ❖ Have students keep neat, complete and accurate records.
- ❖ Utilize FFA incentives and award programs to recognize student accomplishments in SAE programs.

Responsibilities of Teachers

Quality SAE programs should not be taken for granted. The potential for individual student success is great if the SAE program is structured to provide a means of gaining quality employment skills. Much of the potential rests with the agricultural education instructor.

Agricultural educators play a critical role in helping students achieve success. They must assist each student as he/she selects and develops agricultural experience programs. Teachers must help students recognize their limitations as well as their strengths in selecting, planning, and conducting SAE programs. Systematic supervision of SAE programs at the site of agricultural experiences, employment and entrepreneurship is an important responsibility of the agricultural instructor throughout the school year. It is also a significant part of

the summer employment responsibilities of an instructor and should be emphasized in a year-round agricultural education program. The major SAE related responsibilities of agricultural education instructors include:

- ❖ Assist students in selecting quality SAE programs.
- ❖ Assist in planning SAE programs.
- ❖ Supervise individual SAE programs.
- ❖ Evaluate individual SAE programs
- ❖ Coordinate between students, parents and employers.
- ❖ Provide safety instruction.

SAE For Credit

In addition to the minimum requirements students may have the option of enrolling in an SAE program for additional high school credits (this is available in schools where the curriculum includes SAE credits).

The maximum SAE credit available during any one year period is ½ credit. Specific program requirements must be met to earn credit. These include:

1. Must have a satisfactory record of enrollment in agriculture courses and a satisfactory on-going SAE program.
2. Must have a signed agreement for SAE between the student, parents/guardians and employer.
3. Accurate and complete records must be kept during the course of the program and year-end summaries must be completed and turned in at the conclusion of the program.
4. Entrepreneurship programs must meet minimum size requirements. A minimum of 10 work units is suggested (see work unit chart).
5. Placement experience programs must meet a minimum of 10 hours employment per week.
6. Students must be 16 years of age to qualify for cooperative placement programs. Cooperative placement programs that permit release from school periods require approval of the school administration, advisory committee and parents. These programs require close supervision by the teacher and a closely followed, planned course of study.
7. Home farm cooperative training programs are recommended to have a minimum requirement of 50 work units, which may be a combination of livestock, crops or other entrepreneurship activities.

Item	No. of Work Units	Item	No. of Work Units
Dairy Cows	7.0/cow	Barley, Rye	.30/Acre
Other Dairy Cattle	1.2/head	Wheat, Durum, Oats	.30/Acre
Beef Breeding (Cow herd only)	1.2/head	Sunflowers	.40/Acre
Beef Breeding (Whole herd)	1.5/head	Flax	.30/Acre
Beef Feeders (Grass)	.10/cwt.	Potatoes	3.00/Acre
Beef Feeders (Feedlot)	.12/cwt.	Sugar Beets	2.00/Acre
Hogs – Complete	.12/cwt.	Corn for Grain	.55/Acre
Hogs – Finished	.06/cwt.	Soybeans	.45/Acre
Hogs – Weaned Pigs	1.4/litter	Legume & Grass Seed	.40/Acre
Sheep – Range	.45/head	Corn Silage	.60/Acre
Sheep – Farm Flock	.60/head	Silage – Legume & Grass	.40/Acre
Chickens (Laying Flock)	5.00/100	Alfalfa Hay	.60/Acre
Chickens – Broilers	.20/cwt.	Other Legume & Mixed Hay	.40/Acre
Turkeys – Poults	.12/cwt.	Tame Grass Hay	.20/Acre
Turkeys	25.00/100	Annual Hay	.30/Acre
Bees	.33/hive	Wild Hay	.20/Acre
		Truck Gardening	5.0-10.0/Ac
		Set Aside Acres	.20/Acre
		Summer Fallow	.20/Acre
		Self Employed Business	10 hrs/wk

Administration of the Local SAE Program

The agriculture instructor should consult with the local superintendent, principal and advisory council and discuss the objectives of supervised agricultural experience programs. A strong cooperative relationship with these individuals should be maintained throughout the entire year.

