

PLACEMENT Proficiency

WISCONSIN



2010 Environmental Science and Natural Resources
Entrepreneurship/Placement

STATE: WI
Chapter # WI 0093
Member ID # 552162653

Wisconsin

ENV

Triscuit

RCE MGMT

- Name: Kyle Thomas Tollefson
Name on chapter FFA roster: (If Different): Cochrane- Fountain City
- Date of Birth: _____ 3. Age: _____
(Month) (Day) (Year)
- Gender: Male Female
- E-mail: _____
- Address: (street address required)
City: _____ State: _____ Zip: _____
- Home Telephone number (including area code): _____
- Name of Parents/Guardians
a. Father: _____
b. Mother: _____
- List Parents/Guardians Occupation Below:

- Complete FFA Chapter Name: Cochrane- Fountain City
- Name of High School: Cochrane-Fountain City High School
- School Address: (street/RR./box no.) S2770 STH 35
School City: Fountain City State: WI School Zip: 54629
- School Telephone Number (including area code): 608-687-4391
- Chapter Advisor(s): Christine Jumbleck and Chris Ritscher
- Year FFA Membership Began: 2005
- Years of Agricultural Education Completed: 3
- Years of Agricultural Education Offered (grades 7-12) in high school last attended: 5
- Year in school at time of applying for the award: Junior
- If you have graduated from the high school, year graduated: _____
- State/National Dues paid? YES

We have examined this application and find that the records are true, accurate, and complete. We hereby permit for publicity purposes, the use of any information included in this application with the exception of the following:

Kyle Tollefson

Candidate Signature

Ted Tollefson

Parent or Guardian Signature

In addition, we certify the applicant has achieved a satisfactory record of scholastic achievement.

Chris Ritscher

Chapter Advisor Signature

Thomas D. Wiebert

Superintendent or Principal Signature
(indicate which)

The information contained in this application has been substantiated by an actual visit to the site of the applicant's supervised agricultural experience program.

Christine Jumbleck

Employer Signature (if applicable)

[Signature]

State Supervisor, Ag Ed, Signature

NOTICE: This application will not be returned by the National FFA Organization. Please make a copy for your records.

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National FFA Organization

Our House Enterprises

(WI 552162653)

6/21/2010

1. Performance Review

A. Getting Started in this activity:

(15)

1. Briefly describe your SAE as it is related to this proficiency area. Describe how you started in this proficiency area. What interested and motivated you to begin?

My project interests began when I attended the Youth Environmental Science Seminar in November of 2007 in Stevens Point, WI. This seminar offered many different workshops in the Environmental Science field. The presentation on nitrates in groundwater sparked my interest in environmental testing and the equipment used in water evaluation.

My SAE project involves a variety of activities in the Environmental and Natural Resources field. The majority of my scope is testing local wells for nitrates. A follow-up project included conducting surveys of homeowners whose wells I tested. Data collected was used to determine possible sources of nitrate contamination.

Another aspect of my project is working with the Wisconsin Department of Natural Resources (DNR) and the U.S Fish and Wildlife service to plant trees and to remove the invasive plant purple loosestrife on three newly built islands in the Mississippi River. I have also assisted in rip rapping and installing luncker structures to improve fish habitat on the Waumandee Creek.

2. When you were planning your supervised agricultural experience in this proficiency area, what 2 or 3 goals and objectives did you plan to achieve at this point in your development?

Goal 1. Complete at least four water testing trials each year. I will have a testing trial every three months for nitrate levels at the sample sites. I will test for nitrates and also survey the homeowner to find information which may lead to the discovery of the source of these nitrates. It is important to test often to find if a household has high nitrates and also find the source.

Goal 2. I started with 12 samples and I want to increase the number of samples I test by at least 25% in the next year. I will add one or more sample sites for every trial I have. By the end of the year I will have at least a 25% if not more increase in sample sites. It is important to test many areas to give yourself more data to analyze.

Goal 3. Identify the nitrate levels in all of my water samples and take action by informing people if their water is over the state limit of 10mg/L. I will call the homeowner on the phone to give them their results. If I get my testing results and the nitrate level in a water sample is at a dangerous level I call the homeowner immediately after I receive the results. Nitrates are serious and if the level is too high in a sample it could cause methemoglobinemia(Blue Baby Syndrome), this causes a lack of oxygen in the bloodstream which may cause death. This lack of oxygen is caused by the nitrogen from the nitrates attaching to the hemoglobin in the blood stream and taking the spot of the oxygen molecules resulting on fewer molecules on the hemoglobin.

B. Progress:

1. Describe any special advantages or disadvantages that had a major impact on your achievements in your supervised agricultural experience program.

One special advantage in my project was having help from my high school science and agricultural teachers. My science teacher taught me how to operate a spectrophotometer and how to test for nitrates using reagents. My agriculture teacher was able to get me into a professional water testing lab where I was allowed to test all my samples using a digital testing probe. This was a major impact on my project because I was able to cross reference my manual testing procedures to more technological and reliable methods.

