



Lesson 2.3

Food Safety Begins on the Farm

Estimated time: Two 50 min periods

Instructional overview

In Lesson 2.3 students will be given a transcript of an interview with Bill Tinsaft, a farmer who has requested the expertise of the FSI Team to help him define Good Agricultural Practices (GAPs) and implement them on his farm. Working in groups, students will assess the current farm practices and recommend actions to be taken to improve the GAPs on his farm. Students will summarize the farm assessment and compose a letter to Bill Tinsaft explaining the farm assessment and their findings.

Instructional objectives:

1. Define Good Agricultural Practices (GAPs).
2. Conduct a farm assessment working in groups to determine the strengths and weaknesses of a farm operation.
3. Write a summary letter to Bill Tinsaft regarding the completed farm assessment.

Assessment

The grading rubric for this assignment is attached to the lesson.

Relevant learning standards – NSES-A, NSES-C, NHES 1-5

Equipment, supplies, and materials

1. PowerPoint Presentation – PPT 2.3.
2. Transcript of interview – one copy per group or use ppt template.
3. Farm Assessment Worksheets – one copy per group or use ppt template:
 - Clean Hands
 - Clean Soil
 - Clean Water
 - Clean Surfaces
4. Farm Assessment Action Plans – one copy per group or use ppt template:
 - Clean Hands
 - Clean Soil
 - Clean Water
 - Clean Surfaces
5. Reduce Microbial Contamination with Good Agricultural Practices – 1 copy per group.
6. Food Safety Begins on the Farm: A Grower's Guide – 1 copy per group.

7. Assignment 2.3 “Farm Assessment Summary Assignment” – one per student or use ppt template.

References and background information

1. “Costs of Adopting Good Agricultural Practices (GAPs) to Ensure Food Safety in Fresh Strawberries” by Mollie Woods and Suzanne Thornsby. 2005. Agricultural economics Report no. 624, Michigan State University, East Lansing, MI. (Provided as PDF on CD).
2. Food Safety Begins on the Farm: A Grower’s Guide. The National GAPs Program.
3. Food Safety Begins on the Farm: A Grower’s Self-Assessment of Food Safety Risks. The National GAPs Program. <http://www.gaps.cornell.edu/farmassessmentws.html>
4. GAPs resources online access at <http://www.gaps.cornell.edu/pptindex.html>
5. GAPsNET: www.gaps.cornell.edu

Interest approach

Read the following letter from Bill Tinsaft.

Dear FSI Team,

My name is Bill Tinsaft and I need your help. I received a letter from my highest paying produce buyer indicating that I need to implement food safety practices such as Good Agricultural Practices (GAPs) or my crops will not be marketable this year. They have requested that my management and production practices be reviewed in a third party audit and that I implement GAPs on my farm. I am not sure what GAPs are or where to start, but it is now extremely important to me. I have heard that you have extensive experience with food safety and the GAPs program. You have been recommended as the experts to contact. I need this done as soon as possible so that I maintain my market! Please contact me regarding this issue at your earliest convenience. Thank you very much for any assistance you can provide.

Sincerely,

Bill Tinsaft

Classroom procedures

Teaching procedures	Content
Lead discussion to briefly review lesson.	1. What are GAPs?
Good Agricultural Practices: Actions or procedures used to reduce microbial food safety hazards in growing, harvesting, sorting, packing, and storing fresh fruits and vegetables.	2. Why should growers use them on their farms?
	3. What GAPs did we learn about in the last lesson?
	4. How can we assist Bill Tinsaft?