The instructor should discuss the purpose of agricultural education and the importance of experience programs in developing skills and applying classroom and laboratory instruction. Instructors should develop in their administrators, an appreciation and understanding of SAE so they realize that meaningful instruction and student learning does occur outside the classroom as well. Instructors can improve administrator relationships by:

- ❖ Inviting administrators to go on SAE visits.
- ❖ Inviting administrators to attend parent-student-employer functions and participate in the programs.
- ❖ Preparing a monthly report of SAE visits for the administrators and board members to review.
- ❖ Preparing a SAE public relations notebook with picture and descriptions of all students' SAE's to show to school board members.
- ❖ Preparing news articles with pictures for the local and school newspapers and see that all administrators receive copies.

In presenting material to school board members and administrators, instructors should discuss the need for supervision of SAE and the extra time commitment that is needed during the school year and summer months. This can be further justified by presenting a yearly report to the school board with the number of visits, time consumed, economic returns and instructional activities provided for all students.

The agricultural instructor should maintain files on the SAE program for each student. These files should include student year-end summaries of their SAE, preliminary plans pages collected from students, records of instructor visits and comments. Other records such as participation, enrollment, award & degree applications should also become a part of this file.

The SAE Year-End Report

Information from SAE summaries is required to complete the annual program report to the State Supervisor's office. Instructors will need to collect student SAE summaries in order to complete this report. Information requested includes:

1. Number of Entrepreneurship Programs
Total Dollars Earned (NET)
2. Number of Agriculture Employment Programs
Total Hours
Total Earnings (NET)
3. Number of Related Employment Programs
Total Hours
Total Earnings (NET)
4. Number of Directed Activities
Total Hours

SAE RECORD BOOK INSTRUCTIONS

This section is intended to be a reference for advisors and students for completing the North Dakota SAE Record Book. An attempt has been made for anticipated questions or problems that may arise when completing the SAE Record Book.

Page 1 – Personal Data Sheet - This page is for personal information about the student, the student’s background and general information about the SAE program to be recorded in this record book. Attach extra pages if needed. Also include information about the student’s career attainment plans.

Page 2 – Preliminary Plans - Instructors should collect copies of this page from students each year. Students with the help of parents and guidance of the teacher should select an appropriate SAE for the year ahead. Name the SAE in the left column and describe it in the right column (e.g. – Beef Production: 5 head). Complete the bottom of the page including a description of the student’s career choice.

Page 3 – Goals - Use this page to plan participation in the FFA and to set goals of achievement. Plan for one year ahead or more. Encourage students to set goals and then to work to achieve them. Example:

Year	Degrees & Awards	Offices & Committees	Contests	Fairs/Shows	Other
1 st	Greenhand Degree Star Greenhand	VP Mini Chapter Banquet Committee	Crops Judging Range Judging	County Fair State Fair	Football Wrestling

Page 4 – Activities Records - Record dates when degrees are received by student at the top of the page.

Part A – Offices held in the FFA – record here any offices elected to or appointed to in the FFA. Place an X under the correct column for the level of office.

Part B – Chapter and Community Cooperative Activities in the FFA – be sure to read the information above this section for what should/should not be included in this section. Example:

2001	Community Development	helped plant 200 trees in park
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Page 5 – Leadership in the FFA - Include those leadership activities participated in through the FFA such as:

Year	Activity	Chapter	District	State	Award/Responsibility
2001	Livestock Judging – Beulah		X		Silver
2001	Greenhand Camp			X	2 nd in tie tying

Page 6 – Leadership and Community Activities Outside the FFA - Record here other activities participated in outside of the FFA. The explanation at the top of this page is very helpful. Example:

2001	Hobart Hobo’s 4-H Club	President
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Page 7 – Business Inventory - List on this page the items owned that are a part of this SAE program. See the note at the top of the page for examples of what should/should not be included on this page. Generally items listed on this page are subject to market value changes but are generally not depreciable. When you list items on this page do not enter them again on page 8. Year-end/beginning year totals will be transferred to the page 9 financial statement.

Page 8 – Depreciation Schedule - List on this page the items owned that are a part of the SAE program. Refer to the information on the top of the page for examples of what should/should not be included on this page. Generally these are working assets that are subject to normal depreciation. Items listed here must not be listed on page 7.

Special Notes:

Date – the date item was added to your inventory

Original Cost – the cost, book value or market value of the item when added to your inventory

Salvage Value – the projected value of this item at the end of years life period

Years Life – number of years of useful life the item can be expected to be used until it’s value will reach salvage value, depends on the item, type of use and durability of the item. (usually 3,5,10 or 20 years)

Do not include personal items not a part of the SAE on this page, keep these separate from business assets. You may list vehicles (or percent of vehicle) in this section if it was purchased or used as a part of the SAE program.