Another advantage is that my local FFA chapter works closely with the Wisconsin DNR and the U.S Fish and Wildlife Service. Several opportunities presented themselves as SAE projects. I assisted in planting 9,000 trees and shrubs to regenerate the man-made islands and control soil erosion. Another project included placing rock along stream banks to prevent erosion. Luncker structures were also placed in the stream and anchored down by pounding the supporting rods into the stream bed.

B. Progress (continued)

2. Briefly describe your placement in this proficiency area. (Include a description of the business/farm, working conditions, size, number of employees, type of facilities, equipment available, etc.)

For my SAE I worked in the science room at Cochrane-Fountain City High School and at Dairyland Labs in Arcadia. I collected samples of water at sample sites throughout my county. They were chosen randomly making sure that the sample areas were at least 5 miles apart. I am the only person that tested water samples besides the help I received from a lab technician at Dairyland Labs.

The equipment I used to test my samples at Dairyland Labs was a digital testing probe and a nitrate reagent. This reagent was added so that the probe would pick up the amount of nitrates in a sample. Without this reagent the probe would not pick up any reading. At the Cochrane-Fountain City science room I used a spectrophotometer and a chemical called Nitra Ver® 5, which acts just like the reagent for the testing probe. I also used beakers and timers at each testing facility.

To calibrate the spectrophotometer to test for nitrates I made a calibration curve on a Microsoft Excel

3. How has your position description and/or responsibilities changed during the time of your placement?

When my SAE started it was a small scale project. During the time of my placement I have learned more about nitrates and how to test for the amount in a sample. I learned how to use a testing probe at Dairyland Labs and was able to test my samples for the level of nitrates. Throughout my trials I have gained more experience in testing for nitrates and can test for nitrates with no help from others. I have also gained a vast knowledge in the causes of these nitrates and can explain to home owners why they have the nitrate levels that they do. I have also in the past year conducted surveys to find the source of nitrates at my sample sites, by interviewing the owners about their property. I asked questions such as well depth, soil type, the type of filter on their faucet, and how close the well was to cultivated land.

C. Analysis/Evaluation of Program

1. Describe your level of achievement and progress towards your goals (such as skills, scope, etc.) in this award area as related to the goals and objectives described on page 2, question 2.

Goal 1. It has been two years since the beginning of my project and I have had eight trials. I plan to have another trial within two months.

Goal 2. I have sixteen sample sites, however I still have one more trial to run and plan on finding one or two more by next trial. I have gradually worked my way up to more sample sites.

Goal 3. I have been able to test all my samples with accurate results. I have tested the same samples both at Dairyland Labs and in the schools science room. Doing this proved that my testing is very accurate.

2. Describe the personal goals, educational goals, and career goals you would like to achieve in the next ten years.

Personal Goals: I plan on purchasing some woodland and prairie to build a house and shop on. I plan to have woodworking equipment in my shop and make and sell items. I also plan to stay connected to the environmental field where I will become involved in the local Rod and Gun Club and the FFA Alumni.

Educational Goals: I plan to graduate in the top ten of my high school class and be in the Class of Distinction. In the fall of 2011, I will attend college and major in engineering.

Career Goals: My goal is to have an engineering job when I graduate from college and work my way up in the business. I want to become a CEO of the business that I begin to work in. Also, I want to invest my earnings so I can retire at an early age.

II. Scope, Income and Expense Summary for : ENVIRONMENTAL SCIENCE & NAT. RESOURCE MGMT
 Placement and Research Experimentation Type Supervised Agricultural Experience Program (20)

Year	Major Job Title Type of Work and/or Activities completed	Total Hours Worked			Gross Earnings (D)	Total Expenditures (E)	Net Earnings (F)**
		Unpaid (A)	Paid (B)	Total (C)*			
Mo/Day/Yr 1/14/2008 to Dec. 31 2008 (Year)	Lab Technician						
	-Water Sampling	124.0		124.0			
	-Sample preparation for testing	74.0		74.0			
	-Operating a spectrophotometer	25.0		25.0			
	-Operating a testing probe	8.0		8.0			
	Reforestation and Erosion Control	30.0		30.0			
Totals for Year 1		261.0		261.0			
Jan 1, to Dec. 31 2009 (Year)	Lab Technician						
	-Water sampling	158.0		158.0			
	-Sample preparation for testing	90.0		90.0			
	-Operating a spectrophotometer	33.0		33.0			
	Waumandee Stream Erosion Control	8.0		8.0			
Totals for Year 2		289.0		289.0			
Jan 1, to Dec. 31 2010 (Year)							
Totals for Year 3							
Jan 1, to Dec. 31 2011 (Year)							
Totals for Year 4							
Jan 1, to Dec. 31 2012 (Year)							
Totals for Year 5							
Jan 1, to Dec. 31 2013 (Year)							
Totals for Year 6							
GRAND TOTALS		Year (1+2+3+4+5+6)		550		550	

* Columns (A) plus (B) = (C)