<p>Introduce the Farm Assessments.</p>	<p>The National Good Agricultural Practices (GAPs) Program helps farmers implement food safety practices on their farms. The Farm Assessment was developed to help growers review and evaluate farm management and production practices to reduce microbial risks in the production of fresh fruit and vegetables.</p> <p>As members of the FSI Team you are being asked to help this farmer assess his operation and implement GAPs on his farm. Another team of GAPs experts has already contacted Bill Tinsaft and interviewed him about his current management practices. They have sent us a transcript of their interview so that our FSI teams can complete his farm assessment.</p>
<p>State expectations for today's lesson.</p>	<p>By the end of class you will:</p> <ol style="list-style-type: none"> 1. Review the interview with Bill Tinsaft. 2. Conduct a four-part farm assessment of his farm. 3. Write a summary report of the completed farm assessment.
<p>Overview of today's activity.</p> <p>Break the class into four groups (their Investigative Teams if possible); assign each group to one of the following areas.</p> <ul style="list-style-type: none"> • Clean Hands – one copy • Clean Soil – one copy • Clean Water – one copy • Clean Surfaces – one copy <p>Each group should have a designated secretary or recorder.</p>	<p>The Farm Assessment we are going to use reviews the farm in four different areas;</p> <ul style="list-style-type: none"> • Clean Hands - one copy per group • Clean Soil – one copy per group • Clean Water – one copy per group • Clean Surfaces – one copy per group <p>We are going to break into four groups. Each group will use the information from the interview to review one of the four areas.</p>
<p>Handout the appropriate “Assessment Worksheet” to each group and the transcript of the grower interview or use the ppt template to help students organize their notes.</p> <p>Display an overhead or ppt of one of the Assessment worksheets to show what each means as you explain the process.</p>	<p>The assessment worksheet has four individual management areas. For each management area there are scenarios describing a scale of four varying degrees of compliance to Good Agricultural Practices. Each degree of compliance is defined as:</p> <ul style="list-style-type: none"> • Best Practice • Minor Adjustments Needed • Concerns Exists; Examine Practice • Needs Improvement; Prioritize Changes Here

	<p>Your job is to read through the interview transcripts. Match Mr. Tinsaft’s current management practices to one of the degrees of compliance and circle it on the assessment worksheet. Be prepared to tell the class how you determined this rating.</p>
<p>Once all groups have completed their assessment worksheets, have each group present their findings to the rest of the class and explain why they chose each rating.</p> <p>Remind students to take notes.</p>	<p>Pay close attention and take notes on each group’s assessment rating. In the summary assignment at the end of this activity you will be responsible for reporting information from all assessment areas, not just the area your group reviewed.</p>
<p>Handout the Action Plan for each assessment area to the appropriate groups or use the ppt template.</p> <p>Handout the two resources</p> <ul style="list-style-type: none"> • Reduce Microbial Contamination with Good Agricultural Practices • Food Safety Begins on the Farm: A Grower’s Guide <p>Used in the previous lessons.</p>	<p>Now that we know the current practices on Mr. Tinsaft’s farm, it is time to suggest what could be done to improve current practices.</p> <p>Students will be given an Action Plan. They need to put an “X” in the management area box that they circled on the assessment worksheet. The student recorder should write how to improve the current practice in the column marked “Action for Improvement.” Bill Tinsaft will have to determine who will be responsible for implementation, but students can estimate cost using provided information (“Costs of Adopting Good Agricultural Practices (GAPs) to Ensure Food Safety in Fresh Strawberries” by Woods and Thornsbery) or based on the student’s best estimation. Students should summarize when the improvement needs to be completed, for example short term vs. long term or at the beginning of the next season vs right away.</p> <p>Each group will then present their recommendations to the rest of the class and explain why these are the best actions to be taken.</p>
<p>Once all groups have finished their “Actions to be Taken” on the Action Plans, have each group present their findings to the rest of the class and explain their choices.</p>	<p>Remember to pay attention to each group and take good notes because this information will be required to complete the letter to Mr. Tinsaft.</p>

