185 Equine Reproduction and Genetics

This advanced-level project is designed to be taken over a 3-year period. Members should build upon their knowledge, completing additional Interest Areas each time they take this project.

Members do not need to purchase a new book each year. Instead, they will need to complete additional interest areas. Keep all these activities in a notebook.

Members must have access to a horse to complete this project.

General Guidelines

   a. Explore Interest Areas as outlined below, completing at least 2 Things to Do for each Lesson. Those with a check mark in front of them are mandatory. Note, county recommendations for completing Interest Areas and Things to Do (listed on the reverse) vary slightly from those printed in the project.
   b. Document all completed Things to Do in your project notebook (3 ring binder). This notebook should be cumulative and contain documentation of all completed Things to Do 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.
Equine Reproduction and Genetics Year One
- Complete the Equine Reproduction Section (pages 21-45)
  o The Mare
    ▪ Parts of the Ovary and related structures
    ▪ The Estrous Cycle
    ▪ Reproductive organs of the mare
  o The Stallion
    ▪ Reproductive tracts of the stallion
    ▪ Parts of the testicles
    ▪ Factors affecting sperm output
  o Breeding Recommendations
    ▪ Artificial insemination
    ▪ Preparation for breeding and breeding procedures
    ▪ Miscellaneous mare breeding problems

Equine Reproduction and Genetics Year Two
- Review all areas from Year One
- Complete the Mare and Foal Management Section (pages 45-55)
  o Brood mare management prior to foaling
  o The three stages of foaling
  o Post foaling mare problems
  o Post foaling foal problems
  o Lactation in mares
  o Foal growth and miscellaneous care

Equine Reproduction and Genetics Year Three
- Review all areas from Year One and Two
- Complete the Genetics Section (pages 56-70)
  o How genetics work
  o Terms
  o Qualitative traits
  o Quantitative traits
  o Factors that affect the rate of genetic progress
  o Interpreting pedigrees
  o Coat color inheritance
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.

<table>
<thead>
<tr>
<th>Precise Schedules to be Announced</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Monday</strong></td>
</tr>
<tr>
<td><strong>July 13</strong></td>
</tr>
<tr>
<td>Equine (includes Horseless Horse)</td>
</tr>
<tr>
<td>Swine</td>
</tr>
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<td></td>
</tr>
</tbody>
</table>

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CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information, visit cfaesdiversity.osu.edu.
**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.

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**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.

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**PROJECT RATINGS, PREMIUM REQUIREMENTS, and PAYMENTS**

All premiums are paid by the Tuscarawas County Agricultural Society based on project rating received at 4-H Interview Judging.

<table>
<thead>
<tr>
<th>Premium</th>
<th>Requirements</th>
<th>Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold</td>
<td>Exceptional project knowledge.</td>
<td>$8</td>
</tr>
<tr>
<td></td>
<td>Work exhibits extra effort with individual initiative to go above and beyond the project requirements.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A thorough understanding of proper methods to complete project.</td>
<td></td>
</tr>
<tr>
<td>Silver</td>
<td>Very knowledgeable of project subject matter.</td>
<td>$7</td>
</tr>
<tr>
<td></td>
<td>Completed project requirements.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Project presented in a neat and organized manner.</td>
<td></td>
</tr>
<tr>
<td>Bronze</td>
<td>Adequate project knowledge.</td>
<td>$6</td>
</tr>
<tr>
<td></td>
<td>Has made effort towards completing requirements and project presentation.</td>
<td></td>
</tr>
<tr>
<td>Participation</td>
<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

