762 Horse Nutrition

This advanced-level project may be taken a maximum of three (3) years. Members do not need to purchase a new book each year. Instead, they will need to complete additional items under each interest area. Keep all these activities in a notebook.

Members must have access to a horse for completion of this project.

General Guidelines

   a. Explore all Interest Areas, completing two (2) Things to Do for each area.
   b. Document all completed Project Activities in your project notebook (3 ring binder). This notebook should be cumulative and contain documentation of all completed Project Activities for each year of the project.
   c. Take part in at least two (2) Learning Experiences.
   d. Become involved in at least two (2) leadership/Citizenship Activities.
   e. Write a one page report telling about what you have done and learned in this project.

2. Complete the Equine Record Book (R190)

3. Bring to Interview Judging:
   b. Project notebook.
   c. One page report.
   d. Equine Record Book.

4. Fair exhibit:
   a. For completion of this project, your horse may be exhibited at the Tuscarawas County Fair. If your horse is not exhibited, an educational display or 14” W x 22” H poster illustrating and describing some aspect of your project must be present in your club’s fair booth.
Supplemental Member Project Guide: 762 Horse Nutrition

General Project Guidelines

1. Complete the “Planning Your Project” section of this guide
2. Explore Interest Areas, completing at least two (2) Things to Do in each area.
3. Take Part in at least two (2) Project Learning Experiences.
4. Become involved in at least two (2) Leadership/Citizenship activities.
5. Write a one-page report telling what was done and learned through this project.
6. Have access to a horse.

Planning Your Project

Step 1: Interest Areas
Explore Interest Areas in accordance to options listed above. As you begin to explore or re-explore an Interest Area, place the current date (mo./yr.) next to it.

<table>
<thead>
<tr>
<th>Date Started (mo./yr.)</th>
<th>Interest Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>________</td>
<td>1. Animal Factors (pages 4-13)</td>
</tr>
<tr>
<td>________</td>
<td>2. Diet Factors (pages 14 – 23)</td>
</tr>
<tr>
<td>________</td>
<td>3. Feeding Factors (pages 24 – 39)</td>
</tr>
<tr>
<td>________</td>
<td>4. Forage Species for Pastures and Hay (pages 40 – 46)</td>
</tr>
<tr>
<td>________</td>
<td>5. Plant Identification (pages 47 – 87)</td>
</tr>
<tr>
<td>________</td>
<td>6. Diseases Related to Nutrition (pages 88 – 91)</td>
</tr>
</tbody>
</table>
Step 2: Things to Do
Within each of the Interest Areas, place a check mark next to the two (2) activities you plan to do. Activities may be added or changed at any time. Have your parent or advisor initial and date what you complete. Place completed activities in your project notebook.

1. Animal Factors
   - Conduct a body scoring analysis on three horses.
   - Compare and contrast the diets of three horses at different ages and activity levels.
   - Attend county fairs, breed shows, or sales to observe feeds and compare at least 2 different feeds and the condition of the horses eating these feeds.
   - Identify parts of the digestive system. Draw the digestive system and label parts or visit a veterinarian as he/she posts a horse; photograph digestive system and label parts.
   - Visit a veterinarian as he/she posts a horse and observe or take samples of feed from each part of the digestive system (stomach, small intestine, cecum, and colon).
   - Tour each project member’s home to observe his/her animals and discuss feeding.
   - Discuss feed additives with a feed store representative.
   - Conduct a club meeting on “Identifying Feedstuffs” for your fellow members.
   - Develop a cost comparison of various feed stuffs.

2. Diet Factors
   - Describe the six basic nutrients and the function of each.
   - Visit farms or The Ohio State University Veterinary Clinic, etc., and observe horses with specific nutrient deficiencies. Note characteristics of these animals as opposed to normal animals with no nutrient deficiencies.
   - Collect and properly identify at least 5 roughages.
   - Using small jars, collect and label at least 10 concentrates used in making rations.
   - Compare the value of feed additives; which are most cost effective when added to the ration.
   - Discuss feed additives with a feed store representative.
   - Conduct a club meeting on “Identifying Feedstuffs” for your fellow members.
   - Develop a cost comparison of various feed stuffs.

