

Development of Animal Cooperative Plans to Enhance Student Learning at Durand High School

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Durand Livestock Animal Cooperative

A manual designed to assist students in a swine cooperative project.

This manual contains a variety of items designed to assist advisors and students to a successful cooperative project for student SAEs. This document contains an option of certain documents tailored to fit specified goals and needs. This manual may be changed to fit certain programs.

The goals of this manual are to increase student participation in SAE's and to expand learning opportunities through hands on experiences. Another goal is to increase chapter membership by allowing students to have more educational opportunities in learning.

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Durand Barn Rules Form

1. It is an honor to be a FFA member.
2. It is a privilege to use the FFA barn and facility.
3. I must turn off the lights when I leave the facility.
4. I must lock the doors when I leave the facility.
5. I will not allow friends to be in the barn when I am feeding the animals.
6. I understand that the barn is part of the school property and that all school rules apply when I am in the barn.

Student Signature

Date

Co-op Information

Cooperatives are designed to allow a group of people to work together to attain a certain goal or task.

Cooperatives have been used for years. Through cooperatives students have the opportunity to do the following:

1. Develop and share a common goal.
2. Contribute to the understanding of the problem.
3. Respond to and work to understand others questions, insights and solutions.
4. Be accountable to others as others are relying on you.
5. Implement peer teaching.
6. Promote positive relations among different ethnic groups.

In the end when the cooperative is completed and the animals are marketed, the extra money that is earned can be divided among the members.

Expectations of the Students

As a student of the FFA and animal cooperative you are expected to do the following:

1. Uphold the values of the FFA.
2. Respect school property at all times.
3. Abide by all the barn rules.
4. Follow all rules on the contract.
5. Treat each animal in the cooperative as if it were yours.

Contract

The following contain two different contracts. The first contract is for a cooperative that was established for the Corunna FFA Program. This co-op is established to allow students to have a SAE. The money it receives covers the expenses the co-op incurs. The co-op receives half of the profit from each student's project when it is completed.

The second contract is a slight variation of the first contract. This contract is designed for students to make more of a profit and to expand SAE possibilities. The student will receive 80% profit, after the pig expense, feed and vet bills are covered. The 20% expense will be used to cover supply expenses.

_____ **Sheep**

_____ **Hogs**

Co-op Contract

Return signed by March _____, _____

This contract is here by agreed to upon this _____ day of _____, 2004 between (FFA member) _____ and the Corunna FFA Chapter.
(Your Name)

_____ as a FFA member agrees to:
(Your Name)

1. Complete chores on assigned days by 9:30am and between 4:00 and 7:00pm
2. Turn in \$50.00 to the chapter as up front money upon signing this contract.
3. Work with other co-op members on assigned clean out days.
4. Help in keeping accurate records each day and at the completion of the project.
5. Market the animals through the Shiawassee County Fair.
6. Properly train and groom animals for the fair.
7. **Write at least two buyer invitation letters or buyer contact letters prior to the fair.**
8. **Write thank you notes to buyers after the fair.**

The Corunna FFA chapter agrees to:

1. Return the \$50.00 up front money if all of the above guidelines are met.
Some of situations which may cause the loss of all or part of the up front money may include but are not limited to:
 - a. Failure to feed in the morning by 9:30am or in the evening between 4:00pm and 7:00pm. One (1) warning is not a problem. After that, loss of money will occur
 - b. Failure to take the animals to the fair is a loss of up front money**Determination of this will be made by the chapter officers and Advisor.**
2. Obtain animals.
3. Supervise the animals and co-op members to insure proper care.
4. If the animals die the chapter will absorb the loss.
5. Extra animals will be purchased in an attempt to provide each student with a pen of two animals for the fair. (This is not a guarantee that all members will have a pair but every effort will be made to ensure this happens.)
6. Figure approved rations for all animals.
7. If the co-op project is raised at home, the advisor will visit the project at least 4 times.
8. Provide all needed equipment for the animals while in the co-op barn.
9. Provide waterers and feed pans for the fair.