<p>Hand out or use ppt template and explain Assignment 2.3 “Farm Assessment Summary”.</p> <p>Write the Due Date for completing this assignment on the board.</p>	<p>Your Farm Assessment is almost done. All we need to do now is to summarize all of our findings and report them back to Bill Tinsaft so that he may implement them on his farm.</p> <p>Letter – to be sent to Bill Tinsaft explaining the assessment process and overall results highlighting the 3 highest priority areas.</p> <p>You may discuss the farm assessment with your classmates and group members but each of you will need to turn in your own letter.</p>
<p>Reflections for future use.</p>	

Transcript of grower interview

Name of Interviewee: Bill Tinsaft

Name of Interviewer: Ansel Weber

Regarding: Farm practices for growing fresh fruits and vegetables

Date: August 13, 2006

Notes: All interviewer comments and questions appear in bold; all responses from interviewee appear in regular type.

Mr. Tinsaft, please tell me what crops you grow on your farm.

I grow cabbage, carrots, beans, and tomatoes.

Do you do any packing on the farm?

Yes. I pack tomatoes and trim some cabbage.

Do you use a flume tank for the tomatoes?

Yes. We disinfect the water with a bleach solution.

Do you monitor the disinfectant levels, pH, and temperature?

We try to monitor the disinfectant levels in the morning and at lunch. I do not monitor the pH that often since I always use my well water and it seems pretty constant when I mix it with the disinfectant.

Do you monitor the pulp temperature of the tomatoes?

No. Should I?

Well, yes. It is well documented that wash water will enter the stem end of the tomato if the flume water is cooler than the tomato pulp temperature. This can result in contamination of the tomato and if that tomato is consumed it could make someone sick. Monitoring flume and pulp temperature is very important.

Do you have a sanitation schedule for your cabbage trim line?

We usually do a visual inspection of it before we use it. If it is dirty, someone cleans it and uses a sanitizer before we run any cabbage down the line.

Do you have records of this cleaning schedule?

No.

How do you ship your products?

Commercial trucks.

Do you inspect the trucks prior to loading them?

Yeah, because I load them and notice if they are dirty.

Do you keep records?

No

What do you do if the trucks are dirty?

If it is just debris, I sweep it out. If they are really bad I send the driver away and make him clean it.

Do you employ farm workers to assist with planting, harvesting and trimming?

Yes.

Do you offer health and hygiene training for your workers?

Yes. We train all of our workers at the beginning of the season. We use educational materials created by this GAPs group at Cornell University. I think that is where they are located. I think hand washing is really important, so I am a stickler about it. My farm manager knows how important it is to me and so he is constantly reminding people about it. He even hung up some funny posters that talk about hand washing and toilet use.

Do all of your workers speak English?

No, many speak Spanish, but our farm manager speaks Spanish so he usually does the training. It seems to work OK. We go through a lot more soap and paper towels than before so I think they are washing their hands more.

Do you keep records of your worker-training program?

Yes, but sometimes we get new workers in the middle of the season and then they don't get the training.

Do you have an illness reporting protocol for your workers?

No. Many workers want to work and probably do not always tell us when it is something minor. If they are really sick, we notice and send them home.

Do you offer them other jobs, such as driving the tractor?

No. We have only a few people who know how to drive a tractor and that job pays more, so the normal driver is not going to pick instead of driving. We send sick people home and I think that works best for us.

Do you provide toilets and hand washing stations in the field?

Yes.

Do you have a schedule for cleaning them?

Yes, we contract with a company and they come and clean them once a week.

Do you ask for any verification of the service stops from the company who cleans and services the toilets?

Yes. Every time the person cleans them, he marks a chart on the door as a record of his stop. Every month I get a bill and it details how many times they stopped.

Do you have a written Standard Operating Procedure (SOP) for toilet sanitation?

No. Not even sure what that is.

Do you check the facilities to see if once a week is enough to keep them clean and well stocked?

Not specifically, but I use them myself, so I know they are OK most of the time.