** Columns (D) minus (E) = (F)

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 (WI 552162653) 6/21/2010

III. Balance Sheet

ASSETS & INVESTMENTS	Beginning Value on Date Entered Ag (A)	Ending Value on Date of Last Completed Fiscal Year (B)
1. Current/Operating Assets		
a. Cash on-hand, checking and savings	\$725	\$2,840
b. Cash value - bonds, stocks, life insurance		
c. Notes & accounts receivable		
d. Total Current/Operating Inventory (all other current assets)		
2. Total Current/Operating Assets (1a+1b+1c+1d)	\$725	\$2,840
3. Non-Current/Capital Assets		
4. Total Assets (2+3)	\$725	\$2,840

LIABILITIES	Beginning Value on Date Entered Ag (A)	Ending Value on Date of Last Completed Fiscal Year (B)
5. Current/Operating Liabilities (notes payable)		
6. Non-Current/Capital Liabilities		
7. Total Liabilities (5+6)		

8. NET WORTH (4 minus 7)	\$725	\$2,840
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SUMMARY OF SOURCE AND USE OF FUNDS	Beginning Value on Date Entered Ag (A)	Ending Value on Date of Last Completed Fiscal Year (B)
9. Earnings from this proficiency area	XXXXXXXXXXXX	
10. Other SAE earning NOT from this area	XXXXXXXXXXXX	
11. Earnings from non-SAE activities	XXXXXXXXXXXX	\$1,236
12. Income other than earnings	XXXXXXXXXXXX	\$1,127
13. Total Earnings (9+10+11+12)	XXXXXXXXXXXX	\$2,363
14. Use of Funds	XXXXXXXXXXXX	
a. Total educational expenses	XXXXXXXXXXXX	\$48
b. Total other personal expenses (Includes local, state & federal income tax and FICA)	XXXXXXXXXXXX	\$200
15. Total use of funds (14a+14b)	XXXXXXXXXXXX	\$248

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IV. Skills and Activities

A. Skills

(25)

List your top six placement skills and give a brief description of each one and its contribution to the success of your supervised agricultural experience program.

1. Skill Number One.

Year	Skill	Where Attained	Student Hours
2008	Operating a Testing Probe	Dairyland Labs	8

Description of Skill:

At Dairyland Labs I used a probe to test for nitrates in my samples. The probe had a digital screen for the nitrate level reading.

To use the testing probe you first had to turn it on and wait for the screen to say ready. Secondly you had to test a control to see if the probe is testing accurately. Dairyland Labs had a control made to test. After the probe is accurate you pour ten milliliters of each sample into a beaker. For the probe to pick up the nitrates you need to add ten milliliters of a nitrate reagent to each sample. After you add the reagent you mix for five minutes, then you put the probe in the solution to test for the nitrates. The result will show up on the digital screen and you record the results on a sheet of paper.

2. Skill Number Two.

Year	Skill	Where Attained	Student Hours
2008-2010	Operating A Spectrophotometer	Cochrane-Fountain City High School	58

Description of Skill:

This is the skill needed to test for nitrates. To operate a spectrophotometer you must plug it in and let it warm up for five minutes. Then you can run a blank (deionized water) and zero it out. To test a sample you must pour twenty-five milliliters of the sample into a beaker. You then add Nitra Ver® 5 to the sample and mix for five minutes. When done you pour eight milliliters of the sample into a curvet(test tube) and insert into their spectrophotometer. When you have a steady reading write it down. To find the real level of nitrates I tested four solutions of nitrate water (0.1, 1, 10, 20). I used the readings from these samples to create a calibration curve on an Excel worksheet. On the calibration curve there is an equation. This equation is used to find the nitrate level in each sample. You need to insert the spectrophotometer reading into the equation to find the level of nitrates in each sample.

3. Skill Number Three.

Year	Skill	Where Attained	Student Hours
2008-2010	Safe Chemical Handling	Cochrane-Fountain City High School	64

Description of Skill:

Lab safety is crucial in any science related field. My classmates and I had a three-day unit in safe chemical handling procedures. At the end of the unit we took a written test to make sure we knew proper protocol in event of a spill or problem.

To test for nitrates I had to use a chemical called Nitra Ver® 5 at Cochrane-Fountain City. Safety was the concern when handling the chemical. Goggles were worn so the chemical could not irritate my eyes. I also wore goggles at Dairyland Labs to prevent the same irritation.

IV. Skills and Activities (continued)

ENVIRONMENTAL SCIENCE & NAT. RESOURCE MGMT

A. Skills (continued)

(25)

List your top six placement skills and give a brief description of each one and its contribution to the success of your supervised agricultural experience program.

4. Skill Number Four.

Year	Skill	Where Attained	Student Hours
2008-2010	Water Sampling	Cochrane-Fountain City High School	282

Description of Skill:

This is the skill used to retrieve a sample and take it to Dairyland Labs or the C-FC science room. Without this skill I could have taken inaccurate samples.