The chapter member will pay entry fees for the fair and will keep all premiums.

Feed costs for the project will be divided evenly between all co-op students based on the cost per animal raised at the co-op barn. If members raised animals at their home they will pay for the feed which they take home for their animals. These costs will be covered by the chapter until the sale of the animals at the fair. The costs for feed will be removed from the fair checks.

-Profit from the animals will be split evenly between the chapter and the member.

-If the member meets the requirements they will receive their up front money plus the additional profit in a check issued by the chapter.

-If the animal is sold and costs are not covered, the member will still receive their up front money and will not incur any of the loss.

I have read the above contract and agree to its terms.

FFA Member

Advisor

As a parent I agree to assist in the supervision of this project. I will help to ensure that animals are fed on time and cared for on each co-op chore day. I also understand that if the animals are delivered to our home that care, control, and containment are the responsibility of the student and parent.

Parent Signature

Co-op Contract

Return signed by March 28, 200__

This contract is here by agreed to upon this _____ day of _____ 2004 between (FFA member) _____ and the Durand FFA chapter.
(Your Name)

_____ as a FFA member agrees to:
(Your Name)

1. Complete chores on assigned days by 9:30am and between 4:00 and 7:00pm.
2. Turn in \$50.00 to the chapter as up front money upon signing this contract.
3. Work with other co-op members on assigned clean out days.
4. Help in keeping accurate records each day and at the completion of the project.
5. Market the animals through the Shiawassee County Fair.
6. Properly train and groom animals for the fair.
7. **Write at least two buyer invitation letters or buyer contact letters prior to the fair.**
8. **Write thank you notes to livestock buyers after the fair.**
9. Attend 4 of the 7 weigh dates for weighing pigs.
10. Attend the June 15th meeting to complete fair entry forms.

The Durand FFA chapter agrees to:

10. Return the \$50.00 up front money if all of the above guidelines are met.
Some of situations which may cause the loss of all or part of the up front money may include but are not limited to:
 - c. Failure to feed in the morning by 9:30am or in the evening between 4:00pm and 7:00pm. One (1) warning is not a problem after that loss of money (\$50) will occur.
 - d. Failure to take the animals to the fair is a loss of up front money.**Determination of this will be made by the chapter officers and Advisor.**
11. Obtain animals.
12. Supervise the animals and co-op members to insure proper care.
13. If the animals die the chapter will absorb the loss.
14. Extra animals will be purchased in an attempt to provide each student with a pen of two animals for the fair. (This is not a guarantee that all members will have a pair but every effort will be made to ensure that this happens.)
15. Figure approved rations for all animals.
16. If the co-op project is raised at home the Advisor will visit the project at least 4 times.
17. Provide all needed equipment for the animals while in the co-op barn.
18. Provide waterers and feed pans for the fair.

The member must:

The chapter member will pay entry fees for the fair and will keep all premiums.
Feed costs for the project will be divided evenly between all co-op students based on the cost per animal raised at the co-op barn. If members raised animals at their home they will pay for the feed which they take home for their animals. These costs will be covered by the chapter until the sale of the animals at the fair.
The costs for feed will be removed from the fair checks.

-Profit received from any sale from the animals will be split 80-20. The member will receive 80% and the chapter will receive 20%.

-If the member meets the requirements they will receive their up front money plus the additional profit in a check issued by the chapter.

-If the animal is sold and costs are not covered, the member will still receive their up front money and will not incur any of the loss.

I have read the above contract and agree to its terms.

FFA Member

Advisor

As a parent I agree to assist in the supervision of this project. I will help to ensure that animals are fed on time and cared for on each co-op chore day. I also understand that if the animals are delivered to our home that care, control, and containment are the responsibility of the student and parent.