Personal inventory items not a part of the SAE may be listed on a separate page (8) just for personal assets. The total or individual amounts can then be transferred to Page 9 “Other Assets”.

Page 9 – Financial Statement - To be completed at the beginning/end of each program year.

Special Notes:

Assets:

Cash – include all moneys (cash), checking account or on hand at the time of completing this financial statement

Savings – amounts earned by the student that are in saving accounts or certificates of deposit

Stocks/Bonds – all values of stocks, bonds or other investments of capitol from the SAE program

Accounts Receivable – total of all money owed the student for services/products as a result of the SAE

Business Inventory & Business Assets – values from Record Book Pages 7&8 should be transferred here. Be sure that the items are not listed on both (not duplicated)

Personal Share of Auto/Truck – value of auto or truck that is not listed on Page 8. If you list auto or truck in your SAE be sure to account for how it was acquired, such as gift or loans to be paid, etc. (individuals cannot own debt free pickups worth \$9,000 if they show \$2,500 income from SAE, no debts, no gifts)

Value of Other Personal Assets – list here other items owned that may have been purchased or acquired as a result of the SAE such as: motorcycles, recreational equipment, televisions, stereos, or other items not a part of the SAE

Liabilities:

Unpaid Bills – list all outstanding current debts (feed bills, supplies, etc.) incurred as a part of the SAE

Personal Share of Truck – amount of debt owed on auto or truck or percent of auto or truck that is personal not business if you listed the entire vehicle as an asset on Page 8

Other Loans – list the source and/or use of loans in the left column and the amount in the appropriate column

Example:

Other Loans	Start of 1 st Year	End of 1 st Year
Farmers Bank Equipment Loan	\$5,000	\$3,000

Page 10 – Entrepreneurship Agreement - This agreement is designed to be open and generic for adaptability to many types of SAE entrepreneurship programs. The agreement can be used in combination with the budget on page 11.

Page 11 & 12 – Entrepreneurship Budget - These pages can be used for two enterprises or for a projected budget/actual income-expense record. The top four lines are to be used to describe the SAE. Estimate income from all sources in the receipts section. Refer to page 12 for examples. Also, estimate expenses from all sources and refer to the examples on page 12 to complete the expense section. Work the agreement on page 10 to separate parent contributions to the SAE.

Page 13 – Transactions Ledger - The transaction ledger is used to record SAE activity including expenses and receipts on one ledger. Blank columns are provided to allow for keeping separate records of hours, separate enterprises or other income/expenses. These transactions may be kept much like a “journal” or “diary” but is also capable of being used as a “checkbook register” which can have a running balance. Again, this page was meant to be generic and adaptable to any SAE.

Page 14 & 15 - Efficiency factors are one way to measure the success of an enterprise. Record the most appropriate efficiencies of the SAE program on page 14. Suggestions of efficiency factors to be included are found on page 15. Refer to the proficiency award handbook for formulas used to calculate efficiency factors. Every SAE should have applicable efficiency factors that should be included and recorded here.

Page 16 – Employment Agreement – Use this form to record the conditions of employment for agricultural or other employment SAE programs. this form is also very generic to adapt to various SAE’s.

Page 17 – Employment Record – This page is intended to be used for employment SAE programs to record hours, income and expenses much like the transaction ledger (page 13). Keep separate pages for each employer and year of employment.

Page 18 – Directed Activities – A wide variety of activities may be recorded as a “directed activity”. Keep a separate page for each major activity such as “home improvement”. Information on the top of the page is very useful to understand what directed activities are.

Page 19 – Summary of Other Income and Gifts Given – The explanation of each section is very good. Please read and understand these directions. It is necessary to record this information that may have a bearing on the net worth of a student’s SAE.

Page 20 & 21 – Summary of SAE Program – This is the information to be collected by the instructor at the end of each program year.

It will be necessary to accumulate this information to complete the annual program report to the State Supervisor. Page 20 is to be used to summarize entrepreneurship programs. Use a separate column for each enterprise. The results of the student’s SAE should be accurately reported. Use information from pages 10-15 to complete page 20.