3. Feed Factors
   - Keep records of the kind and amount of feed your horse(s) receive for 4 months. Note feed changes and visual changes in your horse.
   - Visit a large horse farm or trainer’s facilities to observe and discuss feed programs.
   - Develop a 2-year feeding calendar for a 3-year-old mare about to be bred.
   - Visit with a feed salesman and discuss common feed rations.
   - Compare labels from commercial feeds.
   - Formulate 2 rations.
   - Use a computer to develop a least-cost balance ration for your horses.
   - Use and evaluate 3 difference commercial feeds.
   - Have a feed sample analyzed.
   - Develop a ration for bred mares.
   - Develop a ration for aged stallions during breeding season.

4. Forage Species for Pastures and Hay
   - Evaluate your hay quality.
   - Take a soil test from your pasture or a nearby one and have it analyzed.
   - Have a hay sample analyzed.
   - Compare the nutrient quality of various roughages.
• Determine the rental value of your pasture or a nearby pasture.

5. Plant Identification
• Collect and identify at least 3 grass plants.
• Collect and identify at least 3 legume plants.
• Collect and identify at least 10 of the most common weeds found in hayfields and pastures in Ohio.
• Collect and identify at least 3 poisonous plants.
• Collect and identify at least 2 poisonous substances.

• Scan your pastures and barnyard area for poisonous substances.

6. Diseases related to Nutrition
• Visit a veterinarian or horse farm to learn to observe changes in a horse’s vital signs.
• Study common digestive problems or malfunctions that occur in the horse.
• Make a chart of things you can do to prevent digestive disorders in your horse.
• Ask a veterinarian to speak to your club regarding common digestive problems and their treatment.
Step 3: Learning Experiences

Take part in at least two (2) of the sample Learning Experiences listed below. Plan your involvement in the chart (Report of Learning Experiences) provided. Before starting your project, enter your two (2) choices in the section labeled “Plan to Take Part In.” Then, once you have taken part in an activity record what you did and when. Learning Experiences may be added or changed at any time.

Sample Learning Experiences

- Demonstration
- Illustrated Talk
- Project Meetings
- Speech
- Exhibit
- Judging Team
- County Fair Judging
- Production Show
- Radio/TV Presentation
- Farm Tour
- Horse Camp
- Field Trip

Report of Learning Experiences

<table>
<thead>
<tr>
<th>Plan to Take Part In</th>
<th>What I Did</th>
<th>Date Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Example) Demonstration</td>
<td>Gave presentation to 4-H club on the parts and function of the digestive system.</td>
<td>4/21</td>
</tr>
</tbody>
</table>

Step 4: Leadership/Citizenship Activities

Plan to do at least two (2) Leadership/Citizenship activities. Keep track of your progress by dating (mo./yr.) what you completed. Leadership/Citizenship activities may be added or changed at any time.

- Teach your club something about horse nutrition.
- Encourage someone to join your club.
- Help someone decide which horse project to take.
- Arrange for your club to go on a tour.
- Have someone visit your club and speak about horses.
- Serve as a club officer.
- Help coach or assist with a Horse Bowl, Horse Judging, or Hippology Team.
- Help someone with his/her horse project.
- Help organize or conduct a horse nutrition clinic.
- Help at a 4-H horse show.
- Write a news story about your club.
- Get sponsors for a 4-H horse show.
- Teach younger members riding skills at a club workout.
County 4-H Project Completion and Judging Overview 2020

Please carefully read this information; it may answer most Interview Judging or county fair questions.

Project Guidelines
For project guideline information, visit: go.osu.edu/tusc4-hguidelines

All project guidelines are available online. Only equine and livestock projects will receive guidelines with project book. Guidelines need completed for Interview Judging. Members taking more than one project in the same interest area need to complete guidelines for each project and cannot use the same items to support both projects.

For a member to achieve the progression of goals needed for development, 4-H projects must be separate and different from those carried in other organizations such as FHA/HERO, FFA, Scouts, Camp Fire, grange, church, and school (including industrial arts class, science fairs, etc.).

Project Completion and Interview Judging
For more Interview Judging information, visit: go.osu.edu/tusc4-hjudging

Completion of a 4-H project may be achieved in one of two methods. Members must choose one of the following for evaluation, based on the completion of project guidelines and knowledge gained. All projects must be judged no later than August 7.

- 4-H Project Interview Judging – All members are required to attend an Interview Judging evaluation to receive a project grade. All projects are evaluated using individual project guidelines. Club times will be assigned, and advisors will be notified of their club’s times. Members are strongly encouraged to attend at their club’s scheduled time.