Parent Signature

Daily Chore Sheet
Hog Co-op
Mornings to be completed by 9:30 am

1. Are the hogs up and moving around? _____
2. Is the feed in the hog feeder all the way
around the base so they can get feed? _____
3. Take the shovel and poke the feed down in the
feeder. _____
4. Is there enough hog feed on the table? _____
5. Check and make sure the waterers are working. _____
6. Open the big barn door. _____
7. Make sure the lights are turned off. _____
8. Fill up the water barrels. _____

Evenings completed between 4:00 and 7:00pm

1. Is the feed in the hog feeder
all the way around the feeder? _____
2. Take the shovel and poke the feed down in the
feeder. _____
3. Make sure all the hogs are up and look healthy. _____
4. Close and lock the doors. _____
5. Fill up the water barrels. _____

Items to be completed one time each day.

1. Remove one load of waste from the hog pen. _____
2. Wash off the boots, hose and scraper. _____
3. Wind up the hose when completed with it. _____
4. Add bedding into the pen where you removed waste. _____
5. Empty wheel barrels into the manure spreader. _____

Mr. Birchmeier (Emergency Phone Number)

Scale Instructions

Scale Instructions for Paul Livestock Hog Scales

Tear Down

1. Remove the weight from the beam
2. Remove hook attached to the beam
3. Remove beam and weights
4. Latch down scales by lifting levers at the bottom of the scale frame
5. Insert the bars with wheels
6. Transfer the scale to the desired position

Set Up

1. Remove the wheels
2. Make sure everything is clear from the scales
3. Lower slowly
4. Unlock scales (step & move latch)
5. Put on weigh beam
6. Hook the beam
7. Add weights
8. Zero out the scales
9. Begin weighing

Monthly Feeding Schedules

Feeding schedules will vary from year to year depending on the dates. Each date should have a student name listed and the phone number in case of an emergency. All students will rotate feeding the animals and no single student will feed two days in a row. This will ensure that the animals are checked on, by a different student, each day. Complete the feeding schedules early so the students can plan around their feeding days. Be sure to give all the students a feeding schedule.

Attached are feeding schedules for May, June, July and August. Remember that they will change due to the dates each year.

May

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---------------------------------|----------------------|------------|------------|------------|------------|------------|
| Birchmeier (Phone Number) | School (288-8710) | | | | | 1. |
| 2. | 3. | 4. | 5. | 6. | 7. | 8. |
| 9. | 10. | 11. | 12. | 13. | 14. | 15. |
| 16. | 17. | 18. | 19. | 20. | 21. | 22. |
| 23. | 24. | 25. | 26. | 27. | 28. | 29. |
| 30. | 31. | | | | | |

June

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---------------------------------|----------------------|---------|-----------|----------|--------|----------|
| Birchmeier (Phone Number) | School (288-8710) | 1. | 2. | 3. | 4. | 5. |
| 6. | 7. | 8. | 9. | 10. | 11. | 12. |
| 13. | 14. | 15. | 16. | 17. | 18. | 19. |
| 20. | 21. | 22. | 23. | 24. | 25. | 26. |
| 27. | 28. | 29. | 30. | | | |
| | | | | | | |

July

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---------------------------------|----------------------|---------|-----------|----------|--------|----------|
| Birchmeier (Phone Number) | School (288-8710) | | | 1. | 2. | 3. |
| 4. | 5. | 6. | 7. | 8. | 9. | 10. |
| 11. | 12. | 13. | 14. | 15. | 16. | 17. |
| 18. | 19. | 20. | 21. | 22. | 23. | 24. |
| 25. | 26. | 27. | 28. | 29. | 30. | 31. |
| | | | | | | |

August

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---------------------------------|----------------------|---------|-----------|----------|--------|----------|
| Birchmeier (Phone Number) | School (288-8710) | | | | | |
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
| 8. | 9. | 10. | 11. | 12. | 13. | 14. |
| 15. | 16. | 17. | 18. | 19. | 20. | 21. |
| 22. | 23. | 24. | 25. | 26. | 27. | 28. |
| 29. | 30. | 31. | | | | |

Dimensions and Space Requirements

Each facility will differ in size. Hogs require 8 square foot of space each. To figure how many hogs your facility can hold, measure each pen. Then multiply the length of the pen by the width. After this is calculated, divide this by 8. This will determine the number of hogs that facility can hold.