Do you monitor workers in the field to insure they are using the facilities? Specifically, do you monitor that they wash their hands after using the toilet and do you make certain they are not peeing and pooping in the field?

No. I am not always out there in the field with them and am not sure I really want to watch people go to the toilet and wash their hands.

Do your workers use any knives, other equipment, or reusable harvest containers in the field?

All of our containers are single use boxes, so they go from the farm to the distributor and I never see them again. The workers use knives to harvest the cabbage, and string to tie up the tomato plants.

I would like to ask you a few questions about your harvest containers. Where do you store them?

I store them in the packing shed on pallets. Usually, we only assemble as many as we need for that day. It keeps the clutter down and makes moving around the small packing shed a little easier on everyone.

Do you have any problems with birds or rodents in the packing shed?

No. We had trouble with the big doors in the past; birds would get in and roost in the rafters, so we put up some netting and changed a few things with the rafters, so now they do not roost. Occasionally we get a bird inside, but it is really rare and they do not stay. We have rodent traps that we check often and rodents are really not a problem for us.

Now, about the harvest aids, do you wash and sanitize them?

No. We use them in the dirt. Even if I were to clean them, with the first cut they would be dirty again and there is no way we are washing them after each cut.

Do you irrigate any of your crops?

Yes. Cabbage, beans and carrots are on overhead irrigation from a pond and the tomatoes are on drip irrigation from my well.

Is your well capped and do you test it?

It is capped and we test it yearly. It is also the drinking water for my house.

What do you test it for?

Nitrates and generic *E. coli*.

Do you test the pond water?

Yes. I only test the pond water for generic *E. coli*.

How often do you test the pond water?

3 times a year.

Do you have a copy of one of those tests?

Sure do. Here it is. I usually look at it to see how many bacteria there were in the water. If I see higher numbers than usual, I get concerned and try to determine if there is something wrong that I can fix.

Do you use manure?

Yes. I get it from the local dairy farmer.

When do you apply it?

I apply it in the fall. We are no longer allowed to apply it in the winter due to run-off, so I try to apply it in the fall.

Do you know if it is applied at least 120 days prior to harvest?

Usually.

Do you keep records?

No.

Do you use compost?

Sometimes, but not often. I get my compost from a local guy and he seems pretty knowledgeable.

Do you request compost records from him?

No. I do not use it very much so I never really think about it.

Do you apply pesticides?

Yes. I am a certified applicator, so I do most of it myself. Occasionally, I contract it out. I keep really good records of all that information since it is required by law.

Do you have a crisis management plan for your farm?

Nothing formal. I went to this extension workshop once where they offered this course on crisis management. I had never really thought about it before that time. After the workshop, I came home and wrote down all the important phone numbers such as my distributor, lawyer, and important company contacts in case of an emergency.

Thank you for your time Mr. Tinsaft

Not a problem. I hope this information will help your team provide me with some food safety guidance. My buyers are really into it now and if I am going to stay competitive I will need to implement GAPs and develop a farm food safety plan.