- Pre-Judging – Pre-Judging is arranged in advance. Any member who is unable to participate in 4-H Project Interview Judging may participate in Pre-Judging. Participants will be ineligible for county awards and state fair participation. Contact the Extension office after June 1 to schedule an appointment. Post-Judging arrangements will be reviewed on a case-by-case basis if a member misses Interview Judging due to extenuating circumstances.

Dress Code
Clothing and footwear need to be neat, clean, and appropriate for a professional office interview. No blue jeans or shorts. Shirts/tops and skirt length should be conservative. Wear appropriate shoes (no flip flops).

#201O Dog Obedience
Judging dates are determined by the key leaders and will be distributed at the dog project information meeting.

#588 The Writer in You
Writings are due to the Extension office before Noon on Thursday, July 2, 2020.

Shooting Sports Projects
The Shooting Sports program is designed for 4-H members ages 9 to 18 (4-H age). Judging dates are determined by the key leaders and will be distributed at the Shooting Sports orientation meeting.

Llamas/Alpacas Projects
Tuscarawas County does not currently have a program in place for llamas/alpacas.

| Precise Schedules to be Announced |
|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Monday July 13 | Tuesday July 14 | Wednesday July 15 | Thursday July 16 | Thursday July 23 |
| Equine (includes Horseless Horse) | FCS Related | Small Livestock (all goats, poultry, rabbits) | Dairy | Clothing and Style Review |
| Swine | Food and Nutrition | Miscellaneous | Beef | Sheep |
| #200 All About Dogs | #201D You and Your Dog | | | |
**Member Evaluation Form**

This form is due to our office no later than June 15, 2020. This is available from the organizational advisor or online (go.osu.edu/tusc4-hjudging). It is to be completed by the 4-H Advisor and parent/guardian if they feel it is necessary that the judge should use special consideration concerning a 4-H member during Interview Judging.

**State Fair Eligibility**

For more State Fair competition or entry deadline information, visit: [http://www.ohiostatefair.com](http://www.ohiostatefair.com)

A 4-H member taking non-livestock projects must attend regularly scheduled judging to be eligible to place in the county or be eligible to go to State Fair. No pre-judging participants will be considered. NOTE: 4-H members in clothing projects must participate in the county 4-H Style Review to be eligible to be selected for State Fair competition.

**County Fair**

For more county fair information or to see the fair booklet, visit [tusccountyfairgrounds.com](http://tusccountyfairgrounds.com).

All members attending a Quality Assurance session will receive the Junior Fair Section of the Tuscarawas County Fair Book. Fair entry forms, rules, and show information are in the booklet.

Of special note:
- All Junior Fair exhibitors must have their official entries completed and signed by their parent/legal guardian regardless of age. The Tuscarawas County Extension office collects Junior Fair Entry Forms on behalf of the Senior Fair Board. All entries must be in the Extension office before by 4:00 p.m. on August 7, 2020. LATE ENTRIES ARE NOT ACCEPTED BY THE TUSCARAWAS COUNTY AGRICULTURAL SOCIETY – NO EXCEPTIONS.
- Wristbands will be distributed only to members who have a yes (Y) in the Club Completion Column on their club’s Completion Sheet.
- Members must have an exhibit at the county fair (as stated in project guidelines) in order to receive a fair premium. If there are circumstances where an animal is not able to be exhibited, a display or poster must be exhibited in the member’s club’s or county miscellaneous booth.

<table>
<thead>
<tr>
<th>PROJECT RATINGS, PREMIUM REQUIREMENTS, and PAYMENTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gold</strong></td>
<td></td>
</tr>
<tr>
<td>• Exceptional project knowledge.</td>
<td>$8</td>
</tr>
<tr>
<td>• Work exhibits extra effort with individual initiative to go above and beyond the project requirements.</td>
<td></td>
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<tr>
<td>• A thorough understanding of proper methods to complete project.</td>
<td></td>
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<tr>
<td><strong>Silver</strong></td>
<td></td>
</tr>
<tr>
<td>• Very knowledgeable of project subject matter.</td>
<td>$7</td>
</tr>
<tr>
<td>• Completed project requirements.</td>
<td></td>
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<tr>
<td>• Project presented in a neat and organized manner.</td>
<td></td>
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<tr>
<td><strong>Bronze</strong></td>
<td></td>
</tr>
<tr>
<td>• Adequate project knowledge.</td>
<td>$6</td>
</tr>
<tr>
<td>• Has made effort towards completing requirements and project presentation</td>
<td></td>
</tr>
<tr>
<td><strong>Participation</strong></td>
<td></td>
</tr>
<tr>
<td>• Shows little effort towards completing requirements and presentation.</td>
<td>None</td>
</tr>
</tbody>
</table>

**MEMBER’S PRESENTATION AND ATTITUDE WILL AFFECT PROJECT RATING**

Please email or call us at 330-339-2337 if you have any questions.