Ohio State University Extension Tuscarawas County 4-H Projects Overview 2020

Page 2
# 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</th>
<th>Enrollment Date</th>
<th>Possession</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>Market Beef &amp; Dairy Market Beef</td>
<td>December 14 or 16, 2019</td>
<td>December 14, 2019</td>
<td>December 14 or 16, 2019</td>
<td>Mandatory attendance at one session is required.</td>
<td></td>
<td></td>
<td>1000 lbs. minimum Heifer or Steer must be Male castrated &amp; dehorned</td>
<td>DUNF Vet check upon arrival</td>
</tr>
<tr>
<td>Beef Breeding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Calf, Heifer or Cow dehorned</td>
<td>No health papers required. Vet check upon arrival</td>
</tr>
<tr>
<td>Beef Feeder Calf</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>350-650 lbs. Steers, castrated &amp; dehorned</td>
<td>No health papers required. Vet check upon arrival</td>
</tr>
<tr>
<td>Dairy Cattle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Calf, Heifer or Cow Dehorned</td>
<td>DUNF Vet check upon arrival</td>
</tr>
<tr>
<td>Sheep Breeding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ewes</td>
<td>No health papers required. Vet check upon arrival</td>
</tr>
<tr>
<td>Market Hogs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>200-315 lbs. Barrows or Gilts ½ inch hair at fair time</td>
<td>DUNF Vet check upon arrival</td>
</tr>
<tr>
<td>Market Lambs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>90 lbs. minimum Ewes or Wethers</td>
<td>DUNF Vet check upon arrival</td>
</tr>
<tr>
<td>Market Goats</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>65 lbs. minimum Castrated &amp; Dehorned</td>
<td>DUNF Vet check upon arrival</td>
</tr>
</tbody>
</table>

**Due August 7, 2020**

No late entries accepted!
<table>
<thead>
<tr>
<th>Animal Type</th>
<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></td>
<td>June 15, 2020</td>
<td>Registration Form due June 15</td>
<td></td>
<td></td>
<td></td>
<td>Dehorned</td>
<td>No Males</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>by 4 PM Extension office</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Vet check upon arrival</td>
</tr>
<tr>
<td>Pygmy Goats &amp; Pack Goats</td>
<td></td>
<td>June 15, 2020</td>
<td>Registration Form due June 15</td>
<td></td>
<td></td>
<td></td>
<td>Dehorned</td>
<td>No health papers required.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>by 4 PM Extension office</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Vet check upon arrival</td>
</tr>
<tr>
<td>Market Rabbits</td>
<td></td>
<td>Doe in possession &amp; tattooed June 6, 9-11 AM OR June 11, 8-7 PM appl. only Fairgrounds</td>
<td>Bunnies tattooed August 29 9-11 AM Fairgrounds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3-5 lbs. maximum 70 Days Old</td>
</tr>
<tr>
<td>Breeding Rabbits</td>
<td></td>
<td>June 6, 2020</td>
<td>June 6, 9-11 AM OR June 11, 8-7 PM appl. only Fairgrounds</td>
<td>Bunnies tattooed August 29 9-11 AM Fairgrounds</td>
<td></td>
<td></td>
<td>N/A</td>
<td>No health papers required.</td>
</tr>
<tr>
<td>Broilers &amp; Market Ducks</td>
<td></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></td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Registration Form/Pictures if rabbit is already tattooed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pullorum-free papers required upon arrival</td>
</tr>
<tr>
<td>Pullets &amp; Fancy Poultry</td>
<td></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></td>
<td>Pullorum-free papers required upon arrival</td>
</tr>
<tr>
<td>Ducks, Geese, &amp; Fancy Turkeys</td>
<td></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></td>
<td>Ducks - No health papers required.</td>
</tr>
<tr>
<td>Market Turkeys</td>
<td></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></td>
<td>20 lbs. minimum</td>
</tr>
<tr>
<td>Horses</td>
<td></td>
<td>May 29, 2020</td>
<td>Registration Form/Pictures due May 29 by 4 PM Extension office</td>
<td>Safety &amp; Ethics April 23 or April 27 7 PM Location TBD</td>
<td>July 13, 2020 Midvale Elementary</td>
<td></td>
<td></td>
<td>See Fair Book for specific requirements.</td>
</tr>
</tbody>
</table>

*See the Tuscarawas County Fair book for more information.