Clean Hands Assessment Worksheet

Management Area	Best Practice	Minor Adjustments Needed	Concerns Exist; Examine Practice	Needs Improvement; Prioritize Changes Here
Worker training on handwashing and personal hygiene for food safety	All workers attend regular training programs focused on good personal hygiene AND handwashing is emphasized daily AND language and training materials are appropriate for workers.	All workers attend one training focused on hygiene provided in their language, but workers arriving mid season are not trained.	Training is provided sporadically OR is presented in a language not well understood by workers.	No training on handwashing or personal hygiene for food safety is provided to workers.
Worker illness reporting	Workers are required to report illness AND if ill, give non-food contact jobs AND supervisors have permission to reassign workers who appear to be ill.	Workers are requested to report illness but no accommodations are made for ill workers.	Workers are not requested to report illness and no accommodations are made for sick workers.	Worker illness is not monitored AND there is no standard procedure for workers reporting illness.
Toilet and handwashing facilities for farm laborers, visitors, and customers	Clean toilet and handwashing facilities are provided for everyone. They are monitored daily to insure cleanliness. Standard Sanitation Operating Procedures (SSOPs) for all aspects of toilet and handwashing station maintenance are written AND records are kept documenting their implementation.	Clean toilet and handwashing facilities are provided BUT are not monitored for cleanliness. Records are kept documenting their implementation but no SOPs are written.	Clean toilet and handwashing facilities are provided BUT are not monitored for cleanliness. SOPs are understood but not written, there are no records to support implementation.	Toilet facilities are not provided at any location on the farm OR there are no SSOPs in place for toilet and handwashing facilities.
Handwashing practices of field workers	All workers practice proper handwashing and wash their hands before work, before and after eating meals, and toilet use.	All workers practice proper handwashing but do not always wash their hands at the critical times.	Very few workers wash their hands properly or at critical times.	Handwashing is not monitored or a priority.

Clean Soil Assessment Worksheet

Management Area	Best Practice	Minor Adjustments Needed	Concerns Exist; Examine Practice	Needs Improvement; Prioritize Changes Here
Timing manure application to planned fruit or vegetables acreage	Manure is applied and incorporated into the soil 120 days prior to harvest of a produce crop OR properly composted manure is applied. Time between manure application and harvest is ALWAYS maximized and recorded.	Manure is applied and incorporated into the soil 120 days prior to harvest of a produce crop OR properly composted manure is applied. Time between manure application and harvest is ALWAYS maximized. No records.	Manure is applied and incorporated into the soil at least 60 days prior to harvest of a produce crop.	Manure is applied to the soil less than 60 days prior to harvest of a produce crop. This application may be in the form of animal bedding that was applied as mulch between rows.
Composting conditions for manure and bedding	Compost producer managers compost pile to achieve a high temperature (131°F to 161°F) for at least 5 days AND aerates the pile several times. Records are kept.	The compost pile is monitored for moisture and aerated or turned several times to insure a high temperature of 131°F to 160°F for at least 5 days. No records are kept.	The compost pile is kept moist and aerated or turned at least twice. Temperatures are not monitored but pile is hot to the touch for at least 5 days. The resulting pile has viable weed seeds present. No records kept.	Pile is more like a manure pile than a compost pile and no high temperatures were monitored or observed OR nothing is known about the composting conditions.
Record keeping of pesticide applications (required by law)	Records are kept in accordance with regulatory agencies. Information recorded for all pesticide applications include date, chemical name and number, rate, weather, target pest, area treated, and ID of applicator. Records are easily accessible.	Records are kept in accordance with regulatory agencies but may not be as comprehensive as outlined. Records are accessible.	Records are kept of chemicals applied and the location of application, but documentation is incomplete and difficult to access.	Chemicals used are known by memory or by invoices. Records are incomplete or non-existent until reporting is required.
Crisis management training and planning	Farm owner/operator has received crisis management training and a written crisis management plan is in place.	Farm owner/operator has received crisis management training and has described a crisis management plan.	Farm owner is aware of crisis management but has no plan and does not believe his operation requires one.	No one on the farm has had crisis management training. No plans for managing a crisis are in place.

