



# Royal Rangers

Merit Requirements: Silver-Bordered Merit

## FARM AND RANCH MANAGEMENT MERIT

**Note:** This merit is intended to benefit the boy involved in FFA, 4-H, or vocational agriculture classes in school. To earn this merit, the boy completes a detailed project that examines various aspects of farming and ranching, including land acquisition, best land use, production, marketing, procurement of product (seed, livestock, feed, etc.), accounting, maintenance, etc. The boy works closely with a farmer or rancher to learn about the entire scope of operating a farm or ranch.

1. Select ONE of the following types of farms or ranches for your project. Contact the farmer or rancher to schedule an appointment for your initial visit. Visit the farm or ranch with an adult or another Expedition Ranger. Explain the scope of your project (specifics listed below for each type of farm and ranch) and your reasons for selecting this type of agricultural enterprise.  
Ask the farmer or rancher if he or she will work with you on this project. Explain that the project will require several visits and some of his or her time. (Confidentiality of financial matters and other concerns is required.) Write a report including the information gathered on your visits and summarize what you learned about the farm or ranch management. Explain how a farmer or rancher may demonstrate Christian ethics in relationships with customers, officials, service providers, and laborers or hired hands.
  - A. Beef production management
    1. What is the size of the land and number of head ratio so that overuse of land doesn't occur?
    2. What are the expected financial goals to be realized from this ranch for one year? In five years? In ten years? Explain.
    3. Does this ranch have professional affiliations, and what value does the association(s) provide for this ranch? Explain.
    4. What is the budget for expenses for this beef-production business?
      - a. List the expected expenses for this business.
      - b. Have the operators of this ranch had specialized business planning training, or have they gained their business experience through the family business? Explain.
    5. How much manpower is needed to make this business manageable and to remain within the budget?
      - a. What part of the budget is spent on hired help?
      - b. How is the help hired?
      - c. What kind and how much experience does a ranch hand need?
      - d. Is the help seasonal or full-time?
    6. How are cattle procured? What kind and how many?
    7. What food is needed? What supplements are given? What is the cost of food and supplements?
    8. Is land rotation, or the moving of cattle, required to help the land repair itself?
    9. What are the water resources for irrigation and for the cattle to drink? Are there any costs for obtaining water rights?
    10. Are there environmental restrictions for land use, water use, fencing, grazing, etc., for the cattle ranch? Explain.
    11. What kind of fencing is used, and how much is needed? What repair is needed monthly? Annually?
    12. What facilities are constructed on the ranch? Are there projections for designing other facilities? Draw a map showing the layout of the ranch: buildings, loading shoots, fences, and other facilities.
    13. What is the strategy for raising cattle for procuring the best market value? Include information on how cattle are fattened and how their health is promoted?

14. What is the marketing strategy? When is it best to sell? Is the Internet used to research the value of the herd?
  15. How do the cattle get to market?
    - a. Is the transport by ranch vehicles or hired out?
    - b. What advance notice is needed for hired-out transport?
    - c. What transport expenses are incurred?
    - d. How are arrangements made for the slaughterhouses to receive the cattle?
    - e. Are there contracts made with the slaughterhouses? Explain.
    - f. What is the involvement of the USDA (U.S. Department of Agriculture)?
  16. While raising the current herd, what preparations need to be made for next year's market? The market in five to ten years?
  17. Are there projections for acquiring more land and cattle?
  18. What items need to be monitored in order to develop a profit and loss statement?
- B. Crop production management
1. How much land does the farm own? Lease out?
  2. What crops are grown? What is the usual yield of the land at harvest time?
    - a. How is seed purchased? What arrangements must be made to procure the seed? How much advance notice must be made?
    - b. How does the farmer know it is quality seed?
      - a. What is the cost per acre for this seed?
      - d. How are crops planted (by hand, by machine, by air)? Explain.
  3. Are there integrated crop management plans in operation to increase yields, crop quality, and profits?
  4. What steps are being done for a nutrient management plan? Steps may include:
    - a. Soil testing
    - b. Color nutrient maps
    - c. Fertilizer and manure recommendations
    - d. Precision sampling—two-acre grids
    - e. Yield map analysis/interpretation
  5. What plans are there for crop management?
    - a. Fertilizer, manure, and pesticide recommendations
    - b. Weed monitoring
    - c. Plant tissue analysis
    - d. Farm records
    - e. Full-season monitoring (weeds, insects, and disease)
    - f. Crop rotation schedules
  6. What schedules are followed for working the land in the winter, spring, summer and fall seasons?
    - a. What expenses are incurred during each season?
    - b. What labor is needed for these seasons?
    - c. What fertilizers or weed killers and insect control chemicals are needed for each season and what are the costs involved?
    - d. What environmental issues are involved in utilizing chemicals on farms in your state?
  7. What schedules are followed for maintaining and preparing the equipment that is used on this farm?
    - a. What equipment does this farm own? Is there any equipment that is leased from and other farmer?
    - b. What equipment needs to be prepared for each phase of the seasons?
    - c. How much is spent on equipment maintenance?
    - d. Is there a plan for acquiring equipment annually? In five years? In ten years?
  8. What help is utilized?
    - a. Full-time help: How many and what are their duties?
    - b. Part-time help (include harvest time): How many and what are their duties?
    - c. What amount of the budget is spent on employees?
  9. Does this farm have professional affiliations, and what value does the association(s) provide? Explain.
  10. What special needs arise during harvest time?
    - a. What arrangements must be made with those receiving the crops?
    - b. What transportation arrangements must be made to get the crops to market, whether it is a packing plant, produce market, or other food-preparation plant?
    - c. How is the price set or determined for the value of the crop?
    - d. Are government subsidies available for crop disasters or other issues? Explain.
  11. What items need to be monitored in order to develop a profit and loss statement?
- C. Pork production management
1. What is the size of the land and number of head ratio so that overuse of land doesn't occur?