Kiersten Heckel, Extension Educator, 4-H Youth Development – heckel.13@osu.edu
Christine Kendle, Extension Educator, Family and Consumer Sciences - kendle.4@osu.edu
## 2020 Tuscarawas County Junior Fair Livestock Requirement Summary

Each 4-H or FFA member may exhibit two large livestock projects, (in beef and sheep breeding a member may exhibit a third animal if they are enrolled in the corresponding market project) of which must be in different classes. Members can only exhibit two small livestock projects, which must be in different classes. Members are only eligible to receive money from a maximum of two revenue generating livestock sale projects at the fair, regardless of the number shown. (See fair book for complete Junior Fair rules.)

<table>
<thead>
<tr>
<th>Mandatory Project Enrollment Date</th>
<th>Possession Date</th>
<th>Weigh-In, Tag/Tattoo, Banding, DNA, or Pictures</th>
<th>Quality Assurance</th>
<th>Livestock Interview Judging</th>
<th>Fair Entries</th>
<th>Animal Requirements</th>
<th>Health Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Market Beef &amp; Dairy</strong>&lt;br&gt;Market Beef**</td>
<td>December 14 or 16, 2019</td>
<td>December 14, 2019</td>
<td>December 14 or 16, 2019</td>
<td>Quality Assurance (December 14 or 16, 2019)</td>
<td>Livestock Interview Judging (December 14 or 16, 2019)</td>
<td>Fair Entries (Market Beef)</td>
<td><strong>1000 lbs. minimum</strong>&lt;br&gt;<strong>Heifer or Steer must be Male castrated &amp; dehorned</strong></td>
</tr>
<tr>
<td><strong>Beef Breeding</strong></td>
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<tr>
<td><strong>Beef Feeder Calf</strong></td>
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<tr>
<td><strong>Dairy Cattle</strong></td>
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<tr>
<td><strong>Sheep Breeding</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>Market Hogs</strong></td>
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<tr>
<td><strong>Market Lambs</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>Market Goats</strong></td>
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</tr>
</tbody>
</table>

### Dates

- **April 15, 2020**
  - **Beef Breeding**
  - **Market Goats**

- **June 6, 2020**
  - **Beef Feeder Calf**
  - **Dairy Cattle**
  - **Market Hogs**
  - **Market Lambs**

- **June 15, 2020**
  - **Market Beef & Dairy**
  - **Beef Breeding**
  - **Dairy Cattle**

- **July 16, 2020**
  - **Midvale Elementary**

### Registration Dates

- **Due August 7, 2020**
  - No late entries accepted!

**Mandatory Project Enrollment Date**
- Market Beef & Dairy: December 14 or 16, 2019
- Beef Breeding
- Beef Feeder Calf
- Dairy Cattle
- Sheep Breeding
- Market Hogs
- Market Lambs
- Market Goats

**Possession Date**
- Market Beef: December 14, 2019
- Beef Breeding
- Beef Feeder Calf
- Dairy Cattle
- Sheep Breeding
- Market Hogs
- Market Lambs
- Market Goats

**Weigh-In, Tag/Tattoo, Banding, DNA, or Pictures**
- Market Beef: December 14 or 16, 2019
- Beef Breeding
- Beef Feeder Calf
- Dairy Cattle
- Sheep Breeding
- Market Hogs
- Market Lambs
- Market Goats

**Quality Assurance**
- Market Beef: Quality Assurance (December 14 or 16, 2019)
- Beef Breeding
- Beef Feeder Calf
- Dairy Cattle
- Sheep Breeding
- Market Hogs
- Market Lambs
- Market Goats

**Livestock Interview Judging**
- Market Beef: Livestock Interview Judging (December 14 or 16, 2019)
- Beef Breeding
- Beef Feeder Calf
- Dairy Cattle
- Sheep Breeding
- Market Hogs
- Market Lambs
- Market Goats