Remember that the fewer the number of pigs are in a pen, the more room each pig will have. It is better to have more room for each pig than to crowd the pigs. There will also be less fecal matter to clean up per pen as well.

Attached is a drawing of the Durand Livestock Lab. Three pens have been created in the barn. Two pens measure 288 square feet and the third pen measures 240 square feet. There is enough space to raise 102 hogs in this area. This many hogs in this size facility would create too much fecal matter and be too crowded. The 8 square foot requirement is a figure used in the industry for commercial production practices. Each pen would fit 10 to 14 pigs comfortably at Durand.

A 50-gallon water has two drinking nipples attached for watering. This serves as automatic water. If it would spring a leak or break, then only 50-gallon of water would run on the ground. If a hose system was hooked to the hydrant and it broke, then the water would flood the barn.

A five-foot stainless steel feeder is also located in each pen. The feeders can be adjusted to increase or decrease the rate of feed flow. The feeders are durable and will also last a long time because they are stainless steel.

Cost Analysis of Project

The cost analysis of project was figured using 18% ground feed, a purchase price of \$80 per pig and a selling price of \$1.10 a pound on a 250 pound hog. A total of 20 pigs were purchased for the coop.

| Expenses for 1 Hogs | | Expenses for 20 Hogs | |
|----------------------------|----------|--------------------------------|------------|
| Cost for 1 Hog | \$80 | Total Cost for 20 Hogs | \$1600 |
| Cost of feed for 1 Hog | \$112.48 | Total Cost of Feed for 20 Hogs | \$2,249.60 |
| Commission | \$1.26 | Total Commission | \$25.20 |
| Pork Check Off | \$8.41 | Total Pork Check Off | \$168.83 |
| Insurance | \$1.25 | Total Insurance | \$25 |
| Expenses for 1 Hog | \$203.40 | Total Co-op Expenses | \$4068.63 |

| Income for 1 Hog | | Income for 20 Hogs | |
|-------------------------|-------|---------------------------|---------|
| Selling Price | \$275 | Selling Price for 20 Hogs | \$5,500 |

| Profits | | | |
|-----------------------------|----------|---------------------------|------------|
| Profit for 1 Hog | \$71.60 | Profit for 20 Hogs | \$1,431.37 |
| Chapter Share (20%) | \$14.31 | Chapter Share for 20 Hogs | \$286.36 |
| Student's Profit for 1 Hog | \$57.29 | | |
| Student's Profit for 2 Hogs | \$114.58 | | |

Students will receive their \$50 deposit and \$114.58 for their project.

Feed Comparisons

Hogs will consume about eight pounds of feed a day. The project will last approximately 100 days, from May first to August 10th. The target weight is 250 pounds. If the beginning weight is 50 pounds the pig will have to gain 200 pounds. The feed conversion ration for a hog is 4 to 1 or four pounds of feed for every one pound of gain. For the feed comparison, Kent 18% Leanium, 18% Show Chow and 18% ground feed will be used. Kent and Show Chow are a complete feed and come in a 50 pound bag. The students in the co-op must decide what type of feed will be used.

| Feed Type | Cost Per Bag | Total Bags 16 bags | Total Cost Per Pig |
|------------------|--------------|-----------------------|--------------------|
| Kent 18% Leanium | \$10.60 | 800 Pounds | \$169.60 |
| 18% Show Chow | \$10.25 | 800 Pounds | \$164.00 |
| 18% Ground Feed | \$7.03 | 800 Pounds | \$112.48 |

The Kent Leanium and Show Chow are close in comparison. These are complete show feeds and are in the pellet form. The ground feed can be purchased in large quantities.