When taking a water sample you must first make sure the container you are collecting the water sample with is not contaminated. You must wash the container with deionized water to make sure you have no nitrates in the container before you take the sample. While taking the sample you must turn the water on for at least five minutes so the water accumulated in the pipes can be flushed out of the system. If you take a sample before five minutes it will be inaccurate, because the nitrates in the system will taint the sample. After you take the sample you have a week to test it for nitrates or it will become inaccurate and will not have a precise reading.

5. Skill Number Five.

Year	Skill	Where Attained	Student Hours
2008-2010	Measuring Time and Amount of Substances	St. Boniface School	57

Description of Skill:

Monitoring testing times and measuring accurately is vital in the science field. To collect a good sample I had to run the faucet for five minutes making sure no stagnant water was left in the pipes. I then collected 125ml of water for each sample. I also used this skill for testing with the probe and spectrophotometer. I had to measure the amount of each sample to add the chemical Nitra Ver® 5 for the spectrophotometer or to add a nitrate reagent for the testing probe. I also had to measure out eight milliliters of the solution to put in a test tube to test in the spectrophotometer. Without my measuring skills all of the testing would be inconclusive, because the testing procedures will be inaccurate. Measuring accuracy is key to my project.

6. Skill Number Six.

Year	Skill	Where Attained	Student Hours
2008-2010	Erosion Control	Cochrane-Fountain City High School	38

Description of Skill:

Erosion can drastically change the environment by both releasing run-off into streams and destroying soil for plant growth. This is a big factor being looked into after the construction of three new man-made islands in the Mississippi River. The reason that this is such a problem is that the waves from the river washed away the previous islands and it will happen again if nothing is done to prevent it.

To prevent the erosion that occurred previously from happening again, trees and shrubs were planted on the islands to create a strong root structure to prevent erosion. Rocks were also placed along the shores at certain points to absorb the waves and prevent the shore from eroding.

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IV. Skills and Activities (continued)

ENVIRONMENTAL SCIENCE & NAT. RESOURCE MGMT

B. Activities

(25)

List your top three placement activities and give a brief description of each one and its contribution to the success of your supervised agricultural experience program.

1. Activity Number One.

Year	Activity	Where Attained	Student Hours
2008-2010	Testing Water Samples For Nitrates With A Spectrophotometer and Testing Probe	Cochrane-Fountain City High School and Dairyland Labs	220

Description of Activity:

To cross reference my sample results, the samples were tested using both a spectrophotometer and testing probe. These tests were vital to show whether the spectrophotometer was an accurate way to test the samples.

While using the spectrophotometer and testing probe I used three of my skills. First, I knew how to operate the spectrophotometer and testing probe to test samples. Secondly, to test samples I needed to measure out accurate amounts of substances and also monitor time. Finally to make the nitrates detectable, I had to use a chemical in which I used safe chemical handling.

2. Activity Number Two.

Year	Activity	Where Attained	Student Hours
2008	Spring Island Restoration Project	Spring Islands	30

Description of Activity:

The Spring Island's in the Mississippi River are three man-made islands created to encourage a better ecosystem in the Spring Lake area.

Once the islands were created an ecosystem had to be created on the islands themselves. The invasive plant Purple Loosestrife was first eradicated from the islands to encourage more diverse plant growth.

Reforestation of the islands was essential to controlling soil erosion. Over 9,000 trees and shrubs were planted on the islands. The trees and shrubs will develop a solid root system which will protect the islands from erosion caused by the constant pounding of the waves on the shoreline.

3. Activity Number Three.

Year	Activity	Where Attained	Student Hours
2008-2010	Collecting Water Samples To Be Tested	Cochrane-Fountain City High School	282

Description of Activity:

Collecting water samples utilizes two of my skills. Once I got permission to collect a sample I utilized my skill of water sampling and accurate sample collecting. While taking the samples I utilized my measuring skills to make sure that the sample was accurate. Without being able to properly collect the samples from the households I would not be able to test the samples and find the possible causes of the nitrates because the data would be corrupt.

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(WI 552162653)

6/21/2010

Checklist for Agricultural Placement Proficiency Applications

Award Area: ENVIRONMENTAL SCIENCE & NAT. RESOURCE MGMT
Name:

Local Advisor	State Advisor	
		Circle "Y" if the Statement is "YES" and "N" if the Statement is "NO".
MET		1. Applicant has been an active FFA member for each year covered by this application. Cover page, Line 20. (Please consult the local & state copy of membership roster for each year.)
<input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> N	2. Applicant has included his/her e-mail address, Cover page, Line 5.
<input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> N	3. Applicant has been out of high school for no more than one year. Cover page, Line 19.
<input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> Y N	4. Applicant has graduated and has completed at least three full years of agriculture, or all of the agriculture offered at the school last attended, Cover page, Line 16. Note: Applicants that are still in high school at the time of applying are eligible to participate at all grade levels.
<input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> N	5. Applicant has in operation and has maintained at least one full calendar year of SAE records to substantiate an outstanding supervised agricultural experience program through which exhibits comprehensive planning, managerial and financial expertise. Pages 2, 3, 4, 5, 6, 7, 8 and 9.
<input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> N	6. The total hours that a student list on Page 4, Section II, are greater than or equal or equal to the hours listed in either the "Skills" portion of Section IV, Pages 6 and 7 or the "Activities" portion of Section IV, Page 8.
<input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> N	7. Applicant has included no more than a two page resume.
<input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> N	8. Applicant has included no more than a one page written evaluation by the most recent employer or agriculture instructor describing the progress that the applicant has made in developing the skills and competencies necessary for success within the award area in which they are applying. A recommendation can be no more than 1 page.
<input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> Y N	9. Applicant has included a maximum of six photographs with captions. Captions must fit in box. Preset font must not be changed.
<input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> Y N	10. Applicant has included a maximum of one page (maximum size 8 1/2" x 11") of additional information. (This may NOT include the following: Video Tapes; Computer Disk; Cd ROM's; DVD's; etc.)
<input checked="" type="checkbox"/> N	<input checked="" type="checkbox"/> Y N	11. The Application is properly signed by the applicant, parent or guardian, chapter advisor, school superintendent or principal, and submitted to the State FFA Advisor.