**Fair Entries**
- Market Beef: Fair Entries (Market Beef)
- Beef Breeding
- Beef Feeder Calf
- Dairy Cattle
- Sheep Breeding
- Market Hogs
- Market Lambs
- Market Goats

**Animal Requirements**
- Market Beef: 1000 lbs. minimum<br>Heifer or Steer must be Male castrated & dehorned
- Beef Breeding
- Beef Feeder Calf
- Dairy Cattle
- Sheep Breeding
- Market Hogs
- Market Lambs
- Market Goats

**Health Requirements**
- Market Beef: DUNF Vet check upon arrival
- Beef Breeding
- Beef Feeder Calf
- Dairy Cattle
- Sheep Breeding
- Market Hogs
- Market Lambs
- Market Goats
<table>
<thead>
<tr>
<th>Mandatory Project Enrollment Date</th>
<th>Possession Deadline</th>
<th>Weigh-In, Tag/Tattoo or Pictures</th>
<th>Quality Assurance</th>
<th>Livestock Interview Judging</th>
<th>Fair Entries</th>
<th>Animal Requirements</th>
<th>Health Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy Goats</td>
<td>June 15, 2020</td>
<td>Registration Form due June 15 by 4 PM Extension office</td>
<td></td>
<td></td>
<td></td>
<td>Dehorned No Males</td>
<td>DUNF Vet check upon arrival</td>
</tr>
<tr>
<td>Pygmy Goats &amp; Pack Goats</td>
<td>June 15, 2020</td>
<td>Registration Form due June 15 by 4 PM Extension office</td>
<td></td>
<td></td>
<td></td>
<td>Dehorned</td>
<td>No health papers required. Vet check upon arrival</td>
</tr>
<tr>
<td>Market Rabbits</td>
<td>Doe in possession &amp; tattooed June 6, 9-11 AM OR June 11, 9-7 PM appt. only Fairgrounds Bunnies tattooed August 29 9-11 AM Fairgrounds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3-5 lbs. maximum 70 Days Old DUNF</td>
</tr>
<tr>
<td>Breeding Rabbits</td>
<td>June 6, 2020</td>
<td>Registration Form/Pictures if rabbit is already tattooed</td>
<td></td>
<td></td>
<td></td>
<td>N/A</td>
<td>No health papers required.</td>
</tr>
<tr>
<td>Broilers &amp; Market Ducks</td>
<td>Cost: TBD</td>
<td>Due at pick-up Pick up: Fairgrounds Tentatively August 6 5-7 PM</td>
<td>N/A</td>
<td></td>
<td></td>
<td>N/A</td>
<td>5 lbs. minimum each bird DUNF</td>
</tr>
<tr>
<td>Pullets &amp; Fancy Poultry</td>
<td>June 15, 2020</td>
<td>Registration Form/Pictures due June 15 by 4 PM Extension office</td>
<td></td>
<td></td>
<td></td>
<td>See Fair Book for specific requirements.</td>
<td>Pullorum-free papers required upon arrival</td>
</tr>
<tr>
<td>Ducks, Geese, &amp; Fancy Turkeys</td>
<td>June 15, 2020</td>
<td>Registration Form/Pictures due June 15 by 4 PM Extension office</td>
<td></td>
<td></td>
<td></td>
<td>See Fair Book for specific requirements.</td>
<td>Ducks - No health papers required.</td>
</tr>
<tr>
<td>Market Turkeys</td>
<td>Cost: TBD</td>
<td>Due at pick-up Pick up: Fairgrounds Tentatively June 4 5-7 PM</td>
<td>N/A</td>
<td></td>
<td></td>
<td>20 lbs. minimum</td>
<td>Pullorum-free papers required upon arrival</td>
</tr>
<tr>
<td>Horses</td>
<td>May 29, 2020</td>
<td>Registration Form/Pictures due May 29 by 4 PM Extension office</td>
<td></td>
<td>Safety &amp; Ethics April 23 or April 27 7 PM Location TBD</td>
<td>July 13, 2020 Midvale Elementary</td>
<td>July 15, 2020 Midvale Elementary</td>
<td>Due August 7, 2020 No late entries accepted!</td>
</tr>
</tbody>
</table>

*See the Tuscarawas County Fair book for more information.*