

Course	Agricultural Science I
Unit	Sheep Production
Lesson	Management of Sheep for Profit
Estimated Time	50 minutes

Student Outcome

Describe strategies of sheep management that will most likely result in a profit.

Learning Objectives



1. Describe producer options for marketing sheep.
2. List key steps in developing a budget for sheep production.
3. List factors that may impact optimal production.
4. Describe how an enterprise analysis tool is used in record keeping.

Grade Level Expectations

SC/ST/1/B/09-11/a SC/ST/1/C/09-11/a

Resources, Supplies & Equipment, and Supplemental Information

Resources

1. Activity Sheets
 -  AS 1 – Sheep Production Budget
 -  AS 2 – Electronic Marketing
2. *Sheep Production (Student Reference)*. University of Missouri-Columbia: Instructional Materials Laboratory, 2001.
3. *Missouri Farm Business Planning Handbook*. Jim Riley, editor. Manual 75, University Extension, University of Missouri-Columbia, 1990.
4. *Sheep Production Curriculum Enhancement*. University of Missouri-Columbia: Instructional Materials Laboratory, 2003.

Supplies & Equipment

- ☐ Examples of budgeting forms or programs to help explain objectives 3 and 4 (optional)

Supplemental Information

1. Internet Sites
 - ☐ *Agricultural Marketing Manual*. Agriculture and Food. Alberta Government. Accessed July 5, 2007, from [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/sis8570](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/sis8570).
 - ☐ Agridata. Accessed July 5, 2007, from <http://www.agridata.co.uk/>.
 - ☐ Graham, I. *Electronic Livestock Auctions in the UK*. Accessed July 5, 2007, from <http://homepages.ed.ac.uk/grahami/research/LIVESTOK.HTM>.
 - ☐ Sachse, J. M. Revised by C. P. Mathis and T. Ross. *Sheep Production and Management*. New Mexico State University. Accessed July 2, 2007, from http://www.cahe.nmsu.edu/pubs/_b/100B15.html.
 - ☐ Thompson, J. M. *Sheep Management Calendar*. Oregon State University. Accessed July 3, 2007, from <http://oregonstate.edu/dept/animal-sciences/shpmgmt.htm>.


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- ❑ Wolfshohl, Karl. *Computer Cowboys Ride High*. Ranch Vision. Accessed July 5, 2007, from <http://www.ranchvision.com/press2.htm>.
2. Print
- ❑ Acker, D. and M. Cunningham. *Animal Science and Industry*. 5th ed. Upper Saddle River: Prentice Hall, 1998.
 - ❑ Barrick, R. K. and H. L. Harmon. *Animal Production and Management*. New York: McGraw-Hill Book Company, 1987.
 - ❑ Blakely, J. and D. H. Bade. *The Science of Animal Husbandry*. 4th ed. New Jersey: Prentice Hall, Inc., 1995.
 - ❑ Gillespie, J. R. *Animal Nutrition and Feeding*. Albany: Delmar Publishers, 1997.
 - ❑ Gillespie, J. R. *Animal Science*. Albany: Delmar Publishers, 1998.
 - ❑ Ricketts, G. E., Scoggins, R. D., and Thomas, D. L. *Management Guidelines for Efficient Sheep Production*. University of Illinois at Urbana-Champaign. North Central Regional Extension Publication 240.
 - ❑ Scott, G. E. *The Sheepman's Production Handbook*. Denver: Abegg Printing, 1982.
 - ❑ *Sheep Resource Handbook for Market and Breeding Projects*. Curriculum Materials Service: Ohio State University, 2000. (More information available at <http://www-cms.ag.ohio-state.edu/>).
 - ❑ Smith, B., M. Aseltine, and G. Kennedy. *Beginning Shepherd's Manual*. 2nd ed. Ames: Iowa State University Press, 1997.
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Interest Approach

Ask the students if they receive an allowance. If so, how often? Do they have to do something to earn the allowance (e.g., take out the trash, vacuum)? Then ask them how they decide what to do with the money. Have them create a simple budget of how they spend their money showing income and expenses. Some students may not realize that they create a budget for themselves by deciding to either spend or save their allowance. Inform them that a sheep producer does the same thing to manage his or her sheep operation, only much more in depth.

Communicate the Learning Objectives

1. Describe producer options for marketing sheep.
2. List key steps in developing a budget for sheep production.
3. List factors that may impact optimal production
4. Describe how an enterprise analysis tool is used in record keeping.