Clean Water Assessment Worksheet

Management Area	Best Practice	Minor Adjustments Needed	Concerns Exist; Examine Practice	Needs Improvement; Prioritize Changes Here
Source of irrigation water for produce crops	Irrigation water is from a municipal, treated water source or from ground water obtained from a properly constructed, capped well, in good condition, that could be readily treated if indicator organisms (generic <i>E. coli</i>) were detected in annual water tests.	Irrigation water is sourced from a surface water source of known microbial quality.	Irrigation water is drawn from a surface water source with no knowledge of its microbial quality.	Irrigation water is sourced from a pond or other water source that has daily visits by livestock or wild animals OR little is known about the water source.
Water quality testing	Water quality is tested annually for wells or at least three times during the season for surface water. Water is tested for generic <i>E. coli</i> , <i>E. coli</i> numbers are quantified and records are kept.	Water quality is tested annually for wells or at least three times during the season for surface water. Water is tested for generic <i>E. coli</i> and the numbers are quantified. No records are kept.	Water quality is tested annually for wells or at least three times during the season for surface water. Water is tested for generic <i>E. coli</i> but the numbers are not quantified and no records are kept.	No standard water testing procedures.
Water quality management in dump tanks, hydro coolers, or other water tanks	Wash water is changed several times a day and disinfectant is added. Levels are monitored continuously to maintain effectiveness. Water pH is monitored and adjusted to between 6.5 and 7.5.	Water is changed twice per day. Disinfectant is added and pH is adjusted. Disinfectant levels and pH are monitored every 1 to 2 hours.	Disinfectant is added but not monitored. No pH monitoring.	Disinfectants are not used in dump tank, flume water, or hydro coolers. Water is changed sporadically based on a visual assessment of clarity or cleanliness.
Temperature management of water	Water temperature and pulp temperatures are monitored hourly to 10°F warmer than produce. SSOPs are in place.	Water temperature and pulp temperature are monitored once a day at beginning of the run. SSOPs are in place.	Water temperature is monitored once a day at beginning of the run. SSOPs are not in place. No records are kept.	Water temperature and pulp temperature are not monitored. No SSOPs. No records.

Clean Contact Surfaces Assessment Worksheet

Management Area	Best Practice	Minor Adjustments Needed	Concerns Exist; Examine Practice	Needs Improvement; Prioritize Changes Here
Washing and sanitation of harvest aids including all gloves, knives and aprons, etc.	All harvest aids are washed, rinsed, and sanitized at the start of each work session, after breaks or as needed throughout the day.	All harvest aids are washed, rinsed and sanitized daily.	All harvest aids are washed, rinsed, and sanitized once per week.	Harvest aids are not washed, rinsed or sanitized except at the beginning of the season.
Storage of containers used for packing produce	Containers used for packing and shipping produce are stored in an area that is covered, and they are stored off the ground to insure that bins are not exposed to rodents, dust or condensation.	Containers for packing produce are stored in a covered area but not off the ground.	Containers are stored in a covered area but the area is accessible to birds and other pests.	Containers are stored in the open, on the ground, exposed to dust and animals or other outdoor conditions.
Packing line sanitation and inspection	All packing line, brushes, and sponges are washed and sanitized daily. Packing line is inspected before each operation to assure cleanliness. SSOPs are in place and records are kept.	Packing lines are washed on a regular schedule, problem areas are spot treated. Packing lines are inspected weekly for cleanliness. Records are kept.	Crop and soil residue is removed and packing areas are cleaned but not on a regular schedule.	Packing lines are only cleaned at the beginning of the season or not at all.
Shipping truck sanitation	Prior to loading produce on truck or other vehicle, the vehicle is inspected for cleanliness, odors, and debris. The truck is cleaned and sanitized if needed. Records are kept.	Prior to loading produce on truck or other conveyance, the vehicle is inspected for cleanliness, odors and debris. The truck is cleaned if needed. No records are kept.	The trucks are usually inspected and appear clean, however no washing and sanitizing is done. No records are kept.	The trucks are not inspected for cleanliness; produce is just loaded on the truck.