Page 21 is a yearly summary of employment, gifts and directed activities. Use pages 16-19 of the record book. The student should always keep a copy of each yearly summary in their SAE record book and the instructor should keep a copy in his/her SAE program files. This information will be very useful when applying for FFA degrees and awards.

STUDENT PROBLEM FOR SAE RECORD BOOK

Name:	JJ Sharp	School:	Elbow Wood High School
Address:	RR, Elbow Woods, ND	Year In School:	Freshman
Age:	15	Instructor:	Bill Knows
SS #:	502-32-3819	Father:	Fred Sharp

JJ is currently enrolled in Ag I. JJ is preparing this record book for the year starting January 1. JJ has the occupation goal to be either a county agent or an instructor of vocational agriculture. The Sharp farm is located 3 miles NW of Elbow Woods. JJ hopes to take over the family farm some day.

JJ plans to be a very active FFA member and Ag Education student. JJ plans to have a very complete SAE program including three directed activities, ownership programs in beef and cereal grains and off-farm placement. JJ has a sister 10 years old and plans to attend Bismarck State College for two years and then go to NDSU.

Beef – JJ will also have a beef production enterprise consisting of three beef cows. JJ will be keeping all animals with father's beef herd and will be paying for all expenses as will be outlined in their agreement. JJ will then receive 100% of the profits. The cow yardage and pasture expenses will be paid in December.

Barley – JJ will be producing ten acres of a feed barley as feed grain production enterprise. JJ will be paying for 100% of the production costs of the project at the close of this project and will be receiving 100% of the profits.

Off-Farm Placement – JJ has made arrangements to work for uncle Don at Deep Water Implement this summer. As a general trainee, JJ will assemble equipment, help maintain the shop area and lost. (3 months part-time)

Directed Activities

1. **Beef Improvement** – JJ plans to build a calf warming box as a directed activity. JJ estimates that this project will cost approximately \$57 and that 2x4 lumber, one sheet of $\frac{3}{4}$ " plywood, insulation materials, a heat lamp, cord switch and paint will be needed. JJ also estimates that this project will take approximately 24 hours of labor. JJ plans to build this project as a part of the shop instruction under the supervision of Mr. Knows. JJ's father has agreed to pay for all materials.
2. **Crop Improvement** – In JJ's cereal grain improvement project, JJ plans several small projects to help improve the crop yield. JJ will pay for all expenses that affect the barley project and JJ's father will pay for all machinery repairs and parts. Improvement activities include seed cleaning, seed treating, soil sampling, grain bin repairs and general repairs on machinery.
3. **Home & Farmstead Improvement** – JJ will scrape and paint father's barn as an improvement activity. JJ plans to scrape old paint where needed and paint the barn red with white trim. JJ will provide all the labor and JJ's father will provide all the paint and materials. JJ estimates 40 hours of labor needed and 13 gallons of paint at \$9 per gallon.
4. **Agriscience Fair Project** – JJ is going to build and exhibit a hydroponics unit for the school science fair. JJ estimates 20 hours of labor.

Goals and Plans for the Year

JJ plans to attend every FFA meeting to be held this year. They are scheduled for the second Monday each month. JJ also intends to participate in crop judging in February and March. The FFA banquet in April, State FFA Convention in June, Land Judging and State Fair in July, Range Judging and the County Fair in September, District Leadership Meeting in October, fruit sales and National Convention in November and the

Christmas party in December. JJ's parents have agreed to pay for all of the FFA activities including meals, room, transportation and spending money.

JJ also intends to earn the Greenhand Degree this year and to win the Chapter Demonstration Contest. JJ's long term goals are to receive the Chapter FFA Degree as a sophomore, be the District Beef Proficiency winner as junior and earn the State FFA Degree as a senior. JJ intends to hold the offices of Chapter Secretary and President and to eventually earn the American FFA Degree as JJ's father did in 1965.

Already in Ag I, JJ has completed all the requirements for the Greenhand Degree except for the section "has satisfactory plans for an SAE". Upon completion of the preliminary plans for SAE and his submitting written application for the degree, JJ will be eligible to receive the Greenhand Degree at the Chapter Installation Ceremonies during FFA Week in February.