Instructor Directions	Content Outline
Objective 1 <i>Ask the students to identify available options for marketing livestock. Relate these methods to sheep production. Remind them that the ultimate goal for marketing sheep (meat-type) is to process the meat into wholesale cuts. See Cooking Lamb in the appendix for further information. Have students complete AS 2 to observe online marketing.</i>  AS 2 – Electronic Marketing	Describe producer options for marketing sheep. Terminal markets (public stockyards) <ol style="list-style-type: none">1. This facility holds sheep temporarily before they are processed, sold, or shipped.2. An agent or firm receives a commission for selling the animals. Local market pools <ol style="list-style-type: none">1. Small and medium-sized producers pool their animals together.2. These pools try to attract more buyers.3. The trucking and marketing cost for producers is decreased. Auction markets (sale barn) <ol style="list-style-type: none">1. Buyer bidding against buyer2. No set price3. Significant market to producers Direct marketing <ol style="list-style-type: none">1. Largest volume market2. Selling animals directly to the processor Niche markets (home-raised organic meat, Kosher market, selling wool) <ol style="list-style-type: none">1. Unique/specialty product2. Can typically sell at a premium

Instructor Directions	Content Outline
	<p>3. Generally small marketing area</p> <p>Electronic marketing</p> <ol style="list-style-type: none"> 1. New marketing option offering producers a wide variety of markets 2. Expected to increase the amount of animals marketed <ol style="list-style-type: none"> a. Lower transportation cost b. Less stress for the animal, which causes weight loss 3. Easy and convenient to sell the animals <ol style="list-style-type: none"> a. Market is brought to the producer. b. The market information can be accessed 24 hours a day. c. Producer has the option to accept or refuse the sell price.
<p>Objective 2</p> <p><i>Ask students what they would include in a budget for a sheep operation. How would they determine what to include in the budget? Have students complete AS 1 to evaluate a sheep production budget.</i></p> <p> AS 1 – Sheep Production Budget</p>	<p>List key steps in developing a budget for sheep production.</p> <ol style="list-style-type: none"> 1. Identify everything that is needed for sheep production (supplies, vaccines, feed, shelter, number of sheep in the production, etc.). 2. Determine a reasonable cost for everything based on history and price projections. 3. Reasonably overbudget to allow for overspending or higher costs than anticipated.
<p>Objective 3</p> <p><i>Ask the students what factors they would consider when feeding sheep. Why is it important to know if the animals are performing at their maximum capacity?</i></p>	<p>List factors that may impact optimal production.</p> <p>Sheep have different nutritional needs depending on the stage of development.</p> <ol style="list-style-type: none"> 1. Young lambs require 3-4 lb of concentrate for 1 lb of gain per day. 2. During the first 15 weeks of gestation, a ewe requires 1% of her body weight of balanced ration plus high-quality forage per day. 3. During the last 4-6 weeks of gestation, a ewe requires 1-2% of her body weight of balanced ration plus high-quality forage per day. 4. During lactation a ewe requires 2% of her body weight of balanced ration plus high-quality forage per day.

Instructor Directions	Content Outline
	<p>Other activities</p> <ol style="list-style-type: none"> 1. Have students contact a producer to see if he/she would be willing to give them past records of his/her operation. Have students fill in records of expenses and receipts from the operation. Have them research to see what the average costs are for all of the expenses and receipts. This activity gives students practice filling out records and also reinforces what is necessary in managing an operation. 2. Visit a banker or invite him/her to speak to the class about money management techniques that can help when running an operation.
Closure/Summary:	<p>The goal of sheep production is to sell the animal to make a profit for the operation. Effective production managers select the best market available to the operation and keep a close eye on the budget to make sure everything is working smoothly. By feeding lambs and ewes the appropriate amount of feed during key growth cycles, producers strive to achieve optimal profit on their flocks. Using enterprise analysis tools helps producers determine cost-benefits and to make important management decisions.</p>
Evaluation: Quiz	<p>Answers:</p> <ol style="list-style-type: none"> 1. Students may list any three of the following markets (a-f) and a characteristic given: <ol style="list-style-type: none"> a. Terminal markets (public stockyards) <ul style="list-style-type: none"> • handle, care for, and receive feeder and process animals • animals sold by an agent or firm that receives commission for the sell b. Local market pools <ul style="list-style-type: none"> • small and medium-sized producers pool their animals together • try to attract more buyers c. Auction markets (sale barn) <ul style="list-style-type: none"> • buyer bidding against buyer • no set price • significant market to producers d. Direct marketing <ul style="list-style-type: none"> • largest market volume • selling animals directly to the processor e. Niche market

Instructor Directions	Content Outline
	<ul style="list-style-type: none"> • unique/specialty product • usually sells at a premium • typically small market area <p>f. Electronic marketing</p> <ul style="list-style-type: none"> • new marketing option • expected to increase the amount of animals marketed • easy and convenient to sell the animals <p>2. Students may list any two of the following:</p> <ul style="list-style-type: none"> a. Performs cost-benefit analysis for producer b. Helps determine outcomes of multiple scenarios c. Processes records to aid future decision making <p>3. d</p> <p>4. b</p> <p>5. c</p> <p>6. b</p> <p>7. d</p>