Clean Hands Action Plan

Date: _____ Reviewer: _____ Commodity Produced: _____

Management Area	Best Practice	Minor Adjustment	Concerns Exist	Prioritize Changes Here	Your Plans to Reduce Risk			
					Action for Improvement	Person Responsible	Estimated Cost	Target Date
Worker training on handwashing and personal hygiene for food safety								
Worker illness reporting								
Toilet and handwashing facilities for farm laborers, visitors, and customers								
Handwashing practices of field workers								

Clean Soil Action Plan

Date: _____ Reviewer: _____ Commodity Produced: _____

Management Area	Best Practice	Minor Adjustment	Concerns Exist	Prioritize Changes Here	Your Plans to Reduce Risk			
					Action for Improvement	Person Responsible	Estimated Cost	Target Date
Timing manure application to planned fruit or vegetables acreage								
Composting conditions for manure and bedding								
Record keeping of pesticide applications (required by law)								
Crisis management training and planning								

Clean Water Action Plan

Date: _____ Reviewer: _____ Commodity Produced: _____

Management Area	Best Practice	Minor Adjustment	Concerns Exist	Prioritize Changes Here	Your Plans to Reduce Risk			
					Action for Improvement	Person Responsible	Estimated Cost	Target Date
Source of irrigation water for produce crops								
Water quality testing								
Water quality management in dump tanks, hydro coolers, or other water tanks								
Temperature management of water								

Clean Contact Surfaces Action Plan

Date: _____ Reviewer: _____ Commodity Produced: _____

Management Area	Best Practice	Minor Adjustment	Concerns Exist	Prioritize Changes Here	Your Plans to Reduce Risk			
					Action for Improvement	Person Responsible	Estimated Cost	Target Date
Washing and sanitation of harvest aids including all gloves, knives and aprons, etc.								
Storage of containers used for packing produce								
Packing line sanitation and inspection								
Shipping truck sanitation								



Food Safety Begins on the Farm

Assignment 2.3

Farm Assessment Summary

Name: _____ Date: _____

Your Farm Assessment is almost done. All you need to do now is summarize all of your findings and report back to Bill Tinsaft so that he may implement them on his farm.

Write a letter to Bill Tinsaft explaining the assessment process and overall results. Be sure to explain the following:

- What is a Farm Assessment?
- Summary of the top 3 management issues as determined by your assessment results. Be sure to justify and explain your selections.
- Attach Action Plans and Assessment Worksheets for his information and review.

Remember to be thorough and clear in your writing. Proof read your work! You may discuss the farm assessment with other classmates and group members but you need to turn in your own cover letter and farm assessment summary.

Letter and Farm Assessment Summary is due: _____



This assignment will be graded using the following Grading Rubric:

CATEGORY	10	8	5	1
Farm Assessment Activity	Student was an active participant in the group activities. Group reports were well thought out, clear, and presented the appropriate information.	Student group report reveals some thought and clarity but did not present all the information. One report may have been much better than the others.	Student group reports reveal little thought and clarity AND did not present all the information.	Student group report did not summarize the assessment worksheet or action plan for their assessment area.
Farm Assessment Summary – content	Student Farm Assessment (SFA) summary covered the current practices and recommended actions to be taken for all four farm assessment areas including explanations of why those actions were recommended.	SFA summary covered most of the current practices and recommended actions to be taken for all four farm assessment areas but did not include explanations of why those actions were recommended.	SFA summary was missing descriptions of current practices OR actions to be taken for some of the assessment areas.	SFA summary was missing all descriptions of current practices AND actions to be taken for some assessment areas.
Letter	Letter is well written and outlines the three priority areas with justification. It describes the assessment process and includes the assessment worksheets and action plans.	Letter is well written and outlines the three priority areas BUT does not include justification. It describes the assessment process and includes the assessment worksheets and action plans.	Letter is well written and outlines the three priority areas BUT does not include justification. There is no description of the assessment but assessment worksheets and action plans are attached.	Letter includes three priority areas but is poorly written and does not describe the assessment process. No worksheet or action plans are attached.

CATEGORY WEIGHT:

Farm Assessment Activity: _____ x 2 = _____

Farm Assessment Summary – content: _____ x 4 = _____

Letter: _____ x 4 = _____

TOTAL POINTS: _____ OUT OF 100 = _____%