January 1 – Beginning Balance

<u>Assets</u>		<u>Liabilities</u>
Checking Account	\$ 543.50	1. Beef cow loan with Dad - \$900 + \$24 interest/year
Savings Account	300.00	5 yr. loan with 3 yrs. remaining
Remington Shotgun	200.00	2. Pickup Loan - \$500 at Farmers Bank
1980 Chevy Pickup	1,000.00	Payment of \$250 per year with 10% annual
3 Crossbred Cows	1,500.00	interest on balance
Beef Equipment	200.00	

Shotgun (20 yr. dep.) - \$100 salvage value
 Pickup (5 yr.) - \$500 salvage value
 Beef Equipment (5 yr.) - \$50 salvage value
 (Use straight line depreciation)

Production Agreement Specification and Projected Budgets

Barley Project – Cost and Assumptions – JJ has agreed to rent ten acres for the barley project from Fred Sharp at the rate of \$15 per acre. JJ will purchase seed, spray, fertilizer, seed treatment, insurance and soil tests. JJ will rent machinery from father at 66% the custom rate for the area (which allows for JJ's self labor). Fred Sharp agrees to furnish equipment (34% custom rate) with fuel at the area custom rates of:

Tractor/Chisel Plow -	\$5/acre	Swather -	\$3.50/acre
Tractor/Field Cult. -	\$3.65/acre	Combine -	\$10/acre
Drill with Fertilizer Attac. -	\$4.80	Trucking -	\$.08/bu (4.00/acre)

JJ estimates that the barley will yield 50 bu/acre and that at current prices JJ can expect to receive \$1.50/bu. JJ also projects the following production costs per acre.

Seed -	\$3.75/acre	Labor -	25 hours
Fertilizer -	\$8.75/acre	Spraying -	\$2.15/acre
Insurance -	\$8.20/acre	Machinery -	\$20.42/acre
Land -	\$15.00/acre	Other costs –	
		Sprayer -	\$2.00/acre
		Ferti spreader -	\$1.20/acre

Beef Production – Costs and Assumptions – JJ purchased three crossbred heifers as a 4-H project two years ago at a cost of \$500 each. JJ has agreed to pay Dad for these animals over a five-year period. JJ makes annual

payments of \$300 on the principle plus interest of \$24.00 per year. JJ pastures the cows with father's herd in the six months of mid-May through mid-November and has agreed to pay \$6.00/head/month. JJ also pays \$15.00/head/month for the rest of the year for feed and yardage.

JJ also estimates the other expenses to be: \$75.00 for medicine and vet, \$4.00 per head for insurance, \$15.00/head breeding costs, and \$11.00/head for marketing costs. JJ anticipates a 100% calf crop, and plans to sell calves at weaning. JJ expects that calves will weigh 600 pounds each at weaning and that JJ can expect to receive \$65.00/cwt this fall.

OFF FARM PLACEMENT – JJ has agreed to work for uncle Don Slick, at Deep Water Implement (DWI) in Elbow Woods this summer. As a general trainee, JJ will assemble equipment, help maintain the shop area and lot, and will also help in the parts department with stocking and customer service. JJ will work four days per week, eight hours per day (8:00-4:30) – this will give JJ time to care for the beef and grain production enterprises. JJ has also made arrangements with Uncle Don to take days off to participate in the county and state fairs, and to participate in the land judging contest this summer. JJ will be paid \$3.50 per hour and will be paid every two weeks. Insurance will be covered by the company and by Workmen's Compensation, the same as all other employees. JJ is expected to provide all suitable work clothing and personal safety equipment as required by the shop foreman. JJ has also made arrangements with his father for transportation to and from work. Fred Sharp has agreed to furnish gasoline to JJ for \$15.00 per month for transportation to work.

STUDENT PROBLEM FOR SAE RECORD BOOK – MONTHLY ACTIVITY

January

1. Completed crop production agreement – 1.5 hours
6. Completed livestock budget and agreement – 3 hours
7. Picked up material for calf warmer – wood, glue, insulation and nails – cost Dad \$57.00 – 1.5 hours
8. Completed crop budget – 2 hours
10. Cut and assemble calf warmer frame – 4 hours
11. Insulate calf warmer – 1 hour
12. Line inside of calf warmer with plywood – 1 hour
13. Build door and attach to calf warmer – 1 hour
13. Went to Greenhand Camp with Mr. Knows and 6 Greenhands
15. Paid Dad for insurance on 3 cows - \$4.00 each
27. Attended crop judging in Minot
31. Yardage for cows in January - \$15.00 each – 2 hours labor