Cochrane-Fountain City FFA
S2770 State Hwy. 35
Fountain City, WI 54629

February 20, 2010

RE: Environmental Science & Natural Resource Management
Placement Proficiency Selection Committee

Kyle Tollefson has a love for learning and is especially gifted in science and mathematics. He is a very mature and forthright young man who is extremely goal oriented. He has developed leadership skills through being the FFA Student Council Representative and his involvement in other activities.

Kyle has undisputed academic talents. He sets standards for excellence in the classroom. Kyle is gifted in scientific reasoning and can go in any direction his heart desires and will pave the road for new thinking in the agriscience field.


Kyle is the third student in my 22 year teaching career to have such an innate passion for science. He is highly accomplished, a quick learner, with an impressive hands-on knowledge base. He demonstrates thorough and detailed research capabilities. He decided to test nitrate levels in well water systems and compared levels from urban to rural areas. During the second year of this project he surveyed home owners and tried to find out the cause of the nitrate contamination. He won the state agriscience fair the past two years and finished 5th Gold in the National Agriscience Fair with this project. He received a lot of special awards for his nitrate testing project including the Badger State Science & Engineering 1st Place Founders Award, the American Fisheries Aquatic Sciences Achievement Award and the Stockholm Jr. Water Prize Award of Excellence.

Kyle is committed to excellence in this field as demonstrated by his selection to the WI Stem Cell Summer Science Camp. The camp was incredible as Kyle learned how stem cells are being used in research and what their potential really holds for the future.

He is a very active student, participating in athletics, speaking contests, state proficiency's, career development events in addition to the countless chapter FFA activities and community service projects in which he is involved. He is a member of the show choir and the drama club. Kyle recently returned from Washington DC where he was selected to participate in the National Youth Leadership Forum on National Security.

Part of the blend of all the qualities I have mentioned is a deep, quiet strength. Kyle's presence is unassuming. He is polite - a gentleman. He comes from a close family, that has always taken a strong interest in his development as a well-rounded person. His excellent upbringing is a major reason he is the individual that he is. I have the utmost confidence that he will be successful at anything he undertakes.

Kyle Tollefson is an aspiring scientist and we are very excited to see what his future holds.


Christine Jumbeck
Agriscience Instructor
Cochrane-Fountain City High School

The FFA Mission

FFA makes a positive difference in the lives of students by developing their potential for premier leadership, personal growth and career success through agricultural education.

Kyle Tollefson

Objective

I plan to pursue a degree in Mechanical Engineering at the Milwaukee School of Engineering.

Education

Junior at Cochrane Fountain City High School			2007-2008
4.0 Honors	2005-2008	High Honors	2007-2009
Advanced Physical Science	2007-2008	Attended Groundwater Seminar	2007
4 semesters of Spanish Class		6 semesters of Agriculture class	
3 semesters concert choir		2 semesters Advanced Chemistry	
National Youth Leadership Forum on National Security		National Society of High School Scholars	

FFA Activities

Chapter Student Council Rep.	2008-2009	Lion's Farm Fest Volunteer	2005-2009
National FFA Convention	2007-2009	Purple Loosestrife Project	2007
State FFA Convention	2005-2010	Spring Islands Tree Planting Project	2008
Wisconsin FFA Delegate	2008	Cemetery Clean-up Project	2008
FFA Agriscience Fair	2008-2010	Prairie Moon Clean-up	2008
FFA Creed Speaker	2008	Farm Safety Day Camp Helper	2007-2009
2 nd Grade Farm Day	2007	Town of Milton Hall Clean-up	2009
Jr. High Quiz Bowl	2005-2007	FFA Lock-in	2005-2009
Jr. High Opening/Closing Ceremonies	2006-2007	Chapter Leader (Action City)	2007
FFA Banquet	2005-2009	Made For Excellence	2007
Foundation in Reaching Excellence	2007	Sectional Leadership Workshop	2007-2009
Back to School Picnic	2005-2009	Assembled 4 th Of July Parade Float	2007-2009
Radio Interview	2007-2009	FFA Week Newspaper supplement Editor	2008
Chapter Fruit Sale Quota	2006-2009	Mount Olympus Trip	2005-2009
Waumandee Stream Project	2010		