Sale List of Places to Purchase Hogs

The FFA Chapter will purchase hogs for the co-op. The purchase price of the hogs will be under \$80. The cost of all the cooperative hogs will be divided equally among the number of students that are showing hogs. Extra pigs will be purchased in case of an emergency. In an effort to match the hogs best quality and traits to a pig of similar type, all hogs will be paired closer to show time. Sale lists will vary from year to year. These are sales that are relatively close to Durand and hogs prices and quality will vary from year to year.

April 16, 2004-Shiawassee County Pork Producers 25th Annual Show Pig Sale 7:00 PM, Shiawassee County Fair

April 17, 2004-Fosters Genetic Triad Championship Sale 7:00 PM-Saginaw County Fair Grounds

April 18, 2004-Locke Family Farm Annual Show Pig Sale 1:00 PM, Albion, Michigan

The co-op will purchase the pigs together at these sales. The hogs will not exceed an \$80 average. The hogs will be purchased for the co-op, not for each individual student.

Co-op Work Requirements

Record DATE when each task is complete. INITIAL each task after it is completed.

_____ Deworm Pigs upon purchase

_____ Deworm Pigs in the End of June

_____ Weigh pigs upon arrival?

_____ Weigh Pigs on May 15th

_____ Weigh pigs on June 1st

_____ Weigh pigs on June 15th

_____ Weigh pigs on July 1st

_____ Weigh pigs on July 15th

_____ Weigh pigs on August 1st

All co-op participants are expected to weigh pigs on the above dates at 9:00 AM. The advisor will be there to assist. Participants must attend 4 of the 7 weigh dates to receive their refund of \$50 back in the end.

Pig Co-op Weight Chart

| Pig Number Description | Weight on Arrival | May 15 th | June 1 st | June 15 th | July 1 st | July 15 th | August 1 st |
|---------------------------|----------------------|-------------------------|-------------------------|-----------------------|-------------------------|--------------------------|---------------------------|
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |
| 10 | | | | | | | |

| | | | | | | | |
|-----------|--|--|--|--|--|--|--|
| 11 | | | | | | | |
| 12 | | | | | | | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |
| 16 | | | | | | | |
| 17 | | | | | | | |
| 18 | | | | | | | |
| 19 | | | | | | | |
| 20 | | | | | | | |

Pork Quality Assurance

(PQA)

Beginning in 2003, all youth exhibitors were required to have Pork Quality Assurance Certification, known as PQA. In order to be eligible for showing, exhibiting or marketing hogs, all exhibitors must have a current PQA certification. PQA certification must be renewed. Once a certificate is attained, check the expiration date to assure all necessary steps are followed to remain PQA certified.

The purpose of PQA is to insure that all swine animals that enter the food chain are fit for human consumption. The training explains the importance of medication storage and withdraw dates, injection sites and medicated feed withdraw timelines. Before the project begins it is recommended that all youth receive PQA certification. Check with the local FFA advisor for PQA certification procedures, dates, times and locations of certifying classes.

Fair Expectations

Swine Fair Exhibitors

2004

Important Dates, Times and Rules for the Fair.