February

4. Pick up paint, light and switch for calf warmer – cost \$18.00 – 1 hour
5. Paint calf warmer – 1 hour.
8. Attended chapter FFA meeting – on FFA Week planning committee
9. Install lights, wiring and switch for calf warming box – 3 hours
10. Made plans for science fair project – 2 hours
15. Purchase Bowman seed barley from NDSU Experiment Station in Dickinson (bulk seed) 15 bu \$2.50/bu – 2 hours labor
16. Order materials for science fair project – 2 hours
15. Cleaned seed barley at Elbow Woods Grain – cost .25/bu., plus paid Dad \$7.50 for truck – 2 hours
18. Participated in crop judging contest in Beulah
19. Gave beef animals vitamin supplement injections at \$1.00 each – paid Dad
19. Gave beef cows a three-way vaccination injection at \$1.50 – paid Dad
20. Received Greenhand Degree at ceremonies in vo-ag room

21. Purchased PVC pipe, ¼” tubing, submersible pump, timer, grow lights, grow plugs - \$75.00 student cost – 2 hours labor
24. Served cherry pie to faculty for FFA Week
25. Participated in crop judging contest at BSC – team was second place gold award individual
27. Set up hydroponics demonstration unit \$20.00 student cost – 2 hours labor
28. Yardage for beef cows for February - \$15.00 each – 3 hours

March

1. Purchase hydroponics nutrient solution – student cost \$8.00 – 1 hour labor
3. Bessie had bull calf – no problems – tagged calf (J87-1FFA) in right ear (birth wt. 87 lbs.)
6. Left for North Dakota Winter Show – crop judging team gold team
9. Discovered that Sally has her calf while I was gone – March 7, heifer calf, no problems. Roped and tagged calf (J87-2FFA) in left ear (birth wt. 75 lbs.)
10. Start plants in hydroponics unit – 2 hours.
15. Bonnie’s bull calf born – had to take to vet to pull (birth wt. 98 lbs.) vet bill \$60.00, tagged calf (J87-3FFA) right ear – 4 hours labor
30. Wrote paper on plant response to hydroponics – 5 hours
31. Yardage for cows for March - \$15.00 each – 10 hours

April

7. Decoration committee for banquet
18. Exhibited hydroponics science fair project at school science fair – 2nd place – 4 hours labor
23. Took soil test for barley ground. Dried and sent to NDSU Soils Lab - \$6.00 – 1 hour labor
25. Attended Annual FFA Banquet with parents – received Star Greenhand Award
26. Rented tractor and chisel plow from Dad to work barley field – self labor 2 hours
30. Yardage for beef cows for April - \$15.00 each – 4 hours

May

2. Improvements made to John Deere press drill – change 3 packer wheels, lubricate and adjust drill for seeding – 9 hours self labor (cost to Dad \$75.00)
6. Bought 2# of D.B. Green for seed treatment from Elbow Woods Farmers Elevator - \$11.00 – 1 hour
8. Broadcast 50 lbs/acres of Urea @ \$170.00/ton (from Elbow Woods Fertilizer Company)
Rented spreader from Elbow Woods Fertilizer Company @ \$1.20/ac
Rented Dads field cultivator to work Urea into soil – self labor 4 hours
10. Rented tractor and drill from Dad to plant barley – seeded at 1.5 bu/ac
10. Seeded with 50 lb/ac 18-46-0 Fertilizer @ \$180.00/ton (from Elbow Woods Fertilizer Company) – self labor 2 hours
11. Replace drive chain on drill – 1 hour labor (cost to Dad \$15)
14. Elected Mini-Chapter President
15. Fixed home pasture fences. Turned cows out to pasture #1 – 5 hours labor
24. Worked our cattle, paid Dad \$3.00 each for branding, vaccination and fly tagging my calves – 1 hr labor
31. Yardage for beef cows for May - \$7.50 each
31. Pasture for beef cows for May - \$3.00 each – labor 5 hours

June

1. Bought crop insurance @ \$8.20/acre – Gary Wald Agency
1. Joined County Crop Improvement Association - \$5.00
2. Left for State FFA Convention – Courtesy Corps Member – Gold Rating
7. Sprayed barley with 2,4-D Ester purchased from CENEX, 1 gal @ \$9.50 – self labor 2.5 hours. Paid for renting spray coupe. (1.80/acre to Cenex)
12. Turned out bulls with cows – 3 hours