Awards

State Finalist in Quiz Bowl 3 rd Place	2006-2007	State Runner-up Jr. High Essay Contest	2006
FFA Discovery Degree	2006	FFA Greenhand Degree	2008
3 rd State Punt, Pass, & Kick Competition	2003	FFA Chapter Degree	2009
State Law Day Poster Contest Winner	2002	MVP C-FC Basketball C-Squad	2008
Letter Winner in Golf	2008-2009	Leader on the Horizon	2008
Best Offensive Player C-FC Basketball C-Squad			2008
Catholic Order of Foresters National Poster Contest Top 3			2002-2007
Finished Top 3 in Coulee Catholic Region Bible Bowl Contest			2002-2006

Science Related Awards

U.S Stockholm Junior Water Prize Award of Excellence	2008
American Fisheries Aquatic Sciences Achievement Award	2008
Bartlett W. Foster Award for Outstanding Research	2008
Badger State Science and Engineering Fair 1 st Place Founders Award	2008
United States Army Award for an Outstanding Environmental Project	2008
American Meteorological Award for Scientific Endeavor in Atmospheric and Related Water Science	2008
Wisconsin FFA Agriscience Fair Winner in Environmental Sciences	2008-2009
National FFA Agriscience Fair Gold Rating in Environmental Sciences	2008-2009
International Sustainable World Energy, Engineering, and Environmental Project 3 rd place	2010

School and Community Activities

St. Boniface Catholic Church Member	1992-2010	St. Boniface Christmas Play Lead Role	2003-2006
St. Boniface Catholic Altar Server	2003-2010	Baseball	1997-2005, 2008-2009
OLPH Mission Helper	2006-2007	Parish Fall Festival Worker	2001-2009
Football	2003-2009	Old Time Farm Fest Worker	2005-2009
Basketball	2005-2010	Purple Loosestrife Project	2007
St. Boniface School Fundraiser	2001-2008	Arcadia Nursing Home Visits	1997-2007
C-FC High School Basketball Manager	2003-2005	Little League Baseball Asst. Coach	2005-2008
Varsity Golf	2008-2009	Class Student Council Rep.	2008-2009
Basketball Manager and Videographer	2003-2005	Community Babysitting for Shoppers	2008-2010

Work Experience

Farm Hand - Helwig Homestead Farm, Waumandoc, WI

2002-Present

- Unload and stack hay
- Mow lawn
- Clean barn

Carpenter - Tollefson Construction, Independence, WI

2004-Present

- Calculate number of boards for wheel chair ramp
- Measure, cut, and fastened boards
- Set foundation posts
- Sanded and varnished wheel chair ramp

Farm Hand - Suhr Farm, Waumandoc, WI

2007-Present

- Unload hay
- Cut weeds
- Clean

References

Ms. Christine Jumbeck

Mr. Steven Stopplemoor

Mrs. Christine Pyka

VI. SUPPORTING DOCUMENTATION (continued)

C. Supporting Pictures

Kyle Thomas Tollefson

ENVIRONMENTAL SCIENCE & NAT. RESOURCE MGMT

PHOTO # 1



Dairyland Labs is a world renowned water and soil testing facility. I had the opportunity to use their equipment with the help of one of their technicians. I tested my own samples to compare with the results from testing at school. I am confident that my results are accurate because the results from the school's spectrophotometer were conclusive with the results from the Dairyland Labs.

VI. SUPPORTING DOCUMENTATION (continued)

C. Supporting Pictures

Kyle Thomas Tollefson

ENVIRONMENTAL SCIENCE & NAT. RESOURCE MGMT

PHOTO # 2



Operating a testing probe is a skill I needed to learn in order to test water samples at Dairyland Labs. This was my first experience using this technology. I had to be extremely careful in handling the equipment. To prevent cross contamination, I had to rinse the probe with distilled water. A new pipette tube was required for each of the 12 samples.