2. What are the expected financial goals to be realized from this farm for one year? For five years? For ten years?
  3. Does this farm have professional affiliations, and what value do the associations provide for this farm? Explain.
  4. What is the budget for expenses for this pork-production business?
    - a. List the expected expenses for this business.
    - b. Have the operators of this farm had specialized business planning training, or have they gained their business experience through the family business? Explain.
  5. How much manpower is needed to make this business manageable and to remain within the budget?
    - a. What part of the budget is spent on hired help?
    - b. How is the help hired?
    - c. What kind and how much experience does a farmhand need?
    - d. Is the help seasonal or full-time?
  6. How are the swine procured? What kind and how many?
  7. What food is needed? What supplements are given? What is the cost of food and supplements?
  8. What are the water resources for irrigation and for the swine to drink? Are there any costs for obtaining water rights?
  9. Are there environmental restrictions for land use, water use, fencing, grazing, etc., for a pork farm? Explain.
  10. Does the farm use fences or pens? What kind is used and how many are needed? What repair is needed monthly? Annually?
  11. What facilities are constructed on the farm? Are there projections for designing other facilities? Draw a map showing the layout of the farm: buildings, loading shoots, fences, and other facilities.
  12. What is the strategy for raising swine for procuring the best market value? Include information on how swine are fattened and how their health is promoted.
  13. What is the marketing strategy? When is it best to sell? Is the Internet used to research the value of the herd?
  14. How do the swine get to market?
    - a. Is the transport by farm vehicles or hired out?
    - b. What advance notice is needed for hired-out transport?
    - c. What transport expenses are incurred?
    - d. How are arrangements made with the slaughterhouses to receive the swine?
    - e. Are there contracts made with the slaughterhouse? Explain.
    - f. What is the involvement of the USDA?
  15. While raising the current herd, what preparations need to be made for next year's market? The market in five to ten years?
  16. Are there projections for acquiring more land and swine?
  17. What items need to be monitored in order to develop a profit and loss statement?
- D. Dairy production management
1. What is the size of the land and number of head ratio so that overuse of land doesn't occur?
  2. What are the expected financial goals to be realized from this dairy farm for one year? In five years? In ten years?
  3. Does this farm have professional affiliations, and what value does the association(s) provide for this farm? Explain.
  4. What is the budget for expenses for this milk-production business?
    - a. List the expected expenses for this business.
    - b. Have the operators of this farm had specialized business training, or have they gained their business experience through the family business? Explain.
  5. How much manpower is needed to make this business manageable and keep within the budget?
    - a. What part of the budget is spent on hired help?
    - b. How is the help hired?
    - c. What kind and how much experience does the hired help need?
    - d. Is the help seasonal or full-time?
    - e. How often must the cows be milked?
    - f. Is the milking done by hand or by machine?
    - g. How and where is the milk processed?
  6. How are cattle procured that are suitable for milking? What kind and how many?
  7. What food is needed? What supplements are needed? What is the cost of food and supplements?
  8. Is land rotation, or moving of cattle, required to help the land repair itself?
  9. What are the water resources for irrigation and for the cattle to drink? Are there any costs for obtaining water rights?
  10. Are there environmental restrictions for land use, water use, fencing, grazing, etc., for dairy farms? Explain.
  11. What kind of fencing is used, and how much is needed? What repair is needed monthly? Annually?

12. What facilities are constructed on the farm? Are there projections for designing other facilities? Draw a map showing the layout of the farm: buildings, loading shoots, fences, milking facilities, and other facilities.
13. What is the strategy of raising cattle for procuring the best market value for dairy products? Include information on how often the cows are milked and how their health is promoted.
14. What is the marketing strategy? Whom do they contact or make arrangements with to market the milk? Is the Internet used to research milk prices?
15. How does the milk get to market?
  - a. Is the transport by farm vehicles or hired out?
  - b. What advance notice is needed for hired-out transport?
  - c. What transport expenses are incurred?
  - d. How are arrangements made for the distributor centers to receive the milk?
  - e. Are there contracts made with the milk distributors? Explain.
  - f. What is the involvement of the USDA?
16. While raising the current herd, what preparations need to be made for next year's market? The market in five to ten years.
17. Are there projections for acquiring more land and cattle?
18. What items need to be monitored in order to develop a profit and loss statement?