- 13. Walked barley field checking for insects and diseases none found – 1 hour
- 19. Got paid for 64 hour @ \$3.50, less 7% SS, 10% Fed.
- 20. Bought new beef halter from Deep Water Vet Supply (\$25.00) plus 4% sales tax (5 year life)
- 30. Pasture rent for beef cows - \$6.00 each – 2 hours labor
- Breeding fees to Dad - \$15.00 for each cow (\$45.00)
- 30. Paid Dad \$15.00 for transportation for June to DWI

July

- 2. Got paid from DWI – 64 hours
- 10. Attended District Tractor driving contest - silver
- 14. Attended Land Judging in Finley/Sharon – silver team
- 16. Got paid from DWI – 56 hours
- 24. Scrape Dad’s barn and prepare for painting – 10 hours
- 25. Paint barn – 12 hours (12 gals of paint) \$9.00/gal
- 26. Finish painting barn – 6 hours
- 30. Got paid from DWI – 63 hours
- 31. Paid Dad for July transportation - \$15.00
- 31. Pasture rent for cows - \$6.00 each – 2 hours labor

August

- 1. Painted barn trim (1 gal of paint) - 3 hours
- 1. Changed swather drive belt (cost to Dad \$65.00) – 4.5 hours
- 7. Fixed cow pasture fence and well pump (cost to Dad \$75.00) – 4 hours
- 7. Sprayed and repaired Dad’s grain bins (cost to Dad \$25.00) – 4.5 hours
- 8. Rented Dad’s swather and swathed barley – 2 hours
- 13. Got paid from DWI for 64 hours
- 14. Combined barley field, rented Dad’s combine, rented Dad’s truck – yield 540 bushels – 4 hrs self labor
- 14. Sold barley at Elbow Woods Farmer Elevator (\$1.40/bu) – 1 hour labor
- 20. Paid for 32 hours at DWI
- 21. Paid Dad all land rent and machinery expenses @ 66% custom rate
- 21. Paid Dad for work transportation - \$15.00
- 22. Change cylinder bars on Dad’s combine (\$250.00 Dad’s cost) – 12 hours
- 31. Pasture rent for cows - \$6.00 each – 3 hours
- 31. Calculated crop efficiency factors – 1 hour

September

- 27. Attended state range judging contest – gold individual – 3 place team
- 30. Pasture rent for beef cows - \$6.00 each – 2 hours

October

- 2. Participated in chapter demonstration contest – demonstrated “Cattle Stocking Rates – How They Affect Rangeland” – chapter winner
- 7. Attended District Leadership meeting – gold award – qualified for state
- 20. Worked cows – pregnancy tests – all ok, paid Dad \$2.80/cow
- 31. Pasture rent for beef cows - \$6.00 each – 5 hours

November

- 2. Sold calves at Western Livestock \$68.00/cwt – 4 hours
 - Steer calf #1 weighed 605 lbs.
 - Heifer calf #2 weighed 558 lbs.
 - Steer calf #3 weighed 635 lbs.

- 2. Expenses of: Trucking - \$10.00 paid to Dad
Commission – 2% paid to Western (24.45)
- 8. Sold 14 boxes of fruit for chapter fruit sales
- 14. Left for National Convention in Kansas City
- 20. Made payment on cow loan to Dad - \$300 principle - \$24.00 interest
- 30. Pasture rent for beef cows - \$3.00 each
- 30. Yardage for beef cows - \$7.50 each – 4 hours

December

- 20. Paid Farmers Bank – pickup loan \$250 principle, \$50 interest
- 22. Attended Christmas Party – sledding and videos
- 24. Received Christmas present from Mom and Dad – 270 Winchester Deer Rifle - \$350.00 value – 20 year dep life salvage – value \$150.00
- 31. Yardage for beef cows - \$15.00 each – 10 hours labor
- 31. Calculated profit on beef cow enterprise and efficiencies – 2 hours labor

CLOSING INVENTORY

<u>Assets</u>		<u>Liabilities</u>	
Dear rifle	\$ 350.00	1. Cow Loan to Dad	\$ 624.00
Shotgun	195.00	2. Pickup loan to Farmers Bank	275.00
Beef Equipment	170.00		
Halter (6 mo dep)	22.50		
3 X-bred cows	1,500.00		
	3300#		
Savings	700.00		
Checking	546.80		