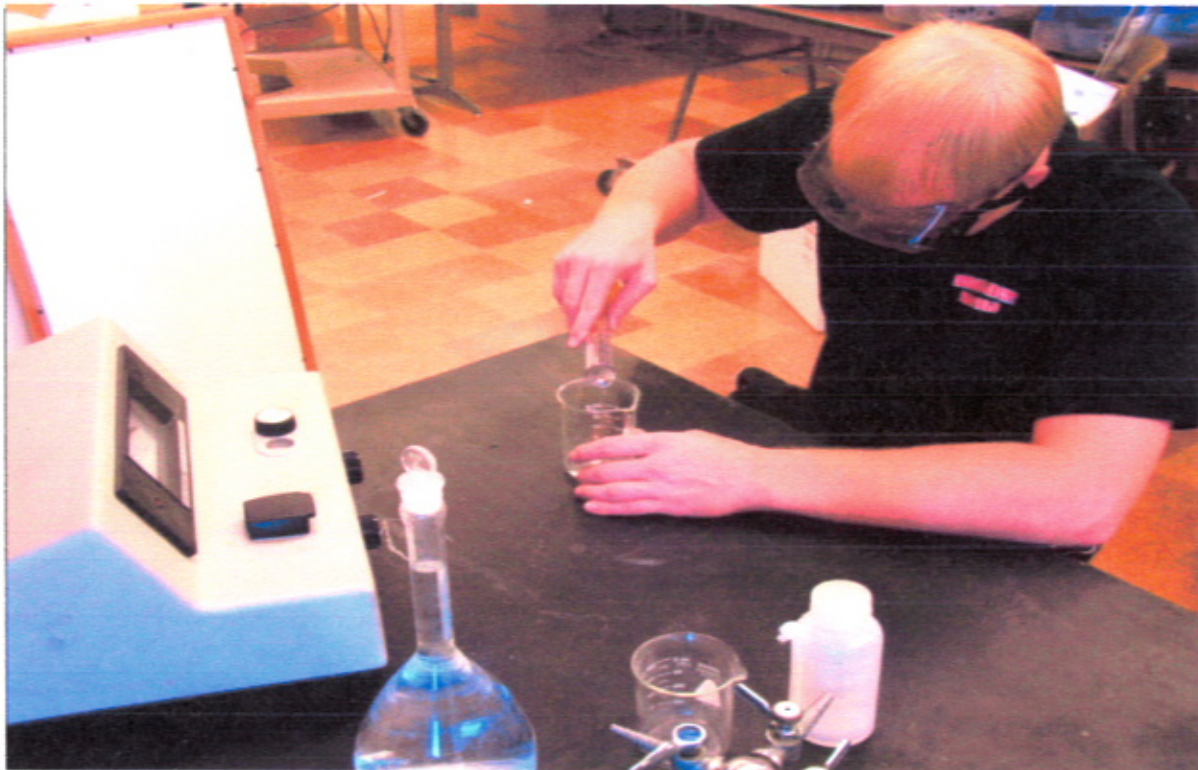
VI. SUPPORTING DOCUMENTATION (continued)

C. Supporting Pictures

Kyle Thomas Tollefson

ENVIRONMENTAL SCIENCE & NAT. RESOURCE MGMT

PHOTO # 3



The spectrophotometer is the most important piece of equipment in my project. Without it I would not be able to find the amount of nitrates in each sample. I used distilled water to calibrate the spectrophotometer prior to running a sample. 25mL of the specimen is mixed with Nitra Ver 5 and then 8mL of this solution is poured into a test tube. The test tube is placed into the spectrophotometer and it provides accurate results.

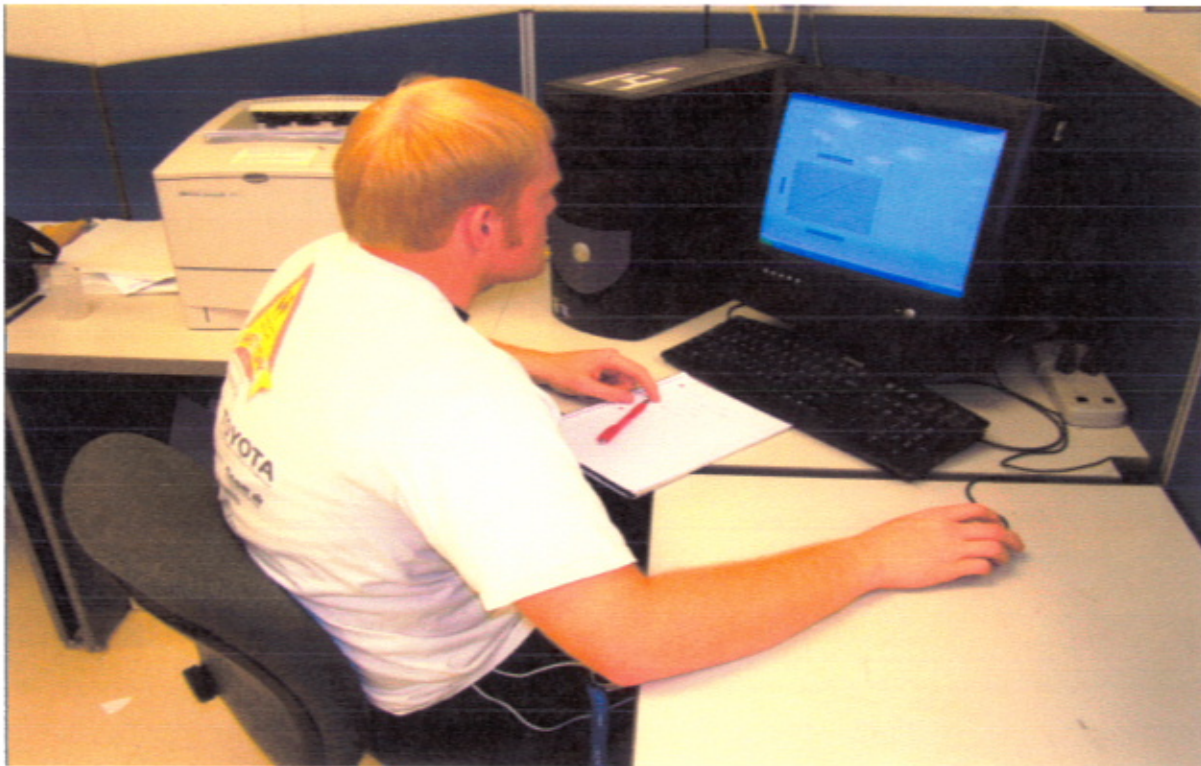
VI. SUPPORTING DOCUMENTATION (continued)