1. Have at least two buyers for your animals. This will help you to achieve the best possible price for your animals so contact them today by phone or letter or personal visit.
2. Help to set up the pens for the animals on Wednesday, August 4th, 2004 at 6:30pm. Bring shovels, rakes, wheelbarrows, gloves and a positive attitude.
3. Help set up decorations for the swine pens on Friday August 6th at 9:30am. All decorations are provided by the FFA chapter.
4. Meet at the ag barn to wash co-op hogs on Saturday August 7th at 10:00am.
5. Pigs will be brought to the fair on Saturday August 7th and weighed upon arrival. This weight is the sale weight and the show weight. Be sure you know which animal you want as your individual.
6. Pigs must weigh between 220 and 270 pounds.
7. See that your animals are fed before 8:00am and between 5:00 and 7:00pm each day. All feed pans must stay out of the pens and waterers must be checked at least 2 times per day.
8. Show times for swine are Showmanship 2:00pm on Sunday August 8th Market Pens and Individuals 9:00am on Monday August 9th, and Breeding Stock at 3:00pm on Wednesday August 10th. Show in jeans and a nice shirt (Durand FFA shirts may be purchased).
9. The market animal sale is on Friday August 12th starting at 11:30am. Pigs sell first followed by sheep and then steers in the evening. Let your buyers know when you will be selling. Dress nicely (like show day) and clean and groom your animals before the sale.
10. You are responsible for feeding and caring for your animals until 10:00pm on Saturday August 13th. We will be taking decorations down at 10:00pm that night.
11. Clean up for the fairgrounds is the Sunday morning after the auction. Make plans to come and help.

Things you need for the fair:

1. Small pans for feed.
2. Small Show box.
3. Cane, small brush, rags, dish or laundry soap (no bleach), and a pail.
4. Blood test papers.

Students and Parents it is important to remember that this is a Durand FFA and School Function so school rules apply. Remember that you are not only representing yourself but the FFA and our chapter how you conduct yourself will be noticed by others so show your

pride and have others see us at our best. Work together to get the necessary jobs done and have a great week at the fair.

Fair Supplies Final Checklist

Make sure these supplies are in the chapter tack box before it leaves the FFA barn and are in the chapter tack box upon arrival back to the FFA barn.

These supplies will be placed in the tack box during the July FFA meeting.

- _____ Tack box clean inside
- _____ Two rubber pans for each pig in box
- _____ One automatic pig waterer for each pen of hogs
- _____ Plastic pipes or canes for exhibiting
- _____ Brushes for cleaning hogs (each student needs their own)
- _____ One bottle of soap for cleaning hogs (Era)
- _____ Two plastic pails for filling water
- _____ One pair of pliers for changing water nipples if one is broken
- _____ Extra water nipples

Selection Process

1. The selection process should take place not earlier than one week before the fair.
2. All hogs must be tagged with an ear tag.
3. The advisor will create pairs of hogs by matching hogs of equal quality with each other.
4. Once pairs of hogs are determined, write the corresponding numbers on a piece of paper.
5. Write paired hog numbers on a piece of paper and place in a bowl for selection.
6. Have each student select one piece of paper from the bowl.
7. The numbers drawn are the pair that the exhibitor will show at the fair.
8. The extra hogs can be used if a pair of hogs does not make weight at the fair.

Points to consider.

1. Any first or second year members can select first because they need the most encouragement to get a SAE started.
2. Drawing less than one week before the fair keeps the students working hard towards the project.
3. It is important not to assign pigs until the end because pigs could get hurt, sick or not grow as fast as others.
4. Selection at the end is the only practical solution.

Sample Buyer Letter

_____ (Date)

Dear Mr. Jones,

The letter needs to contain the following:

1. Date and time of the sale.
2. Number of hogs the Durand FFA co-op is exhibiting at the fair.
3. What you have learned from the project.
4. State how the buyer will benefit (meat, supporting youth, rewarding).
5. Their support would be greatly appreciated.

Sincerely,

(Your Name)

Sample Thank You Letter

_____ (Date)

Dear _____, (buyer of your animals)

The thank you letter needs to contain the following:

1. What you have learned from the project.
2. What you will do with the money.
3. Your future plans.
4. This thank you letter will also include a picture of you and your animal.

Sincerely,

(Your Name)

Emergency Contact Numbers

If there is an emergency, here are the numbers where I can be reached. Try to contact the school if you are unable to locate me. They should know where to find me.

School number-

Mr. Birchmeier's Cell-

All co-op members names and numbers will be listed here.