C. Supporting Pictures

Kyle Thomas Tollefson

ENVIRONMENTAL SCIENCE & NAT. RESOURCE MGMT

PHOTO # 4



Microsoft Excel software is a tool I use to record and analyze my test results. In Excel, I created a calibration curve; this curve is calculated by the computer. The reading from the spectrophotometer is put into the equation to divide the amount of nitrates in every sample. I record my results in the Excel program to keep them organized by sample site.

VI. SUPPORTING DOCUMENTATION (continued)

C. Supporting Pictures

Kyle Thomas Tollefson

ENVIRONMENTAL SCIENCE & NAT. RESOURCE MGMT

PHOTO # 5



For the Spring Islands restoration project the Wisconsin Department of Natural Resources and the U.S Fish and Wildlife Service worked to create three new man-made islands to replace the previous islands that had eroded away. The invasive plant Purple Loosestrife was first eradicated from the islands. Trees were then planted to prevent the previous island erosion from occurring again.

VI. SUPPORTING DOCUMENTATION (continued)

C. Supporting Pictures

Kyle Thomas Tollefson

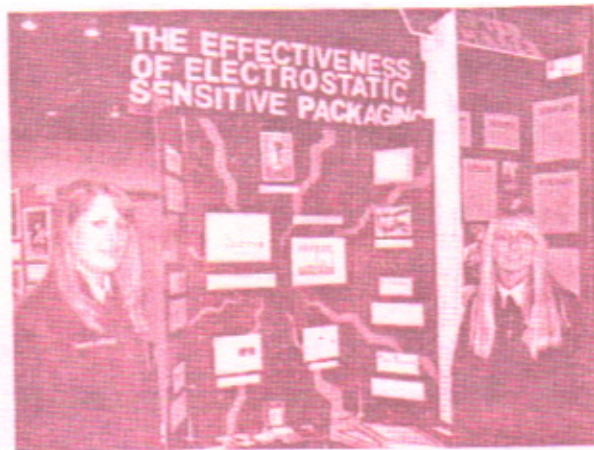
ENVIRONMENTAL SCIENCE & NAT. RESOURCE MGMT

PHOTO # 6



At the Waumandee Trout Stream Project, lunker structures and logs were installed into the stream bed to help encourage the trout population. The lunker structures act as an overhang bank and shelter for the trout. The logs caused increased flow underneath the lunker structures which create a habitat for the trout to grow and flourish.

Environmental Science and Natural Resources



C-FC FFA National Winning Team

This year the Cochrane-Fountain City had record number of twelve participants at the National FFA Convention in Indianapolis, Indiana from October 22-25. Hannah LaDuke and Megan Hurlburt took home top honors as they won the Engineering category of the Agriscience Fair! They were one of five Wisconsin winners at the convention. Their project researched "The Effectiveness of Electrostatic Sensitive Packaging." They spent many hours testing various computer component packages for static electricity. They concluded that mylar coated packaging resists electrical charges the most and therefore are the most economical for companies to use.

Kyle Tollefson also competed in the Environmental Science category of the Agriscience Fair with a project that tested nitrate levels in rural versus urban areas. Kyle did an outstanding job placing fifth gold out of thirty projects.

Chandler Engler, Brent Gabrick, Justin Scheel, Jesse Scheel and Keith Bollinger were one of forty teams competing in the Environmental/Natural Resources Career Development Event. As a team they placed fourteenth for a silver rated finish. Jesse Scheel was awarded an individual gold medal for finishing twenty-first overall. Participants had to complete interviews covering global and national issues, write press releases, and solve complex problems. They were tested on their abilities in environmental analysis, soil testing, and water analysis. Team members had to address an environmental scenario and write a written exam.

Michelle Pehler was in the Creed speaking contest where she had to recite the five paragraph creed and answer three questions about it in front of a panel of judges. Michelle gave her best performance amongst some tough competition. We are very proud of all of her efforts!

Nick Palkowski and Mark Schaffner received their American FFA Degrees. The American Degree is the highest degree awarded by the National FFA Organization they each received a gold key and a framed award. It recognizes achievements in agricultural business, production, processing, and service programs. Members must also demonstrate leadership skills and abilities. Nick was also the chairman of the nominating committee who pick the national officers for the upcoming year.

McKenzie Baecker represented Wisconsin as a National delegate and did a lot of work with the FFA Go Green Program. Congratulations to all of the competitors! You made us Proud!